

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR 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			LPV: DA LNAV/VNAV: DA LNAV: RW31 CLIMB TO 6000 DIRECT EGITE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 6000. ADDITIONAL FLIGHT DATA: HOLD NW, RT, 125.73 INBOUND. CHART FAS OBST: 2755 TWR 462534N/1055140W CHART 2821 TOWER 462302N/1054824W. DISTANCE TO THLD FROM 250 HAT: 0.66 NM. CHART VDP AT 1.10 MILES TO RW31* *LNAV ONLY. WAAS CHANNEL # 56240 REFERENCE PATH ID: W31A CHART CIRCLING ICON. LTP HAE: 784.3 M					
NEUMS (IAF)	BOKDE (NOPT) (FB)			035.92 / 10.00			5500								
EASTE (IAF)	BOKDE (NOPT) (FB)			216.16 / 10.00			5500								
BOKDE (IF/IAF)	AVUNE (FB)			306.04 / 6.96			4300								
AVUNE (FAF)	CADUX/2.00 NM TO RW31 (FB)			305.95 / 3.12											
CADUX/2.00 NM TO RW31	RW31 (MAP) (FO)			305.95 / 2.00											
RW31 (MAP)	2877 MSL			305.95			6000								
2877 MSL	EGITE (FO)														
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SE BOKDE, RT, 306.04 INBOUND, 5500 FT. IN LIEU OF PT (IAF) 3. FAC: 305.95 FAF: AVUNE DIST FAF TO MAP: 5.12 THLD: 5.12 4. MIN. ALT: BOKDE 5500, AVUNE 4300, CADUX/2.00 NM TO RW31 3300* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 4300 GS ALT AT: AVUNE 4300 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 43.0 34:1 IS CLEAR 8. MSA FROM: _____										MAG VAR: 9E EPOCH YEAR: 2020					
MINIMUMS															
TAKEOFF: 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
LPV DA	2877	1	250	2877	1	250	2877	1	250	2877	1	250			
LNAV/VNAV DA	2917	1	290	2917	1	290	2917	1	290	2917	1	290			
LNAV MDA	3020	1	393	3020	1	393	3020	1 1/8	393	3020	1 1/8	393			
CIRCLING	3060	1	430	3100	1	470	3120	1 1/2	490	3320	2 1/4	690			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -24C (-11F) OR ABOVE 54C (130F). CHART NOTE: BARO-VNAV AND VDP NA WHEN USING FORSYTH ALTIMETER SETTING. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)															
CITY AND STATE			ELEVATION: 2630 TDZE: 2627			FACILITY IDENTIFIER: RNAV			PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:		
MILES CITY, MT			AIRPORT NAME:						RNAV (GPS) RWY 31, ORIG				AMDT: NONE		
			FRANK WILEY FIELD										DATED		



ALL AFFECTED PROCEDURES REVIEWED? <div><input checked="" type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
ROUTINE					
COORDINATED WITH:					
ATA <div><input checked="" type="checkbox"/></div>		AAT <div><input type="checkbox"/></div>		ALPA <div><input checked="" type="checkbox"/></div>	
APA <div><input type="checkbox"/></div>		AOPA <div><input checked="" type="checkbox"/></div>		NBAA <div><input type="checkbox"/></div>	
OTHER (specify) <div><input checked="" type="checkbox"/> ZLC, MLS AMGR, GTF FSS</div>					
FLIGHT CHECKED BY					
NAME: <div>PENDING</div>				FIFO	DATE:
DEVELOPED BY					
NAME: <div>FRANK JACKSON JR</div>				FIFO AJV-5432	DATE: 02/04/2016
APPROVED BY					
NAME: <div>ALLAN WILL</div> <div>LONNIE EVERHART</div>				FIFO AJV-5430	DATE:
CHANGES: ORIGINAL PROCEDURE.					
REASONS:					
PDF EDITS: TERMINAL ROUTES ALTITUDE: ADDED 6000 FROM 2877 MSL TO EGITE, DUE TO CA-DF-CIH COMBINATION.					



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR 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.

NOTES, (CONT.):

*RNAV ONLY

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FORSYTH ALTIMETER SETTING; INCREASE LPV DA TO 2965 AND ALL VISIBILITY 1/8 MILE, AND INCREASE RNAV/VNAV DA TO 3005 AND ALL VISIBILITY 1/4 MILE. INCREASE ALL MDA 100 FT. AND ALL CAT C AND D VISIBILITY 1/4 MILE.

TAA

	FROM	TO	ALT
1.	216/30 CW 036/30 (NOPT)	216/15 CW 036/15	6100
2.	216/15 CW 036/15	BOKDE (IF/IAF) (FB)	5500
3.	036/30 CW 126/30	NEUMS (IAF) (FB)	5900
4.	126/30 CW 216/30	EASTE (IAF) (FB)	5800

QUALITY
16
CHECKED

CITY AND STATE
MILES CITY, MT

ELEVATION: 2630 TDZE: 2627
AIRPORT NAME:
FRANK WILEY FIELD

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 31, ORIG

SUP:
AMDT: NONE
DATED:

ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
COORDINATED WITH:					
ATA <div><input type="checkbox"/></div>		AAT <div><input type="checkbox"/></div>	ALPA <div><input type="checkbox"/></div>	APA <div><input type="checkbox"/></div>	AOPA <div><input type="checkbox"/></div>
NBAA <div><input type="checkbox"/></div>		OTHER (specify) <div><input type="checkbox"/></div>			
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME:				FIFO	DATE:
APPROVED BY					
NAME:				FIFO	DATE:
CHANGES:					
REASONS:					

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - 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.

FAS DATA BLOCK INFORMATION**DATA FIELD****DATA**

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMLS
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	462526.3505N
LTP/FTP LONGITUDE	1055236.4500W
LTP/FTP ELLIPSOIDAL HEIGHT	+07843
FPAP LATITUDE	462629.2000N
FPAP LONGITUDE	1055407.7290W
THRESHOLD CROSSING HEIGHT (TCH)	00043.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1040
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

A218BBAE

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K1
LTP ORTHOMETRIC HEIGHT	+08003
FPAP ORTHOMETRIC HEIGHT	+08003

QUALITY
16
CHECKED

CITY AND STATE MILES CITY, MT	ELEVATION: 2630 AIRPORT NAME: FRANK WILEY FIELD	TDZE: 2627	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 31, ORIG	SUP:
					AMDT: NONE
					DATED:

ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
COORDINATED WITH:					
ATA <div><input type="checkbox"/></div>		AAT <div><input type="checkbox"/></div>	ALPA <div><input type="checkbox"/></div>	APA <div><input type="checkbox"/></div>	AOPA <div><input type="checkbox"/></div>
NBAA <div><input type="checkbox"/></div>		OTHER (specify) <div><input type="checkbox"/></div>			
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME:				FIFO	DATE:
APPROVED BY					
NAME:				FIFO	DATE:
CHANGES:					
REASONS:					

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICES - TITLE 14 CFR 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.

ARINC SUMMARY - KMLS

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
BOKDE	010	BOKDE	HF	FO		306.0			R			AA 05500		EE A
EASTE	010	EASTE	IF	FB										E A
EASTE	020	BOKDE	TF	FB	1.0	216.2						AA 05500		EE B
NEUMS	010	NEUMS	IF	FB										E A
NEUMS	020	BOKDE	TF	FB	1.0	035.9						AA 05500		EE B
	010	BOKDE	IF	FB								AA 05500		E I
	020	AVUNE	TF	FB	1.0	306.0						AA 04300		E F
	021	CADUX	TF	FB	0.3	306.0		3.00				AA 03300 GS 03306		E S
	030	RW31	TF	FO	0.3	306.0		3.00				AT 02669		GY M
	040		CA	FB		306.0						AA 02877		M
	050	EGITE	DF	FO								AA 06000		EY
	060	EGITE	HM	FO		125.7			R			AA 06000		EE

POINTS

POINT NAME	LATITUDE	LONGITUDE
AVUNE	N462149.41	W1054722.06
BOKDE	N461654.15	W1054015.82
CADUX	N462401.67	W1055033.61
EASTE	N462357.52	W1053002.38
EGITE	N463435.71	W1060557.26
NEUMS	N460949.85	W1055026.64

RUNWAYS

RUNWAY	THRESHOLD LATITUDE	THRESHOLD LONGITUDE	THRESHOLD ELEVATION	PROCEDURE TCH
RW31	N462526.35	W1055236.45	02626	43

QUALITY
16
CHECKED

CITY AND STATE MILES CITY, MT	ELEVATION: 2630 TDZE: 2627	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
	AIRPORT NAME: FRANK WILEY FIELD	RNAV	RNAV (GPS) RWY 31, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED? <input type="checkbox"/> YES <input type="checkbox"/> NO		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
COORDINATED WITH: <div>ATA<input type="checkbox"/> AAT<input type="checkbox"/> ALPA<input type="checkbox"/> APA<input type="checkbox"/> AOPA<input type="checkbox"/> NBAA<input type="checkbox"/> OTHER (specify) <input type="checkbox"/> _____</div>					
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.					
STRAIGHT-IN AREA		216/30 CW 036/30		216/15 CW 036/15		1. AAO		454848.00N/1060118.00W		4016 (5E)	2000			6100					
						2. TERRAIN		454848.00N/1060118.00W		3816 (3800)		AS1500		5300					
STRAIGHT-IN AREA		216/15 CW 036/15		BOKDE		3. TREE		462050.70N/1052254.99W		3405 (2C)	2000			5500					
						4. TERRAIN		462050.70N/1052254.99W		3305 (3300)		AS1500		4800					
LEFT BASE AREA		036/30 CW 126/30		NEUMS		5. TOWER (30-000234)		461033.00N/1062424.00W		3862 (3C)	2000			5900					
						6. TERRAIN		460642.00N/1063612.00W		3567 (3600)		AS1500		5100					
RIGHT BASE AREA		126/30 CW 216/30		EASTE		7. TOWER (30-000283)		462404.00N/1053908.00W		3770 (5E)	2000			5800					
						8. TERRAIN		465239.00N/1054739.00W		3504 (3500)		AS1500		5000					
INITIAL		NEUMS		BOKDE		9. AAO		461512.00N/1053842.00W		3124 (5E)	1000	AT1376		5500					
						10. TERRAIN		461527.00N/1054112.00W		2855 (2900)		AS1500		4400					
INITIAL		EASTE		BOKDE		11. AAO		462236.00N/1052757.00W		3531 (5E)	1000	AT969		5500					
						12. TERRAIN		462239.00N/1052803.00W		3327 (3300)		AS1500		4800					
INTERMEDIATE		BOKDE (IF/IAF)		AVUNE		13. AAO		462215.00N/1053954.00W		3363 (4E)	500	AC125 AT312		4300					
						14. TERRAIN		462106.00N/1054215.00W		2953 (3000)		AS1000		4000					
2. HOLD-IN-LIEU-OF-PT		BOKDE		P-6		17. AAO		461827.00N/1053045.00W		3393 (5E)	1000	AT1107		5500					
						18. TERRAIN		461827.00N/1053045.00W		3193 (3200)		AS1500		4700					
3. MISSED APPROACH	MAP:		DA / DA / RW31		EGITE						ASC			6000					
	ELEV:		2686/2755/2920				19. AAO		463348.00N/1060757.00W		3216 (5E)	1000	4300						
						20. TERRAIN		463333.00N/1060727.00W		2924 (2900)		AS1500		4400					
4. CIRCLING AREA		DISTANCE		HT. ABV. ARPT.															
CATEGORY A		1.3 NM		REQUIRED	350	ACTUAL	430	15. TWR (KMLST000417)		462533.88N/1055139.59W		2755 (1A)	300	3060					
CATEGORY B		1.5 NM			450		470	21. N-ANT (KMLST0069)		462443.25N/1055619.49W		2794 (1A)	300	3100					
CATEGORY C		1.7 NM			450		490	22. TREE		462450.98N/1055803.17W		2809 (2C)	300	3120					
CATEGORY D		2.3 NM			550		690	23. AAO		462453.27N/1055840.89W		3020 (2C)	300	3320					
CATEGORY E		4.5 NM			550														
5. MINIMUM SAFE ALTITUDES														PRIMARY NAVAD:					
SECTOR		OBSTRUCTION		BRG/DIST		ELEVATION (MSL)		M S A		SECTOR		OBSTRUCTION		BRG/DIST		ELEVATION (MSL)		M S A	
CITY AND STATE		ELEVATION: 2630		FACILITY		PROCEDURE AND AMENDMENT NO:		REGION											
MILES CITY, MT		AIRPORT NAME: FRANK WILEY FIELD		RNAV		RNAV (GPS) RWY 31, ORIG		ANM											

QUALITY
16
CHECKED

PART B - SUPPLEMENTAL DATA										PART C - REMARKS: PRECIPITOUS TERRAIN EVALUATION COMPLETED. CRITICAL TEMPERATURES: DESCENT RATE: STANDARD TEMP 990 HIGH TEMP 1156. CRITICAL LOW :-24C (-11F) CRITICAL HIGH :+54C (+130F) ACT :-31C APT ISA :+9.79C ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED. CAT A: 1.34NM CAT B: 1.90NM CAT C: 3.00NM CAT D: 3.92NM SEE ATTACHED AIRSPACE LETTER. RASS PRESSURE PATTERNS SAME KMLS 2630.2, K1S3 2729.3 RA = 87.1. VGSI DATA: 3.00/43. LPV SLOPE: 34:1 LNAV/VNAV SLOPE: 23.86:1 VISUAL PORTION OF FINAL APPROACH EVALUATED IAW AFS-400 MEMORANDUM DATED 11/04/2014. OBSTACLES 3, 22, AND 23 VERIFIED ON QUAD CHART (2C ACCURACY CODE APPLIED). MAXIMUM VEGETATION HEIGHT 30 FEET PER FPT WITHIN 20,000 FT. KMLS ASOS IS ON SERVICE-A. K1S3 AWOS IS NOT ON SERVICE-A. AVERAGE COLD TEMPERATUR BASED ON 5-YEAR HISTORY (2011-2015). CRITICAL LOW TEMP BASED ON EFFECTIVE GPA TEMPERATURE LIMITS, DELTA ISA LOW, AND DESCENT VALUES DERIVED FROM AFS-400 CALCULATOR.	
1. COMMUNICATIONS WITH:			2. WEATHER SERVICE			3. ALTIMETER SETTING					
GTF FSS ZLC ARTCC				N W S	OTHER: ASOS		SOURCE:KMLS / K1S3				
				F A A			DISTANCE: 0 / 31.93				
				A / C			HOURS REMOTE OPERATION: 24				
SATISFACTORY ON:			LOCATION: KMLS			ADJUSTMENT: 0 / 88					
4. MONITOR STATUS	X	V H F	X	U H F	H F	PRIMARY NAVAID:					
						MONITOR POINT:					
						HRS	CAT 1				
						OPTN:	CAT 3				
5. APPROACH & RUNWAY LIGHTING	X								ALS		
									(S) SALS		
									MAL S		
									HIRL		
									MIRL 04 (PCL), 13 (PCL), 22 (PCL), 31 (PCL)		
									REIL 04 (PCL), 13 (PCL), 22 (PCL), 31 (PCL)		
									TDZ		
									C/LINE		
	X								OTHER (SPECIFY) PAPI-2L 04 (PCL), 13 (PCL), 22 (PCL), 31 (PCL)		
6. RUNWAY MARKINGS									BASIC BSC-P 13, 31		
									ALL WEATHER		
									INSTRUMENT NPI-F 04		
7. RUNWAY VISUAL RANGE									APPROACH		
									MIDFIELD		
									ROLL OUT		
8. GLIDE PATH									GP ANGLE: 3.00	ELEV RWY THRESHOLD:2625.7	
									DISTANCE FROM RWY:	ELEV GP ANTENNA:	
										THRESHOLD CROSSING HEIGHT:43.0	
9. FINAL APPROACH COURSE AIMING			X							RUNWAY THRESHOLD	FT. FROM THRESHOLD
										ON CENTERLINE	FT. FROM CENTERLINE
10. WAIVERS: NONE											
PART D - PREPARED BY: FRANK JACKSON JR						DATE: 02/04/2016					
TITLE: AERONAUTICAL INFORMATION SPECIALIST						OFFICE: AJV-5432					



STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD		
--	--	--

PART - A OBSTRUCTION DATA

[illegible]

PART B - SUPPLEMENTAL DATA										PART C - REMARKS:	
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	CAT 1								
		OPTN:	CAT 3								
5. APPROACH & RUNWAY LIGHTING			ALS								
			(S) SALS								
			MALS								
			HIRL								
			MIRL								
			REIL								
			TDZ								
			C/LINE								
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:	