

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							ILS - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.29									Bearings, headings, courses, 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 in feet RVR.					
TERMINAL ROUTES												MISSED APPROACH									
FROM			TO			COURSE AND DISTANCE			ALTITUDE			ILS: DA LOC: 5.11 NM AFTER TABUY INT/I-YIP 6.51 DME OR AT I-YIP 1.40 DME CLIMB TO 1200 THEN CLIMBING LEFT TURN TO 3000 DIRECT SVM VORTAC AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 1200 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 200 AND CRL R-318 DIRECT TABUY INT/I-YIP 6.51 DME AND HOLD. ADDITIONAL FLIGHT DATA: HOLD NW, LT, 114.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SW TABUY INT/I-YIP 6.51 DME, LT, 052.70 INBOUND. FAS OBST: 944 AAO 421100N/0833727W. 980 AAO 421025N/0833840W. CHART VDP AT 2.74 DME* DISTANCE VDP TO THLD 1.33 NM. *LOC ONLY. CHART CIRCLING ICON. CHART IN PLANVIEW: (CFFFM) 420612.39N/0834315.18W.									
SVM VORTAC			TABUY INT/I-YIP 6.51 DME (TF) (FB) (RNP 1.00)			188.26 / 14.24			2400												
1. PT <u>R</u> SIDE OF COURSE <u>232.70</u> OUTBOUND <u>2400</u> FT WITHIN <u>10</u> MILES OF <u>TABUY</u> (IAF) 2. _____ 3. FAC: <u>052.70</u> FAF: <u>TABUY INT/I-YIP 6.51 DME</u> DIST FAF TO MAP: <u>5.11</u> THLD: <u>5.11</u> 4. MIN. ALT: <u>TABUY 2400</u> 5. DIST TO THLD FROM OM: <u>-</u> MM: <u>-</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: <u>1111</u> 6. MIN GS INCPT: <u>2400</u> GS ALT AT: <u>TABUY 2400</u> OM: <u>-</u> MM: <u>-</u> IM: <u>-</u> 7. GS ANGLE: <u>3.00</u> TCH: <u>59.0</u> 8. MSA FROM: <u>DXO VOR/DME 2800</u>																					
												MAG VAR: 6W EPOCH YEAR: 1995									
MINIMUMS																					
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A		ILS: STANDARD #		LOC: STANDARD @										
CATEGORY =====>		A			B			C			D			E							
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA						
S-ILS 05R	916	1800	200	916	1800	200	916	1800	200	916	1800	200									
S-LOC 05R	1200	2400	484	1200	2400	484	1200	5000	484	1200	5000	484									
SIDESTEP 05L	1240	1	524	1240	1	524	1240	1 1/2	524	1240	2	524									
CIRCLING	1220	1	504	1220	1	504	1220	1 1/2	504	1400	2 1/4	684									
NOTES: CHART NOTE: CIRCLING TO RWY 09 NA AT NIGHT. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SVM VORTAC ON V26 NORTHWEST BOUND. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 05R CAT C/D VISIBILITY TO 1 3/8 SM.																					
CITY AND STATE DETROIT, MI			ELEVATION: 716 AIRPORT NAME: WILLOW RUN			TDZE: 05R 716 TDZE: 05L 716			FACILITY IDENTIFIER: I-YIP			PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 5R, AMDT 16				SUP: AMDT: 15 DATED 07/05/2007					



ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
				ROUTINE	
COORDINATED WITH:					
ATA	AAT	ALPA	APA	AOPA	NBAA
<div><input checked="" type="checkbox"/></div>	<div><input type="checkbox"/></div>	<div><input checked="" type="checkbox"/></div>	<div><input checked="" type="checkbox"/></div>	<div><input checked="" type="checkbox"/></div>	<div><input checked="" type="checkbox"/></div>
OTHER (specify) ZOB, DTW APP CON, YIP ATCT, AMGR					
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY <i>Digitally signed by</i>					
NAME:				FIFO	DATE:
ROBERT GRIM				AJV-5431	06/29/2017
ROBERT GRIM				Sep 06, 2017	
APPROVED BY					
NAME:				FIFO	DATE:
PATRICK MULQUEEN				AJV-5430	
MANAGER					
CHANGES:					
<p>1. YIPPS LOM REPLACED WITH TABUY IN THE PROCEDURE.</p> <p>2. ALTERNATE MISSED APPROACH CLEARANCE LIMIT INSTRUCTIONS CHANGED FROM CLIMB TO 1200, THEN CLIMBING LEFT TURN TO 3000 DIRECT YIPPS LOM /INT/1-YIP 6.34 DME AND HOLD (SW, LT, 052.711NBOUND), TO CLIMB TO 1200 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 200 AND CRL R-318 DIRECT TABUY INT/I-YIP 6.51 DME AND HOLD.</p> <p>3. PROCEDURE TURN COURSE AND HOLD POINT CHANGED FROM YIPPS LOM, 233.10 OUTBOUND TO TABUY, 232.70 OUTBOUND.</p> <p>4. FEEDER ROUTE CHANGED FROM SVM VORTAC TO YIPPS LOM/187.96/14.13 TO SVM VORTAC TO TABUY/188.26/14.24.</p> <p>5. MSA CENTER CHANGED FROM YI LOM TO DXO VOR/DME.</p> <p>6. FINAL COURSE CHANGED FROM 052.71 TO 052.70.</p> <p>7. LENGTH OF FINAL SEGMENT CHANGED FROM 5.04 TO 5.11.</p> <p>8. LOCALIZER MISSED APPROACH POINT CHANGED FROM 5.04 MILES AFTER YIPPS LOM/I-YIP 6.38 OR AT I-YIP 1.37 DME FIX TO 5.11 NM AFTER TABUY INT/I-YIP 6.51 DME OR AT I-YIP 1.40 DME.</p> <p>9. ADDED NOTE, CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA BLOCK.</p> <p>10. ADDED NOTE: CHART NOTE: CIRCLING TO RWY 09 NA AT NIGHT.</p> <p>11. ADDED CNF AT MISSED APPROACH POINT.</p> <p>(SEE FORM 8260-10)</p>					
REASONS:					
<p>1-5. YIPPS LOM DECOMMISSIONING.</p> <p>6-7. FAF FIX MOVED 400 FT TO MATCH IPDS PFAF LOCATION AND FINAL COURSE ALIGNMENT DATA CHANGE.</p> <p>8. YIPPS LOM DECOMMISSIONING. FAF FIX MOVED 400 FT TO MATCH IPDS PFAF LOCATION.</p> <p>9. NEW CIRCLING AREA RADIUS.</p> <p>10. 20:1 PENETRATIONS IN CIRCLING VISUAL AREA.</p> <p>11. FOR CODING (ARINC) PURPOSES.</p> <p>12. TO MATCH ILS PROCEDURE TCH.</p> <p>13. FINAL APPROACH SURFACE IS "ASC". PREVIOUS AMENDMENT FINAL CONTROLLING OBS (TREE) REMOVED.</p> <p>14. CONTROLLING OBSTACLE CHANGED FROM 801 TREE TO 940 AAO.</p> <p>15. NEW EXPANDED CIRCLING AREA RADII AND NEW CONTROLLING OBSTACLES.</p> <p>16. CAT D CIRCLING AREA OF 684 AND VISIBILITY OF 2 1/2 SM.</p> <p>17. 20:1 PENETRATIONS REMOVED FROM STRAIGHT-IN VISUAL AREA.</p> <p>18. IAW 8260.19G 8-2-5 E</p> <p>19. PER CURRENT CRITERIA.</p> <p>20. CONTROLLING OBSTACLE CHANGED FROM 801 MSL T-L TO 990 MSL AAO.</p>					



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
ILS - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29

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CITY AND STATE
DETROIT, MI

ELEVATION: 716 TDZE: 05R 716
AIRPORT NAME: TDZE: 05L 716
WILLOW RUN

FACILITY
IDENTIFIER:
I-YIP

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:
ILS OR LOC RWY 5R, AMDT 16

SUP:
AMDT: 15
DATED: 07/05/2007

QUALITY
10
CHECKED

ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
COORDINATED WITH:					
ATA <div><input type="checkbox"/></div>		AAT <div><input type="checkbox"/></div>	ALPA <div><input type="checkbox"/></div>	APA <div><input type="checkbox"/></div>	AOPA <div><input type="checkbox"/></div>
NBAA <div><input type="checkbox"/></div>		OTHER (specify) <div><input type="checkbox"/></div>			
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME:				FIFO	DATE:
APPROVED BY					
NAME:				FIFO	DATE:
<div>CHANGES:</div> <div>CHANGES CONT.</div> <div>12. TCH CHANGED FROM 56.9 TO 59.0.</div> <div>13. S-ILS 05R DA/HAT CHANGED FROM 965/250 TO 916/200 ALL CATS AND VISIBILITIES FROM RVR 4000 TO RVR 1800 ALL CATS. .</div> <div>14. S-LOC 05R MDA/HAT CHANGED FROM 1120/405 ALL CATS TO 1200/484 ALL CATS. VISIBILITY CHANGED FROM RVR 4000 CAT A-B TO RVR 2400 CAT A-B AND RVR 4000 CAT C-D TO RVR 5000 CAT C-D.</div> <div>15. CIRCLING MDA/HAA CHANGED FROM 1120/404 ALL CATS TO 1220/504 CATS A-C, 1400/684 CAT D.</div> <div>16. ADDED NONSTANDARD ALTERNATE MINIMUMS.</div> <div>17. ADDED VDP TO PROCEDURE.</div> <div>18. ADDED NOTE: CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SVM VORTAC ON V26 NORTHWEST BOUND.</div> <div>19. CHANGED APPROACH LIGHTS INOP NOTE FROM FOR INOPERATIVE MALSR INCREASE S-LOC-5R CAT A AND B VISIBILITY TO RVR 5000. INOPERATIVE TABLE DOES NOT APPLY TO S-ILS ALL CATS TO CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 05R CAT C/D VISIBILITY TO 1 3/8 SM.</div> <div>20. CHANGED SIDESTEP 05L MDA/HAT FROM 1120/404 TO 1220/504 ALL CATS.</div>					
<div>REASONS:</div>					



STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD																			
PART - A OBSTRUCTION DATA																			
1. APP SEGMENT		FROM		TO		OBSTRUCTION		COORDINATES		ELEV. MSL	ROC	ALT. ADJUSTMENTS		MIN. ALT.					
FEEDER		SVM VORTAC		TABUY INT/I-YIP		1. GENERAL_UTILITY		422403.80N/0833325.40W		1308 (2C)	1000			2400					
				6.51 DME		(26-027127)													
						2. TERRAIN		422157.00N/0833948.00W		1054 (1100)		AS1000	2100						
INTERMEDIATE: PT		10 NM		TABUY INT/I-YIP		3. AAO		420621.00N/0835048.00W		1057 (4E)	500			1600					
				6.51 DME		4. TERRAIN		420621.00N/0835048.00W		857 (900)		AS1500	2400						
FINAL: ILS		TABUY INT/I-YIP		RW05R							ASC			916/200					
		6.51 DME																	
FINAL: LOC		TABUY INT/I-YIP		5.11 NM AFTER		5. AAO		421100.00N/0833727.00W		944 (2C)	250			1200					
		6.51 DME		TABUY INT/I-YIP															
				6.51 DME OR AT															
				I-YIP 1.40 DME															
FINAL: SIDESTEP		TABUY INT/I-YIP		RW05L		6. AAO		421029.84N/0833849.57W		990 (2C)	250			1240					
		6.51 DME																	
2. PROCEDURE TURN		TABUY		10 NM		7. TOWER (26-000689)		421802.75N/0833827.86W		1249 (2C)	1000	AT151	2400						
						8. TERRAIN		421118.00N/0835512.00W		1034 (1000)		AS1000	2000						
3. MISSED APPROACH	MAP:		DA / 5.11 NM		SVM VORTAC						ASC	3000							
			AFTER TABUY				1. GENERAL_UTILITY		422403.80N/0833325.40W		1308 (2C)	1000	2400						
	ELEV:		745/950				9. TERRAIN		422403.00N/0833315.00W		1018 (1000)		AS1500	2500					
4. CIRCLING AREA		DISTANCE		HT. ABV. ARPT.															
CATEGORY A		1.3 NM		REQUIRED	350	ACTUAL	504	11. TOWER (26-002998)		421431.78N/0833411.47W		903 (1A)	300	1220					
CATEGORY B		1.5 NM			450		504	11. TOWER (26-002998)		421431.78N/0833411.47W		903 (1A)	300	1220					
CATEGORY C		1.7 NM			450		504	11. TOWER (26-002998)		421431.78N/0833411.47W		903 (1A)	300	1220					
CATEGORY D		2.3 NM			550		684	12. TOWER (26-001164)		421540.00N/0833711.00W		1040 (5D)	300	AC50	1400				
CATEGORY E		4.5 NM			550														
5. MINIMUM SAFE ALTITUDES											PRIMARY NAVAID: DXO VOR/DME								
SECTOR		OBSTRUCTION		BRG/DIST		ELEVATION (MSL)		M S A		SECTOR		OBSTRUCTION		BRG/DIST		ELEVATION (MSL)		M S A	
360-360		TWR (26-000324)		014/16.4		1750 (4D)		2800											
CITY AND STATE				ELEVATION: 716				FACILITY				PROCEDURE AND AMENDMENT NO:				REGION			
DETROIT, MI				AIRPORT NAME:				I-YIP				ILS OR LOC RWY 5R, AMDT 16				AGL			
				WILLOW RUN															

QUALITY
10

CHECKED

PART B - SUPPLEMENTAL DATA										PART C - REMARKS: PRECIPITOUS TERRAIN EVALUATION COMPLETED. KYIP ASOS IS ON WMSCR. BACKUP ALTIMETER NOT REQUIRED PER FPT DUE TO REDUNDANT WEATHER SOURCES. ORDER 8260.3 CHAPTER 2 APPLIED TO 980 AAO 421025N/0833840W VEGETATION HEIGHT 100 FEET PER FPT. VISUAL PORTION OF FINAL PENETRATIONS: CIRCLING RWY 09: 20:1 718 SIGN (26-026598) 421439.67N/0833230.19W (2.50) 717 SIGN (26-026599) 421437.05N/0833231.11W (1.47) 738 ELEC SYS (26-026684) 421344.62N/0833231.57W (5.02) AND 724 NAVAID (26-086311) 421347.15N/0833228.02W (1.93) HAVE BEEN ELIMINATED FROM VISUAL SURFACE PENETRATION CONSIDERATION. THESE OBSTACLES ARE ASSOCIATED WITH THE APPROACH LIGHTING SYSTEM AND ARE NOT CONSIDERED PENETRATIONS. PROCEDURAL TCH 59.00 UTILIZED/ACTUAL TCH IS 59.025 FT. VGSI DATA: NONE ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED. CAT A: 1.30NM CAT B: 1.83NM CAT C: 2.88NM CAT D: 3.76NM SEE ATTACHED AIRSPACE LETTER. MISSED APPROACH OBSTACLES CONT. ALTERNATE: ASC 3000 7. TOWER (26-000689) 421802.75N/0833827.86W 1249 (2C) 1000 AT145 2400 10. TERRAIN 421015.00N/0834215.00W 847 (800) AS1500 2300																													
1. COMMUNICATIONS WITH:				2. WEATHER SERVICE				3. ALTIMETER SETTING																															
ZOB ARTCC YIP TOWER DTW APP CON						N W S		OTHER: ASOS												SOURCE:KYIP																			
						F A A														DISTANCE:																			
						A / C														HOURS REMOTE OPERATION: 0/YES																			
SATISFACTORY ON:																				LOCATION: KYIP										ADJUSTMENT: 0									
4. MONITOR STATUS		PRIMARY NAVAID: I-YIP																																					
		MONITOR POINT: YIP ATCT																																					
		HRS OPTN:		CAT 1		24														CAT 3																			
5. APPROACH & RUNWAY LIGHTING				ALS																																			
				(S) SALS																																			
		X		MALSR 05R, 23L																																			
		X		HIRL 05R, 23L																																			
		X		MIRL 05L, 09, 23R, 27																																			
				REIL																																			
		X		TDZ 05R																																			
		X		C/L 05R, 23L																																			
X		OTHER (SPECIFY) PAPI-4L 05L, 09, 23L, 23R																																					
6. RUNWAY MARKINGS		BASIC																																					
		ALL WEATHER PIR-F 05R, 23L																																					
		INSTRUMENT NPI-F 05L, 09, 23R, 27																																					
7. RUNWAY VISUAL RANGE		APPROACH 05R																																					
		MIDFIELD																																					
		ROLL OUT 23L																																					
8. GLIDE PATH		GP ANGLE: 3.00								ELEV RWY THRESHOLD:714.3																													
		DISTANCE FROM RWY: 1111								ELEV GP ANTENNA: 712.7																													
		THRESHOLD CROSSING HEIGHT:59.0																																					
9. FINAL APPROACH COURSE AIMING				X		RUNWAY THRESHOLD														FT. FROM THRESHOLD																			
				X		ON CENTERLINE														FT. FROM CENTERLINE																			
10. WAIVERS: NONE																																							
PART D - PREPARED BY: ROBERT GRIM										DATE: 06/29/2017																													
TITLE: AERONAUTICAL INFORMATION SPECIALIST										OFFICE: AJV-5431																													

