FEDERAL AVIATION ADMINISTRATION FLIGHT STANDARDS SERVICE TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP) TITLE 14 CFR PART 97.37

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 statute miles or feet RVR unless otherwise indicated.

AIRPORTAIRPORT IDCITYSTATEAMDT NOACTUAL EFFECTIVE DATEPIERCE COUNTY-THUN FIELDKPLUPUYALLUPWA427 JANUARY 2022

TAKEOFF MINIMUMS:

RWY 17: 300-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 900.

RWY 35: 300-1 1/8 WITH MINIMUM CLIMB OF 270 FT PER NM TO 1000.

TEXTUAL DEPARTURE PROCEDURES:

RWY 17: CLIMB ON HEADING 185 TO INTERCEPT SEA R-168 TO ALDER INT/SEA 37.09 DME AND HOLD. CONTINUE CLIMB-IN-HOLDING PATTERN (HOLD NORTH, RIGHT TURN, 168.00 INBOUND) TO CROSS ALDER AT OR ABOVE THE MEA FOR DIRECTION OF FLIGHT. DO NOT EXCEED 175K WHEN CLIMB-IN-HOLD.

RWY 35: CLIMBING LEFT TURN TO INTERCEPT SEA R-168 TO ALDER INT/SEA 37.09 DME AND HOLD. CONTINUE CLIMB-IN-HOLDING PATTERN (HOLD NORTH, RIGHT TURN, 168.00 INBOUND) TO CROSS ALDER AT OR ABOVE MEA FOR DIRECTION OF FLIGHT. DO NOT EXCEED 175K WHEN CLIMB-IN-HOLD.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 17, SIGN 9 FT FROM DER, 70 FT LEFT OF CENTERLINE, 2 FT AGL/537 FT MSL. SIGN 10 FT FROM DER, 69 FT RIGHT OF CENTERLINE, 2 FT AGL/537 FT MSL. FENCE 51 FT FROM DER, 250 FT LEFT OF CENTERLINE, 6 FT AGL/540 FT MSL. POLE 69 FT FROM DER, 312 FT LEFT OF CENTERLINE, 18 FT AGL/552 FT MSL. POLE, TRAVERSE WAY BEGINNING 86 FT FROM DER, 454 FT LEFT OF CENTERLINE, UP TO 33 FT AGL/567 FT MSL. BUILDINGS, TRAVERSE WAY BEGINNING 130 FT FROM DER, 41 FT LEFT OF CENTERLINE, UP TO 41 FT AGL/575 FT MSL. TRAVERSE WAYS BEGINNING 184 FT FROM DER, 459 FT RIGHT OF CENTERLINE, UP TO 542 FT MSL. TRAVERSE WAYS BEGINNING 249 FT FROM DER, 150 FT RIGHT OF CENTERLINE, UP TO 545 FT MSL. TREES, TERRAIN, TRAVERSE WAYS, GENERAL UTILITY BEGINNING 351 FT FROM DER, 10 FT LEFT OF CENTERLINE, UP TO 58 FT AGL/589 FT MSL. TREE 409 FT FROM DER, 605 FT RIGHT OF CENTERLINE, 29 FT AGL/547 FT MSL. POLE 511 FT FROM DER, 566 FT RIGHT OF CENTERLINE, 40 FT AGL/552 FT MSL. TREE 624 FT FROM DER, 429 FT RIGHT OF CENTERLINE, 36 FT AGL/563 FT MSL. TREES BEGINNING 649 FT FROM DER, 324 FT RIGHT OF CENTERLINE, UP TO 39 FT AGL/572 FT MSL. TRAVERSE WAYS BEGINNING 1149 FT FROM DER, 398 FT RIGHT OF CENTERLINE, UP TO 574 FT MSL. TRAVERSE WAYS BEGINNING 1290 FT FROM DER, 1 FT RIGHT OF CENTERLINE, UP TO 582 FT MSL. TRAVERSE WAYS BEGINNING 1583 FT FROM DER, 386 FT RIGHT OF CENTERLINE, UP TO 583 FT MSL. TRAVERSE WAYS BEGINNING 1668 FT FROM DER, 90 FT RIGHT OF CENTERLINE, UP TO 587 FT MSL. TREES BEGINNING 2925 FT FROM DER, 580 FT LEFT OF CENTERLINE, UP TO 106 FT AGL/638 FT MSL. TREES BEGINNING 2974 FT FROM DER, 675 FT LEFT OF CENTERLINE, UP TO 106 FT AGL/642 FT MSL. TREES BEGINNING 3077 FT FROM DER, 258 FT LEFT OF CENTERLINE, UP TO 107 FT AGL/646 FT MSL. TREES BEGINNING 3161 FT FROM DER, 35 FT LEFT OF CENTERLINE, UP TO 117 FT AGL/656 FT MSL. TREES BEGINNING 3227 FT FROM DER, 73 FT LEFT OF CENTERLINE, UP TO 125 FT AGL/668 FT MSL. TREES BEGINNING 3241 FT FROM DER, 138 FT RIGHT OF CENTERLINE, UP TO 641 FT MSL. TREES BEGINNING 3361 FT FROM DER, 74 FT RIGHT OF CENTERLINE, UP TO 647 FT MSL. TREES BEGINNING 3489 FT FROM DER, 81 FT RIGHT OF CENTERLINE, UP TO 107 FT AGL/654 FT MSL. TREES BEGINNING 3572 FT FROM DER, 156 FT RIGHT OF CENTERLINE, UP TO 655 FT MSL. TREES BEGINNING 3925 FT FROM DER, 758 FT LEFT OF CENTERLINE, UP TO 672 FT MSL. TREES BEGINNING 4030 FT FROM DER, 23 FT LEFT OF CENTERLINE, UP TO 674 FT MSL. TREES BEGINNING 4103 FT FROM DER, 62 FT LEFT OF CENTERLINE, UP TO 680 FT MSL. TREE 4139 FT FROM DER, 162 FT RIGHT OF CENTERLINE, 110 FT AGL/667 FT MSL. TREES BEGINNING 4253 FT FROM DER, 119 FT RIGHT OF CENTERLINE, UP TO 116 FT AGL/668 FT MSL. TREES BEGINNING 4295 FT FROM DER, 115 FT LEFT OF CENTERLINE, UP TO 118 FT AGL/681 FT MSL. TREES BEGINNING 4723 FT FROM DER, 158 FT LEFT OF CENTERLINE, UP TO 118 FT AGL/683 FT MSL. TREES BEGINNING 5332 FT FROM DER, 865 FT LEFT OF CENTERLINE, UP TO 123 FT AGL/684 FT MSL. TREE 5698 FT FROM DER, 1207 FT LEFT OF CENTERLINE, 117 FT AGL/686 FT MSL. TREES BEGINNING 5744 FT FROM DER, 934 FT LEFT OF CENTERLINE, UP TO 113 FT AGL/689 FT MSL. TREES BEGINNING 5911 FT FROM DER, 791 FT LEFT OF CENTERLINE, UP TO 107 FT AGL/691 FT MSL. TREE 6037 FT FROM DER, 809 FT LEFT OF CENTERLINE, 106 FT AGL/692 FT MSL. TANK 1.1 NM FROM DER, 2325 FT LEFT OF CENTERLINE, 106 FT AGL/711 FT MSL. TREES BEGINNING 1.2 NM FROM DER, 770 FT LEFT OF CENTERLINE, UP TO 149 FT AGL/738 FT MSL.

NOTE: RWY 35, VERTICAL STRUCTURE, TERRAIN BEGINNING 10 FT FROM DER, 70 FT RIGHT OF CENTERLINE, UP TO 2 FT AGL/540 FT MSL. LIGHTING, TRAVERSE WAY BEGINNING 10 FT FROM DER, 19 FT LEFT OF CENTERLINE, UP TO 2 FT AGL/539 FT MSL. TREES BEGINNING 57 FT FROM DER, 270 FT RIGHT OF CENTERLINE, UP TO 609 FT MSL. TREES, BUILDING BEGINNING 349 FT FROM DER, 252 FT LEFT OF CENTERLINE, UP TO 581 FT MSL. TREES, BUILDING BEGINNING 628 FT FROM DER, 427 FT LEFT OF CENTERLINE, UP TO 55 FT AGL/585 FT MSL. TREES, POLE BEGINNING 778 FT FROM DER, 217 FT LEFT OF CENTERLINE, UP TO 636 FT MSL. TREES BEGINNING 1129 FT FROM DER, 452 FT RIGHT OF CENTERLINE, UP TO 631 FT MSL. TREES BEGINNING 1834 FT FROM DER, 435 FT RIGHT OF CENTERLINE, UP TO 135 FT AGL/663 FT MSL. TREES BEGINNING 1889 FT FROM DER, 443 FT RIGHT OF CENTERLINE, UP TO 134 FT AGL/666 FT MSL. TREES BEGINNING 2316 FT FROM DER, 505 FT RIGHT OF CENTERLINE, UP TO 143 FT AGL/697 FT MSL. TREES BEGINNING 2581 FT FROM DER, 739 FT RIGHT OF CENTERLINE, UP TO 160 FT AGL/709 FT MSL. TREES BEGINNING 2690 FT FROM DER, 5 FT RIGHT OF CENTERLINE, UP TO 157 FT AGL/716 FT MSL. TREES BEGINNING 2791 FT FROM DER, 17 FT LEFT OF CENTERLINE, UP TO 141 FT AGL/664 FT MSL. TREES BEGINNING 2959 FT FROM DER, 74 FT LEFT OF CENTERLINE, UP TO 139 FT AGL/665 FT MSL. TREES BEGINNING 3130 FT FROM DER, 55 FT LEFT OF CENTERLINE, UP TO 144 FT AGL/667 FT MSL. TREES BEGINNING 3681 FT FROM DER, 58 FT LEFT OF CENTERLINE, UP TO 141 FT AGL/671 FT MSL. TREES 5290 FT FROM DER, 1828 FT RIGHT OF CENTERLINE, UP TO 144 FT AGL/705 FT MSL. TREES

CONTROLLING OBSTACLES:

RWY 17: 738 TREE 470442.03N/1221701.65W (CEILING/CLIMB GRADIENT/CLIMB-TO ALTITUDE) 731 FT MSL TREE 470441.71N/12216.59W (VISIBILITY)

RWY 35: 697 TREE 470654.88N/1221657.97W (CEILING/LIMB GRADIENT) 705 TREE 470724.14N/1221646.38W (VISIBILITY) 716 TREE 470658.56N/1221656.68W (CLIMB-TO ALTITUDE)

OBSTACLES MANDATING ROUTE DEVELOPMENT: 14610 FT MSL AAO 465112.00N/1214536.00W

REMARKS:

175 KIAS SPEED RESTRICTION UTILIZED IN PROCEDURE DESIGN IN ORDER TO USE 200 AND 230 KNOT PATTERNS FOR A CLIMB-IN-HOLD DUE TO



AIRPORT D CITY STATE AMDT NO EFFECTIVE DATE
PIERCE COUNTY-THUN FIELD KPLU PUYALLUP WA 4 27 JANUARY 2022

TERRAIN LIMITATIONS AND MINIMUM EN ROUTE ALTITUDES ON V495 AND V204 RATHER THAN USING THE NORMAL 310 KNOT PATTERN PER THE INSTRUCTION OF 8260.3E AND IS APPLIED AS A TEXTUAL NOTE.

VCOA NOT ESTABLISHED PER ATC REQUEST. SEATTLE TRACON ATC OPTS OUT OF VCOA AS REQUIRED BY CRITERIA DUE TO REQUIRED CLIMB INTO THE ARRIVAL/DEPARTURE ROUTES AT SEA-TAC AIRPORT IN ACCORDANCE WITH 8260.46H, 2-1-1, B.(13).

RWY 35: STANDARD MINIMUMS NOT PUBLISHED AT FPT REQUEST DUE TO LIMITED USE AND TYPE OF AIRCRAFT OPERATIONS (CAT A/B ONLY) AND CLIMB GRADIENT WOULD BE IN EXCESS OF 500 FT PER NM; STANDARD MINIMUMS NOT REQUIRED IF THERE IS AN APPROVED "OPT OUT VCOA" PER MANAGEMENT.

FLIGHT INSPECTED BY		Digitally signed by	OFFICE	DATE	
THOMAS E MOLOKIE		JON DENTON	FPO	11/02/2021	
		Nov 04, 2021			
DEVELOPED BY	Digitally signed by		OFFICE	<u>DATE</u>	
APRIL SARMENTO	APRIL T SARMENTO		AJV-A432	07/13/2021	
	Aug 05, 2021				
APPROVED BY		Digitally signed by JON DENTON	OFFICE	DATE	TITLE
LONNIE EVERHART		Nov 04, 2021	AJV-A430		MANAGER

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A ALPA \times AOPA \times	APA H	HAI	$NBAA \times $	OTHER: AMGR, ZSE, SEA APP CON
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CHANGES - REASONS:

- 1. CHANGED TAKEOFF MINIMUMS RWY17 FROM "STANDARD" TO "300-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 900" NEW OIS SURVEY/NEW CONTROLLING OBSTACLES.
- 2. CHANGED TAKEOFF MINIMUMS RWY 35 FROM "300-1 WITH MINIMUM CLIMB OF 270 FT PER NM TO 1000 OR STANDARD WITH MINIMUM CLIMB OF 470 FT PER NM TO 800" TO "300-1 1/8 WITH MINIMUM CLIMB OF 270 FT PER NM TO 1000" NEW OIS SURVEY/NEW CONTROLLING OBSTACLES. STANDARD MINS REMOVED CG IN EXCESS OF 500 FT/NM.
- 3. CHANGED TEXTUAL DEPARTURE PROCEDURES RWY 17 FROM "CLIMBING RIGHT TURN HEADING 023.00 TO INTERCEPT SEA R-158 TO COTNY INT/SEA 18.00 DME AND HOLD. CONTINUE CLIMB IN HOLDING PATTERN (HOLD S, LEFT TURNS, 338.00 INBOUND) TO CROSS COTNY AT OR ABOVE THE MEA FOR DIRECTION OF FLIGHT. DO NOT EXCEED 175 KIAS UNTIL ESTABLISHED AT MEA FOR ROUTE OF FLIGHT" TO "CLIMB ON HEADING 185 AND SEA R-168 TO ALDER INT/SEA 37.09 DME AND HOLD. CONTINUE CLIMB-IN-HOLDING PATTERN (HOLD NORTH, RIGHT TURN, 168.00 INBOUND) TO CROSS ALDER AT OR ABOVE THE MEA FOR DIRECTION OF FLIGHT. DO NOT EXCEED 175K WHEN CLIMB-IN-HOLD" NEW HOLDING FIX ALDER/V187 AND FIX COTNY BEING CANCELLED.
- 4. CHANGED TEXTUAL DEPARTURE PROCEDURES RWY 35 FROM "CLIMB ON HEADING 345.61 AND SEA R-158 TO COTNY INT/SEA 18.00 DME AND HOLD. CONTINUE CLIMB IN HOLDING PATTERN (HOLD S, LEFT TURNS, 338.00 INBOUND) TO CROSS COTNY AT OR ABOVE THE MEA FOR DIRECTION OF FLIGHT. DO NOT EXCEED 175 KIAS UNTIL ESTABLISHED AT MEA FOR ROUTE OF FLIGHT" TO "CLIMBING LEFT TURN TO INTERCEPT SEA R-168 TO ALDER INT/SEA 37.09 DME AND HOLD. CONTINUE CLIMB-IN-HOLDING PATTERN (HOLD NORTH, RIGHT TURN, 168.00 INBOUND) TO CROSS ALDER AT OR ABOVE MEA FOR DIRECTION OF FLIGHT. DO NOT EXCEED 175K WHEN CLIMB-IN-HOLD" NEW HOLDING FIX ALDER/V187 BEING CANCELLED.
- 5. UPDATED TAKEOFF OBSTACLE NOTES NEW OIS SURVEY/TARGETS BUILD.
- 6. UPDATED CONTROLLING OBSTACLES NEW OIS SURVEY/TARGETS BUILD.
- 7. UPDATED REMARKS.

