

**U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION  
GRAPHIC DEPARTURE PROCEDURE (DP)**

Bearings, headings, courses, tracks, and radials are magnetic. Elevation 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. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
LEVEL ISLAND	ONE	LVD1.LVD	NONE		

**TYPE:** OBSTACLE

**DP ROUTE DESCRIPTION:**

TAKEOFF RWY 10: TURN LEFT AS SOON AS PRACTICABLE, CLIMB IN VISUAL CONDITIONS UNTIL ESTABLISHED ON LVD R-061 AT JUMKI/LVD 22.00 DME FIX ON A WESTERLY COURSE (VISUAL CONDITIONS MUST BE MAINTAINED FROM TAKEOFF UNTIL ESTABLISHED OVER JUMKI AT/ABOVE 1000.) CROSS JUMKI AT OR ABOVE 1000 THEN CLIMB ON LVD R-061 TO LVD VOR/DME. THENCE...

TAKEOFF RWY 28: CLIMB HEADING 277.40 TO 500 THEN CLIMBING LEFT TURN HEADING 230 TO INTERCEPT LVD R-061 TO LVD VOR/DME. DO NOT EXCEED 180 KNOTS UNTIL ESTABLISHED ON LVD R-061 WESTBOUND. THENCE...

...CONTINUE CLIMB IN HOLD (SE, RT 300.29 INBOUND) TO MEA FOR ROUTE OF FLIGHT.

**TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):**

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	Crossing Altitudes/Fixes

**PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:**

TAKEOFF MINIMUMS:

RWY 10, 1000-3

RWY 28, STANDARD WITH MINIMUM CLIMB OF 280 FT PER NM TO 1100.

NOTE: RWY 10, DME REQUIRED

NOTE: RAPIDLY RISING TERRAIN SOUTH/SOUTHWEST AND EAST/NORTHEAST OF AIRPORT TO ABOVE 2500 FEET WITHIN 3 MILES OF AIRPORT.

**TAKEOFF OBSTACLES NOTES:**

NOTE: RWY 10, TREES AND RISING TERRAIN BEGINNING 52 FT FROM DER, 253 FT RIGHT OF CENTERLINE, UP TO 148 FT AGL/1147 FT MSL.

NOTE: RWY 28, TREES AND RISING TERRAIN BEGINNING 84 FT FROM DER, 265 FT LEFT OF CENTERLINE, UP TO 23 FT AGL/122 FT MSL.

**CONTROLLING OBSTACLES:**



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RWY 28: 599 FT MSL AAO 563058.22N/1322805.41W, 517 FT MSL TREE 562834.39N/1322308.10W, 1399 FT MSL AAO 562546.13N/1323019.19W.

**OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:**

RWY 10 – 3000 FT MSL AAO 562613.60N/1321836.40W, 3500 FT MSL AAO 562319.50N/1322924.10W, 3947 FT MSL AAO 563231.60/1321916.00W, 1876 FT MSL TREE 563139.05N/1322718.19W, 10223 FT MSL AAO 570233.70N/1320250.60W.

RWY 28 – 3000 FT MSL AAO 562613.60N/1321836.40W, 3500 FT MSL AAO 562319.50N/1322924.10W, 3947 FT MSL AAO 563231.60/1321916.00W, 1876 FT MSL TREE 563139.05N/1322718.19W, 10223 FT MSL AAO 570233.70N/1320250.60W, 799 FT MSL AAO 563101.17N/1322802.07W.

**LOST COMMUNICATIONS PROCEDURES:**

**ADDITIONAL FLIGHT DATA:**

CHART: 3 SM CIRCLE AROUND PAWG.  
CHART: HOLDING AT LVD VOR/DME, HOLD SE, RT, 300 INBOUND.

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**AIRPORTS SERVED:**

WRANGELL

WRANGELL, AK

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**COMMUNICATIONS:**

CTAF, ANCHORAGE CENTER APP/DEP CON, SIT FSS

**FIXES AND/OR NAVAIDS:**

**REMARKS:**



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LEVEL ISLAND	ONE	LVD1.LVD	NONE		

VCOA NOT ESTABLISHED AT ATC REQUEST DUE TO POTENTIAL FOR CONFUSION WHEN APPLYING NONSTANDARD VISUAL DEPARTURE PROCEDURES OFF RWY 10 WITH WEATHER MINIMUMS OF 1000-3 AND A VISUAL CLIMB OVER AIRPORT (VCOA) OFF RWY 28 WHICH WOULD HAVE HAD WEATHER MINIMUMS OF 2900-2.

280 FT CG PULLED TRAP BACK FAR ENOUGH TO AVOID ADDITIONAL HIGH TERRAIN.

180 KNOT SPEED RESTRICTION FOR DEPARTURES OFF RWY 28 UNTIL ESTABLISHED ON LVD R-061 TO AVOID ADDITIONAL TERRAIN OUTSIDE THE SMALLER TURNING RADIUS.

PROCEDURE ORIGINALLY DEVELOPED AS A TEXTUAL DEPARTURE, FLIGHT CHECK SENT BACK DIRECTING GRAPHIC DEPICTION.



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DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
LEVEL ISLAND	ONE	LVD1.LVD	NONE		

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**FLIGHT INSPECTED BY:**

**REQUIRED EFFECTIVE DATE:**

**DEVELOPED BY:**

CHARLES ERICKSON                      AJV-354                                      01/12/2011

**APPROVED BY:**

DEZ SILAGYI                                      AJV-354

**COORDINATED WITH:**

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**CHANGES:**

**REASONS:**



# RADIO FIX AND HOLDING DATA RECORD

NAME: JUMKI

STATE: AK

COUNTRY: US

LATITUDE/LONGITUDE: 562820.41N/1322519.54W

TYPE: DME

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

**FIX MAKE-UP FACILITIES:**

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	LEVEL ISLAND	LVD	VOR/DME	H	061.00	089.00	22.00	22.00		1000	14500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	LEVEL ISLAND	1		PAWG	WRANGELL	AK (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 10/11/2010

DEVELOPED BY: DATE: 10/11/2010

OFFICE: AVN-130

NAME: CHARLES ERICKSON

NFPO APPROVAL: DATE:

OFFICE: AVN-130

NAME: DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:

NFDC  
FPO: WST  
ARTCC: ZAN  
ATC FACILITY:  
OTHER: SIT FSS



# RADIO FIX AND HOLDING DATA RECORD

NAME: LEVEL ISLAND VOR/DME STATE: AK COUNTRY: US

LATITUDE/LONGITUDE: 562803.75N/1330459.21W TYPE:

AIRSPACE DOCKET: FIX TYPE OF ACTION: NO CHANGE

**FIX MAKE-UP FACILITIES:**

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	LEVEL ISLAND	LVD	VOR/DME	H							45000

**EXPANDED SERVICE VOLUME (ESV):**

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
LVD	VOR/DME	R-298	74	9000	14100

HOLDING: HOLDING TYPE OF ACTION: MODIFY

**PATTERNS:**

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	HOLDING DME	ALTITUDES MIN	ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	SE	LVD	VOR/DME	120.29	300.29	R	1-1 1/2		7000	17500	8	16
2	SE		WP	120.29	300.29	R		8	6000	17500	8	17

**CONTROLLING OBSTRUCTIONS:**

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	562041.30N/1325144.30W	2644	6A
1	310	AAO	561527.60N/1323334.70W	4120	6A
2	230	AAO	562041.30N/1325144.30W	2644	6A
2	310	AAO	561527.60N/1323334.70W	4120	6A

**PRECIPITOUS TERRAIN ADDITIONS:**

PAT	SPEED	ADDITION
1	230	131
1	310	190
2	230	131
2	310	207

**HOLDING RESTRICTIONS:**

HOLDING LIMITED TO ESTABLISHED PATTERNS

**PROCEDURES REQUIRING CLIMB-IN-HOLD:**

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	LEVEL ISLAND	PAWG	WRANGELL	AK (US)
1	LDA/DME-D	PAPG	PETERSBURG	AK (US)
2	RNAV (GPS) -B	PAPG	PETERSBURG	AK (US)

**REMARKS:**

PRECIPITOUS TERRAIN EVALUATION COMPLETED

C-I-H EVAL CONDUCTED FOR LEVEL ISLAND DEPARTIURE USING P-13

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	JUNEAU			PAJN	JUNEAU	AK (US)
DP	TAKEOFF MINIMUMS			PAPG	PETERSBURG	AK (US)
DP	LEVEL ISLAND		1	PAWG	WRANGELL	AK (US)
EN ROUTE	J502					(US)
EN ROUTE	T241					(US)
EN ROUTE	T280					(US)
EN ROUTE	V317		1			(US)
EN ROUTE	V318					(US)
EN ROUTE	V473					(US)
IAP	LDA/DME-D		1	PAPG	PETERSBURG	AK (US)
IAP	RNAV (GPS) -B		2	PAPG	PETERSBURG	AK (US)
IAP	LDA/DME-C			PAWG	WRANGELL	AK (US)
IAP	LDA/DME-D			PAWG	WRANGELL	AK (US)
IAP	RNAV (GPS) - A			PAWG	WRANGELL	AK (US)

REQUIRED CHARTING: DP, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: LOW

RECORD REVISION NUMBER: 6

DATE OF REVISION: 06/30/2011

REASON FOR REVISION:



MOVED HOLDING LIMITED REMARK TO RESTRICTIONS  
ADDED PRECIPITOUS TERRAIN EVALUATION COMPLETED REMARK.  
UPDATED ESV DATA TO NEW FORMAT.  
UPDATED HOLDING PATTERN CONTROLLING OBSTACLE DATA FOR BOTH PATTERNS AND BOTH AIRSPEEDS AND ADDED 131 FEET  
PRECIPITOUS TERRAIN ADJUSTMENTS FOR BOTH PATTERNS WITH 230KIAS.  
UPDATED FIX USE.

THIS IS AN UPDATED COPY OF THE FORM CREATED ON 05/05/2010.  
1. ADDED REMARK " C-I-H EVAL CONDUCTED FOR LEVEL ISLAND DEPARTIURE USING P-13".

**DEVELOPED BY:**            **DATE:** 05/05/2010            **OFFICE:** AVN-130            **NAME:** ADOLFO URRUTIA (JOHN LINDSEY)

**APPROVED BY:**            **DATE:**            **OFFICE:** AVN-130            **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**    **NFDC**  
                         **FPO: WST**  
                         **ARTCC: ZAN**  
                         **ATC FACILITY:**  
                         **OTHER:**





**DEVELOPED BY:**      **DATE:** 05/06/2010      **OFFICE:** AVN-130      **NAME:** ADOLFO URRUTIA (JOHN LINDSEY)  
**APPROVED BY:**      **DATE:**      **OFFICE:** AVN-130      **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**      **NFDC**  
                                 **FPO: WST**  
                                 **ARTCC: ZAN**  
                                 **ATC FACILITY:**  
                                 **OTHER: SIT FSS**



# FLIGHT PROCEDURES STANDARDS WAIVER

FLIGHT STANDARDS USE ONLY

CONTROL NO:

1. Flight Procedure Identification:

**WRANGELL AIRPORT (WRG) (PAWG)  
WRANGELL, AK.  
LEVEL ISLAND ONE DEPARTURE (OBSTACLE)**

2. Waiver Required and Applicable Standard: **RELOCATE THE INITIAL DEPARTURE SEGMENT TO A SPECIFIC POINT WITH A ROUTE OF FLIGHT TO BE FLOWN AT A PREDETERMINED START ALTITUDE THAT ALLOWS FOR OBSTACLE CLEARANCE.**

**TERPS VOL IV, PARA 1.6 AND TABLE 1 OF 8260.46D INITIAL CLIMB AREA: THIS SEGMENT STARTS AT THE DER AND PROCEEDS ALONG RUNWAY CENTERLINE EXTENDED TO ALLOW AIRCRAFT TO REACH AN ALTITUDE OF 400 FEET ABOVE DER.**

3. Reason for Waiver (*Justification for nonstandard treatment*):

**INITIAL CLIMB AREA FOR RUNWAY 10 WAS EVALUATED, BUT DUE TO HIGH TERRAIN IN THE ICA AND SURROUNDING THE AIRPORT, AIRCRAFT DEPARTING OFF OF RWY 10 WILL BE EXPECTED TO TURN LEFT AS SOON AS PRACTICABLE (AVOIDING RAPIDLY RISING TERRAIN IN THE ICA) AND FLY VISUALLY TO A DME FIX ESTABLISHED ON A SPECIFIC COURSE. WHEN THE AIRCRAFT IS POSITIONED OVER THE DME FIX AT A SPECIFIED ALTITUDE COMMENCING THE DEPARTURE ROUTE, ALL REQUIRED DEPARTURE OBSTRUCTION CLEARANCE WILL BE PROVIDED.**

4. Equivalent Level of Safety Provided:

- 1. PROCEDURE REQUIRES VISUAL FLIGHT FROM RWY 10 TO A POINT WHERE IFR FLIGHT CAN BE MADE UNTIL ESTABLISHED ON THE IFR ENROUTE STRUCTURE. THE DEPARTURE PROCEDURE OFF RWY 10 WILL CLEARLY STATE THAT VISUAL FLIGHT CONDITIONS MUST BE MAINTAINED FROM TAKEOFF UNTIL ESTABLISHED ON LVD R-061 AT JUMKI/22.00 DME FIX AT/ABOVE 1000 ON A WESTERLY COURSE.**
- 2. AIRCRAFT WILL CLIMB IN VISUAL FLIGHT CONDITIONS TO INTERCEPT LVD R-061 AT JUMKI/22.00 DME FIX. FROM JUMKI AIRCRAFT WILL CONTINUE ON LVD R-061 TO LVD VOR/DME.**
- 3. 1000-3 IS REQUIRED TO DEPART FROM RWY 10 TO ENSURE AIRCRAFT CAN MAINTAIN VISUAL FLIGHT CONDITIONS UNTIL OVER LVD R-061 AT JUMKI/22.00 DME FIX.**
- 4. THE FOLLOWING NOTE WILL BE ADDED: RAPIDLY RISING TERRAIN SOUTH/SOUTHWEST AND EAST/NORTHEAST OF AIRPORT TO ABOVE 2500 FEET MSL WITHIN 3 MILES OF AIRPORT.**

5. How Relocation or Additional Facilities Will Affect Waiver Requirement:

**RELOCATION OR ADDITION OF FACILITIES NOT CONTEMPLATED AT THIS TIME.**

6. Coordination With User Organizations (*Specify*):

**AJV-354 \_\_\_\_\_**

7. SUBMITTED BY

DATE:	Office Identification: <b>AJV-35</b>	Title: <b>MANAGER, TERMINAL PROCEDURES PUBLICATIONS GROUP</b>	Signature: <b>JOHN BICKERSTAFF</b>
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8. CONTINUATION

Comments:

9. AFS ACTION

<input type="checkbox"/>	Approved
<input type="checkbox"/>	Disapproved
<input type="checkbox"/>	Not Required

Comments:

Date:

Routing Symbol:

Signature:

## Memorandum

Date: 19 January 2011

To: Manager, Flight Procedure Standards

From: John Bickerstaff  
Manager, Terminal Procedures Publications Group

Subj: **Action:** Approval Request

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LEVEL ISLAND ONE (GRAPHIC ODP), WRANGELL, AK.

Climb gradient exceeds 500 feet per NM, 8260.46D, Para 2-1 d. (2)

Departures off runway 10 would have a computed climb gradient is 1205 feet per NM to an altitude of 4,602 feet above airport elevation. The obstacle driving this climb gradient is 3947 AAO (200' assumed adverse obstacle).

Adverse terrain in close proximity to Wrangell airport to the south, east and northeast makes it impossible to design an IFR departure off Rwy 10 that is within established criteria and that would avoid an excessive climb gradient.

In conjunction with disapproval of 1205 ft per NM climb gradient, request to publish Takeoff Minimums of 1000-3 for Rwy 10 to provide an avenue for aircraft to depart the airport visually and navigate to a predetermined location in which IFR flight can be commenced.