US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.29

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
HLN VORTAC	HAU NDB	089.65 / 8.40	9700
FALDE INT	HAU NDB	239.24 / 10.02	9600
SWEDD INT	HAU NDB	292.96 / 11.37	9900
JUVGO/HLN 22.00 DME (IAF)	DOOKR/HLN 20.00 DME (NOPT)	266.71 / 2.00 (I-HLN)	10200
DOOKR/HLN 20.00 DME	YERUT/HLN 16.40 DME	266.71 / 3.60 (I-HLN)	9000
YERUT/HLN 16.40 DME (IF)	GELEY/HLN 10.67 DME	266.71/5.73 (I-HLN)	7400
YERUT/HLN 16.40 DME (IF)	HAU NDB	266.71 / 8.01 (I-HLN)	7100*

MISSED APPROACH

ILS: DA
LOC: 8.72 MILES AFTER HAU NDB

CLIMB TO 4700 THEN CLIMBING RIGHT TURN TO 9000 VIA HEADING 021 AND HLN VORTAC R-336 TO WOKEN INT AND HOLD, CONTINUE CLIMB-IN-HOLD TO 9000.

ADDITIONAL FLIGHT DATA:
HOLD SW, RT, 026.00 INBOUND.
CHART: 175K ICON AT HAU NDB
CHART: ARRIVAL HOLDING AT JUVGO: HOLD E, RT, 266.71 INBOUND, 11,100. (DME REQUIRED)
FAS OBST: 4319 AAO 463425N/1115053W

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. HOLD E HAU NDB, RT, 266.71 INBOUND, 7400 FT. IN LIEU OF PT (IAF)
3. FAC: 266.71 FAF: HAU NDB PFAF: GELEY/HLN 10.67 DME DIST FAF TO MAP: 8.72 THLD: 8.72
4. MIN. ALT: HAU NDB 7100*, FERRI OM/HLN 4.42 DME 5620*
5. DIST TO THLD FROM OM: 4.73 MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 1019
6. MIN GS INCPT: 7400 GS ALT AT: GELEY 7400 OM: 5427 MM: - IM: -
7. GS ANGLE: 3.00 TCH: 54.5
8. MSA FROM: HAU NDB 045-225 10800, 225-315 10000, 315-045 9200

MAG VAR: 16E EPOCH YEAR: 1990

MINIMUMS

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT | ALTERNATE: N A | ILS: STANDARD # | 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 27	4402	1 3/8	557	4402	1 3/8	557	4402	1 3/8	557	4402	1 3/8	557	4402	1 3/8	557
S-LOC 27	5620	1 1/4	1775	5620	1 1/2	1775	5620	3	1775	5620	3	1775	5620	3	1775
CIRCLING	5620	1 1/4	1743	5620	1 1/2	1743	5620	3	1743	5620	3	1743	5620	3	1743
FERRI FIX MINIMUMS*															
S-LOC 27	4580	1/2	735	4580	1/2	735	4580	1 5/8	735	4580	1 5/8	735	4580	1 5/8	735
CIRCLING	4640	1	763	4640	1	763	4740	2 1/2	863	4740	2 3/4	863	4940	3	1063

NOTES:
CHART PLANVIEW NOTE: ADF OR DME REQUIRED.
*LOC ONLY
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-LOC 27 ALL CATS. FOR INOPERATIVE MALSR, INCREASE S-ILS 27 ALL CATS VISIBILITY TO 1 7/8 MILES, FERRI FIX MINIMUMS: S-LOC 27 CAT C,D AND E (SEE FORM 8260-10)

CAT A, B 1800-2, CAT C, D, E 1800-3
@ CAT A, B 1800-2, CAT C, D, E 1800-3
#@ NA WHEN CONTROL TOWER CLOSED.

QUALITY CHECKED

CITY AND STATE	ELEVATION: 3877 THRE: 3845	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
HELENA, MT	AIRPORT NAME: HELENA RGNL	I-HLN	ILS OR LOC Y RWY 27, AMDT 3	AMDT: 2
				DATED 09/25/2008

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]	[X] ZLC ARTCC, HLN APP CON, HLN ATCT, AMGR

FLIGHT CHECKED BY		
NAME: JOHN JEFFERS	FIFO	DATE: 5/10/12
DEVELOPED BY		
NAME: ADOLFO URRUTIA (ROBERT DAVIS)	FIFO AJV-354	DATE: 09/29/2011
APPROVED BY		
NAME: DEZ SILAGYI MANAGER	FIFO AJV-354	DATE:

CHANGES:

1. RAISED STEPDOWN MINIMUMS FROM 5400 TO 5620 FOR ALL CATS AND ADJUSTED VISIBILITIES S-ILS 27 ALL CATS FROM 1 1/2 TO 1 3/8, S-LOC CATS C, D AND E FROM 2 1/2 TO 3.
2. RAISED FERRI FIX S-LOC 27 MINIMUMS FROM 4560 TO 4580 FOR ALL CATS AND ADJUSTED VISIBILITIES S-LOC 27 CATS C, D AND E TO 1 5/8.
3. CIRCLING MINIMUMS RAISED FOR ALL CATS DUE TO NEW STEPDOWN AND S-LOC 27 MINIMUMS AND ADJUSTED VISIBILITIES ACCORDINGLY.
4. UPDATED HATH/HATS/HAAS TO REFLECT THRE VS TDZE.
5. LENGTH FROM YERUT TO GLIDESLOPE INTERCEPT CHANGED FROM 6.05 NM TO 5.73 NM.
6. LOWERED ALTITUDE AT YERUT FROM 9300 TO 9000.
7. ADDED JUVGO DME FIX AT 22.00NM AND MOVED ARRIVAL HOLDING TO IT AND ADDED FEEDER FROM JUVGO TO DOOKR.
8. ADDED ZIMUM AND KEDEC FIXES FOR STEPDOWN ALTITUDES FOR AIRCRAFT FLYING THE 20 NM ARCS OVER DOOKR AND AS (IAF)S FOR AIRCRAFT ON V113 AND V2.
9. REMOVED DME ARC REQUIRED FOR TURBOJET NOTE.
10. ADDED CIRLCING NA TO RWY 5/23 NOTE.
11. ADDED WHEN VGSI INOP NOTE.
12. ADDED DME FROM HLN NOTE.
13. ADDED C-I-H REQUIRED AT MISSED HOLDING.

REASONS:

1. PRESENT DESCENT GRADIENT FROM FAF TO STEPDOWN FIX EXCEEDS 400 FT PER NM AND ALSO TO KEEP CAT D AND E MINIMUMS.
2., 3. UPDATED OBSTACLE DATA, EXCESSIVE LENGTH OF FINAL AND MISSED APPROACH ADJUSTMENTS.
4. NEW CRITERIA, 8260.3B CHG. 20.
5. IAPA CALCULATION.
6. USABLE ALTITUDE TO BE AT OR BELOW GS AND KEEP INTERMEDIATE DESCENT GRADIENT 300 FT PER NM OR LESS.
7. DUE TO THE LOWERING OF INTERMEDIATE ALTITUDE, PRESENT ALTITUDE FROM ARRIVAL HOLDING AT DOOKR TO YERUT EXCEEDS 500 FT PER NM.
8. TO ACCOMODATE WORKABLE DESCENT GRADIENTS AND PROVIDE NEW (IAF)S, ZIMUM ADDED PER E-MAILS AND RAPT MINUTES.
9. PER FPT REQUEST.
10. 8260.19D PARA. 854. M (2) (G).
11. 8260.19D PARA. 854. M (2) (H).
12. 8260.19D PARA. 855. I.
13. 8260.19D PARA. 856. F (1).

QUALITY CHECKED

03/22/2012: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 09/29/2011

08/08/12: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 03/22/2012.

(SEE FORM 8260-10)

1. ADDED TERMINAL ROUTE: YERUT/HLN 16.40 DME (IF) TO GELEY/HLN 10.67 DME 266.71/5.73 (I-HLN) 7400
2. ADDED AN ASTERISK (*) TO THE 7100 ON THE LAST TERMINAL ROUTE

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.

NOTES, (CONT.):
VISIBILITY TO 2 MILES.
CHART NOTE: HOLDING AT HAU NDB AUTHORIZED FOR CATEGORY A AND B AIRCRAFT ONLY.
CHART NOTE: CIRCLING NA SOUTH OF RWY 9-27 FOR CATS D AND E.
CHART NOTE: CIRCLING TO RWY 5 AND 23 NA AT NIGHT.
CHART NOTE: WHEN VGSI INOP, CIRCLING TO RWY 34 NA AT NIGHT.
CHART NOTE: DME FROM HLN VORTAC, SIMULTANEOUS RECEPTION OF I-HLN AND HLN DME REQUIRED.

QUALITY CHECKED

CITY AND STATE	ELEVATION: 3877 THRE: 3845	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
HELENA, MT	AIRPORT NAME: HELENA RGNL	I-HLN	ILS OR LOC Y RWY 27, AMDT 3	AMDT: 2
				DATED: 09/25/2008

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:

REASONS CONT.

1. **REMOVES ALL FEEDER ROUTE ARC SEGMENTS IN TERMINAL ROUTES, PER FLIGHT CHECK.**
2. **REMOVES ALL CORRESPOINDING HLN VORTAC CHART RADIALS FROM ADDITIONAL FLIGHT DATA.**

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
ILS STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICES - FAR PART 97.29

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.

ARINC PACKET - 424-18 - ILS

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        HLN   K1011770VTHW N46362456W111571251    N46362456W111571251E0160038232     NARHELENA

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   DOOKR K10    R     N46313838W111290365                        E0128     NAR           DOOKR
        SUSAEAENRT   FALDE K10    C   L N46364026W111312562                        E0129     NAR           FALDE
        SUSAEAENRT   GELEY K10    R     N46334467W111421368                        E0129     NAR           GELEY
        SUSAEAENRT   JUVGO K10    R     N46311116W111261425                        E0128     NAR           JUVGO
        SUSAEAENRT   SWEDD K10    C   L N46265845W111324166                        E0129     NAR           SWEDD
        SUSAEAENRT   WOKEN K10    C   L N46585479W112013314                        E0132     NAR           WOKEN
        SUSAEAENRT   YERUT K10    R     N46322713W111340830                        E0129     NAR           YERUT

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHLNK1AHLN     0     090YHN46362450W111585790E016003877         1800018000C    MNAR    HELENA RGNL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHLNK1FI27-Y AFALDE C10FALDEK1EA0E       IF                                                18000                 0 NS
        SUSAP KHLNK1FI27-Y AFALDE C20HAU  K1PN0NY      TF                                          + 09600                     0 NS
        SUSAP KHLNK1FI27-Y AFALDE C30HAU  K1PN0NE AR   HF HLN K1      089700842667T010D   + 07400                     0 NS
        SUSAP KHLNK1FI27-Y AHLN   C10HLN  K1D 0V       IF                                                18000                 0 NS
        SUSAP KHLNK1FI27-Y AHLN   C20HAU  K1PN0NY      TF                                          + 09700                     0 NS
        SUSAP KHLNK1FI27-Y AHLN   C30HAU  K1PN0NE AR   HF HLN K1      089700842667T010D   + 07400                     0 NS
        SUSAP KHLNK1FI27-Y AJUVGO C10JUVGOK1EA0E  C    IF                                                18000                 0 NS
        SUSAP KHLNK1FI27-Y AJUVGO C20DOOKRK1EA0E       TF                                          + 10200                     0 NS
        SUSAP KHLNK1FI27-Y AJUVGO C30YERUTK1EA0EE B    CF IHLNK1      0867018426670036PI  + 09000                     0 NS
        SUSAP KHLNK1FI27-Y ASWEDD C10SWEDDK1EA0E       IF                                                18000                 0 NS
        SUSAP KHLNK1FI27-Y ASWEDD C20HAU  K1PN0NY      TF                                          + 09900                     0 NS
        SUSAP KHLNK1FI27-Y ASWEDD C30HAU  K1PN0NE AR   HF HLN K1      089700842667T010D   + 07400                     0 NS
        SUSAP KHLNK1FI27-Y I      C10YERUTK1EA0E  I    IF IHLNK1      08670184        PI  J 090000740018000                 0 NS
        SUSAP KHLNK1FI27-Y I      C20GELEYK1EA0E  F    CF IHLNK1      0867012726700057PI  H 0740007400        -300HAU   K1PN0 NS
        SUSAP KHLNK1FI27-Y I      C30RW27 K1PG0GY M    CF IHLNK1      0867001726700110PI    03899             -300          0 NS
        SUSAP KHLNK1FI27-Y I      C40         0  M     CA                     2667        + 04700                     0 NS
        SUSAP KHLNK1FI27-Y I      C50         0    R   VIY                    0210                                    0 NS
        SUSAP KHLNK1FI27-Y I      C60WOKENK1EA0EY      CF HLN K1      3365022733650180D   + 09000                     0 NS
        SUSAP KHLNK1FI27-Y I      C70WOKENK1EA0EE  R   HM                     0260T010    + 09000                     0 NS
```

CITY AND STATE	ELEVATION: 3877 THRE: 3845	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
HELENA, MT	AIRPORT NAME: HELENA RGNL	I-HLN	ILS OR LOC Y RWY 27, AMDT 3	AMDT: 2
				DATED: 09/25/2008

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:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

ILS STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.29**

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.

```
RUNWAY  1         2         3         4         5         6         7         8         9         0         1         2         3
        123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHLNK1GRW27    0090002667 N46361076W111574596+0200    +1158703845000055150IIHLN1

ILS     1         2         3         4         5         6         7         8         9         0         1         2         3
        123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHLNK1IIHLN1   011010RW27 N46363289W1120008442667N46361595W1115759221200 10190393300E01605503841

MSA     1         2         3         4         5         6         7         8         9         0         1         2         3
        123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHLNK1SHAU  K1PN               0   045135100251352250922522504510825                                                M

NAVAID  1         2         3         4         5         6         7         8         9         0         1         2         3
        123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAPNKHLNK1 HAU   K1003860H MW N46340802W111452902                      E0160           NARHAUSER
```

CITY AND STATE	ELEVATION: 3877 THRE: 3845	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
HELENA, MT	AIRPORT NAME: HELENA RGNL	I-HLN	ILS OR LOC Y RWY 27, AMDT 3	AMDT: 2
				DATED: 09/25/2008

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:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

ILS STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.29**

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.

ARINC SUMMARY - 424-18 - ILS

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	FALDE	FALDE	010		IF		FB					
	FALDE	HAU	020		TF		FO				AA 09600	
	FALDE	HAU	030	IAF	HF	R	FO		266.7()	T01.0	AA 07400	
	HLN	HLN	010		IF		FB					
	HLN	HAU	020		TF		FO				AA 09700	
	HLN	HAU	030	IAF	HF	R	FO		266.7()	T01.0	AA 07400	
	JUVGO	JUVGO	010	IAF	IF		FB					
	JUVGO	DOOKR	020		TF		FB				AA 10200	
	JUVGO	YERUT	030		CF		FB		266.7()	003.6	AA 09000	
	SWEDD	SWEDD	010		IF		FB					
	SWEDD	HAU	020		TF		FO				AA 09900	
	SWEDD	HAU	030	IAF	HF	R	FO		266.7()	T01.0	AA 07400	
		YERUT	010	FACF	IF		FB				AA 09000 GI 07400	
		GELEY	020	FAF	CF		FB		267.0()	005.7	GI 07400 GS 07400	
		RW27	030	MAP	CF		FO		267.0()	011.0	AT 03899	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		266.7()		AA 04700	
		050		VI	R	FB		021.0()			
	WOKEN	060		CF		FO		336.5()	018.0	AA 09000	
	WOKEN	070		HM	R	FO		026.0()	T01.0	AA 09000	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	HLN	N463624.56	W1115712.51	N4636.409	W11157.209
	DOOKR	N463138.38	W1112903.65	N4631.640	W11129.061
	FALDE	N463640.26	W1113125.62	N4636.671	W11131.427
	GELEY	N463344.67	W1114213.68	N4633.745	W11142.228
	JUVGO	N463111.16	W1112614.25	N4631.186	W11126.238
	SWEDD	N462658.45	W1113241.66	N4626.974	W11132.694
	WOKEN	N465854.79	W1120133.14	N4658.913	W11201.552
	YERUT	N463227.13	W1113408.30	N4632.452	W11134.138
	RW27	N463610.76	W1115745.96	N4636.179	W11157.766
	IHLN (LOC)	N463632.89	W1120008.44	N4636.548	W11200.141
	HAU	N463408.02	W1114529.02	N4634.134	W11145.484

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW27	03845	55

CITY AND STATE	ELEVATION: 3877 THRE: 3845	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
HELENA, MT	AIRPORT NAME: HELENA RGNL	I-HLN	ILS OR LOC Y RWY 27, AMDT 3	AMDT: 2
				DATED: 09/25/2008

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:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

LOC STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.25**

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.

ARINC PACKET - 424-18 - LOC

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        HLN   K1011770VTHW N46362456W111571251    N46362456W111571251E0160038232     NARHELENA

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   DOOKR K10    R     N46313838W111290365                      E0128     NAR           DOOKR
        SUSAEAENRT   FALDE K10    C   L N46364026W111312562                      E0129     NAR           FALDE
        SUSAEAENRT   FERRI K10    R     N46350792W111510436                      E0130     NAR           FERRI OM
        SUSAEAENRT   JUVGO K10    R     N46311116W111261425                      E0128     NAR           JUVGO
        SUSAEAENRT   SWEDD K10    C   L N46265845W111324166                      E0129     NAR           SWEDD
        SUSAEAENRT   WOKEN K10    C   L N46585479W112013314                      E0132     NAR           WOKEN
        SUSAEAENRT   YERUT K10    R     N46322713W111340830                      E0129     NAR           YERUT

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHLNK1AHLN     0     090YHN46362450W111585790E016003877         1800018000C    MNAR    HELENA RGNL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
TRM WP  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHLNK1CFL27  K10    N     N46341510W111452667                      E0130     NAR           HAUSER NDB

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHLNK1FL27-Y AFALDE 010FALDEK1EA0E       IF                                                  18000                 0 NS
        SUSAP KHLNK1FL27-Y AFALDE 020HAU  K1PN0NY      TF                                        + 09600                         0 NS
        SUSAP KHLNK1FL27-Y AFALDE 030HAU  K1PN0NE AR   HF HLN K1      089700842667T010D   + 07400                         0 NS
        SUSAP KHLNK1FL27-Y AHLN   010HLN  K1D 0V       IF                                                  18000                 0 NS
        SUSAP KHLNK1FL27-Y AHLN   020HAU  K1PN0NY      TF                                        + 09700                         0 NS
        SUSAP KHLNK1FL27-Y AHLN   030HAU  K1PN0NE AR   HF HLN K1      089700842667T010D   + 07400                         0 NS
        SUSAP KHLNK1FL27-Y AJUVGO 010JUVGOK1EA0E  C    IF                                                  18000                 0 NS
        SUSAP KHLNK1FL27-Y AJUVGO 020DOOKRK1EA0E       TF                                        + 10200                         0 NS
        SUSAP KHLNK1FL27-Y AJUVGO 030YERUTK1EA0EE B    CF IHLNK1      0867018426670036PI  + 09000                         0 NS
        SUSAP KHLNK1FL27-Y ASWEDD 010SWEDDK1EA0E       IF                                                  18000                 0 NS
        SUSAP KHLNK1FL27-Y ASWEDD 020HAU  K1PN0NY      TF                                        + 09900                         0 NS
        SUSAP KHLNK1FL27-Y ASWEDD 030HAU  K1PN0NE AR   HF HLN K1      089700842667T010D   + 07400                         0 NS
        SUSAP KHLNK1FL27-Y L      010YERUTK1EA0E  I    IF IHLNK1      08670184        PI  + 09000     18000                 0 NS
        SUSAP KHLNK1FL27-Y L      020FL27 K1PC0E  F    CF IHLNK1      0867010426700080PI  + 07100                 HAU   K1PN0 NS
        SUSAP KHLNK1FL27-Y L      021FERRIK1EA0E S     CF IHLNK1      0867006426700040PI  + 05620             -346          0 NS
```

CITY AND STATE	ELEVATION: 3877 THRE: 3845	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
HELENA, MT	AIRPORT NAME: **HELENA RGNL**	**I-HLN**	**ILS OR LOC Y RWY 27, AMDT 3**	AMDT: **2**
				DATED: **09/25/2008**

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:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
LOC STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICES - FAR PART 97.25

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.

```
SUSAP KHLNK1FL27-Y L     030RW27 K1PG0GY M    CF IHLNK1     0867001726700047PI    03899          -346          0 NS
SUSAP KHLNK1FL27-Y L     040          0  M    CA                     2667        + 04700                        0 NS
SUSAP KHLNK1FL27-Y L     050          0    R  VIY                    0210                                       0 NS
SUSAP KHLNK1FL27-Y L     060WOKENK1EA0EY      CF HLN K1     3365022733650180D   + 09000                        0 NS
SUSAP KHLNK1FL27-Y L     070WOKENK1EA0EE  R   HM                     0260T010    + 09000                        0 NS
```

```
                1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHLNK1GRW27    0090002667 N46361076W111574596+0200    +1158703845000055150IIHLN1
```

```
                1         2         3         4         5         6         7         8         9         0         1         2         3
ILS     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHLNK1IIHLN1   011010RW27 N46363289W1120008442667N46361595W1115759221200 10190393300E01605503841
```

```
                1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHLNK1SHAU  K1PN                0   045135100251352250922522504510825                                                  M
```

```
                1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAPNKHLNK1 HAU   K1003860H MW N46340802W111452902                      E0160          NARHAUSER
```

CITY AND STATE	ELEVATION: 3877 THRE: 3845	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
HELENA, MT	AIRPORT NAME: HELENA RGNL	I-HLN	ILS OR LOC Y RWY 27, AMDT 3	AMDT: 2
				DATED: 09/25/2008

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:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

LOC STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.25**

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.

ARINC SUMMARY - 424-18 - LOC

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	FALDE	FALDE	010		IF		FB					
	FALDE	HAU	020		TF		FO				AA 09600	
	FALDE	HAU	030	IAF	HF	R	FO		266.7()	T01.0	AA 07400	
	HLN	HLN	010		IF		FB					
	HLN	HAU	020		TF		FO				AA 09700	
	HLN	HAU	030	IAF	HF	R	FO		266.7()	T01.0	AA 07400	
	JUVGO	JUVGO	010	IAF	IF		FB					
	JUVGO	DOOKR	020		TF		FB				AA 10200	
	JUVGO	YERUT	030		CF		FB		266.7()	003.6	AA 09000	
	SWEDD	SWEDD	010		IF		FB					
	SWEDD	HAU	020		TF		FO				AA 09900	
	SWEDD	HAU	030	IAF	HF	R	FO		266.7()	T01.0	AA 07400	
		YERUT	010	FACF	IF		FB				AA 09000	
		FL27	020	FAF	CF		FB		267.0()	008.0	AA 07100	
		FERRI	021	SDF	CF		FB		267.0()	004.0	AA 05620	
		RW27	030	MAP	CF		FO		267.0()	004.7	AT 03899	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		266.7()		AA 04700	
		050		VI	R	FB		021.0()			
	WOKEN	060		CF		FO		336.5()	018.0	AA 09000	
	WOKEN	070		HM	R	FO		026.0()	T01.0	AA 09000	

POINT DATA

WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
HLN	N463624.56	W1115712.51	N4636.409	W11157.209
DOOKR	N463138.38	W1112903.65	N4631.640	W11129.061
FALDE	N463640.26	W1113125.62	N4636.671	W11131.427
FERRI	N463507.92	W1115104.36	N4635.132	W11151.073
JUVGO	N463111.16	W1112614.25	N4631.186	W11126.238
SWEDD	N462658.45	W1113241.66	N4626.974	W11132.694
WOKEN	N465854.79	W1120133.14	N4658.913	W11201.552
YERUT	N463227.13	W1113408.30	N4632.452	W11134.138
FL27	N463415.10	W1114526.67	N4634.252	W11145.445
RW27	N463610.76	W1115745.96	N4636.179	W11157.766
IHLN (LOC)	N463632.89	W1120008.44	N4636.548	W11200.141
HAU	N463408.02	W1114529.02	N4634.134	W11145.484

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH

CITY AND STATE	ELEVATION: **3877** THRE: **3845**	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
HELENA, MT	AIRPORT NAME: **HELENA RGNL**	**I-HLN**	**ILS OR LOC Y RWY 27, AMDT 3**	AMDT: **2**
				DATED: **09/25/2008**

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:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

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.

RW27 03845 55

CITY AND STATE	ELEVATION: 3877 THRE: 3845	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
HELENA, MT	AIRPORT NAME: HELENA RGNL	I-HLN	ILS OR LOC Y RWY 27, AMDT 3	AMDT: 2
				DATED: 09/25/2008

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:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

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	HLN VORTAC	HAU NDB	1. AAO	462551.00N/1114909.00W	8547 (4E)	2000	SA-900	9700
			2. TERRAIN	463018.00N/1114857.00W	6542 (6500)		AS1500	8000
FEEDER	FALDE INT	HAU NDB	3. AAO	463951.00N/1112803.00W	7592 (4E)	2000		9600
			4. TERRAIN	464012.00N/1113554.00W	6191 (6200)		AS1500	7700
FEEDER	SWEDD INT	HAU NDB	5. AAO	462251.00N/1114448.00W	8790 (4E)	2000	SA-900	9900
			6. TERRAIN	463003.00N/1114809.00W	6470 (6500)		AS1500	8000
INITIAL	JUVGO/HLN 22.00	DOOKR/HLN 20.00	7. AAO	463357.00N/1112421.00W	6700 (4E)	1000	AT2500	10200
	DME	DME	8. TERRAIN	463518.00N/1112748.00W	6004 (6000)		AS1500	7500
INITIAL: STEPDOWN	DOOKR/HLN 20.00	YERUT/HLN 16.40	9. AAO	463524.00N/1112751.00W	6211 (4E)	1000	AT1789	9000
	DME	DME	10. TERRAIN	463524.00N/1112751.00W	6011 (6000)		AS1500	7500
INTERMEDIATE: LOC	YERUT/HLN 16.40	HAU NDB	11. AAO	463238.00N/1114243.00W	5717 (2C)	500	AT883	7100
	DME		12. TERRAIN	463238.00N/1114243.00W	5517 (5500)		AS1500	7000
FINAL: ILS	GS INTCP	RW27				ASC	MA357	4402/557
2. HOLD-IN-LIEU-OF-PT	HAUSER NDB	P-4	15. AAO	462945.00N/1114833.00W	7094 (4E)	1000	PR151 SA-875	7400
			12. TERRAIN	463238.00N/1114243.00W	5517 (5500)		AS1500	7000
3. MISSED APPROACH — MAP:	DA / 8.72 MILES	WOKEN/37.68 DME	16. AAO	464035.15N/1120504.72W	5452 (2C)	ASC		9000
	AFTER HAU NDB		17. AAO	465348.80N/1115911.80W	7000 (6A)	1000		8000
ELEV:	4078/4330		18. TERRAIN	465348.80N/1115911.80W	6800 (6800)		AS1500	8300
			19. TREE	463454.00N/1115758.00W	4339 (2C)	300	SI	5620 / 4640
			19. TREE	463454.00N/1115758.00W	4339 (2C)	300	SI	5620 / 4640
			20. TREE	463433.16N/1115905.71W	4439 (2C)	300	SI	5620 / 4740
			21. TOWER (30-000365)	463624.04N/1115613.78W	3956 (1A)	300	SI	5620 / 4740
			22. AAO	463954.97N/1120347.02W	4639 (2C)	300	SI	5620 / 4940

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	ACTUAL
CATEGORY A	1.3 NM	350	1743 / 763
CATEGORY B	1.5 NM	450	1743 / 763
CATEGORY C	1.7 NM	450	1743 / 863
CATEGORY D	2.3 NM	550	1743 / 863
CATEGORY E	4.5 NM	550	1743 / 1063

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: HAU NDB

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
045-225	AAO	093/ 25.1	9720 (6C)	10800	315-045	AAO	346/ 19.4	8200 (6C)	9200
225-315	AAO	222/ 26.1	8952 (6C)	10000					

CITY AND STATE	ELEVATION: 3877 AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
HELENA, MT	HELENA RGNL	I-HLN	ILS OR LOC Y RWY 27, AMDT 3	ANM

PART B - SUPPLEMENTAL DATA

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

4. MONITOR STATUS		
PRIMARY NAVAID: I-HLN		
MONITOR POINT: HLN ATCT		
HRS OPTN:	CAT 1	@ ATCT OPEN
	CAT 3	@ ATCT CLOSED

5. APPROACH & RUNWAY LIGHTING	
	ALS
	(S) SALS
X	MALSR 27 (PCL)
X	HIRL 27 (PCL), 09 (PCL)
X	MIRL 16 (PCL), 05 (PCL), 23 (PCL), 34 (PCL)
X	REIL 09 (PCL)
	TDZ
	C/LINE
X	OTHER (SPECIFY) PAPI-2L 23 (PCL) VASI-4L 27, 09

6. RUNWAY MARKINGS	
BASIC	BSC-G 16, 05, 23, 34
ALL WEATHER	PIR-G 27, 09
INSTRUMENT	

7. RUNWAY VISUAL RANGE	
APPROACH	
MIDFIELD	
ROLL OUT	

8. GLIDE PATH		
GP ANGLE: 3.00		ELEV RWY THRESHOLD: 3844.7
DISTANCE FROM RWY: 1019		ELEV GP ANTENNA: 3845.8
		THRESHOLD CROSSING HEIGHT: 54.5

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

10. WAIVERS: NONE

PART D - PREPARED BY:	DATE:
ADOLFO URRUTIA (ROBERT DAVIS)	09/29/2011
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-354

PART C - REMARKS:

VDP NOT ESTABLISHED - FINAL FACILITY DOES NOT HAVE DME.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

NO SUITABLE BACK-UP ALTIMETER AVAILABLE.
NO SUITABLE ALTERNATE MISSED APPROACH AVAILABLE.

KHLN ASOS ON SERVICE A.

SECONDARY NAVAID: HLN HOURS OPTN: CAT 1 24HRS

ILS UNMONITORED WHEN CONTROL TOWER CLOSED, SEE AFD FOR HOURS OF OPERATION.

VGSI: 3.00/55

SEE ATTACHED AIRSPACE LETTER.

175KT HOLDING AT HAUSER REQUIRED FOR P-4.

MISSED APPROACH HOLDING AT WOKEN - PR 295
ARRIVAL HOLDING AT JUVGO - PR 363
HAUSER NDB HOLDING - PR 151

100' VEGETATION HEIGHT USED PER PREVIOUS PROCEDURES.

OBS #1 IS 26257.18 FT/4.32 NM INTO SECONDARY.
OBS #5 IS 25145.53 FT/4.14 NM INTO SECONDARY.
OBS #7 IS 6429.71 FT/1.06 NM INTO SECONDARY.
OBS #7 IS 9116 FT/1.50 NM INTO SECONDARY IN HOLDING PATTERN AT HAUSER NDB.
OBS #26 IS 85.28FT/0.01 NM INTO SECONDARY.

OBS #12 AC FROM PREVIOUS PROCEDURE.

ILS INTERMEDIATE CONTROLLING OBSTACLES:
21. AAO 463230.00N/1114236.00W 5581 (4E) AC98 AT1221 7400
22. TERRAIN 463230.00N/1114236.00W 5381 (5400) AS1500 6900

LOC MA PENETRATOR
25. AAO 464038.51N/1120450.06W 5379 (2C) ASC 9000

TERPS PARA 251 20:1 PENETRATIONS
RW05
3996 KHLNA020 POLE 463607.25N-1120016.94W (19.14)
3905 KHLNA006 OL ON HGR 463616.36N-1115955.52W (15.14)
3953 KHLNA014 TREE 463615.41N-1120011.52W (10.10)
3880 KHLNA003 GRD 463620.22N-1115953.97W (3.00)
3934 KHLNA012 POLE 463613.13N-1120007.09W (0.60)
RW23
3821 KHLN0013 GRD 463638.42N-1115846.64W (1.35)
3821 KHLNA035 GRD 463638.42N-1115846.64W (1.35)
3821 KHLNL002 GRD 463638.42N-1115846.64W (1.35)
RW34
4174 30-000363 TANK 463537.00N-1115851.00W (132.83)
3904 KHLN0043 BLDG 463607.11N-1115846.17W (15.08)
3901 KHLN0037 POLE 463606.23N-1115853.43W (7.92)
3891 KHLN0036 RD(N) 463607.79N-1115850.04W (5.68)
3865 KHLN0033 GRD 463612.35N-1115850.22W (2.80)
3897 30-000362 BLDG 463606.00N-1115853.00W (2.73)
FPT NOTIFIED

QUALITY 5 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.
FINAL: LOC	HAU NDB	FERRI OM/ 4.42	13. AAO	463516.59N/1114509.62W	4499 (2C)	250	XL136 DG735	5620
		DME						
FINAL: LOC STEPDOWN	FERRI OM/ 4.42	8.72 MILES AFTER	14. AAO	463425.14N/1115052.65W	4319 (2C)	250	SA-14 MA4	4580
	DME	HAU NDB						
3. MISSED APPROACH	MAP:							
	ELEV:							

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL
CATEGORY A	1.3 NM	350	
CATEGORY B	1.5 NM	450	
CATEGORY C	1.7 NM	450	
CATEGORY D	2.3 NM	550	
CATEGORY E	4.5 NM	550	

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID:

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A

CITY AND STATE		FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
HELENA, MT	ELEVATION: 3877 AIRPORT NAME: HELENA RGNL	I-HLN	ILS OR LOC Y RWY 27, AMDT 3	ANM

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:			2. WEATHER SERVICE			3. ALTIMETER SETTING
SATISFACTORY ON:				N W S	OTHER:	SOURCE:
				F A A		DISTANCE:
				A / C		HOURS REMOTE OPERATION:
V H F	U H F	H F	LOCATION:			ADJUSTMENT:

4. MONITOR STATUS		
PRIMARY NAVAID:		
MONITOR POINT:		
HRS OPTN:	CAT 1	
	CAT 3	

5. APPROACH & RUNWAY LIGHTING	
	ALS
	(S) SALS
	MALS
	HIRL
	MIRL
	REIL
	TDZ
	C/LINE
	OTHER (SPECIFY)

6. RUNWAY MARKINGS	
BASIC	
ALL WEATHER	
INSTRUMENT	

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	FT. FROM THRESHOLD
		ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS:

PART D - PREPARED BY:	DATE:
TITLE:	OFFICE:

PART C - REMARKS:

CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: DOOKR **STATE:** MT **COUNTRY:** US

LATITUDE/LONGITUDE: 463138.38N/1112903.65W **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	DIST FROM FAC FEET	MRA	MAA
1	HELENA	I-HLN	LOC		086.71	102.71		22.00		10200	12000
2	HELENA	HLN	VORTAC	H	087.63	103.63	20.00	20.00		10200	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-HLN	LOC	R-087	22	10200	12000

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC Y RWY 27	1, 2		KHLN	HELENA	MT (US)
IAP	ILS OR LOC Z RWY 27	1, 2		KHLN	HELENA	MT (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 04/05/2012

REASON FOR REVISION:
ADDED DISTANCE FROM DATA FOR FACILITY 1 AND 2.
RAISED FACILITY 1 AND 2 MRA FROM 9200 TO 10200.
DELETED HOLDING PAT. 1.
REMOVED HOLDING LIMITED AND PRECIPITOUS TERRAIN REMARKS.
MOVED ESV DATA FROM REMARKS SECTION TO ESV SECTION.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 09/26/2011 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (ROBERT DAVIS)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZLC
ATC FACILITY: HLN APP CON
OTHER:

QUALITY 5 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: FALDE **STATE:** MT **COUNTRY:** US

LATITUDE/LONGITUDE: 463640.26N/1113125.62W **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	HELENA	HLN	VORTAC	H	073.00	089.00	17.78	17.78		9400	17500
2	GREAT FALLS	GTF	VORTAC	H	169.24	185.24		50.56		9400	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
GTF	VORTAC	R-169	51	9400	17500

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V247	1, 2				(US)
EN ROUTE	V536	1, 2				(US)
IAP	ILS OR LOC Y RWY 27	1, 2		KHLN	HELENA	MT (US)
IAP	ILS OR LOC Z RWY 27	1, 2		KHLN	HELENA	MT (US)
IAP	RNAV (RNP) Y RWY 27			KHLN	HELENA	MT (US)
IAP	RNAV (RNP) Z RWY 27			KHLN	HELENA	MT (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 04/05/2012

REASON FOR REVISION:
ADDED DISTANCE FROM FOR FACILITY 1 AND 2.
FORMATTED ESV.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 09/26/2011 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (ROBERT DAVIS)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZLC
ATC FACILITY: HLN APP CON
OTHER:

QUALITY 1 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: FERRI OM **STATE:** MT **COUNTRY:** US

LATITUDE/LONGITUDE: 463507.92N/1115104.36W **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	DIST FROM FAC FEET	MRA	MAA
1	HELENA	I-HLN	LOC		086.71	102.71		6.41		5300	8300
2	HELENA	HLN	VORTAC	H	090.77	106.77	4.42	4.42		5300	8300

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

REMARKS:
COORDINATES REFLECT LOCATION ON LOC/AZ CENTERLINE ABEAM THE FERRI OM.
ACTUAL FACILITY LOCATION IS 463508.40N/1115104.20W.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC Y RWY 27	1, 2		KHLN	HELENA	MT (US)
IAP	ILS OR LOC Z RWY 27	1, 2		KHLN	HELENA	MT (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 04/05/2012

REASON FOR REVISION:
ADDED DISTANCE FROM DATA FOR ALL FACILITIES.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 11/07/2011 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (ROBERT DAVIS)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZLC
ATC FACILITY: HLN APP CON
OTHER:

QUALITY 5 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: GELEY **STATE:** MT **COUNTRY:** US

LATITUDE/LONGITUDE: 463344.67N/1114213.68W **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	HELENA	I-HLN	LOC		086.71	102.71		12.67	76979	7300	9000
2	HELENA	HLN	VORTAC	H			10.67	10.67		7300	17500

REMARKS:
PFAF LOCATION.
8260.54A 2-16B PFAF FORMULA APPLIED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC Y RWY 27	1, 2		KHLN	HELENA	MT (US)
IAP	ILS OR LOC Z RWY 27	1, 2		KHLN	HELENA	MT (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 04/05/2012

DEVELOPED BY: **DATE:** 11/29/2011 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (ROBERT DAVIS)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZLC
ATC FACILITY: HLN APP CON
OTHER:

5

RADIO FIX AND HOLDING DATA RECORD

NAME: HAUSER NDB **STATE:** MT **COUNTRY:** US

LATITUDE/LONGITUDE: 463415.10N/1114526.67W **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	DIST FROM FAC FEET	MRA	MAA
1	HAUSER	HAU	NDB	MH							17500
2	HELENA	I-HLN	LOC		086.71	102.71		10.39	63146	7000	8300
3	HELENA	HLN	VORTAC	H	088.83	104.83	8.40	8.40		7000	8300

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

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	E	HAU	NDB	086.71	266.71	R	1		7400	14000	4	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	175	AAO	462945.00N/1114833.00W	7094	4E

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
1	175	151

HOLDING RESTRICTIONS:
HOLDING RESTRICTED TO CATS A/B AIRCRAFT ONLY.
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
COORDINATES REFLECT LOCATION ON LOC/AZ CENTERLINE ABEAM THE HAUSER NDB.
ACTUAL FACILITY LOCATION IS 463408.02N/1114529.02W.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
PAT 1 CONTROLLING OBSTACLE LOCATED 7190.67 FEET INTO SECONDARY.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC Y RWY 27		1	KHLN	HELENA	MT (US)
IAP	ILS OR LOC Z RWY 27		1	KHLN	HELENA	MT (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 8 **DATE OF REVISION:** 04/05/2012

REASON FOR REVISION:
ADDED DISTANCE FROM FOR FACILITY 2 AND 3.
UPDATED HOLDING PATTERN OBSTACLE.
MOVED PRECIPITOUS TERRAIN ADJUSTMENT FROM REMARKS SECTION TO HOLDING SECTION.
MOVED HOLDING LIMITED REMARK TO HOLDING RESTRICTIONS SECTION.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 09/27/2011 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (ROBERT DAVIS)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: WST
ARTCC: ZLC
ATC FACILITY: HLN APP CON
OTHER:

QUALITY 5 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: JUVGO **STATE:** MT **COUNTRY:** US

LATITUDE/LONGITUDE: 463111.16N/1112614.25W **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	HELENA	I-HLN	LOC		086.71	102.71		24.00		11100	12000
2	HELENA	HLN	VORTAC	H	087.55	103.55	22.00	22.00		11100	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-HLN	LOC	R-087	24	11100	12000

HOLDING: **HOLDING TYPE OF ACTION:** ESTABLISH

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	E	I-HLN	LOC	086.71	266.71	R	1-1 1/2		11100	12000	10	11

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	462554.40N/1111109.70W	9720	6A

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
1	230	363

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC Y RWY 27	1, 2	1	KHLN	HELENA	MT (US)
IAP	ILS OR LOC Z RWY 27	1, 2	1	KHLN	HELENA	MT (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 04/05/2012

DEVELOPED BY: **DATE:** 09/28/2011 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (ROBERT DAVIS)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: WST
ARTCC: ZLC
ATC FACILITY: HLN APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: SWEDD **STATE:** MT **COUNTRY:** US

LATITUDE/LONGITUDE: 462658.45N/1113241.66W **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	HELENA	HLN	VORTAC	H	103.00	119.00	19.38	19.38		10000	17500
2	BOZEMAN	BZN	VOR/DME	H	320.00	338.00		43.13		10000	17500
3	GREAT FALLS	GTF	VORTAC	H	169.24	185.24	60.30	60.30		12000	17500
4	HAUSER	HAU	NDB	MH	112.96	128.96		11.37		9800	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
BZN	VOR/DME	R-320	44	10000	17500
GTF	VORTAC	R-169	61	12000	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		WP	145.54	325.54	R		7	10000	17500	10	17

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	463236.00N/1112106.00W	8931	4E

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
1	230	292

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
HELENA (FAC 1) AND BOZEMAN (FAC 2) USED TO ESTABLISH FIX COORDINATES
* WAIVER ON FILE - TERPS PARA 1761A(2)
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
PAT 1 CONTROLLING OBSTACLE LOCATED 11160 FEET INTO SECONDARY.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	SWEDD	1, 2		KHLN	HELENA	MT (US)
EN ROUTE	V2					(US)
EN ROUTE	V365					(US)
EN ROUTE	V536					(US)
IAP	ILS OR LOC Y RWY 27	1, 2		KHLN	HELENA	MT (US)
IAP	ILS OR LOC Z RWY 27	1, 2		KHLN	HELENA	MT (US)
IAP	RNAV (GPS) X RWY 27		1	KHLN	HELENA	MT (US)
IAP	RNAV (RNP) Y RWY 27			KHLN	HELENA	MT (US)
IAP	RNAV (RNP) Z RWY 27			KHLN	HELENA	MT (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4 **DATE OF REVISION:** 04/05/2012

REASON FOR REVISION:
DELETED GASBE AS A FACILITY AND MOVED HAUSER NDB FROM BACKUP TO FACILITY SECTION.
ADDED DISTANCE FROM DATA FOR ALL FACILITIES.
UPDATED ESV SECTION.
UPDATED HOLDING PATTERN OBSTACLE.
MOVED PRECIPITOUS TERRAIN ADJUSTMENT FROM REMARKS SECTION TO HOLDING SECTION.
MOVED HOLDING LIMITED REMARK TO HOLDING RESTRICTIONS SECTION.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 09/28/2011 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (ROBERT DAVIS)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

QUALITY 5 CHECKED

DISTRIBUTION:

NFDC
FPO: WST
ARTCC: ZLC
ATC FACILITY: HLN APP CON/HLN ATCT
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: WOKEN **STATE:** MT **COUNTRY:** US

LATITUDE/LONGITUDE: 465854.79N/1120133.14W **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	GREAT FALLS	GTF	VORTAC	H	206.00	222.00	37.68	37.68		8800	17500
2	HELENA	HLN	VORTAC	H	336.47	352.47	22.71	22.71		9000	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
GTF	VORTAC	R-206	46	9000	17500

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

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	SW	GTF	VORTAC	206.00	026.00	R	1-1 1/2		9300	17500	11	18
2	SW		WP	206.00	026.00	R		7	9300	17500	10	17
3	SW	GTF	VORTAC	206.00	026.00	R	1-1 1/2		9000	17500	11	18

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	465636.00N/1121636.00W	7251	4E
2	230	AAO	465633.00N/1121427.00W	7202	4E
2	310	AAO	465825.80N/1121703.00W	7960	4E
3	230	AAO	465636.00N/1121636.00W	7251	4E
3	310	AAO	465548.00N/1114403.00W	7976	4E

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
1	230	295
2	230	255
2	310	305
3	230	295
3	310	308

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
2	RNAV (GPS) RWY 23	KHLN	HELENA	MT (US)
2	RNAV (GPS) X RWY 27	KHLN	HELENA	MT (US)
3	ILS OR LOC Y RWY 27	KHLN	HELENA	MT (US)
3	VOR/DME - B	KHLN	HELENA	MT (US)

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	DIVIDE			KHLN	HELENA	MT (US)
EN ROUTE	V257	1, 2				(US)
EN ROUTE	V365	1, 2				(US)
IAP	RNAV (GPS) Y RWY 03			KGTF	GREAT FALLS	MT (US)
IAP	ILS OR LOC Y RWY 27	1, 2	3	KHLN	HELENA	MT (US)
IAP	ILS OR LOC Z RWY 27	1, 2	3	KHLN	HELENA	MT (US)
IAP	LOC/DME BC C	1, 2	1	KHLN	HELENA	MT (US)
IAP	RNAV (GPS) RWY 23		2	KHLN	HELENA	MT (US)
IAP	RNAV (GPS) X RWY 27		2	KHLN	HELENA	MT (US)
IAP	VOR-A	1, 2	3	KHLN	HELENA	MT (US)
IAP	VOR/DME - B	1, 2	3	KHLN	HELENA	MT (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 11 **DATE OF REVISION:** 04/05/2012

REASON FOR REVISION:
UPDATED ESV.

QUALITY CHECKED 5

DEVELOPED BY:	**DATE:** 11/28/2011	**OFFICE:** AJV-354	**NAME:** ADOLFO URRUTIA (ROBERT DAVIS)
APPROVED BY:	**DATE:**	**OFFICE:** AJV-354	**NAME:** DEZ SILAGYI
	SIGNATURE:		

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZLC
ATC FACILITY: ZLC APP/DEP CON, HLN ATCT
OTHER: GTF APCH

QUALITY CHECKED 5

RADIO FIX AND HOLDING DATA RECORD

NAME: YERUT **STATE:** MT **COUNTRY:** US

LATITUDE/LONGITUDE: 463227.13N/1113408.30W **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	DIST FROM FAC FEET	MRA	MAA
1	HELENA	I-HLN	LOC		086.71	102.71		18.40		9000	9300
2	HELENA	HLN	VORTAC	H			16.40	16.40		9000	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-HLN	LOC	R-087	19	9000	9300

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC Y RWY 27	1, 2		KHLN	HELENA	MT (US)
IAP	ILS OR LOC Z RWY 27	1, 2		KHLN	HELENA	MT (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 04/05/2012

REASON FOR REVISION:
ADDED DISTANCE FROM DATA FOR ALL FACILITIES.
LOWERED MRA FROM 9300 TO 9000.
MOVED ESV DATA FROM REMARKS SECTION TO ESV SECTION.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 09/28/2011 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (ROBERT DAVIS)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZLC
ATC FACILITY: HLN APP CON
OTHER:

QUALITY 5 CHECKED

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

NAME: HELENA VORTAC **STATE:** MT **COUNTRY:** US

LATITUDE/LONGITUDE: 463624.56N/1115712.51W **TYPE:**

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	HELENA	HLN	VORTAC	H							45000

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

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	E	HLN	VORTAC	086.00	266.00	R	1-1 1/2		8400	17500	9	16

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	462736.00N/1114724.00W	8104	4E

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
1	230	222

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
PAT 1 CONTROLLING OBSTACLE LOCATED 11976 FEET INTO SECONDARY, PRIMARY EQUIVELANT ELEVATION IS 7106.01 FEET.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BILLINGS			KBIL	BILLINGS	MT (US)
DP	HELENA			KHLN	HELENA	MT (US)
DP	HELENA			KHLN	HELENA	MT (US)
DP	SIEBE			KHLN	HELENA	MT (US)
DP	STAKK			KHLN	HELENA	MT (US)
DP	TAKE-OFF MINIMUMS			KHLN	HELENA	MT (US)
EN ROUTE	J34-136					(US)
EN ROUTE	J34-90					(US)
EN ROUTE	J90					(US)
EN ROUTE	V113					(US)
EN ROUTE	V2					(US)
EN ROUTE	V2-365					(US)
EN ROUTE	V21					(US)
EN ROUTE	V247					(US)
EN ROUTE	V365					(US)
IAP	ILS OR LOC Y RWY 27			KHLN	HELENA	MT (US)
IAP	ILS OR LOC Z RWY 27			KHLN	HELENA	MT (US)
IAP	LOC/DME BC-C		1	KHLN	HELENA	MT (US)
IAP	NDB-D			KHLN	HELENA	MT (US)
IAP	RNAV (GPS) Y RWY 09			KHLN	HELENA	MT (US)
IAP	RNAV (RNP) Y RWY 27			KHLN	HELENA	MT (US)
IAP	RNAV (RNP) Z RWY 09			KHLN	HELENA	MT (US)
IAP	RNAV (RNP) Z RWY 27			KHLN	HELENA	MT (US)
IAP	VOR-A		1	KHLN	HELENA	MT (US)
IAP	VOR/DME-B		1	KHLN	HELENA	MT (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 9 **DATE OF REVISION:** 06/30/2011

REASON FOR REVISION:
UPDATED FIX USE.
UPDATED PRECIPITOUS TERRAIN EVALUATION, CHANGED FROM 196 FEET TO 222 FEET.
MOVED HOLDING LIMITED TO ESTABLISHED PATTERN FROM REMARKS TO HOLDING RESTRICTIONS BLOCK.
UPDATED SIGNATURE/DISTRIBUTION BLOCKS.

DEVELOPED BY: **DATE:** 11/15/2010 **OFFICE:** AVN-130 **NAME:** ADOLFO URRUTIA (DAVID JENNER)

APPROVED BY: **DATE:** 04/20/2011 **OFFICE:** AVN-130 **NAME:** DEZ SILAGYI

QUALITY 5 CHECKED

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: WST
ARTCC: ZLC
ATC FACILITY: ZLC APP/DEP CON, HLN ATCT
OTHER:

QUALITY CHECKED

TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: **HELENA** STATE: **MT**

AIRPORT NAME: **HELENA RGNL** ID: **KHLN**

PROCEDURE: **ILS or LOC Y RWY 27** AMDT: **3**

DOCKET # :
(96-AXX-X/Required/Not Required)

ALL DIST TO 1/100 NM; ELEV TO NEAREST FT; COORD TO 1/100 SEC; DEG TO 1/100 DG.

1. Distance from **THLD** to 1000' point **4.40**
   (Enter THLD, FAF, ARP, FACILITY, as appropriate)
2. Width of **FINAL** segment at 1000' point **1.17**
   (Enter appropriate segment , final, intermediate, etc.)
3. True Course of **FINAL** segment containing 1000' point **282.71**
4. High Terrain in **FINAL** segment containing 1000' point **4299**
5. Distance from **THLD** to 1500' point **7.81**
   (If 1500' point in PT maneuvering area or holding pattern note in remarks)
6. Width of **FINAL** segment at 1500' point **1.90**
7. True Course of **FINAL** segment containing 1500' point **282.71**
8. High Terrain in **FINAL** segment containing 1500' point **4299**
9. Threshold Coordinates (if straight-in) ... **463610.76N** / **1115745.96W**
10. ARP Coordinates ..... **463624.50N** / **1115857.90W**
11. Runway Approach End and distance furthest from ARP.....RWY **27**
    Distance **0.86** NM
12. FAF Coordinates ..... **463415.10N** / **1114526.67W**
    (Click to Select)

REMARKS: Approach/Drawing attached.