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

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RWF VOR/DME	UWGAG (FO)	144.80 / 26.47	2900
YOPBU (IAF)	UWGAG (NOPT) (FB)	025.37 / 15.77	2900
WAGIK (IAF)	UWGAG (NOPT) (FB)	287.63 / 13.48	2900
UWGAG (IF/IAF)	WOXIG (FB)	310.07 / 7.00	2600
WOXIG (FAF)	ZEKEX/2.00 NM TO RW31 (FB)	309.99 / 2.69	
ZEKEX/2.00 NM TO RW31	RW31 (MAP) (FO)	309.99 / 2.00	
(SEE FORM 8260-10)			

MISSED APPROACH

LNAV: RW31

CLIMB TO 2900 DIRECT ZIVLO AND HOLD.

ADDITIONAL FLIGHT DATA:
HOLD NW, RT, 129.78 INBOUND.
FAS OBST: 1189 TREE 441256N/0945940W
WOXIG TO RW31: 3.00/40.
CHART REDWOOD FALLS MUNI ASOS.

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. HOLD SE UWGAG, RT, 310.07 INBOUND, 2900 FT. IN LIEU OF PT (IAF)
3. FAC: 309.99 FAF: WOXIG DIST FAF TO MAP: 4.69 THLD: 4.69
4. MIN. ALT: UWGAG 2900, WOXIG 2600, ZEKEX/2.00 NM TO RW31 1740
5. DIST TO THLD FROM OM: ____ MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: ____ GS ALT AT: ____ OM: ____ MM: ____ IM: ____
7. GS ANGLE: ____ TCH: 34:1 IS NOT CLEAR
8. MSA FROM: RW31 3100

MAG VAR: 2E EPOCH YEAR: 2015

MINIMUMS

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

ALTERNATE: N A X

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
LNAV MDA	1500	1	433	1500	1	433	1500	1 1/4	433		NA				
CIRCLING	1660	1	588	1660	1	588	1820	2 1/4	748		NA				

NOTES:
CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: DME/DME RNP-0.3 NA.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT.
CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
(SEE FORM 8260-10)

QUALITY CHECKED

CITY AND STATE	ELEVATION: 1072 THRE: 1067 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
SPRINGFIELD, MN	SPRINGFIELD MUNI	RNAV	RNAV (GPS) RWY 31, ORIG	AMDT: NONE
				DATED

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
[ ] YES [X] NO		ROUTINE

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
[ ]	[ ]	[X]	[ ]	[X]	[X]	[X] ZMP, RWF FSS.

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME: JILL OLSON (MARK BURTZ)	FIFO AJV-353	DATE: 08/16/2012
APPROVED BY		
NAME: LARRY H STROUT MANAGER	FIFO AJV-353	DATE:

CHANGES:

ORIGINAL PROCEDURE.

REASONS:

FPT REQUEST.

PDF EDITS:
- ADDED (FAF) AND REMOVED 1740 FROM WOXIG TERMINAL ROUTE.
- CHANGED 1472 TO 2900 FOR MISSED APPROACH ALTITUDE IN TERMINAL ROUTE.
- REMOVED 020 AND 2.0 FROM MISSED APPROACH ARINC CODING.
- ADDED ASOS AND KRWF TO PART B BLOCK 2.
- CHANGED 0 TO 60 IN PART B BLOCK 3.

QUALITY CHECKED

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW31 (MAP)	1472 MSL	309.99	
1472 MSL	ZIVLO (FO)		2900

NOTES, (CONT.):
CHART NOTE: USE REDWOOD FALLS ALTIMETER SETTING; WHEN NOT RECEIVED, USE NEW ULM ALTIMETER SETTING.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON RWF VOR/DME AIRWAY RADIALS 054 CW 229.

QUALITY CHECKED

CITY AND STATE	ELEVATION: 1072 THRE: 1067	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
SPRINGFIELD, MN	AIRPORT NAME: SPRINGFIELD MUNI	RNAV	RNAV (GPS) RWY 31, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

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:

REASONS:

QUALITY CHECKED

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

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```
ARINC PACKET - 424-18 - RNAV (GPS)

                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        RWF   K3011330VDHA N44280219W095074163    N44280219W095074163E0070010612     NARREDWOOD FALLS

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   UWGAG K30    W     N44055125W094473464                      E0019     NAR           UWGAG
        SUSAEAENRT   WAGIK K30    C   L N44012094W094295780                      E0017     NAR           WAGIK
        SUSAEAENRT   WOXIG K30    W     N44103253W094544798                      E0020     NAR           WOXIG
        SUSAEAENRT   YOPBU K30    C   L N43515143W094573836                      E0021     NAR           YOPBU
        SUSAEAENRT   ZEKEX K30    W     N44122039W094573466                      E0020     NAR           ZEKEX
        SUSAEAENRT   ZIVLO K30    W     N44215060W095122040                      E0022     NAR           ZIVLO

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP D42 K3AD42     0     034YHN44135185W094595616E002001072         1800018000C    MNAR    SPRINGFIELD MUNI

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP D42 K3FR31   ARWF   010RWF  K3D 0V       IF                                                18000                B JS
        SUSAP D42 K3FR31   ARWF   020UWGAGK3EA0EY   020TF                     14480265    + 02900                            B JS
        SUSAP D42 K3FR31   ARWF   030UWGAGK3EA0EE AR   HF                     31010040    + 02900                            B JS
        SUSAP D42 K3FR31   AWAGIK 010WAGIKK3EA0E  A    IF                                                18000                B JS
        SUSAP D42 K3FR31   AWAGIK 020UWGAGK3EA0EE B 010TF                     28760135    + 02900                            B JS
        SUSAP D42 K3FR31   AYOPBU 010YOPBUK3EA0E  A    IF                                                18000                B JS
        SUSAP D42 K3FR31   AYOPBU 020UWGAGK3EA0EE B 010TF                     02540158    + 02900                            B JS
        SUSAP D42 K3FR31   R      010UWGAGK3EA0E  I    IF                                  + 02900     18000                B JS
        SUSAP D42 K3FR31   R      020WOXIGK3EA1E  F 051TF                     31010070    + 02600                 RW31  K3PGB JS
        SUSAP D42 K3FR31   R      020WOXIGK3EA2WN          N          ALNAV                                                    JS
        SUSAP D42 K3FR31   R      021ZEKEXK3EA0E S  031TF                     31000027    V 0174001744        -300          B JS
        SUSAP D42 K3FR31   R      030RW31 K3PG0GY M 031TF                     31000020      01107             -300          B JS
        SUSAP D42 K3FR31   R      040         0  M     CA                     3100        + 01472                            B JS
        SUSAP D42 K3FR31   R      050ZIVLOK3EA0EY      DF                                  + 02900                            B JS
        SUSAP D42 K3FR31   R      060ZIVLOK3EA0EE  R   HM                     12980040    + 02900                            B JS

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP D42 K3GRW31    0034003099 N44134060W094593877+0100    +0297701067000040075R
```

QUALITY CHECKED

CITY AND STATE	ELEVATION: 1072 THRE: 1067	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
SPRINGFIELD, MN	AIRPORT NAME: **SPRINGFIELD MUNI**	**RNAV**	**RNAV (GPS) RWY 31, ORIG**	AMDT: **NONE**
				DATED:

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER ☐ (specify) _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

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```
                1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP D42 K3SRW31 K3PG                0   18018003125                                                                  M
```

QUALITY CHECKED

CITY AND STATE	ELEVATION: 1072 THRE: 1067	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
SPRINGFIELD, MN	AIRPORT NAME: SPRINGFIELD MUNI	RNAV	RNAV (GPS) RWY 31, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER ☐ (specify) _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

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ARINC SUMMARY - 424-18 - RNAV (GPS)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	RWF	RWF	010		IF		FB					
	RWF	UWGAG	020		TF		FO	2.0	144.8(146.8T)	026.5	AA 02900	
	RWF	UWGAG	030	IAF	HF	R	FO		310.1(312.1T)	004.0	AA 02900	
	WAGIK	WAGIK	010	IAF	IF		FB					
	WAGIK	UWGAG	020		TF		FB	1.0	287.6(289.6T)	013.5	AA 02900	
	YOPBU	YOPBU	010	IAF	IF		FB					
	YOPBU	UWGAG	020		TF		FB	1.0	025.4(027.4T)	015.8	AA 02900	
		UWGAG	010	FACF	IF		FB				AA 02900	
		WOXIG	020	FAF	TF		FB	0.5	310.1(312.1T)	007.0	AA 02600	
		ZEKEX	021	SDF	TF		FB	0.3	310.0(312.0T)	002.7	AA 01740 GS 01744	
		RW31	030	MAP	TF		FO	0.3	310.0(312.0T)	002.0	AT 01107	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		310.0(312.0T)		AA 01472	
	ZIVLO	050		DF		FO				AA 02900	
	ZIVLO	060		HM	R	FO		129.8(131.8T)	004.0	AA 02900	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	RWF	N442802.19	W0950741.63	N4428.037	W09507.694
	UWGAG	N440551.25	W0944734.64	N4405.854	W09447.577
	WAGIK	N440120.94	W0942957.80	N4401.349	W09429.963
	WOXIG	N441032.53	W0945447.98	N4410.542	W09454.800
	YOPBU	N435151.43	W0945738.36	N4351.857	W09457.639
	ZEKEX	N441220.39	W0945734.66	N4412.340	W09457.578
	ZIVLO	N442150.60	W0951220.40	N4421.843	W09512.340
	RW31	N441340.60	W0945938.77	N4413.677	W09459.646

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW31	01067	40

QUALITY CHECKED

CITY AND STATE	ELEVATION: 1072 THRE: 1067	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
SPRINGFIELD, MN	AIRPORT NAME: SPRINGFIELD MUNI	RNAV	RNAV (GPS) RWY 31, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

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.
FEEDER	RWF VOR/DME	UWGAG	1. TOWER (27-000406)	441411.64N/0945739.61W	1453 (2C)	1000	AT447	2900
			2. TERRAIN	441157.00N/0945530.00W	1155 (1200)		AS1500	2700
INITIAL	YOPBU	UWGAG	3. TOWER (27-000464)	435652.00N/0945538.00W	1763 (5D)	1000		2800
			4. TERRAIN	435221.00N/0945630.00W	1401 (1400)		AS1500	2900
INITIAL	WAGIK	UWGAG	5. TOWER (27-020849)	440307.54N/0943131.79W	1374 (5D)	1000	AT526	2900
			6. TERRAIN	440412.00N/0944848.00W	1119 (1100)		AS1500	2600
INTERMEDIATE	UWGAG (IF/IAF)	WOXIG	7. TOWER (27-020792)	440712.10N/0945352.80W	1433 (2C)	500		2000
			8. TERRAIN	440539.00N/0945318.00W	1139 (1100)		AS1500	2600
FINAL: LNAV	WOXIG	ZEKEX/2.00 NM TO RW31	9. AAO	441036.54N/0945451.76W	1309 (2C)	250	RA60 DG121	1740
FINAL: LNAV STEPDOWN	ZEKEX/2.00 NM TO RW31	RW31	10. TREE	441256.44N/0945940.15W	1189 (2C)	250	RA60	1500
2. HOLD-IN-LIEU-OF-PT	UWGAG	P-5	11. AAO	440312.00N/0945118.00W	1405 (4E)	1000	AT495	2900
			12. TERRAIN	440312.00N/0945118.00W	1205 (1200)		AS1500	2700
3. MISSED APPROACH MAP:	RW31	ZIVLO				ASC		2900
			13. AAO	441939.00N/0951257.00W	1319 (4E)	1000		2400
ELEV:	1340		14. TERRAIN	441939.00N/0951257.00W	1119 (1100)		AS1500	2600
			15. TANK (27-001250)	441419.00N/0945901.00W	1231 (5D)	300	AC50 RA60	1660
			15. TANK (27-001250)	441419.00N/0945901.00W	1231 (5D)	300	AC50 RA60	1660
			1. TOWER (27-000406)	441411.64N/0945739.61W	1453 (2C)	300	RA60	1820

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL
CATEGORY A	1.3 NM	350	588
CATEGORY B	1.5 NM	450	588
CATEGORY C	1.7 NM	450	748
CATEGORY D	2.3 NM	550	
CATEGORY E	4.5 NM	550	

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: RW31

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
360-360	TWR (27-000813)	111/ 18.7	2020 (5D)	3100					

CITY AND STATE	ELEVATION: 1072 AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
SPRINGFIELD, MN	SPRINGFIELD MUNI	RNAV	RNAV (GPS) RWY 31, ORIG	AGL

QUALITY CHECKED

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE	3. ALTIMETER SETTING
ZMP ARTCC RWF FSS	N W S F A A A / C OTHER: ASOS	SOURCE: KRWF / KULM DISTANCE: 19.28 / 22.06 HOURS REMOTE OPERATION: 24 / BACKUP
SATISFACTORY ON: X V H F X U H F H F	LOCATION: KRWF	ADJUSTMENT: 52 / 60

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN: CAT 1	
	HRS OPTN: CAT 3	
5. APPROACH & RUNWAY LIGHTING		ALS
		(S) SALS
		MALS
		HIRL
	X	MIRL 31 (PCL), 13 (PCL)
	X	REIL 31, 13
		TDZ
		C/LINE
	X	OTHER (SPECIFY) PAPI-2L 31, 13
6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	
	INSTRUMENT	NPI-G 31, 13
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	X	RUNWAY THRESHOLD FT. FROM THRESHOLD
	X	ON CENTERLINE FT. FROM CENTERLINE

10. WAIVERS: NONE

PART D - PREPARED BY: JILL OLSON (MARK BURTZ)	DATE: 08/16/2012
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-353

PART C - REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

RWF ASOS AND ULM AWOS ON SERVICE A.

VDP NOT ESTABLISHED - FULL TIME REMOTE ALTIMETER.

VGSI DATA: 3.00/20.

RASS PRESSURE PATTERNS SAME:
KD42 1072
KRWF 1024, RA 51.1
KULM 1011, RA 59.3

100 FT VEGETATION USED PER FPT.

NO SURVEY RWY 13, 31. UNABLE TO VERIFY IF VISUAL PORTION OF FINAL IS CLEAR. PROCEDURE NA AT NIGHT.

LP MINIMUMS NOT PRODUCED DUE TO LACK OF BENEFIT.

SEE ATTACHED AIRSPACE LETTER.

OBST #7 IS 241 FT FROM THE INNER EDGE OF THE SECONDARY AREA ON THE SECOND DOCUMENTED INTERMEDIATE SEGMENT (WAGIK TRANSITION), 1414 PRIMARY EQUIVALENT HEIGHT.

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: REDWOOD FALLS VOR/DME **STATE:** MN **COUNTRY:** US

LATITUDE/LONGITUDE: 442802.19N/0950741.63W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	REDWOOD FALLS	RWF	VOR/DME	H							45000

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	S	RWF	VOR/DME	196.00	016.00	R	1		2600	6000	4	5
2	SW	RWF	VOR/DME	244.69	064.69	L	1 1/2		7000	31000	8	23

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	TOWER (27-001053)	442903.00N/0952928.00W	1641	5D
1	200	WINDMILL (27-002448)	443005.90N/0951032.20W	1433	5D
2	230	TOWER (27-001418)	442154.00N/0951928.00W	1588	5D

REASON FOR NONSTANDARD HOLDING:
PAT 2 AIR TRAFFIC REQUEST

HOLDING RESTRICTIONS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3000.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	SCHEP			KFCM	MINNEAPOLIS	MN (US)
DP	SCHEP			KMSP	MINNEAPOLIS	MN (US)
DP	SCHEP			KSTP	ST PAUL	MN (US)
EN ROUTE	J34					(US)
EN ROUTE	J90					(US)
EN ROUTE	Q120					(US)
EN ROUTE	V148					(US)
EN ROUTE	V175					(US)
EN ROUTE	V24					(US)
EN ROUTE	V26					(US)
EN ROUTE	V398					(US)
EN ROUTE	V412					(US)
IAP	VOR/DME RWY 33			KGDB	GRANITE FALLS	MN (US)
IAP	NDB RWY 32			KDXX	MADISON	MN (US)
IAP	ILS OR LOC RWY 12			KMML	MARSHALL	MN (US)
IAP	RNAV (GPS) RWY 12			KMML	MARSHALL	MN (US)
IAP	VOR RWY 12			KMML	MARSHALL	MN (US)
IAP	VOR/DME RWY 30			KMML	MARSHALL	MN (US)
IAP	RNAV (GPS) RWY 32			KMVE	MONTEVIDEO	MN (US)
IAP	VOR/DME OR GPS-A		1	KOVL	OLIVIA	MN (US)
IAP	RNAV (GPS) RWY 30			KRWF	REDWOOD FALLS	MN (US)
IAP	VOR-A		1	KRWF	REDWOOD FALLS	MN (US)
IAP	RNAV (GPS) RWY 13			KD42	SPRINGFIELD	MN (US)
IAP	RNAV (GPS) RWY 31			KD42	SPRINGFIELD	MN (US)
IAP	VOR/DME RWY 13			KD42	SPRINGFIELD	MN (US)
IAP	RNAV (GPS) RWY 15			KJYG	ST JAMES	MN (US)
IAP	RNAV (GPS) RWY 11			KTKC	TRACY	MN (US)
IAP	RNAV (GPS) RWY 29			KTKC	TRACY	MN (US)
IAP	RNAV (GPS) RWY 31			KBDH	WILLMAR	MN (US)
IAP	NDB RWY 17			KMWM	WINDOM	MN (US)
IAP	RNAV (GPS) RWY 17			KMWM	WINDOM	MN (US)
STAR	SKETR ARRIVAL		2	KMSP	MINNEAPOLIS	MN (US)

REQUIRED CHARTING: DP, STAR, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 16 **DATE OF REVISION:** 01/10/2013

REASON FOR REVISION:
CHANGED UNPLANNED HOLDING AIRSPEED FROM 310 TO 200.
CHANGED PAT 3 HOLDING AIRSPEED FROM 265 TO 230.

QUALITY CHECKED

DEVELOPED BY:	**DATE:** 09/12/2012	**OFFICE:** AJV-353	**NAME:** JILL OLSON (MARK BURTZ)
APPROVED BY:	**DATE:**	**OFFICE:** AJV-353	**NAME:** LARRY STROUT
	SIGNATURE:		

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY:
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: UWGAG **STATE:** MN **COUNTRY:** US

LATITUDE/LONGITUDE: 440551.25N/0944734.64W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

HOLDING: **HOLDING TYPE OF ACTION:** ESTABLISH

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	SE		WP	130.07	310.07	R		4	2900	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	440315.00N/0945121.00W	1405	4E

HOLDING RESTRICTIONS:
HOLDING RESTRICTED TO ESTABLISHED PATTERN.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 13		1	KD42	SPRINGFIELD	MN (US)
IAP	RNAV (GPS) RWY 31		1	KD42	SPRINGFIELD	MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 01/10/2013

DEVELOPED BY: **DATE:** 08/09/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (MARK BURTZ)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZMP
ATC FACILITY:
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: WAGIK **STATE:** MN **COUNTRY:** US

LATITUDE/LONGITUDE: 440120.94N/0942957.80W **TYPE:** WP, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	MANKATO	MKT	VOR/DME	L	238.18	245.18	28.00	28.00		3400	17500

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V250	1				(US)
IAP	RNAV (GPS) RWY 13			KFRM	FAIRMONT	MN (US)
IAP	RNAV (GPS) RWY 33			KULM	NEW ULM	MN (US)
IAP	RNAV (GPS) RWY 31			KD42	SPRINGFIELD	MN (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 01/10/2013

REASON FOR REVISION:
REMOVED FAC 2 FROM FIX MAKEUP.

DEVELOPED BY: **DATE:** 08/09/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (MARK BURTZ)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZMP
ATC FACILITY:
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: WOXIG **STATE:** MN **COUNTRY:** US

LATITUDE/LONGITUDE: 441032.53N/0945447.98W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 31			KD42	SPRINGFIELD	MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 01/10/2013

DEVELOPED BY: **DATE:** 08/10/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (MARK BURTZ)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY:
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: YOPBU **STATE:** MN **COUNTRY:** US

LATITUDE/LONGITUDE: 435151.43N/0945738.36W **TYPE:** WP, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	WORTHINGTON	OTG	VOR/DME	L	056.02	064.02	30.00	30.00		3400	17500

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V250	1				(US)
IAP	RNAV (GPS) RWY 31			KD42	SPRINGFIELD	MN (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 01/10/2013

DEVELOPED BY: **DATE:** 08/10/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (MARK BURTZ)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY:
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: ZEKEX **STATE:** MN **COUNTRY:** US

LATITUDE/LONGITUDE: 441220.39N/0945734.66W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 31			KD42	SPRINGFIELD	MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 01/10/2013

DEVELOPED BY: **DATE:** 08/10/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (MARK BURTZ)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY:
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: ZIVLO **STATE:** MN **COUNTRY:** US

LATITUDE/LONGITUDE: 442150.60N/0951220.40W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

HOLDING: **HOLDING TYPE OF ACTION:** ESTABLISH

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	NW		WP	309.78	129.78	R		4	2900	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (27-001418)	442154.00N/0951928.00W	1588	5D

HOLDING RESTRICTIONS:
HOLDING RESTRICTED TO ESTABLISHED PATTERN.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 13		1	KD42	SPRINGFIELD	MN (US)
IAP	RNAV (GPS) RWY 31		1	KD42	SPRINGFIELD	MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 01/10/2013

DEVELOPED BY: **DATE:** 08/09/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (MARK BURTZ)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY:
OTHER:

QUALITY CHECKED

TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: **SPRINGFIELD** STATE: **MN**

AIRPORT NAME: **SPRINGFIELD MUNI** ID: **KD42**

PROCEDURE: **RNAV (GPS) RWY 31** AMDT: **ORIG**

DOCKET # :
(96-AXX-X/Required/Not Required)

ALL DIST TO 1/100 NM; ELEV TO NEAREST FT; COORD TO 1/100 SEC; DEG TO 1/100 DG.

1. Distance from **THLD** to 1000' point **3.02**
   (Enter THLD, FAF, ARP, FACILITY, as appropriate)
2. Width of **FINAL** segment at 1000' point **1.20**
   (Enter appropriate segment , final, intermediate, etc.)
3. True Course of **FINAL** segment containing 1000' point **311.99**
4. High Terrain in **FINAL** segment containing 1000' point **1109**
5. Distance from **THLD** to 1500' point **4.69**
   (If 1500' point in PT maneuvering area or holding pattern note in remarks)
6. Width of **FINAL** segment at 1500' point **2.13**
7. True Course of **FINAL** segment containing 1500' point **311.99**
8. High Terrain in **FINAL** segment containing 1500' point **1109**
9. Threshold Coordinates (if straight-in) ... **441340.60N** / **0945938.77W**
10. ARP Coordinates ..... **441351.85N** / **0945956.16W**
11. Runway Approach End and distance furthest from ARP.....RWY **31**
    Distance **.28** NM
12. FAF Coordinates ..... **441032.53N** / **0945447.98W**
    (Click to Select)

REMARKS: Approach/Drawing attached.

Federal Aviation Administration

Memorandum

Date:

To: Dick Powell Manager, National Flight Data Center, AJV-21

From: Larry Strout, Manager, Terminal Procedures & Charting Services, Central Team, AJV-353

Subject: **ACTION:** Magnetic Variation Change

The Magnetic Variation (MV) data for the airport(s) and/or facility(s) listed under the 'Airport/Facility" column will be revised effective concurrent with the publication of the procedure(s) listed below.

RNAV (GPS) RWY 13, ORIG
RNAV (GPS) RWY 31, ORIG
TAKEOFF MINIMUMS AND OBSTACLE DP, ORIG
VOR/DME RWY 13, AMDT 3

Estimated Chart Date: 01/10/2013

Runway Numbers are not affected.

Please publish these changes in the National Flight Data Digest.

MINNESOTA

Location	Name	Airport /Facility	Identifier	Assigned Magnetic Variation Value	Epoch Year
Springfield	Springfield Muni	Airport	KD42 / D42	Old 6 ° East New 2 ° East	2015

If you have any questions please notify Larry H. Strout, larry.h.strout@faa.gov (405) 954-5070

CONCURRENCES
ROUTING SYMBOL AJV-34 SBaker
INITIALS/SIG
DATE
ROUTING SYMBOL AJV-353 JOlson
INITIALS/SIG
DATE
ROUTING SYMBOL AJV-353 LStrout
INITIALS/SIG
DATE
ROUTING SYMBOL AJV-341 JAlfonso
INITIALS/SIG
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cc: FTW-FPT, AVJ-3rf
AJV-353; LStrout :sbj::x7537:07162012 :U:\AVN100\100Public\MAGVAR\MAGVAR Letters 2012\ MV Change Request for Springfield, MN (KD42) 7-16-12
Requestor:MBurtz, AJW-3762:CTerrell, Evaluated By:LFortier