

**FEDERAL AVIATION ADMINISTRATION**  
**FLIGHT STANDARDS SERVICE**  
**ILS STANDARD INSTRUMENT APPROACH PROCEDURE**  
**TITLE 14 CFR PART 97.29**

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	ILS OR LOC RWY 21L ILS RWY 21L SA CAT I, ILS RWY 21L SA CAT II	13A	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SUPERSEDED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	632	ILS OR LOC RWY 21L ILS RWY 21L SA CAT I, ILS RWY 21L SA CAT II	13	05/24/2018	7W	2020
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
I-EJR		28 FEBRUARY 2019	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>
RYEDR	IAF	TOFFY		TF	FB	1.00	272.46	4.00	5000
COBBO	IAF	KAALI		TF	FB	1.00	279.88	4.01	6000
COUNT/I-EJR 24.13 DME/RADAR	IAF	TIGRZ/I-EJR 18.51 DME/RADAR					215.72	5.62 (I-EJR)	5000
TOFFY		GIVVZ		TF	FB	1.00	268.72	2.26	5000
GIVVZ		COUNT/I-EJR 24.13 DME/RADAR		TF	FB	1.00	225.58	2.05	5000
KAALI		TIGRZ/I-EJR 18.51 DME/RADAR		TF	FB	1.00	245.14	3.14	5000
TIGRZ/I-EJR 18.51 DME/RADAR		ROBBI/I-EJR 15.37 DME/RADAR					215.72	3.14 (I-EJR)	5000
ROBBI/I-EJR 15.37 DME/RADAR		BALAS/I-EJR 12.22 DME/RADAR					215.72	3.14 (I-EJR)	4000
BALAS/I-EJR 12.22 DME/RADAR		NESBI/I-EJR 9.08 DME/RADAR					215.72	3.14 (I-EJR)	3000
NESBI/I-EJR 9.08 DME/RADAR	IF	PUKLE INT/I-EJR 5.93 DME/RADAR					215.72	3.14 (I-EJR)	2000

**MISSED APPROACH**

**MAP:**

ILS: DA  
 LOC: I-EJR 1.81 DME

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 4000 ON DXO R-122 TO GAAGE/DXO 16.00 DME AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):**

CLIMB TO 4000 DIRECT CRL VOR/DME AND HOLD.



**PROFILE:**

<b>1. PT</b>	<b>SIDE OF COURSE</b>	<b>OUTBOUND</b>	<b>FT WITHIN</b>	<b>MILES OF (IAF)</b>
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2. PROFILE STARTS AT TIGRZ

<b>3. FAC:</b>	215.72	<b>FAF:</b>	PUKLE INT/I-EJR 5.93 DME/RADAR	<b>DIST FAF TO MAP:</b>	<b>DIST FAF TO THLD:</b>	4.12
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4. **MIN ALT:** TIGRZ/I-EJR 18.51 DME/RADAR 5000, ROBBI/I-EJR 15.37 DME/RADAR 5000, BALAS/I-EJR 12.22 DME/RADAR 4000, NESBI/I-EJR 9.08 DME/RADAR 3000, PUKLE INT/I-EJR 5.93 DME/RADAR 2000, ZITKA/I-EJR 4.05 DME/RADAR 1400\*

<b>5. DIST TO THLD FROM OM:</b>	<b>MM:</b>	<b>IM:</b>	<b>100 HAT:</b>	859	<b>150 HAT:</b>	1813	<b>GS ANT:</b>	1189
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<b>6. MIN GS INCPT:</b>	2000	<b>GS ALT AT FAF :</b>	PUKLE INT/I-EJR 5.93 DME/RADAR 2000	<b>OM:</b>	<b>MM:</b>	<b>IM:</b>
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<b>7. GP ANGLE:</b>	3.00	<b>34:1:</b>	<b>20:1:</b>	<b>TCH:</b>	55.0
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8. **MSA FROM:** DXO VOR/DME 2800

**EQUIPMENT REQUIREMENTS NOTES:**

FROM RYEDR AND COBBO: RNAV 1-DME/DME/IRU OR GPS REQUIRED. AIRCRAFT NOT DME/DME/IRU OR GPS EQUIPPED - RADAR REQUIRED FOR PROCEDURE ENTRY.

**NOTES:**

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 21L: CAT A, B, C, D RA 148, RVR 1400, HAT 150, DA 782 MSL.  
SA CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 21L: CAT A, B, C, D RA 98, RVR 1200, HAT 100, DA 732 MSL.  
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.  
CHART NOTE: DME OR RADAR REQUIRED.  
SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH.  
SA CAT II CHART NOTE: REDUCED LIGHTING: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN.  
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).  
CHART SPEED ICON IN PLANVIEW AT RYEDR: MAX 200 KIAS.  
CHART SPEED ICON IN PLANVIEW AT COBBO: MAX 210 KIAS.  
PBN REQUIREMENT NOTE: RNAV 1-GPS.  
CHART NOTE: \*\*RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.

**ADDITIONAL FLIGHT DATA:**

CHART LOC RWY 22L/22R.  
CHART MANDATORY 5000 AT GIVVZ.  
CHART AT OR BELOW 6000 AT TOFFY.  
CHART MANDATORY 7000 AT RYEDR.  
CHART MANDATORY 6000 AT COBBO.  
CHART AT OR ABOVE 5000 AT COUNT.  
CHART CIRCLING ICON.  
CHART IN PLANVIEW: CRL VOR/DME  
CHART VDP AT 2.77 DME\*  
DISTANCE VDP TO THLD 0.96 NM  
\* LOC ONLY  
CHART FAS OBST: 751 TOWER 421445N/0831824W.  
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD S CRL VOR/DME, RT, 360.00 INBOUND.  
HOLD SE, RT, 302.46 INBOUND  
LTP HAE: 158.1 M



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

**ALTERNATE:** NA ☐ ILS: STANDARD; LOC: 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
S-ILS 21L**	832	2400	200	832	2400	200	832	2400	200	832	2400	200			
S-LOC 21L	1020	2400	388	1020	2400	388	1020	3500	388	1020	3500	388			
CIRCLING	1180	1	535	1180	1	535	1180	1 1/2	535	1240	2	595			

**CHANGES - REASONS**  
1. CHANGED MAX SPEED AT COBBO FROM 200 KIAS TO 210 KIAS. - ATC REQUEST.

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

**FLIGHT CHECKED BY**  
PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:  
FLIGHT INSPECTION REVIEW NOT REQUIRED

**DEVELOPED BY**  
JIMMY S. HUGHES  
*Digitally signed by*  
**JIMMY S HUGHES**  
Nov 09, 2018

**APPROVED BY**  
JULIE MORGAN

**OFFICE**  
**DATE**  
*Digitally signed by*  
**ROBERT G HAMILTON**  
Nov 13, 2018

**OFFICE**  
AJV-5422  
**DATE**  
08/31/2018

**OFFICE**  
AJV-5420  
**DATE**  
*Digitally signed by*  
**ROBERT G HAMILTON**  
Nov 13, 2018  
**TITLE**  
MANAGER

