

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
GRAPHIC DEPARTURE PROCEDURES (DP)**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>
NANDR	TWO	NANDR2.NANDR	ONE	05/19/2022	20 APR 2023
<u>TYPE:</u>	<u>OBSTACLE</u>	<u>COPTER</u>	<u>SID</u>	<u>SPECIAL</u>	<u>RNAV</u>
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DP ROUTE DESCRIPTION:**50F:****TAKEOFF RWY 17:** CLIMB ON HEADING 165.44 OR AS ASSIGNED BY ATC, THENCE . . .**KADS:****TAKEOFF RWY 16:** CLIMB ON HEADING 156.77 OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 34:** CLIMB ON HEADING 336.77 OR AS ASSIGNED BY ATC, THENCE . . .**KAFW:****TAKEOFF RWY 16L:** CLIMB ON HEADING 166.21 OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 16R:** CLIMB ON HEADING 166.21 TO 1100 BEFORE TURNING RIGHT OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 34L:** CLIMB ON HEADING 346.21 OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 34R:** CLIMB ON HEADING 346.21 OR AS ASSIGNED BY ATC, THENCE . . .**KCPT:****TAKEOFF RWY 15:** CLIMB ON HEADING 153.20 OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 33:** CLIMB ON HEADING 333.20 OR AS ASSIGNED BY ATC, THENCE . . .**KDTO:****TAKEOFF RWY 18L:** CLIMB ON HEADING 177.06 OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 18R:** CLIMB ON HEADING 177.04 OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 36L:** CLIMB ON HEADING 357.04 OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 36R:** CLIMB ON HEADING 357.06 OR AS ASSIGNED BY ATC, THENCE . . .**F46:****TAKEOFF RWY 17:** CLIMB ON HEADING 167.46 OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 35:** CLIMB ON HEADING 347.45 OR AS ASSIGNED BY ATC, THENCE . . .**KFTW:****TAKEOFF RWY 16:** CLIMB ON HEADING 163.90 TO 1600 BEFORE PROCEEDING ON COURSE OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 17:** CLIMB ON HEADING 163.90 TO 1600 BEFORE PROCEEDING ON COURSE OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 34:** CLIMB ON HEADING 343.90 OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 35:** CLIMB ON HEADING 343.90 OR AS ASSIGNED BY ATC, THENCE . . .**KFWS:****TAKEOFF RWY 18R:** CLIMB ON HEADING 177.11 TO 1200 BEFORE TURNING RIGHT OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 36L:** CLIMB ON HEADING 357.11 OR AS ASSIGNED BY ATC, THENCE . . .

QUALITY
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CHECKED

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NANDR	TWO	NANDR2.NANDR	ONE	05/19/2022	20 APR 2023

KGKY:**TAKEOFF RWY 16:** CLIMB ON HEADING 162.02 TO 2500 BEFORE TURNING LEFT OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 34:** CLIMB ON HEADING 342.02 TO 1400 BEFORE TURNING SOUTHEAST BOUND OR AS ASSIGNED BY ATC, THENCE . . .**KGPM:****TAKEOFF RWY 18:** CLIMB ON HEADING 192.34 TO 2500 BEFORE PROCEEDING ON COURSE OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 36:** CLIMB ON HEADING 357.34 TO 1400 BEFORE TURNING SOUTHBOUND OR AS ASSIGNED BY ATC, THENCE . . .**KHQZ:****TAKEOFF RWY 18:** CLIMB ON HEADING 177.88 OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 36:** CLIMB ON HEADING 357.88 OR AS ASSIGNED BY ATC, THENCE . . .**KLNC:****TAKEOFF RWY 13:** CLIMB ON HEADING 134.31 OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 31:** CLIMB ON HEADING 314.31 TO 1800 BEFORE TURNING LEFT OR AS ASSIGNED BY ATC, THENCE . . .**KLUD:****TAKEOFF RWY 17:** CLIMB ON HEADING 163.45 TO 1700 BEFORE PROCEEDING NORTH, THENCE . . .**KNFW:****TAKEOFF RWY 18:** CLIMB ON HEADING 176.53 OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 36:** CLIMB ON HEADING 356.52 OR AS ASSIGNED BY ATC, THENCE . . .**KRBD:****TAKEOFF RWY 13:** CLIMB ON HEADING 129.08 TO 1800 BEFORE TURNING WESTBOUND OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 17:** CLIMB ON HEADING 174.13 TO 2600 BEFORE TURNING WESTBOUND OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 31:** CLIMB ON HEADING 309.09 TO 1500 BEFORE TURNING SOUTHBOUND OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 35:** CLIMB ON HEADING 354.13 TO 1400 BEFORE TURNING SOUTHBOUND OR AS ASSIGNED BY ATC, THENCE . . .**KTKI:****TAKEOFF RWY 18:** CLIMB ON HEADING 179.12 OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 36:** CLIMB ON HEADING 359.11 OR AS ASSIGNED BY ATC, THENCE . . .**KWEA:****TAKEOFF RWY 17:** CLIMB ON HEADING 175.38 OR AS ASSIGNED BY ATC, THENCE . . .**TAKEOFF RWY 35:** CLIMB ON HEADING 355.37 TO 1600 BEFORE TURNING LEFT, THENCE . . .**ALL AIRPORTS:**

. . . EXPECT RADAR VECTORS TO CROSS CUZNO AT OR ABOVE 3000, THEN ON TRACK 357.12 TO CROSS NANDR AT OR BELOW 13000, THEN ON ASSIGNED TRANSITION.

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TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

<u>TRANSITION NAME</u>	<u>TRANSITION COMPUTER CODE</u>	<u>FROM FIX/NAVAID</u>	<u>TO FIX/NAVAID</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>MEA</u>	<u>MOCA</u>	<u>CROSSING ALTITUDE/FIXES</u>
MC ALESTER	NANDR2.MLC	NANDR	AKUNA	TRACK 038.90	16.35	5000	2100	NANDR AT/BELOW 13000
		AKUNA	TIKYS	TRACK 025.19	41.90	5000	3800	
		TIKYS	MLC TACAN	TRACK 031.08	56.73	5000	2500	
WILL ROGERS	NANDR2.IRW	NANDR	BLECO	TRACK 341.24	12.64	5000	2700	NANDR AT/BELOW 13000
		BLECO	ZEMMA	TRACK 003.04	56.20	5000	2500	
		ZEMMA	IRW VORTAC	TRACK 329.54	65.91	5000	2600	
OKMULGEE	NANDR2.OKM	NANDR	GRABE	TRACK 015.03	12.84	5000	2100	NANDR AT/BELOW 13000
		GRABE	EAKER	TRACK 015.12	54.60	5000	3700	
		EAKER	OKM VOR/DME	TRACK 021.06	90.40	5000	2400	
ROLLS	NANDR2.ROLLS	NANDR	LOWGN	TRACK 316.22	16.08	5000	2200	NANDR AT/BELOW 13000
		LOWGN	ADM VORTAC	TRACK 002.09	45.75	5000	2600	
		ADM VORTAC	MRMAC	TRACK 306.22	60.00	5000	2700	
		MRMAC	ROLLS	TRACK 305.69	85.20	5000	3400	
TULSA	NANDR2.TUL	NANDR	BLECO	TRACK 341.24	12.64	5000	2700	NANDR AT/BELOW 13000
		BLECO	ZEMMA	TRACK 003.04	56.20	5000	2500	
		ZEMMA	TUL VORTAC	TRACK 025.19	123.58	5000	2600	
EAKER	NANDR2.EAKER	NANDR	GRABE	TRACK 015.03	12.84	5000	2100	NANDR AT/BELOW 13000
		GRABE	EAKER	TRACK 015.12	54.60	5000	3700	
ZEMMA	NANDR2.ZEMMA	NANDR	BLECO	TRACK 341.24	12.64	5000	2700	NANDR AT/BELOW 13000
		BLECO	ZEMMA	TRACK 003.04	56.20	5000	2500	

PROCEDURAL DATA NOTES:**NOTE:** EAKER TRANSITION: FOR TUL TERMINAL ARRIVALS ONLY**NOTE:** TULSA TRANSITION: FOR ALL AIRCRAFT OVERFLYING TUL VORTAC**NOTE:** AIRCRAFT ARRIVING TO THE OKLAHOMA CITY TERMINAL AREA, FILE AND EXPECT THE ZEMMA ENROUTE TRANSITION.QUALITY
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CHECKED

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PBN REQUIREMENTS NOTES:

RNAV 1 - DME/DME/IRU OR GPS

EQUIPMENT REQUIREMENT NOTES:

RADAR REQUIRED

TAKEOFF MINIMUMS:**50F:****RWY 17:** 300-2 OR STANDARD WITH MINIMUM CLIMB OF 512 FT/NM TO 1300.**KADS:****RWY 34:** STANDARD**RWY 16:** 400-2 1/2 OR STANDARD WITH MINIMUM CLIMB OF 325 FT/NM TO 1100.**KAFW:****RWY 34L, 34R:** STANDARD**RWY 16L, 16R:** 300-2 1/4 OR STANDARD WITH MINIMUM CLIMB OF 220 FT/NM TO 1100, OR ALTERNATIVELY WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT/NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1900 FEET PRIOR TO DER.**KCPT:****RWY 15:** STANDARD**RWY 33:** 300-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 422 FT/NM TO 1200.**KDTO:****RWY 18L, 18R, 36L, 36R:** STANDARD**F46:****RWY 15, 33:** STANDARD**KFTW:****RWY 16, 17:** STANDARD**RWY 34:** 300-2 OR STANDARD WITH MINIMUM CLIMB OF 225 FT/NM TO 1100, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT/NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 2000 FT PRIOR TO DER.**RWY 35:** 300-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 210 FT/NM TO 900, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT/NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1200 FT PRIOR TO DER.**KFWS:****RWY 18L, 36R:** NA - ENVIRONMENTAL**RWY 18R, 36L:** STANDARD**KGKY:****RWY 16, 34:** STANDARD**KGPM:****RWY 18, 36:** STANDARD**KHQZ:****RWY 18, 36:** STANDARD

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KLNC:**RWY 13:** STANDARD**RWY 31:** 300-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 205 FT/NM TO 800, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT/NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1200 FT PRIOR TO DER.**KLUD:****RWY 17:** STANDARD**KNFW:**

REFER TO APPROPRIATE MILITARY SERVICE DIRECTIVES.

KRBD:**RWY 13, 31, 35:** STANDARD**RWY 17:** 400-2 3/4 OR STANDARD WITH MINIMUM CLIMB OF 220 FT/NM TO 1200**KTKI:****RWY 18, 36:** STANDARD**KWEA:****RWY 17, 35:** STANDARD**TAKEOFF OBSTACLES NOTES:**

SEE FORM 8260-15A, TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP).

CONTROLLING OBSTACLES:**50F:****RWY 17:** 1011 FT MSL TREE 323407.39N/0973524.72W (CLIMB GRADIENT/CLIMB-TO-ALTITUDE); 1123 FT MSL TRANSMISSION LINE 323306.16N/0973536.73W (CEILING), 1101 FT MSL TREE 323248.00N/0973542.00W (VISIBILITY).**KADS:****RWY 16:** 850 FT MSL BUILDING 325629.00N/0964925.00W (CLIMB GRADIENT), 975 FT MSL BUILDING 325540.81N/0964919.57W (CLIMB-TO-ALTITUDE/CEILING), 973 FT MSL BUILDING 325536.93N/0964906.47W (VISIBILITY).**KAFW:****RWY 16L:** 961 FT MSL WATER TOWER 325641.35N/0971909.88W (CLIMB GRADIENT/CLIMB-TO ALTITUDE/CEILING), 954 FT MSL TANK 325642.21N/0971909.98W (VISIBILITY).**RWY 16R:** 961 FT MSL WATER TOWER 325641.35N/0971909.88W.**OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 16R:** 1002 FT MSL TOWER 325653.00N/0971932.00W.**KCPT:****RWY 33:** 1043 FT MSL WELL DRILLING RIG 322243.27N/0972649.63W.**KFTW:****RWY 34:** 970 FT MSL BUILDING 325123.18N/0972128.11W.**RWY 35:** 826 FT MSL TRANSMISSION TOWER 325026.78N/0972232.32W.**OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 16:** 1196 FT MSL BUILDING 324522.00N/0971950.00W, 1743 FT MSL TOWER 324501.00N/0971608.00W; **RWY 17:** 1743 FT MSL TOWER 324501.00N/0971608.00W.**KFWS:****OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 18R:** 1772 FT MSL TOWER 323212.00N/0972446.86W.**KGKY:****OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 16, 34:** 2549 FT MSL TOWER 323502.67N/0965748.75W.QUALITY
20
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KGPM:
OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 18, 36: 2549 FT MSL TOWER 323502.67N/0965748.75W.

KLNC:
RWY 31: 661 FT MSL TRANSMISSION LINE 323601.76N/0964358.15W.
OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 31: 2549 FT MSL TOWER 323502.67N/0965748.75W.

KLUD:
RWY 17: 2859 FT MSL TOWER 332312.00N/0973358.00W.

KRBD:
RWY 17: 1024 FT MSL ANTENNA 323817.76N/0965154.08W.
OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 13, 17, 31, 35 - 2549 FT MSL TOWER 32352.67N/0965748.75W.

KWEA:
OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 35: 1420 FT MSL TOWER 324648.40N/0974155.16W.

MSA:
50F: MSA FROM ARP 50F, 3600.
KADS: MSA FROM ARP KADS, 3600.
KAFW: MSA FROM ARP KAFW, 4000.
KCPT: MSA FROM ARP KCPT, 3600.
KDTO: MSA FROM ARP KDTO, 4000.
F46: MSA FROM ARP F46, 2600.
KFTW: MSA FROM ARP KFTW, 3600.
KFWS: MSA FROM ARP KFWS, 3600.
KGKY: MSA FROM ARP KGKY, 3600.
KGPM: MSA FROM ARP KGPM, 3600.
KHQZ: MSA FROM ARP KHQZ, 3600.
KLNC: MSA FROM ARP KLNC, 3600.
KLUD: MSA FROM ARP KLUD, 4000.
KNFW: MSA FROM ARP KNFW, 3600.
KRBD: MSA FROM ARP KRBD, 3600.
KTKI: MSA FROM ARP KTKI, 3800.
KWEA: MSA FROM MQP VORTAC, 3600.

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:
AIRPORT MV: ADS (P) 3E/2025, 50F 6E/2000, AFW 4E/2015, CPT 6E/2000, DTO 4E/2010, F46 5E/2000, FTW 8E/1975, FWS 3E/2025, GKY 6E/2000, GPM 3E/2025, HQZ 3E/2015, LNC 6E/1990, LUD 9E/2000, NFW 4E/2015, RBD 6E/1990, TKI 3E/2015, WEA 5E/2010.
DME/DME ASSESSMENT: SAT (RNP 2.0)
CHART: TOP ALTITUDE: ASSIGNED BY ATC
CHART: MINIMUM CROSSING ALTITUDE AT CUZNO - 3000

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AIRPORTS SERVED:

<u>AIRPORT ID</u>	<u>CITY</u>	<u>STATE</u>
KADS	DALLAS	TX
KAFW	FORT WORTH	TX
KCPT	CLEBURNE	TX
KDTO	DENTON	TX
F46	ROCKWALL	TX
KFTW	FORT WORTH	TX
KFWS	FORT WORTH	TX
KGKY	ARLINGTON	TX
KGPM	GRAND PRAIRIE	TX
KHQZ	MESQUITE	TX
KLNC	LANCASTER	TX
KLUD	DECATUR	TX
KNFW	FORT WORTH	TX
KRBD	DALLAS	TX
KTKI	DALLAS	TX
KWEA	WEATHERFORD	TX
50F	FORT WORTH	TX

COMMUNICATIONS:

KADS: CHART: ATIS, CLNC DEL, GND CON, ATCT
KAFW: CHART: ATIS, CLNC DEL, GND CON, ATCT
KDTO: CHART: CLNC DEL, GND CON, ATCT
KFTW: CHART: ATIS, CLNC DEL, GND CON, ATCT
KFWS: CHART: ATIS, GND CON, ATCT
KGKY: CHART: CLNC DEL, GND CON
KGPM: CHART: GND CON, ATCT
KNFW: CHART: ATIS, GND CON, ATCT
KRBD: CHART: ATIS, CLNC DEL, GND CON, ATCT
KTKI: CHART: CLNC DEL, GND CON, ATCT

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FIXES AND/OR NAVAIDS:**REMARKS:**

ENVIRONMENTAL REVIEW: COMPLETE
NOISE SCREENING: COMPLETE
MLC TACAN LOCATION USED ON PROCEDURE AS THE MLC WP.
MAXIMUM 100 FT VEGETATION HEIGHT APPLIED.

FLIGHT INSPECTED BY

GARY BELL

OFFICE

FPO

DATE

01/27/2023

*Digitally signed by***ERIC N SUSKI**

Feb 07, 2023

DEVELOPED BY

PARNELL PRASSADA

OFFICE

AJV-A431

DATE

11/23/2021

*Digitally signed by***ERIC N SUSKI**

Jan 03, 2023

APPROVED BY

JOHNNIE BAKER

OFFICE

AJV-A430

DATE**TITLE**

MANAGER

REQUIRED EFFECTIVE DATE

ROUTINE

*Digitally signed by***ERIC N SUSKI**

Jan 03, 2023

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZFW, REGIONAL DEP CON, ADS ATCT, RBD ATCT, TKI ATCT, AFW ATCT, FTW ATCT, FWS ATCT, NFW ATCT, GPM ATCT, AMGR(S).

CHANGES - REASONS:

1. REMOVED KDAL AND KDFW FROM NANDR RNAV SID - PER ATC REQUEST.
2. ADDED 50F, KCPT, F46, KLUD, AND KWEA TO NANDR (RNAV) SID - PER ATC REQUEST; THESE ADDITIONS WILL ALLOW AIRCRAFT TO HAVE AN OPTION TO FILE (RNAV) SID ON THEIR IFR FLIGHT PLAN FROM THESE AIRPORTS.
3. ADDED 50F, KLUD, AND KWEA TO DP ROUTE DESCRIPTION - IAW 8260.46J, APPENDIX E (2) (B).
4. ADDED EAKER AND ZEMMA TRANSITION ROUTES - FOR COMPUTER CODING PURPOSES IN AUTOMATED SYSTEM.
5. UPDATED MOCA FOR ALL LEGS IN THE PROCEDURE - NEW TARGETS CALCULATIONS.
6. UPDATED MEA FOR ALL TRANSITIONS TO 5000 - ATC REQUEST; IN ORDER TO ALLOW LOW PERFORMANCE AIRCRAFT TO FILE (RNAV) SID ON THEIR IFR FLIGHT PLAN.
7. ADDED "NANDR AT/BELOW 13000" TO MC ALESTER, WILL ROGERS, OKMULGEE, ROLLS, TULSA, EAKER, AND ZEMMA TRANSITIONS' CROSSING ALTITUDES/FIXES - IAW 8260.46J, APPENDIX E (2) (D) (9).
8. DELETED CHART NOTES "DALLAS LOVE FLD: PROPS ONLY" AND "DALLAS-FORT WORTH INTL: PROPS ONLY" FROM PROCEDURAL DATA NOTES - NOTES NOT REQUIRED; BOTH AIRPORTS DELETED FROM NANDR RNAV SID.
9. ADDED "EAKER TRANSITION: FOR TUL TERMINAL ARRIVALS ONLY," "TULSA TRANSITION: FOR ALL AIRCRAFT OVERFLYING TUL VORTAC," AND "AIRCRAFT ARRIVING TO THE OKLAHOMA CITY TERMINAL AREA, FILE AND EXPECT THE ZEMMA ENROUTE TRANSITION" TO PROCEDURAL DATA NOTES - IAW 8260.46J, APPENDIX E (2) (G).
10. CHANGED FROM CLIMB GRADIENT UNIT FORMAT FROM "FEET PER NM" TO "FT/NM" - IAW 8260.46J, FIGURE 2-1-1.
11. ADDED 50F "RWY 17: 300-2 OR STANDARD WITH MINIMUM CLIMB OF 512 FT/NM TO 1300" - IAW 8260.46J, APPENDIX E (2) (H).
12. ADDED KCPT "RWY 15, 33: "STANDARD" TO TAKEOFF MINIMUMS - IAW 8260.46J, APPENDIX E (2) (H).
13. ADDED F46 "RWY 15, 33: STANDARD" TO TAKEOFF MINIMUMS - IAW 8260.46J, APPENDIX E (2) (H).
14. ADDED KLUD "RWY 17: STANDARD - IAW 8260.46J, APPENDIX E (2) (H).
15. ADDED KWEA "RWY 17, 35: STANDARD" TO TAKEOFF MINIMUMS - IAW 8260.46J, APPENDIX E (2) (H).
16. CHANGED KADS CONTROLLING OBSTACLES "RWY 16: 850 FT MSL BUILDING 325629.00N/0964925.00W (CLIMB GRADIENT), 975 FT MSL BUILDING 325540.81N/0964919.57W (CLIMB-TO ALTITUDE/ CEILING), 973 FT MSL BUILDING 325536.93N/0964906.47W (VISIBILITY)" TO "RWY 16: 850 FT MSL BUILDING 325629.00N/0964925.00W (CLIMB GRADIENT), 975 FT MSL BUILDING 325540.81N/0964919.57W (CLIMB-TO ALTITUDE/CEILING), 973 FT MSL BUILDING 325536.93N/0964906.47W (VISIBILITY)" - TARGETS EVALUATION REVISED ENTITY CLASSIFICATION, THEREFORE CLASSIFYING 850 FT MSL BUILDING 325629.00N/0964925.00W AS BOTH CG/CTA, AND 975 FT MSL BUILDING 325540.81N/0964919.57W TO CEILING ONLY.
17. ADDED "50F: RWY 17: 1011 FT MSL TREE 323407.39N/0973524.72W (CLIMB GRADIENT/CLIMB-TO-ALTITUDE), 1123 FT MSL TRANSMISSION LINE 323306.16N/0973536.73W (CEILING), 1101 FT MSL TREE 323248.00N/0973542.00W (VISIBILITY)" TO CONTROLLING OBSTACLES - IAW 8260.46J, APPENDIX E (2) (J).

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NANDR	TWO	NANDR2.NANDR	ONE	05/19/2022	20 APR 2023
18. UPDATED KAFW CONTROLLING OBSTACLES FROM "RWY 16L, 16R: 961 FT MSL WATER TOWER 325641.35N/0971909.88W (CLIMB GRADIENT/CLIMB-TO ALTITUDE/CEILING), 954 FT MSL TANK 325642.21N/0971909.98W (VISIBILITY)" TO "RWY 16L: 961 FT MSL WATER TOWER 325641.35N/0971909.88W (CLIMB GRADIENT/CLIMB-TO ALTITUDE/CEILING), 954 FT MSL TANK 325642.21N/0971909.98W (VISIBILITY); RWY 16R: 961 FT MSL WATER TOWER 325641.35N/0971909.88W" - IAW 8260.46J, APPENDIX E (2) (J).					
19. UPDATED KFTW "OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 16: 1196 FT MSL BUILDING 324522.00N/0971950.00W (OFFSET ICA), 1743 FT MSL TOWER 324501.00N/0971608.00W (CLIMB-TO-ALTITUDE); RWY 17: 1743 FT MSL TOWER 324501.00N/0971608.00W" TO OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 16: 1196 FT MSL BUILDING 324522.00N/0971950.00W, 1743 FT MSL TOWER 324501.00N/0971608.00W; RWY 17: 1743 FT MSL TOWER 324501.00N/0971608.00W - IAW 8260.46J, APPENDIX E (2) (J).					
20. ADDED "KCPT: RWY 33: 1043 FT MSL WELL DRILLING RIG 322243.27N/0972649.63W" - IAW 8260.46J, APPENDIX E (2) (J).					
21. UPDATED KRBD RWY 35 DP ROUTE DESCRIPTION FROM "CLIMB ON HEADING 354.13 TO 1500 BEFORE TURNING SOUTHBOUND OR AS ASSIGNED BY ATC, THENCE . . ." TO "CLIMB ON HEADING 354.13 TO 1400 BEFORE TURNING SOUTHBOUND OR AS ASSIGNED BY ATC, THENCE . . ." - CLIMB TO ALTITUDE INCORRECTLY ANNOTATED AS 1500 IN ORIGINAL FORM.					
22. UPDATED KLNC RWY 31 TAKEOFF MINIMUMS FROM "RWY 31: 300-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 208 FT/NM TO 800, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1300 FT PRIOR TO DER" TO "300-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 205 FT/NM TO 800, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT/NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1200 FT PRIOR TO DER" - MINIMUM CLIMB GRADIENT INCORRECTLY ANNOTATED AS 208 FT/NM.					
23. ADDED "KWEA: OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 35: 1420 FT MSL TOWER 324648.40N/0974155.16W. TO CONTROLLING OBSTACLES - IAW 8260.46J, APPENDIX E (2) (J).					
24. ADDED TO MSA "50F: MSA FROM ARP 50F, 3600; KADS: MSA FROM ARP KADS, 3600; KAFW: MSA FROM ARP KAFW, 4000; KCPT: MSA FROM ARP KCPT, 3600; KDTO: MSA FROM ARP KDTO, 4000; F46: MSA FROM ARP F46, 2600; KFTW: MSA FROM ARP KFTW, 3600; KFWS: MSA FROM ARP KFWS, 3600; KGKY: MSA FROM ARP KGKY, 3600; KGPM: MSA FROM ARP KGPM, 3600; KHQZ: MSA FROM ARP KHQZ, 3600; KLNC: MSA FROM ARP KLNC, 3600; KLUD: MSA FROM ARP KLUD, 4000; KNFW: MSA FROM ARP KNFW, 3600; KRBD: MSA FROM ARP KRBD, 3600; KTKI: MSA FROM ARP KTKI, 3800; KWEA: MSA FROM MQP VORTAC, 3600" - AW 8260.46J, APPENDIX E (2) (K).					
25. UPDATED ADDITIONAL FLIGHT DATA REFERENCE MAG VAR FROM "KDFW 4E EPOCH YR: 2015" TO "ADS (P) 3E/2025, 50F 6E/2000, AFW 4E/2015, CPT 6E/2000, DTO 4E/2010, F46 5E/2000, FTW 8E/1975, FWS 3E/2025, GKY 6E/2000, GPM 3E/2025, HQZ 3E/2015, LNC 6E/1990, LUD 9E/2000, NFW 4E/2015, RBD 6E/1990, TKI 3E/2015, WEA 5E/2010" - IAW AJV-A MEMORANDUM, "MAGNETIC VARIATION DOCUMENTATION FOR STANDARD INSTRUMENT DEPARTURES AND GRAPHIC OBSTACLE DEPARTURE PROCEDURES", DATED 07/15/2022.					
26. DELETED FROM ADDITIONAL FLIGHT DATA "DALLAS-FORT WORTH INTL - CHART: TOP ALTITUDE: 2000; DALLAS LOVE FLD - CHART TOP ALTITUDE RWY 13L/13R: 3000; RWY: 31L/31R: 2000" - NOT REQUIRED; BOTH AIRPORTS DELETED FROM NANDR RNAV SID.					
27. ADDED TO ADDITIONAL FLIGHT DATA "CHART: MINIMUM CROSSING ALTITUDE AT CUZNO - 3000" - IAW 8260.46J, APPENDIX E (2) (M) (3).					
28. DELETED KDAL AND KDFW FROM AIRPORTS SERVED - NOT REQUIRED; BOTH AIRPORTS DELETED FROM NANDR RNAV SID.					
29. ADDED 50F, KCPT, F46, KLUD, AND KWEA TO AIRPORTS SERVED - IAW IAW 8260.46J, APPENDIX E (2) (N).					
30. UPDATED COMMUNICATION FROM "ATIS: DFW, DAL, ADS, RBD, AFW, FTW, FWS, NFW. CLNC DEL: DFW, DAL, ADS, RBD, TKI, AFW, FTW, NFW, GKY, DTO. GND CON: DFW, DAL, ADS, RBD, TKI, AFW, FTW, FWS, NFW, GKY, DTO, GPM. TOWER: DFW, DAL, ADS, RBD, TKI, AFW, FTW, FWS, NFW, GPM. DEP CON: REGIONAL DEP CON. " TO "KADS: CHART: ATIS, CLNC DEL, GND CON, ATCT; KAFW: CHART: ATIS, CLNC DEL, GND CON, ATCT; KDTO: CHART: CLNC DEL, GND CON, ATCT; KFTW: CHART: ATIS, CLNC DEL, GND CON, ATCT; KFWS: CHART: ATIS, GND CON, ATCT; KGKY: CHART: CLNC DEL, GND CON; KGPM: CHART: GND CON, ATCT; KNFW: CHART: ATIS, GND CON, ATCT; KRBD: CHART: ATIS, CLNC DEL, GND CON, ATCT; KTKI: CHART: CLNC DEL, GND CON, ATCT" - IAW 8260.46J, APPENDIX E (2) (O).					
31. ADDED TO REMARKS "ENVIRONMENTAL REVIEW: COMPLETE; NOISE SCREENING: COMPLETE; MLC TACAN LOCATION USED ON PROCEDURE AS THE MLC WP" - PER ATC REQUEST.					
32. ADDED TO REMARKS "MAXIMUM 100 FT VEGETATION HEIGHT APPLIED" - REFERENCE FOR FUTURE DEVELOPERS.					

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
DEPARTURE (DATA RECORD)**

DP NAME						NUMBER	DP COMPUTER CODE	SUPERSEDED NUMBER	DATED	ACTUAL EFFECTIVE DATE
NANDR						TWO	NANDR2.NANDR	ONE	05/19/2022	20 APR 2023
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED		REMARKS
CUZNO	330538.50N/0970227.84W	Y	-	IF	-	-	AT/ABOVE 3000			
NANDR	331451.55N/0970226.43W	Y	FB	TF	000.12	9.20	AT/BELOW 13000			
NANDR	331451.55N/0970226.43W	Y	-	IF	-	-	AT/BELOW 13000			
BLECO	332702.70N/0970632.59W	Y	FB	TF	344.24	12.64				NANDR2.IRW
ZEMMA	342301.81N/0965924.01W	Y	FB	TF	006.04	56.20				
IRW VORTAC	352130.95N/0973633.22W	Y	FB	TF	332.54	65.91				
NANDR	331451.55N/0970226.43W	Y	-	IF	-	-	AT/BELOW 13000			NANDR2.MLC
AKUNA	332702.48N/0964923.30W	Y	FB	TF	041.90	16.35				
TIKYS	340359.93N/0962533.53W	Y	FB	TF	028.19	41.90				
MLC TACAN	345057.99N/0954656.44W	Y	FB	TF	034.08	56.73				
NANDR	331451.55N/0970226.43W	Y	-	IF	-	-	AT/BELOW 13000			NANDR2.OKM
GRABE	332705.25N/0965741.50W	Y	FB	TF	018.03	12.84				
EAKER	341902.72N/0963711.52W	Y	FB	TF	018.12	54.60				
OKM VOR/DME	354135.07N/0955157.44W	Y	FB	TF	024.06	90.40				
NANDR	331451.55N/0970226.43W	Y	-	IF	-	-	AT/BELOW 13000			NANDR2.ROLLS
LOWGN	332702.70N/0971459.29W	Y	FB	TF	319.22	16.08				
ADM VORTAC	341241.71N/0971005.62W	Y	FB	TF	005.09	45.75				
MRMAC	345028.82N/0980634.32W	Y	FB	TF	309.22	60.00				



<u>DP NAME</u>		<u>NUMBER</u>		<u>DP COMPUTER CODE</u>		<u>SUPERSEDED NUMBER</u>		<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>
NANDR		TWO		NANDR2.NANDR		ONE		05/19/2022	20 APR 2023
<u>FIX/NAVAID</u>	<u>LAT/LONG</u>	<u>C</u>	<u>FO/FB</u>	<u>LEG TYPE</u>	<u>TC</u>	<u>DIST (NM)</u>	<u>ALTITUDE</u>	<u>SPEED</u>	<u>REMARKS</u>
ROLLS	354321.88N/0992814.51W	Y	FB	TF	308.69	85.20			
NANDR	331451.55N/0970226.43W	Y	-	IF	-	-	AT/BELOW 13000		NANDR2.TUL
BLECO	332702.70N/0970632.59W	Y	FB	TF	344.24	12.64			
ZEMMA	342301.81N/0965924.01W	Y	FB	TF	006.04	56.20			
TUL VORTAC	361146.51N/0954717.13W	Y	FB	TF	028.19	123.58			
NANDR	331451.55N/0970226.43W	Y	-	IF	-	-	AT/BELOW 13000		NANDR2.EAKER
GRABE	332705.25N/0965741.50W	Y	FB	TF	018.03	12.84			
EAKER	341902.72N/0963711.52W	Y	FB	TF	018.12	54.60			
NANDR	331451.55N/0970226.43W	Y	-	IF			AT/BELOW 13000		NANDR2.ZEMMA
BLECO	332702.70N/0970632.59W	Y	FB	TF	344.24	12.64			
ZEMMA	342301.81N/0965924.01W	Y	FB	TF	006.04	56.20			