## 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.

**PROCEDURE NAME ORIGINAL/AMENDMENT AIRPORT CITY** STATE AIRPORT ID YELLOWSTONE RGNL RNAV (GPS) RWY 22 CODY WY 2 **KCOD AIRPORT ELEVATION TDZE SUPERSEDED ORIGINAL/AMENDMENT DATED MAG VAR EPOCH YEAR** 

1

04/13/2006

11F

2020

RNAV (GPS) RWY 22 **FACILITY COORDINATES OF FACILITIES ACTUAL EFFECTIVE DATE** REQUIRED EFFECTIVE DATE CANCEL/SUSPEND

**RNAV** ROUTINE 26 MARCH 2020

5076

#### **TERMINAL ROUTES**

5102

FROM	FIX TYPE	<u>TO</u>	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
CRANY		HOZZR		TF	FB	1.00	318.34	21.53	9000
NICQE		HOZZR		TF	FB	1.00	008.51	16.07	9000
HOZZR	IAF	DUSCA	NOPT	TF	FB	1.00	311.57	7.00	8400
SEZJI	IAF	DUSCA	NOPT	TF	FB	1.00	131.39	10.56	8400
DUSCA	IF/IAF	ELYPS		TF	FB	1.00	221.49	6.05	7500
ELYPS	FAF	COYAV/6.26 NM TO RW22		TF	FB	0.30	221.42	1.19	
COYAV/6.26 NM TO RW22		JUSIL/2.74 NM TO RW22		TF	FB	0.30	221.42	3.52	
JUSIL/2.74 NM TO RW22		RW22	MAP	TF	FO	0.30	221.42	2.74	
RW22	MAP	5740 MSL		CA			221.42		5740
5740 MSL		NICQE		DF	FO	1.00			9600

# MISSED APPROACH

MAP: LPV: DA LNAV: RW22

#### MISSED APPROACH INSTRUCTIONS:

(DO NOT EXCEED 185 KIAS UNTIL NICQE) CLIMB TO 5740 THEN CLIMBING LEFT TURN TO 9600 DIRECT NICQE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 9600. \*\*MISSED APPROACH REQUIRES MINIMUM CLIMB OF 227 FEET PER NM TO 6900.

#### ALTERNATE MISSED APPROACH INSTRUCTIONS:

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**AIRPORT** PROCEDURE NAME **ORIGINAL/AMENDMENT** <u>AIRPORT ID</u> <u>CITY</u> <u>STATE</u> YELLOWSTONE RGNL KCOD RNAV (GPS) RWY 22 CODY WY

PROFILE:

1. PT SIDE OF COURSE **OUTBOUND FT WITHIN** MILES OF (IAF)

2. HOLD NE DUSCA, RT, 221.49 INBOUND, 8400 FT. IN LIEU OF PT (IAF), MAX 14000.

3. FAC: 221.42 FAF: ELYPS **DIST FAF TO MAP: 7.45 DIST FAF TO THLD: 7.45** 

4. MIN ALT: DUSCA 8400, ELYPS 7500, COYAV/6.26 NM TO RW22 7120\*, JUSIL/2.74 NM TO RW22 6000\*

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 321 HAT: 0.85 GS ANT:

**6. MIN GP INCPT:** 7500 **GP ALT AT FAF: ELYPS 7500** OM: MM: IM:

**7. GP ANGLE**: 3.50 **34:1:** IS CLEAR **20:1:** IS CLEAR TCH: 60.0

**8. MSA FROM:** RW22 13600

#### **PBN REQUIREMENTS NOTE:**

RNP APCH.

#### NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CRANY ON V187 SOUTHBOUND AND V319 SOUTHEAST BOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT NICQE ON V85 SOUTHEAST BOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SEZJI ON V85 NORTHBOUND.

CHART SPEED ICON IN PLANVIEW AT HOZZR: MAX 210 KIAS.

CHART SPEED ICON IN PLANVIEW AT DUSCA: MAX 180 KIAS.

# **ADDITIONAL FLIGHT DATA:**

CHART CIRCLING ICON CHART VDP AT 1.47 NM TO RW22\* \*LNAV ONLY WAAS CHANNEL #93600

REFERENCE PATH ID: W22A

CHART FAS OBST: 5333 TERRAIN 443110N/1090046W.

CHART: 6662 TOWER 443509N/1085101W, 5140 TRANSMISSION LINE 443257N/1085657W.

HOLD SE. LT. 326.37 INBOUND

LTP HAE: 1535 M

#### MINIMUMS:

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

**ALTERNATE: NA** NA WHEN LOCAL WEATHER NOT AVAILABLE.; STANDARD - CAT B 900-2, CAT C 900-2 1/2, CAT D 1900-3

	E			D			С			В			Α		CATEGORY:
HAT/HA	<u>VIS</u>	DA/MDA	HAT/HAA	<u>VIS</u>	DA/MDA	FINAL TYPE									
			321	1	5397	321	1	5397	321	1	5397	321	1	5397	LPV DA**
			381	1 1/8	5457	381	1 1/8	5457	381	1 1/8	5457	381	1 1/8	5457	LPV DA
WAL/>			524	1 1/2	5600	524	1 1/2	5600	524	1	5600	524	1	5600	LNAV MDA
13	(		1838	3	6940	838	2 1/2	5940	818	1 1/4	5920	678	1	5780	CIRCLING

AIRPORT AIRPORT ID PROCEDURE NAME ORIGINAL/AMENDMENT CITY STATE
YELLOWSTONE RGNL KCOD RNAV (GPS) RWY 22 2 CODY WY

# **CHANGES - REASONS**

- 1. CHANGED MAGVAR 14E EPOCH 1995 TO 11E EPOCH 2020.-EXCEEDED 3°.
- 2. ADDED 3° TO ALL COURSES.-AIRPORT MAGVAR CHANGE FROM 14E/1995 TO 11E/2020.
- 3. LPV VISIBILITY LOWERED FROM 1 1/4 TO 1 1/8.- NEW VISICHECK
- 4. CHANGED COYAV SDF FROM "COYAV/4.40NM TO RW22" TO "COYAV/6.26 NM TO RW22" AND ADDED SECOND SDF AT JUSIL.-TO ACHIEVE LOWEST POSSIBLE LNAV MDA.
- 5. CHANGED INTERMEDIATE LENGTH FROM 6.2 NM TO 6.05 NM.-NEW FAF/PFAF LOCATION.
- 6. CHANGED FINAL LENGTH FROM 7.3 TO 7.45.-NEW FAF/PFAF LOCATION.
- 7. CHANGED INTERMEDIATE, BOTH INITIALS AND HOLD IN-LIEU ALTITUDE FROM 8000 TO 8400.-ATC REQUEST.
- 8. LNAV MDA/HAT LOWERED FROM 5620/544 TO 5600/524, LOWERED CAT D VIS FROM 1 3/4 TO 1 1/2.-SECOND SDF AND NEW CONTROLLING OBSTACLE.
- 9. ADDED LPV SECOND LINE OF MINIMA WITH MISSED APPROACH CLIMB GRADIENT OF 227 FPNM TO 6900 FEET.-ATC REQUEST.
- 10. UPDATED ALTERNATE MINIMUM NOTES.-NEW APPROACH MINIMUMS
- 11. MISSED APPROACH SPEED RESTRICTION OF 185 KIAS MAX UNTIL NICQE.-ATC REQUEST.
- 12. ADDED SPEED ICONS AT HOZZR 210 KIAS AND AT DUSCA 180 KIAS MAX.-ATC REQUEST.
- 13. CHANGED CIRCLING MDA/HAA -VIS FROM CAT A 5840/738-1 ¼ TO 5780/678-1, CAT B 5840/738-1 ¼ TO 5920/818-1 1/4, CAT C 5900/798-2 ¼ TO 5940/838-2 1/2, CAT D 5960/858-2 ¾ TO 6940/1838-3 AND ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA.-NEW CIRCLING CRITERIA APPLIED.
- 14. REMOVED CHART NOTE DME/DME RNP-0.3 NA.-NO LONGER REQUIRED.
- 15. ADDED PBN REQUIREMENTS NOTE: RNP APCH.-8260.19H PARA 8-6-8.
- 16. REMOVED APPROACH ROUTE QUALIFIERS 1 AND 2 FROM ADDITIONAL FLIGHT DATA.-NO LONGER REQUIRED.

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- 17. CHART VDP CHANGED FROM 1.55 TO 1.47 TO RWY 22.-NEW TARGETS VDP CALCULATIONS.
- 18. CHANGED FAS OBSTACLE FROM 5380 TREE 443110N/1090014W TO 5333 TERRAIN 443110N/1090046W.-NEW LNAV FINAL
- 19. REMOVED 7:1 OBSTACLE 0502 TREE 443622N/1085342W AND ADDED 6662 TOWER 443509N/1085101W, 5140 TRANSMISSION LINE 443257N/1085657W.-MOVED/ADDED SDFS.
- 20. CHANGED HOLD SE, LT, 323.37 INBOUND TO HOLD SE, LT, 326.37 INBOUND.-AIRPORT MAGVAR CHANGE FROM 14E/1995 TO 11E/2020.

NBAA 🛛

- 21. REMOVED ROUTE TYPE DESCRIPTION: A, R.-NO LONGER NEEDED.
- 22. CHANGED LTP FROM 443135.23N/1090044.95W TO 443135.2320N/1090044.9485W, FPAP FROM 443040.76N/1090223.50W TO 443040.7615N/1090223.4975W AND CRC REMAINDER FROM 243F6D1E TO 2EECFFC6.-NEW DATA PULL AND TARGETS CALCULATIONS.
- 23. REMOVED ALT2 AT COYAV6545.-NO LONGER REQUIRED.
- 24. CHANGED DISTANCE TO THLD FROM 381 HAT: 1.04 NM TO 321 HAT: 0.85 NM AND MOVED FROM ADDITIONAL FLIGHT DATA TO PROFILE.-LPV WITH CLIMB GRADIENT LOWER MINIMUMS AND 8260.19H.
- 25. ADDED MAX HOLDING ALTITUDE AT DUSCA 14000.-8260.19H.
- 26. ADDED 20:1 IS CLEAR ON LINE 7 OF PROFILE.-20:1 IS CLEAR.

AOPA 🔯

27. MISSED APPROACH ROUTE CHANGED FROM CLIMB TO 9600 DIRECT AJKEV AND LEFT TURN VIA 123° TRACK TO NICQE AND HOLD. TO (DO NOT EXCEED 185 KIAS UNTIL NICQE) CLIMB TO 5740 THEN CLIMBING LEFT TURN TO 9600 DIRECT NICQE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 9600.-NEW CRITERIA APPLIED

02/13/2020: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 01/22/20.

APA 🗍

1. FAC ON LINE 3 OF PROFILE VIEW CHANGED FROM 038.21 TO 221.42.

# COORDINATED WITH:

— & — E	· —				
FLIGHT CHECKED I		Digitally sign <b>WARDELL HE</b>	<u>01110L</u>	<b><u>DATE</u></b> 12/11/2019	
		Feb 13. 20	020		
<u>DEVELOPED BY</u> WARDELL HENNING (JOHN KEEFER)		Digitally signed by WARDELL HENNING	OFFICE AJV-A432	<b>DATE</b> 08/09/2019	
APPROVED BY GEORGE DAVIS	Digitally signed by WARDELL HENNING	Feb 13, 2020	OFFICE AJV-A430	<u>DATE</u>	<u>TITLE</u> MANAGER
	Feb 13, 2020				

OTHER: ZLC, AMGR

ONALITY 13 CHECKED AIRPORT AIRPORT ID PROCEDURE NAME ORIGINAL/AMENDMENT CITY STATE
YELLOWSTONE RGNL KCOD RNAV (GPS) RWY 22 2 CODY WY

# **FAS DATA BLOCK INFORMATION**

DATA FIELDDATAOPERATION TYPE0SBAS SERVICE PROVIDER IDENTIFIER0AIRPORT IDENTIFIERKCODRUNWAYRW22APPROACH PERFORMANCE DESIGNATOR0

**ROUTE INDICATOR** 

REFERENCE PATH DATA SELECTOR 0

REFERENCE PATH IDENTIFIER (APPROACH ID) W22A

 LTP/FTP LATITUDE
 443135.2320N

 LTP/FTP LONGITUDE
 1090044.9485W

LTP/FTP ELLIPSOIDAL HEIGHT +15350

 FPAP LATITUDE
 443040.7615N

 FPAP LONGITUDE
 1090223.4975W

THRESHOLD CROSSING HEIGHT (TCH) 00060.0

TCH UNITS SELECTOR (METERS OR FEET USED) F

GLIDEPATH ANGLE (GPA) 03.50

COURSE WIDTH AT THRESHOLD 106.75

LENGTH OFFSET 0352

HORIZONTAL ALERT LIMIT (HAL) 40.0

VERTICAL ALERT LIMIT (VAL) 50.0

CRC REMAINDER 2EECFFC6

## ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE K1
LTP ORTHOMETRIC HEIGHT +15471
FPAP ORTHOMETRIC HEIGHT +15471

ONALITY 10 CHECKED