



# **SURABAYA (INDONESIA)**

## **JUANDA INTL AIRPORT (WARR/SUB)**

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**OKTOBER 2017**

# LOCATION OF SURABAYA CITY



**Surabaya is located at East Java and Airport location about 1.5 NM South West of the city of Surabaya**

# AIRPORT OVERVIEW



# CLIMATE/ WEATHER

The temperature through out the year averages 22<sup>0</sup>C to 34<sup>0</sup>C and humidity averages a high 75%. The wet season is from October to the end of April. The rain comes as a tropical downpour, falling most afternoons. The dry season from May to September, intermittently the rain also comes as a tropical downpour. The heaviest rain is usually around January – February.

# RUNWAY/ AIRPORT SURABAYA – INDONESIA

**ARP Coordinates and Site at APT**

: S 07° 23' 01" E 112° 46' 48"

**Operation Hours**

: 23.00 - 17.00 UTC

**Time Conversion**

: UTC + 7

**Magnetic Variation**

: 1° 05' E (2015)

**AD Elevation**

: 11 ft

**Dimension**

: 9842 x 147 ft (3000 x 45 m)

**Runway Designation**

: RWY 10/ 28

**Surface**

: ASPHALT CONCRETE

**Strength**

: 94 FDXT

**Rescue and Firefighting Services CAT**

:CAT VIII

## NAVIGATION & COMMUNICATION

**VOR/ DME** : 113.4 MHz / CH-81X “SBR”

**ILS/ LLZ** : 110.10 MHz “ISBY”

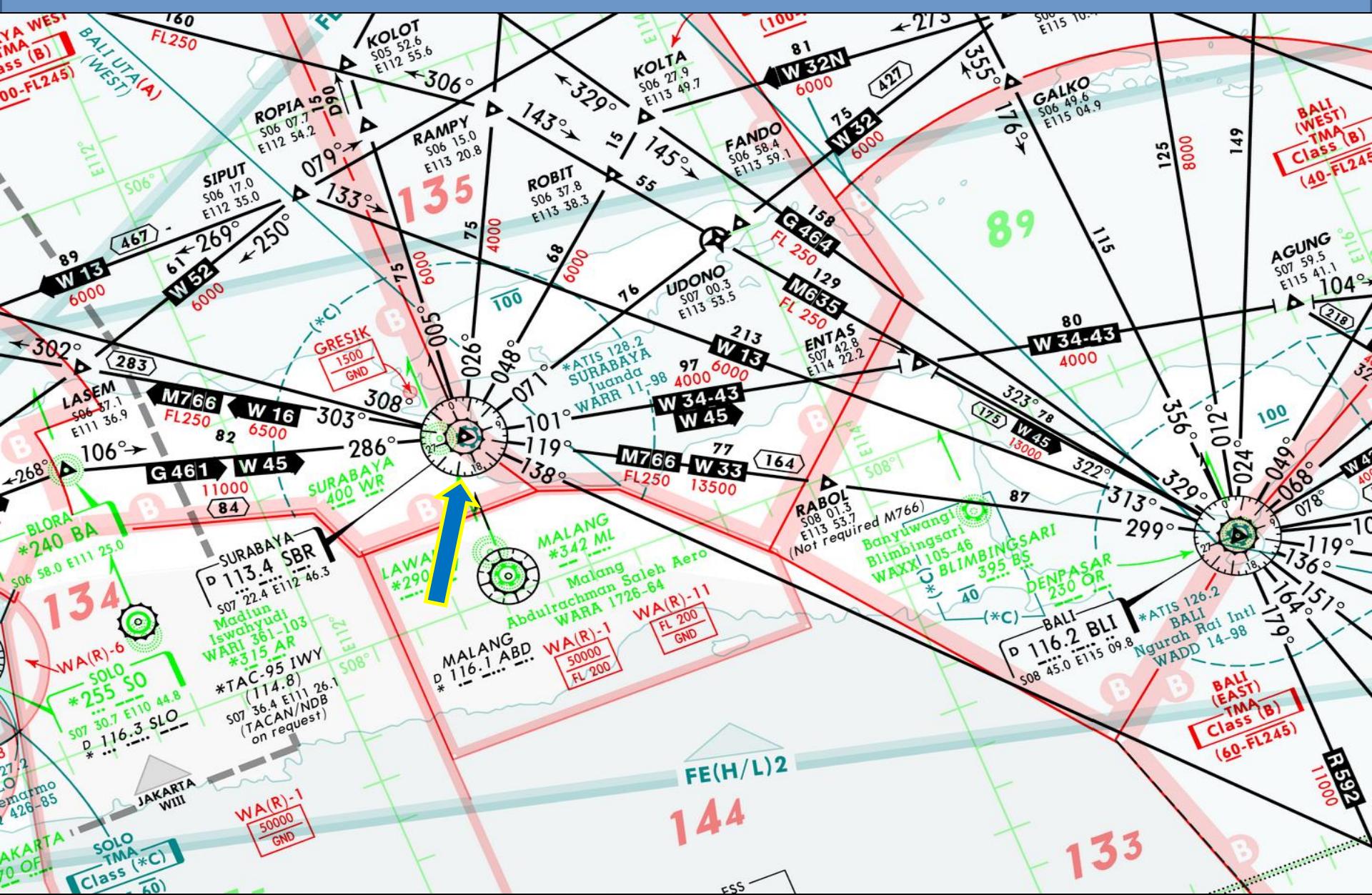
**GP** : 334.40 MHz

**ATIS** : 128.2 MHz

**TOWER** : 118.30 , 118.10 MHz “JUANDA Tower”

**CTR** : 123.20 , 124.50 MHz “SURABAYA DIR”

# JEPPESEN ROUTE CHART SURABAYA (WARR)

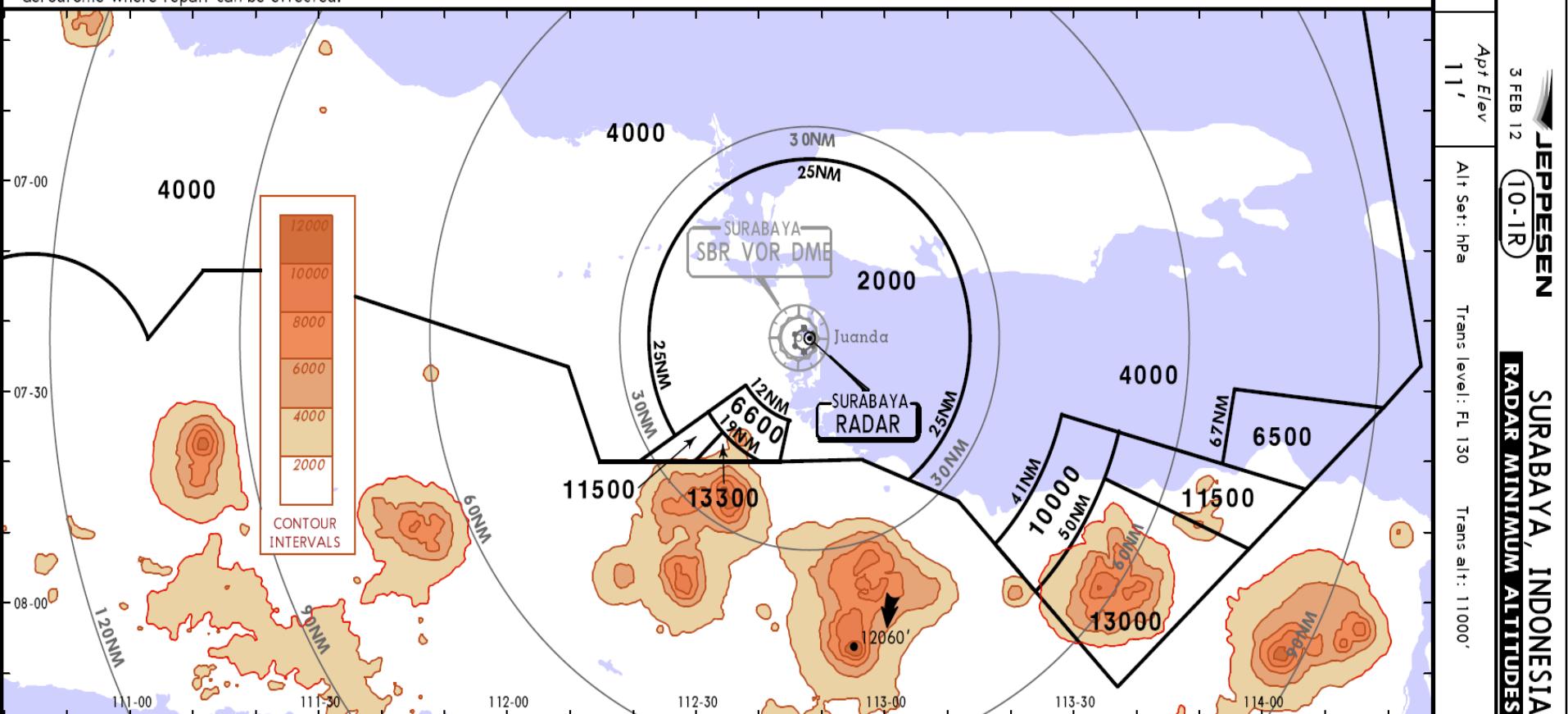


# RADAR MINIMUM ATTITUDES

When aircraft experiencing transponder failure after departure is operating or expected to operate in Surabaya TMA East, TMA West, and CTR where the carriage of a functioning transponder with specified capabilities (Mode C) is mandatory, the ATS unit concerned should endeavor to provide for continuation of the flight to the aerodrome of first intended landing in accordance with the flight plan. However, in certain traffic situations, while en-route, continuation of the flight may not be possible, particularly when failure is detected shortly after take-off, and the aircraft may then be required to return to the departure aerodrome or to land at the nearest suitable aerodrome acceptable to the operator concerned and to ATC.

In case of transponder failure, which is detected before departure from an aerodrome where it is not practicable to effect a repair, pilot shall:

- Inform ATS unit as soon as possible, preferably before submission flight plan.
  - Comply with any published procedures for seeking as exemption from the requirements for carriage of function transponder.
  - If so required by the ATS authority of Juanda airport, plan to proceed as directly as possible, to the nearest suitable aerodrome where repair can be effected.

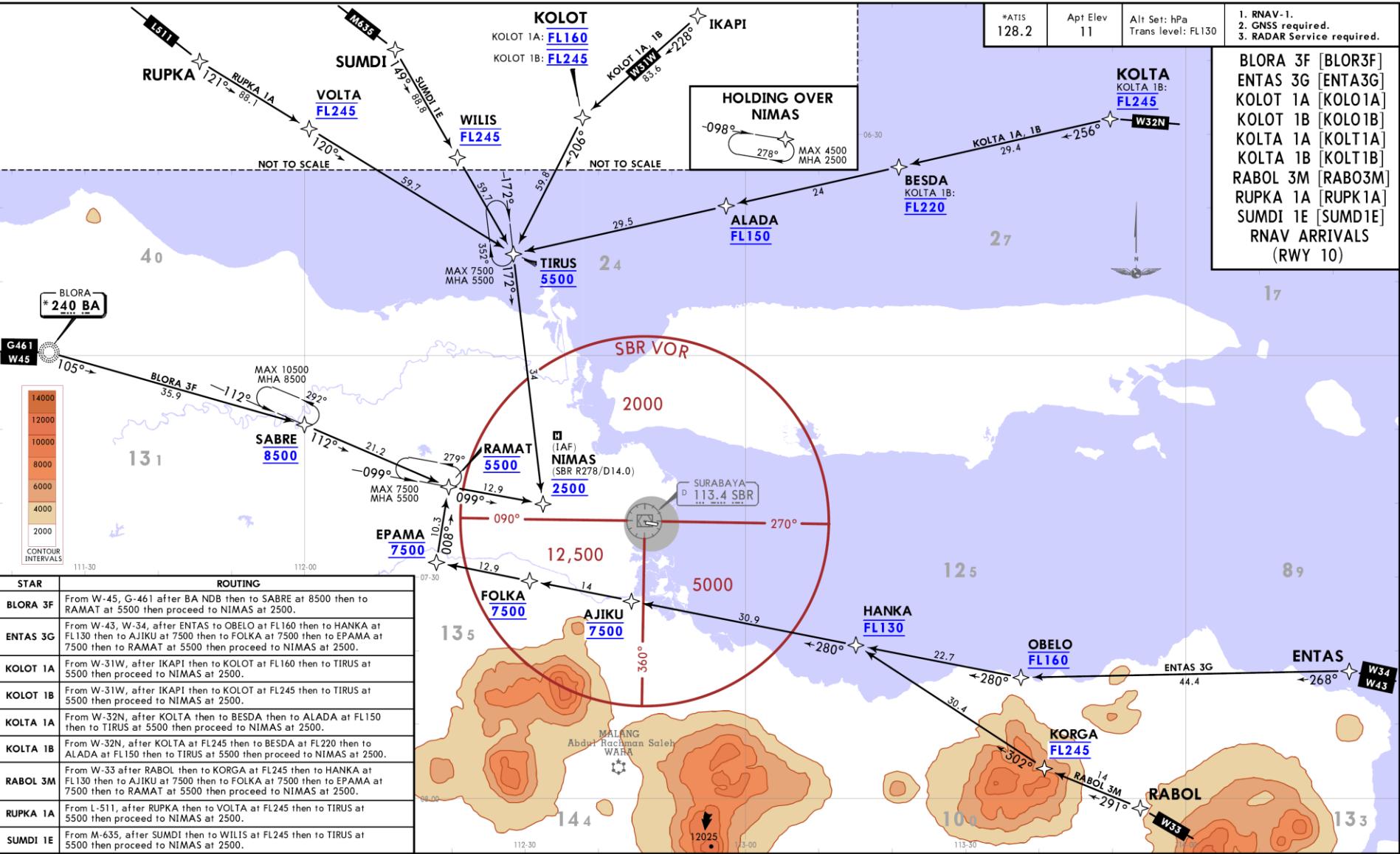


# RNAV RWY 10 ARRIVALS / STAR

WARR/SUB  
JUANDA

JEPPESSEN  
18 MAY 18 10-2

SURABAYA, INDONESIA  
RNAV STAR

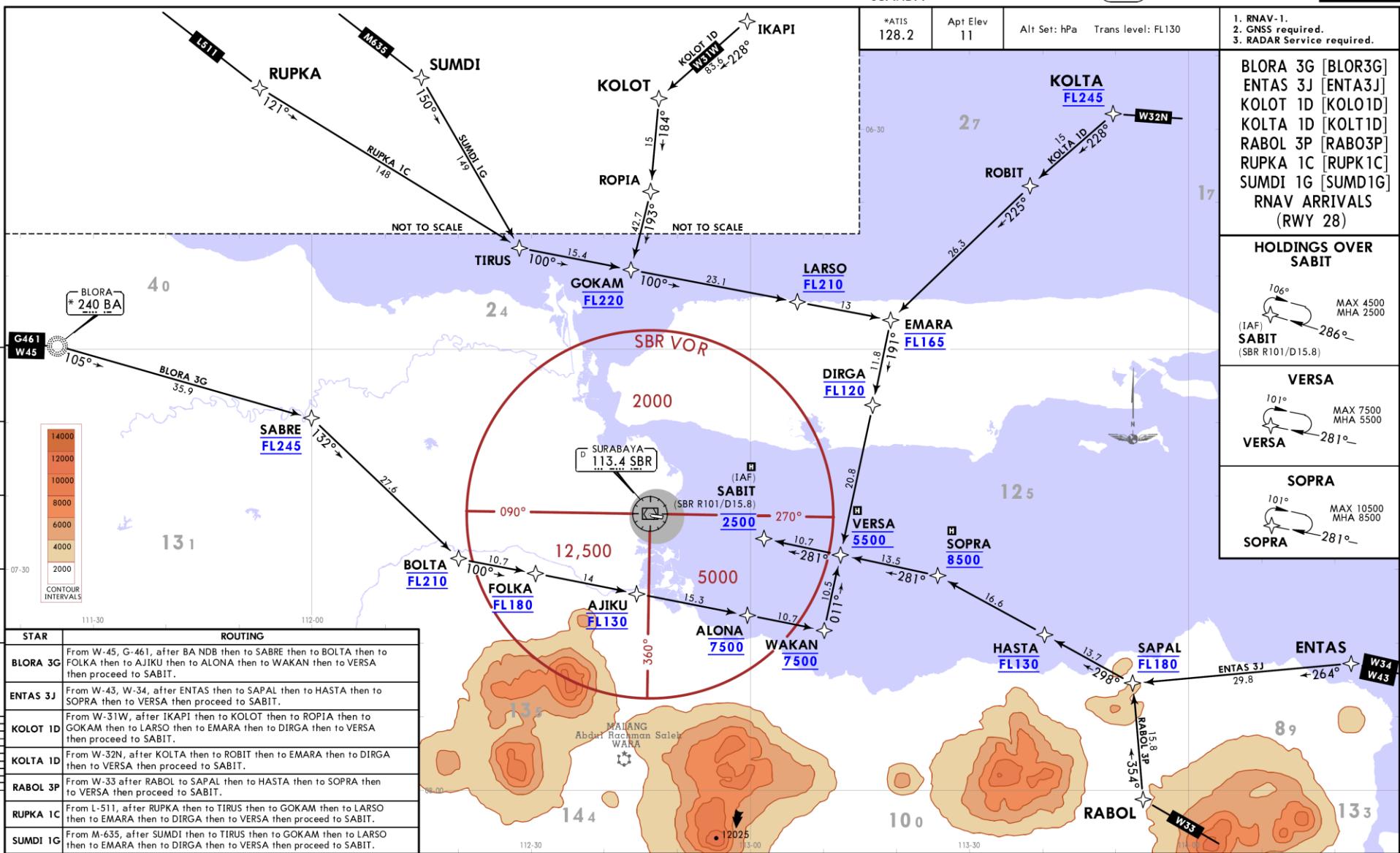


# RNAV RWY 28 ARRIVALS / STAR

WARR/SUB  
JUANDA

JEPPESEN  
18 MAY 18  
10-2A

SURABAYA, INDONESIA  
RNAV STAR



\*ATIS 128.2 SURABAYA Control (R) WEST 125.1 EAST 124.0 \*SURABAYA Director (R) 123.2 \*JUANDA Tower 118.1 118.3 \*Ground (Contact tower when inop) 118.9 119.15

LOC ISBY <b>110.1</b>	<i>Final Apch Crs</i> <b>098°</b>	<i>GS OM</i> <b>1330' (1319')</b>	<i>ILS DA(H)</i> <b>211' (200')</b>	<i>Apt Elev</i> <b>11'</b>	<i>Rwy 10 11'</i>
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**MISSING APCH:** Climb STRAIGHT AHEAD to 1500' then turn RIGHT join SBR VOR R-278 climb to 2500' proceed to NIMAS for holding, consecutive approach or as instructed by ATC.

Alt Set: hPa Rwy Elev: 0 hPa Trans level: FL 130 Trans alt: 11000' D200

D200

07-15 07-20 07-25 112-30 112-40 112-50

WA(P)-7 0° 330° 030° 360° 330° 50°

**(IAF) NIMAS D14.0 SBR** **(IF) D10.9 SBR** **D5.9 SBR** **OM** **MM** **D0.3 SBR** **SURABAYA 113.4 SBR**

**098° 110.1 ISBY** 2500' 12,500' 2000' 5000'

**LOC (GS out)** **SBR DME** **5.0** **4.0** **3.0** **2.0**

ALTITUDE 1720' 1400' 1080' 760'

**NIMAS D14.0 SBR** **D10.9 SBR** **D5.9 SBR GS2000'** **OM GS1330'** **MM GS 230'** **D0.3 SBR** **M** **TCH 53'**

098° - 278° 098° 2500' 2000' \*098° 2000' 1500' 2500' RT Rwy 10 11'

3.1 5.0 2.0 3.5 0.5 0.1 0.5 0

Gnd speed-Kts 120 140 160 180

ILS GS or LOC Descent Angle 3.00° 637 743 849 955

MAP at D0.3 SBR or D5.9 SBR to MAP 5.6 2:48 2:24 2:06 1:52

STRAIGHT-IN LANDING RWY10 LOC (GS out) MDA(H) 460'(449')

FULL ALS out ALS out Max Kts MDA(H)

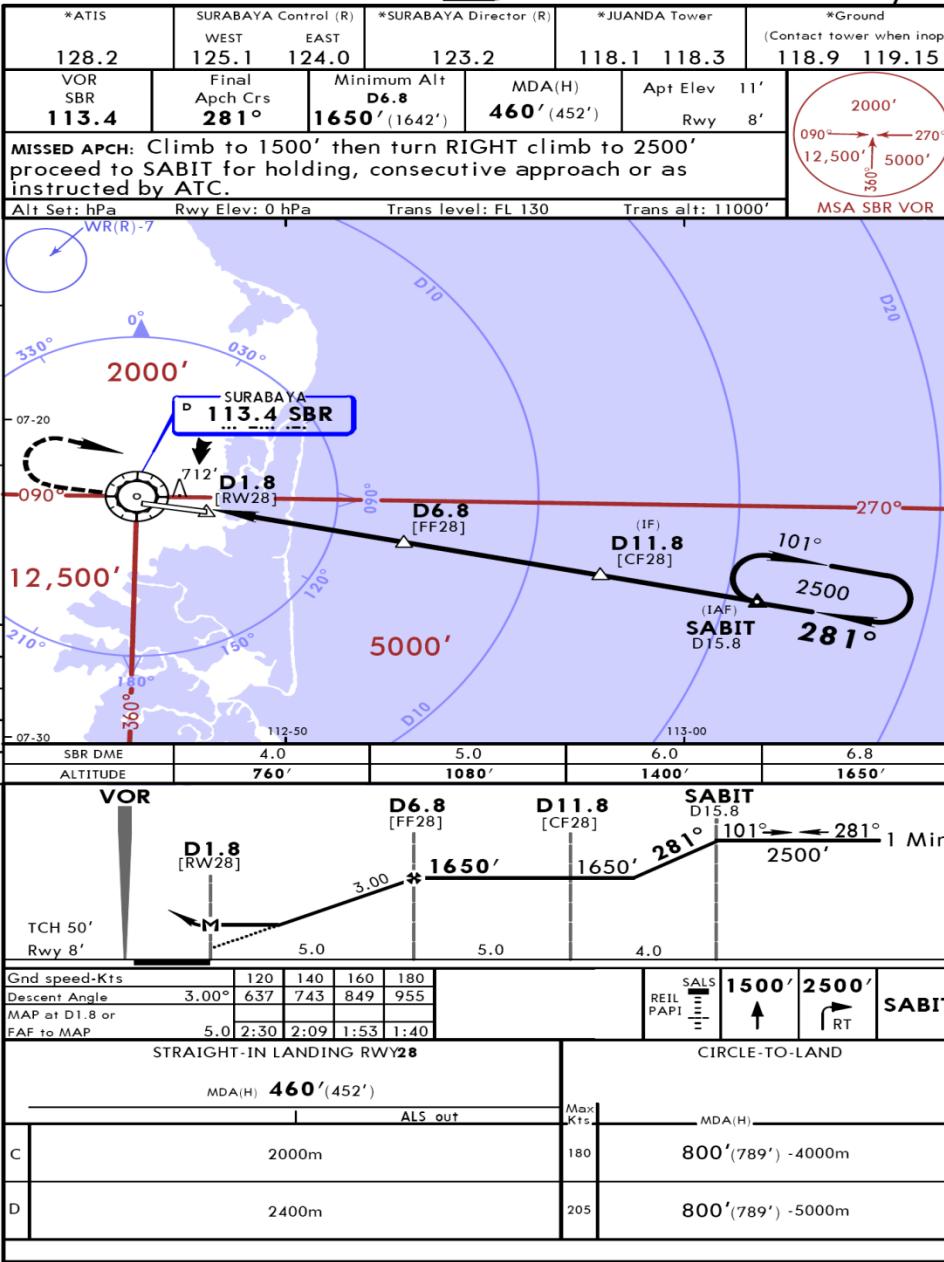
C 800m 1200m 1200m 2000m 180 800' (789') - 2400m

D 1600m 2400m 205 800' (789') - 3600m

CIRCLE-TO-LAND

**ILS RWY 10**

**MISSED APPROACH;** Climb STRAIGHT AHEAD to 1500' then turn RIGHT join SBR VOR R-278 climb to 2500' proceed to NIMAS for holding, consecutive approach or as instructed by ATC.

WARR/SUB  
JUANDAJEPPESEN  
12 AUG 16 13-1SURABAYA, INDONESIA  
VOR DME Rwy 28

## VOR DME RWY 28

**MISSED APPROACH;** Climb to 1500' then turn RIGHT climb to 2500' proceed to SABIT for holding, consecutive approach or as instructed by ATC.

**WARR/SUB JUANDA**

**JEPPESEN**  
15 JAN 16 (12-1)

**SURABAYA, INDONESIA  
RNAV (GNSS) Rwy 10**

*ATIS	SURABAYA Approach	SURABAYA Control (R) WEST 125.1	EAST 124.0	*SURABAYA Director (R) 123.2	*JUANDA Tower 118.1 118.3	*Ground (Contact tower when inop) 118.9 119.15
128.2	119.1	125.1	124.0	123.2	118.1 118.3	118.9 119.15
RNAV	Final Apch Crs <b>098°</b>	Minimum Alt <b>RR404 2000' (1989')</b>	LNAV/VNAV MDA(H) <b>370' (359')</b>	Apt Elev 11' Rwy 11'	2000' 090° → 270° 12,500' 5000' 360'	

**MISSED APCH:** Climb STRAIGHT AHEAD 2500' to SABIT for holding and or as instructed by ATC.

Alt Set: hPa Rwy Elev: 0 hPa Trans level: FL 130 Trans alt: 11000'  
1. GPS or RNP 0.30 required. 2. Max IAS for initial: 210 Kts. 3. Baro VNAV not authorized below 15°C (59°F).

MSA SBR VOR

**MISSED APPROACH:** Climb STRAIGHT HEAD 2500' to SABIT for holding and or as instructed by ATC.

**\*ATIS** SURABAYA Approach SURABAYA Control (R) \*SURABAYA Director (R) \*JUANDA Tower \*Ground  
128.2 119.1 WEST EAST 125.1 124.0 123.2 118.1 118.3 (Contact tower when inop)  
RNAV Final Apch Crs Minimum Alt LNAV/VNAV Apt Elev 11' 118.9 119.15  
**278°** RR409 MDA(H) Rwy 8'  
**1650'** (1642') 290' (282')  
**MISSING APCH:** Climb STRAIGHT AHEAD 2500' to NIMAS for holding and or as instructed by ATC.  
Alt Set: hPa Rwy Elev: 0 hPa Trans level: FL 130 Trans alt: 11000'  
1. GPS or RNP 0.30 required. 2. Max IAS for initial: 210 Kts. 3. Baro VNAV not authorized below 15°C (59°F).  

The map shows the Surabaya area with various airports and approach routes. Key points include NIMAS (MISSING APCH FIX), SURABAYA (113.4 SBR), RWY 28, and RR409. Approach routes are labeled with headings (e.g., 278°, 188°, 106°) and altitudes (e.g., 2500'). Holding patterns are shown for RR408 and SABIT. A legend indicates 07-20, 07-30, 113-00, and 113-01. A purple shaded area represents land.

**NIMAS**  
MISSING APCH FIX

**SURABAYA**  
113.4 SBR

**RWY 28**

**RR409**

**RR408**

**RR407**  
2500

**SABIT**  
2500

**RR406**  
2500

**188°**  
1300T

**106°**  
2500

**286°**

**008°**  
1300T

**278°**

**112-50**

**113-00**

**113-01**

**07-20**

**07-30**

**RR409**

**RR408**

**RWY 28**

**TCH 50'**

**Rwy 8'**

**1650'**

**278°**

**1650'**

**MDA**

**800'**

**5.0**

**5.0**

**5.0**

**10.0**

Gnd speed-Kts 110 120 130 140 150 170 180

Rate of decent on final (feet/min) 584 637 690 744 797 903 956

MAP at RWY 28

RR409 to MAP 5.0 2:44 2:30 2:19 2:09 2:00 1:46 1:40

**STRAIGHT-IN LANDING RWY 28**

**LNAV/VNAV** DA(H) **290' (282')** **LNAV** MDA(H) **460' (452')** **CIRCLE-TO-LAND**

	ALS out	ALS out	Max Kts	MDA(H)
A			100	
B	1600m	1600m	135	610' (599') - 1600m
C		2000m	180	800' (789') - 3600m
D	2000m	2400m	205	800' (789') - 4000m

# **RNAV (GNSS) RWY 28**

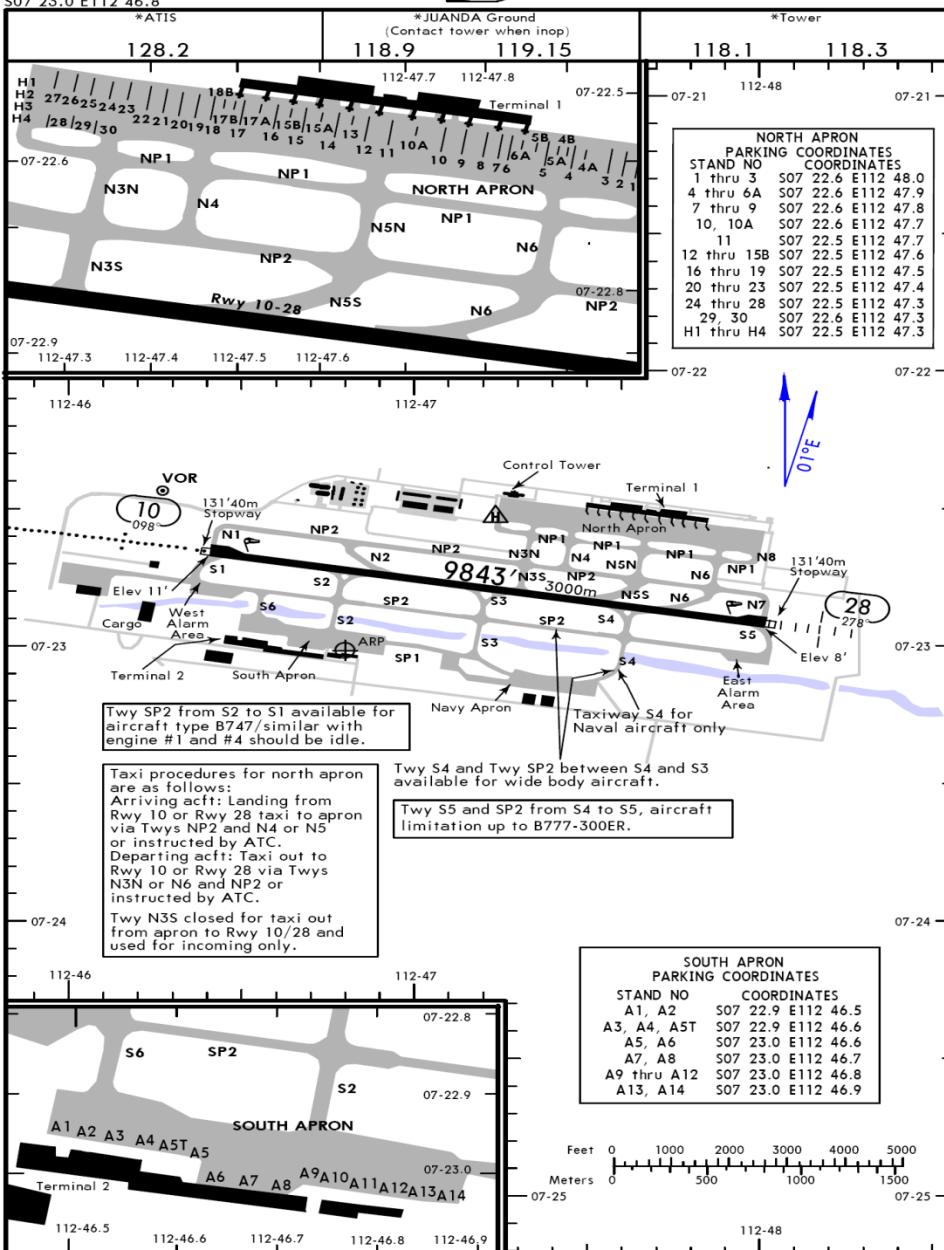
**MISSED APPROACH:** Climb STRAIGHT HEAD 2500' to NIMAS for holding and or as instructed by ATC.

WARR/SUB  
Apt Elev 11'  
S07 23.0 E112 46.8



JEPPESSEN  
8 APR 16 10-9

SURABAYA, INDONESIA  
JUANDA



# AIRPORT CHART

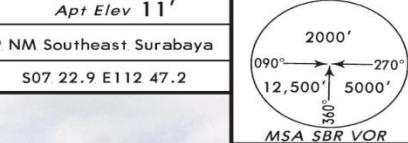
GA aircraft parking on North Apron and bay no 10 or instructed by ground control

Taxi procedure for north apron are as follows:

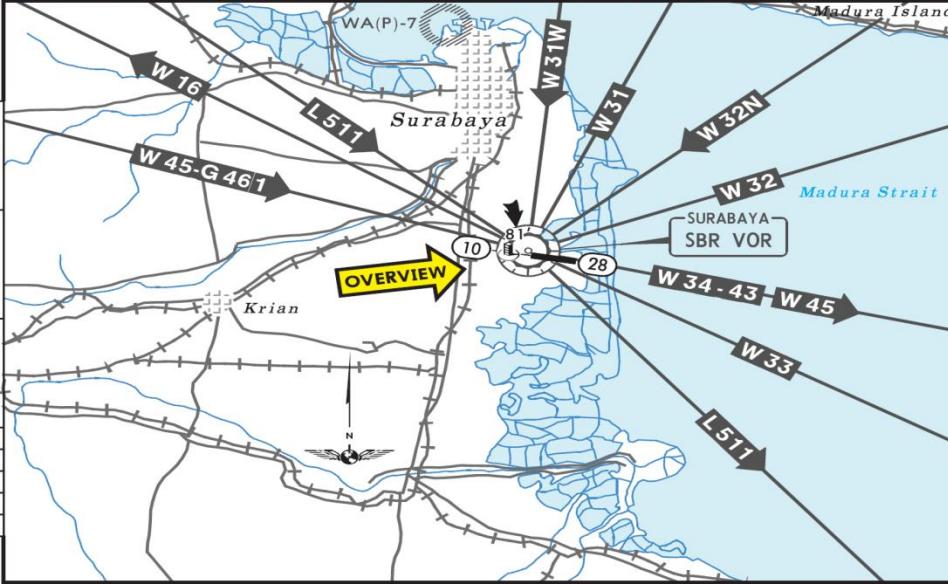
Arriving acft : Landing from RWY 28 taxi to apron via TWYs NP2 and N4 or N5 Or instructed by ATC. Departing acft : Taxi out to RWY 10 or RWY 28 via TWYs

N3N or N6 and NP2 or instructed by ATC. TWY N3S closed for taxi out from apron to RWY 10/28 and used for incoming only.

1. High Terrain in Southern Quadrants
2. Prohibited and Restricted Areas Near the Airport.



## OVERVIEW

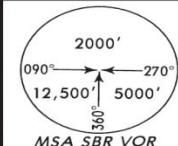


## OVERVIEW

1. **High Terrain in Southern Quadrants**
2. **Restricted Area Surround Airport**

1. High Terrain in Southern Quadrants
2. Prohibited and Restricted Areas Near the Airport.

Apt Elev 11'  
9 NM Southeast Surabaya  
S07 22.9 E112 47.2



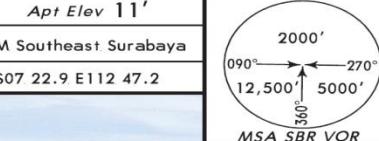
RUNWAY 10

Visual vertical guidance is provided by PAPI (3.05°) on the left side of the runway.

## RWY 10 overview

1. *High Terrain in Southern Quadrants*
2. *Restricted Area Surround Airport*

1. High Terrain in Southern Quadrants
2. Prohibited and Restricted Areas Near the Airport.



**RUNWAY 28**

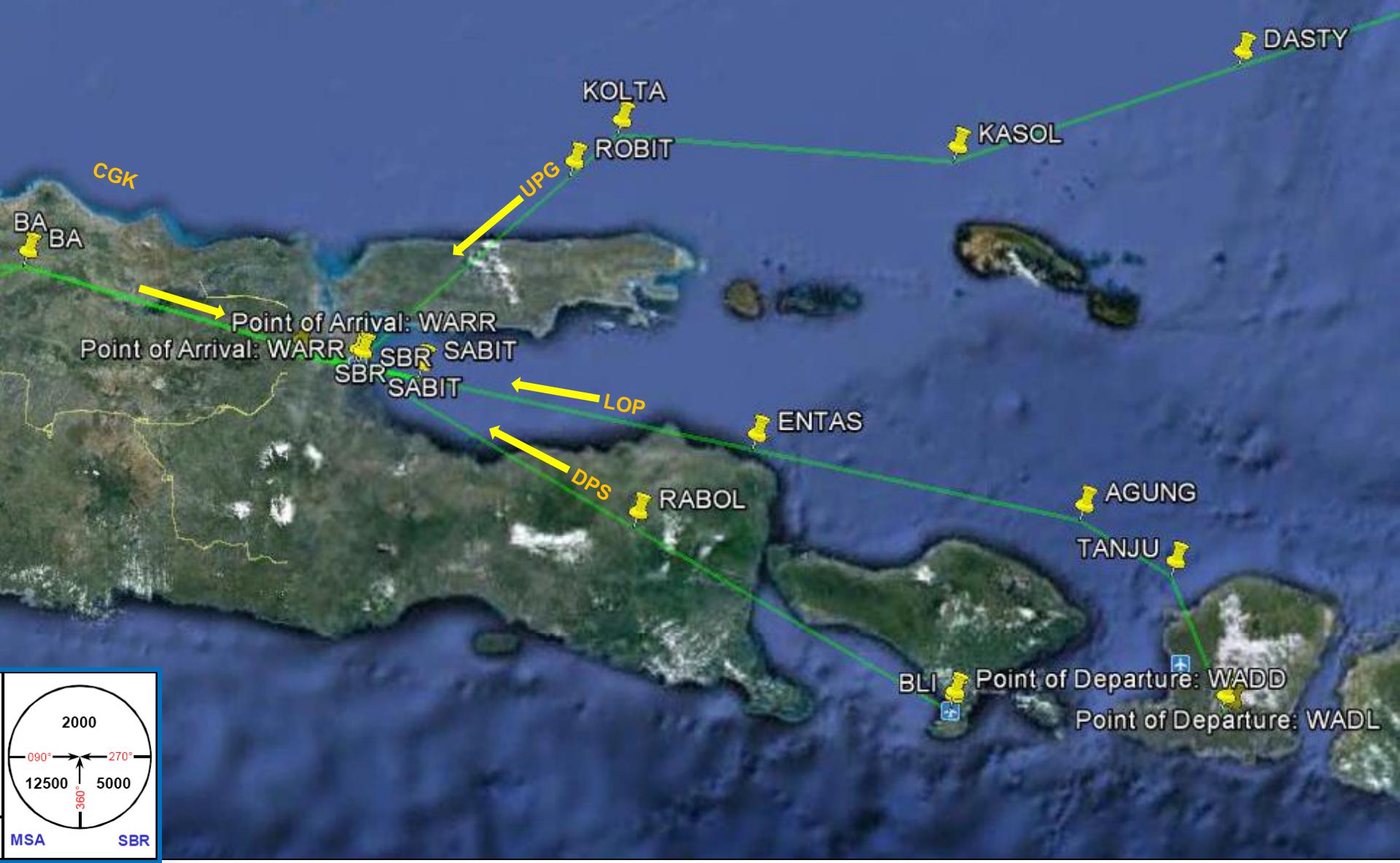
This runway uses a right-hand traffic pattern.

Visual vertical guidance is provided by PAPI (3.02°) on the left side of the runway.

## RWY 28 overview

- 1. High Terrain in Southern Quadrants***
- 2. Restricted Area Surround Airport***

# AIRWAY ARRIVALS





# TURNING & HEADING ON RWY 10



# FINAL APPROACH RWY 10 OVERVIEW

North Terminal

South Terminal



# RWY 10 OVERVIEW

North Terminal

Madura Strait



# RWY 10 OVERVIEW

North Terminal

PAPI  
*Guideline  
for turning*

North Terminal





*Arriving acft N4 or N5 or instructed by ATC, Departing acft N3N or N6 or instructed by ATC  
TWY N3S closed for taxi out from apron to RWY 10/28 and used for incoming only.*



# RWY 28 OVERVIEW





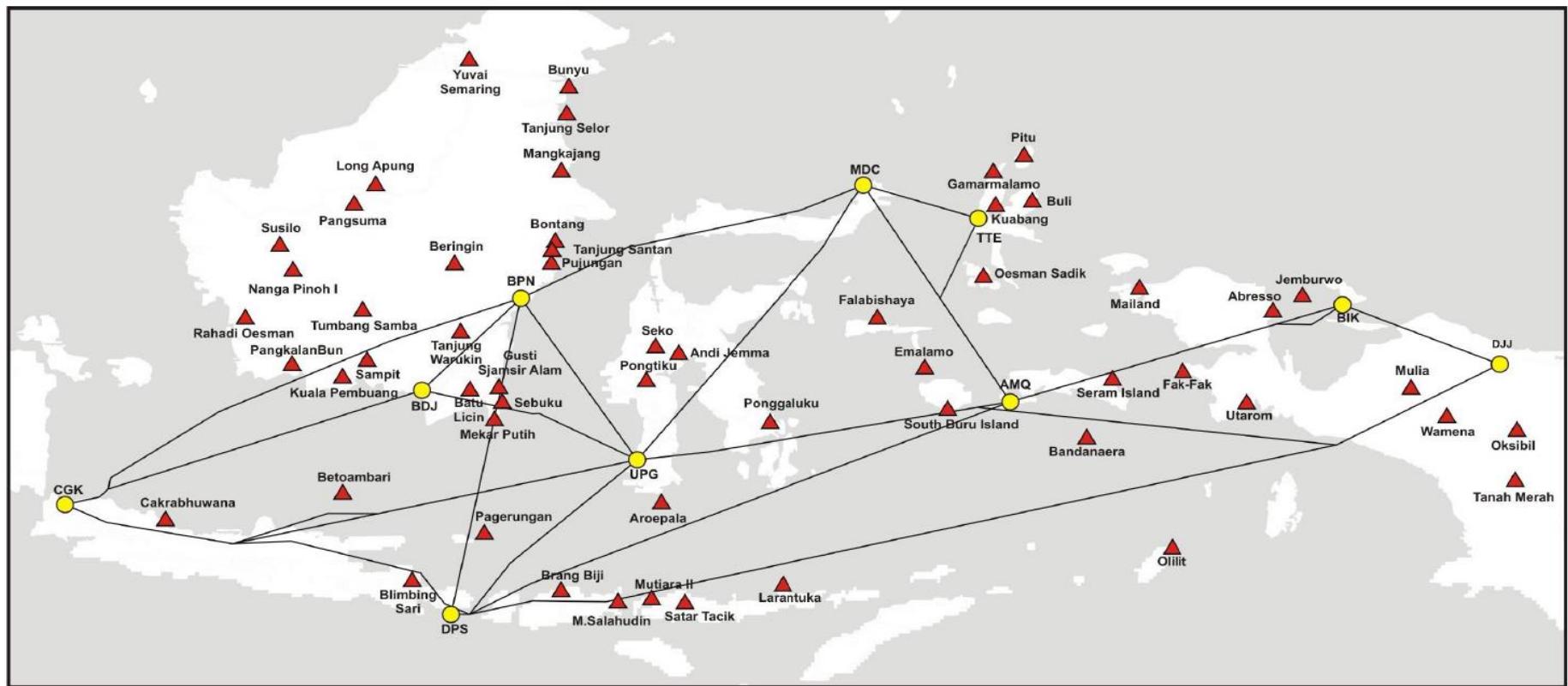
*Arriving Acft : Landing from RWY 10/28 taxi to apron via TWYs NP2 and N4 or N5 or instructed by ATC*

# ALTERTANE AERODROMES



No	AD	Loc ID	Type OF ACFT			Dist NM	GH	
1	DENPASAR	WADD	DPS		B738	B737	201	Gapura
2	SEMARANG	WARS	SRG		B738	B737	161	R
3	SOLO	WARQ	SOC		B738	B737	169	R, Gapura
4	JOYAKARTA	WARJ	JOG		B738	B737	194	R, Gapura
5	JAKRTA	WIII	CGK		B738	B737	386	Gapura

**MAP OF ENROUTE EMERGENCY AIRPORT FOR EAST AREA (DOMESTIC FLIGHT)  
FLIGHT)**



= Destination

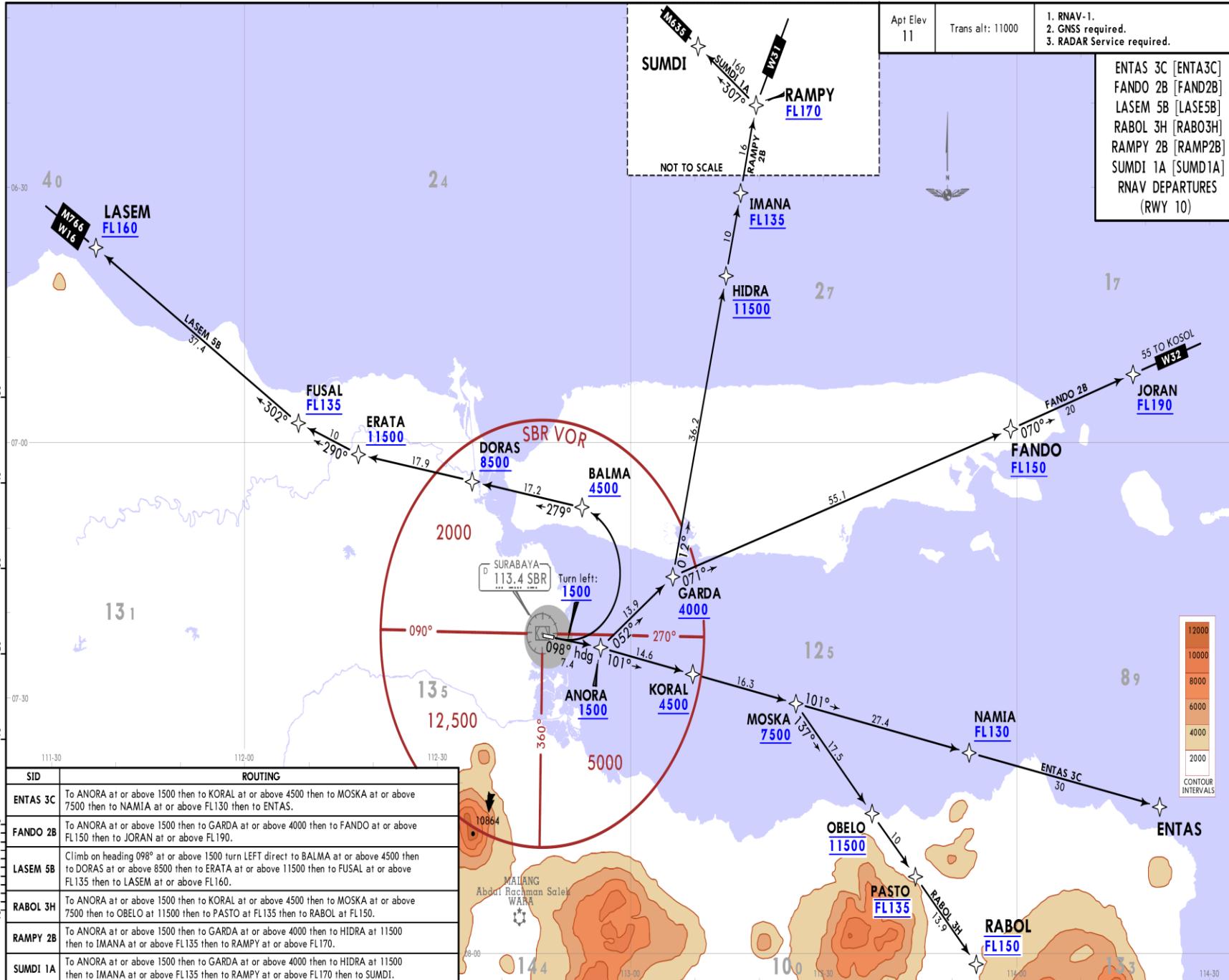


= Enroute emergency airport

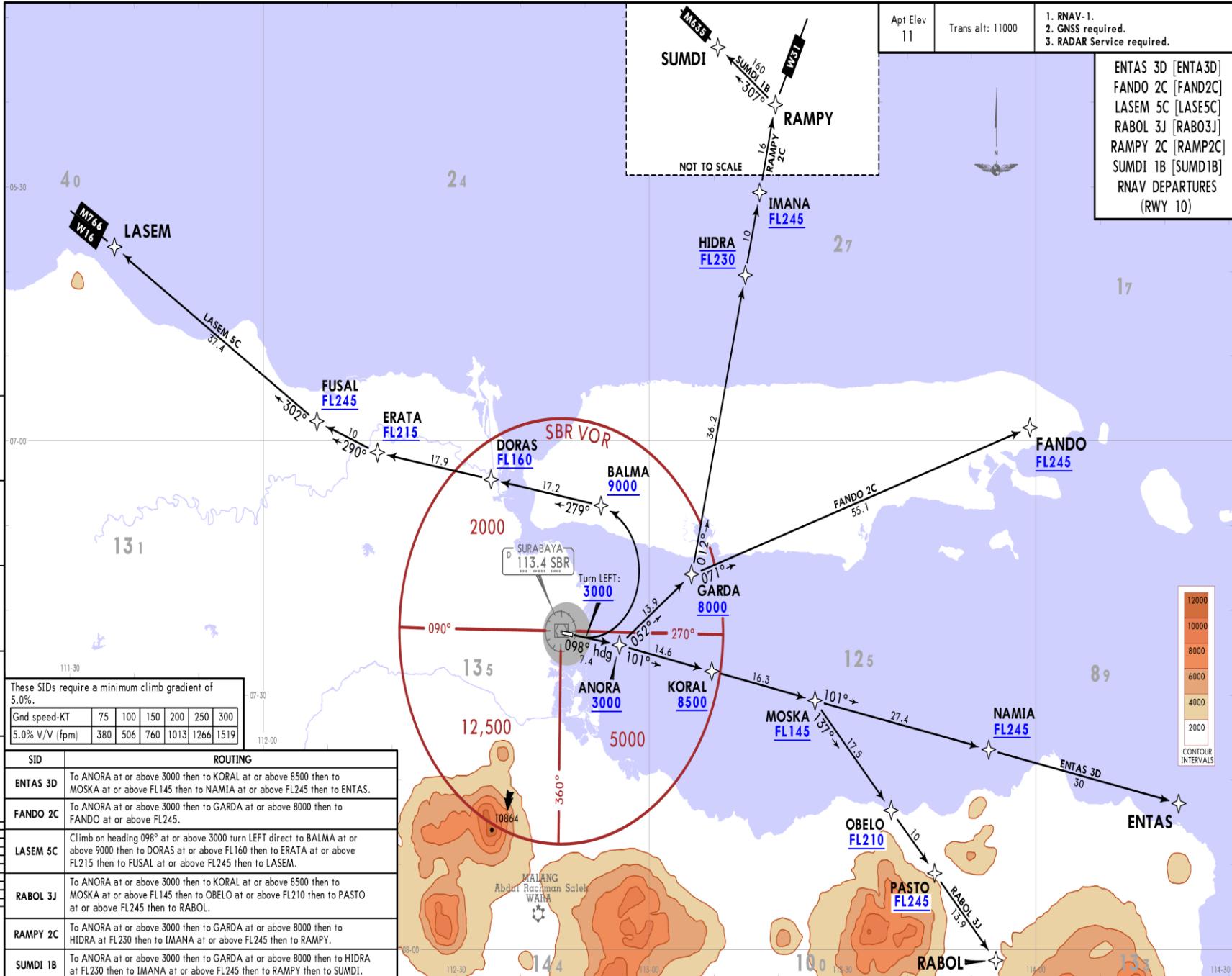


= Radius 30 NM

# DEPARTURES



RWY 28 DEPARTURES





# DEPARTURE RWY 10 OVERVIEW



# AIRWAY DEPARTURES



# OVERVIEW



# COMMUNICATION FAILURE

If radio failure precludes, the airplane shall comply with the radio communication failure procedure described herein or miscellaneous book.

The airplane when forming part of the aerodrome traffic at a controlled aerodrome shall keep a watch for such instructions as may be issued by visual signals.

## A. Complete Radio Failure

- If in Visual Meteorological Condition (VMC) : → Squawk 7600
  - continue to fly in visual meteorological conditions.
  - land at the nearest suitable aerodrome
  - report its arrival by the most expeditious means to the appropriate ATC unit.
- If in Instrument Meteorological Conditions (IMC) or when weather conditions are such that it does not appear feasible to complete the flight in accordance with appropriate procedure : → Squawk 7600.
  - Proceed according to the current flight plan to the appropriate designated navigation aid serving destination aerodrome and when required to ensure compliance with next following paragraph, hold over this aid until commencement of descent.
  - Commence descent from the navigation aid specified in flight plan or as close as possible to, the expected approach time last received and acknowledge , or if no expected approach time has been received and acknowledge, at or as close as possible to the estimated time of arrival resulting from the current flight plan.

- Complete applicable STAR followed by a normal instrument approach procedure as specified for the designated navigational aid, and land, if possible within 30 minutes after the estimated time of arrival specified or the last acknowledge expected approach time, whichever is later.

If the clearance for the levels covers only part of the route, the aircraft is expected to maintain the last assigned and acknowledged cruising level(s) to the point(s) specified in the clearance level(s) in the current flight plan. The provision of air traffic control service to other flights operating in the airspace concerned will be based on the assumption that aircraft experiencing radio failure will comply with the above name rules.

### B. Receiver Failure

When two-way communication is not possible due to receiver failure at the aircraft station, report shall be transmitted preceded by the phrase “transmitting blind due to receiver failure”, at the scheduled positions or times, and on the frequency in use. After blind transmitting of a report, the complete message shall be repeated, and the time of next intended transmission shall be advised.

**HAVE ANICE FLIGHT**

