FEDERAL AVIATION ADMINISTRATION

FLIGHT STANDARDS SERVICE

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

TITLE 14 CFR PART 97.33

Bearings, headings, courses, tracks 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 feet RVR.

AIRPORT ID KEKS		PROCEDURE NAME RNAV (GPS) RWY 34	<u>OF</u>	RIGINAL/AMEN 1	<u>NDMENT</u>		<u>CITY</u> ENNIS		STATE MT	
AIRPORT ELEVATION 5433	<u>TDZ</u> 5370		SUPERSEDE NAV (GPS) RW		9		/AMENDMENT ORIG	DATED 09/15/2016	<u>MAG VAR</u> 12E	EPOCH YEAR 2015
FACILITY RNAV	COORDINATES OF F	FACILITIES ACTUAL EFFECT 17 JUNE			<u>REQUII</u>	RED EFFI ROUT	ECTIVE DATE NE	CANCEL/SI	<u>JSPEND</u>	
TERMINAL ROUTES										
FROM	FIX TYPE	<u>T0</u>	FIX TYPE	LEG TYPE	FO/FB	<u>RNP</u>	COURSI	E	DISTANCE	ALTITUDE
WAIDE	IAF	PUDIY		TF	FB	1.00	008.52		7.29	11600
PUDIY		OGHEP		TF	FB	1.00	008.56		3.43	10000
OGHEP	IF	KEEPO		TF	FB	1.00	354.27		5.82	8300
KEEPO		HIRSO		TF	FB	1.00	354.25		2.05	7700
HIRSO	FAF	CARGI/5.25 NM TO RW34		TF	FB	0.30	344.62		2.01	
CARGI/5.25 NM TO RW3	4	RW34	MAP	TF	FO	0.30	344.62		5.25	
RW34	MAP	6300 MSL		CA			344.62			6300
6300 MSL		BUVDE		DF	FB	1.00				
BUVDE		MDISN		TF	FO	1.00	000.22		9.17	9900

MISSED APPROACH

MAP:

LPV: DA LNAV/VNAV: DA LNAV: RW34

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 6300, THEN CLIMBING LEFT TURN TO 9900 DIRECT BUVDE AND ON TRACK 000.22 TO MDISN AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

OUALITY 16 CHIECKER

<u>AIRPORT ID</u> KEKS		P URE NAME PS) RWY 34	<u>0</u>	RIGINAL/AMENDMENT	E CITY ENNIS	<u>STATE</u> MT
PROFILE:						
1. PT SIDE OF COURSE	OUT	BOUND	FT WITHIN	MILES OF	(IAF)	
2. PROFILE STARTS AT OGHEP						
3. FAC: 344.62	FAF: HIRSO		DIST FAF	TO MAP: 7.26	DIST FAF TO THLD: 7.26	
4. MIN ALT: OGHEP 10000, KE	EPO 8300, HIRSO 7700, C	ARGI/5.25 NM TO I	RW34 7060			
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	275 HAT: 0.80	GS ANT:	
6. MIN GP INCPT: 7700	GP ALT AT FAF :	HIRSO 7700		OM:	MM:	IM:
7. GP ANGLE: 3.00	34:1: IS NOT CLEAR	20:1: IS CLEA	AR TCH:	40.1		
8. MSA FROM: RW34 12600						

PBN REQUIREMENTS NOTE:

RNP APCH - GPS

NOTES:

CHART NOTE: CIRCLING NA EAST OF RWY 16-34. CHART NOTE: RWY 34 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: BARO-VNAV NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT WAIDE ON V343 SOUTHBOUND.

ADDITIONAL FLIGHT DATA:

HOLD N, RT, 164.58 INBOUND. FAS OBST: 5780 AAO 451242N/1113749W. CHART VDP AT 2.59 NM TO RW34 WAAS CHANNEL # 45539 REFERENCE PATH ID: W34A CHART CIRCLING ICON. LTP HAE: 1620.3 M

MINIMUMS:

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

ALTERNATE: NA

CAT A, B 900-2, CAT C, D 900-2 1/2

CATEGORY:		Α			В			С			D			Е	
FINAL TYPE	DA/MDA	<u>VIS</u>	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	<u>VIS</u>	HAT/HAA
LPV DA	5645	1	275	5645	1	275	5645	1	275	5645	1	275			
LNAV/VNAV DA	5952	1 3/4	582	5952	1 3/4	582	5952	1 3/4	582	5952	1 3/4	582			
LNAV MDA	6220	1	850	6220	1 1/4	850	6220	2 1/2	850	6220	2 1/2	850	ALIS		
CIRCLING	6220	1	787	6220	1 1/4	787	6220	2 1/2	787	6220	2 1/2	787	0.VAL/7_ 16		

CHECKED

<u>AIRPORT ID</u>	PROCEDURE NAME	ORIGINAL/AMENDMENT	<u>CITY</u>	<u>STATE</u>	
KEKS	RNAV (GPS) RWY 34	1	ENNIS	MT	

CHANGES - REASONS

1. ADDED NEW INTERMEDIATE STEPDOWN FIX KEEPO WITH ALTITUDE 8300 FT - PER ATC/FPT APPROVED PROCEDURE REDESIGN.

2 MOVED PFAF HIRSO FIX - ATC/FPT APPROVED PROCEDURE REDESIGN.

3. NEW SEGMENT OGHEP TO KEEPO COURSE/LENGTH 354.27/5.82 AND PFAF HIRSO MOVED SOUTH, NEW KEEPO TO HIRSO COURSE/LENGTH 324.25/2.05 - PER ATC/FPT APPROVED PROCEDURE REDESIGN.

4. RELOCATED STEPDOWN FIX CARGI WITH ALTITUDE LOWERED TO 6440 FT AND SHORTENED DISTANCE HIRSO TO CARGI FROM 3.46 NM TO 2.01 NM AND CARGI TO RWY 34/MAP LENGTHENED FROM 3.80 NM TO 5.25 NM - PER ATC/FPT APPROVED PROCEDURE REDESIGN.

5. RAISED LPV DA ALL CATS FROM 5644 TO 5645 - NEW SURVEY/AIRNAV DATA.

6. CHANGED LNAV/VNAV DA/HAT/VIS ALL CATS FROM 5950/581/2 1/4 SM TO 5952/582/1 3/4 SM - NEW EVALUATION AND SURVEY/AIRNAV DATA.

7. LOWERED LNAV MDA/HAT ALL CATS FROM 6240/871 TO 6220/850 - NEW EVALUATION AND SURVEY/AIRNAV DATA.

8. LOWERED CIRCLING ALL CATS MDA/HAA FROM 6240/817 TO 6220/787 - NEW EVALUATION AND HIGHER LNAV MINIMUMS.

9. LOWERED CIRCLING CAT A VISIBILITY FROM 1 1/4 SM TO 1 SM, CAT D VISIBILITY FOM 2 3/4 SM TO 2 1/2 SM - NEW EVALUATION.

10. ADDED "RNP APCH-GPS" TO PBN REQUIREMENTS NOTES - IAW 8260.19I 8-6-8(B)(2).

11. REMOVED CHART NOTE: "DME/DME RNP-0.3 NA" - IAW 8260.19I 4-6-10(E).

12. PROFILE SECTION, LINE 7, ADDED "34:1 IS NOT CLEAR" AND "20:1 IS CLEAR" - UPDATED SURVEY DATA AND 8260.19I REQUIREMENT.

13. CHANGED ADDITIONAL FLIGHT DATA FROM "CHART VDP AT 2.66 NM TO RW34" TO "CHART VDP 2.59 NM TO RW34" - NEW EVALUATION.

14. REMOVED BARO-VNAV NOTE TEMPERATURE LIMIT NOTE AND REPLACED WITH "BARO-VNAV NA" - PRECIPITOUS TERRAIN IN FINAL.

15. ADDED CHART NOTE: RWY 34 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - 34:1 PENETRATIONS DOCUMENTED, NEW EVALUATION.

16. FAS DATA BLOCK INFORMATION CHANGES: LTP/FTP LAT/LONG CHANGED FROM 45155.1585N/1113853.1270W TO 451555.1655N/1113852.9555W, FPAP LAT/LONG CHANGED FROM 451724.0885/1113900.5900W TO 451724.0955N/1113900.41550W, TCH CHANGED FROM 40.0 TO 40.1, LENGTH OFFSET FROM 0744 TO 0432 AND RESULTANT CRC REMAINDER CODE CHANGED FROM 661CB122 TO 5A3E620F.

17. ADDED ADDITIONAL FLIGHT DATA "FAS OBST: 5780 AAO 451242N/1113749W" - LNAV CONTROLLING OBSTACLE, NEW EVALUATION.

18. REMOVED FROM ALTERNATE MINIMUMS "NA WHEN LOCAL WEATHER NOT AVAILABLE" - NO BACKUP ALTIMETER SETTING AVAILABLE.

19. CHANGED MISSED APPROACH FROM "CLIMB TO 11900 DIRECT BUVDE AND ON TRACK 000.22 TO MDISN AND HOLD, CONTINUE CLIMB-IN-HOLD TO 11900" TO "CLIMB TO 6300, THEN CLIMBING LEFT TURN TO 9900 DIRECT BUVDE AND ON TRACK 000.22 TO MDISN AND HOLD", LOWERED HOLDING ALTITUDE FROM 11900 TO 9900 FT - ALLOWED CLIMB-IN-HOLD TO BE ELIMINATED, MAINTAINED SAME HOLDING FIX, MISSED APPROACH FLIGHT PATH AND MINIMUMS, FPT/ATC APPROVED.

COORDINATED WITH:

A4A 🗌 ALPA 🗙	AOPA X	APA X	hai 🗌	NBAA X	OTHER: ZLC, AMGR.			
FLIGHT CHECKED BY SCOTT A THOMPSON				Digitally signed i	Digitally signed by JON DENTON Apr 23, 2021	OFFICE FICO	DATE 04/07/2021	
DEVELOPED BY JON DENTON (GORDON I	LEMON)			JON DENTON Apr 23, 2021	I	OFFICE AJV-A432	DATE 01/04/2021	
APPROVED BY LONNIE EVERHART		J	<i>itally signed b</i> ON DENTON Apr 23, 2021	Ý		OFFICE AJV-A430	DATE	<u>TITLE</u> MANAGER

<u>AIRPORT ID</u>	PROCEDURE NAME	ORIGINAL/AMENDMENT	<u>CITY</u>	<u>STATE</u>
KEKS	RNAV (GPS) RWY 34	1	ENNIS	MT

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KEKS
RUNWAY	RW34
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W34A
LTP/FTP LATITUDE	451555.1655N
LTP/FTP LONGITUDE	1113852.9555W
LTP/FTP ELLIPSOIDAL HEIGHT	+16203
FPAP LATITUDE	451724.0955N
FPAP LONGITUDE	1113900.4155W
THRESHOLD CROSSING HEIGHT (TCH)	00040.1

<u>DATA</u>

F

03.00

106.75 0432

40.0

50.0

5A3E620F

ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+16303
FPAP ORTHOMETRIC HEIGHT	+16303

TCH UNITS SELECTOR (METERS OR FEET USED)

GLIDEPATH ANGLE (GPA)

LENGTH OFFSET

CRC REMAINDER

COURSE WIDTH AT THRESHOLD

HORIZONTAL ALERT LIMIT (HAL)

VERTICAL ALERT LIMIT (VAL)

FAS DATA BLOCK INFORMATION

DATA FIELD