

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.							
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW19R CLIMB TO 1700 THEN CLIMBING RIGHT TURN TO 2000 DIRECT ROLLR AND HOLD. ADDITIONAL FLIGHT DATA: HOLD W, RT, 100.18 INBOUND. FAS OBST: 261 AAO 605137N/1614644W DISTANCE TO THLD FROM 200 HAT: 0.52 NM. CHART VDP AT 1.27 NM TO RW19R* *LNAV ONLY. WAAS CHANNEL # 70507 REFERENCE PATH ID: W19A CHART CIRCLING ICON. LTP HAE: 41.7 M					
TOORR (IAF)		CATUB (NOPT) (TF) (FB) (RNP 1.00)		102.34 / 9.89				1800							
RATNE (IAF)		CATUB (NOPT) (TF) (FB) (RNP 1.00)		282.88 / 10.00				1800							
CATUB (IF/IAF)		KAYSE (TF) (FB) (RNP 1.00)		192.61 / 6.71				1800							
KAYSE (FAF)		RW19R (MAP) (TF) (FO) (RNP 0.30)		192.53 / 5.18				1800							
RW19R (MAP)		1700 MSL (CA)		192.53				1700							
1700 MSL		ROLLR (DF) (FO) (RNP 1.00)						2000							
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N CATUB, RT, 192.61 INBOUND, 1800 FT. IN LIEU OF PT (IAF) 3. FAC: 192.53 FAF: KAYSE DIST FAF TO MAP: 5.18 THLD: 5.18 4. MIN. ALT: CATUB 1800, KAYSE 1800 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 1800 GS ALT AT: KAYSE 1800 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 51.8 34:1 IS CLEAR 8. MSA FROM: _____										MAG VAR: 11E		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	320	2400	200	320	2400	200	320	2400	200	320	2400	200			
LNAV/VNAV DA	479	4000	359	479	4000	359	479	4000	359	479	4000	359			
LNAV MDA	560	2400	440	560	2400	440	560	4500	440	560	4500	440			
CIRCLING	560	1	431	600	1	471	600	1 1/2	471	680	2	551			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -25C (-13F) OR ABOVE 54C (130F). CHART NOTE: CIRCLING NA W OF RWY 1L-19R. CHART NOTE: DME/DME RNP-0.3 NA.															
CITY AND STATE		ELEVATION: 129 TDZE: 120		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
BETHEL, AK		AIRPORT NAME: BETHEL				RNAV (GPS) RWY 19R, AMDT 2D				AMDT: 2C					
										DATED 11/13/2014					



ALL AFFECTED PROCEDURES REVIEWED? <div><input 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 checked="" type="checkbox"/></div>	
OTHER (specify)		<div><input checked="" type="checkbox"/> ZAN, BET ATCT, AIRPORT MANAGER</div>			
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME:				FIFO	DATE:
HERMAN C. ROGERS				AJV-5432	11/22/2016
APPROVED BY					
NAME:				FIFO	DATE:
PATRICK MULQUEEN				AJV-5430	
CHANGES:					
<div>1. MAGVAR UPDATED FROM 14E/2010 TO 11E/2020.</div> <div>2. INCREASED ALL MAGNETIC COURSES 3 DEGREES.</div> <div>3. ADDED NOTE TO ADDITIONAL FLIGHT DATA, CHART CIRCLING ICON.</div> <div>4. UPDATED BARO-VNAV NOTE TO READ "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C (0F) OR ABOVE 54C (130F).</div> <div>5. UPDATED FAS DATA WITH NEW THLD COORDINATES, CFC CHANGED FROM C2DB50D9 TO EFEF442C.</div>					
ALL CHANGES FROM AMDT 2A THRU 2C HAVE BEEN INCORPORATED INTO THIS PROCEDURE.					
REASONS:					
<div>1. MAGVAR OUT OF TOLERANCE.</div> <div>2. MAGVAR UPDATE FROM 14E TO 11E.</div> <div>3. 8260.3 NEW CIRCLING CRITERIA USED.</div> <div>4. AFS HIGH/LOW TEMP CALCULATOR USED.</div> <div>5. NEW SURVEY DATA.</div>					

QUALITY
10
CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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TAA

	FROM	TO	ALT
1.	102/30 CW 283/30 (NOPT)	CATUB (IF/IAF) (FB)	1800
2.	283/30 CW 013/30	283/15 CW 013/15	4600
3.	283/15 CW 013/15	RATNE (IAF) (FB)	1800
4.	013/30 CW 102/30	TOORR (IAF) (FB)	1800

CITY AND STATE

BETHEL, AK

ELEVATION: 129

TDZE: 120

AIRPORT NAME:

BETHEL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 19R, AMDT 2D

SUP:

AMDT:

DATED: 11/13/2014

QUALITY
10
CHECKED

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

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	PABE
RUNWAY	RW19R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W19A
LTP/FTP LATITUDE	604716.1785N
LTP/FTP LONGITUDE	1614945.2945W
LTP/FTP ELLIPSOIDAL HEIGHT	+00417
FPAP LATITUDE	604554.6700N
FPAP LONGITUDE	1615057.6300W
THRESHOLD CROSSING HEIGHT (TCH)	00051.8
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0800
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 EFEF442C

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	PA
LTP ORTHOMETRIC HEIGHT	+00312
FPAP ORTHOMETRIC HEIGHT	+00312

CITY AND STATE

BETHEL, AK

ELEVATION: 129

TDZE: 120

AIRPORT NAME:

BETHEL

FACILITY
IDENTIFIER:
RNAVPROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 19R, AMDT 2D

SUP:

AMDT:

DATED: 11/13/2014

 QUALITY
10
CHECKED

ALL AFFECTED PROCEDURES REVIEWED?		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
<div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>					
COORDINATED WITH:					
<div>ATA</div> <div><input type="checkbox"/></div>		<div>AAT</div> <div><input type="checkbox"/></div>		<div>ALPA</div> <div><input type="checkbox"/></div>	
		<div>APA</div> <div><input type="checkbox"/></div>		<div>AOPA</div> <div><input type="checkbox"/></div>	
		<div>NBAA</div> <div><input type="checkbox"/></div>		<div>OTHER (specify)</div> <div><input type="checkbox"/></div> <div></div>	
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME:				FIFO	DATE:
APPROVED BY					
NAME:				FIFO	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		102/30 CW 283/30		CATUB		1. AAO		604300.00N/1604742.00W		552 (4E)		1000		AT248		1800			
						2. TERRAIN		612603.00N/1620148.00W		178 (200)				AS1500		1700			
LEFT BASE AREA		283/30 CW 013/30		283/15 CW 013/15		3. AAO		603605.50N/1602736.80W		2581 (6A)		2000				4600			
						4. TERRAIN		603119.44N/1604310.52W		1710 (1700)				AS1500		3200			
LEFT BASE AREA		283/15 CW 013/15		RATNE		5. AAO		604743.53N/1615234.44W		374 (2C)		1000		AT426		1800			
						6. TERRAIN		604748.00N/1611212.00W		125 (100)				AS1500		1600			
RIGHT BASE AREA		013/30 CW 102/30		TOORR		7. AAO		604324.00N/1615442.00W		381 (4E)		1000		AT419		1800			
						8. TERRAIN		604324.00N/1615442.00W		181 (200)				AS1500		1700			
INITIAL		TOORR		CATUB		9. AAO		605639.00N/1615018.00W		260 (4E)		1000		AT540		1800			
						10. TERRAIN		605639.00N/1615018.00W		60 (100)				AS1500		1600			
INITIAL		RATNE		CATUB		11. AAO		605654.00N/1613442.00W		260 (4E)		1000		AT540		1800			
						12. TERRAIN		605654.00N/1613442.00W		60 (100)				AS1500		1600			
INTERMEDIATE		CATUB (IF/IAF)		KAYSE		13. AAO		605358.76N/1614245.13W		291 (2A)		500		DG1009		1800			
						14. TERRAIN		605358.76N/1614245.13W		91 (100)				AS1500		1600			
2. HOLD-IN-LIEU-OF-PT		CATUB		P-4		13. AAO		605358.76N/1614245.13W		291 (2A)		1000		AT509		1800			
						14. TERRAIN		605358.76N/1614245.13W		91 (100)				AS1500		1600			
3. MISSED APPROACH	MAP:		DA / DA / RW19R		ROLLR						ASC				2000				
	ELEV:		134/298/460				7. AAO		604324.00N/1615442.00W		381 (4E)		1000		1400				
							8. TERRAIN		604324.00N/1615442.00W		181 (200)				AS1500				
4. CIRCLING AREA		DISTANCE		HT. ABV. ARPT.															
CATEGORY A		1.3 NM		REQUIRED	350	ACTUAL	431	16. ANT (PBETT000409)		604716.94N/1614848.37W		162 (1A)		300		SI			
CATEGORY B		1.5 NM			450		471	17. ANT (PBETT000800)		604729.36N/1614624.54W		299 (1A)		300				600	
CATEGORY C		1.7 NM			450		471	17. ANT (PBETT000800)		604729.36N/1614624.54W		299 (1A)		300				600	
CATEGORY D		2.3 NM			550		551	18. AAO		604322.42N/1615417.34W		350 (2C)		300		HAA		680	
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)			
CITY AND STATE		ELEVATION: 129		AIRPORT NAME:		FACILITY		PROCEDURE AND AMENDMENT NO:		REGION									
BETHEL, AK				BETHEL		RNAV		RNAV (GPS) RWY 19R, AMDT 2D		10									

QUALITY
10
CHECKED

PART B - SUPPLEMENTAL DATA										PART C - REMARKS:																							
1. COMMUNICATIONS WITH:					2. WEATHER SERVICE					3. ALTIMETER SETTING					PRECIPITOUS TERRAIN EVALUATION COMPLETED.																		
ZAN ARTCC BET TOWER							N W S		OTHER: ASOS			SOURCE: PABE/PANA					VGSI DATA: 3.00/52																
							F A A					DISTANCE: 6.8					RWY 12/30 GRAVEL.																
							A / C					HOURS REMOTE OPERATION: 0/YES 24/YES					VISUAL PORTION OF FINAL PENETRATIONS: RWY 1L: (THIS IS THE FIRST LIGHT BAR ON THE MALSR, NOT A FACTOR) 20:1 128 ELEC SYS (02-021462) 604616.56N/1615038.22W (0.79)																
SATISFACTORY ON:		X		V H F		X		U H F				H F		LOCATION: PABE					ADJUSTMENT: 0/32					CRITICAL TEMPERATURES: CRITICAL LOW :-18C (0F) CRITICAL HIGH :+54C (+130F) ACT :-32C APT ISA :+14.74C									
4. MONITOR STATUS		PRIMARY NAVAID:										CRITICAL TEMPERATURE REMARKS																					
		MONITOR POINT:										AVERAGE COLD TEMPERATURE DERIVED FROM 5-YEAR HISTORY (2006-2010).																					
		HRS OPTN:		CAT 1				CAT 3				CRITICAL LOW TEMPERATURE BASED ON ACT. DESCENT RATE (FPM): STANDARD TEMP 955 HIGH TEMP 1115.																					
5. APPROACH & RUNWAY LIGHTING				ALS										ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.																			
				(S) SALS										CAT A: 1.30NM CAT B: 1.81NM CAT C: 2.84NM CAT D: 3.71NM																			
		X		MALSR 01L (PCL), 19R (PCL)										NO ADDITIONAL AIRSPACE REQUIRED.																			
		X		HIRL 01L (PCL), 01R (PCL), 19L (PCL), 19R (PCL)										RASS PRESSURE PATTERNS SAME PABE 129, PANA 17 RA = 31.8.																			
		X		MIRL 12 (PCL), 30 (PCL)										35' VEGETATION APPLICATION, PER FPT.																			
		X		REIL 01R (PCL), 19L										LPV, LNAV/VNAV AND LNAV INTERMEDIATE SEGMENTS HAVE THE SAME CONTROLLING OBSTACLE.																			
				TDZ										MOUNTAINOUS AND NON-MOUNTAINOUS ROC USED IN TAA.																			
				C/LINE										FLIGHT CHECK VERIFIED BUILDINGS RIGHT OF RUNWAY 19R ARE NOT A FACTOR ON THE LOC APPROACH, NO SURVEY DATA ON BUILDINGS.																			
6. RUNWAY MARKINGS				OTHER (SPECIFY) VASI-4L 01L (PCL), 19R (PCL) PAPI-4L 01R (PCL), 19L (PCL)										ACT: -32, AVERAGE COLD TEMPERATURE BASED ON 5-YEAR HISTORY (2006-2010).																			
		BASIC										INITIAL SEGMENT TO ORR TO CATUB 102.34 DEGREES CHARTS AS 102 DEGREES. STRAIGHT-IN TAA BOUNDARY 102.61 DEGREES CW TO 282.61 DEGREES WOULD CHART 103 CW TO 283. IN ORDER TO ALLEVIATE CONFUSION BETWEEN INITIAL BEING CHARTED AT 102 AND TAA BEING CHARTED AT 103, THE STRAIGHT-IN TAA SEGMENT WILL BE CHARTED AT 102 DEGREES CW TO 283 DEGREES.																					
		ALL WEATHER PIR-F 01L, 19R										CIRCLING NA W OF RWY 1L-19R DUE TO HIGH TOWERS.																					
7. RUNWAY VISUAL RANGE		INSTRUMENT NPI-G 01R, 19L										SECONDARY ALTIMETER SETTING NOTE NOT PUBLISHED PER FPT.																					
		APPROACH 01L, 19R										MAGVAR UPDATE: ARPT; BETHEL (BET) ILS; OSCARVILLE (OSE) NDB : OLD 14E/2010; NEW 11E/2020																					
		MIDFIELD										XP: LNAV/VNAV DA/HATH INCREASED TO RETAIN PREVIOUS MINIMUMS																					
8. GLIDE PATH		ROLL OUT										XP: MDA ADJUSTED TO RETAIN PREVIOUS MINIMUMS																					
		GP ANGLE: 3.00					ELEV RWY THRESHOLD: 102.2																										
		DISTANCE FROM RWY:					ELEV GP ANTENNA:																										
9. FINAL APPROACH COURSE AIMING		X		RUNWAY THRESHOLD					FT. FROM THRESHOLD																								
		X		ON CENTERLINE					FT. FROM CENTERLINE																								
10. WAIVERS: NONE																																	
PART D - PREPARED BY: HERMAN C. ROGERS										DATE: 11/22/2016																							
TITLE: AERONAUTICAL INFORMATION SPECIALIST										OFFICE: AJV-5432																							

QUALITY
10
CHECKED

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD		
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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:					

