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 statue miles or feet RVR unless otherwise indicated.

DP NAM	I <u>E</u>					NUMBER THREE	DP COMPUTER CODE CCOBB3.CCOBB	SUPERSEDED NUMBER TWO	<u>DATED</u> 08/15/2019	ACTUAL EFFECTIVE DATE
TYPE:		COPTER	SID X	SPECIAL	RNAV					

DP ROUTE DESCRIPTION:

DETROIT METRO WAYNE COUNTY (KDTW):

TAKEOFF RWY 3L: CLIMB ON HEADING 035.71 TO INTERCEPT COURSE 334.68 TO CROSS NITRN AT OR ABOVE 2500 AND AT OR BELOW 230 KIAS, THEN ON TRACK 304.14 TO FERRM, THEN ON TRACK 258.76 TO CROSS AVERL AT OR BELOW 7000, THEN ON TRACK 261.59 TO BROZZ, THENCE...

TAKEOFF RWY 3R: CLIMB ON HEADING 035.71 TO INTERCEPT COURSE 336.41 TO CROSS NITRN AT OR ABOVE 2500 AND AT OR BELOW 230 KIAS, THEN ON TRACK 304.14 TO FERRM, THEN ON TRACK 258.76 TO CROSS AVERL AT OR BELOW 7000, THEN ON TRACK 261.59 TO BROZZ, THENCE...

TAKEOFF RWY 4L: CLIMB ON HEADING 035.68 TO INTERCEPT COURSE 347.26 TO CROSS NITRN AT OR ABOVE 2500 AND AT OR BELOW 230 KIAS, THEN ON TRACK 304.14 TO FERRM, THEN ON TRACK 258.76 TO CROSS AVERL AT OR BELOW 7000, THEN ON TRACK 261.59 TO BROZZ, THENCE...

TAKEOFF RWY 4R: CLIMB ON HEADING 035.70 TO INTERCEPT COURSE 339.14 TO CROSS NITRN AT OR ABOVE 2500 AND AT OR BELOW 230 KIAS, THEN ON TRACK 304.14 TO FERRM, THEN ON TRACK 258.76 TO CROSS AVERL AT OR BELOW 7000, THEN ON TRACK 261.59 TO BROZZ, THENCE...

TAKEOFF RWY 21L: CLIMB ON HEADING 215.72 TO INTERCEPT COURSE 242.73 TO CROSS SAAMS AT OR BELOW 7000, THEN ON TRACK 313.00 TO CROSS BSLNE AT OR BELOW 9000, THEN ON TRACK 312. 87 TO FDRCH, THEN ON TRACK 278.51 TO BROZZ, THENCE...

TAKEOFF RWY 21R: CLIMB ON HEADING 215.72 TO INTERCEPT COURSE 240.34 TO CROSS SAAMS AT OR BELOW 7000, THEN ON TRACK 313.00 TO CROSS BSLNE AT OR BELOW 9000, THEN ON TRACK 312. 87 TO FDRCH, THEN ON TRACK 278.51 TO BROZZ, THENCE...

TAKEOFF RWY 22L: CLIMB ON HEADING 215.71 TO INTERCEPT COURSE 239.20 TO CROSS SAAMS AT OR BELOW 7000, THEN ON TRACK 313.00 TO CROSS BSLNE AT OR BELOW 9000, THEN ON TRACK 312. 87 TO FDRCH, THEN ON TRACK 278.51 TO BROZZ, THENCE...

TAKEOFF RWY 22R: CLIMB ON HEADING 215.69 TO INTERCEPT COURSE 237.67 TO CROSS SAAMS AT OR BELOW 7000, THEN ON TRACK 313.00 TO CROSS BSLNE AT OR BELOW 9000, THEN ON TRACK 312. 87 TO FDRCH, THEN ON TRACK 278.51 TO BROZZ, THENCE...

TAKEOFF RWY 27L: CLIMB ON HEADING 275.73 OR AS ASSIGNED BY ATC, FOR RADAR VECTORS TO BROZZ, THENCE...

TAKEOFF RWY 27R: CLIMB ON HEADING 275.72 OR AS ASSIGNED BY ATC, FOR RADAR VECTORS TO BROZZ, THENCE...

...ON TRACK 278.63 TO CCOBB, THEN ON (TRANSITION). MAINTAIN 17000, EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

WILLOW RUN (KYIP):

TAKEOFF RWY 5: CLIMB ON HEADING 052.70 TO 1220, THEN ON HEADING 300.00 OR AS ASSIGNED BY ATC, FOR RADAR VECTORS TO BROZZ, THENCE... TAKEOFF RWY 9: CLIMB ON HEADING 094.55 TO 1220, THEN ON HEADING 300.00 OR AS ASSIGNED BY ATC, FOR RADAR VECTORS TO BROZZ, THENCE... TAKEOFF RWY 23: CLIMB ON HEADING 232.72 OR AS ASSIGNED BY ATC, FOR RADAR VECTORS TO BROZZ, THENCE... TAKEOFF RWY 27: CLIMB ON HEADING 274.56 OR AS ASSIGNED BY ATC, FOR RADAR VECTORS TO BROZZ, THENCE...

...ON TRACK 278.63 TO CCOBB, THEN ON (TRANSITION). MAINTAIN ATC ASSIGNED ALTITUDE, EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

ANN ARBOR MUNI (KARB):

TAKEOFF RWY 6: CLIMB ON HEADING 059.53 OR AS ASSIGNED BY ATC, THENCE... TAKEOFF RWY 24: CLIMB ON HEADING 239.53 OR AS ASSIGNED BY ATC, THENCE...

...FOR RADAR VECTORS TO BROZZ, THEN ON TRACK 278.63 TO CCOBB, THEN ON (TRANSITION). MAINTAIN ATC ASSIGNED ALTITUDE, EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

WALIT,

DP NAME	NUMBER	DP COMPUTER CODE	SUPERSEDED NUMBER	DATED	ACTUAL EFFECTIVE DATE
ССОВВ	THREE	CCOBB3.CCOBB	TWO	08/15/2019	

COLEMAN A YOUNG MUNI (KDET):

TAKEOFF RWY 15: CLIMB ON HEADING 148.32 OR AS ASSIGNED BY ATC, THENCE... TAKEOFF RWY 33: CLIMB ON HEADING 328.33 TO 1800 THEN AS ASSIGNED BY ATC, THENCE...

...FOR RADAR VECTORS TO BROZZ, THEN ON TRACK 278.63 TO CCOBB, THEN ON (TRANSITION). MAINTAIN ATC ASSIGNED ALTITUDE, EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

CUSTER (KTTF):

TAKEOFF RWY 3: CLIMB ON HEADING 027.49 OR AS ASSIGNED BY ATC, THENCE... **TAKEOFF RWY 21:** CLIMB ON HEADING 207.50 OR AS ASSIGNED BY ATC, THENCE...

...FOR RADAR VECTORS TO BROZZ, THEN ON TRACK 278.63 TO CCOBB, THEN ON (TRANSITION). MAINTAIN ATC ASSIGNED ALTITUDE, EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

GROSSE ILE MUNI (KONZ):

TAKEOFF RWY 4: CLIMB ON HEADING 037.34 TO 1200 THEN AS ASSIGNED BY ATC, THENCE...TAKEOFF RWY 17: CLIMB ON HEADING 173.78 OR AS ASSIGNED BY ATC, THENCE...TAKEOFF RWY 22: CLIMB ON HEADING 217.34 OR AS ASSIGNED BY ATC, THENCE...TAKEOFF RWY 35: CLIMB ON HEADING 005.78 TO 1800 THEN AS ASSIGNED BY ATC, THENCE...

...FOR RADAR VECTORS TO BROZZ, THEN ON TRACK 278.63 TO CCOBB, THEN ON (TRANSITION). MAINTAIN ATC ASSIGNED ALTITUDE, EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

LIVINGSTON COUNTY SPENCER J HARDY (KOZW):

TAKEOFF RWY 13: CLIMB ON HEADING 132.35 OR AS ASSIGNED BY ATC, THENCE... **TAKEOFF RWY 31:** CLIMB ON HEADING 312.36 OR AS ASSIGNED BY ATC, THENCE...

...FOR RADAR VECTORS TO BROZZ, THEN ON TRACK 278.63 TO CCOBB, THEN ON (TRANSITION). MAINTAIN ATC ASSIGNED ALTITUDE, EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

OAKLAND COUNTY INTL (KPTK):

TAKEOFF RWY 9L: CLIMB ON HEADING 094.66 OR AS ASSIGNED BY ATC, THENCE... TAKEOFF RWY 9R: CLIMB ON HEADING 094.63 OR AS ASSIGNED BY ATC, THENCE... TAKEOFF RWY 27L: CLIMB ON HEADING 274.65 OR AS ASSIGNED BY ATC, THENCE... TAKEOFF RWY 27R: CLIMB ON HEADING 274.68 OR AS ASSIGNED BY ATC, THENCE...

...FOR RADAR VECTORS TO BROZZ, THEN ON TRACK 278.63 TO CCOBB, THEN ON (TRANSITION). MAINTAIN ATC ASSIGNED ALTITUDE, EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

OAKLAND/TROY (KVLL):

TAKEOFF RWY 10: CLIMB ON HEADING 095.71 TO 1400 THEN AS ASSIGNED BY ATC, THENCE... TAKEOFF RWY 28: CLIMB ON HEADING 275.72 TO 1500 THEN AS ASSIGNED BY ATC, THENCE...

...FOR RADAR VECTORS TO BROZZ, THEN ON TRACK 278.63 TO CCOBB, THEN ON (TRANSITION). MAINTAIN ATC ASSIGNED ALTITUDE, EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

SELFRIDGE ANGB (KMTC):

TAKEOFF RWY 1: CLIMB ON HEADING 007.47 OR AS ASSIGNED BY ATC, THENCE... **TAKEOFF RWY 19:** CLIMB ON HEADING 187.47 OR AS ASSIGNED BY ATC, THENCE...

...FOR RADAR VECTORS TO BROZZ, THEN ON TRACK 278.63 TO CCOBB, THEN ON (TRANSITION). MAINTAIN ATC ASSIGNED ALTITUDE, EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

DP NAME CCOBB			NUMBER THREE			SUPERSEDED NUMBER TWO			ACTUAL EFFECTIVE DATE
TRANSITION ROUTES	(GRAPHIC DEPICTION ONL	<u>.Y):</u>							
TRANSITION NAME	TRANSITION COMPUTER CODE	<u>FROM</u> FIX/NAVAID	<u>TO</u> FIX/NA	VAID	COURSE	DISTANCE	MEA	MOCA	<u>CROSSING</u> ALTITUDE/FIXES
ZEGBI	CCOBB3.ZEGBI	ССОВВ	ZEGI	BI	TRACK 278.40	31.33	9000	2500	

PBN REQUIREMENT NOTES:

RNAV 1 - DME/DME/IRU OR GPS.

EQUIPMENT REQUIREMENT NOTES:

RADAR REQUIRED

PROCEDURAL DATA NOTES:

NOTE: TURBOJET DEPARTURES AT/ABOVE 10000, MAINTAIN 280K UNTIL ADVISED BY ATC. NOTE: FOR USE BY AIRCRAFT FILED AT OR BELOW FL220, OR AS ASSIGNED BY ATC. NOTE: CAUTION: PARACHUTE JUMPING 6 NM SW OF BROZZ, 3 NM RADIUS OF NAPOLEON AIRPORT (3NP) AT OR BELOW 17,999 (SR-SS).

TAKEOFF MINIMUMS:

DETROIT METRO WAYNE COUNTY (KDTW): RWY 27L, 27R: STANDARD. RWY 3L, 3R, 4L, 4R, 21L, 21R, 22L, 22R: STANDARD WITH MINIMUM CLIMB OF 500 FT/NM TO 1146. WILLOW RUN (KYIP): RWY 23: STANDARD. RWY 5, 9: STANDARD WITH MINIMUM CLIMB OF 500 FT/NM TO 1220. RWY 27: STANDARD WITH MINIMUM CLIMB OF 209 FT/NM TO 1000.

ANN ARBOR MUNI (KARB):

RWY 12, 30: NA - ENVIRONMENTAL. RWY 6, 24: STANDARD.

COLEMAN A YOUNG MUNI (KDET):

RWY 15, 33: STANDARD.

CUSTER (KTTF): RWY 3, 21: STANDARD.

GROSSE ILE MUNI (KONZ): RWY 4, 17, 22: STANDARD. RWY 35: STANDARD WITH MINIMUM CLIMB OF 500 FT/NM TO 1100.

LIVINGSTON COUNTY SPENCER J HARDY (KOZW): RWY 13, 31: STANDARD.

OAKLAND COUNTY INTL (KPTK): RWY 18, 36: NA - ENVIRONMENTAL. RWY 9L, 9R, 27L, 27R: STANDARD.

OAKLAND/TROY (KVLL):

RWY 10: STANDARD. RWY 28: STANDARD WITH MINIMUM CLIMB OF 476 FT/NM TO 1500.

OUALITL 16 CHIECKER

DP NAME	NUMBER	DP COMPUTER CODE	SUPERSEDED NUMBER	DATED	ACTUAL EFFECTIVE DATE
CCOBB	THREE	CCOBB3.CCOBB	TWO	08/15/2019	
SELFRIDGE ANGB (KMTC): RWY 1: STANDARD. RWY 19: STANDARD WITH MINIMUM CLIMB OF 235 FT/NM TO 1500.					

TAKEOFF OBSTACLES NOTES:

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

CONTROLLING OBSTACLES:

WILLOW RUN (KYIP): RWY 27: 903 FT MSL TOWER 421431.80N/0833411.49W.

COLEMAN A YOUNG MUNI (KDET):

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 33: 1749 FT MSL TOWER 422653.00N/0831023.00W.

GROSSE ILE MUNI (KONZ):

RWY 35: 1146 FT MSL STACK 420718.61N/0831050.62W.

OAKLAND/TROY (KVLL):

RWY 28: 905 FT MSL BUILDING 423232.54N/0831234.07W. OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 10. 28: 1724 FT MSL TOWER 422858.46N/0831218.94W.

SELFRIDGE ANGB (KMTC):

RWY 19: 1246 FT MSL TOWER 423312.00N/0825315.00W.

MSA:

KDTW: MSA FROM KDTW, 2800. KYIP: MSA FROM KYIP, 3000. KARB: MSA FROM KARB, 3000. KDET: MSA FROM KDET, 2800. KTTF: MSA FROM KTTF, 3100. KONZ: MSA FROM KONZ, 3100. KOZW: MSA FROM KOZW, 3000. KPTK: MSA FROM KPTK, 2900. KVLL: MSA FROM KVLL, 2900. KMTC: MSA FROM KMTC, 2800.

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0) AIRPORT MV: DTW (P) 7W/2020, ARB 5W/1985, DET 5W/1980, MTC 6W/1985, ONZ 7W/2010, OZW 5W/1990, PTK 7W/2020, TTF 5W/1980, VLL 6W/1995, YIP 6W/1995. DETROIT METRO WAYNE COUNTY - CHART: TOP ALTITUDE: 17000 ALL OTHER AIRPORTS - CHART: TOP ALTITUDE: ASSIGNED BY ATC. CHART: 3NP AS STANDALONE AIRPORT. (REF: CHART NOTE). CHART SPEED ICON MAXIMUM 230 KIAS AT NITRN.

AIRPORTS SERVED:

AIRPORTS SERVED:		AL IN
AIRPORT ID	CITY	STATE OUT /
KDTW	DETROIT	MI CHECKER
KYIP	DETROIT	MI

DP NAME CCOBB	NUMBER THREE	DP COMPUTER CODE CCOBB3.CCOBB	SUPERSEDED NUMBER TWO	DATED 08/15/2019	ACTUAL EFFECTIVE DATE
KARB		ANN ARBOR			MI
KDET		DETROIT			MI
KTTF		MONROE			MI
KONZ	Γ	DETROIT/GROSSE ILE			MI
KOZW		HOWELL			MI
KPTK		PONTIAC			MI
KVLL		TROY			MI
КМТС		MOUNT CLEMENS			MI

COMMUNICATIONS:

CHART: ATIS, AWOS/ASOS, CLNC DEL, GND CON, TWR, CTAF, CPDLC.

FIXES AND/OR NAVAIDS:

REMARKS:

1. 100 FT MAXIMUM VEGETATION HEIGHT UTILIZED PER FPT CHECKLIST.

2. WAIVER ON FILE: TO NOT CHART IF ALTITUDE AT IF FOR RADAR VECTORS.

3. WAIVER ON FILE: AFS MEMO "WAIVER TO FAA ORDER 8260.58C PARAGRAPH 1-2-5.3.(C) MAXIMUM BANK ANGLE" DATED 01/31/2023.

Mar 18, 2024

4. CHANGES TO THIS PROCEDURE MUST BE COORDINATED WITH NAVCANADA, AERONAUTICAL INFORMATION MANAGEMENT (AIM), AIMDATA@NAVCANADA.CA (CURRENT POC IS CHARLES SIMARD, 613-248-3819, SIMACHA@NAVCANADA.CA).

5. ATC APPROVAL FOR 45 DEGREE MAX INTERCEPT AT FIX BROZZ ABOVE FL245.

6. KDTW CHART NOTE: SEE ADDITIONAL REQUIREMENTS ON AAUP.

7. KDTW RWY 3L, 3R, 4L, 4R, 21L, 21R, 22L, 22R DEPARTURES EARLY TURN AND SHORTENED ICA REQUIRED DUE TO SIMULTANEOUS DEPARTURES.

8. KYIP RWY 5, 9 DEPARTURES EARLY TURN AND SHORTENED ICA REQUIRED DUE TO KDTW AIR TRAFFIC FLOW.

9. MEA BASED ON LOWEST DME/DME COVERAGE.

FLIGHT INSPECTED BY	Digitally signed by	OFFICE	DATE	
SCOTT WIEBE	ERIC N SUSKI	FPO	03/08/2024	
	Mar 18, 2024			
DEVELOPED BY	SIGNATURE	OFFICE	DATE	
MICHAEL MCCARTNEY	Digitally signed by MICHAEL A MCCARTNEY	AJV-A431	11/28/2023	
	Jan 24, 2024			
APPROVED BY	SIGNATURE	OFFICE	DATE	TITLE
ERIC N SUSKI		AJV-A431		MANAGER
	Digitally signed by			
REQUIRED EFFECTIVE DATE	ERIC N SUSKI			

ROUTINE

COORDINATED WITH:

DP NAME CCOBB	<u>NUMBER</u> THREE	DP COMPUTER CODE CCOBB3.CCOBB	SUPERSEDED NUMBER TWO	DATED 08/15/2019	ACTUAL EFFECTIVE DATE
	OTHER:ZOB	B, DTW APP CON, AMGR, NAV	/CANADA		
CHANGES - REASONS: 1. AIRPORT NAME, CHANGED ALL KDTW AIRPORT NAME REFERENCES FR 2. DELETED ALL CYQG DATA FROM DP ROUTE DESCRIPTION, TAKEOFF M 3. DELETED KYIP RWY 5L, 23R REFERENCES AND CHANGED RUNWAY NU RUNWAY 5L, 23R DECOMMISSIONED AND RWY 5R, 23L RENUMBERED ON 4. DELETED KDET RWY 7, 25 REFERENCES IN DP ROUTE DESCRIPTION, TA 5. CHANGED KVLL RWYS FROM RWY 9, 27 TO RWY 10, 28 RUNWAYS WE 6. DP ROUTE DESCRIPTION, ALL RUNWAY TRANSITIONS, DELETED FIX BR BROZZ" CROSSING ALTITUDE REMOVED PER ATC REQUEST AND WAIVE	Inimums, and / Mbers from r 10/06/2022. Akeoff minimu Re renumber Ozz minimum (AIRPORTS SERVED AIRPOI 2WY 5R TO RWY 5 AND FROM JMS AND RWY 25 CONTROLL ED ON 02/10/2021. CROSSING ALTITUDE AND CH	RT REMOVED FROM SID PER N 1 RWY 23L TO RWY 23 IN DP R ING OBSTACLE RUNWAY IS HANGED VERBIAGE FROM "TO	IAVCANADA REQUI DUTE DESCRIPTIO GOING TO BE DEC	EST. N AND TAKEOFF MINIMUMS OMMISSIONED.
7. DP ROUTE DESCRIPTION, DELETED KDTW RWY 3L, 3R, 4L, 4R MINIMUM OR BELOW 6000" TO "THEN ON TRACK 304.14 TO FERRM" ATC REQUEST				I "THEN ON TRACK	304.14 TO CROSS FERRM AT
8. DP ROUTE DESCRIPTION, CHANGED KDTW RWY 27L FROM "CLIMB ON H 275.73 OR AS ASSIGNED BY ATC, FOR RADAR VECTORS" EARLY TURN A	EADING 275.73	TO 1146, THEN ON HEADING	G 275.71 OR AS ASSIGNED FOR		
FAAO 8260.46J APPENDIX E.SECTION 1.2.C.(7). 9. DP ROUTE DESCRIPTION, CHANGED KDTW RWY 27R FROM "CLIMB ON I 275.72 OR AS ASSIGNED BY ATC, FOR RADAR VECTORS" EARLY TURN A					
 275.72 OK AS ASSIGNED BY ATC, FOR RADAR VECTORS - EARLY TURN A FAAO 8260.46J APPENDIX E.SECTION 1.2.C.(7). 10. DP ROUTE DESCRIPTION, DELETED KDTW TOP ALTITUDE VERBIAGE "(1). DP ROUTE DESCRIPTION, CHANGED KYIP TAKEOFF RWY 5 FROM "CLII TO 1220, THEN ON HEADING 300.00 OR AS ASSIGNED BY ATC, FOR RADAF "MAGNETIC VARIATION DOCUMENTATION FOR STANDARD INSTRUMENT I ASSIGNED HEADINGS ON VM LEG; FORMAT IAW FAAO 8260.46J APPENDIX 12. DP ROUTE DESCRIPTION, CHANGED KYIP TAKEOFF RWY 9 FROM "CLII TO 1220, THEN ON HEADING 300.00 OR AS ASSIGNED BY ATC, FOR RADAF "MAGNETIC VARIATION DOCUMENTATION FOR STANDARD INSTRUMENT I ASSIGNED HEADINGS ON VM LEG; FORMAT IAW FAAO 8260.46J APPENDIX 13. DP ROUTE DESCRIPTION, CHANGED KYIP TAKEOFF RWY 23 FROM "CLI ASSIGNED BY ATC, FOR RADAR VECTORS" EARLY TURN AND LNAV ENG CHANGED FROM KDTW (7W/2020) TO KYIP (6W/1995) IAW AJV-A MEMO "M/ DEPARTURE PROCEDURES" DATED 07/15/2022; ATC REQUESTED TO ADD 14. DP ROUTE DESCRIPTION, CHANGED KYIP TAKEOFF RWY 27 FROM "CLI ASSIGNED BY ATC, FOR RADAR VECTORS" EARLY TURN AND LNAV ENG CHANGED FROM KDTW (7W/2020) TO KYIP (6W/1995) IAW AJV-A MEMO "M/ DEPARTURE PROCEDURES" DATED 07/15/2022; ATC REQUESTED TO ADD 14. DP ROUTE DESCRIPTION, CHANGED KYIP TAKEOFF RWY 27 FROM "CLI ASSIGNED BY ATC, FOR RADAR VECTORS" EARLY TURN AND LNAV ENG CHANGED FROM KDTW (7W/2020) TO KYIP (6W/1995) IAW AJV-A MEMO "M/ DEPARTURE PROCEDURES" DATED 07/15/2022; ATC REQUESTED TO ADD 15. DP ROUTE DESCRIPTION, KARB, KDET, KONZ, KOZW, KTTF, KPTK, KVL AND MOVED "FOR RADAR VECTORS TO CROSS BROZZ" FROM THE INDIVI 	DR AS ASSIGNE MB ON HEADING VECTORS" C DEPARTURES A E.SECTION 1.2 MB ON HEADING VECTORS" C DEPARTURES A E.SECTION 1.2 IMB ON HEADIN AGEMENT ALTI AGNETIC VARIA ATC ASSIGNED IMB ON HEADIN AGEMENT ALTI AGNETIC VARIA ATC ASSIGNED L AND KMTC, C	D BY ATC" KDTW HAS A NU 5 053.70 TO 1220, THEN LEFT CLIMB ON HEADING MAG VAR ND GRAPHIC OBSTACLE DEF .C.(7). 3 095.55 TO 1220, THEN LEFT .LIMB ON HEADING MAG VAR ND GRAPHIC OBSTACLE DEF .C.(7). IG 233.72 TO 1220, THEN ON TUDE NOT REQUIRED, SEGM TION DOCUMENTATION FOR 0 HEADINGS ON VM LEG; FOF 10 DOCUMENTATION FOR 0 HEADINGS ON VM LEG; FOF HEADINGS ON VM LEG; FOF	JMERIC TOP ALTITUDE 17000 (TURN HEADING 300.00 FOR R CHANGED FROM KDTW (7W/2 PARTURE PROCEDURES" DATE TURN HEADING 300.00 FOR R CHANGED FROM KDTW (7W/2 PARTURE PROCEDURES" DATE HEADING 233.70 FOR RADAR M MENT CHANGED FROM VA-VM STANDARD INSTRUMENT DEF RMAT IAW FAAO 8260.46J APPE ADING VERBIAGE FROM "OR A	CHARTED FOR ALL ADAR VECTORS" T 2020) TO KYIP (6W/ ED 07/15/2022; ATC ADAR VECTORS" T 2020) TO KYIP (6W/ ED 07/15/2022; ATC /ECTORS" TO "CLIM PARTURES AND GR ENDIX E.SECTION 1 /ECTORS" TO "CLIM PARTURES AND GR ENDIX E.SECTION 1 S ASSIGNED" TO "C	RUNWAYS. TO "CLIMB ON HEADING 052.70 1995) IAW AJV-A MEMO REQUESTED TO ADD ATC TO "CLIMB ON HEADING 094.55 1995) IAW AJV-A MEMO REQUESTED TO ADD ATC MB ON HEADING 232.72 OR AS ON HEADING MAG VAR APHIC OBSTACLE .2.C.(7). MB ON HEADING 274.56 OR AS ON HEADING MAG VAR APHIC OBSTACLE .2.C.(7). DR AS ASSIGNED BY ATC",
THEN ON TRACK 278.63 TO CCOBB, THEN ON (TRANSITION)" UPDATED V 16. TRANSITION ROUTES, LOWERED MEA FROM 10000 TO 9000 UPDATED 17. TRANSITION ROUTES, ADDED MOCA 2500 AND DELETED REMARK "MO	D DME/DME EVA	ALUATION.			
E.SECTION 1.2.D.(8). 18. MOVED PBN NAV SPEC/SENSORS FROM PROCEDURAL DATA NOTES T REQUIRED" TO "RNAV 1 - DME/DME/IRU OR GPS" DOCUMENTATION IAW 19. MOVED "NOTE: RADAR REQUIRED" FROM PROCEDURAL DATA NOTES SECTION 1.2.F.	FAAO 8260.46J	PARAGRAPH 2-1-1.F.			
20. PROCEDURAL DATA NOTES, DELETED "NOTE: KDTW/KYIP DEPARTURE REDUNDANT AND NO LONGER NEEDED.					NITIAL CONTACT"
21. TAKEOFF MINIMUMS, CHANGED ALL CLIMB GRADIENT FORMATS FROM 22. TAKEOFF MINIMUMS, CHANGED KDTW RWY 27L AND 27R FROM "500 F TO OBSTACLE-BASED CLIMB GRADIENT; MATCHES ODP TAKEOFF MINIMU 23. TAKEOFF MINIMUMS, CHANGED KYIP RWY 23 FROM "500 FT PER NM TO FOR A COMPANY OF A DESCRIPTION OF THE REAL OF A DESCRIPTION OF THE REAL OF A DESCRIPTION OF A D	T PER NM TO 1 ² IMS.	146" TO "STANDARD" EARL	Y TURN AND LNAV ENGAGEME	ENT CLIMB GRADIE	
ENGAGEMENT CLIMB GRADIENT NOT REQUIRED; LOWERED TO OBSTACL	E-BASED CLIME	GRADIENT AND MATCHES	ODP TAKEOFF MINIMUMS.		00

24. TAKEOFF MINIMUMS, KTTF, ADDED "RWY 3, 21:". - LISTED RUNWAYS AUTHORIZED STANDARD TAKEOFF MINIMUMS IAW FAAO 8260.46J APPENDIX E.SECTION 1.2.H.(2).

DP NAME	NUMBER	DP COMPUTER CODE	SUPERSEDED NUMBER	DATED	ACTUAL EFFECTIVE DATE
ССОВВ	THREE	CCOBB3.CCOBB	TWO	08/15/2019	

25. TAKEOFF MINIMUMS, KOZW, ADDED "RWY 13, 31:". - LISTED RUNWAYS AUTHORIZED STANDARD TAKEOFF MINIMUMS IAW FAAO 8260.46J APPENDIX E.SECTION 1.2.H.(2). 26. TAKEOFF MINIMUMS, INCREASED KMTC RWY 19 CLIMB GRADIENT FROM 234 FT PER NM TO 235 FT/NM. - UPDATED CALCULATIONS; CONTROLLING OBSTRUCTION 1246 FT MSL TOWER (26-001410) LAT/LONG CHANGED FROM 423315.00N/0825315.00W TO 423312.00N/0825315.00W (MOVED 303.71 FT SOUTH) AND ACCURACY CHANGED FROM 5D TO 4D BY OBSTACLE DATA TEAM. 27. TAKEOFF OBSTACLE NOTES, ADDED 'COMMA' AFTER "SEE FORM 8260-15A". - FIXED PUNCTUATION IAW FAAO 8260.46J APPENDIX E.SECTION 1.2.I.

28. CONTROLLING OBSTACLES, KYIP RWY 27, CHANGED CONTROLLING OBSTRUCTION LAT/LONG FROM 421431.78N/0833411.47W TO 421431.80N/0833411.49W (MOVED 2.52 FT NORTHWEST). - UPDATED OBSTACLE DATA; TAKEOFF MINIMUMS DID NOT CHANGE.

29. CONTROLLING OBSTACLES, KDET, ADDED VERBIAGE TO RWY 33 "OBSTACLES MANDATING ODP ROUTE DEVELOPMENT". - CLIMB GRADIENT IS STANDARD AND THIS OBSTACLE IS REASON FOR EXTENDED ICA; DOCUMENTED IAW FAAO 8260.46J APPENDIX E.SECTION 1.2.J.(3).

30. CONTROLLING OBSTACLES, KONZ, DELETED COMMA BETWEEN "STACK" AND LAT/LONG. - FIXED TYPO.

31. CONTROLLING OBSTACLES, KVLL RWY 28, CHANGED CONTROLLING OBSTACLES FROM 940 FT MSL BLDG 423234.20N/0831235.50W (CG), 1749 FT MSL TOWER 422858.00N/0831219.00W (CGTA) TO 905 FT MSL BUILDING 423232.54N/0831234.07W. - UPDATED OBSTACLE EVALUATION AND RETAINED CLIMB GRADIENT AND CLIMB-TO ALTITUDE TO MATCH PUBLISHED ODP AND REDUCE PILOT CONFUSION.

32. CONTROLLING OBSTACLES, KVLL, ADDED "OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 10, 28: 1724 FT MSL TOWER 422858.46N/0831218.94W".- THIS UPDATED OBSTACLE IS REASON FOR EXTENDED ICA; DOCUMENTED IAW FAAO 8260.46J APPENDIX E.SECTION 1.2.J.(3).

33. CONTROLLING OBSTACLES, KMTC, CHANGED CONTROLLING OBSTRUCTION LAT/LONG FROM 423315.00N/0825315.00W TO 423312.00N/0825315.00W (MOVED 303.71 FT SOUTH). - DATABASE COORDINATES UPDATED BY OBSTACLE DATA TEAM.

34. ADDED MSA AT ALL AIRPORTS. - REQUIRED IAW FAAO 8260.46J APPENDIX E.SECTION 1.2.K.

35. ADDITIONAL FLIGHT DATA, MAGNETIC VARIATION ADDED FOR ALL AIRPORTS AND UPDATED KDTW FORMAT FROM "REFERENCE MAG VAR; KDTW 7W/2020" TO "AIRPORT MV: DTW (P) 7W/2020". - REQUIRED ALL AIRPORTS AND DOCUMENTED IAW AJV-A MEMO "MAGNETIC VARIATION DOCUMENTATION FOR STANDARD INSTRUMENT DEPARTURES AND GRAPHIC OBSTACLE DEPARTURE PROCEDURES" DATED 07/15/2022.

36. ADDITIONAL FLIGHT DATA, UPDATED TOP ALTITUDE FORMAT FROM "CHART: TOP ALTITUDE: KDTW 17000" TO "DETROIT METRO WAYNE COUNTY - CHART: TOP ALTITUDE: 17000" AND FROM "CHART: TOP ALTITUDE: ALL OTHER AIRPORTS ASSIGNED BY ATC" TO "ALL OTHER AIRPORTS - CHART: TOP ALTITUDE: ASSIGNED BY ATC". - FORMAT IAW FAAO 8260.46J APPENDIX E.SECTION 1.2. M.(B).

37. ADDITIONAL FLIGHT DATA, ADDED CHART SPEED ICON MAXIMUM 230 KIAS AT FIX NITRN. - REQUIRED IAW FAAO 8260.46J PARAGRAPH 2-1-1.E.(4)(B).

38. AIRPORTS SERVED, DELETED AIRPORT NAMES. - NAMES NOT REQUIRED IAW FAAO 8260.46J APPENDIX E.SECTION 1.2.N.

39. COMMUNICATIONS, ADDED "CHART:" AND DELETED "DEP CON". - VERBIAGE REQUIRED AND DEP CON CHARTED AUTOMATICALLY IAW FAAO 8260.46J APPENDIX E.SECTION 1.2.O. 40. ADDED REMARK "ATC APPROVAL FOR 45 DEGREE MAX INTERCEPT AT FIX BROZZ ABOVE FL245". - DTA CALCULATION WITH 16 DEGREE BANK ANGLE ABOVE FL245 EXCEEDS LEG LENGTH FROM FIX BROZZ TO FIX CCOBB.

41. MOVED KDTW AAUP FROM ADDITIONAL FLIGHT DATA TO REMARKS AND CHANGED VERBIAGE FROM "KDTW CHART: SEE ADDITIONAL REQUIREMENTS IN RNAV DEPARTURE AAUP" TO "KDTW CHART NOTE: SEE ADDITIONAL REQUIREMENTS ON AAUP". - MOVED AND FORMAT IAW FAAO 8260.46J APPENDIX E.SECTION 1.2.Q.(3).

04/03/2024. THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 03/18/2024. 1. PROCEDURAL DATA NOTES, CHANGED SPELLING OF 3NP AIRPORT NAME FROM "NAPOLEAN" TO "NAPOLEON". - FIXED TYPO.

> Digitally signed by ERIC N SUSKI Apr 03, 2024

FEDERAL AVIATION ADMINISTRATION FLIGHT STANDARDS SERVICE DEPARTURE (DATA RECORD)

DP NAME						NUMBER	URE (DATA RECO		SEDED NUMBER	DATED	ACTUAL EFFECTIVE DATE
ССОВВ						THREE	CCOBB3.CCC		TWO	08/15/2019	
FIX/NAVAID	LAT/LONG	<u>C</u>	FO/FB	LEG TYPE	TC	<u>DIST</u> (NM)	ALTITUDE	SPEED		REMARKS	
	DETROIT METRO WAYNE COUNTY (KDTW)										
RW03L (AER)	421228.21N/0832104.39W	Ν	-	-	-	-				CG 500 FT PER NM T	O 1146
-	421436.03N/0831930.16W	-	-	VI	028.71	2.43					
NITRN	421943.95N/0832352.28W	Y	FB	CF	327.68	6.07	AT/ABOVE 2500	AT/BELOW 230K			
FERRM	422158.09N/0832945.62W	Y	FB	TF	297.14	4.91					
AVERL	421955.54N/0833805.48W	Y	FB	TF	251.76	6.51	AT/BELOW 7000				
BROZZ	421327.81N/0840917.61W	Y	FB	TF	254.59	24.05					
RW03R (AER)	421144.21N/0832106.49W	Ν	-	-	-	-				CG 500 FT PER NM T	O 1146
-	421404.99N/0831922.74W	-	-	VI	028.71	2.67					
NITRN	421943.95N/0832352.28W	Y	FB	CF	329.41	6.56	AT/ABOVE 2500	AT/BELOW 230K			
FERRM	422158.09N/0832945.62W	Y	FB	TF	297.14	4.91					
AVERL	421955.54N/0833805.48W	Y	FB	TF	251.76	6.51	AT/BELOW 7000				
BROZZ	421327.81N/0840917.61W	Y	FB	TF	254.59	24.05					
RW04L (AER)	421207.82N/0832302.40W	Ν	-	-	-	-				CG 500 FT PER NM T	O 1146
-	421427.54N/0832119.53W	-	-	VI	028.68	2.65					
NITRN	421943.95N/0832352.28W	Y	FB	CF	340.26	5.60	AT/ABOVE 2500	AT/BELOW 230K			
FERRM	422158.09N/0832945.62W	Y	FB	TF	297.14	4.91					
AVERL	421955.54N/0833805.48W	Y	FB	TF	251.76	6.51	AT/BELOW 7000				
BROZZ	421327.81N/0840917.61W	Y	FB	TF	254.59	24.05					QUALITY
											16 0. 8

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DP NAME CCOBB						NUMBER THREE	DP COMPUTER CCOBB3.CCC		RSEDED NUMBER TWO	DATED 08/15/2019	ACTUAL EFFECTIVE DATE
FIX/NAVAID	LAT/LONG	<u>C</u>	FO/FB	LEG TYPE	<u>TC</u>	<u>DIST</u> (<u>NM)</u>	ALTITUDE	SPEED		REMARKS	
RW04R (AER)*	421212.78N/0832213.32W*	Ν	-	-	-	-				*DISPL THLD (509.0 CG 500 FT PER NM T	0 FT) O 1146
-	421446.08N/0832020.37W	-	-	VI	028.70	2.91					
NITRN	421943.95N/0832352.28W	Y	FB	CF	332.14	5.61	AT/ABOVE 2500	AT/BELOW 230	<		
FERRM	422158.09N/0832945.62W	Y	FB	TF	297.14	4.91					
AVERL	421955.54N/0833805.48W	Y	FB	TF	251.76	6.51	AT/BELOW 7000				
BROZZ	421327.81N/0840917.61W	Y	FB	TF	254.59	24.05					
RW21L (AER)	421310.86N/0832002.65W	Ν	-	-	-	-				CG 500 FT PER NM T	O 1146
-	421050.18N/0832146.27W	-	-	VI	208.72	2.67					
SAAMS	420303.12N/0833709.78W	Y	FB	CF	235.73	13.85	AT/BELOW 7000				
BSLNE	420911.22N/0834831.76W	Y	FB	TF	306.00	10.45	AT/BELOW 9000				
FDRCH	421313.04N/0835602.14W	Y	FB	TF	305.87	6.88					
BROZZ	421327.81N/0840917.61W	Y	FB	TF	271.51	9.85					
RW21R (AER)	421341.86N/0832010.11W	Ν	-	-	-	-				CG 500 FT PER NM T	O 1146
-	421134.56N/0832143.90W	-	-	VI	208.72	2.42					
SAAMS	420303.12N/0833709.78W	Y	FB	CF	233.34	14.30	AT/BELOW 7000				
BSLNE	420911.22N/0834831.76W	Y	FB	TF	306.00	10.45	AT/BELOW 9000				
FDRCH	421313.04N/0835602.14W	Y	FB	TF	305.87	6.88					
BROZZ	421327.81N/0840917.61W	Y	FB	TF	271.51	9.85					

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DP NAME CCOBB						NUMBER THREE	DP COMPUTER CODE CCOBB3.CCOBB	SUPERSEDED NUMBER TWO	DATED 08/15/2019	ACTUAL EFFECTIVE DATE
FIX/NAVAID	LAT/LONG	<u>C</u>	FO/FB	LEG TYPE	<u>TC</u>	<u>DIST</u> (NM)	ALTITUDE	SPEED	<u>REMARKS</u>	
RW22L (AER)	421352.36N/0832059.97W	Ν	-	-	-	-			CG 500 FT PER NM TO	1146
-	421134.77N/0832256.02W	-	-	VI	208.71	2.99				
SAAMS	420303.12N/0833709.78W	Y	FB	CF	232.20	13.39	AT/BELOW 7000			
BSLNE	420911.22N/0834831.76W	Y	FB	TF	306.00	10.45	AT/BELOW 9000			
FDRCH	421313.04N/0835602.14W	Y	FB	TF	305.87	6.88				
BROZZ	421327.81N/0840917.61W	Y	FB	TF	271.51	9.85				
RW22R (AER)	421334.48N/0832158.61W	Ν	-	-	-	-			CG 500 FT PER NM TO	1146
-	421115.08N/0832341.20W	-	-	VI	208.69	2.65				
SAAMS	420303.12N/0833709.78W	Y	FB	CF	230.67	12.95	AT/BELOW 7000			
BSLNE	420911.22N/0834831.76W	Y	FB	TF	306.00	10.45	AT/BELOW 9000			
FDRCH	421313.04N/0835602.14W	Y	FB	TF	305.87	6.88				
BROZZ	421327.81N/0840917.61W	Y	FB	TF	271.51	9.85				
RW27L (AER)	421158.34N/0831949.33W	Ν	-	-	-	-				
-	-	-	-	VM	268.73	-				
RW27R (AER)	421303.02N/0831951.71W	Ν	-	-	-	-				
-	-	-	-	VM	268.72	-				
	WILLOW RUN (KYIP)									
RW05 (AER)	421350.25N/0833223.46W	Ν	-	-	-	-				
1220 MSL	-	-	-	VA	046.70	-	AT/ABOVE 1220		CG 500 FT PER NM TO	•
-	-	-	-	VM	294.00	-				16 Sty _{ECV} E?
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DP NAME CCOBB						NUMBER THREE	DP COMPUTER CODE CCOBB3.CCOBB	SUPERSEDED NUMBER TWO	DATED 08/15/2019	ACTUAL EFFECTIVE DATE
FIX/NAVAID	LAT/LONG	<u>C</u>	FO/FB	LEG TYPE	<u>TC</u>	<u>DIST</u> (NM)	ALTITUDE	SPEED	REMARKS	
RW09 (AER)	421438.22N/0833235.98W	Ν	-	-	-	-				
1220 MSL	-	-	-	VA	088.55	-	AT/ABOVE 1220		CG 500 FT PER NM T	O 1220
-	-	-	-	VM	294.00	-				
RW23 (AER)	421441.34N/0833110.47W	Ν	-	-	-	-				
-	-	-	-	VM	226.72	-				
RW27 (AER)	421439.47N/0833129.51W	Ν	-	-	-	-				
-	-	-	-	VM	268.56	-			CG 209 FT PER NM T	O 1000
BROZZ	421327.81N/0840917.61W	Y	-	IF	-	-				
ССОВВ	421344.05N/0842244.76W	Y	FB	TF	271.63	10.00				
ССОВВ	421344.05N/0842244.76W	Y	-	IF	-	-			CCOBB3.ZEGB	31
ZEGBI	421422.22N/0850455.14W	Y	FB	TF	271.40	31.33				

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