

## ARMI

(Airport and Route Manual Information)

# PALU WAFF / PLW

**DOMESTIC** 



#### I. Airport Data

Name	ICAO	IATA	ARP	Magnetic Variation	Airport Elevation (Feet)	Local time (UTC +/-)	
Mutiara Airport	WAFF	PLW	S 00 <sup>0</sup> 55.0' E119 <sup>0</sup> 54.4'	1 <sup>0</sup> E	284	+ 8	

Runways designator	length	strength	VASIS	RWY Elev
RWY 15 – 33	7382 x 148 ft (2250 x 45 m)	ASPHALT CONCRETE PCN 45 F/C/X/T	PAPI RWY 15 : 3.03 <sup>0</sup> RWY 33 : 3.02 <sup>0</sup>	RWY 15 : 282 ft RWY 33 : 250 ft

#### II. Communication & Navigation Aids facilities

APP	123.0 MHz			
Palu Approach	123.0 IVITZ			
TWR	110 7 MU-			
Mutiara Tower	118.7 MHz			

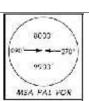
VOR/DME	PAL	116.2 MHZ		

#### III. Airport location

4 NM Southeast of city palu. Operating hours: 2300-1200z

#### IV. Minimum Safe / Sector Altitude (MSA)

The highest MSA are 8000 ft North (R270 -090), and 9900 ft South (R090-270) based on "PAL" VOR/DME.



#### V. Climate / Weather Condition

- Northerly wind speed about 20 kts & slightly gusty. Average Temp.33°C. Rainfall (4.7 mm) SEPT to FEB.
- Cloud covers the top of the mountain.

#### VI. Ground/ Taxi maneuvering

• Open

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#### VII. Parking

- Push back not required.
- 05 Aircraft nose out.

#### VIII. Ground Handling & Agents

Open

#### IX. Servicing

- Pertamina
- AES Facilities CAT VII

#### X. Medical Facilities

Hospital in Town

#### XI. Accommodation

Hotels in Town

#### XII. Immigration Procedures

On Request

#### XIII. Entry Procedures - Arrival Procedures

STANDARD ARRIVAL ROUTES ( STAR)					
DILAM ONE	From DILAM (W-36) proceed to PAL, then to DONGA.				
BRAVO	1 Total Dilam (W-30) proceed to FAL, then to Donga.				
DORIA ONE	From DORIA (W-36) proceed to PAL, then to DONGA.				
BRAVO	PIONI DONIA (W-50) Proceed to FAL, then to DONGA.				
GORONTALO	From GTL (W-51) proceed to PAL, then to DONGA.				
ONE BRAVO	From GTL (W-51) proceed to FAL, then to DONGA.				
MAKASSAR ONE	From MKC (M 51) proceed to BAL then to BONGA				
BRAVO	From MKS (W-51) proceed to PAL, then to DONGA.				

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#### XIV. Departure procedures and conditions from Palu

STANDARD INSTRUMENT DEPARTURE RWY 31					
DILAM ONE	From D11 PAL, turn LEFT to overhead PAL and join W-36 to				
ALPHA	DILAM.				
DORIA ONE	From D44 DAI turn I FFT to join W 26 present to DODIA				
ALPHA	From D11 PAL, turn LEFT to join W-36, proceed to DORIA.				
GRONTALO	From D11 PAL, turn LEFT to overhead PAL and join W-51 to				
ONE ALPHA	GTL.				
MAKASSAR	From D11 PAL, turn LEFT to overhead PAL and join W-51 to				
ONE ALPHA	MKS.				

#### XV. Search and Rescue

- In general, Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures contain in ICAO.
- The following Emergency / distress frequencies are provided:
  - a. VHF 121.5 MHz.
  - b UHF 243 0 MHz
  - c. HF 500 kHz, 2.182 kHz, 8.364 kHz.

#### XVI. ATC Flight plans routes and distances

#### WIII - WAAA - WAFF (CGK-UPG-PLW)

WIII - WAAA R 01

WIII ... GL ... HLM2G ... HLM... KASAL ... W

45...CA...PIALA...ANY...W52...LASEM ... SIPUT...SOLOM...GUANO...OVINA ... ECHO...00MK5...MK60C...MKS...WAAA. Distance 808 NM

WAAA-WAFF 01

WAAA...MKS...W51...RUDAL...PAL...WAML. Distance 282NM

#### Enroute Mora CKG - UPG

The highest MSA at CENGKARENG are 4,500 ft to South and 2,000 ft to the North based on CL, CR, GL, GR NDB, the Highest Grid Mora On this Route is 13.500 ft from point KASAL to PIALA and The highest MSA at U. Pandang are 10.500 ft to Southwest, 3000 ft to Northwest and 7600 ft to Northeast based on MKS VOR/DME or OR NDB.

#### Enroute Mora UPG - PLW

The highest MSA at U. Pandang are 10.500 ft to Southwest, 3000 ft to Northwest and 7600 ft to Northeast based on MKS VOR/DME or OR NDB. The Highest Grid Mora On this Route is 12.600 ft from point MKS to PAL (PALU) and The highest MSA at Palu are 8500 ft to Southwest, 7900 ft to Southeast, 6900 ft to Northeast and 5100 ft to Northwest based on PAL VOR/DME or NDB.

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WAFF - WAAA - WIII (PLW-UPG-CGK)

WAFF - WAAA R01

WAML ... PAL ... W51...RUDAL ...MKS ...WAAA. Distance 282 NM.

WAAA - WIII R01A

WAAA...MK30J...OVIN1B...OVINA...W52...GUANO...SOLOM...SIPUT...W13... CUCUT...M766...MADIN...KIDET...IMU...ESALA...DKI28...DKI42...CGK9...CG K2...GL...WIII. Distance 822 NM.

#### Enroute Mora PLW - UPG

The highest MSA at Palu are 8500 ft to Southwest, 7900 ft to Southeast, 6900 ft to Northeast and 5100 ft to Northwest based on PAL VOR/DME or NDB. The Highest Grid Mora On this Route is 12.600 ft from point MKS to PAL (PALU) and The highest MSA at U. Pandang are 10.500 ft to Southwest, 3000 ft to Northwest and 7600 ft to Northeast based on MKS VOR/DME or OR NDB.

#### Enroute Mora UPG - CKG

The highest Grid Mora is 13.600 ft from point MADIN to IMU, and The highest MSA at CENGKARENG is 4,500 ft to South and 2,000 ft to the North based on CL, CR, GL, GR NDB.

#### XVII. ALTERNATE

Destination	Alternate	Loc.	Ind.	B737 classic	B737 NG	т	NM	Ground Handling
	Balikpapan	WALL	BPN	+	+	263	182	Gapura
Palu	Ujung Pandang	WAAA	UPG	+	+	184	248	Gapura
WAFF PLW	Menado	WAMM	MDC	+	+	063	335	Gapura
PLVV	Kendari	WAWW	KDI	+	1	141	241	Gapura
	Gorontalo	WAMG	GTO	+	•	360	200	-

Note: refer to MISCELLANEOUS DOMESTIC 3.3.3 Destination Alternate List

+ :alternate airport adequate for indicated aircraft type

- : alternate airport NOT adequate for indicated aircraft type

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#### Balikpapan

#### Alternate Flight plan route and distance

WAFF - WALL (PLW-BPN) A 01

WAFF ... PAL ... ECHO ... DORIA ... BP082 ... BPN ... WALL. Distance 184 NM.

#### Enroute Mora PLW - BPN

The highest MSA at Palu are 8500 ft to Southwest, 7900 ft to Southeast, 6900 ft to Northeast and 5100 ft to Northwest based on PAL VOR/DME or NDB, and the highest MSA at Balikpapan are 3000 ft to North, 2000 ft to Southwest, 1500 ft to Southeast based on Sepinggan VOR/DME.

#### **Ujung Pandang**

#### Alternate Flight plan route and distance

WAFF – WAAA ( PLW – UPG ) R01 WAFF ... PAL ... W51...RUDAL ...MKS ...WAAA. Distance 282 NM.

#### Enroute Mora PLW - UPG

The highest MSA at Palu are 8500 ft to Southwest, 7900 ft to Southeast, 6900 ft to Northeast and 5100 ft to Northwest based on PAL VOR/DME or NDB. The Highest Grid Mora On this Route is 12.600 ft from point MKS to PAL (PALU) and The highest MSA at U. Pandang are 10.500 ft to Southwest, 3000 ft to Northwest and 7600 ft to Northeast based on MKS VOR/DME.

#### Menado

#### Alternate Flight plan route and distance

Open

#### Kendari

#### Alternate Flight plan route and distance

Open

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#### Gorontalo

#### Alternate Flight plan route and distance

Open

#### XVIII. Remarks

- Possible light turbulence in approaching RWY 33
- Birds & animals hazard on final RWY 33
- Aircraft turn on turning area

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