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TERMINAL ROUTES				MISSED APPROACH
FROM	TO	COURSE AND DISTANCE	ALTITUDE	
CSN VORTAC	SAVVV (FB)	021.29 / 14.07	3000	LPV: DA LNAV/VNAV: DA LNAV: RW16L
SAVVV (IAF)	GIGEY (FB)	090.43 / 8.00	3000	
MANNE (IAF)	GIGEY (FB)	171.00 / 7.01	3000	CLIMB TO 700 THEN CLIMBING RIGHT TURN TO 3000 DIRECT CSN VORTAC AND HOLD.
SHYLO (IAF)	GIGEY (FB)	230.61 / 8.00	3000	
GIGEY (IF)	DUDNG (FB)	160.57 / 2.64	2600	
DUDNG	DORGE (FB)	160.56 / 2.64	2200	ADDITIONAL FLIGHT DATA: HOLD SW, LT, 027.00 INBOUND. CHART FAS OBST: 393 TREE 384545N/0773209W CHART R6608A, B, & C. DISTANCE TO THLD FROM 250 HATH: 0.76 NM. CHART VDP AT 1.29 MILES TO RW16L* *LNAV ONLY. WAAS CHANNEL # 70302 REFERENCE PATH ID: W16A CHART CIRCLING ICON LTP HAE: 26.6 M
DORGE (FAF)	JUKIK/3.40 NM TO RW16L (FB)	160.57 / 2.72		
(SEE FORM 8260-10)				

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. PROFILE STARTS AT GIGEY
3. FAC: 160.57 FAF: DORGE DIST FAF TO MAP: 6.12 THLD: 6.12
4. MIN. ALT: GIGEY 3000, DUDNG 2600, DORGE 2200, JUKIK/3.40 NM TO RW16L 1320
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 100 HAT: GS ANT:
6. MIN GS INCPT: 2200 GS ALT AT: DORGE 2200 OM: MM: IM:
7. GS ANGLE: 3.00 TCH: 57.8 34:1 IS NOT CLEAR
8. MSA FROM: RW16L 3400

MAG VAR: 10W EPOCH YEAR: 2000

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	442	3/4	250	442	3/4	250	442	3/4	250	442	3/4	250			
LNAV/VNAV DA	635	1	443	635	1	443	635	1	443	635	1	443			
LNAV MDA	660	3/4	468	660	3/4	468	660	1	468	660	1	468			
CIRCLING	720	1	528	740	1	548	840	1 3/4	648	880	2 1/4	688			

NOTES:
 CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F). @ CAT D 800-2 1/4
 CHART NOTE: DME/DME RNP-0.3 NA. @ NA WHEN LOCAL WEATHER NOT AVAILABLE.
 CHART PLANVIEW NOTE: RADAR REQUIRED.
 *LNAV ONLY
 (SEE FORM 8260-10)



CITY AND STATE WASHINGTON, DC	ELEVATION: 192 THRE: 192	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 16L, AMDT 1 6 FEBRUARY 2014	SUP:
	AIRPORT NAME: MANASSAS RGNL/HARRY P. DAVIS FIELD			AMDT: ORIG-D
				DATED 05/02/2013

**RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33**

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
JUKIK/3.40 NM TO RW16L	RW16L (MAP) (FO)	160.57 / 3.40	
RW16L (MAP)	700 MSL	160.57	700
700 MSL	CSN VORTAC (FO)		3000

NOTES, (CONT.):

*LNAV ONLY

CHART NOTE: WHEN LOCAL ALTIMETER SETTING IS NOT RECEIVED USE WASHINGTON DULLES INTL ALTIMETER SETTING AND INCREASE ALL DA 59 FT AND LNAV/VNAV ALL CATS VISIBILITIES 1/8 MILE; INCREASE ALL MDA 60 FT.

CHART NOTE: FOR INOPERATIVE MALSR, INCREASE LNAV/VNAV VISIBILITY TO 1 1/2 MILES, AND INCREASE LNAV CAT A/B VISIBILITY TO 1 MILE AND CAT C/D VISIBILITY TO 1 3/8 MILE.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT MANNE ON V4-92 NORTHWEST BOUND.

CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO LPV.

CHART NOTE: FOR INOPERATIVE MALSR WHEN USING WASHINGTON DULLES INTL ALTIMETER SETTING, INCREASE LPV ALL CATS TO 7/8 MILE, LNAV/VNAV ALL CATS TO 1 3/8, AND LNAV CAT A/B VISIBILITY TO 1 MILE, CATS C/D TO 1 3/8 MILE.

CHART NOTE: VDP AND BARO-VNAV NA WHEN USING WASHINGTON DULLES INTL ALTIMETER SETTING.



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FLIGHT STANDARDS SERVICE - FAR PART 97.33

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FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KHEF
RUNWAY	RW16L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W16A
LTP/FTP LATITUDE	384339.7200N
LTP/FTP LONGITUDE	0773107.5860W
LTP/FTP ELLIPSOIDAL HEIGHT	+00266
FPAP LATITUDE	384222.0075N
FPAP LONGITUDE	0773011.7255W
THRESHOLD CROSSING HEIGHT (TCH)	00057.8
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0864
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 B3FCAB67

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00586
FPAP ORTHOMETRIC HEIGHT	+00586



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RUNWAY 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012

SUSAP KHEFK6GRW16L 0062001606 N38433972W077310759-0200 +0026600192000058100IIHEF1

PP 1 2 3 4 5 6 7 8 9 0 1 2 3
 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012

SUSAP KHEFK6PR16L RW16L001 0000W16A0N3843397200W07731075860+002660300N3842220075W07730117255106750864000578F400500B3FCAB67
 SUSAP KHEFK6PR16L RW16L002E +00586+00586LPV 70302

MSA 1 2 3 4 5 6 7 8 9 0 1 2 3
 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012

SUSAP KHEFK6SRW16LK6PG 0 18018003425 M



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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
	CSN	CSN	010		IF		FB					
	CSN	SAVVV	020	IAF	TF		FB	2.0	021.3(011.3T)	014.1	AA 03000	
	CSN	GIGEY	030		TF		FB	1.0	090.4(080.4T)	008.0	AA 03000	
	MANNE	MANNE	010	IAF	IF		FB					
	MANNE	GIGEY	020		TF		FB	1.0	171.0(161.0T)	007.0	AA 03000	
	SAVVV	SAVVV	010	IAF	IF		FB					
	SAVVV	GIGEY	020		TF		FB	1.0	090.4(080.4T)	008.0	AA 03000	
	SHYLO	SHYLO	010	IAF	IF		FB					
	SHYLO	GIGEY	020		TF		FB	1.0	230.6(220.6T)	008.0	AA 03000	
		GIGEY	010	FACF	IF		FB				AA 03000	
		DUDNG	011	SDF	TF		FB	0.5	160.6(150.6T)	002.6	AA 02600	
		DORGE	020	FAF	TF		FB	0.5	160.6(150.6T)	002.6	AA 02200	
		JUKIK	021	SDF	TF		FB	0.3	160.6(150.6T)	002.7	AA 01320	GS 01333
		RW16L	030	MAP	TF		FO	0.3	160.6(150.6T)	003.4	AT 00250	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		160.6(150.6T)		AA 00700	
	CSN	050		DF	R	FO				AA 03000	
	CSN	060		HM	L	FO		027.0(017.0T)	004.0	AA 03000	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	CSN	N383828.33	W0775155.80	N3838.472	W07751.930
	DORGE	N384900.07	W0773458.27	N3849.001	W07734.971
	DUDNG	N385118.34	W0773638.03	N3851.306	W07736.634
	GIGEY	N385336.58	W0773817.89	N3853.610	W07738.298
	JUKIK	N384637.62	W0773315.61	N3846.627	W07733.260
	MANNE	N390014.40	W0774113.17	N3900.240	W07741.220
	SAVVV	N385217.18	W0774824.14	N3852.286	W07748.402
	SHYLO	N385941.51	W0773137.71	N3859.692	W07731.629
	RW16L	N384339.72	W0773107.59	N3843.662	W07731.127

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW16L	00192	58



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