04/09/2024

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 CCOBB	<u>1E</u>				NUMBER THREE	DP COMPUTER CODE CCOBB3.CCOBB	SUPERSEDED NUMBER TWO	DATED 08/15/2019	ACTUAL EFFECTIVE DATE 16 May 2024
TYPE:		COPTER	SID X	RNAV		This is a correc ** See page 7 fe	ted copy of the proced or details. **	ure published	in NFDD 064.

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.

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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.

OUALITL 16

NFDD	NO. 069			04/09/2024					32
DP NAME CCOBB			NUMBER THREE	DP COMPUTER CODE CCOBB3.CCOBB	SUPERSEDED NUMBER TWO		DATED 08/15/2019		ACTUAL EFFECTIVE DATE 16 May 2024
TRANSITION ROUTES	(GRAPHIC DEPICTION ONL)	<u>.Y):</u>							
TRANSITION NAME	TRANSITION COMPUTER CODE	FROM FIX/NAVAID		<u>TO</u> NAVAID	COURSE	DISTANCE	MEA	MOCA	CROSSING ALTITUDE/FIXES
ZEGBI	CCOBB3.ZEGBI	ССОВВ	Z	EGBI	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.

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DP NAME	NUMBER	DP COMPUTER CODE	SUPERSEDED NUMBER	DATED	ACTUAL EFFECTIVE DATE
CCOBB	THREE	CCOBB3.CCOBB	TWO	08/15/2019	16 May 2024
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 PR	CCEDURES (O	DP).			
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:		1 AL / S
AIRPORT ID	CITY	STATE OUT
KDTW	DETROIT	MI CHECKER
KYIP	DETROIT	MI

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KARB		ANN ARBOR			MI
KDET		DETROIT			MI
KTTF		MONROE			MI
KONZ	Ľ	DETROIT/GROSSE ILE			МІ
KOZW		HOWELL			МІ
KPTK		PONTIAC			МІ
KVLL		TROY			MI
КМТС		MOUNT CLEMENS			МІ

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.

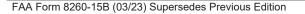
8. KYIP RWY 5, 9 DEPARTURES EARLY TURN AND SHORTENED ICA REQUIRED DUE TO KDTW AIR TRAFFIC FLOW.

9. MEA BASED ON LOWEST DME/DME COVERAGE.

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

ROUTINE

COORDINATED WITH:



NALIZ

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	NFDD N	IO. 069					04/09/2024			35
DP NAME						NUMBER	DP COMPUTER CODE	SUPERSEDED NUMBER	DATED	ACTUAL EFFECTIVE DATE
CCOBB						THREE	CCOBB3.CCOBB	TWO	08/15/2019	16 May 2024
<u>A4A</u>				HAI	NBAA 🔀	OTHER:ZOB,	DTW APP CON, AMGR, NAV	CANADA		
	- REASONS:									
-	, -							ITY TO DETROIT METRO WAY		
				,		,		RWY 23L TO RWY 23 IN DP R		
RUNWAY	5L, 23R DECC	MMISSIONED	AND RWY 5R,	23L RENUM	IBERED ON 1	0/06/2022.				
		,			,			NG OBSTACLE RUNWAY IS	GOING TO BE DECO	OMMISSIONED.
							ON 02/10/2021.	IANGED VERBIAGE FROM "TO		
		,		,				FIX FOR RADAR VECTORS.	CRUSS BRUZZ AT	OR ABOVE 4000 10 10
									I "THEN ON TRACK	304.14 TO CROSS FERRM AT
							E AT FERRM NO LONGER N			
		,						275.71 OR AS ASSIGNED FOR		
		D BY ATC, FOR DIX E.SECTION		IORS" EAH	RLY TURN AN	ID LNAV ENGAG	EMENT ALTITUDE NOT REC	UIRED, SEGMENTS CHANGE	J FROM VA-VM LEG	S TO VM LEG; FORMAT IAW
				27R FROM	"CLIMB ON HI	FADING 275 72	TO 1146 THEN ON HEADING	275.70 OR AS ASSIGNED FOR	R RADAR VECTORS	" TO "CLIMB ON HEADING
								UIRED, SEGMENTS CHANGEI		
		DIX E.SECTION								
		,						MERIC TOP ALTITUDE 17000		
								CHANGED FROM KDTW (7W/2		O "CLIMB ON HEADING 052.70
								ARTURE PROCEDURES" DAT		
-						E.SECTION 1.2.0			,	
		,					,			O "CLIMB ON HEADING 094.55
								CHANGED FROM KDTW (7W/2		
						EPARTURES AN		ARTURE PROCEDURES" DAT	ED 07/15/2022; ATC	REQUESTED TO ADD ATC
								HEADING 233.70 FOR RADAR	/ECTORS" TO "CLIN	IB ON HEADING 232.72 OR AS
ASSIGNE	D BY ATC, FO	R RADAR VEC	TORS" EARL	Y TURN AND	D LNAV ENGA	GEMENT ALTIT	UDE NOT REQUIRED, SEGM	ENT CHANGED FROM VA-VM	TO VM LEG; CLIMB	ON HEADING MAG VAR
								STANDARD INSTRUMENT DEF		
								MAT IAW FAAO 8260.46J APPE		
		,					,	ENT CHANGED FROM VA-VM		IB ON HEADING 274.56 OR AS
								STANDARD INSTRUMENT DEF		
								MAT IAW FAAO 8260.46J APPE		
								DING VERBIAGE FROM "OR A		
								RED ROUTE DESCRIPTIONS T		
		,	```	,		DME/DME EVAL		ECTION 1.2.C AND CONSOLID	ATED SHARED ROU	TINGS VERBIAGE.
		,						REDUCE CHART CLUTTER".	MOCA REQUIRED	IAW FAAO 8260.46J APPENDIX
	N 1.2.D.(8).	, -								
								D VERBIAGE FROM "NOTE: RN	IAV 1" AND "NOTE: I	DME/DME/IRU OR GPS
							ARAGRAPH 2-1-1.F.			
SECTION		JAK KEQUIKEL			ATA NOTES I	U EQUIPMENT I	REQUIREMENT NOTES AND	DELETED "NOTE:" DOCUME		7 8200.40J APPENDIX E.
		A NOTES, DELE	ETED "NOTE: I	KDTW/KYIP I	DEPARTURES	S: IF UNABLE TO	ACCEPT 500 FT PER NM CI	IMB RATE, ADVISE CLEARAN	CE DELIVERY ON IN	NITIAL CONTACT"
-		ONGER NEED								
		,						AO 8260.46J APPENDIX E.SEC		
		S, CHANGED K CLIMB GRADIE					6" TO "STANDARD" EARLY	IURN AND LNAV ENGAGEME	ENT CLIMB GRADIEI	NT NOT REQUIRED; LOWERED
23. TAKEC	OFF MINIMUM	S. CHANGED K	YIP RWY 23 F	ROM "500 F		1220" TO "STAN	IDARD" AND RWY 27 FROM	"500 FT PER NM TO 1220" TO '	209 FT/NM TO 1000	" EARLY TURN AND IMAV
ENGAGEN	IENT CLIMB	GRADIENT NOT	REQUIRED: I	OWERED T	O OBSTACLE	-BASED CLIMB	GRADIENT AND MATCHES C	DP TAKEOFF MINIMUMS.		
21 TAKED			ר ג אוסיי ח: עוסיי ח:							(2) 16

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).

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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.

NFDD NO. 069

04/09/2024

FEDERAL AVIATION ADMINISTRATION FLIGHT STANDARDS SERVICE DEPARTURE (DATA RECORD)

DP NAME CCOBB						NUMBER THREE	DP COMPUTER CCOBB3.CCC		PERSEDED NUMBER TWO	<u>DATED</u> 08/15/2019	ACTUAL EFFECTIVE DATE 16 May 2024
FIX/NAVAID	LAT/LONG	<u>C</u>	FO/FB	LEG TYPE	<u>TC</u>	<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 2	30K		
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	N	-	-	-	-				CG 500 FT PER NM T	
-	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 2	30K		
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	N	-	-	-	-				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 2	30K		
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					OUALITL
											16 Q Q

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NFD	D NO. 069					04/09/2024				38	
DP NAME						NUMBER	DP COMPUTER	CODE SUPER	RSEDED NUMBER	DATED	ACTUAL EFFECTIVE DATE
ССОВВ						THREE CCOBB3.CCOBB TWO		08/15/2019	16 May 2024		
FIX/NAVAID	LAT/LONG	<u>C</u>	FO/FB	<u>LEG</u> TYPE	TC	<u>DIST</u> (NM)	ALTITUDE	SPEED	SPEED		
RW04R (AER)*	421212.78N/0832213.32W*	Ν	-	-	-	-				*DISPL THLD (509.0 CG 500 FT PER NM T	
-	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 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					
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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NFDI						04/09/2024			39	
DP NAME CCOBB						NUMBER THREE	DP COMPUTER CODE CCOBB3.CCOBB	SUPERSEDED NUMBER TWO	DATED 08/15/2019	ACTUAL EFFECTIVE DATE
FIX/NAVAID	LAT/LONG		FO/FB	LEG TYPE	TC	DIST	ALTITUDE	SPEED	REMARKS	16 May 2024
		<u> </u>		TYPE		<u>(NM)</u>	ALITODE	<u>SPEED</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	1220 OUALITL
-	-	-	-	VM	294.00	-				16 542000

NFDD NO. 069						04/09/2024	40		
					NUMBER			DATED	ACTUAL EFFECTIVE DATE 16 May 2024
							TWO	00/13/2019	10 Way 2024
LAT/LONG	<u>C</u>	FO/FE	<u>} LEG</u> <u>TYPE</u>	<u>TC</u>	<u>DIST</u> (NM)	ALTITUDE	<u>SPEED</u>	REMARKS	
421438.22N/0833235.98W	Ν	-	-	-	-				
-	-	-	VA	088.55	-	AT/ABOVE 1220		CG 500 FT PER NM T	ГО 1220
-	-	-	VM	294.00	-				
421441.34N/0833110.47W	Ν	-	-	-	-				
-	-	-	VM	226.72	-				
421439.47N/0833129.51W	Ν	-	-	-	-				
-	-	-	VM	268.56	-			CG 209 FT PER NM T	ĩO 1000
421327.81N/0840917.61W	Y	-	IF	-	-				
421344.05N/0842244.76W	Y	FB	TF	271.63	10.00				
421344.05N/0842244.76W	Y	-	IF	-	-			CCOBB3.ZEGE	31
421422.22N/0850455.14W	Y	FB	TF	271.40	31.33				
	LAT/LONG 421438.22N/0833235.98W - - - 421441.34N/0833110.47W - 421441.34N/0833110.47W - 421344.05N/0842244.76W	LAT/LONG C 421438.22N/0833235.98W N 421438.22N/0833235.98W N 421441.34N/0833110.47W - 421441.34N/0833110.47W N 421441.34N/0833110.47W N 421441.34N/0833110.47W N 421441.34N/0833110.47W N 421439.47N/0833129.51W N 421327.81N/0840917.61W Y 421344.05N/0842244.76W Y 421344.05N/0842244.76W Y	LAT/LONG C FO/FE 421438.22N/0833235.98W N - 421438.22N/0833235.98W N - 421441.34N/0833110.47W N - 421441.34N/0833110.47W N - 4214439.47N/0833129.51W N - 421439.47N/0833129.51W N - 421327.81N/0840917.61W Y - 421344.05N/0842244.76W Y FB 421344.05N/0842244.76W Y -	LAT/LONG C FO/FB LEG 421438.22N/0833235.98W N - - 421438.22N/0833235.98W N - - 421438.22N/0833235.98W N - - 421438.22N/0833235.98W N - - 421441.34N/0833110.47W A - - 421441.34N/0833110.47W N - - 421441.34N/0833110.47W N - - 421441.34N/0833110.47W N - - 421439.47N/0833129.51W N - - 421327.81N/0840917.61W N - - 421344.05N/0842244.76W Y FB TF 421344.05N/0842244.76W Y - -	LAT/LONG C FO/FE LEG TC 421438.22N/0833235.98W N - - 421438.22N/0833235.98W N - - - - - - - - - - - - - - - - - 421438.22N/0833235.98W N - - - - - - VM 988.55 - - - VM 294.00 - - - - - 421441.34N/0833110.47W N - - 421439.47N/0833129.51W N - - 421439.47N/0833129.51W N - - 421327.81N/0840917.61W Y - IF - 421344.05N/0842244.76W Y FB TF 271.63	LAT/LONGCFO/FSLEGTCDIST THREE421438.22N/0833235.98WN421438.22N/0833235.98WNVA088.55VM294.00421441.34N/0833110.47WN421439.47N/0833110.47WN421439.47N/0833129.51WN421327.81N/0840917.61WY421324.05N/0842244.76WYFBTF271.6310.00421344.05N/0842244.76WY421344.05N/0842244.76WY421344.05N/0842244.76WY421344.05N/0842244.76WY421344.05N/0842244.76WY421344.05N/0842244.76WY421344.05N/0842244.76WY421344.05N/0842244.76WY421344.05N/0842244.76WY421344.05N/0842244.76WY421344.05N/0842244.76WY421344.05N/0842244.76WY </td <td>LAT/LONG C FO/FB LEG TYPE TC DIST (NM) ALTITUDE 421438.22N/0833235.98W N - - - - 421438.42N/0833110.47W N - - - - 421441.34N/0833110.47W N - - - - 421439.47N/0833129.51W N - - - - 421327.81N/0840917.61W Y - IF - - 421327.81N/0840917.61W Y FB TF 271.63 10.00</td> <td>LAT/LONGCFO/FBLEG TYPETCDIST (NM)ALTITUDESPEED421438.22N/0833235.98WN421438.22N/0833235.98WNVA088.55-AT/ABOVE 1220VM294.00VM294.00421441.34N/0833110.47WN421439.47N/0833129.51WN4214327.81N/0840917.61WY-SE6.56-421327.81N/0840917.61WYFBTF271.63421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-</td> <td>LAT/LONG C FO/FB LEG TYPE TC DIMBER THREE DP COMPUTER CODE CCOBB3.CCOBB SUPERSEDED NUMBER TWO DATED 08/15/2019 LAT/LONG C FO/FB LEG TYPE TC DIST (NM) ALTITUDE SPEED REMARKS 421438.22N/0833235.98W N -<!--</td--></td>	LAT/LONG C FO/FB LEG TYPE TC DIST (NM) ALTITUDE 421438.22N/0833235.98W N - - - - 421438.42N/0833110.47W N - - - - 421441.34N/0833110.47W N - - - - 421439.47N/0833129.51W N - - - - 421327.81N/0840917.61W Y - IF - - 421327.81N/0840917.61W Y FB TF 271.63 10.00	LAT/LONGCFO/FBLEG TYPETCDIST (NM)ALTITUDESPEED421438.22N/0833235.98WN421438.22N/0833235.98WNVA088.55-AT/ABOVE 1220VM294.00VM294.00421441.34N/0833110.47WN421439.47N/0833129.51WN4214327.81N/0840917.61WY-SE6.56-421327.81N/0840917.61WYFBTF271.63421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-421344.05N/0842244.76WY-F-	LAT/LONG C FO/FB LEG TYPE TC DIMBER THREE DP COMPUTER CODE CCOBB3.CCOBB SUPERSEDED NUMBER TWO DATED 08/15/2019 LAT/LONG C FO/FB LEG TYPE TC DIST (NM) ALTITUDE SPEED REMARKS 421438.22N/0833235.98W N - </td

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