

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: 6.04 NM AFTER ADDUM/I-JMJ 5.84 DME/RADAR OR AT I-JMJ 0.20 DME CLIMB TO 2100 THEN CLIMBING LEFT TURN TO 4000 ON UBG R-360 TO UBG VOR/DME AND HOLD. ALTERNATE MA (DO NOT CHART): CLIMB TO 2100 THEN CLIMBING LEFT TURN TO 4000 ON BTG R-194 TO ENDZZ/BTG 23.00 DME AND HOLD (DME REQUIRED). ADDITIONAL FLIGHT DATA: HOLD S, LT, 003.00 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD N ENDZZ/BTG 23.00 DME, RT, 193.68 INBOUND. CHART FAS OBST: 323 TANK 453242N/1223129W 419 AAO 453220N/1223016W CHART VDP AT 1.01 DME* DISTANCE VDP TO THLD 1.20 NM. *LOC ONLY. CHART IN PLANVIEW: ENDZZ/BTG 23.00 DME. CHART MANDATORY 6700 AT SHAFR. CHART CIRCLING ICON. MAG VAR: 16E EPOCH YEAR: 2010										
MAVER				WALAP (TF) (FB) (RNP 2.00)			036.84 / 11.79				4000												
WALAP (IAF)				HPSTR (TF) (FB) (RNP 1.00)			357.15 / 14.69				3700												
SHAFR (IAF)				REEDI (TF) (FB) (RNP 1.00)			218.72 / 7.29				5700												
REEDI (IAF)				HPSTR (TF) (FB) (RNP 1.00)			253.59 / 5.28				3700												
HPSTR/I-JMJ 13.20 DME/RADAR (IF)				HANAH/I-JMJ 8.84 DME/RADAR			283.03 / 4.36 (I-JMJ R-283)				2900												
HANAH/I-JMJ 8.84 DME/RADAR				ADDUM/I-JMJ 5.84 DME/RADAR			283.03 / 3.00 (I-JMJ R-283)				2000												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)																							
2. PROFILE STARTS AT HPSTR/I-JMJ 13.20 DME/RADAR																							
3. FAC: 283.03 FAF: ADDUM/I-JMJ 5.84 DME/RADAR DIST FAF TO MAP: 6.04 THLD: 6.04																							
4. MIN. ALT: HPSTR 3700, HANAH 2900, ADDUM 2000, YINUP/I-JMJ 3.60 DME/RADAR 1280*																							
5. DIST TO THLD FROM OM: - MM: - IM: - 150 HAT: - 100 HAT: - GS ANT: 1049																							
6. MIN GS INCPT: 2000 GS ALT AT: ADDUM 2000 OM: - MM: - IM: -																							
7. GS ANGLE: 3.00 TCH: 54.8																							
8. MSA FROM: BTG VORTAC 120-300 3400, 300-120 6000																							
MINIMUMS																							
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A			ILS: #			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 28L	306	2400	283	306	2400	283	306	2400	283	306	2400	283	306	2400	283								
S-LOC 28L	480	2400	457	480	2400	457	480	4500	457	480	4500	457	480	4500	457								
CIRCLING	720	1	689	760	1	729	1060	3	1029	1060	3	1029	1140	3	1109								
NOTES: CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 580. CHART NOTE: DME OR RADAR REQUIRED. CHART PLANVIEW NOTE ADJACENT TO MAVER: RNAV 1-GPS REQUIRED. (CONTINUED ON PAGE 2)																							
CITY AND STATE PORTLAND, OR				ELEVATION: 31 TDZE: 23 AIRPORT NAME: PORTLAND INTL				FACILITY IDENTIFIER: I-JMJ		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: ILS OR LOC RWY 28L, AMDT 5					SUP: AMDT: 4 DATED 06/25/2015								



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 <div><input checked="" type="checkbox"/></div>		AAT <div><input type="checkbox"/></div>		ALPA <div><input checked="" type="checkbox"/></div>	
APA <div><input checked="" type="checkbox"/></div>		AOPA <div><input checked="" type="checkbox"/></div>		NBAA <div><input checked="" type="checkbox"/></div>	
OTHER (specify) <div><input checked="" type="checkbox"/></div>		ZSE, PDX ATCT, ARPT MGR, ST AERO			
FLIGHT CHECKED BY					
NAME: <div>Digitally signed by JAMES MICHAEL MEEK DION E LANCIA</div>				FIFO FIOG	DATE: 11/01/2017
Dec 27, 2017 DEVELOPED BY					
NAME: <div>Digitally signed by HEIDI SNIDER DION E LANCIA</div>				FIFO AJV-5423	DATE: 08/23/2017
Dec 27, 2017 APPROVED BY					
NAME: <div>Digitally signed by JULIE A. MORGAN DION E LANCIA</div>				FIFO AJV-5420	DATE:
MANAGER					
CHANGES: Dec 27, 2017					
<div>1. ADDED FEEDER SEGMENT FROM MAVER. 2. ADDED INITIAL SEGMENT FROM WALAP. 3. CHANGED SHAFR SEGMENT FROM A FEEDER, ALT 6300 TO AN INITIAL, ALT 5700. 4. UPDATED FAS OBS FROM 136 TOWER 453339N/1223129W TO 323 TANK 453242N/1223129W. 5. UPDATED LINE 4 MIN ALT FROM YINUP/I-JMJ 2.9 DME/RADAR 1060 TO YINUP/I-JMJ 3.6 DME/RADAR 1280. 6. UPDATED LINE 8 MSA FROM BTG VORTAC 120-300 3500, 300-120 6200 TO BTG VORTAC 120-300 3400, 300-120 6000. 7. ADDED CHART SPEED ICON IN PLANVIEW AT SHAFR : MAX 210 KIAS. 8. ADDED CHART PLANVIEW NOTE ADJACENT TO MAVER: RNAV 1-GPS REQUIRED 9. UPDATE NOTE FROM CHART PLANVIEW NOTE ADJACENT TO SHAFR: GPS REQUIRED TO CHART PLANVIEW NOTE ADJACENT TO SHAFR: RNAV 1 OR GPS REQUIRED. 10. UPDATED CHART NOTE FROM FOR INOPERATIVE MALSR, INCREASE S-ILS 28L ALL CATS VISIBILITY TO RVR 4500 AND INCREASE S-LOC 28L CAT E VISIBILITY TO 1 3/8 MILE. TO FOR INOPERATIVE ALS, INCREASE S-ILS 28L CAT E VISIBILITY TO RVR 4500 AND INCREASE S-LOC 28L CAT E VISIBILITY TO 1 3/8 SM. 11. CHANGED NOTE FROM "SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 28R" TO "SIMULTANEOUS APPROACH AUTHORIZED". 12. ADDED NOTE: PROCEDURE NA FOR ARRIVALS AT MAVER ON V448 SOUTHBOUND AND ON V165 EASTBOUND. (SEE FORM 8260-10)</div>					
REASONS:					
<div>1-2. IAW ATC REQUEST/FPT CHECKLIST. 3. CONNECT TO HHOOD STAR. 4, 6. CONTROLLING OBSTACLE EVALUATION. 5. OPTIMUM SDF ALT LOCATION AT OR ABOVE CAT E CIRCLING MDA. 7. TO MATCH SPEED RESTRICTION ON HHOOD STAR. 8. RNAV TRANSITION. 9, 11. IAW 8260-19G CH 8 10. VIS CK CALCULATION 12. TURN EXCEEDS 120 DEGREES 13. USED RNAV 1-DME/DME/IRU OR GPS REQUIRED ON RNAV TRANSITION FIXES. PDF EDITS: 8260-3 TERMINAL ROUTES TO HPSTR: REMOVED I-JMJ 13.20 DME/RADAR - RNAV TRANSITIONS.</div>					
<div>12/7/2017: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 11/15/2017. (SEE FORM 8260-10)</div>					



**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.

NOTES, (CONT.):

CHART PLANVIEW NOTE ADJACENT TO SHAFR: RNAV 1-GPS REQUIRED.

CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 28L CAT E VISIBILITY TO RVR 4500 AND INCREASE S-LOC 28L CAT E VISIBILITY TO 1 3/8 SM.

CHART SPEED ICON IN PLANVIEW AT SHAFR: MAX 210 KIAS.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT MAVER ON V448 SOUTHBOUND AND ON V165 EASTBOUND.

QUALITY
4
CHECKED

CITY AND STATE

PORTLAND, OR

ELEVATION: 31

TDZE: 23

AIRPORT NAME:

PORTLAND INTL

FACILITY
IDENTIFIER:

I-JMJ

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 28L, AMDT 5

SUP:

AMDT: 4

DATED: 06/25/2015

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:
CHANGES: CHANGES CONT. 13. DELETED CHART PLANVIEW NOTE: RADAR REQUIRED.					
REASONS: REASONS CONT. 1. REMOVED SHAFR 6700 FROM LINE 4 MIN. ALT. 12/27/2017: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 12/08/2017. 1. CHANGED NOTE FROM MAVER: RNAV 1-DME/DME/IRU OR GPS REQUIRED TO MAVER: RNAV 1-GPS REQUIRED. 2. CHANGED NOTE FROM SHAFR: RNAV 1-DME/DME/IRU OR GPS REQUIRED TO SHAFR: RNAV 1-GPS REQUIRED. 3. UPDATED CHANGE ITEM 8 TO REFLECT MAVER: RNAV 1-GPS REQUIRED. 4. UPDATED CHANGE ITEM 9 TO REFLECT SHAFR: RNAV 1-GPS REQUIRED.					



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	MAVER	WALAP	1. AAO	451415.00N/1222630.00W	1903 (4E)	2000		4000	
			2. TERRAIN	451415.00N/1222630.00W	1703 (1700)		AS1500	3200	
INITIAL	WALAP	HPSTR	3. AAO	451421.00N/1222627.00W	1897 (4E)	1000	AT803	3700	
			4. TERRAIN	451421.00N/1222627.00W	1697 (1700)		AS1500	3200	
INITIAL	SHAFR	REEDI	5. AAO	453151.00N/1220524.00W	4177 (4E)	1000	PR380 AT143	5700	
			6. TERRAIN	453151.00N/1220524.00W	3976 (4000)		AS1500	5500	
INITIAL	REEDI	HPSTR	7. AAO	452819.50N/1220955.04W	2401 (2C)	1000	AT139 PR160	3700	
			8. TERRAIN	452833.00N/1221103.00W	1710 (1700)		AS1500	3200	
INTERMEDIATE	HPSTR/I-JMJ 13.20	HANAH/I-JMJ 8.84	9. AAO	452712.00N/1222339.00W	1234 (4E)	500	AT1068 AC98	2900	
	DME/RADAR	DME/RADAR	10. TERRAIN	452712.00N/1222339.00W	1034 (1000)		AS1500	2500	
INTERMEDIATE:	HANAH/I-JMJ 8.84	ADDUM/I-JMJ 5.84	11. AAO	452824.00N/1222527.00W	1195 (4E)	500	AC98 AT207	2000	
STEPDOWN	DME/RADAR	DME/RADAR	12. TERRAIN	452912.00N/1222554.00W	857 (900)		AS1000	1900	
FINAL: ILS	ADDUM/I-JMJ 5.84	RW28L				ASC	MA83	306/283	
	DME/RADAR								
2. PROCEDURE TURN									
3. MISSED APPROACH	MAP: DA / 6.04 NM	UBG VOR/DME	15. ATCT (41-020289)	453515.16N/1223520.69W	291 (1A)	ASC		4000	
	AFTER		16. AAO	452348.00N/1230324.00W	1834 (4E)	1000		2900	
	ELEV: 102/230		17. TERRAIN	452348.00N/1230324.00W	1634 (1600)		AS1500	3100	
4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT.							
CATEGORY A	1.3 NM	REQUIRED 350	ACTUAL 689	18. TREE (41-025144)	453657.36N/1223520.82W	415 (1B)	300	720	
CATEGORY B	1.5 NM	450	729	19. TREE (41-025128)	453657.13N/1223423.53W	447 (1B)	300	760	
CATEGORY C	1.7 NM	450	1029	20. TREE	453247.28N/1223357.30W	742 (2A)	300	1060	
CATEGORY D	2.3 NM	550	1029	20. TREE	453247.28N/1223357.30W	742 (2A)	300	1060	
CATEGORY E	4.5 NM	550	1109	21. AAO	453046.52N/1223534.67W	840 (2C)	300	1140	
5. MINIMUM SAFE ALTITUDES									
SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
120-300	AAO	269/19.7	2392 (4E)	3400					
300-120	AAO	005/27.8	5000 (4E)	6000					
CITY AND STATE	ELEVATION: 31	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION					
PORTLAND, OR	AIRPORT NAME: PORTLAND INTL	I-JMJ	ILS OR LOC RWY 28L, AMDT 5	ANM					

PART B - SUPPLEMENTAL DATA										PART C - REMARKS:			
1. COMMUNICATIONS WITH:				2. WEATHER SERVICE				3. ALTIMETER SETTING				PRECIPITOUS TERRAIN EVALUATION COMPLETED.	
ZSE ARTCC PDX APP CON PDX TOWER				N W S		OTHER: ASOS		SOURCE:KPDX				PROCEDURE CONNECTED TO HHOOD STAR	
				F A A				DISTANCE:				SDF ALT AT OR ABOVE CAT E CIRCLING MINS	
				A / C				HOURS REMOTE OPERATION: O/YES				ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED. CAT A: 1.30NM CAT B: 1.81NM CAT C: 2.84NM CAT D: 3.71NM CAT E: 4.64NM	
SATISFACTORY ON:				LOCATION: KPDX				ADJUSTMENT: 0				NO ADDITIONAL AIRSPACE REQUIRED.	
4. MONITOR STATUS		PRIMARY NAVAID:		I-JMJ								BACKUP ALTIMETER NOT REQUIRED DUE TO REDUNDANT WEATHER.	
		MONITOR POINT:		KPDX ATCT								VEGETATION USED: 130 FT.	
		HRS OPTN:	CAT 1	24								VGSI DATA: 72.3/3.00	
5. APPROACH & RUNWAY LIGHTING		X		ALSF-2 10R								ORDER 8260.3 CHAPTER 2 APPLIED TO 419 AAO 453220N/1223016W	
				(S) SALS								MISSED APPROACH OBSTACLES CONT. ALTERNATE:	
		X		MALSR 10L, 28L, 28R								15. ATCT (41-020289) 453515.16N/1223520.69W 291 (1A) ASC 4000	
		X		HIRL 10L, 10R, 28L, 28R								22. TOWER (41-000040) 453120.00N/1224450.00W 2049 (1D) 1000 3100	
		X		MIRL 03, 21								23. TERRAIN 453136.00N/1224506.00W 1355 (1400) 2900	
		X		REIL 03, 21									
		X		TDZ 10R									
		X		C/L 10L, 10R, 28L, 28R									
6. RUNWAY MARKINGS		X		OTHER (SPECIFY) PAPI-4R 10R, 21, 28R PAPI-4L 03, 10L, 28L									
7. RUNWAY VISUAL RANGE		BASIC											
		ALL WEATHER		PIR-G 10L, 10R, 28L, 28R									
		INSTRUMENT		NPI-G 03, 21									
8. GLIDE PATH		APPROACH		10L, 10R, 28L, 28R									
		MIDFIELD		10L, 10R, 28L, 28R									
		ROLL OUT		10L, 10R, 28L, 28R									
9. FINAL APPROACH COURSE AIMING		GP ANGLE: 3.00		ELEV RWY THRESHOLD:22.7									
		DISTANCE FROM RWY: 1049		ELEV GP ANTENNA: 19.9									
				THRESHOLD CROSSING HEIGHT:54.8									
10. WAIVERS: NONE		X		RUNWAY THRESHOLD								FT. FROM THRESHOLD	
		X		ON CENTERLINE								FT. FROM CENTERLINE	
PART D - PREPARED BY: HEIDI SNIDER												DATE: 08/23/2017	
TITLE: AERONAUTICAL INFORMATION SPECIALIST												OFFICE: AJV-5423	

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD		
--	--	--

PART - A OBSTRUCTION DATA

[illegible]

PART B - SUPPLEMENTAL DATA										PART C - REMARKS:	
1. COMMUNICATIONS WITH:				2. WEATHER SERVICE			3. ALTIMETER SETTING				
SATISFACTORY ON:					N W S	OTHER:		SOURCE:			
					F A A			DISTANCE:			
					A / C			HOURS REMOTE OPERATION:			
	V H F		U H F		H F	LOCATION:			ADJUSTMENT:		
4. MONITOR STATUS		PRIMARY NAVAID:									
		MONITOR POINT:									
		HRS	CAT 1								
		OPTN:	CAT 3								
5. APPROACH & RUNWAY LIGHTING			ALS								
			(S) SALS								
			MALS								
			HIRL								
			MIRL								
			REIL								
			TDZ								
			C/LINE								
6. RUNWAY MARKINGS		BASIC									
		ALL WEATHER									
		INSTRUMENT									
7. RUNWAY VISUAL RANGE		APPROACH									
		MIDFIELD									
		ROLL OUT									
8. GLIDE PATH		GP ANGLE:				ELEV RWY THRESHOLD:					
		DISTANCE FROM RWY:				ELEV GP ANTENNA:					
						THRESHOLD CROSSING HEIGHT:					
9. FINAL APPROACH COURSE AIMING				RUNWAY THRESHOLD					FT. FROM THRESHOLD		
				ON CENTERLINE					FT. FROM CENTERLINE		
10. WAIVERS:											
PART D - PREPARED BY:										DATE:	
TITLE:										OFFICE:	