

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: RW35 CLIMB TO 6200 DIRECT COLOD AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, RT, 171.82 INBOUND. CHART FAS OBSTACLE: 4167 TOWER 400226N/1021444W DISTANCE TO THLD FROM 250 HAT: 0.67 NM. CHART VDP AT 2.30 NM TO RW35* *LNAV ONLY. WAAS CHANNEL # 87041 REFERENCE PATH ID: W35A CHART CIRCLING ICON. LTP HAE: 1086.6 M							
CAREE (IAF)		GUDSE (NOPT) (TF) (FB) (RNP 1.00)			081.69 / 10.00			6600									
DLFRD (IAF)		GUDSE (NOPT) (TF) (FB) (RNP 1.00)			261.97 / 10.00			6600									
GUDSE (IF/IAF)		HAGLA (TF) (FB) (RNP 1.00)			351.83 / 8.00			5400									
HAGLA (FAF)		RW35 (MAP) (TF) (FO) (RNP 0.30)			351.82 / 5.37												
RW35 (MAP)		3903 MSL (CA)			351.82												
3903 MSL		COLOD (DF) (FO) (RNP 1.00)						6200									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD S GUDSE, RT, 351.83 INBOUND, 6600 FT. IN LIEU OF PT (IAF) 3. FAC: 351.82 FAF: HAGLA DIST FAF TO MAP: 5.37 THLD: 5.37 4. MIN. ALT: GUDSE 6600, HAGLA 5400 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 5400 GS ALT AT: HAGLA 5400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 52.0 20:1 IS CLEAR 34:1 IS NOT CLEAR 8. MSA FROM: _____										MAG VAR: 8E		EPOCH YEAR: 2005					
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	3903	1	250	3903	1	250	3903	1	250	3903	1	250					
LNAV/VNAV DA	3945	1	292	3945	1	292	3945	1	292	3945	1	292					
LNAV MDA	4420	1	767	4420	1 1/4	767	4420	2 1/2	767	4420	2 1/2	767					
CIRCLING	4420	1	743	4420	1 1/4	743	4540	2 1/2	863	4540	2 3/4	863					
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -22C (-7F) OR ABOVE 53C (127F). CHART NOTE: BARO-VNAV AND VDP NA WHEN USING IMPERIAL ALTIMETER SETTING. CHART NOTE: RWY 35 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA. (CONTINUED ON PAGE 2)																	
CITY AND STATE				ELEVATION: 3677 TDZE: 3653				FACILITY IDENTIFIER: RNAV				PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:	
WRAY, CO				AIRPORT NAME:								RNAV (GPS) RWY 35, AMDT 2A				AMDT: 2	
				WRAY MUNI												DATED 03/29/2018	



ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE <div>ROUTINE</div>	
COORDINATED WITH: <div><div>A4A<div></div></div><div>ALPA<div></div></div><div>AOPA<div>X</div></div><div>APA<div></div></div><div>HAI<div></div></div><div>NBAA<div>X</div></div><div>OTHER (specify)<div>ZDV, DEN ATCT, DEN APP CON, CO AERO, AMGR</div></div></div>					
FLIGHT CHECKED BY					
NAME: FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-333) MEMO, DEC 22, 2017.				<div>FIFO</div> <div>Digitally signed by DAVID TEFFETELLER</div>	DATE:
DEVELOPED BY Digitally signed by Mar 06, 2018					
NAME: DAVID TEFFETELLER (FRANK MOORE)				<div>FIFO</div> <div>DAVID TEFFETELLER Mar 06, 2018</div>	DATE: AJV-5433 03/05/2018
APPROVED BY					
NAME: PATRICK MULQUEEN				<div>FIFO</div> <div>Digitally signed by DAVID TEFFETELLER MANAGER</div>	DATE: AJV-5430
CHANGES: Mar 06, 2018 1. REMOVED STRAY "FT" FROM BACKUP ALTIMETER CHART NOTE. 2. ADDED HAGLA TO BLOCK 3 FAF.					
REASONS: 1, 2. CORRECT DOCUMENTATION ERRORS.					



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

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NOTES, (CONT.):

CHART PROFILE NOTE: VGSi AND RNAV GLIDEPATH NOT COINCIDENT (VGSi ANGLE {ANGLE}/TCH {FEET}).

CHART NOTE: WHEN LOCAL ALTIMETER SETTING IS NOT RECEIVED USE IMPERIAL ALTIMETER SETTING: INCREASE LPV

DA TO 4047 AND VISIBILITY TO 1 1/8 SM AND LNAV/VNAV DA TO 4088 AND VISIBILITY TO 1 1/4 SM; INCREASE

ALL MDAS 140 FT AND VISIBILITY CATS A, D 1/4 SM, CAT C 1/2 SM.

TAA

	<u>FROM</u>	<u>TO</u>	<u>ALT</u>
1.	262/30 CW 082/30 (NOPT)	GUDSE (IF/IAF) (FB)	6600
2.	082/30 CW 172/30	CAREE (IAF) (FB)	6600
3.	172/30 CW 262/30	DLFRD (IAF) (FB)	6600

QUALITY
50
CHECKED

CITY AND STATE WRAY, CO	ELEVATION: 3677 TDZE: 3653 AIRPORT NAME: WRAY MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 35, AMDT 2A	SUP:
				AMDT: 2
				DATED: 03/29/2018

ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
COORDINATED WITH:					
A4A <div><input type="checkbox"/></div>	ALPA <div><input type="checkbox"/></div>	APA <div><input type="checkbox"/></div>	AOPA <div><input type="checkbox"/></div>	HAI <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	2V5
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	400534.7560N
LTP/FTP LONGITUDE	1021428.1125W
LTP/FTP ELLIPSOIDAL HEIGHT	+10866
FPAP LATITUDE	400703.9225N
FPAP LONGITUDE	1021428.4790W
THRESHOLD CROSSING HEIGHT (TCH)	00052.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1104
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

9FB01081

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+11086
FPAP ORTHOMETRIC HEIGHT	+11086

QUALITY
50
CHECKED

CITY AND STATE WRAY, CO	ELEVATION: 3677 AIRPORT NAME: WRAY MUNI	TDZE: 3653 WRAY MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 35, AMDT 2A	SUP:
					AMDT: 2
					DATED: 03/29/2018

ALL AFFECTED PROCEDURES REVIEWED? <input type="checkbox"/> YES <input type="checkbox"/> NO		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
COORDINATED WITH:					
A4A <input type="checkbox"/>	ALPA <input type="checkbox"/>	APA <input type="checkbox"/>	AOPA <input type="checkbox"/>	HAI <input type="checkbox"/>	NBAA <input type="checkbox"/>
OTHER (specify) <input type="checkbox"/> _____					
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		262/30 CW 082/30		GUDSE		1. AAO		394424.00N/1025433.00W		4744 (2C)	1000	AT856		6600					
						2. TERRAIN		394424.00N/1025433.00W		4544 (4500)		AS1500		6000					
LEFT BASE AREA		082/30 CW 172/30		CAREE		3. AAO		394909.00N/1030735.00W		4959 (2C)	1000	AT641		6600					
						4. TERRAIN		394909.00N/1030735.00W		4759 (4800)		AS1500		6300					
RIGHT BASE AREA		172/30 CW 262/30		DLFRD		5. TOWER (08-000769)		400042.70N/1021932.60W		4434 (5D)	1000	AT1166		6600					
						6. TERRAIN		400818.00N/1021939.00W		3979 (4000)		AS1500		5500					
INITIAL		CAREE		GUDSE		7. AAO		395009.00N/1022830.00W		4236 (2C)	1000	AT1364		6600					
						8. TERRAIN		395221.00N/1022539.00W		4206 (4200)		AS1500		5700					
INITIAL		DLFRD		GUDSE		9. AAO		395148.00N/1021645.00W		4075 (2C)	1000	AT1525		6600					
						10. TERRAIN		395303.00N/1021348.00W		3826 (3800)		AS1500		5300					
INTERMEDIATE		GUDSE (IF/IAF)		HAGLA		11. AAO		395949.00N/1021643.00W		4069 (2C)	500			4600					
						12. TERRAIN		395949.00N/1021643.00W		3869 (3900)		AS1500		5400					
FINAL: LPV		HAGLA		RW35		13. VEGETATION		400531.15N/1021422.98W		3647 (1A)	34:1			3903/250					
						(08-057024)													
2. HOLD-IN-LIEU-OF-PT		GUDSE		P-4		16. AAO		394411.00N/1022057.00W		4249 (2C)	1000	AT1351		6600					
						17. TERRAIN		394411.00N/1022057.00W		4049 (4000)		AS1500		5500					
3. MISSED APPROACH	MAP:		DA / DA / RW35		COLOD		18. TOWER (08-057037)		400503.90N/1021332.20W		3793 (1B)	ASC	AC10		6200				
	ELEV:		3699/3767/4317				19. AAO		401007.00N/1021314.00W		4180 (2C)	1000			5200				
						20. TERRAIN		401007.00N/1021314.00W		3980 (4000)		AS1500		5500					
4. CIRCLING AREA		DISTANCE		HT. ABV. ARPT.															
CATEGORY A		1.3 NM		REQUIRED	350	ACTUAL	743	21. TOWER (08-057037)		400503.90N/1021332.20W		3793 (1B)	300	XP320		4420			
CATEGORY B		1.5 NM			450		743	21. TOWER (08-057037)		400503.90N/1021332.20W		3793 (1B)	300	XP320		4420			
CATEGORY C		1.7 NM			450		863	22. WINDMILL (08-		400302.37N/1021321.70W		4173 (5B)	300	AC50		4540			
CATEGORY D		2.3 NM			550		863	22. WINDMILL (08-		400302.37N/1021321.70W		4173 (5D)	300	AC50		4540			
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		ELEVATION: 3677				FACILITY				PROCEDURE AND AMENDMENT NO:				REGION					
WRAY, CO		AIRPORT NAME:				RNAV				RNAV (GPS) RWY 35, AMDT 2A				ANM					
		WRAY MUNI																	

QUALITY

50

CHECKED

PART B - SUPPLEMENTAL DATA										
1. COMMUNICATIONS WITH:				2. WEATHER SERVICE			3. ALTIMETER SETTING			
DEN FSS ZDV ARTCC						N W S	OTHER: CTAF		SOURCE:K2V5 / KIML	
						F A A			DISTANCE: 0 / 37.60	
						A / C			HOURS REMOTE OPERATION: 0/YES / 24/YES	
SATISFACTORY ON:										
X	V H F	X	U H F		H F	LOCATION: K2V5			ADJUSTMENT: 0	
4. MONITOR STATUS		PRIMARY NAVAID:								
		MONITOR POINT:								
		HRS OPTN:	CAT 1							
			CAT 3							
5. APPROACH & RUNWAY LIGHTING		ALS								
		(S) SALS								
		MALS								
		HIRL								
		X	MIRL 17 (PCL), 35 (PCL)							
		X	REIL 17 (PCL), 35 (PCL)							
		TDZ								
		C/LINE								
		X	OTHER (SPECIFY) PAPI-2L 17 (PCL), 35 (PCL)							
6. RUNWAY MARKINGS		BASIC								
		ALL WEATHER								
		INSTRUMENT NPI-G 17, 35								
7. RUNWAY VISUAL RANGE		APPROACH								
		MIDFIELD								
		ROLL OUT								
8. GLIDE PATH		GP ANGLE: 3.00				ELEV RWY THRESHOLD:3637.3				
		DISTANCE FROM RWY:				ELEV GP ANTENNA:				
						THRESHOLD CROSSING HEIGHT:52.0				
9. FINAL APPROACH COURSE AIMING			X	RUNWAY THRESHOLD					FT. FROM THRESHOLD	
			X	ON CENTERLINE					FT. FROM CENTERLINE	
10. WAIVERS: NONE										
PART D - PREPARED BY: DAVID TEFFETELLER (FRANK MOORE)						DATE: 03/05/2018				
TITLE: AERONAUTICAL INFORMATION SPECIALIST						OFFICE: AJV-5433				

PART C - REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

3' TREES USED ON FINAL PER FPT.

GUDSE FIX NAME RETAINED FOR OPERATIONAL ADVANTAGE PER FPT REQUEST.

CRITICAL TEMPERATURES:
CRITICAL LOW :-22C (-7F)
CRITICAL HIGH :+53C (+127F)
ACT :-22C
APT ISA :+7.72C

CRITICAL TEMPERATURE REMARKS
AVERAGE COLD TEMPERATURE DERIVED FROM STANDARD -30C
ISA DEVIATION
CRITICAL LOW TEMPERATURE BASED ON ACT.
DESCENT RATE (FPM): STANDARD TEMP 1005 HIGH TEMP 1173.

ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.
CAT A: 1.36NM
CAT B: 1.94NM
CAT C: 3.07NM
CAT D: 4.02NM

SEE ATTACHED AIRSPACE LETTER.
RASS PRESSURE PATTERNS THE SAME
K2V5 3677, KIML 3276
RA = 142.7.

VISUAL PORTION OF FINAL PENETRATIONS:
34:1 3645 TREE (08-057025) 400530.67N/1021427.04W
(1.41)



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			OTHER (SPECIFY)								
			BASIC								
			ALL WEATHER								
7. RUNWAY VISUAL RANGE			INSTRUMENT								
			APPROACH								
			MIDFIELD								
8. GLIDE PATH			ROLL OUT								
			GP ANGLE:								
			ELEV RWY THRESHOLD:								
9. FINAL APPROACH COURSE AIMING			DISTANCE FROM RWY:								
			ELEV GP ANTENNA:								
			THRESHOLD CROSSING HEIGHT:								
10. WAIVERS:			RUNWAY THRESHOLD								
			FT. FROM THRESHOLD								
PART D - PREPARED BY:			ON CENTERLINE								
			FT. FROM CENTERLINE								
TITLE:											
OFFICE:											