

US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) - STANDARD
INSTRUMENT APPROACH PROCEDURE
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.

TERMINAL ROUTES				MISSED APPROACH											
FROM	TO	COURSE AND DISTANCE	ALTITUDE												
BEIGE	CIRYI (FB)	273.05 / 30.41	3000	LPV: DA LNAV/VNAV: DA LNAV: RW13 CLIMB TO 3000 DIRECT PICRA AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 309.16 INBOUND. CHART FAS OBST: 1075 TREE 414301N/0924437W FAS OBST: 1229 AAO 414532N/0924714W DISTANCE TO THLD FROM 279 HAT: 0.82 NM. WAAS CHANNEL # 58107 REFERENCE PATH ID: W13A											
SINGR	DEFSA (FB)	352.43 / 18.44	3000												
CIRYI (IAF)	BAXKO (NOPT) (FB)	218.95 / 5.00	3000												
DEFSA (IAF)	BAXKO (NOPT) (FB)	038.85 / 5.00	3000												
BAXKO (IF/IAF)	APADY (FB)	128.90 / 6.10	2700												
1. PT <u> </u> SIDE OF COURSE <u> </u> OUTBOUND <u> </u> FT WITHIN <u> </u> MILES OF <u> </u> (IAF) 2. HOLD NW BAXKO, RT, 128.90 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: <u>128.97</u> FAF: <u>APADY</u> DIST FAF TO MAP: <u>5.19</u> THLD: <u>5.19</u> 4. MIN. ALT: <u>BAXKO 3000, APADY 2700</u> 5. DIST TO THLD FROM OM: <u> </u> MM: <u> </u> IM: <u> </u> 150 HAT: <u> </u> 100 HAT: <u> </u> GS ANT: <u> </u> 6. MIN GS INCPT: <u>2700</u> GS ALT AT: <u>APADY</u> OM: <u> </u> MM: <u> </u> IM: <u> </u> 7. GS ANGLE: <u>3.00</u> TCH: <u>34.0</u> 34:1 IS NOT CLEAR 8. MSA FROM: <u>RW13 2800</u>				MAG VAR: 2E EPOCH YEAR: 2000											
MINIMUMS															
TAKEOFF:	STANDARD	X	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	1284	1	279	1284	1	279	1284	1	279		NA				
LNAV/VNAV DA	1415	1 1/2	410	1415	1 1/2	410	1415	1 1/2	410		NA				
LNAV MDA	1480	1	475	1480	1	475	1480	1 1/4	475		NA				
CIRCLING	1620	1	612	1620	1	612	1620	1 3/4	612		NA				
NOTES: CHART NOTE: BARO-VNAV NA WHEN USING NEWTON ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. SEE 8260-10															
CITY AND STATE		ELEVATION: 1008 TDZE: 1005		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
GRINNELL, IA		AIRPORT NAME: GRINNELL REGIONAL				RNAV (GPS) RWY 13, AMDT 1				AMDT: ORIG					
						JUN 5 2008				DATED 02/16/2006					

TL 08-12

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) - STANDARD
INSTRUMENT APPROACH PROCEDURE - FAR PART 97.33

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NOTES CONT.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BEIGE VIA V172 EASTBOUND.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE NEWTON ALTIMETER SETTING AND INCREASE

ALL DAS 38 FEET AND ALL MDAS 40 FEET, INCREASE LPV AND LNAV/VNAV VISIBILITY 1/4 MILE ALL CATS AND

LNAV CAT C VISIBILITY 1/4 MILE.

CITY AND STATE

GRINNELL, IA

ELEVATION: 1008 TDZE: 1005

AIRPORT NAME:

GRINNELL REGIONAL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO / AMDT NO / EFFECTIVE DATE:

RNAV (GPS) RWY 13, AMDT 1

JUN 5 2008

SUP:

AMDT: ORIG

DATED: 02/16/2006

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR PART 97.33

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FAS DATA BLOCK INFORMATION

DATA FIELD

DATA

OPERATION TYPE
SBAS SERVICE PROVIDER IDENTIFIER
AIRPORT IDENTIFIER
RUNWAY
APPROACH PERFORMANCE DESIGNATOR
ROUTE INDICATOR
REFERENCE PATH DATA SELECTOR
REFERENCE PATH IDENTIFIER (APPROACH ID)
LTP/FTP LATITUDE
LTP/FTP LONGITUDE
LTP/FTP ELLIPSOIDAL HEIGHT
FPAP LATITUDE
FPAP LONGITUDE
THRESHOLD CROSSING HEIGHT (TCH)
TCH UNITS SELECTOR (METERS OR FEET USED)
GLIDEPATH ANGLE (GPA)
COURSE WIDTH AT THRESHOLD
LENGTH OFFSET
HORIZONTAL ALERT LIMIT (HAL)
VERTICAL ALERT LIMIT (VAL)

0
0
KGGI
RW13
0

0
W13A
414251.1905N
0924433.4015W
+02698
414152.6600N
0924303.6800W
00034.0
F
03.00
106.75
1224
40.0
50.0

CRC REMAINDER

0707A18F

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE
LTP ORTHOMETRIC HEIGHT
FPAP ORTHOMETRIC HEIGHT

K3
+03018
+03018

CITY AND STATE

GRINNELL, IA

ELEVATION: 1008 TDZE: 1005

AIRPORT NAME:

GRINNELL REGIONAL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 13, AMDT 1

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ARINC PACKET - 424-18[illegible][illegible]

SEGMENT	1	2	3	4	5	6	7	8	9	0	1	2	3
SUSAP KGGIK3FR13	ABAXKO	010BAXKOK3EA0EE	CR	HF		12890040	+	03000	18000			A JS	
SUSAP KGGIK3FR13	ABEIGE	010BEIGE K3EA0E		IF					18000			A JS	
SUSAP KGGIK3FR13	ABEIGE	020CIRYIK3EA0E	A	020TF		27310304	+	03000				A JS	
SUSAP KGGIK3FR13	ABEIGE	030BAXKOK3EA0EE	L	010TFY		21900050	+	03000				A JS	
SUSAP KGGIK3FR13	ASINGR	010SINGRK3EA0E		IF					18000			A JS	
SUSAP KGGIK3FR13	ASINGR	020DEFSAK3EA0E	A	020TF		35240184	+	03000				A JS	
SUSAP KGGIK3FR13	ASINGR	030BAXKOK3EA0EE	R	010TFY		03890050	+	03000				A JS	
SUSAP KGGIK3FR13	R	010BAXKOK3EA0E	I	IF			+	03000	18000			A JS	
SUSAP KGGIK3FR13	R	020APADYK3EA1E	F	051TF		12890061	+	02700			RW13	K3PGA	JS
SUSAP KGGIK3FR13	R	020APADYK3EA2WALPV			ALNAV/VNAV	ALNAV							JS
SUSAP KGGIK3FR13	R	030RW13 K3PG0GY	M	031TF		12900052		01024	-300			A JS	
SUSAP KGGIK3FR13	R	040PICRAK3EA0EYM		010DF			+	03000				A JS	
SUSAP KGGIK3FR13	R	050PICRAK3EA0EE	HR	020HM		30920040	+	03000				A JS	

[illegible]

CITY AND STATE

GRINNELL, IA

ELEVATION: 1008 · TDZE: 1005

AIRPORT NAME:

GRINNELL REGIONAL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 13, AMDT 1

JUN 5 2008

SUP:

AMDT:	ORIG
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DATED: 02/16/2006

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SUSAP KGGIK3PR13	RW13 001	0000W13A0N4142511905W09244334015+026980300N4141526600W09243036800106751224000340F4005000707A18F
SUSAP KGGIK3PR13	RW13 002E	+03018+03018LPV 58107 000

[illegible]

SUP:	
AMDT:	ORIG
DATED:	02/16/2006

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR PART 97.33

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ARINC FLIGHT INSPECTION SUMMARY - VERSION 424-18

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE
	BAXKO	BAXKO	010		HF	R	FB		128.9(131T)	004.0	03000
	BEIGE	BEIGE	010		IF		FB				
	BEIGE	CIRYI	020	IAF	TF		FB	2.0	273.1(275T)	030.4	03000
	BEIGE	BAXKO	030		TF	L	FB	1.0	219.0(221T)	005.0	03000
	SINGR	SINGR	010		IF		FB				
	SINGR	DEFSA	020	IAF	TF		FB	2.0	352.4(354T)	018.4	03000
	SINGR	BAXKO	030		TF	R	FB	1.0	038.9(041T)	005.0	03000
		BAXKO	010	FACF	IF		FB				03000
		APADY	020	FAF	TF		FB	0.5	128.9(131T)	006.1	02700
		RW13	030	MAP	TF		FO	0.3	129.0(131T)	005.2	01024

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE
	PICRA	040		DF		FO	1.0			03000
	PICRA	050		HM	R	FO	2.0	309.2(311T)	004.0	03000

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	APADY	N414615.51	W0924947.23	N4146.259	W09249.787
	BAXKO	N415015.51	W0925557.03	N4150.259	W09255.951
	BEIGE	N415128.80	W0921059.86	N4151.480	W09210.998
	CIRYI	N415402.28	W0925134.00	N4154.038	W09251.567
	DEFSA	N414628.57	W0930019.55	N4146.476	W09300.326
	PICRA	N413500.72	W0923234.29	N4135.012	W09232.572
	SINGR	N412806.80	W0925756.11	N4128.113	W09257.935
	RW13	N414251.19	W0924433.40	N4142.853	W09244.557

RUNWAY DATA	THRESHOLD		
RWY	ELEVATION	TCH	
RW13	00990	34	

CITY AND STATE
GRINNELL, IA

ELEVATION: 1008 TDZE: 1005
 AIRPORT NAME:
 GRINNELL REGIONAL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
 RNAV (GPS) RWY 13, AMDT 1
 JUN 5 2008

SUP:
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TERMINAL ROUTES				MISSED APPROACH				
FROM	TO	COURSE AND DISTANCE	ALTITUDE					
BEIGE	CIRYI (FB)	273.05 / 30.41	3000	LPV: DA LNAV/VNAV: DA LNAV: RW13 CLIMB TO 3000 DIRECT PICRA AND HOLD. ADDITIONAL FLIGHT DATA: HOLD SE, RT, 309.16 INBOUND. CHART FAS OBST: 1075 TREE 414301N/0924437W FAS OBST: 1229 AAO 414532N/0924714W DISTANCE TO THLD FROM 279 HAT: 0.82 NM. WAAS CHANNEL # 58107 REFERENCE PATH ID: W13A				
SINGR	DEFSA (FB)	352.43 / 18.44	3000					
CIRYI (IAF)	BAXKO (NOPT) (FB)	218.95 / 5.00	3000					
DEFSA (IAF)	BAXKO (NOPT) (FB)	038.85 / 5.00	3000					
BAXKO (IF/IAF)	APADY (FB)	128.90 / 6.10	2700					
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD NW BAXKO, RT, 128.90 INBOUND, 3000 FT. IN LIEU OF PT (IAF) 3. FAC: 128.97 FAF: APADY DIST FAF TO MAP: 5.19 THLD: 5.19 4. MIN. ALT: BAXKO 3000, APADY 2700 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2700 GS ALT AT: APADY OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 34.0 34:1 IS NOT CLEAR 8. MSA FROM: RW13 2800				MAG VAR: 2E EPOCH YEAR: 2000				
MINIMUMS								
TAKEOFF:	STANDARD	X	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
LPV DA	1284	1	279	1284	1	279	1284	1
LNAV/VNAV DA	1415	1 1/2	410	1415	1 1/2	410	1415	1 1/2
LNAV MDA	1480	1	475	1480	1	475	1480	1 1/4
CIRCLING	1620	1	612	1620	1	612	1620	1 3/4
NOTES: CHART NOTE: BARO-VNAV NA WHEN USING NEWTON ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. SEE 8260-10								
CITY AND STATE		ELEVATION: 1008 TDZE: 1005		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:		SUP:
GRINNELL, IA		AIRPORT NAME:		RNAV		RNAV (GPS) RWY 13, AMDT 1		AMDT: ORIG
		GRINNELL REGIONAL						DATED 02/16/2006

 QUALITY
2
CHECKED

ALL AFFECTED PROCEDURES REVIEWED? ☒ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE ROUTINE		
COORDINATED WITH: ATA ☐ AAT ☐ ALPA ☒ APA ☐ AOPA ☒ NBAA ☒ OTHER (specify) ☒ ZAU, AMGR				
FLIGHT CHECKED BY				
NAME:	Jeffrey W Randall <i>John Bickerstaff</i>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">FIFO AVN</td> <td style="width: 50%;">DATE: 2/12/08</td> </tr> </table>	FIFO AVN	DATE: 2/12/08
FIFO AVN	DATE: 2/12/08			
DEVELOPED BY				
NAME:	JON DENTON <i>John Bickerstaff</i>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">FIFO AVN-120</td> <td style="width: 50%;">DATE: 01/24/2008</td> </tr> </table>	FIFO AVN-120	DATE: 01/24/2008
FIFO AVN-120	DATE: 01/24/2008			
APPROVED BY				
NAME:	JOHN BICKERSTAFF <i>John Bickerstaff</i> MANAGER	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">FIFO AVN-120</td> <td style="width: 50%;">DATE: MAR 05 2008</td> </tr> </table>	FIFO AVN-120	DATE: MAR 05 2008
FIFO AVN-120	DATE: MAR 05 2008			
CHANGES: 1. TERMINAL ROUTE/DISTANCE FROM BEIGE TO CIRYI CHANGED FROM 275.95/26.62 TO 273.05/30.41. 2. TERMINAL ROUTE CIRYI TO BAXKO CHANGED FROM 237.66 TO 218.95. 3. TERMINAL ROUTE/DISTANCE FROM SINGR TO DEFSA CHANGED FROM 358.15/21.89 TO 352.43/18.44. 4. TERMINAL ROUTE DEFSA TO BAXKO CHANGED FROM 057.54 TO 038.85. 5. TERMINAL ROUTE BAXKO TO APADY CHANGED TO 147.60/6.03 TO 128.90/6.10. 6. FAC CHANGED FROM 147.64 TO 128.97. 7. HOLD-IN-LIEU COURSE CHANGED FROM 147.60 TO 128.90. 8. DISTANCE FROM FAF TO MAP AND THLD, CHANGED FOM 5.17 TO 5.19. 9. MISSED APPROACH INSTRUCTIONS CHANGED. 10. FAS OBST CHANGED 1129 TREE TO 1075 TREE FOR LNAV/VNAV AND 1229 AAO FOR LNAV. 11. VDP DELETED. 12. LNAV MDA/HAT CHANGED FROM 1380/375 TO 1480/475 ALL CATS, AND CAT C VIS CHANGED FROM 1 TO 1 1/4. 13. ADDED HELICOPTER NA NOTE. 14. CHANGED BACKUP ALTIMETER NOTE. SEE 8260-10				
REASONS: 1, 2, 3, 4, 5, 6, 7, 8. LPV AND LNAV/VNAV MINIMA ADDED, COURSES CHANGED DUE TO FAC REQUIREMENT TO MATCH RUNWAY ALIGNMENT FOR STRAIGHT IN LPV. 9. MISSED APPROACH HOLDING FIX ALIGNED WITH OPPOSITE END SIAP AT INTERMEDIATE FIX. 10. FINAL SEGMENT EVALUATED ON 24:1 MAP, NEW CRITERIA. 11. OBSTACLES PENETRATE VISIBILITY SURFACES. 12. NEW CONTROLLING OBSTACLE IN FINAL. 13. MEMO DATED 9/1/2005. 14. AWOS-3 INSTALLED ON AIRPORT WITH DISCRETE FREQUENCY. 15, 16. PROCEDURE DESIGNED TO MATCH VGSI. 17. AWOS-3 ON SERVICE A. 18. BACKUP MINS PUBLISHED BY NOTE. 19. NOT REQUIRED FOR STRAIGHT MISSED.				

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NOTES CONT.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BEIGE VIA V172 EASTBOUND.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE NEWTON ALTIMETER SETTING AND INCREASE ALL DAS 38 FEET AND ALL MDAS 40 FEET, INCREASE LPV AND LNAV/VNAV VISIBILITY 1/4 MILE ALL CATS AND LNAV CAT C VISIBILITY 1/4 MILE.

CITY AND STATE

GRINNELL, IA

ELEVATION: 1008

TDZE: 1005

AIRPORT NAME:

GRINNELL REGIONAL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 13, AMDT 1

SUP:

AMDT: ORIG

DATED: 02/16/2006

QUALITY
CHECKED
2

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
COORDINATED WITH: ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____		
FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:
CHANGES: CHANGES CONT. 15. TCH CHANGED FROM 40 TO 34. 16. REMOVED VGSI NOT COINCIDENT NOTE. 17. ALTERNATE MINIMUMS ADDED. 18. REMOVED NEWTON FIX MINIMUMS. 19. DELETED WIGOD IN MISSED APPROACH INSTRUCTIONS.		
REASONS:		

QUALITY
 2
 2017

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
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FAS DATA BLOCK INFORMATION

DATA FIELD

DATA

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGGI
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	414251.1905N
LTP/FTP LONGITUDE	0924433.4015W
LTP/FTP ELLIPSOIDAL HEIGHT	+02698
FPAP LATITUDE	414152.6600N
FPAP LONGITUDE	0924303.6800W
THRESHOLD CROSSING HEIGHT (TCH)	00034.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER

0707A18F

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03018
FPAP ORTHOMETRIC HEIGHT	+03018

CITY AND STATE
GRINNELL, IA

ELEVATION: 1008 TDZE: 1005
AIRPORT NAME:
GRINNELL REGIONAL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 13, AMDT 1

SUP:	
AMDT:	ORIG
DATED:	02/16/2006

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[illegible][illegible][illegible][illegible]

1	2	3	4	5	6	7	8	9	0	1	2
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CITY AND STATE GRINNELL, IA	ELEVATION: 1008 TDZE: 1005 AIRPORT NAME: GRINNELL REGIONAL	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 13, AMDT 1	SUP:
				AMDT: ORIG
				DATED: 02/16/2006

06
QUALITY
2
CHECKED

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV (GPS) 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.

PP 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012

SUSAP KGGIK3PR13 RW13 001 0000W13AON4142511905W09244334015+026980300N4141526600W09243036800106751224000340F4005000707A18F
SUSAP KGGIK3PR13 RW13 002E +03018+03018LPV 58107 000

	1	2	3	4	5	6	7	8	9	0	1	2	3
MSA	12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012												

	SUSAP KGGIK3SRW13 K3PG			0	18018002825								M

CITY AND STATE
GRINNELL, IA

ELEVATION: 1008 TDZE: 1005
AIRPORT NAME:
GRINNELL REGIONAL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 13, AMDT 1

SUP:
AMDT: ORIG
DATED: 02/16/2006

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR PART 97.33

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ARINC FLIGHT INSPECTION SUMMARY - VERSION 424-18

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG (TRUE)	DISTANCE	ALTITUDE
	BAXKO	BAXKO	010		HF	R	FB		128.9 (131T)	004.0	03000
	BEIGE	BEIGE	010		IF		FB				
	BEIGE	CIRYI	020	IAF	TF		FB	2.0	273.1 (275T)	030.4	03000
	BEIGE	BAXKO	030		TF	L	FB	1.0	219.0 (221T)	005.0	03000
	SINGR	SINGR	010		IF		FB				
	SINGR	DEFSA	020	IAF	TF		FB	2.0	352.4 (354T)	018.4	03000
	SINGR	BAXKO	030		TF	R	FB	1.0	038.9 (041T)	005.0	03000
		BAXKO	010	FACF	IF		FB				03000
		APADY	020	FAF	TF		FB	0.5	128.9 (131T)	006.1	02700
		RW13	030	MAP	TF		FO	0.3	129.0 (131T)	005.2	01024

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG (TRUE)	DISTANCE	ALTITUDE
	PICRA	040		DF		FO	1.0			03000
	PICRA	050		HM	R	FO	2.0	309.2 (311T)	004.0	03000

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	APADY	N414615.51	W0924947.23	N4146.259	W09249.787
	BAXKO	N415015.51	W0925557.03	N4150.259	W09255.951
	BEIGE	N415128.80	W0921059.86	N4151.480	W09210.998
	CIRYI	N415402.28	W0925134.00	N4154.038	W09251.567
	DEFSA	N414628.57	W0930019.55	N4146.476	W09300.326
	PICRA	N413500.72	W0923234.29	N4135.012	W09232.572
	SINGR	N412806.80	W0925756.11	N4128.113	W09257.935
	RW13	N414251.19	W0924433.40	N4142.853	W09244.557

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW13	00990	34

CITY AND STATE
GRINNELL, IA

ELEVATION: 1008 TDZE: 1005
 AIRPORT NAME:
 GRINNELL REGIONAL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 13, AMDT 1

SUP:
 AMDT: ORIG
 DATED: 02/16/2006

CHECKED

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD											
PART - A OBSTRUCTION DATA											
1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS		MIN. ALT.		
FEEDER	BEIGE	CIRYI	1. TOWER (19-002841)	415155.20N/0924746.20W	1285 (6F)	1000	AC250 AT465		3000		
			2. TERRAIN	415018.00N/0924842.00W	1050 (1100)		AS1500	2600			
FEEDER	SINGR	DEFSA	3. TOWER (19-001526)	414119.56N/0925431.92W	1315 (2C)	1000	AT685		3000		
			4. TERRAIN	414551.00N/0930254.00W	1001 (1000)		AS1500	2500			
INITIAL	CIRYI	BAXKO	1. TOWER (19-002841)	415155.20N/0924746.20W	1285 (6F)	1000	AC250 AT465		3000		
			5. TERRAIN	415321.00N/0925303.00W	1057 (1100)		AS1500	2600			
INITIAL	DEFSA	BAXKO	6. AAO	415021.00N/0925554.00W	1244 (4E)	1000	AT756		3000		
			7. TERRAIN	415021.00N/0925554.00W	1044 (1000)		AS1500	2500			
INTERMEDIATE	BAXKO (IF/IAF)	APADY	8. AAO	415321.00N/0925303.00W	1257 (4E)	500	AC98 AT845		2700		
			9. TERRAIN	415054.00N/0925142.00W	1041 (1000)		AS1500	2500			
FINAL: LPV	APADY	DA	10. TREE (KGGIT002)	414301.30N/0924437.06W	1075 (2C)	27.03:1	AC20		1284/279		
FINAL: LNAV/VNAV	APADY	DA	10. TREE (KGGIT002)	414301.30N/0924437.06W	1075 (2C)	PDA	MA70 AC20		1415/410		
FINAL: LNAV	APADY	RW13	11. AAO	414531.87N/0924713.52W	1229 (2C)	250			1480		
2. HOLD-IN-LIEU-OF-PT	BAXKO	P-5	12. TOWER (19-002037)	415543.30N/0930750.37W	1393 (1A)	1000	AT607		3000		
			13. TERRAIN	415557.00N/0930451.00W	1060 (1100)		AS1500	2600			
3. MISSED APPROACH	MAP: DA/DA/RW13	PICRA	14. TOWER (19-000870)	414341.00N/0924323.00W	1205 (5D)	ASC	AC50		3000		
	ELEV: 1066/1133/1230		15. TOWER	414116.00N/0924334.00W	1260 (4D)	1000			2300		
				16. TERRAIN	414418.00N/0924333.00W	1024 (1000)		AS1500	2500		
4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT.									
CATEGORY A	1.3 NM	REQUIRED	350	ACTUAL	612	15. TOWER	414116.00N/0924334.00W	1260 (4D)	300	AC50	1620
CATEGORY B	1.5 NM		450		612	15. TOWER	414116.00N/0924334.00W	1260 (4D)	300	AC50	1620
CATEGORY C	1.7 NM		450		612	15. TOWER	414116.00N/0924334.00W	1260 (4D)	300	AC50	1620
CATEGORY D	2.3 NM		550								
CATEGORY E	4.5 NM		550								
5. MINIMUM SAFE ALTITUDES				PRIMARY NAVAID: RW13							
SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A		
360-360	TOWER (19-	261/ 27.6	1701 (4D)	2800							
CITY AND STATE		AIRPORT & ELEVATION		1008	FACILITY		PROCEDURE AND AMENDMENT NO:		REGION		
GRINNELL, IA		GRINNELL REGIONAL			RNAV		RNAV (GPS) RWY 13, AMDT 1		ACE		

NOTES / EXPLANATIONS FROM OPPOSITE SIDE OF FORM:

NO ADDITIONAL AIRSPACE REQUIRED.

NO TAA PER ZAU ARTCC.

RASS (PRESSURE PATTERNS SAME):

KGGI 1008 MSL

KTNU 952 MSL

BACKUP ALTIMETER SOURCE MINIMUMS PUBLISHED BY NOTE, ALL
DA'S RAISED 38 FEET, INCREASE LPV AND LNAV/VNAV ALL
CATS VIS 1/4 MILE, ALL MDAS RAISED 40 FT INCREASE LNAV
CAT C VIS 1/4 MILE.

15. 200 FT TOWER IDENTIFIED DURING FLIGHT CHECK
INSPECTION.

BEIGE: 4151.480N-09210.998W

SINGR: 4128.113N-09257.935W

EFSA: 4146.476N-09300.326W

IRYI: 4154.038N-09251.567W

AXKO: 4150.259N-09255.951W

APADY: 4146.259N-09249.787W

DRWY13: 4142.853N-09244.557W

PICRA: 4135.012N-09232.572W

LPV:

INNER SURFACE: 27.03:1

OUTER SURFACE: 34:1

LNAV/VNAV:

INNER SURFACE: 23.4:1

OUTER SURFACE: 34:1

PART C - REMARKS CONT.

34:1

1022 BLDG (KGGIT003) 414300.47N/0924437.95W (12.10)

1015 BLDG (KGGIT004) 414259.40N/0924437.42W (8.08)

1027 POLE (KGGIT007) 414302.05N/0924441.90W (7.37)

1027 POLE (KGGIT016) 414302.06N/0924441.93W (7.30)

KGGI AWOS-3 AND KTNU AWOS-3 IS ON SERVICE-A.

PART B:

BLOCK 2: KGGI AWOS-3 ON AIRPORT, HRS OPTN: 24

BLOCK 3: KGGI/KTNU, 13.02 NM, 24 HRS, 37.79 FT

ISI DATA: 3.00/34

A DEVIATION: -30

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:		2. WEATHER SERVICE		3. ALTIMETER SETTING	
ZAU ARTCC FOD FSS		N W S	OTHER: AWOS-3		SOURCE:
		F A A			DISTANCE:
		A / C			HOURS REMOTE OPERATION:
SATISFACTORY ON:		LOCATION:		ADJUSTMENT:	
☒ V H F ☒ U H F ☐ H F		KGGI			
		HRS OPTN:			
4. MONITOR STATUS	PRIMARY			SECONDARY	
	NAVAID:			NAVAID:	
	MONITOR POINT:			MONITOR POINT:	
	HRS	CAT 1		HRS	CAT 1
	OPTN:	CAT 3		OPTN:	CAT 3
5. AIRSPACE		FLOOR OF CONTROLLED AIRSPACE UNDER FAC			CONTROL AREA
		CONTROL ZONE:			TRANSITION AREA
6. APPROACH & RUNWAY LIGHTING	ALS			X	REIL 31, 13 (PCL)
	(S) SALS				TDZ
	MALS				C/LINE
	HIRL				OTHER (SPECIFY)
	X	MIRL 31, 13 (PCL)			PAPI-2L 31, 13 (PCL)
7. RUNWAY MARKINGS			8. RUNWAY VISUAL RANGE		
ALL WEATHER			APPROACH		
INSTRUMENT NPI-F 31, 13			ROLL OUT		
9. GLIDE SLOPE	G S ANGLE: 3.00			ELEV RWY THRESHOLD: 990.0	
	DISTANCE FROM RWY:			ELEV GS ANTENNA:	
				THRESHOLD CROSSING HEIGHT: 34.0	
10. FINAL APPROACH		X	RUNWAY THRESHOLD		FT. FROM THRESHOLD
COURSE AIMING		X	ON CENTERLINE		FT. FROM CENTERLINE
11. WAIVERS OF STANDARDS		NUMBER OF WAIVERS ON FILE		DATES OF APPROVAL	
		NONE			

PART C - REMARKS:
VDP NOT ESTABLISHED - OBSTACLES PENETRATE 20:1.
THRESHOLD DISPLACED 200 FEET.
PARA 251, 20:1 PENETRATION.
PARA 251, 34:1 PENETRATION.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

TERPS, VOLUME 1, PARAGRAPH 251 PENETRATIONS:
20:1
1031 BLDG (KGGIT015) 414259.01N/0924436.42W (16.40)
1030 BLDG (KGGIT006) 414259.01N/0924436.42W (15.40)
995 GRD (KGGIT005) 414254.24N/0924433.75W (3.87)
CONT.

PART D - PREPARED BY:		DATE:
JON DENTON		01/24/2008
TITLE:		OFFICE:
AERONAUTICAL INFORMATION SPECIALIST		AVN-120

QUALITY
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