

WSAP PAYA LEBAR

Note: The following sections in this chapter are intentionally left blank:

AD 2.16, AD 2.21 and AD 2.25

WSAP AD 2.1 AERODROME LOCATION INDICATOR AND NAME**WSAP - PAYA LEBAR****WSAP AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA**

1	ARP coordinates and site at AD	012120.60N 1035410.00E (Paya Lebar IBN)
2	Direction and distance from (city)	-
3	Elevation/Reference temperature	20 M(65ft) / 31.5°C
4	MAG VAR	0°23'E (2020)
5	AD Administration, address, telephone, telefax, telex, AFS	PAYA LEBAR AIRPORT SINGAPORE534395 Tel: 63813111 (Base Command Post) AFS: WSAPYWYX
6	Types of traffic permitted	IFR
7	Remarks	Operator: Republic of Singapore Air Force. Alternate/Emergency Diversionary Aerodrome for Singapore Changi Airport (see page WSAP AD 2-9)

WSAP AD 2.3 OPERATIONAL HOURS

1	Aerodrome Administration	BTN 2300-1100 SUN/MON to THU/FRI Public holidays and outside operating hours prior permission required from RSAF Headquarters via Paya Lebar Base Command Post.
2	Customs and immigration	by prior arrangement only
3	Health and sanitation	by prior arrangement only
4	AIS Briefing Office	-
5	ATS Reporting Office	-
6	MET Briefing Office	H24
7	Air Traffic Services	H24
8	Remarks	AD may be closed periodically for Foreign Object Damage (FOD) walk. Actual emergency or diversion will be accepted at 30 min notification. Such closure will be published via NOTAM.

WSAP AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo Handling Facilities	-
2	Fuel / Oil Types	JET A1, Oil
3	Fuelling Facilities / Capacity	BTN 2300-1100 SUN/MON to THU/FRI Public holidays and outside operating hours prior permission required from RSAF Headquarters via Paya Lebar Base Command Post.
4	Hangar space for visiting aircraft	-
5	Repair facilities for visiting aircraft	-
6	Remarks	NIL

WSAP AD 2.5 PASSENGER FACILITIES

1	Hotels	NIL
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2	Restaurants	NIL
3	Transportation	NIL
4	Medical Facilities	NIL
5	Banks and Post Offices	NIL
6	Tourist Office	NIL
7	Remarks	NIL

WSAP AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT9
2	Rescue equipment	Adequately provided as recommended by ICAO
3	Capability for removal of disabled aircraft	Sufficient salvage equipment provided by Airfield Ground Services section at military bases.
4	Remarks	All Airport Emergency Services personnel are trained in rescue and fire-fighting as well as medical first-aid.

WSAP AD 2.7 SEASONAL AVAILABILITY - CLEARING

The aerodrome is available throughout the year.

WSAP AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	Strength: PCR559/R/B/W/U (Apron A) Strength: LCN100 - PCN71/R/B/W/U (Apron B) Strength: PCR637/R/B/W/U (Apron C) Strength: PCR305/R/B/W/U (Apron D) Strength: PCR559/R/B/W/U (Jet Apron) Strength: PCR574/R/B/W/U (Jet Apron Extension)
2	Taxiway width, surface and strength	Strength: PCR502/F/B/X/U
3	Remarks	TWY between TWY W1 and TWY W2 closed to all code C and above aircraft. Pilots to exercise caution.

WSAP AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Aircraft Parking Restrictions		
	There are 4 designated parking aprons: Apron A, Apron C, Jet Apron and Jet Apron Extension:		
		ACFT Stand	Largest ACFT Type
	Apron A	A1 to A5	C17
	Apron C	C1 to C7 (reserved for RSAF) C8 to C9 C10 C10A C11 C11A	C130 C130 KC135 B747-400 C17 C5, AN124
	Jet Apron	J1 to J3 J1A and J2A	C130 B747
	Jet Apron Extension	J4 and J5	C17
2	Taxiing Procedures		
2.1	Taxiing in/out of Apron Areas		

SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS		
	Pilots taxiing in/out of apron areas must adhere to ATC's instructions. Once a pilot has reported visual with the marshallers, the pilot will be instructed to continue to taxi and follow the marshaller's instructions. At any time, should the aircraft pilot decide not to comply with the marshaller's instructions, it is mandatory for the pilot or the marshalling agency to inform ATC immediately. All marshalling services shall terminate at that moment and the pilot will be instructed by ATC to shutdown the aircraft. Concurrently, ATC will also inform the marshallers via the ground communications network. Subsequently, the aircraft will be towed to its allocated aircraft stand. Pilots are to exercise caution when operating in the apron areas due to close proximity of obstacles (e.g. Floodlights, buildings, etc.)	
2.2	To minimize the possibility of ground taxiing conflict within the apron areas as well as to achieve an orderly flow of aircraft ground movements, the following guidelines are recommended for both RWY 02 (Departures) and RWY 20 (Arrivals):	
	Apron	Departures
	Apron A	Taxi for RWY 02 departure via TWY F4.
	Apron B	No taxiing is allowed within Apron B and TWY W7. Aircraft will be towed in/out of Apron B to an assigned aircraft stand via TWY W7.
	Apron C	TWY F1
	Jet Apron/Jet Apron Extension	TWY F3
	Arrivals	
		TWY F3 or F4
		TWY F1 or F2
		TWY F3
3	Ground Taxiing Guidelines	
3.1	The recommended taxiing guidelines may be subject to changes due to work-in-progress or unforeseen circumstances and shall be included in the NOTAM. Pilots will receive a taxiing brief from the Flight Planning office prior to departure.	
4	Ground Restrictions due to Weather	
4.1	In the event of inclement weather over Paya Lebar airport, ground support services for aircraft are to be terminated when the meteorological office issues a Lightning Risk Category 1 warning (very high lightning risk with extremely probable lightning producing CB clouds over the affected area). Ground agencies will be alerted of the warnings through the Base Public Announcement system as well as through the ground communications network. The following ground support services are to be terminated: a) aircraft refuelling and de-refuelling b) towing of aircraft in the open c) maintenance works on aircraft on the apron areas d) marshalling of aircraft in and out of the apron areas e) loading and unloading of cargo from aircraft f) customs and immigration checks in the apron areas	
4.2	There is no work restriction for Lightning Risk Categories 2, 3, 4 and 5. As aircraft marshalling is not permitted during Lightning Risk Category 1, aircraft that has landed at Paya Lebar Airport will be instructed to hold at the following designated areas until the warning has expired: a) Non-VIP aircraft at TWY F1, F2, F3 or F4 b) VIP aircraft at TWY F3 or F4	
4.3	There may be occasions when despite a declaration of Lightning Risk Category 1, certain activities would still need to be performed in the open areas due to critical or operational requirements. In such instances, approval must be sought from Paya Lebar Tower after careful assessment of the overall weather situation over Paya Lebar Airport. Examples of such critical activities include: a) Marshalling of VVIP / VIP aircraft b) Embarkation / disembarkation of VIP from aircraft	
5	Ground Procedures - General	
5.1	<u>Engine Start-ups and Ground Runs</u> Clearance from the Ground Controller must be sought and obtained for all engine start-ups or any associated activities within the apron areas. In addition, all engine ground runs, regardless of intensity, must be co-ordinated with ATC for approval. However, ground runs exceeding 85% of the engine power are prohibited within the apron areas. Within Paya Lebar Airport, the designated area for engine ground runs exceeding 85% of the engine power are the Northern Access Run-up Pad and Hush-House or as designated by Paya Lebar Base Command Post. The area allocated will be dependent on the type of aircraft concerned.	
5.2	<u>Aircraft to/from Apron B</u> Engine start-ups and shutdowns at TWY W7 are strictly prohibited. Aircraft departing or arriving to/from Apron B shall be allocated the appropriate aircraft stands for their start-ups or shutdowns and shall be towed in/out of the allocated aircraft stand. In addition, wing-walkers are to be provided for large aircraft on tow at TWY W7 due to construction works located next to TWY W7.	
5.3	<u>Prohibited Activities - Smoking in the Apron Areas</u> Smoking is strictly prohibited within the Apron areas. Disciplinary action will be taken on any personnel caught contravening this restriction.	

WSAP AD 2.10 AERODROME OBSTACLES

IN APPROACH / TKOF AREAS		
RWY/Area affected	OBST type, ELEV, Markings/LGT	Location/Coordinates
1	2	3
a. RWY 02 APCH RWY 20 TKOF	Industrial buildings, HGT 83ft AMSL. OBST LGTD.	Located on either side of approach funnel 2300ft from RWY 02 THR.
b. RWY 02 APCH RWY 20 TKOF	Structure (water tower), HGT AMSL, marked and LGTD.	012022N 1035436E (east of RWY)
c. RWY 02/20 APCH RWY 02/20 TKOF	ILS LLZ, co-located with LLZ antennae, HGT 17ft AGL.	LLZ RWY 02 located 1324ft from RWY 20 THR. LLZ RWY 20 located 1525ft from RWY 02 THR.
d. RWY 02/20 APCH RWY 02/20 TKOF	ILS LLZ, co-located with LLZ antennae, HGT 8ft AGL.	LLZ RWY 02 located 1244ft from RWY 20 THR.

IN CIRCLING AREA AND AT AERODROME	
OBST type, ELEV, Markings/LGT	Location/Coordinates
1	2
a. ILS GP huts co-located with GP antenna mast, 53ft AGL, marked and lighted.	GP RWY 02 located 296ft west of western edge of RWY and 858ft from RWY 02 THR. GP RWY 20 located 296ft west of western edge of RWY and 984ft from RWY 20 THR.
b. Precision Approach Radar (PAR) hut, 49.2ft AGL, marked and lighted.	211ft east of eastern edge of RWY, 7089ft north of RWY 02 THR.
c. 2 x Frangible PAR Moving Target Indicator (MTI) reflectors, 16ft AGL, marked and lighted.	RWY 02 MTI reflectors, located 213ft east of eastern edge of RWY, 4389ft from RWY 02 THR. RWY 20 MTI reflectors, located 209ft east of eastern edge of RWY, 2911ft from RWY 20 THR.
d. Arrestor hookwire retriever unit, 4ft AGL, lighted .	Within the RWY strip. Located 52ft from both sides of the RWY edges, installed 1200ft from RWY 02 THR and 1100ft from RWY 20 THR.
e. Arrestor barrier flat on the ground.	Within the RWY strip, installed 210ft south of RWY 02 THR and 118ft north of RWY 20 THR.
f. Surface wind direction sleeves, 25ft AGL, marked and lighted.	344ft west of western edge of RWY for both sides, 458ft from RWY 02 THR and 307ft from RWY 20 THR.
g. AWOS stanchions, 23ft AGL, marked and lighted.	296ft west of western edge of RWY on both sides, 658ft from RWY 02 THR and 654ft from RWY 20 THR.
h. One wheel structure, 585ft AMSL, lighted.	Erected at 011726N 1035150E, BRG 216 DEG, DIST 5NM from WSAP ARP - within WSAP CTR.
i. One Building, 804ft AMSL, lighted.	Erected at 011642N 1035105E, BRG 216 DEG, DIST 6.2NM from WSAP ARP - within WSAP CTR.
j. Mobile aircraft arrestor gear, 6.6ft AGL, lighted.	39ft from edge of western taxiway between TWY W1 and W2 at 1362ft south of TWY W1.
k. Lightning protection system, 218ft AMSL, marked and lighted.	Erected at 012203.36N 1035509.39E.
l. Mobile aircraft arrestor gear, 6.6ft AGL, lighted.	300ft south of RWY 20 THR, 33ft from RWY edge on both sides. All RWY 20 inbound shall land 500ft up RWY 20 THR. LDA 11,900ft.
m. Lightning protection system, 40ft AGL, and cabin structure, 19.8ft AGL, marked and lighted.	Erected at 012240N 1035453E.
n. Trees, 197ft AMSL.	Exceed HGT limitations of Eastern Transitional Surface for Runway 02 and Runway 20. Pilots to exercise caution.
o. Concrete hut, arm barrier and fences, 19.3ft AGL.	Erected at 012032N 1035405E, Exceed HGT limitations of Take-Off Climb Surface for RWY 20. Pilots to exercise caution.
p. ILS GP huts co-located with GP antenna mast, 49ft AGL, marked and lighted.	GP RWY 02 located 263ft west of western edge of RWY and 858ft from RWY 02 THR. GP RWY 20 located 266ft west of western edge of RWY and 950ft from RWY 20 THR.

WSAP AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	<i>Associated MET Office</i>	Paya Lebar (WSAP)
2	<i>Hours of service</i>	H24
3	<i>Office responsible for TAF preparation and Periods of validity</i>	Paya Lebar (WSAP), 9, 24
4	<i>Type of landing forecast and Interval of issuance</i>	NIL
5	<i>Briefing/consultation provided</i>	P
6	<i>Flight documentation and Language(s) used</i>	Charts or Tabular forms, English
7	<i>Charts and other information available for briefing or consultation</i>	S, U, P
8	<i>Supplementary equipment available for providing information</i>	APT, WXR
9	<i>ATS units provided with information</i>	-
10	<i>Additional information</i>	Tel : 63813156 (Met Office)

WSAP AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE & MAG BRG	Dimensions of RWY (m)	Strength (PCR) and surface of RWY/SWY	THR Coordinates	THR elevation and highest elevation of TDZ of precision APCH RWY
1	2	3	4	5	6
02	23° GEO 23° MAG	3780 x 61	502/F/B/X/U Bituminous concrete	012041.08N 1035410.36E	12.9M (43ft)
20	203° GEO 203° MAG	3780 x 61	502/F/B/X/U Bituminous concrete	012234.41N 1035458.53E	19.7M(65ft)
Designations RWY NR	Slope of (RWY - SWY)	Dimensions of SWY (m)	Dimensions of CWY (m)	Dimensions of Strip	OFZ
1	7	8	9	10	11
02	-	300x61	300x150	-	-
20	-	300x61	300x150	-	-

12	<i>Remarks</i>
<p>a) Intensive fixed wing flying operation west of runway. b) Helizone adjacent west of runway up to 800ft QNH. c) Arrestor Barrier both ends of runway. Pilots are to land at least 500ft up the THR of RWY in use. d) Hookwire cable installed 335m inwards from RWY 20 THR and 360m inwards from RWY 02 THR. e) Intense bird activity after rain, and up to 2 hour after dusk and dawn. f) Pilots making approaches for RWY 20 are to take note of the high ground, 32m AMSL, 1NM north of RWY 20 THR and to exercise caution. g) Threshold markings consist of 16 stripes.</p>	

WSAP AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
02	3780	4080	4080	3780	NIL
20	3780	4080	4080	3780	NIL

WSAP AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT type LEN INTST	THR LGT colour WBAR	VASIS (MEHT) PAPI	TDZ LGT LEN	RWY Centre Line LGT LEN, spacing, colour, INTST	RWY edge LGT LEN, spacing colour, INTST	RWY END LGT colour WBAR	SWY LGT LEN colour
1	2	3	4	5	6	7	8	9
02/20	Sequenced FLG LGT. Modified Calvert High INTST White LGT with brilliancy control.	GREEN	PAPI on 3° glide slope	-	NIL	WHITE with AMBER	RED	Red

WSAP AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

WDI/Taxiway/Stopway	Lighted
IBN	012120.60N 1035410.00E012120.60N 1035410.00E; Flashing RED 'PL' ; Operating hours HN and IMC

WSAP AD 2.16 [NIL] HELICOPTER LANDING AREA

NIL (not applicable).

WSAP AD 2.17 ATS AIRSPACE

1	<i>Designation and Lateral Limits</i>	PAYA LEBAR CTR 011100N 1035134E 013300N 1040149E 013200N 1035344E 012534N 1035454E thence along international BDRY to 012544N 1035320E 012227N 1035158E 012232N 1035016E 012100N 1034654E 012025N 1034539E 011835N 1034459E thence southwards on 180° to 011100N 1034459E and eastwards to join up with 011100N 1035134E.
2	<i>Vertical Limits</i>	GND to 3000FT ALT
3	<i>Airspace Classification</i>	D
4	<i>ATS Unit Call Sign, Language(s)</i>	PAYA LEBAR TOWER (Singapore APP outside the opr hours of PAYA LEBAR TOWER), English
5	<i>Transition Altitude</i>	11000FT (3,350m)
6	<i>Remarks</i>	Northern Transit Corridor: RSAF military aircraft (with the exception of trainer aircraft) using the northern transit corridor will enter the airspace over Johor at or above 5,000ft. RSAF trainer aircraft using the northern corridor will enter the airspace over Johor at or above 2,000ft.

WSAP AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
APP	SELETAR APPROACH	126.025 MHz	0000-1500	TAR – Intermediate approach to Seletar Airport
	SINGAPORE APPROACH	124.05 MHz 124.6 MHz 126.3 MHz	H24	TAR – flow control service provided for ARR/DEP ACFT. Intermediate approach to Singapore Changi AP and other airports in Singapore. DEP from all airports in Singapore.
	PAYA LEBAR APPROACH	119.9 MHz 298.0 MHz *255.8 MHz #127.7 MHz	BTN 2300-1100 SUN-MON to THU-FRI On SAT-SUN, public holidays and outside the above times PPR from RSAF Headquarters via Paya Lebar Base Command Post.	* for monitoring aircraft operating in Light Aircraft Training Areas. # for monitoring aircraft operating in Light Aircraft Training Areas and Seletar outbound/inbound traffic.
TWR	PAYA LEBAR TOWER	118.05 MHz 263.1 MHz	Paya Lebar Base Command Post.	NIL
GND	PAYA LEBAR GROUND	130.8 MHz 296.0 MHz		
PAR	PAYA LEBAR TALKDOWN	119.9 MHz †269.0 MHz ◆240.5 MHz		† for Talkdown 1, ◆ for Talkdown 2 Maint Period: BTN 0001-1100 First THU of EV month
SRE	PAYA LEBAR DIRECTOR	283.0 MHz		Maint Period: BTN 0001-1100 Second THU of EV month
Flight Information Service	SINGAPORE RADAR	119.1 MHz		H24

WSAP AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of Aid and MAG Variation	IDENT	FREQ	OPR Hour	Position of transmitting Antenna Coordinates	DME transmitting Antenna Elevation / Remarks
TACAN	PLA	CH110X	H24	012224.00N 1035451.00E	030° MAG 2.375km from ARP. Maint Period: BTN 0001-0900 Second SAT of EV month For homing purposes only.
PAPA UNIFORM DVOR/DME	PU	115.1MHz CH98X	H24	012524.00N 1035600.00E	020° MAG 9km from THR RWY 02 Antenna Hgt: 190ft AMSL. Coverage 200NM. Maint Period: BTN 0200-0600 Third WED of EV month

Type of Aid and MAG Variation	IDENT	FREQ	OPR Hour	Position of transmitting Antenna Coordinates	DME transmitting Antenna Elevation / Remarks
SINJON DVOR/DME	SJ	113.5MHz CH82X	H24	011321.34N 1035115.22E	201° MAG 14.5km from THR RWY 02 (Paya Lebar). Antenna HGT: 190ft AMSL Coverage 200NM Maint Period: BTN 0200-0600 Third THU of EV month
ILS LLZ RWY 02	IPN	109.3MHz	H24	012246.41N 1035503.64E	LOC 401m from THR RWY 20 along centreline of RWY. Course width 3 DEG. Maint Period: BTN 0001-0900 First SUN of EV month
ILS GP RWY 02	-	332.00MHz	H24	012050.42N 1035410.11E	GP angle 3 DEG.
ILS DME RWY 02	IPN	CH30X	H24	012050.42N 1035410.11E	DME co-located with GP
ILS LLZ RWY 20	IPS	111.5MHz	H24	012027.24N 1035404.48E	LOC 462m from THR RWY 02 along centreline of RWY. Course width 3 deg. Maint Period: BTN 0001-0900 Second SUN of EV month
ILS GP RWY 20	-	332.90MHz	H24	012227.29N 1035451.29E	GP angle 3 deg.
ILS DME RWY 20	IPS	CH52X	H24	012227.29N 1035451.29E	DME co-located with GP

WSAP AD 2.20 LOCAL AERODROME REGULATIONS - DESIGNATION OF PAYA LEBAR AIRPORT AS AN ALTERNATE AD FOR SINGAPORE CHANGI AIRPORT

1 INTRODUCTION

1.1 Paya Lebar Airport is designated as an alternate aerodrome to Singapore Changi Airport.

1.2 As Paya Lebar Airport is a joint civil/military aerodrome, its use as a planned alternate aerodrome for Singapore Changi Airport is subjected to certain restrictions and limitations. It also has limited ground, baggage and passenger handling facilities for civilian aircraft operations, such as passenger boarding bridges.

2 MANNING OF PAYA LEBAR AIRPORT

2.1 The airport is open from 2300-1100 on SUN-MON to THU-FRI. It is closed on Saturdays, Sundays and Public Holidays. Outside the stipulated operating hours and during airport closure, Paya Lebar Airport will be opened at 30 minutes' notice to accept diversion flights into the aerodrome.

2.2 Airline operators are requested to inform the Airport Manager and the Duty Tower Controller or SATCC Watch Manager at Singapore Changi Airport as soon as it is known that their service will require the use of Paya Lebar Airport. Revised ETAs and/or ETDs are to be notified as soon as known.

2.3 The airport will hold off all departures and arrivals when the aerodrome visibility falls below 3km, or when the aerodrome prevailing cloud base is lower than 500ft. This is a safety consideration to avoid aircraft from carrying out a missed approach under an adverse weather condition. For maintenance/functional check flights scheduled to depart and arrive back to the airport, such departures may be held off when the aerodrome visibility falls below 6km, or when the aerodrome prevailing cloud base is lower than 1,000ft.

3 OPERATIONAL SERVICES

3.1 Air-ground-air communications maintained by Paya Lebar Airport for aerodrome/approach control service are listed in page WSAP AD 2-7.

4 PASSENGER CLEARANCE

4.1 All Customs, Health and Immigration clearances will be carried out at Singapore Changi Airport.

4.2 The diverting aircraft Airline's Coordinator and its ground handling agency staff shall be present to provide assistance when an aircraft is required to land at Paya Lebar Airport.

5 SECURITY

5.1 All airline personnel, including ground handlers and support staff who have to proceed to Paya Lebar Airport must wear their Singapore Changi Airport passes at a prominent position for entry to the aircraft parking area. All personnel not in possession of the laminated Singapore Changi Airport pass will be denied entry into Paya Lebar Airport by the RSAF Security Guard. Entry into the airport by both the airline personnel and service equipment is via the main gate. The Airline Engineering Coordinator shall be responsible for the proper positioning of the ground servicing equipment and vehicles in the Apron Area where arriving aircraft are to be parked.

5.2 The security of civil aircraft parked in the Apron is the responsibility of the aircraft owner and any security service obtained shall first be cleared with the Paya Lebar Airport flight security.

6 AIRCRAFT STAND ALLOCATION

6.1 Nine aircraft parking positions in Apron C and on taxiway fillets are available for civil aircraft. A separation of 40 feet between wing-tips should be maintained.

6.2 Aircraft parking positions will be issued by the Paya Lebar Tower and the Airline Engineering Coordinator shall provide the marshalling services. Close coordination between the Airline Engineering Coordinator and the Tower Controller is essential in regard to aircraft parking and positioning of servicing equipment in and around the parking apron.

7 AIRCRAFT REFUELLING

7.1 ST Airport Services Pte Ltd (STARS) is the assigned aircraft fuelling agency. However, prior arrangement must be made between the airline and STARS for such services. The refuelling rate available is 350 imperial gallons per minute (IGPM).

8 GROUND OPERATIONS

8.1 Singapore Airport Terminal Services (SATS) and DNATA Singapore Pte Ltd (DNATA) will provide all ground services at one hour's prior notice except engineering services which will be provided by Singapore Airlines.

9 FULL EMERGENCY/CRASH PROCEDURE

9.1 In the event of a Full Emergency being declared on a civil aircraft diverted to Paya Lebar AP, Full Emergency/Crash Procedures applicable to Singapore Changi AP will equally apply to Paya Lebar AP.

9.2 Alerting of all outside organisations such as the Singapore Civil Defence Force, Police, MINDEF and ambulance services shall be carried out by the Singapore Changi AP Tower Controller.

10 METEOROLOGICAL AND AERONAUTICAL INFORMATION SERVICE

10.1 Meteorological service is available 24 hours at the 6th floor of the building where Paya Lebar Air Traffic Control Tower is located.

10.2 Aeronautical Information Service is available at Singapore Changi Airport.

11 ATC SERVICE OUTSIDE STIPULATED OPERATING HOURS

11.1 Radar service will not be available at Paya Lebar Airport outside its stipulated operating hours.

WSAP AD 2.21 [NIL] NOISE ABATEMENT PROCEDURES

NIL (not applicable).

WSAP AD 2.22 FLIGHT PROCEDURES

1 DEPARTURE AND ARRIVAL PROCEDURES

1.1 The designated runway for departures is RWY 02 and for arrivals is RWY 20.

1.2 The airport will hold off all departures and arrivals when the aerodrome visibility falls below 3km, or when the aerodrome prevailing cloud base is lower than 500ft. This is a safety consideration to avoid aircraft from carrying out a missed approach and overflying the populace under an adverse weather condition.

2 STANDARD INSTRUMENT DEPARTURES

November 1 Departure - Climb to maintain 3,000ft on RWY heading for PU DVOR/DME. At PU DVOR/ DME, turn left heading 010. Contact Seletar APP on 126.025 MHz or as instructed by ATC.

November 2 Departure - Climb to maintain 3,000ft on RWY heading for PU DVOR/DME. At PU DVOR/ DME, maintain heading 020. Contact Seletar APP on 126.025 MHz or as instructed by ATC.

November 3 Departure - Climb to maintain 3,000ft on RWY heading for PU DVOR/DME. At PU DVOR/ DME, turn left heading 360. Contact Seletar APP on 126.025 MHz or as instructed by ATC.

3 STANDARD ARRIVALS

When Paya Lebar is VMC - Expect radar vector to RWY 20 for visual straight-in approach.

When Paya Lebar is IMC - Expect radar vector to RWY 20 for ILS or PU DVOR/DME approach.

WSAP AD 2.23 ADDITIONAL INFORMATION

1 OUTDOOR LIGHT AND WATER SHOW

1.1 An outdoor light and water show will take place between 1200-1215, 1300-1315, 1400-1415 Friday to Saturday and 1200-1215, 1300-1315 Sunday to Thursday at 011704N 1035130E (within Paya Lebar Control Zone). GND - UNL.

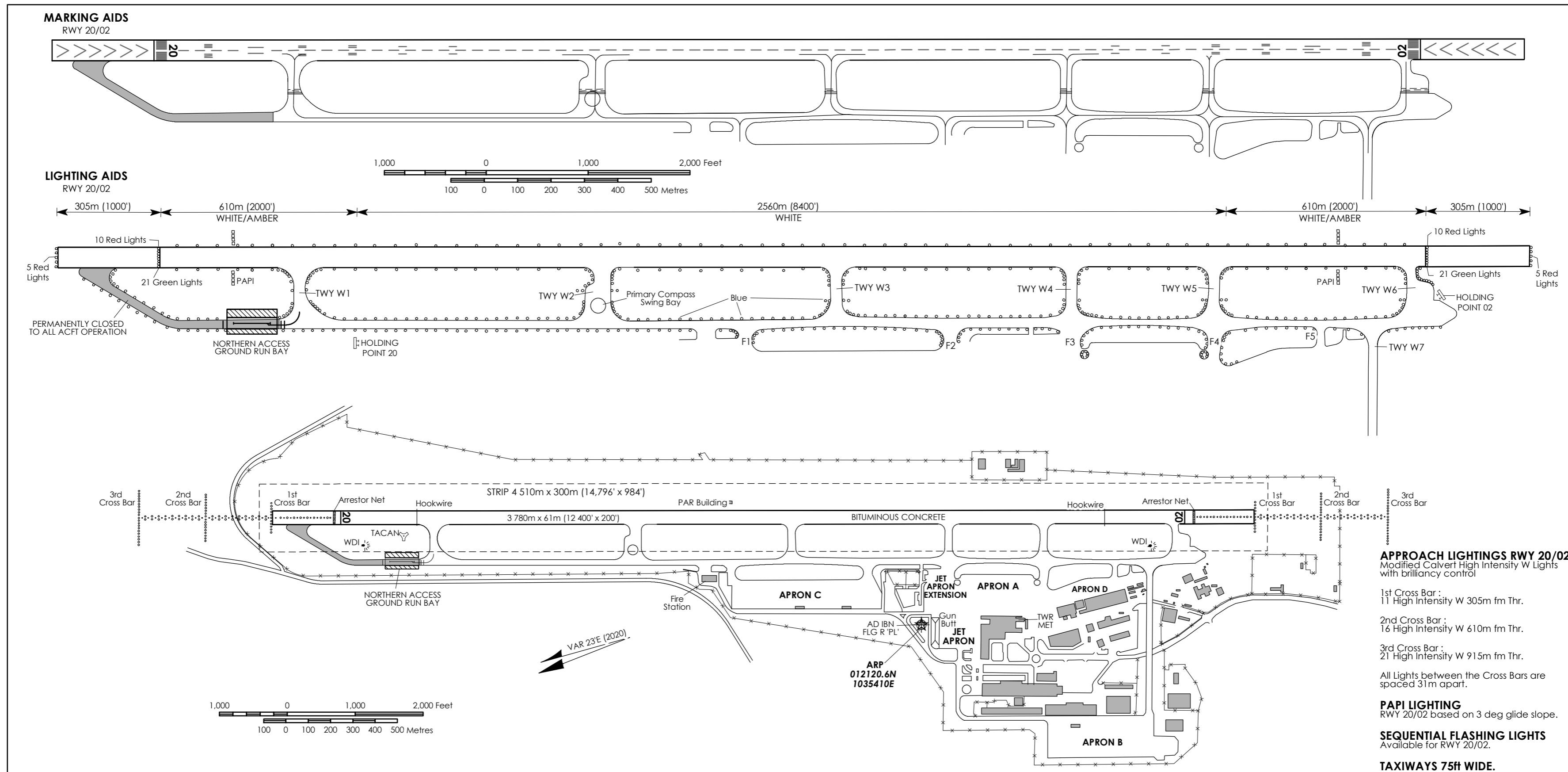
WSAP AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome Chart	AD-2-WSAP-ADC-1
Location of Aircraft Stands for Civil Aircraft	AD-2-WSAP-ADC-2
Aerodrome Obstacle Chart - ICAO - TYPE A	AD-2-WSAP-AOC-1
Instrument Approach Chart - ICAO - RWY 20 - PU DVOR/DME	AD-2-WSAP-IAC-1
Instrument Approach Chart - ICAO - RWY 02 - PU DVOR/DME	AD-2-WSAP-IAC-2
Instrument Approach Chart - ICAO - RWY 20 - IPS ILS/DME	AD-2-WSAP-IAC-3
Instrument Approach Chart - ICAO - RWY 02 - IPN ILS DME	AD-2-WSAP-IAC-4
Instrument Approach Chart - ICAO - RWY 02 - RNP	AD-2-WSAP-IAC-5
Instrument Approach Chart - ICAO - RWY 20 - RNP	AD-2-WSAP-IAC-6

WSAP AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

NIL (not applicable).

AERODROME CHART - PAYA LEBAR AIRPORT



APPROACH LIGHTINGS RWY 20/02
Modified Calvert High Intensity W Lights with brilliancy control

1st Cross Bar :
11 High Intensity W 305m fm Thr.

2nd Cross Bar :
16 High Intensity W 610m fm Thr.

3rd Cross Bar :
21 High Intensity W 915m fm Thr.

All Lights between the Cross Bars are spaced 31m apart.

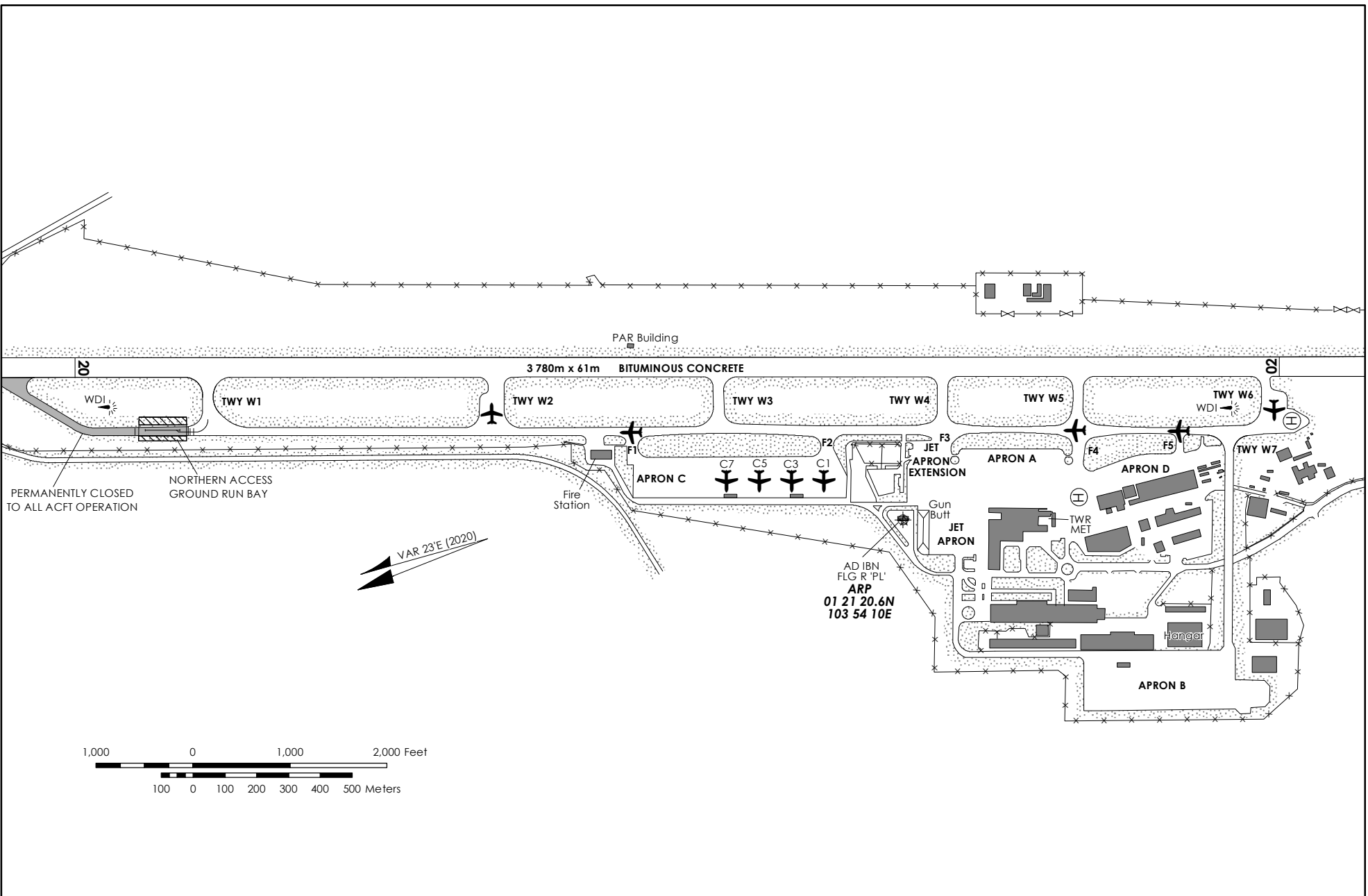
PAPI LIGHTING
RWY 20/02 based on 3 deg glide slope.

SEQUENTIAL FLASHING LIGHTS
Available for RWY 20/02.

TAXIWAYS 75ft WIDE.

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LOCATION OF AIRCRAFT STANDS FOR CIVIL AIRCRAFT AT PAYA LEBAR AIRPORT



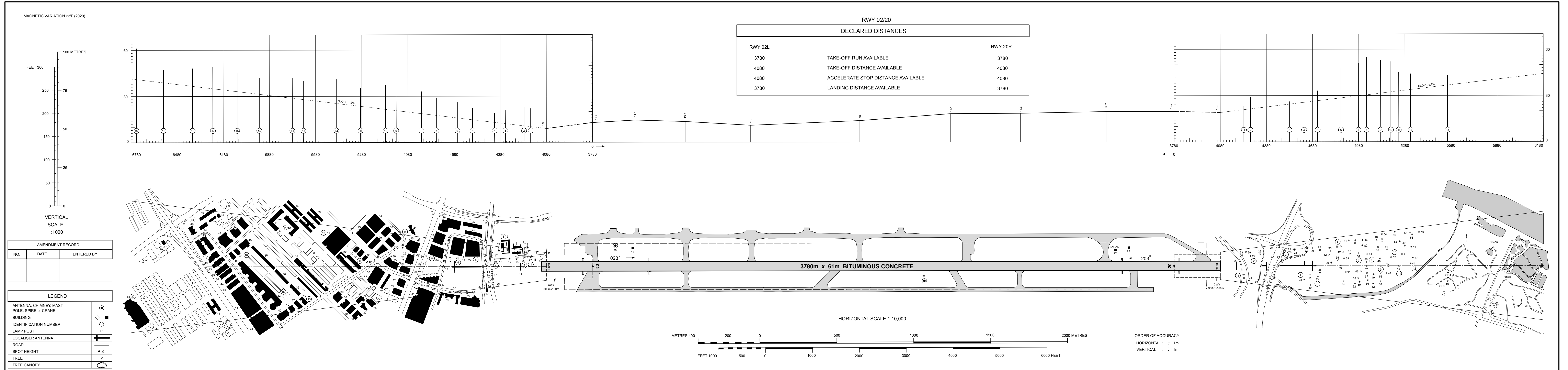
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DIMENSIONS AND ELEVATIONS IN METRES

AERODROME OBSTACLE CHART - ICAO

TYPE A (OPERATING LIMITATIONS)

SINGAPORE/Paya Lebar Airport

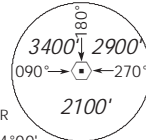


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INSTRUMENT APPROACH CHART - ICAO

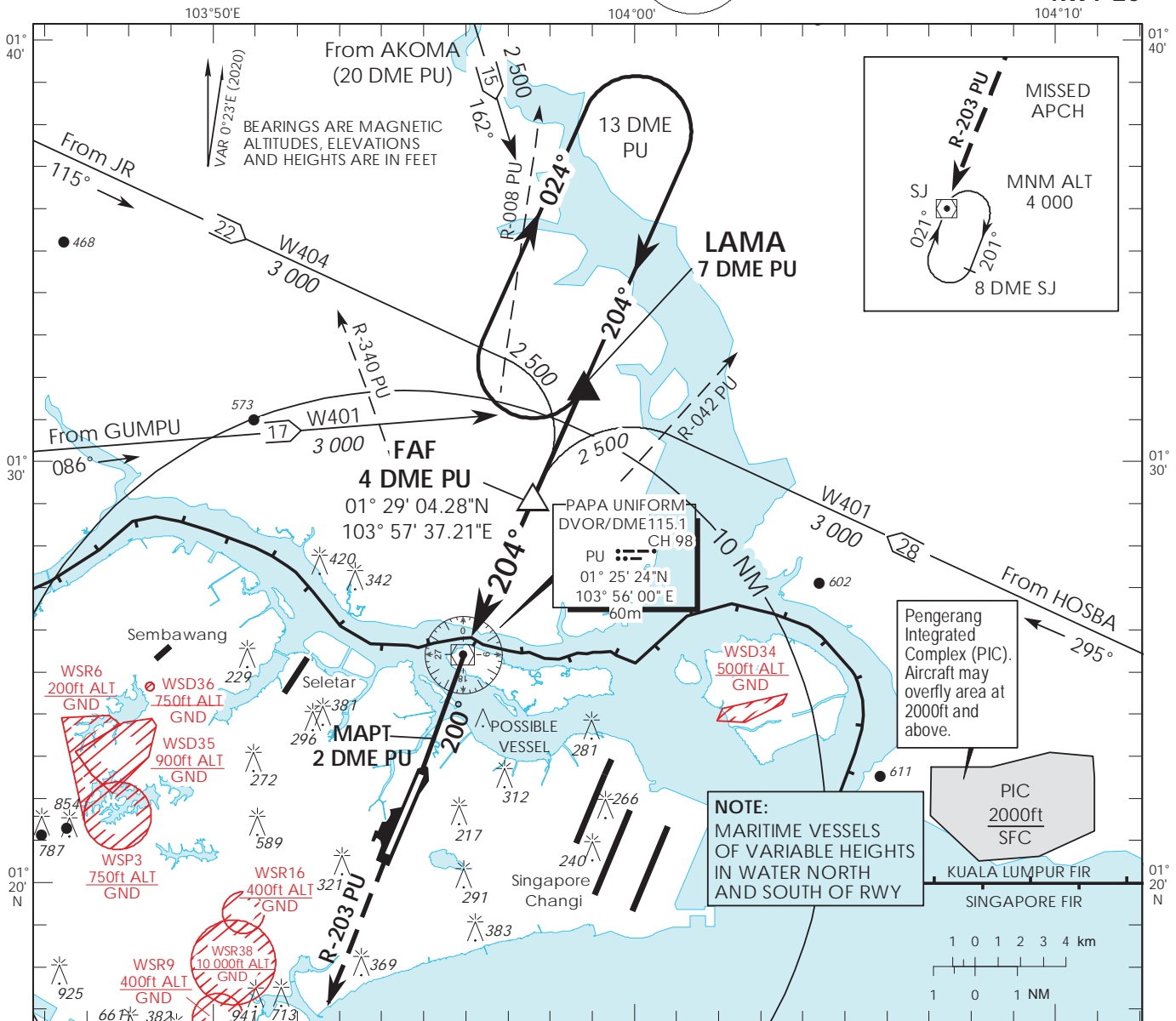
AERODROME ELEV 65ft
HEIGHT RELATED TO
AD ELEV - 65ft

MSA 25 NM
from PAPA UNIFORM DVOR



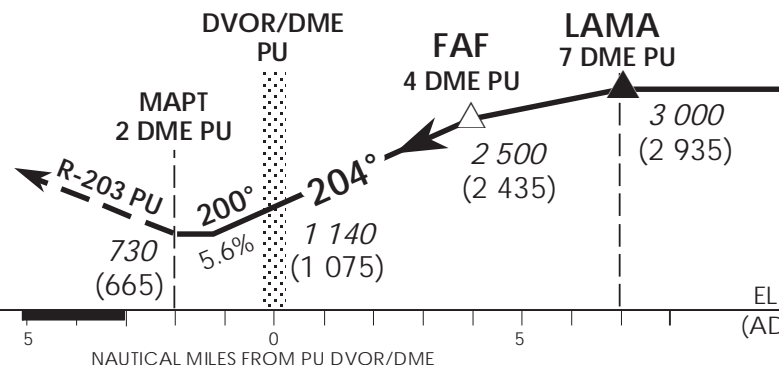
APP 124.05
119.9
126.025
TWR 118.05

**SINGAPORE/PAYA LEBAR
PU DVOR/DME
RWY 20**



Transition Level : FL 130
Transition Alt : 11 000

MISSED APPROACH
Climb to 4 000ft on R-203 PU to SJ
DVOR/DME and hold South right
turn 021° inbound or
AS DIRECTED BY ATC



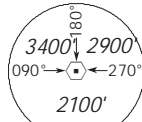
OCA (OCH)					
Category of Aircraft	A	B	C	D	
Straight-in	730 (665)				
Distance	3 DME	2 DME	1 DME	PU DVOR/DME	1 DME
Altitude (Height)	2160 (2095)	1820 (1755)	1480 (1415)	1140 (1075)	800 (735)
Speed	knots	70	120	150	185
FAF - MAPT 6nm	min : s	5 : 09	3 : 00	2 : 24	1 : 57
Rate of descent/GS	ft/min	370	635	795	980

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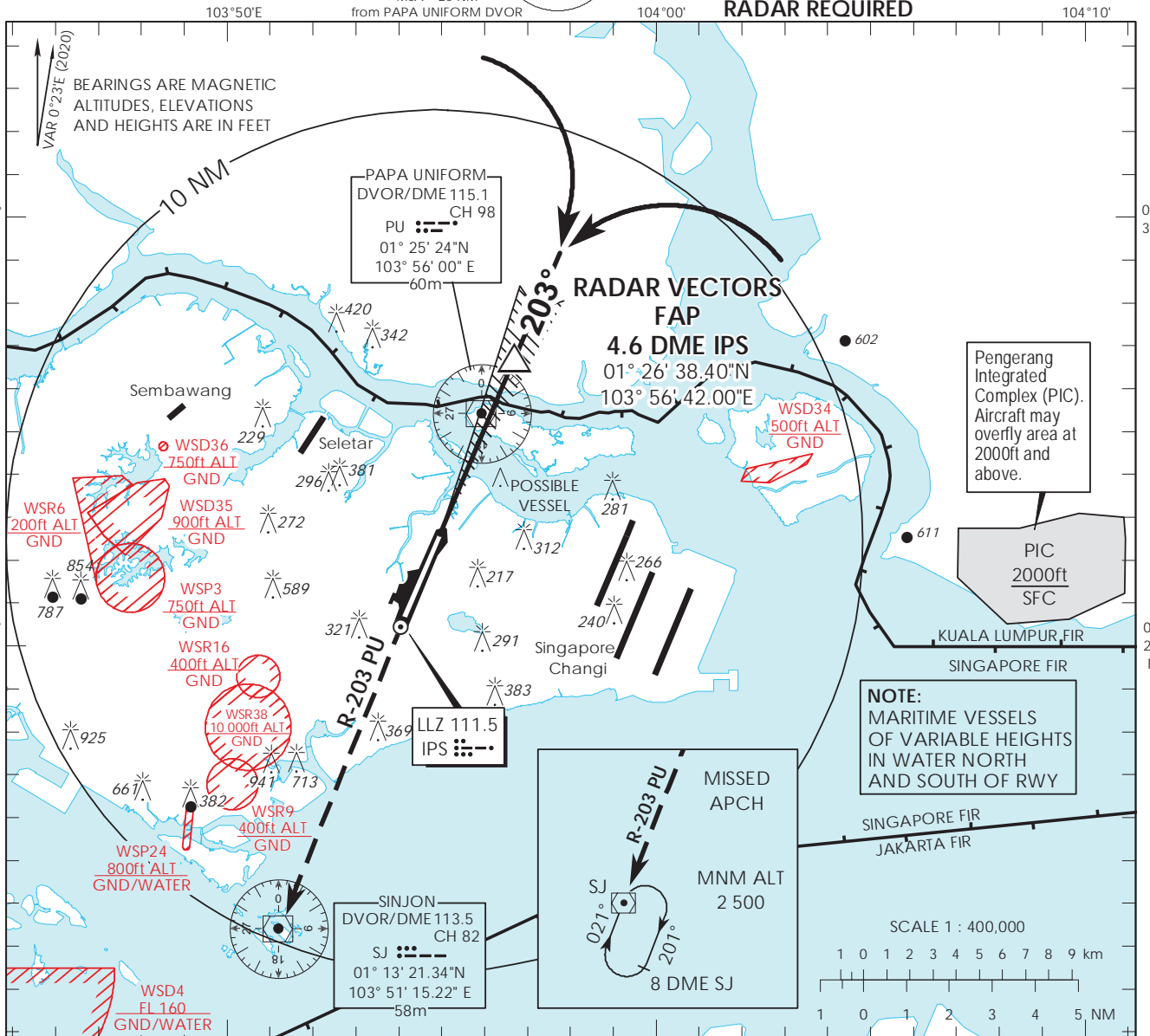
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV 65ft
HEIGHT RELATED TO THR RWY 20 - 65ft



ATIS Paya Lebar	148.9
Singapore APP	124.05
Paya Lebar APP	119.9 298.0
Seletar APP	126.025
Paya Lebar TWR	118.05 263.1
Ground Control	130.8 296.0

SINGAPORE/PAYA LEBAR IPS ILS/DME RWY 20

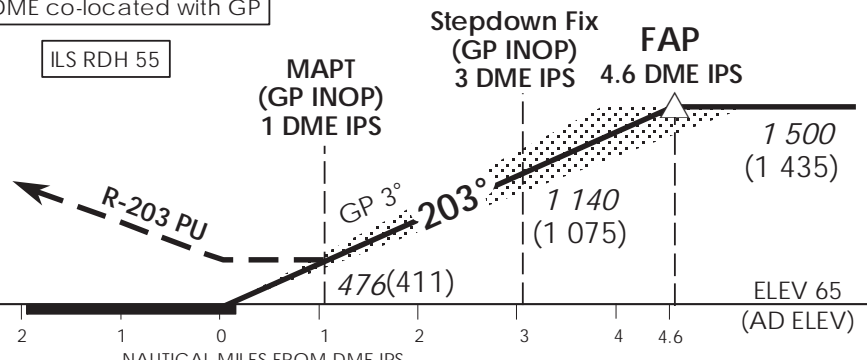


Transition Level : FL 130
Transition Alt : 11 000

ILS/DME co-located with GP

ILS RDH 55

MISSED APPROACH
Climb to 3 000ft on R-203 PU to SJ DVOR/DME and hold South right turn 021° inbound or AS DIRECTED BY ATC

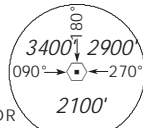


		OCA (OCH)			
Category of Aircraft		A	B	C	D
Straight-in	CAT I ILS	194 (129)	204 (139)	214 (149)	224 (159)
	GP INOP	476 (411)			
Distance		4 DME	3 DME	2 DME	
Altitude (Height)		1300 (1235)	1140 (1075)	820 (755)	
Speed	knots	70	120	150	185
FAF - MAPT 3.6nm	min : s	3 : 06	1 : 48	1 : 27	1 : 11
Rate of descent/GS	ft/min	370	635	795	980

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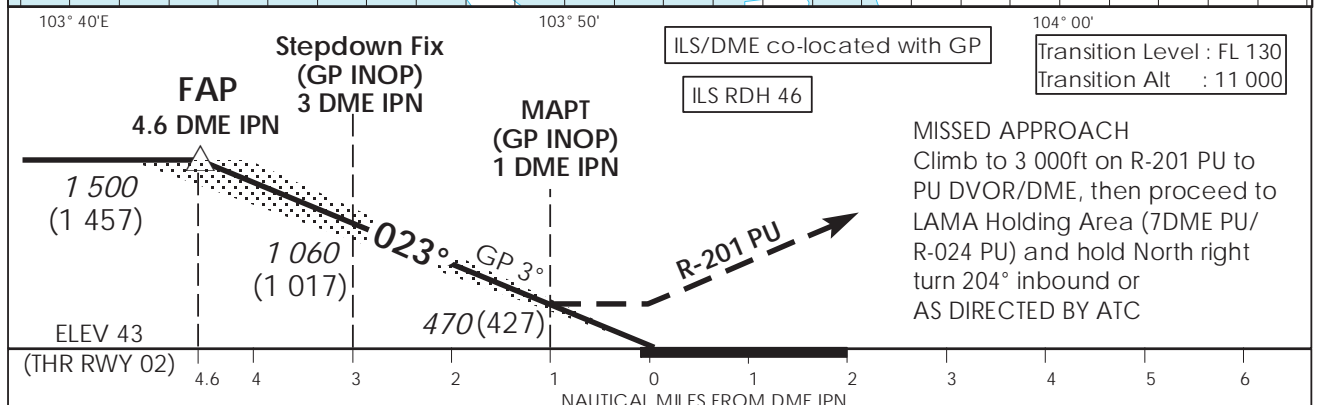
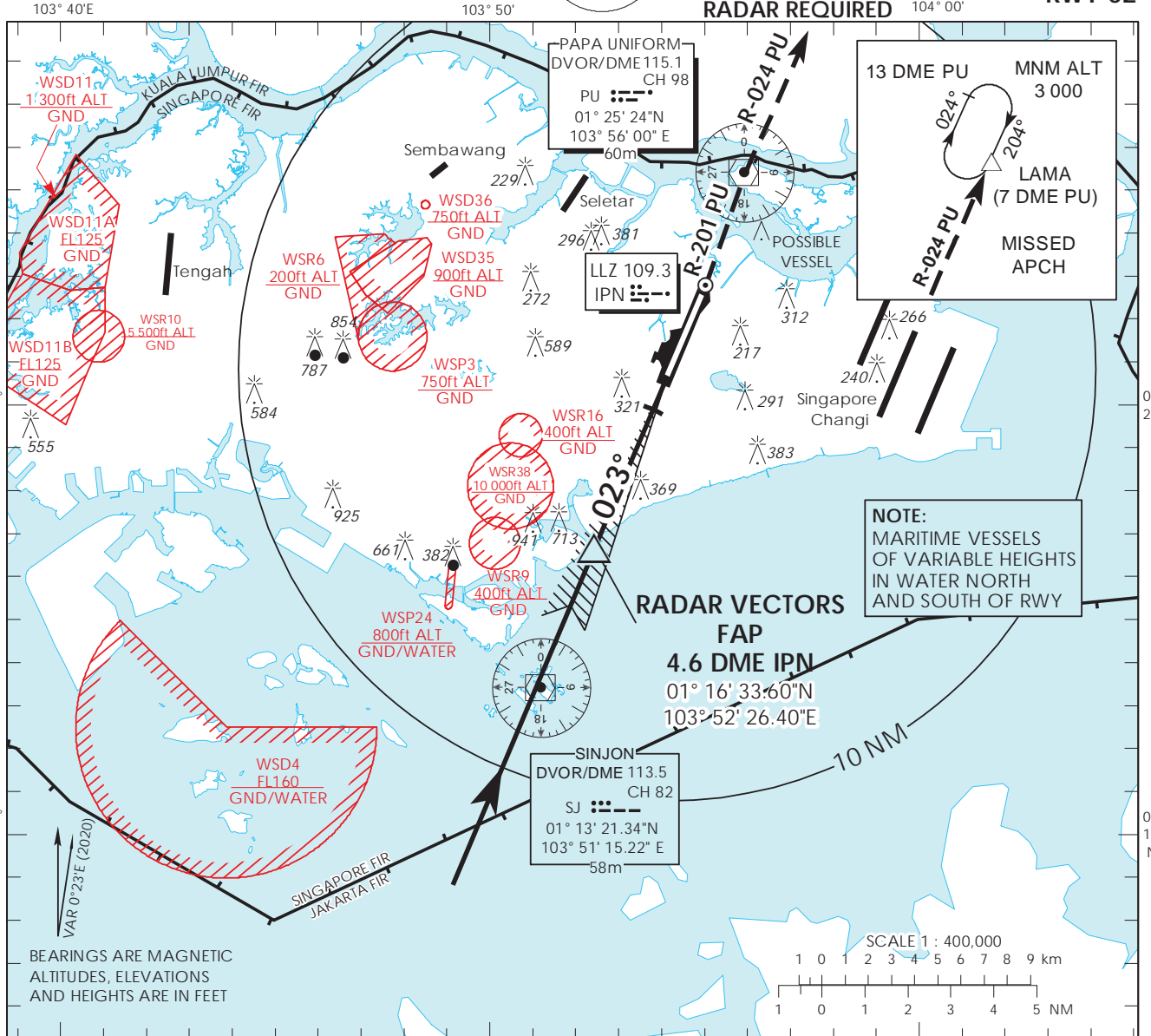
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV 65ft
HEIGHT RELATED TO
THR RWY 02 - ELEV 43ft
MSA 25 NM
from PAPA UNIFORM DVOR



ATIS Paya Lebar	148.9
Singapore APP	124.05
Paya Lebar APP	119.9 298.0
Seletar APP	126.025
Paya Lebar TWR	118.05 263.1
Ground Control	130.8 296.0

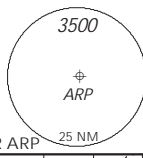
SINGAPORE/PAYA LEBAR IPN ILS/DME RWY 02



OCA (OCH)					
Category of Aircraft	A	B	C	D	
Straight-in	CAT I ILS	178 (135)	188 (145)	198 (155)	208 (165)
	GP INOP	470 (427)			
Distance	4 DME	3 DME	2 DME		
Altitude (Height)	1300 (1257)	1060 (1017)	740 (697)		
Speed	knots	70	120	150	185
FAF - MAPT 3.6nm	min : s	3 : 06	1 : 48	1 : 27	1 : 11
Rate of descent/GS	ft/min	370	635	795	980

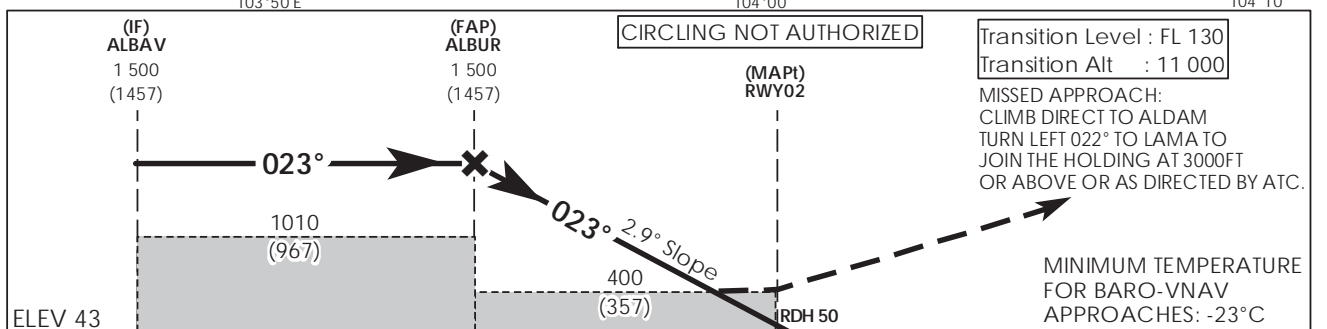
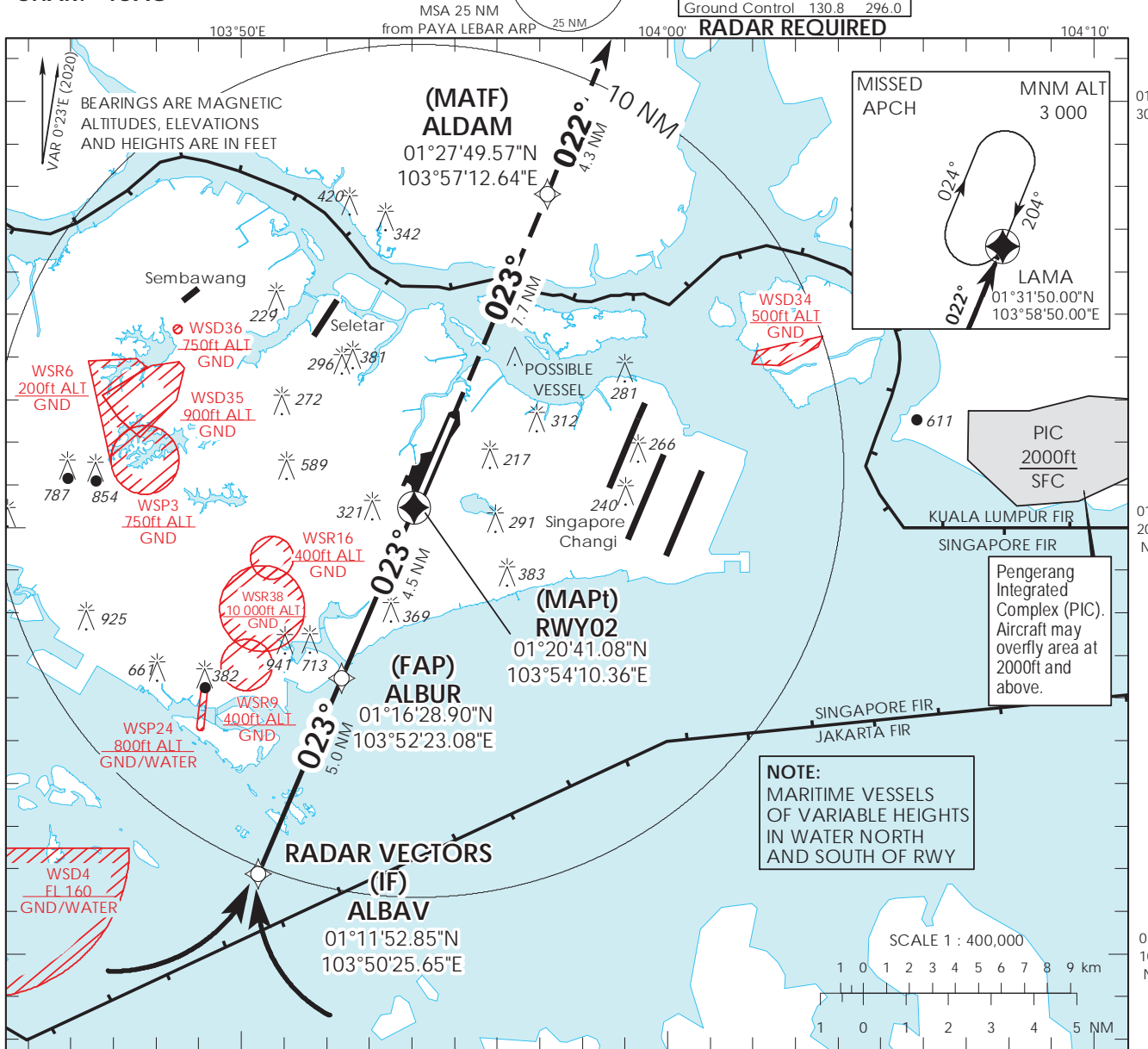
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INSTRUMENT APPROACH CHART - ICAO
AERODROME ELEV 65ft
HEIGHT RELATED TO THR RWY 02 - 43ft



ATIS Paya Lebar	148.9
Singapore APP	124.05
Paya Lebar APP	119.9 298.0
Seletar APP	126.025
Paya Lebar TWR	118.05 263.1
Ground Control	130.8 296.0

SINGAPORE/PAYA LEBAR RNP RWY 02

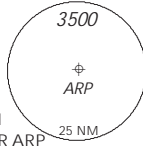


Category of Aircraft	OCA (OCH)			
	A	B	C	D
LNAV/VNAV	2.5%	400 (357)		
LNAV	2.5%	400 (357)		

Fix	ALBAV	ALBUR	RWY02	ALDAM	LAMA		
Altitude (Height)	1500 (1457)	1500 (1457)	400 (357)	1250 (1207)	1910 (1867)		
Speed	knots	80	100	120	140	160	180
FAP - MAPt 4.5 nm	min : s	3 : 23	2 : 42	2 : 15	1 : 56	1 : 41	1 : 30
Rate of descent/GS	ft/min	410	513	615	718	821	923

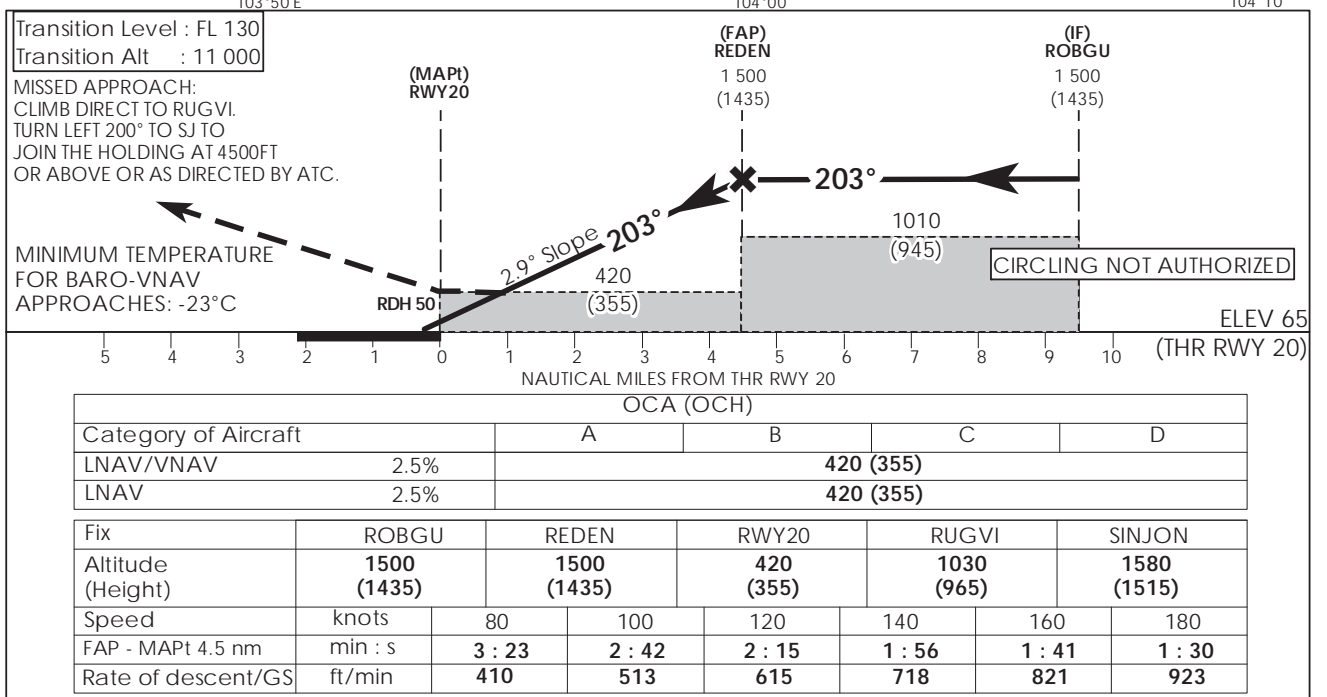
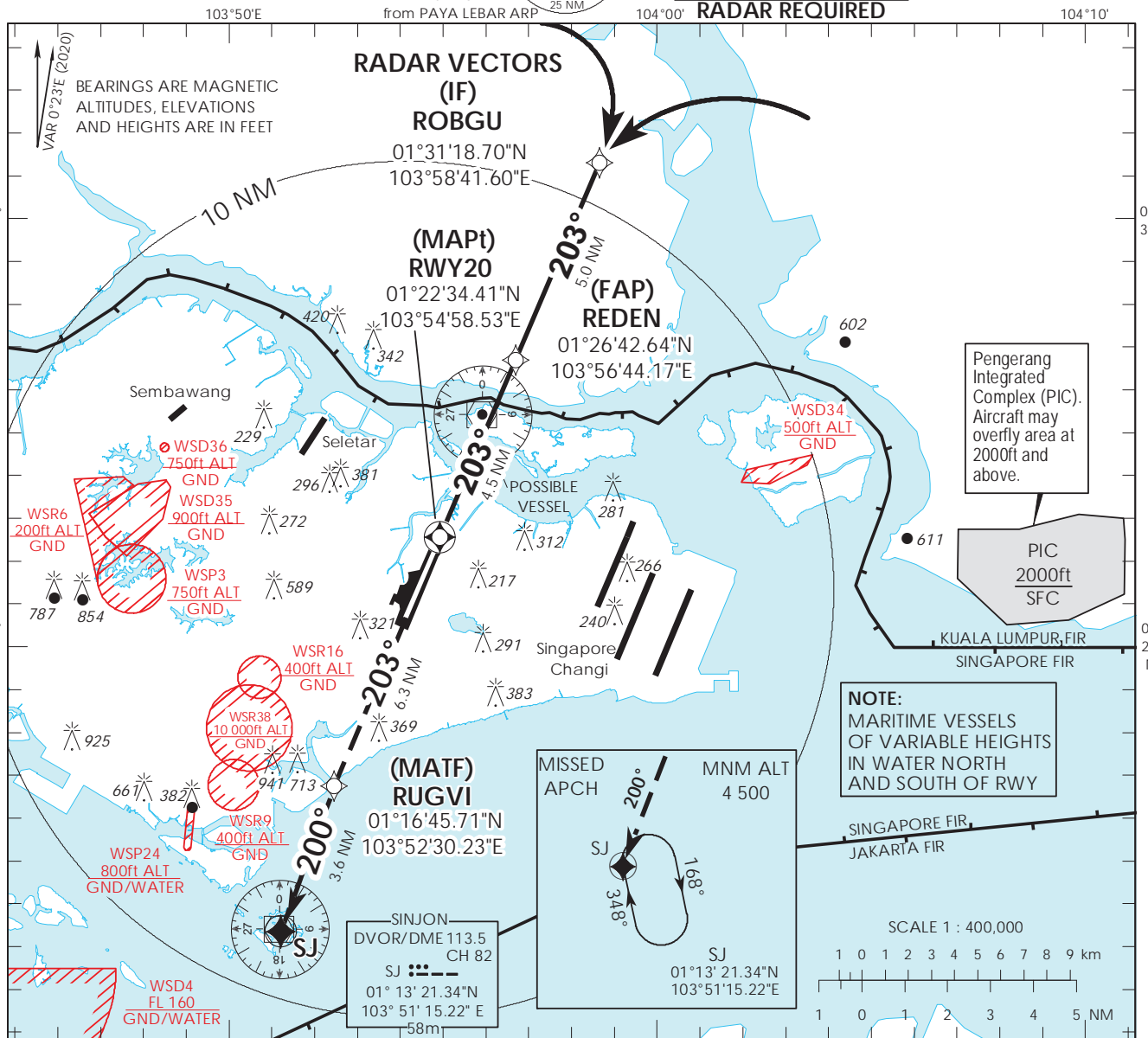
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INSTRUMENT APPROACH CHART - ICAO
AERODROME ELEV 65ft
HEIGHT RELATED TO THR RWY 20 - 65ft



ATIS Paya Lebar	148.9
Singapore APP	124.05
Paya Lebar APP	119.9 298.0
Seletar APP	126.025
Paya Lebar TWR	118.05 263.1
Ground Control	130.8 296.0

SINGAPORE/PAYA LEBAR
RNP RWY 20



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