

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				MISSED APPROACH											
FROM	TO	COURSE AND DISTANCE	ALTITUDE	LPV: DA LNAV/VNAV: DA LNAV: RW18											
OTG VOR/DME	JIMED (FO)	357.69 / 12.24	3300	CLIMB TO 3300 DIRECT OSIGE AND ON TRACK 174.15 TO BILOO AND HOLD.											
POGSE (IAF)	JIMED (NOPT) (FB)	138.56 / 19.72	3300												
GOPEC (IAF)	JIMED (NOPT) (FB)	213.56 / 19.14	3300												
JIMED (IF/IAF)	ZERIX (FB)	178.00 / 6.97	3000												
ZERIX (FAF)	OMLAE/1.70 NM TO RW18 (FB)	178.00 / 2.69													
OMLAE/1.70 NM TO RW18 (SEE FORM 8260-10)	RW18 (MAP) (FO)	178.00 / 1.70		ADDITIONAL FLIGHT DATA: HOLD S, RT, 354.16 INBOUND. CHART FAS OBST: 1665 TREE 434058N/0953423W DISTANCE TO THLD FROM 200 HATH: 0.53 NM. CHART VDP AT 1.00 MILES TO RW18* *LNAV ONLY. WAAS CHANNEL # 93830 REFERENCE PATH ID: W18A LTP HAE: 452.3 M											
1. PT <u> </u> SIDE OF COURSE <u> </u> OUTBOUND <u> </u> FT WITHIN <u> </u> MILES OF <u> </u> (IAF) 2. HOLD N JIMED, RT, 178.00 INBOUND, 3300 FT. IN LIEU OF PT (IAF) 3. FAC: <u>178.00</u> FAF: <u>ZERIX</u> DIST FAF TO MAP: <u>4.39</u> THLD: <u>4.39</u> 4. MIN. ALT: <u>JIMED 3300, ZERIX 3000, OMLAE/1.70 NM TO RW18 2140*</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>3000</u> GS ALT AT: <u>ZERIX 3000</u> OM: <u> </u> MM: <u> </u> IM: <u> </u> 7. GS ANGLE: <u>3.00</u> TCH: <u>30.0</u> 34:1 IS CLEAR 8. MSA FROM: <u>RW18 3900</u>				MAG VAR: 2E EPOCH YEAR: 2015											
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	1771	3/4	200	1771	3/4	200	1771	3/4	200	1771	3/4	200			
LNAV/VNAV DA	1821	7/8	250	1821	7/8	250	1821	7/8	250	1821	7/8	250			
LNAV MDA	1920	1	349	1920	1	349	1920	1	349	1920	1	349			
CIRCLING	2100	1	526	2100	1	526	2100	1 1/2	526	2140	2	566			
NOTES: CHART NOTE: BARO-VNAV NA WHEN USING JACKSON ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C (0F) OR ABOVE 54C (130F). CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GOPEC ON V175 NOTHEAST BOUND. (SEE FORM 8260-10)															
CITY AND STATE WORTHINGTON, MN		ELEVATION: 1574 THRE: 1571 AIRPORT NAME: WORTHINGTON MUNI		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 18, ORIG 10 JANUARY 2013				SUP: AMDT: NONE DATED					

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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
RW18 (MAP)	1771 MSL	178.00	
1771 MSL	OSIGE (FB)		
OSIGE	BILOO (FO)	174.15 / 6.53	3300

NOTES, (CONT.):

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT POGSE ON V148 SOUTHWEST BOUND.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON OTG VOR/DME AIRWAY RADIALS 014 CW 082.

*LNAV ONLY

CHART NOTE: VDP NA WITH JACKSON ALTIMETER SETTING.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JACKSON ALTIMETER SETTING AND INCREASE ALL DA 78 FEET AND ALL MDA 80 FEET, INCREASE LPV AND LNAV/VNAV ALL CATS, LNAV CAT C/D, AND CIRCLING CAT C VISIBILITY 1/4 MILE.

QUALITY
2
CHECKED

CITY AND STATE
WORTHINGTON, MN

ELEVATION: 1574 THRE: 1571
AIRPORT NAME:
WORTHINGTON MUNI

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
RNAV (GPS) RWY 18, ORIG
10 JANUARY 2013

SUP:
AMDT: NONE
DATED:

**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	KOTG
RUNWAY	RW18
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18A
LTP/FTP LATITUDE	433941.7480N
LTP/FTP LONGITUDE	0953500.4920W
LTP/FTP ELLIPSOIDAL HEIGHT	+04523
FPAP LATITUDE	433812.6400N
FPAP LONGITUDE	0953500.4900W
THRESHOLD CROSSING HEIGHT (TCH)	00030.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1472
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

558704BB

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04790
FPAP ORTHOMETRIC HEIGHT	+04790

QUALITY
CHECKED
2

CITY AND STATE WORTHINGTON, MN	ELEVATION: 1574 THRE: 1571	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 18, ORIG 10 JANUARY 2013	SUP:
	AIRPORT NAME: WORTHINGTON MUNI			AMDT: NONE
				DATED:

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

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.

ARINC PACKET - 424-18 - RNAV (GPS)

[illegible][illegible][illegible]

SEGMENT	1	2	3	4	5	6	7	8	9	0	1	2	3
SUSAP	KOTGK3FR18	AGOPEC	010GOPECK3EA0E	A	IF					18000		A	JS
SUSAP	KOTGK3FR18	AGOPEC	020JIMEDK3EA0EE	B	010TF		21360191	+	03300			A	JS
SUSAP	KOTGK3FR18	AOTG	0100TG K3D 0V		IF					18000		A	JS
SUSAP	KOTGK3FR18	AOTG	020JIMEDK3EA0EY		020TF		35770122	+	03300			A	JS
SUSAP	KOTGK3FR18	AOTG	030JIMEDK3EA0EE	AR	HF		17800040	+	03300			A	JS
SUSAP	KOTGK3FR18	APOGSE	010POGSEK3EA0E	A	IF					18000		A	JS
SUSAP	KOTGK3FR18	APOGSE	020JIMEDK3EA0EE	B	010TF		13860197	+	03300			A	JS
SUSAP	KOTGK3FR18	R	010JIMEDK3EA0E	I	IF			+	03300	18000		A	JS
SUSAP	KOTGK3FR18	R	020ZERIXK3EA1E	F	051TF		17800070	+	03000		RW18	K3PGA	JS
SUSAP	KOTGK3FR18	R	020ZERIXK3EA2WALPV			ALNAV/VNAV							JS
SUSAP	KOTGK3FR18	R	0210MLAEK3EA0E	S	031TF		17800027	V	0214002143	-300		A	JS
SUSAP	KOTGK3FR18	R	030RW18 K3PG0GY	M	031TF		17800017		01601	-300		A	JS
SUSAP	KOTGK3FR18	R	040	0	M	CA	1780	+	01771			A	JS
SUSAP	KOTGK3FR18	R	0500SIGEK3EA0E		DF							A	JS
SUSAP	KOTGK3FR18	R	060BILOOK3EA0EY		010TF		1742	+	03300			A	JS
SUSAP	KOTGK3FR18	R	070BBILOOK3EA0EE	R	HM		35420040	+	03300			A	JS

[illegible]

CITY AND STATE
WORTHINGTON, MN

ELEVATION: 1574 THRE: 1571
AIRPORT NAME:
WORTHINGTON MUNI

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:
RNAV (GPS) RWY 18, ORIG
 10 JANUARY 2013

SUP:	CHEC
AMDT:	NONE
DATED:	

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.

SUSAP KOTGK3GRW18 0042001780 N43394175W095350049+0100 +0452301571000030075R

[illegible]

SUSAP	KOTGK3PR18	RW18	G01	0000W18A0N4339417480W09535004920+045230300N4338126400W09535004900106751472000300F400350558704BB
SUSAP	KOTGK3PR18	RW18	Q02E	+04790+04790LPV 93830

[illegible]

SUSAP KOTGK3SRW18 K3PG 0 18018003925 M

QUALITY
2
CHECKED

CITY AND STATE WORTHINGTON, MN	ELEVATION: 1574 THRE: 1571 AIRPORT NAME: WORTHINGTON MUNI	FACILITY IDENTIFIER: RNAV	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE: RNAV (GPS) RWY 18, ORIG 10 JANUARY 2013	SUP:
				AMDT: NONE
				DATED:

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

ARINC SUMMARY - 424-18 - RNAV (GPS)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	GOPEC	GOPEC	010	IAF	IF		FB					
	GOPEC	JIMED	020		TF		FB	1.0	213.6 (215.6T)	019.1	AA 03300	
	OTG	OTG	010		IF		FB					
	OTG	JIMED	020		TF		FO	2.0	357.7 (359.7T)	012.2	AA 03300	
	OTG	JIMED	030	IAF	HF	R	FO		178.0 (180.0T)	004.0	AA 03300	
	POGSE	POGSE	010	IAF	IF		FB					
	POGSE	JIMED	020		TF		FB	1.0	138.6 (140.6T)	019.7	AA 03300	
		JIMED	010	FACF	IF		FB				AA 03300	
		ZERIX	020	FAF	TF		FB	0.5	178.0 (180.0T)	007.0	AA 03000	
		OMLAE	021	SDF	TF		FB	0.3	178.0 (180.0T)	002.7	AA 02140	GS 02143
		RW18	030	MAP	TF		FO	0.3	178.0 (180.0T)	001.7	AT 01601	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		178.0 (180.0T)		AA 01771	
	OSIGE	050		DF		FB					
	BILOO	060		TF		FO	1.0	174.2 (176.2T)		AA 03300	
	BILOO	070		HM	R	FO		354.2 (356.2T)	004.0	AA 03300	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	OTG	N433848.90	W0953455.05	N4338.815	W09534.918
	BILOO	N432806.10	W0953424.17	N4328.102	W09534.403
	GOPEC	N440638.81	W0951937.61	N4406.647	W09519.627
	JIMED	N435103.43	W0953500.49	N4351.057	W09535.008
	OMLAE	N434123.76	W0953500.49	N4341.396	W09535.008
	OSIGE	N433437.21	W0953500.49	N4334.620	W09535.008
	POGSE	N440618.50	W0955218.99	N4406.308	W09552.317
	ZERIX	N434405.28	W0953500.49	N4344.088	W09535.008
	RW18	N433941.75	W0953500.49	N4339.696	W09535.008

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW18	01571	30

QUALITY
2
CHECKED

CITY AND STATE WORTHINGTON, MN	ELEVATION: 1574	THRE: 1571	FACILITY IDENTIFIER: RNAV	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE: RNAV (GPS) RWY 18, ORIG 10 JANUARY 2013	SUP:
	AIRPORT NAME: WORTHINGTON MUNI				AMDT: NONE
					DATED: