

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</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
DETROIT METROPOLITAN WAYNE COUNTY	KDTW	RNAV (GPS) Z RWY 4L	ORIG	DETROIT	MI	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
645	645				7W	2020
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
RNAV			ROUTINE			

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
SYKOE	IAF	HURRT		TF	FB	1.00	123.05	6.20	4000
HURRT		ACIRA		TF	FB	1.00	065.43	5.00	4000
GRBAC	IAF	MMOTT		TF	FB	1.00	140.94	6.38	3000
MMOTT		ASLLI		TF	FB	1.00	067.53	4.75	3000
NBSTN	IAF	ACIRA		TF	FB	1.00	035.54	2.09	4000
ACIRA		ASLLI		TF	FB	1.00	035.55	3.14	3000
ASLLI		NATYI		TF	FB	1.00	035.58	4.20	3000
NATYI		REGGE		TF	FB	1.00	035.61	3.14	3000
REGGE	IF	PAYED		TF	FB	1.00	035.63	3.14	2000
PAYED	FAF	HIPKA/1.80 NM TO RW04L		TF	FB	0.30	035.65	2.28	
HIPKA/1.80 NM TO RW04L		RW04L	MAP	TF	FO	0.30	035.65	1.80	
RW04L	MAP	1100 MSL		CA			035.65		1100
1100 MSL		DOHNT		DF	FO	1.00			4000



MISSED APPROACH

MAP:
LPV: DA
LNAV/VNAV: DA
LNAV: RW04L

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 4000 DIRECT DOHNT AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)				
2.	PROFILE STARTS AT ASLLI							
3. FAC:	035.65	FAF: PAYED	DIST FAF TO MAP: 4.08	DIST FAF TO THLD: 4.08				
4. MIN ALT:	ASLLI 3000, NATIY 3000, REGGE 3000, PAYED 2000, HIPKA/1.80 NM TO RW04L 1260*							
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	200 HAT: 0.45	GS ANT:			
6. MIN GP INCPT: 2000	GP ALT AT FAF : PAYED 2000		OM:	MM:	IM:			
7. GP ANGLE: 3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 55.0					
8. MSA FROM:	RW04L 2800							

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 6000.
CHART SPEED ICON IN PLANVIEW AT SYKOE: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT GRBAC: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

CHART MANDATORY 5000 AT GRBAC.
CHART MANDATORY 4000 AT HURRT.
CHART MANDATORY 3000 AT MMOTT.
CHART MANDATORY 6000 AT SYKOE.
CHART CIRCLING ICON.
CHART VDP AT 1.01 NM TO RW04L*
*LNAV ONLY
WAAS CHANNEL #82241
REFERENCE PATH ID: W4A
CHART FAS OBST: 779 TOWER 421051N/0832322W.
HOLD NW, RT, 117.62 INBOUND
LTP HAE: 162.1 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD



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	HAT/HAA
LPV DA	845	1800	200	845	1800	200	845	1800	200	845	1800	200			
LNAV/VNAV DA	1046	4000	401	1046	4000	401	1046	4000	401	1046	4000	401			
LNAV MDA	1040	2400	395	1040	2400	395	1040	3500	395	1040	3500	395			
CIRCLING	1180	1	535	1180	1	535	1180	1 1/2	535	1240	2	595			

CHANGES - REASONS

ORIG.



COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** DTW ATCT, ZOB, AMGR, DTW APP CON, ATA

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

OFFICE

DATE

ROBERT G HAMILTON (AUSTIN GOTCHER)

AJV-5422

07/17/2018

APPROVED BY

OFFICE

DATE

TITLE

JULIE MORGAN

AJV-5420

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KDTW
RUNWAY	RW04L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Z
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W04A
LTP/FTP LATITUDE	421207.8215N
LTP/FTP LONGITUDE	0832302.4000W
LTP/FTP ELLIPSOIDAL HEIGHT	+01621
FPAP LATITUDE	421334.4520N
FPAP LONGITUDE	0832158.6115W
THRESHOLD CROSSING HEIGHT (TCH)	00055.0
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	D8102072

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01967
FPAP ORTHOMETRIC HEIGHT	+01967



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

AIRPORT	AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
DETROIT METROPOLITAN WAYNE COUNTY	KDTW	RNAV (GPS) Z RWY 4L	ORIG	DETROIT	MI	645	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM SYKOE TO HURRT

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	6.20										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
1.TOWER (26-001782)	415516.83N/0833948.48W	935	50	20	2C	1000				AT2065	4000
2.TERRAIN	415442.00N/0834039.00W	706 (700)								AS1500	2200

COMPUTATIONS

ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT
REMARKS:

INITIAL: STEPDOWN

FROM HURRT TO ACIRA

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	5.00										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
3.TOWER (26-028234)	415557.30N/0833814.40W	948	250	50	4D	1000				AT2052	4000
2.TERRAIN	415442.00N/0834039.00W	706 (700)								AS1500	2200

COMPUTATIONS

ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT
REMARKS:



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>				
DETROIT METROPOLITAN WAYNE COUNTY	KDTW	RNAV (GPS) Z RWY 4L	ORIG	DETROIT	MI	645	RNAV				
MISSED APPROACH : LNAV/VNAV											
<u>FROM</u>				<u>TO</u>							
DA				DOHNT							
<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>						
					885						
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC				4000
18.TOWER (26-000689)	421802.75N/0833827.86W	1249	20	3	1A	1000					2300
19.TERRAIN	421909.00N/0834154.00W	991 (1000)								AS1500	2500

<u>COMPUTATIONS</u>	<u>ALT</u>	<u>KIAS</u>	<u>KTAS</u>	<u>HAA</u>	<u>VKTW</u>	<u>TR</u>	<u>BA</u>	<u>DTA</u>	<u>COURSE CHANGE</u>	<u>DVEB</u>	<u>VEB OCS</u>	<u>RF CENTER FIX/DISTANCE</u>
<u>SEGMENT</u>												
<u>REMARKS:</u>												

MISSED APPROACH : LNAV												
<u>FROM</u>						<u>TO</u>						
RW04L						DOHNT						
<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>							
					940							
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>	
							ASC				4000	
18.TOWER (26-000689)	421802.75N/0833827.86W	1249	20	3	1A	1000					2300	
19.TERRAIN	421909.00N/0834154.00W	991 (1000)								AS1500	2500	
<u>COMPUTATIONS</u>	<u>ALT</u>	<u>KIAS</u>	<u>KTAS</u>	<u>HAA</u>	<u>VKTW</u>	<u>TR</u>	<u>BA</u>	<u>DTA</u>	<u>COURSE CHANGE</u>	<u>DVEB</u>	<u>VEB OCS</u>	<u>RF CENTER FIX/DISTANCE</u>
<u>SEGMENT</u>												
<u>REMARKS:</u>												



CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☒ CAT D

☐ CAT E

☐ NOT AUTHORIZED

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>RADIUS</u>	<u>HAA</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
CATEGORY A											
20.CONTROL_TOWER (26-001770)	421245.80N/0832115.66W	1.30	535	877	20	3	1A	300			1180
CATEGORY B											
20.CONTROL_TOWER (26-001770)	421245.80N/0832115.66W	1.83	535	877	20	3	1A	300			1180
CATEGORY C											
20.CONTROL_TOWER (26-001770)	421245.80N/0832115.66W	2.87	535	877	20	3	1A	300			1180
CATEGORY D											
21.TOWER (26-000777)	421627.36N/0832411.86W	3.75	595	936	20	10	1B	300			1240

CIRCLING REMARKS:
ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.

MSA

<u>CENTER</u>	<u>RADIUS</u>
RW04L	25

<u>SECTOR</u>	<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>BEARING</u>	<u>DISTANCE</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
360-360	TWR (26-000324)	422901.00N/0831844.00W	018	17.2	1750	250	50	4D	1000			2800

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

LPV SLOPE: 34:1
LNAV/VNAV SLOPE: 23.74:1

ADVERSE VEGETATION HEIGHT 100 FT PER IFP CHECKLIST.

PART B: SUPPLEMENTAL DATA
COMMUNICATIONS WITH

DTW APP CON, DTW TOWER, ZOB ARTCC



<u>AIRPORT</u> DETROIT METROPOLITAN WAYNE COUNTY	<u>AIRPORT ID</u> KDTW	<u>PROCEDURE NAME</u> RNAV (GPS) Z RWY 4L	<u>AMDT NO.</u> ORIG	<u>CITY</u> DETROIT	<u>STATE</u> MI	<u>AIRPORT ELEVATION</u> 645	<u>FACILITY</u> RNAV
<u>WX SERVICE</u> ASOS	<u>LOCATION</u> KDTW	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u> KDTW	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u>	
<u>BACK-UP WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>SERVICE-A</u>	<u>ADJUSTMENTS</u>	
WX REMARKS:							
<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>				
<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>			<u>RUNWAY MARKINGS</u>		<u>RUNWAY VISUAL RANGE</u>		
RW03L - HIRL, REIL, C/LINE, PAPI-4R			NPI-G		APPROACH, ROLL OUT		
RW21R - HIRL, REIL, C/LINE, PAPI-4L			NPI-G		APPROACH, ROLL OUT		
RW03R - TDZ, ALSF-2, HIRL, C/LINE, PAPI-4R			PIR-G		APPROACH, MIDPOINT, ROLL OUT		
RW04L - TDZ, ALSF-2, HIRL, C/LINE, PAPI-4L			PIR-G		APPROACH, MIDPOINT, ROLL OUT		
RW04R - TDZ, ALSF-2, HIRL, C/LINE			PIR-G		APPROACH, MIDPOINT, ROLL OUT		
RW09L - HIRL, REIL			PIR-G		ROLL OUT		
RW09R - HIRL, REIL, C/LINE			PIR-G		ROLL OUT		
RW21L - MALSR, HIRL, C/LINE, PAPI-4L			PIR-G		APPROACH, MIDPOINT, ROLL OUT		
RW22L - MALSR, HIRL, C/LINE			PIR-G		APPROACH, MIDPOINT, ROLL OUT		
RW22R - TDZ, MALSR, HIRL, C/LINE, PAPI-4R			PIR-G		APPROACH, MIDPOINT, ROLL OUT		
RW27L - MALSR, HIRL, C/LINE, PAPI-4L			PIR-G		APPROACH		
RW27R - MALSR, HIRL, PAPI-4L			PIR-G		APPROACH		
<u>GLIDESLOPE ANGLE</u> 3.00	<u>ELEV RWY THRESHOLD</u> 645.2	<u>TCH</u> 55.0	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u> 3.00	<u>TCH</u> 70.7	
<u>FINAL APPROACH COURSE AIMING</u>							
RUNWAY THRESHOLD	<input checked="" type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE				
ON CENTERLINE	<input checked="" type="checkbox"/>	FT FROM CENTERLINE					
<div>QUALITY 16 CHECKED</div>							

FAA Form 8260-9 / (11/16) Supersedes Previous Edition

Electronic Version

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<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
DETROIT METROPOLITAN WAYNE COUNTY	KDTW	RNAV (GPS) Z RWY 4L	ORIG	DETROIT	MI	645	RNAV

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
-19C	+54C	-20C	+13.72C

CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM 5-YEAR HISTORY (2013-2017).
CRITICAL LOW TEMPERATURE BASED ON EFFECTIVE GPA.
DESCENT RATE (FPM): STANDARD TEMP 962 HIGH TEMP 1124.

"VISUAL PORTION OF FINAL" PENETRATIONS

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or
5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
KDTW ASOS TRANSMITTED TO WMSCR. BACK-UP ALTIMETER SOURCE NOT USED DUE TO REDUNDANT WEATHER SOURCING.

TAA/FEDERS NOT EVELOPED PER CENTRAL FPT/ATC REQUEST. IAFS SYKOE AND RBAC WILL TIE TO FUTURE RNAV STARS.

RNAV TRANSITIONS EVALUATED IN IPDS. 20-DEGREE BANK ANGLE USED AT MMOTT.



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
DETROIT METROPOLITAN WAYNE COUNTY	KDTW	RNAV (GPS) Z RWY 4L		DETROIT	MI	645	RNAV

PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	THLD	TO 1000FT POINT	3.14
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	0.90
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	028.65
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	669
DISTANCE FROM	THLD	TO 1500FT POINT	5.62
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	4.49
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	028.63
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	716

THRESHOLD
COORDINATES
(IF STR-IN)421207.82N/0832302.40W

ARP COORDINATES421244.80N/0832112.20W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

RUNWAY 4L DISTANCE 1.50 NM

FAF
COORDINATES420832.84N/0832540.40W

FIX NAME
COORDINATES

REMARKS



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
DETROIT METROPOLITAN WAYNE COUNTY	KDTW	RNAV (GPS) Z RWY 4L	ORIG	DETROIT	MI	645	RNAV

PART E: PREPARED BY

<u>NAME</u>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
ROBERT G HAMILTON (AUSTIN GOTCHER)	AJV-5422	07/17/2018	AERONAUTICAL INFORMATION SPECIALIST

