

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE**

TITLE 14 CFR PART 97.33

Bearings, headings, courses, tracks 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 feet RVR.

<u>AIRPORT ID</u> KTUL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 18L	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> TULSA	<u>STATE</u> OK		
<u>AIRPORT ELEVATION</u> 678	<u>TDZE</u> 641	<u>SUPERSEDED</u> RNAV (GPS) RWY 18L	<u>ORIGINAL/AMENDMENT</u> 1C	<u>DATED</u> 03/31/2016	<u>MAG VAR</u> 3E	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 19 MAY 2022	<u>REQUIRED EFFECTIVE DATE</u> 05/19/2022	<u>CANCEL/SUSPEND</u>		

TAA

FROM	FIX TYPE	TO	FIX TYPE	ALTITUDE
1. 090/30 CW 270/30	NOPT	ORKUC	IF/IAF	3500
2. 270/30 CW 000/30		MUTXU	IAF	3600
3. 000/30 CW 090/30		NUPXA	IAF	3500

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
MUTXU	IAF	ORKUC	NOPT	TF	FB	1.00	270.22	9.92	3500
NUPXA	IAF	ORKUC	NOPT	TF	FB	1.00	089.98	9.92	3500
ORKUC	IF/IAF	IRUHU		TF	FB	1.00	180.10	6.94	2400
IRUHU	FAF	ERIRE/3.20 NM TO RW18L		TF	FB	0.30	180.09	2.19	
ERIRE/3.20 NM TO RW18L		RW18L	MAP	TF	FO	0.30	180.09	3.20	
RW18L	MAP	841 MSL		CA			180.09		
841 MSL		ICECE		DF	FO	1.00			3500

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW18L

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3500 DIRECT ICECE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF** (IAF)

2. HOLD N ORKUC, RT, 180.10 INBOUND, 3500 FT. IN LIEU OF PT (IAF), MAX 14000.

3. **FAC:** 180.09 **FAF:** IRUHU **DIST FAF TO MAP:** 5.39 **DIST FAF TO THLD:** 5.39

4. **MIN ALT:** ORKUC 3500, IRUHU 2400, ERIRE/3.20 NM TO RW18L 1700*

5. **DIST TO THLD FROM FAF:** 5.39 **MM:** **IM:** **150 HAT:** **200 HAT:** 0.50 **GS ANT:**

6. **MIN GP INCPT:** 2400 **GP ALT AT PFAF :** IRUHU 2400 **OM:** **MM:** **IM:**

7. **GP ANGLE:** 3.00 **34:1:** IS CLEAR **20:1:** IS CLEAR **TCH:** 55.6

8. **MSA FROM:**

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: CIRCLING NA FOR CAT E S OF RWY 8-26.

CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -11°C OR ABOVE 54°C.

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

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV CAT E VISIBILITY TO RVR 4000, LNAV/VNAV ALL CATS VISIBILITY TO RVR 5500, AND LNAV CAT E VISIBILITY TO 1 1/4 SM.

CHART IN PLAINVIEW AT ORKUC: MAXIMUM HOLDING AIRSPEED 230 KIAS.

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.

CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.

ADDITIONAL FLIGHT DATA:

HOLD S, RT, 000.08 INBOUND.

CHART FAS OBST: 772 TOWER (40-000370) 361347N/0955204W.

CHART VDP AT 1.35 NM TO RW18L.

WAAS CHANNEL # 93504

REFERENCE PATH ID: W18A

CHART CIRCLING ICON.

LTP HAE: 161.9 M



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

ALTERNATE: NA STANDARD - CAT C 900-2 1/2, CAT D 900-2 3/4, CAT E 900-3

CATEGORY:	A			B			C			D			E		
	FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS
LPV DA	841	2400	200	841	2400	200	841	2400	200	841	2400	200	841	2400	200
LNAV/VNAV DA	983	3000	342	983	3000	342	983	3000	342	983	3000	342	983	3000	342
LNAV MDA	1080	2400	439	1080	2400	439	1080	4000	439	1080	4000	439	1080	4000	439
CIRCLING	1120	1	442	1160	1	482	1500	2 1/2	822	1520	2 3/4	842	1520	3	842

CHANGES - REASONS

1. TERMINAL ROUTES: CHANGED IAF MUTXU-ORKUC COURSE/DIST FROM 270.17/6.00 TO 270.22/9.92. - MOVED MUTXU FIX TO FACILITATE TURNING AND ATC VECTORS.
2. TERMINAL ROUTES: CHANGED IAF NUPXA-ORKUC COURSE/DIST FROM 090.03/6.00 TO 089.98/9.92. - MOVED MUTXU FIX TO FACILITATE TURNING AND ATC VECTORS.
3. TERMINAL ROUTES: CHANGED IF DIST FROM 7.02 TO 6.94. - MOVED FAF TO FACILITATE OPTIMAL DESIGN.
4. TERMINAL ROUTES: CHANGED FAF DIST FROM 2.12 TO 2.19. - MOVED FAF TO FACILITATE OPTIMAL DESIGN.
5. TERMINAL ROUTES: CHANGED CA LEG ALTITUDE FROM 908 TO 841. - LOWERED LPV MINS.
6. PROFILE: LINE 2; ADDED MAX 14000, LINE 3; CHANGED DIST FAF TO MAP/THLD FROM 5.32 TO 5.39, LINE 4; ADDED DIST TO THLD FROM FAF: 5.39 AND 200 HAT: 0.50, LINE 7; CHANGED TCH FROM 55.9 TO 55.6 AND ADDED 20:1 IS CLEAR. - IAW 8260.19I 8-6-7 AND MOVED FAF FOR OPTIMAL DESIGN.
7. PBN REQUIREMENTS NOTE: ADDED RNP APCH-GPS. - IAW 8260.19I 8-6-8.
8. NOTES: CHANGED CIRCLING NA NOTE FROM "SOUTH" TO "S" AND REMOVED DME/DME NOTE. - IAW 8260.19I 8-6-9.
9. NOTES: CHANGED BARO-VNAV NOTE FROM "BELOW -13C (9F) OR ABOVE 54C (130F)" TO "BELOW -11°C OR ABOVE 54°C". - IAW 8260.19I 8-6-9.
10. NOTES: CHANGED INOP ALS NOTE FROM "CHART NOTE: FOR INOPERATIVE MALSR, INCREASE LPV ALL CATS VISIBILITY TO RVR 4500, LNAV/VNAV ALL CATS VISIBILITY TO 1 5/8 MILE, AND LNAV CAT E VISIBILITY TO 1 1/4 MILE" TO "CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV CAT E VISIBILITY TO RVR 4000, LNAV/VNAV ALL CATS VISIBILITY TO RVR 5500, AND LNAV CAT E VISIBILITY TO 1 1/4 SM". - IAW 8260.19I 8-6-9.
11. ADDITIONAL FLIGHT DATA: ADDED 40-000370 TO FAS OBST DESCRIPTION AND CHART CIRCLING ICON, CHANGED VDP FROM 1.37 TO 1.35 AND REMOVE "", AND REMOVED ""LNAV ONLY" AND DIST FROM THLD. - IAW 8260.19I 8-6-10 AND LOWERED LPV MINS AND NEW EVAL COMPLETED.
12. MINS: CHANGED LPV FROM 908/267 TO 841/200. - IAW 8260.3E 3-3-1 AND NEW EVAL COMPLETED WITH NO CONT OBST.
13. MINS: CHANGED VNAV: FROM 1128/487/ 1 1/4 SM TO 983/342/3000 RVR. - IAW 8260.3E 3-3-1 AND NEW EVAL COMPLETED WITH YIELDING NEW CONT OBST.
14. MINS: CHANGED CIRCLING CAT C FROM 1520/842 TO 1500/822. - CAT C OBST ELEVATION WAS LOWERED.
15. FAS DATA: CRC CHANGED FROM 5A86CE70 TO 1E21F9B8. - LTP LAT/LONG CHANGED FROM ".1650/.7210" TO ".1655/.7190", FPAP LAT/LONG CHANGED FROM ".4305/.2860" TO ".4215/.2845", TCH CHANGED FROM 55.9 TO 55.6, AND VERT LIMIT CHANGED FROM 50 TO 35.
16. NOTES: CHANGED SIMULTANEOUS APPROACH NOTE FROM "SIMULTANEOUS APPROACH AUTHORIZED WITH ILS OR LOC RWY 18R." TO "SIMULTANEOUS APPROACH AUTHORIZED". - IAW 8260.19I 8-5-11 O (8).
17. ADDITIONAL FLIGHT DATA: REMOVED CHART ASR. - IAW 8260.19I 8-6-10.



COORDINATED WITH:

A4A **ALPA** **AOPA** **APA** **HAI** **NBAA** **OTHER:** ZKC, ZFW, ZME, TUL APP CON, TUL ATCT, AMGR

FLIGHT CHECKED BY
PENDING

Digitally signed by
DONALD H LANIER
Mar 01, 2022

OFFICE
FPO

DATE

DEVELOPED BY
DONALD H. LANIER (ANDRE TUCKER)

Digitally signed by
DONALD H LANIER

OFFICE
AJV-A431

DATE
12/29/2021

APPROVED BY
LONNIE EVERHART

Mar 01, 2022
Digitally signed by
DONALD H LANIER
Mar 01, 2022

OFFICE
AJV-A430

DATE

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KTUL
RUNWAY	RW18L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18A
LTP/FTP LATITUDE	361250.1655N
LTP/FTP LONGITUDE	0955252.7190W
LTP/FTP ELLIPSOIDAL HEIGHT	+01619
FPAP LATITUDE	361111.4215N
FPAP LONGITUDE	0955259.2845W
THRESHOLD CROSSING HEIGHT (TCH)	00055.6
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	1E21F9B8

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+01910
FPAP ORTHOMETRIC HEIGHT	+01910

