

VTUU AD 2.1 AERODROME LOCATION INDICATOR AND NAME

VTUU - UBON RATCHATHANI / UBON RATCHATHANI AIRPORT

VTUU AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	151504.59N 1045212.82E
2	Direction and distance from (city)	1 KM N, from city
3	Elevation/Reference temperature	406 FT/36°C
4	Geoid Undulation at AD ELEV PSN	NIL
5	MAG VAR/Annual change	0.80°W(2016)/0.02°W
6	AD Administration, address, telephone, telefax, telex, AFS	Director of Ubon Ratchathani Airport Ubon Ratchathani Airport Amphone Muang Ubon Ratchathani Province 34000 Thailand Tel: +664 524 5612-3 Fax: +664 524 4406 AFS: VTUUYDYX
7	Types of traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	Operator: Department of Airports

VTUU AD 2.3 OPERATIONAL HOURS

1	Aerodrome Operator	2300-1500
2	Customs and immigration	On request
3	Health and sanitation	On request
4	AIS Briefing Office	NIL
5	ATS Reporting Office (ARO)	2300-1500
6	MET Briefing Office	NIL
7	ATS	2300-1500
8	Fuelling	0100-1130
9	Handling	NIL
10	Security	NIL
11	De-icing	NIL
12	Remarks	ATS Reporting Office (ARO): Located at Ubon Ratchathani Air Traffic Control Centre (1st floor of tower building) Tel: +664 525 6407, +668 9488 2157 Fax: +664 524 0798 Ext. 7874

VTUU AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	NIL
2	Fuel/oil types	JET A-1, AVGAS
3	Fuelling facilities/capacity	NIL
4	De-icing facilities	NIL
5	Hangar space for visiting aircraft	NIL
6	Repair facilities for visiting aircraft	NIL

7	Remarks	NIL
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VTUU AD 2.5 PASSENGER FACILITIES

1	Hotels	In the city
2	Restaurants	In the city
3	Transportation	Limousine
4	Medical facilities	NIL
5	Bank and Post Office	Bank: Available Post office: Available
6	Tourist Office	Office in the city
7	Remarks	NIL

VTUU AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	Category 8
2	Rescue equipment	Yes
3	Capability for removal of disabled aircraft	NIL
4	Remarks	NIL

VTUU AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Types of clearing equipment	NIL
2	Clearance priorities	NIL
3	Remarks	The aerodrome is available all seasons.

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

1	Apron surface and strength	Surface: Concrete Strength: PCN 61/R/C/X/T
2	Taxiway width, surface and strength	Width: 23 M Surface: Concrete and asphalt Strength: PCN 61/F/C/X/T
3	Altimeter checkpoint location and elevation	NIL
4	VOR checkpoints	NIL
5	INS checkpoints	NIL
6	Remarks	NIL

VTUU AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	Aircraft stand ID signs: NIL TWY guide lines: NIL VDGS of aircraft stands: Aircraft stand no.3 is equipped with VDGS.
2	RWY and TWY markings and LGT	RWY and TWY: Marked and lighted
3	Stop bars	NIL
4	Remarks	NIL

VTUU AD 2.10 AERODROME OBSTACLES

In approach/TKOF areas			In circling areas and at AD			Remarks
1			2			3
RWY/Area affected	Obstacle type Elevation Markings/LGT	Coordinates	Obstacle type Elevation Markings/LGT	Coordinates		
a	b	c	a	b		
05	Tree 141.1(M)	151420.7N 1045121.1E	Radio Mast 178.7(M) marked	151348.6N 1045108.9E		NIL
	Sign Board 143.5 (M)	151425.0N 1045109.8E	Radio Mast 180.2(M) marked	151346.7N 1045112.3E		
	Sign Board 141.4 (M)	151421.6N 1045111.1E	Radio Mast 182.9(M) marked	151344.1N 1045117.2E		
	Sign Board 139.0 (M)	151419.0N 1045113.2E	Radio Mast 165.8(M) marked	151330.3N 1045117.1E		
	Building 143.2 (M)	151409.3N 1045113.1E	Radio Mast 179.2(M) marked/LGT	151328.7N 1045125.9E		
	Tree 153.9 (M)	151404.9N 1045045.8E	Radio Mast 174.3(M) marked	151327.0N 1045125.7E		
			Radio Mast 168.3(M) marked	151442.7N 1045052.7E		
			Radio Mast 183.1(M) marked	151445.5N 1045056.1E		
			Building 166.1(M)	151451.5N 1045107.2E		
			Radio Mast 166.7(M) marked/LGT	151504.1N 1045140.0E		
			Radio Mast 171.3(M) marked	151459.6N 1045056.8E		
			Radio Mast 219.4(M) marked/LGT	151431.5N 1045005.1E		
			Radio Mast 200.8(M) marked/LGT	151437.6N 1044919.2E		
			Radio Mast 196.1(M) marked/LGT	151445.6N 1044930.0E		
			Radio Mast 185.4(M) marked	151505.6N 1044949.7E		
			Radio Mast 180.6(M) marked/LGT	151506.6N 1045012.8E		
			Building 170.0(M)	151523.3N 1045053.9E		
			Radio Mast 210.2(M) marked/LGT	151524.8N 1045042.5E		
			Radio Mast 186.6(M) marked	151535.2N 1045049.0E		
			Radio Mast 186.3(M) marked	151517.1N 1045013.8E		
			Radio Mast 165.3(M) marked/LGT	151515.7N 1045013.7E		
			Radio Mast 170.5(M) marked	151514.5N 1044950.3E		

In approach/TKOF areas			In circling areas and at AD			Remarks
1			2			3
RWY/Area affected	Obstacle type Elevation Markings/LGT	Coordinates	Obstacle type Elevation Markings/LGT	Coordinates		
a	b	c	a	b		
05			Radio Mast 185.4(M) marked/LGT	151551.7N	1044934.8E	NIL
			Radio Mast 189.4(M) marked	151541.1N	1044941.1E	
			Radio Mast 165.7(M) marked	151542.4N	1044950.1E	
			Radio Mast 194.9(M) marked/LGT	151542.6N	1044944.0E	
			Radio Mast 170.9(M) marked	151549.9N	1045032.8E	
			Building 180.7(M)	151548.3N	1045023.0E	
			Radio Mast 187.4(M) marked/LGT	151557.4N	1045012.3E	
			Building 170.7(M)	151602.4N	1045034.5E	
			Radio Mast 184.5(M) marked	151602.4N	1045034.5E	
			Radio Mast 178.9(M) marked/LGT	151612.9N	1045102.3E	
			Radio Mast 200.5(M) marked	151619.4N	1045056.3E	
			Radio Mast 182.0(M) marked	151609.3N	1045143.8E	
			Radio Mast 181.2(M) marked/LGT	151632.2N	1045137.5E	
			Radio Mast 208.1(M) marked/LGT	151637.2N	1045131.8E	
			Radio Mast 172.2(M) marked/LGT	151654.5N	1045200.6E	
			Radio Mast 186.5(M) marked/LGT	151718.8N	1045305.6E	
			Radio Mast 186.7(M) marked	151719.2N	1045314.8E	
			Radio Mast 177.2(M) marked	151607.7N	1045301.0E	
			Radio Mast 278.9(M) marked/LGT	151820.8N	1045337.6E	
			Radio Mast 247.1(M) marked/LGT	151821.0N	1045344.7E	
			Building 130.7 (M)	151436.9N	1045129.2E	
			Radio Pole 134.4 (M)	151502.6N	1045200.2E	
			Building 126.8 (M)	151434.2N	1045138.3E	
			Building 128.5 (M)	151433.8N	1045143.8E	

In approach/TKOF areas			In circling areas and at AD		Remarks
1			2		3
RWY/Area affected	Obstacle type Elevation Markings/LGT	Coordinates	Obstacle type Elevation Markings/LGT	Coordinates	
a	b	c	a	b	
05			Building 127.0 (M) AWOS	151523.2N 1045243.5E	NIL
			Radio Mast G/P marked/LGT 133.9(M)	151525.9N 1045247.1E	
			Building Marked DVOR/DME 133.1(M)	151442.9N 1045157.1E	
			Tower 166.4(M) Marked/LGT	151445.8N 1045209.2E	
23	Tree 131.2(M)	151541.7N 1045256.9E	Radio Mast 179.2(M) marked	151345.9N 1045136.4E	
	TACAN 130.0(M) Building/LGT	151544.7N 1045300.0E	Radio Mast 181.6(M) LGT	151333.5N 1045201.1E	
	Tree 141.7(M)	151552.8N 1045314.5E	Radio Mast 176.6(M)	151236.6N 1045141.5E	
	Tree 148.3(M)	151557.4N 1045313.7E	Radio Mast 178.0(M) marked/LGT	151602.4N 1045145.8E	
	Tree 148.4(M)	151600.5N 1045314.1E	Radio Mast 169.9(M) marked/LGT	151411.9N 1045147.1E	
	Radio Mast 167.6(M) marked	151349.8N 1045058.0E	Radio Mast 170.4(M) marked	151416.6N 1045149.2E	
			Radio Mast 174.6(M) marked/LGT	151411.4N 1045149.8E	
			Radio Mast 166.5(M) marked/LGT	151425.4N 1045200.1E	
			Radio Mast 178.6(M) marked/LGT	151409.3N 1045227.7E	
			Radio Mast 170.4(M) marked/LGT	151427.7N 1045252.7E	
			Radio Mast 170.1(M)	151512.0N 1045252.7E	
			Radio Mast 174.5(M) marked/LGT	151439.8N 1045341.1E	
			Radio Mast 172.9(M) marked/LGT	151618.3N 1045501.2E	
			Radio Mast 262.9(M) marked/LGT	151609.5N 1045544.3E	

VTUU AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	Lower Northeastern Meteorological Center, Thai Meteorological Department (TMD)
2	Hours of service MET Office outside hours	H24 NIL
3	Office responsible for TAF preparation Periods of validity	Lower Northeastern Meteorological Center, 24 HR
4	Type of landing forecast Interval of issuance	TREND 1 HR
5	Briefing/consultation provided	Personal Consultation Tel: +664 524 4108 Fax: +664 524 4200
6	Flight documentation Language(s) used	Charts, Tabular forms and Abbreviated Plain Language Texts English
7	Charts and other information available for briefing or consultation	S, U85, U70, U50, U40, U30, U25, U20, SWH, SWM, SWL, P85, P70, P50, P40, P30, P25, P20, P15, satellite and radar images
8	Supplementary equipment available for providing information	Automated Weather Observation System (AWOS), Low Level Wind Shear Alert System (LLWAS) and Weather Radar
9	ATS units provided with information	Ubon Ratchathani TWR Ubon Ratchathani APP
10	Additional information (limitation of service, etc.)	NIL

VTUU AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY(M)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY coordinates THR end undulation	THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
05	051.55°	3000x45	PCN 61/F/C/X/T Concrete and asphalt	151434.17N 1045133.46E	THR 406 FT TDZ 406 FT
23	231.55°	3000x45	PCN 61/F/C/X/T Concrete and asphalt	151535.02N 1045252.20E	THR 392 FT TDZ 392 FT

Slope of RWY-SWY	SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	OFZ	Remarks
7	8	9	10	11	12
NIL	60x60	NIL	3240x75	NIL	NIL
NIL	60x60	NIL	3240x75	NIL	NIL

VTUU AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
05	3000	3000	3060	3000	NIL
23	3000	3000	3060	3000	NIL

VTUU 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 Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour WBAR	SWY LGT LEN (M) colour	Remarks
1	2	3	4	5	6	7	8	9	10
05	SALS 420M LIH	Green WBAR	PAPI LEFT 3°	NIL	NIL	3 000 M 60 M White, LIH YCZ: 600 M	Red	NIL	NIL
23	SALS 420M LIH	Green WBAR	PAPI LEFT 3°	NIL	NIL	3 000 M 60 M White, LIH YCZ: 600 M	Red	NIL	NIL

VTUU AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: At Tower Building, FLG W G EV 4 SEC.
2	LDI location and LGT Anemometer location and LGT	NIL
3	TWY edge and centre line lighting	EDGE: ALL TWY
4	Secondary power supply/switch-over time	Secondary power supply to all lighting at the airport Switch – over time : 15 SEC..
5	Remarks	NIL

VTUU AD 2.16 HELICOPTER LANDING AREA

1	Coordinates TLOF or THR of FATO Geoid undulation	NIL
2	TLOF and/or FATO elevation M/FT	NIL
3	TLOF and FATO area dimensions, surface, strength, marking	NIL
4	True and MAG BRG of FATO	NIL
5	Declared distance available	NIL
6	APP and FATO lighting	NIL
7	Remarks	NIL

VTUU AD 2.17 ATS AIRSPACE

1	Designation and lateral limits	A circle of 5NM radius centred on UBL DVOR/DME (151442.71N 1045157.30E)
2	Vertical limits	3000 FT/AGL
3	Airspace classification	C
4	ATS unit call sign Language(s)	Ubon Tower English, Thai
5	Transition altitude	11000 FT
6	Remarks	NIL

VTUU AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
APP	Ubon Approach	123.5 MHZ 257.8 MHZ 121.5 MHZ ¹⁾	As AD OPR HR	¹⁾ Emergency frequency ²⁾ Other this period 2 HR PN TO ATC Royal Thai Air Force ASR OPS AVBL for MIL - Coverage/HGT: PSR 70 NM/30 000 FT SSR 200 NM/100 000 FT - EM: PSR 500 KW SSR 1.5 KW
TWR	Ubon Tower	119.9 MHZ 274.5 MHZ 121.5 MHZ ¹⁾ 243.0 MHZ ¹⁾	As AD OPR HR	
GND	Ubon Ground	121.9 MHZ 275.8 MHZ	As AD OPR HR	
ATIS	Ubon Airport	373.0 KHZ	As AD OPR HR	
ASR	Departure Control	335.5 MHZ 134.1 MHZ	0100-0900 ²⁾ MON-FRI (Except Public Holiday)	
	Arrival Control	282.2 MHZ 125.75 MHZ		
SRA	Final Control	382.4 MHZ		

VTUU AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, MAG VAR CAT of ILS/MLS (For VOR/ILS/MLS, give declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
NDB	UB	373 KHZ	H24	151425.83N 1045148.77E		Data refer from commissioning checked as follows: <ul style="list-style-type: none"> - 50 NM clockwise orbit, altitude 3 000 FT bearing 111°-070° found satisfactory - Due to border limited: 35 NM clockwise orbit, altitude 3 000 FT bearing 071°-110° found satisfactory

Type of aid, MAG VAR CAT of ILS/MLS (For VOR/ILS/MLS, give declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
DVOR/DME	UBL	112.7 MHZ CH74X	H24	151442.71N 1045157.30E		DVOR/DME restriction 1. Due to obstacles surround DVOR/ DME station, coverage check does not provide adequate signal clockwise orbit at required altitude in various areas as follows: a) 40 NM – Radial 111°-155° altitude should not below 3 000 FT – Radial 156°-165° altitude should not below 7 000 FT – Radial 166°-200° altitude should not below 5 000 FT – Radial 201°-070° altitude should not below 3 000 FT b) 30 NM (Due to border limit) – Radial 071°-110° altitude should not below 2 000 FT 2. During 6 NM orbit found 30 Hz. AM modulation is fluctuated within 29%-50% between radial 170°-190°. UBON DVOR/DME unusable between radial 170°-190° (CW) beyond 10 NM altitude 2 000 FT.
ILS CAT I LOC RWY23	IUBL	110.1 MHZ CH38X	H24	151423.85N 1045120.10E		– ILS coverage over sector of 35 either side of runway centre line, no back course and voice feature, the antenna array is located on extended runway centre line at distance 500 M from THR of RWY 05, height of antenna array is 4.1 M from ground – No marker
GP/DME		334.4 MHZ	H24	151526.05N 1045247.13E		– Glide Path angle 3.0° – DME co-located with glide path power output 100 watts omnidirectional
TACAN	UBL	114.6 MHZ CH93	2300-1100 MON-FRI (Except Public Holiday)	151544.79N 1045300.00E		Other this period 2 HR PN TO ATC

VTUU AD 2.20 LOCAL AERODROME REGULATIONS

1. 180 DEGREES TURN ON THE RUNWAY

To prevent runway pavement damage which may result in the closure of the aerodrome if such damage is severe, aircraft code letter C or higher are not allowed to make 180 degrees turn on the runway. The turn shall be made on the runway turn pad located on both end of runway. Any breach done by the aircraft operator shall be recorded and reported to The Civil Aviation Authority of Thailand (CAAT)/ The Headquarter of that operator and shall be liable for the compensation caused by such violation.

VTUU AD 2.21 NOISE ABATEMENT PROCEDURES

NIL

VTUU AD 2.22 FLIGHT PROCEDURES

1. VFR REPORTING POINTS AND LOCAL PROCEDURES

1.1 Reporting points for VFR flight

In order to expedite and maintain an orderly flow of air traffic into Ubon Ratchathani Airport, The procedures of inbound traffic or VFR flight, conventional and prop jet aircraft be set up as follow:

- a) Aircraft entering to land from north of Ubon Ratchathani Airport, shall report over Khuang Nai District, designated as KILO NOVEMBER (1523.0N 10434.0E) and / or Nong Tae District designated as NOVEMBER (1524.4N 10447.9E) which are 22 NM on R-300 and 11NM or R-337 of UBL DVOR/DME respectively. When reaching November the aircraft will be instructed to join aerodrome traffic pattern accordingly.
- b) Aircraft entering to land from west or southwest of Ubon Ratchathani Airport, shall report over Kantharom District, designated as KILO ROMEO (1505.5N 10431.5E) and/or Pak Nam Chi designated as DELTA (1511.5N 10443.5E) which are 24 NM on R-248 and 10 NM on R-250 of UBL VOR/DME respectively. When reaching DELTA the aircraft will be instructed to join aerodrome traffic pattern accordingly.
- c) Aircraft entering to land from south of Ubon Ratchathani Airport, shall report over Sri-cai Bridge, designated as SIERRA (1506.0N 10454.4E) which is 9 NM on R-167 of UBL DVOR/DME. When Reaching SIERRA the aircraft will be instructed to join aerodrome traffic pattern accordingly.

1.2 Aerodrome traffic circuit

Using both sides of traffic circuit.

1.3 Overhead approach pattern

- a) Using RWY05 by left turn pattern.
- b) Using RWY23 by right turn pattern

1.4 Landing and Take - off

In order to avoid the high percentage of noise pollution at Ubon Ratchathani Airport, If traffic and weather condition permit, Pilots are requested to land by using RWY23 and take off RWY05.

2. SPEED CONTROL PROCEDURE IN UBON TMA

- a) All arriving turbo-propeller and turbo-jet aircraft when flying below 10000 FT AMSL are subject to fly not faster than indicated air speed 250 knots unless authorized by ATC.
- b) Speed will be reduced to 220 knots during 20-25 track miles from touchdown.
- c) 180 knots at Intermediate fix (Including aircraft from RNAV STAR), or shortly before closing heading to intercept or to establish the final course,
- d) 150 to 160 knots at FAP or FAF; all speed to be flown as accurately as possible. At the other times, speed control may be applied on a tactical basis to extent determined by ATC.
- e) Pilots who unable to comply with the speed limits specifics above for reasons of flight safety and/or weather conditions should inform ATC and state the speed acceptable.
- f) ATC will notify that the aircraft may keep its preferred speed without restriction and will use the phrase "NO SPEED RESTRICTIONS". An instruction to notify that the aircraft need no longer comply with the previous issued speed restriction, the phrase "RESUME NORMAL SPEED" will be used.
- g) All aircraft navigating under conditions of RNAV STARs shall conform to speed limitation as published then at IF pilot shall comply with speed control procedures unless otherwise instructed by ATC.
- h) If the pilots do not comply, the flight shall follow ATC instruction for re-sequencing.

NOTE - an instruction to "RESUME NORMAL SPEED" does not cancel speed restrictions that applicable to published procedure of upcoming segments of flight, aircraft shall comply speed restrictions specified in a) b) c) and d)

3. IFR DEPARTURES OTHER THAN VIA SID

IFR departure procedures described below are determined for the purpose of case when an instrument departure via SID is impossible or undesirable.

4. VISUAL DEPARTURES

Visual departures during take-off and initial climb-out are permitted during the daytime and Visual Meteorological Conditions (VMC). ATC clearance to execute a visual departure may be issued upon request of the pilot or upon initiative of the ATC and accepted by the pilot.

To execute a visual departure

- meteorological conditions in the direction of take-off and the following climb-out shall enable visual reference to terrain up to Minimum Sector Altitude (MSA) or Minimum Flight Altitude (MFA) stated in ATC clearance
- the pilot shall be responsible for obstacle clearance until such specified altitude,

- the pilot prior to take-off shall agree to execute this procedure,
- the ATC clearance shall be readback,

5. OMNIDIRECTIONAL DEPARTURES

Omnidirectional departures during take-off and initial climb-out are permitted during the day and night. ATC clearance to execute an omnidirectional departure may be issued upon request of the pilot or upon initiative of the ATC and accepted by the pilot.

To execute an omnidirectional departure:

- the pilot shall be maintaining a minimum climb gradient up to specific altitude as published shown as below,
- the pilot shall be responsible for adherence to such obtained ATC clearance,
- the pilot prior to take-off shall agree to execute this procedure,
- The ATC clearance shall be readback,

- Runway 05:

UBON OMNI 05 Departure: Required climb gradient 201 ft per NM (3.3%) until 2,000 ft.

Ground speed	Knot	65	75	100	150	200	250	300
Rate of climb 3.3%	(ft/min)	217	251	334	501	668	835	1003

No turn before DER.

After departure climb straight ahead until 1,500 ft (or altitude assigned by ATC between 1,500 ft - 1,800 ft), then comply with ATC clearance issued (or as directed by ATC).

- Runway 23

UBON OMNI 23 Departure: Required climb gradient 207 ft per NM (3.4%) until 2,000 ft.

Ground speed	Knot	65	75	100	150	200	250	300
Rate of climb 3.4%	(ft/min)	224	258	344	516	689	861	1033

No turn before DER.

After departure climb straight ahead until 1,500 ft (or altitude assigned by ATC between 1,500-1,800 ft), then comply with ATC clearance issued (or as directed by ATC)

VTUU AD 2.23 ADDITIONAL INFORMATION

- BAK14 RAG installed at 400 M from threshold runway 05 and 23 cable height 3 inches.
- Net Barrier installed on both side of runway 05/23 at 35 M (115 FT.) from threshold, height 1.35 M (4.5 FT.)
- Birds concentration on and in the vicinity of an aerodrome.

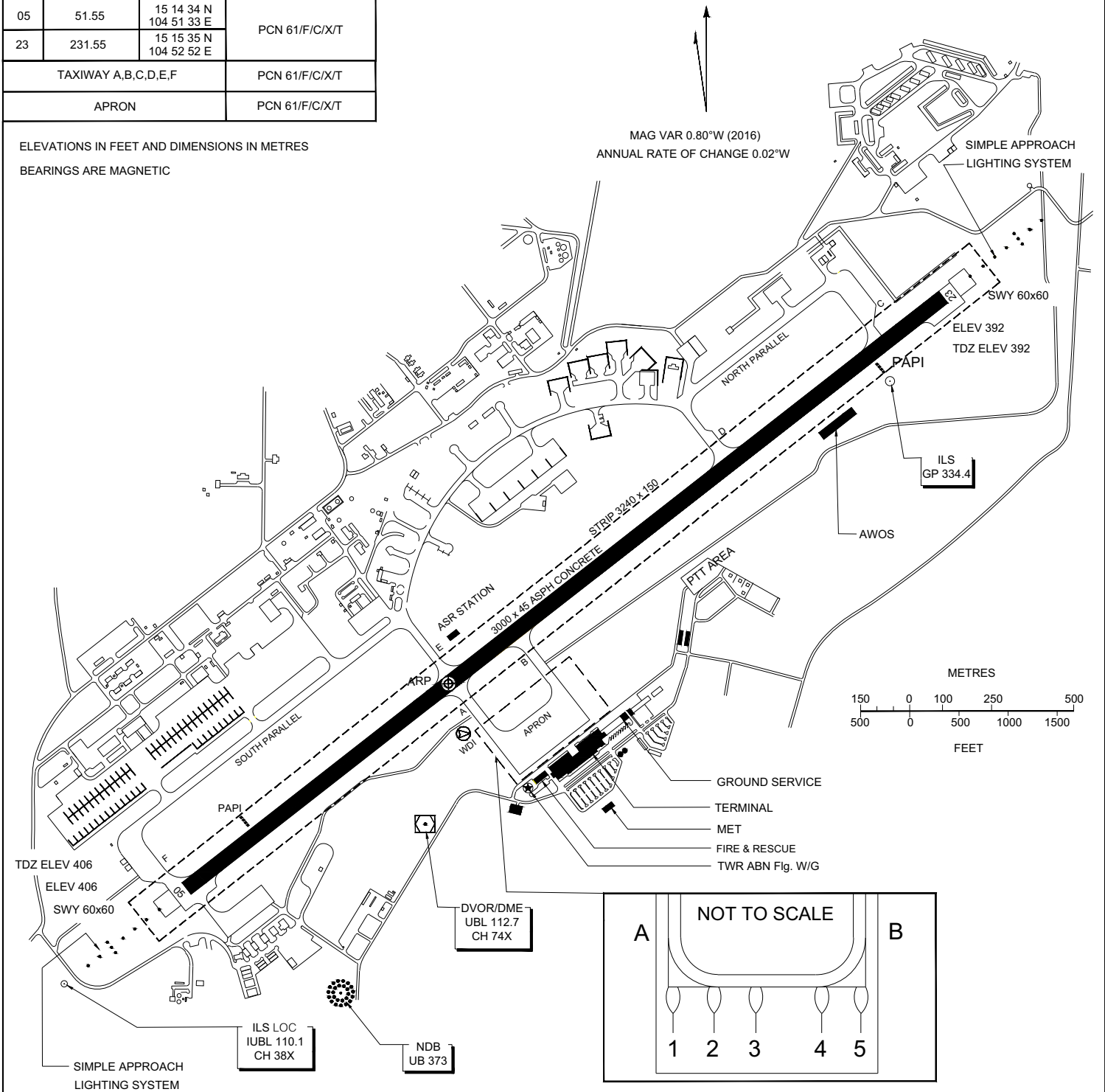
VTUU AD 2.24 CHARTS RELATED TO AN AERODROME

Chart name	Page
Aerodrome Chart - ICAO	AD 2-VTUU-2-1
Standard Departure Chart - Instrument (SID) - ICAO - RWY 05 - RAMBU1B ROT1B CMP1B BUTRA1B PAKSE1B	AD 2-VTUU-6-1
Standard Departure Chart - Instrument (SID) - ICAO - RWY 23 - RAMBU1A ROT1A CMP1A BUTRA1A PAKSE1A	AD 2-VTUU-6-3
Standard Departure Chart - Instrument (SID) - ICAO - RNAV RWY 05 - ARARE1B BAMBO1B CHETA1B PACER1B ROONY1B	AD 2-VTUU-6-5
Standard Departure Chart - Instrument (SID) - ICAO - RNAV RWY 05 - ARARE1B BAMBO1B CHETA1B PACER1B ROONY1B (Tabular description)	AD 2-VTUU-6-6
Standard Departure Chart - Instrument (SID) - ICAO - RNAV RWY 23 - ARARE1A BAMBO1A CHETA1A PACER1A ROONY1A	AD 2-VTUU-6-7
Standard Departure Chart - Instrument (SID) - ICAO - RNAV RWY 23 - ARARE1A BAMBO1A CHETA1A PACER1A ROONY1A (Tabular description)	AD 2-VTUU-6-8
Instrument Approach Chart - ICAO - VOR RWY 05	AD 2-VTUU-8-1
Instrument Approach Chart - ICAO - VOR RWY 05 (Fix and point list table)	AD 2-VTUU-8-2
Instrument Approach Chart - ICAO - VOR RWY 23	AD 2-VTUU-8-3
Instrument Approach Chart - ICAO - VOR RWY 23 (Fix and point list table)	AD 2-VTUU-8-4
Instrument Approach Chart - ICAO - ILS or LOC RWY 23	AD 2-VTUU-8-5
Instrument Approach Chart - ICAO - ILS or LOC RWY 23 (Fix and point list table)	AD 2-VTUU-8-6
Instrument Approach Chart - ICAO - RNP RWY 05	AD 2-VTUU-8-7
Instrument Approach Chart - ICAO - RNP RWY 05 (Tabular description)	AD 2-VTUU-8-8
Instrument Approach Chart - ICAO - RNP RWY 23	AD 2-VTUU-8-9
Instrument Approach Chart - ICAO - RNP RWY 23 (Tabular description)	AD 2-VTUU-8-10

AERODROME CHART - ICAO 15 15 05 N 104 52 13 E ELEV 406 FT TWR 119.90 274.50 UBON RATCHATHANI / Ubon Ratchathani

RWY	DIRECTION (TRUE BG)	THR	BEARING STRENGTH
05	51.55	15 14 34 N 104 51 33 E	PCN 61/F/C/X/T
23	231.55	15 15 35 N 104 52 52 E	
TAXIWAY A,B,C,D,E,F			PCN 61/F/C/X/T
APRON			PCN 61/F/C/X/T

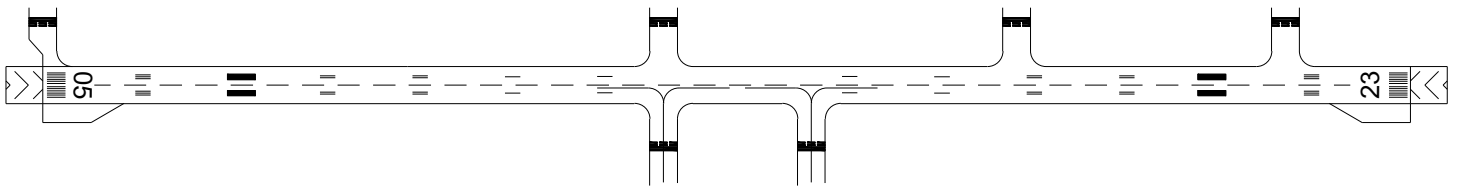
ELEVATIONS IN FEET AND DIMENSIONS IN METRES
BEARINGS ARE MAGNETIC



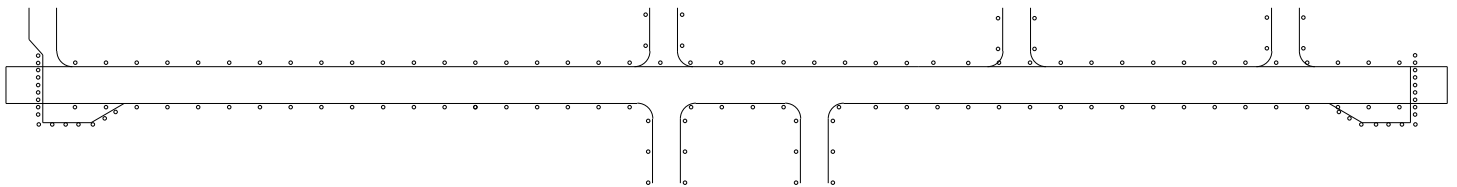
REMARK : COORDINATES ARE WGS-84

CHANGE : REVISED CHART. AIRCRAFT STANDS.

MARKING AIDS RWY 05/23 AND EXIT TWY



LIGHTING AIDS RWY 05/23 AND EXIT TWY

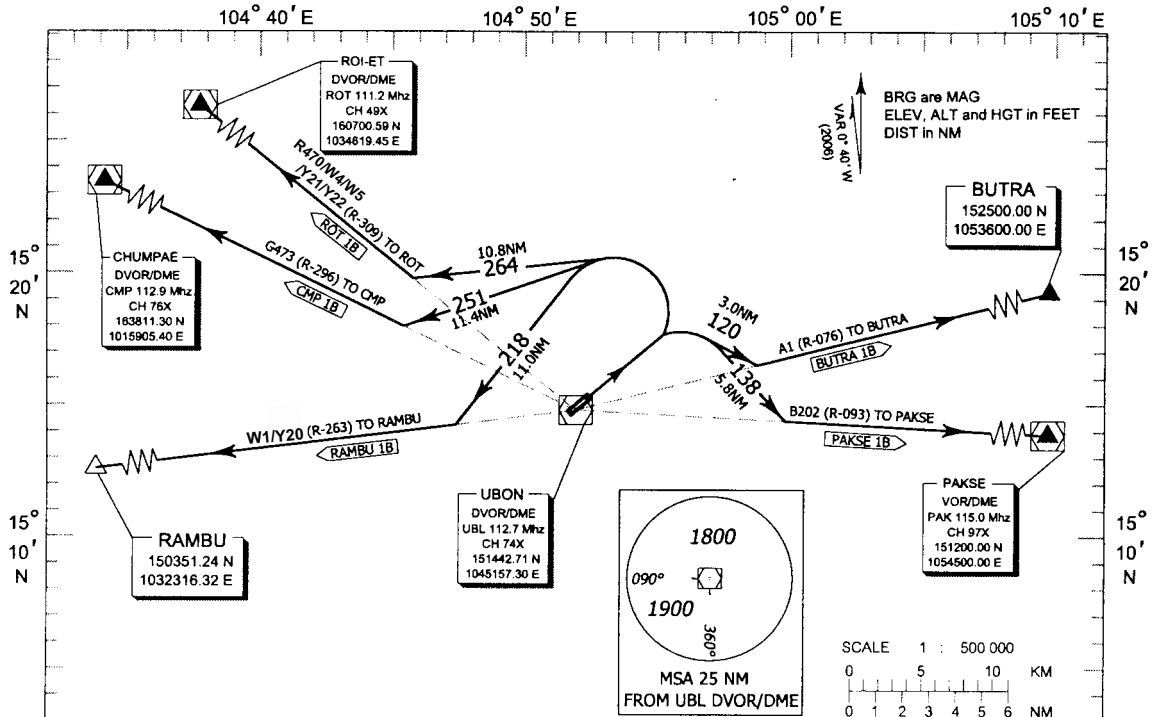


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STANDARD INSTRUMENT DEPARTURE CHART
(SID) - ICAO

UBON RATCHATANI / Ubon (VTUU)
RWY 05
RAMBU 1B, ROT 1B
CMP 1B, BUTRA 1B
PAKSE 1B

APP : 123.5 , 257.8
TWR : 119.9 , 274.5



COMMUNICATION FAILURE PROCEDURE

- Squawk A7600
- Comply with last assigned level until next reporting point then climb to flight plan cruising level.

Warning

- No Turn before Departure End of Runway
- Procedure Design Gradient = 3.3 %
- Max IAS 230 kts for turning after departure

RAMBU ONE BRAVO : AFTER DEPARTURE CLIMB ON RWY HEADING UNTIL 1200FT OR ABOVE THEN TURN LEFT HEADING 218 TO INTERCEPT AND PROCEED ON R-263 UBL TO RAMBU
(RAMBU 1B)

CHUMPAE ONE BRAVO : AFTER DEPARTURE CLIMB ON RWY HEADING UNTIL 1200FT OR ABOVE THEN TURN LEFT HEADING 251 TO INTERCEPT AND PROCEED ON R-296 UBL TO CHUMPAE DVOR/DME
(CMP 1B)

ROIET ONE BRAVO : AFTER DEPARTURE CLIMB ON RWY HEADING UNTIL 1200FT OR ABOVE THEN TURN LEFT HEADING 264 TO INTERCEPT AND PROCEED ON R-309 UBL TO ROIET DVOR/DME
(ROT 1B)

BUTRA ONE BRAVO : AFTER DEPARTURE CLIMB ON RWY HEADING UNTIL 1400FT OR ABOVE THEN TURN RIGHT HEADING 120 TO INTERCEPT AND PROCEED ON R-076 UBL TO BUTRA
(BUTRA 1B)

PAKSE ONE BRAVO : AFTER DEPARTURE CLIMB ON RWY HEADING UNTIL 1400FT OR ABOVE THEN TURN RIGHT HEADING 138 TO INTERCEPT AND PROCEED ON R-093 TO PAKSE VOR/DME
(PAKSE 1B)

CHANGE:ROUTE Y20, Y21, Y22 ADDED.

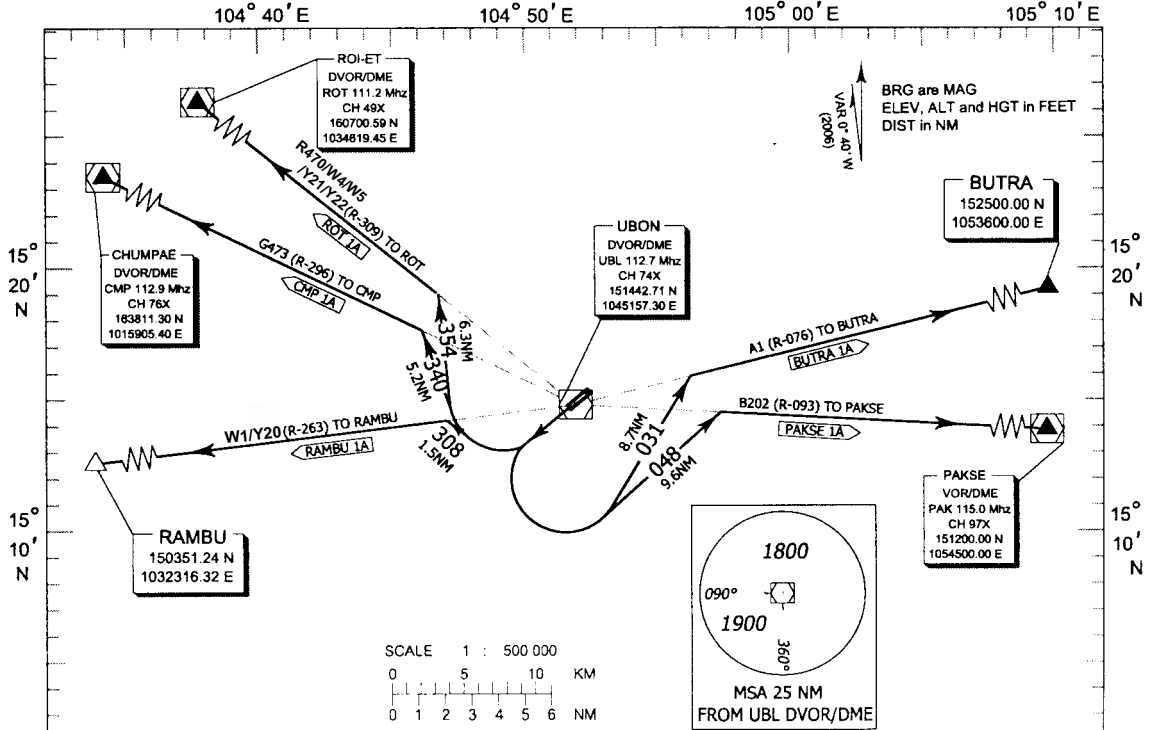
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STANDARD INSTRUMENT DEPARTURE CHART
(SID) - ICAO

UBON RATCHATANI / Ubon (VTUU)
RWY 23

APP : 123.5 , 257.8
TWR : 119.9 , 274.5

RAMBU 1A, ROT 1A
CMP 1A, BUTRA 1A
PAKSE 1A



COMMUNICATION FAILURE PROCEDURE
 - Squawk A7600
 - Comply with last assigned level until next reporting point then climb to flight plan cruising level.

Warning
 - No turn before Departure End of Runway
 - Procedure Design Gradient = 4.9 % to 1200ft
 - Max IAS 230 kts for turning after departure

RAMBU ONE ALPHA : AFTER DEPARTURE CLIMB ON RWY HEADING UNTIL 1200FT OR ABOVE THEN TURN RIGHT HEADING 308 TO INTERCEPT AND PROCEED ON R-263 UBL TO RAMBU
(RAMBU 1A)

CHUMPAE ONE ALPHA : AFTER DEPARTURE CLIMB ON RWY HEADING UNTIL 1200FT OR ABOVE THEN TURN RIGHT HEADING 340 TO INTERCEPT AND PROCEED ON R-296 UBL TO CHUMPAE DVOR/DME
(CMP 1A)

ROIET ONE ALPHA : AFTER DEPARTURE CLIMB ON RWY HEADING UNTIL 1200FT OR ABOVE THEN TURN RIGHT HEADING 354 TO INTERCEPT AND PROCEED ON R-309 UBL TO ROIET DVOR/DME
(ROT 1A)

BUTRA ONE ALPHA : AFTER DEPARTURE CLIMB ON RWY HEADING UNTIL 1200FT OR ABOVE THEN TURN LEFT HEADING 031 TO INTERCEPT AND PROCEED ON R-076 UBL TO BUTRA
(BUTRA 1A)

PAKSE ONE ALPHA : AFTER DEPARTURE CLIMB ON RWY HEADING UNTIL 1200FT OR ABOVE THEN TURN LEFT HEADING 048 TO INTERCEPT AND PROCEED ON R-093 TO PAKSE VOR/DME
(PAKSE 1A)

CHANGE:ROUTE Y20, Y21, Y22 ADDED.

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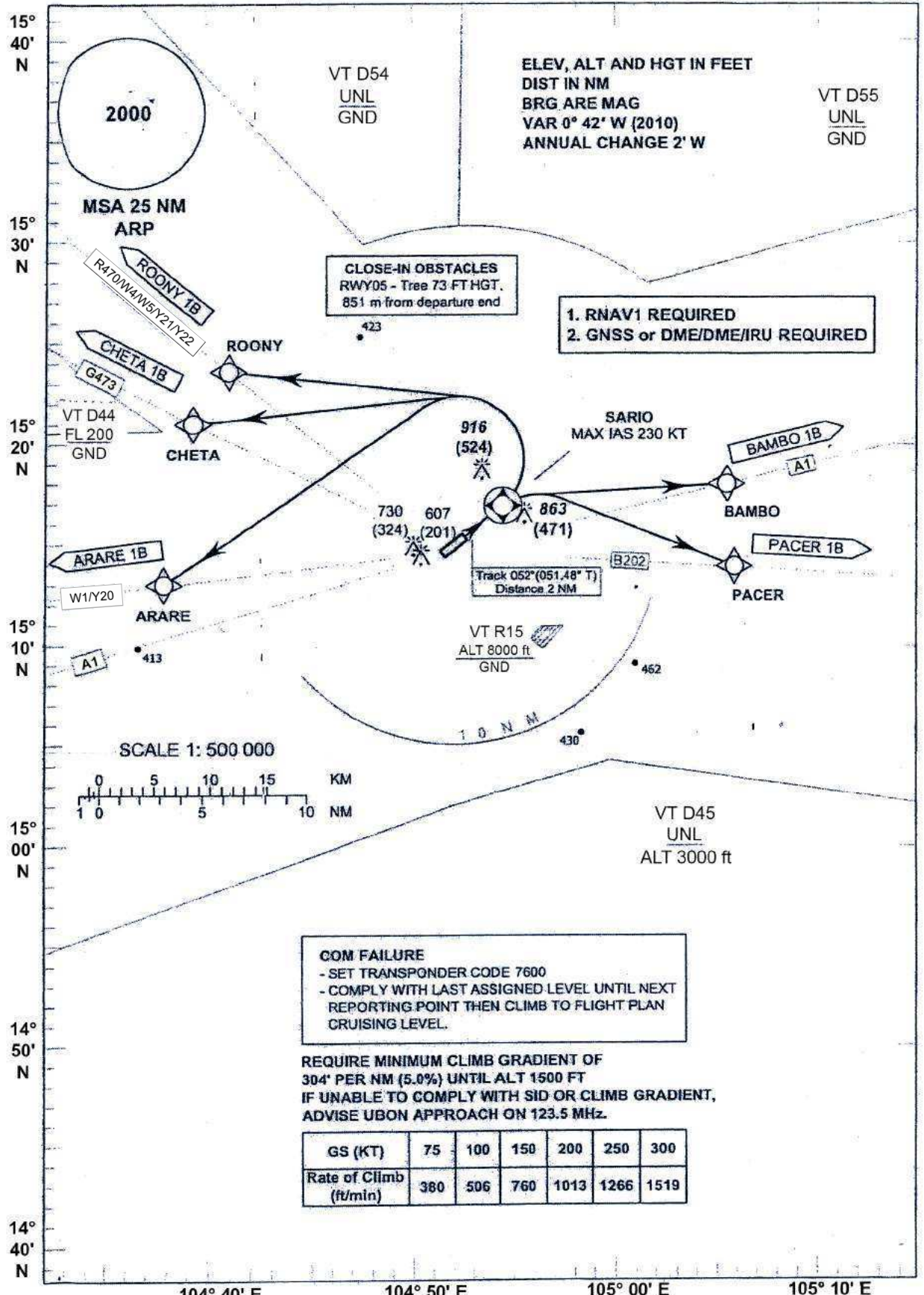
STANDARD DEPARTURE CHART
INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
11000 FT

APP : 123.5 , 257.8
TWR : 119.9 , 274.5
GND : 121.9 , 275.8

UBON RATCHATHANI /
Ubun Ratchathani (VTUU)
RNAV RWY05

ARARE1B, BAMBO1B, CHETA1B, PACER1B, ROONY1B



CHANGE:ROUTE Y20, Y21, Y22 ADDED.

STANDARD DEPARTURE CHART-
INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
11000 FT

APP : 123.5 , 257.8
TWR : 119.9 , 274.5
GND : 121.9 , 275.8

UBON RATCHATHANI /
Ubon Ratchathani (VTUU)
RNAV RWY05

ARARE1B, BAMBO1B, CHETA1B, PACER1B, ROONY1B

Serial Number	Path Descriptor	Waypoint Identifier	WGS-84 Coordinates		Flyover	Course * M (" T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA/ TCH	Navigation Specification
			Latitude	Longitude									
001	-	DER RWY05	15 15 35.02 N	104 52 52.20 E	-	-	0.83	-	-	-	-	-	RNAV1
002	CF	SARIO	15 16 50.07 N	104 54 29.32 E	Y	052*(051.48°)	0.83	2	L, R	-	230	-	RNAV1
003	DF	ARARE	15 12 59.33 N	104 37 34.68 E	-	-	0.83	-	-	-	-	-	RNAV1
004	DF	BAMBO	15 11 03.89 N	105 06 01.57 E	-	-	0.83	-	-	-	-	-	RNAV1
005	DF	CHETA	15 21 04.49 N	104 39 01.93 E	-	-	0.83	-	-	-	-	-	RNAV1
006	DF	PACER	15 13 55.64 N	105 06 25.14 E	-	-	0.83	-	-	-	-	-	RNAV1
007	DF	ROONY	15 23 40.20 N	104 40 46.96 E	-	-	0.83	-	-	-	-	-	RNAV1

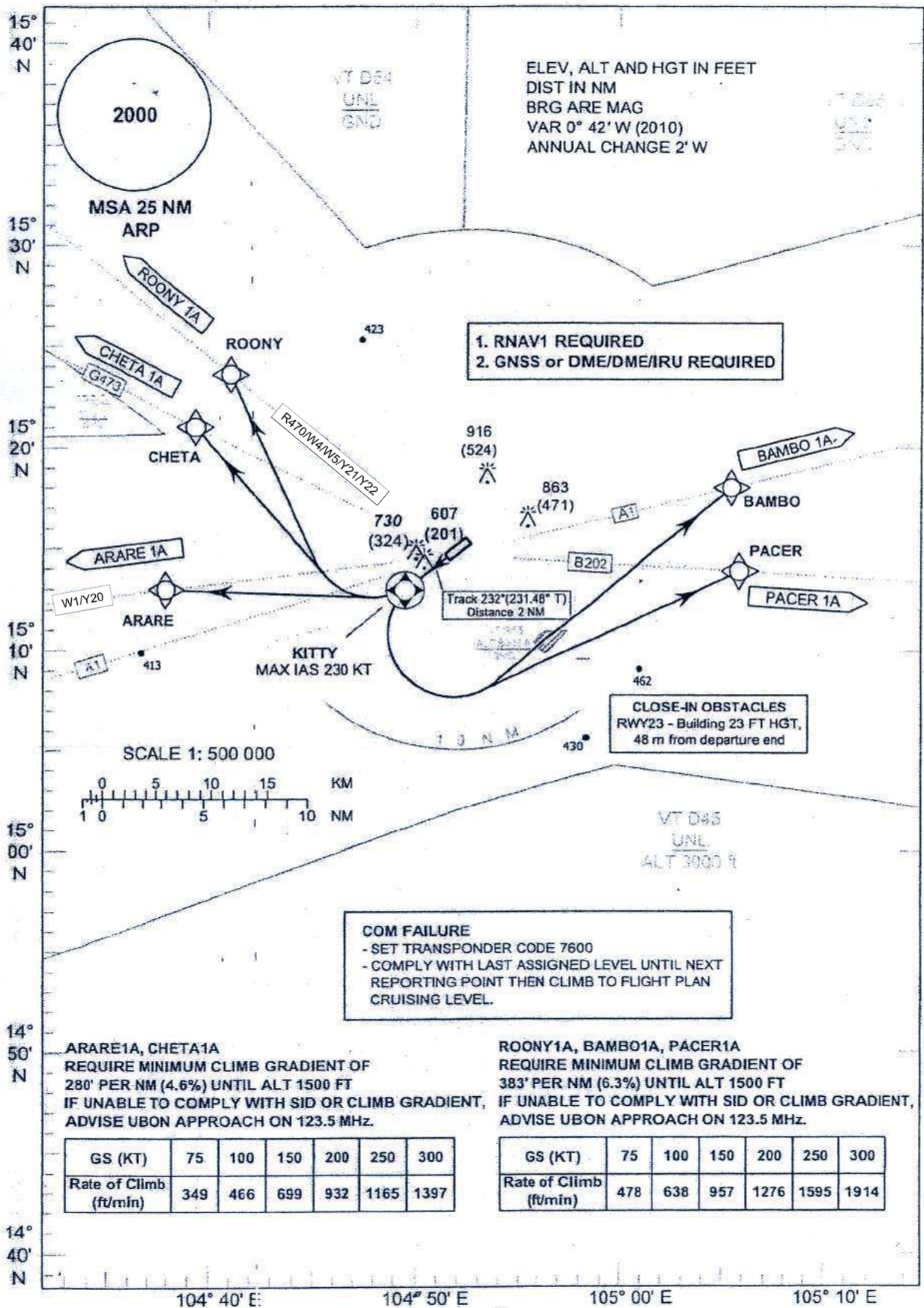
STANDARD DEPARTURE CHART -
INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
11000 FT

APP : 123.5, 257.8
TWR : 119.9, 274.5
GND : 121.9, 275.8

UBON RATCHATHANI /
Ubon Ratchathani (VTUU)
RNAV RWY23

ARARE1A, BAMBO1A, CHETA1A, PACER1A, ROONY1A



ELEV, ALT AND HGT IN FEET
DIST IN NM
BRG ARE MAG
VAR 0° 42' W (2010)
ANNUAL CHANGE 2' W

1. RNAV1 REQUIRED
2. GNSS or DME/DME/IRU REQUIRED

CLOSE-IN OBSTACLES
RWY23 - Building 23 FT HGT,
48 m from departure end

COM FAILURE
- SET TRANSPONDER CODE 7600
- COMPLY WITH LAST ASSIGNED LEVEL UNTIL NEXT REPORTING POINT THEN CLIMB TO FLIGHT PLAN CRUISING LEVEL.

ARARE1A, CHETA1A
REQUIRE MINIMUM CLIMB GRADIENT OF
280' PER NM (4.6%) UNTIL ALT 1500 FT
IF UNABLE TO COMPLY WITH SID OR CLIMB GRADIENT,
ADVISE UBON APPROACH ON 123.5 MHz.

ROONY1A, BAMBO1A, PACER1A
REQUIRE MINIMUM CLIMB GRADIENT OF
383' PER NM (6.3%) UNTIL ALT 1500 FT
IF UNABLE TO COMPLY WITH SID OR CLIMB GRADIENT,
ADVISE UBON APPROACH ON 123.5 MHz.

GS (KT)	75	100	150	200	250	300
Rate of Climb (ft/min)	349	466	699	932	1165	1397

GS (KT)	75	100	150	200	250	300
Rate of Climb (ft/min)	478	638	957	1276	1595	1914

CHANGE:ROUTE Y20, Y21, Y22 ADDED.

STANDARD DEPARTURE CHART-
INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
11000 FT

APP : 123.5 , 257.8
TWR : 119.9 , 274.5
GND : 121.9 , 275.8

UBON RATCHATHANI /
Ubon Ratchathani (VTUU)
RNAV RWY23

ARARE1A, BAMBO1A, CHETA1A, PACER1A, ROONY1A

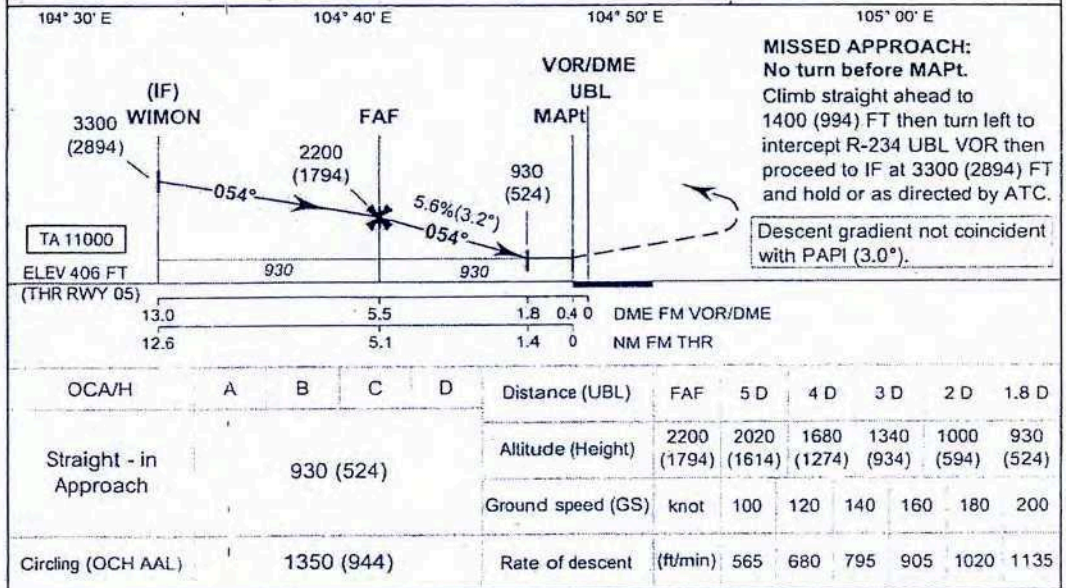
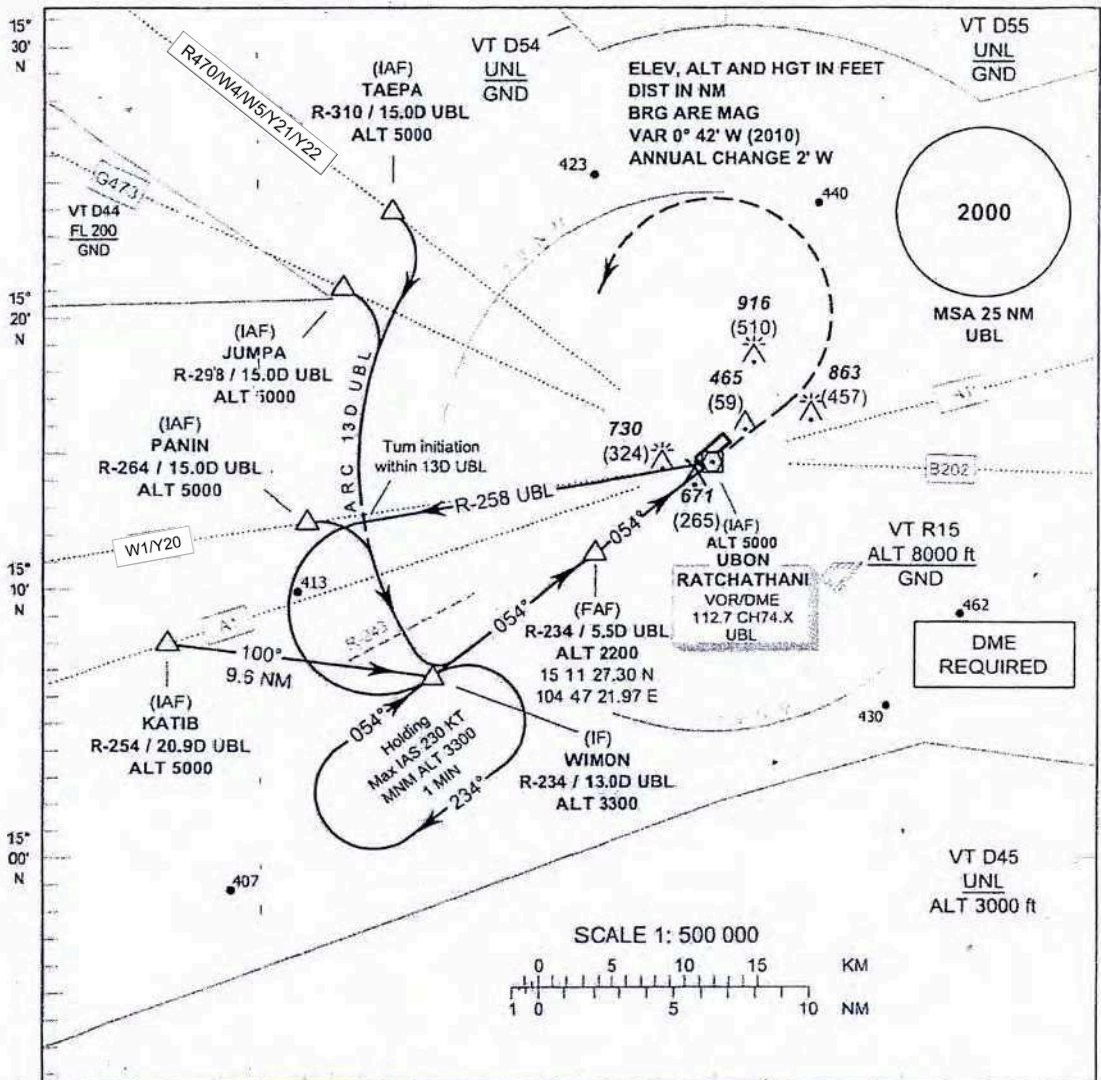
Serial Number	Path Descriptor	Waypoint Identifier	WGS-84 Coordinates		Flyover	Course ° M (° T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA/TCH	Navigation Specification
			Latitude	Longitude									
001	-	DER RWY23	15 14 34.17 N	104 51 33.46 E	-	-	0.83	-	-	-	-	-	RNAV1
002	CF	KITTY	15 13 19.11 N	104 49 56.35 E	Y	232°(231.48°)	0.83	2	L R	-	230	-	RNAV1
003	DF	ARARE	15 12 59.33 N	104 37 34.68 E	-	-	0.83	-	-	-	-	-	RNAV1
004	DF	BAMBO	15 18 03.89 N	105 06 01.57 E	-	-	0.83	-	-	-	-	-	RNAV1
005	DF	CHETA	15 21 04.49 N	104 39 01.93 E	-	-	0.83	-	-	-	-	-	RNAV1
006	DF	PACER	15 13 55.64 N	105 06 25.14 E	-	-	0.83	-	-	-	-	-	RNAV1
007	DF	ROONY	15 23 40.20 N	104 40 46.96 E	-	-	0.83	-	-	-	-	-	RNAV1

INSTRUMENT
APPROACH
CHART - ICAO

AERODROME ELEV 406 FT
HEIGHTS RELATED TO
AERODROME ELEV

APP : 123.5, 257.8
TWR : 119.9, 274.5
GND : 121.9, 275.8

UBON RATCHATHANI /
Ubun Ratchathani (VTUU)
VOR RWY05



CHANGE ROUTE Y20, Y21, Y22 ADDED.

INSTRUMENT AERODROME ELEV 406 FT
APPROACH HEIGHTS RELATED TO
CHART - ICAO AERODROME ELEV

APP : 123.5 , 257.8
TWR : 119.9 , 274.5
GND : 121.9 , 275.8

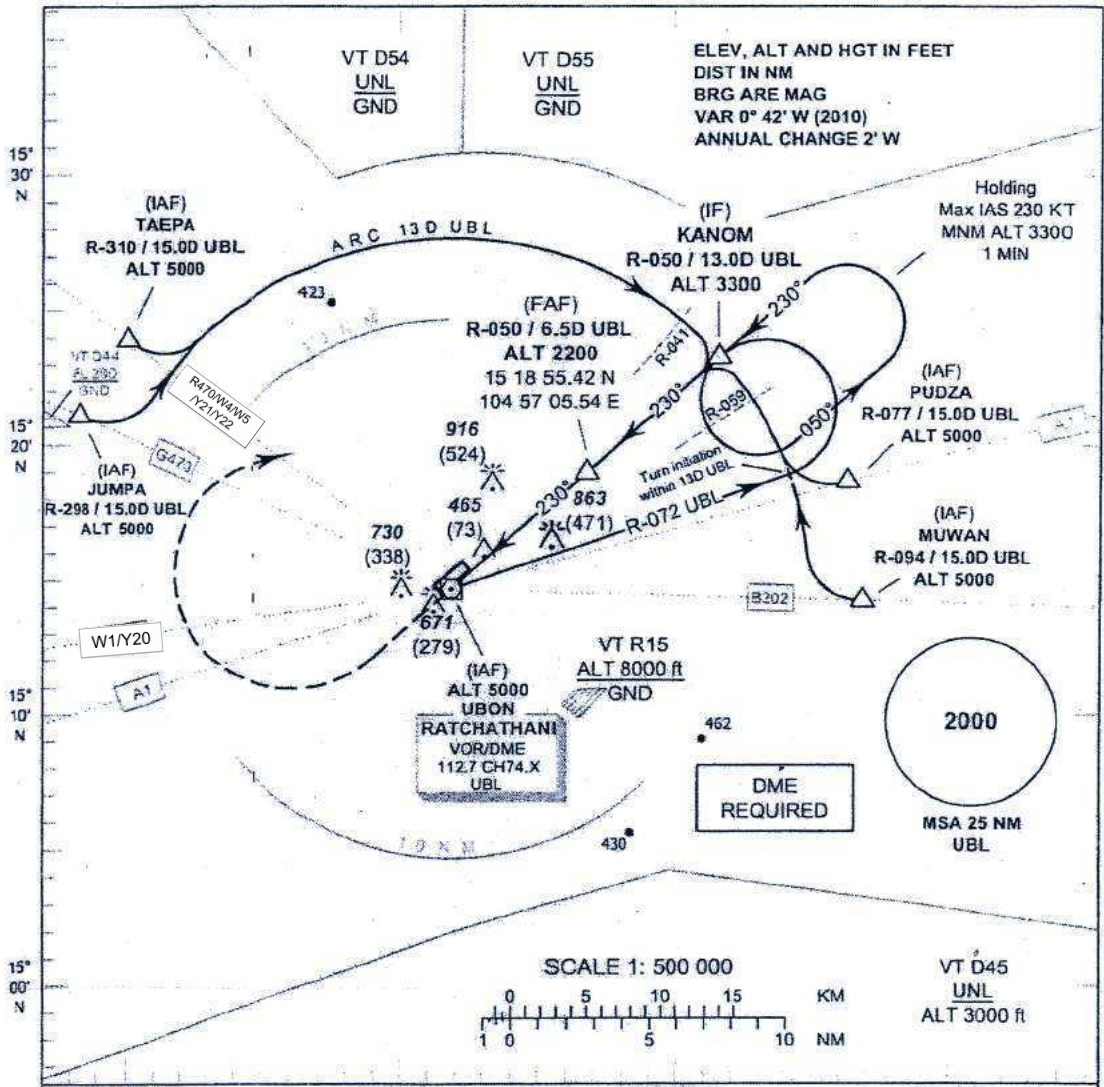
UBON RATCHATHANI /
Ubon Ratchathani (VTUU)
VOR RWY05

Fix / Point		Coordinates	
KATIB (IAF)	R-254 / 20.9 D UBL	15 08 28.67 N	104 31 17.73 E
PANIN (IAF)	R-264 / 15.0 D UBL	15 12 51.92 N	104 36 33.08 E
JUMPA (IAF)	R-298 / 15.0 D UBL	15 21 31.74 N	104 38 06.52 E
TAEPA (IAF)	R-310 / 15.0 D UBL	15 24 18.58 N	104 39 59.05 E
WIMON (IF)	R-234 / 13.0 D UBL	15 07 00.15 N	104 41 05.99 E
FAF	R-234 / 5.5 D UBL	15 11 27.30 N	104 47 21.97 E
MAPt	R-234 / 0.4 D UBL	15 14 28.71 N	104 51 37.57 E
THR RWY 05	-	15 14 34.17 N	104 51 33.46 E
VOR (IAF)	UBL	15 14 42.71 N	104 51 57.30 E

INSTRUMENT APPROACH CHART - ICAO
AERODROME ELEV 406 FT
HEIGHTS RELATED TO THR RWY 23 - ELEV 392 FT

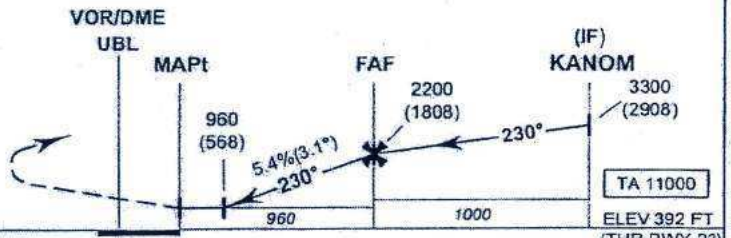
APP : 123.5, 257.8
TWR : 119.9, 274.5
GND : 121.9, 275.8

UBON RATCHATHANI /
Ubun Ratchathani (VTUU)
VOR RWY23



MISSED APPROACH:
No turn before MAPt.
Climb straight ahead to 1400 (1008) FT then turn right to intercept R-050 UBL /OR then proceed to IF at 3300 (2908) FT and hold or as directed by ATC.

Descent gradient not coincident with PAPI (3.0°).



DME FM VOR/DME	0	1.2	2.8	6.5	13.0
NM FM THR	0	1.6	5.3	11.8	

OCA/H	A	B	C	D	Distance (UBL)							
					2.8 D	3 D	4 D	5 D	6 D	FAF		
Straight-in Approach	960 (568)				Altitude (Height)	960 (568)	1030 (638)	1360 (968)	1690 (1298)	2015 (1623)	2200 (1808)	
					Ground speed (GS)	knot	100	120	140	160	180	200
					Rate of descent	(ft/min)	545	655	765	875	985	1095
Circling (OCH AAL)	1350 (944)											

CHANGEROUTE Y20, Y21, Y22 ADDED.

INSTRUMENT AERODROME ELEV 406 FT
APPROACH HEIGHTS RELATED TO
CHART - ICAO THR RWY 23 - ELEV 392 FT

APP : 123.5 , 257.8
TWR : 119.9 , 274.5
GND : 121.9 , 275.8

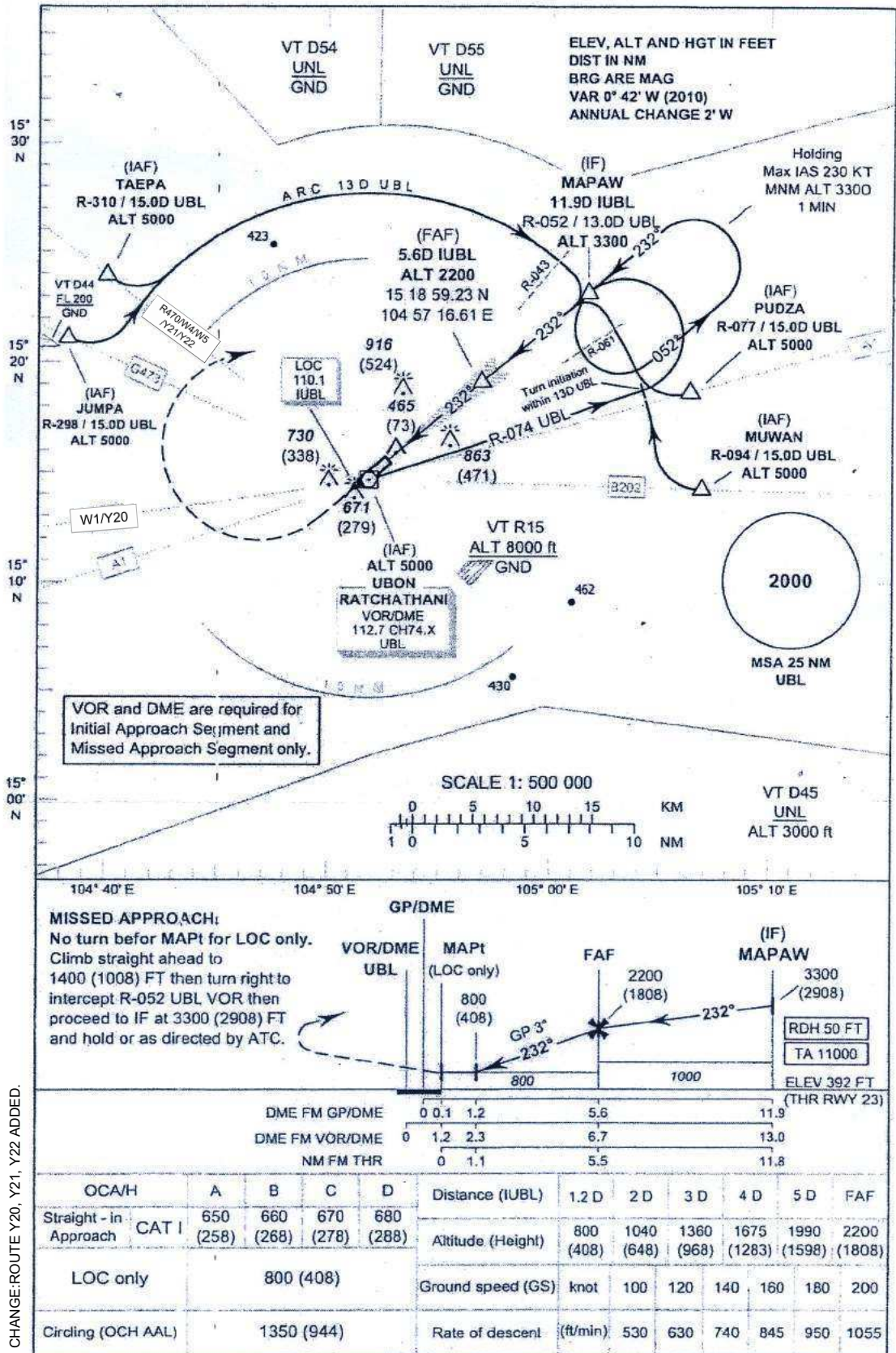
UBON RATCHATHANI /
Ubon Ratchathani (VTUU)
VOR RWY23

Fix / Point		Coordinates	
PUDZA (IAF)	R-077 / 15.0 D UBL	15 18 18.23 N	105 07 01.90 E
MUWAN (IAF)	R-094 / 15.0 D UBL	15 13 52.25 N	105 07 27.13 E
JUMPA (IAF)	R-298 / 15.0 D UBL	15 21 31.74 N	104 38 06.52 E
TAEPA (IAF)	R-310 / 15.0 D UBL	15 24 18.58 N	104 39 59.05 E
KANOM (IF)	R-050 / 13.0 D UBL	15 23 08.02 N	105 02 13.99 E
FAF	R-050 / 6.5 D UBL	15 18 55.42 N	104 57 05.54 E
MAPt	R-050 / 1.2 D UBL	15 15 30.67 N	104 52 55.77 E
THR RWY 23	-	15 15 35.02 N	104 52 52.20 E
VOR (IAF)	UBL	15 14 42.71 N	104 51 57.30 E

INSTRUMENT APPROACH CHART - ICAO
AERODROME ELEV 406 FT
HEIGHTS RELATED TO THR RWY 23 - ELEV 392 FT

APP : 123.5 , 257.8
TWR : 119.9 , 274.5
GND : 121.9 , 275.8

UBON RATCHATHANI /
Ubon Ratchathani (VTUU)
ILS or LOC RWY23



INSTRUMENT AERODROME ELEV 406 FT APP : 123.5 , 257.8
 APPROACH HEIGHTS RELATED TO TWR : 119.9 , 274.5
 CHART - ICAO THR RWY 23 - ELEV 392 FT GND : 121.9 , 275.8

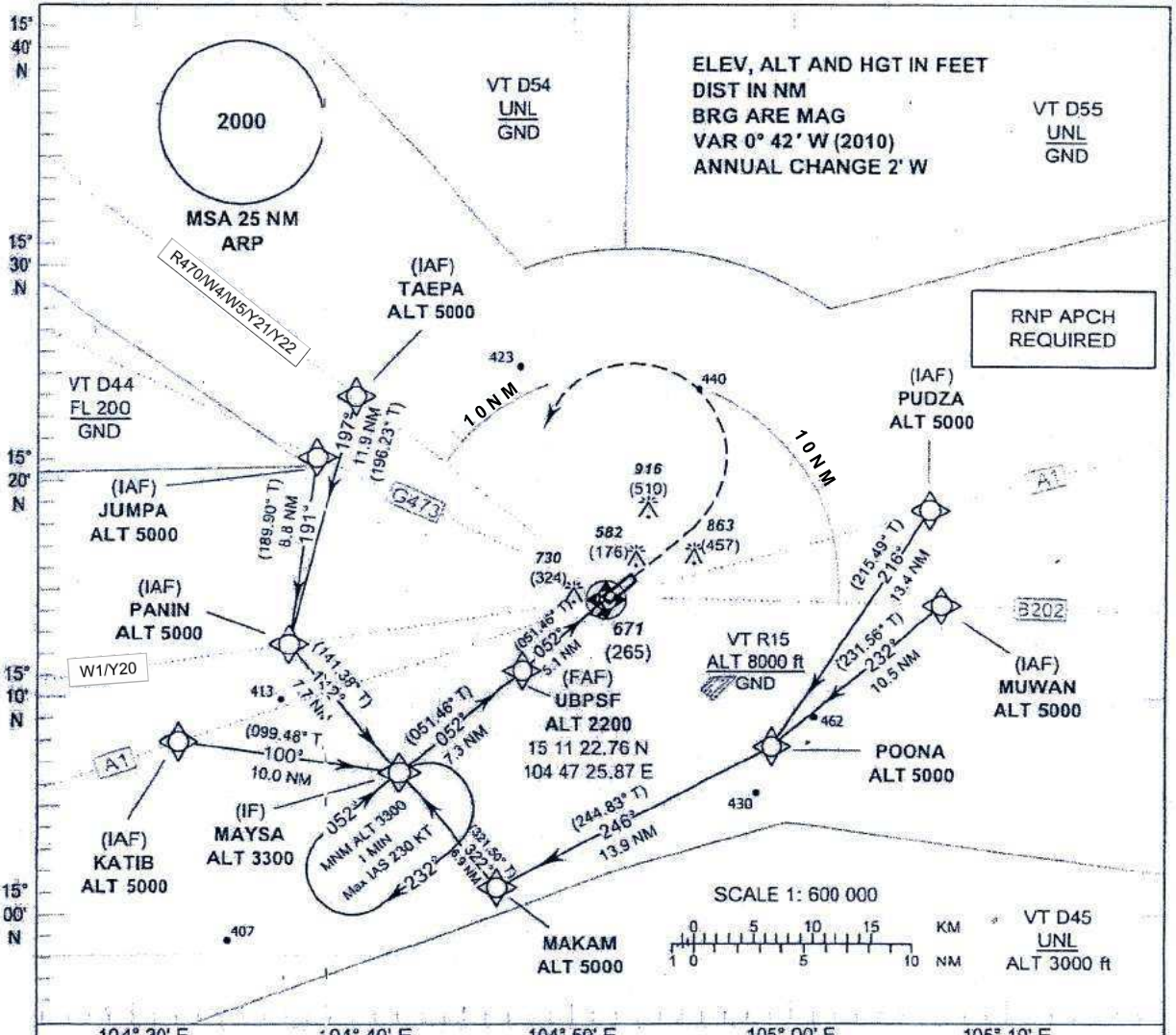
UBON RATCHATHANI /
 Ubon Ratchathani (VTUU)
 ILS or LOC RWY23

Fix / Point		Coordinates	
JUMPA (IAF)	R-298 / 15.0 D UBL	15 21 31.74 N	104 38 06.52 E
TAEPA (IAF)	R-310 / 15.0 D UBL	15 24 18.58 N	104 39 59.05 E
PUDZA (IAF)	R-077 / 15.0 D UBL	15 18 18.23 N	105 07 01.90 E
MUWAN (IAF)	R-094 / 15.0 D UBL	15 13 52.25 N	105 07 27.13 E
MAPAW (IF)	11.9 D IUBL R-052 / 13.0 D UBL	15 22 56.53 N	105 02 24.20 E
FAF	5.6 D IUBL	15 18 59.23 N	104 57 16.61 E
MAPt (LOC only)	0.1 D IUBL	15 15 35.02 N	104 52 52.20 E
THR RWY 23	-	15 15 35.02 N	104 52 52.20 E
LOC	IUBL	15 14 23.85 N	104 51 20.10 E
GP/DME	IUBL	15 15 26.05 N	104 52 47.13 E
VOR (IAF)	UBL	15 14 42.71 N	104 51 57.30 E

INSTRUMENT APPROACH CHART - ICAO
AERODROME ELEV 406 FT
HEIGHTS RELATED TO AERODROME ELEV
BARO-VNAV NA BELOW 0°C

APP : 123.5, 257.8
 TWR : 119.9, 274.5
 GND : 121.9, 275.8

UBON RATCHATHANI /
Ubun Ratchathani (VTUU)
RNP RWY05



MISSED APPROACH:
 No turn before MAPt.
 Climb on track 052° to 1400 (994) FT then turn left to IF at 3300 (2894) FT and hold or as directed by ATC.
 Descent gradient not coincident with PAPI (3.0°).

CHANGE ROUTE Y20, Y21, Y22 ADDED.	3300 MAYSA (2894)		2200 UBPSF (1794)		930 (524)							
	RDH 50 FT				LNAV ONLY							
	TA 11000				LNAV ONLY							
	ELEV 406 FT (THR RWY 05)		930		930							
	12.4		5.1		1.4		0 NM FM THR					
OCA/H	A	B	C	D	NM to THR 05	FAF	5 NM	4 NM	3 NM	2 NM	1.4 NM	
LNAV / VNAV	860 (454)	920 (514)				Altitude (Height)	2200 (1794)	2155 (1749)	1815 (1409)	1475 (1069)	1135 (729)	930 (524)
LNAV	930 (524)				Ground speed (GS)	knot	100	120	140	160	180	200
Circling (OCH AAL)	1350 (944)				Rate of descent	(ft/min)	565	680	795	905	1020	1135

INSTRUMENT APPROACH CHART - ICAO
AERODROME ELEV 406 FT
HEIGHTS RELATED TO AERODROME ELEV
BARO-VNAV NA BELOW 0°C

APP : 123.5 , 257.8
TWR : 119.9 , 274.5
GND : 121.9 , 275.8

UBON RATCHATHANI /
Ubon Ratchathani (VTUU)
RNP RWY 05

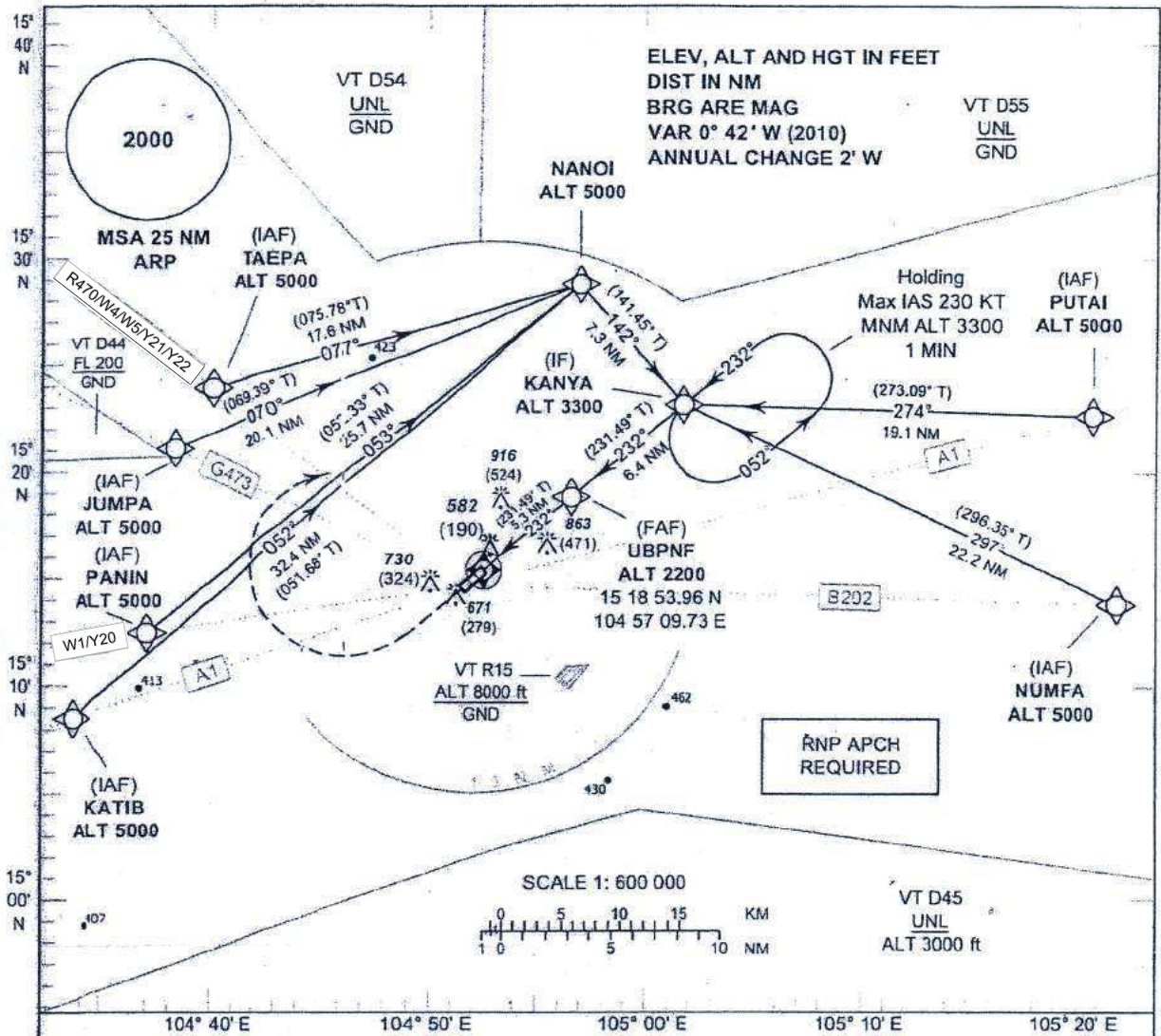
Serial Number	Path Descriptor	Waypoint Identifier	WGS-84 Coordinates		Flyover	Course ° M (° T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA/TCH	Navigation Specification
			Latitude	Longitude									
001	IF	PUDZA (IAF)	15 18 18.23 N	105 07 01.90 E	-	216°(215.49°)	0.83	13.4	-	5000	-	-	RNP APCH
002	IF	MUWAN (IAF)	15 13 52.25 N	105 07 27.13 E	-	232°(231.56°)	0.83	10.5	-	5000	-	-	RNP APCH
003	TF	POONA	15 07 20.47 N	104 58 59.08 E	-	246°(244.83°)	0.83	13.9	R	5000	-	-	RNP APCH
004	TF	MAKAM	15 01 23.42 N	104 45 58.02 E	-	322°(321.50°)	0.83	6.9	R	5000	-	-	RNP APCH
005	IF	KATIB (IAF)	15 08 28.67 N	104 31 17.73 E	-	100°(099.48°)	0.83	10.0	-	5000	-	-	RNP APCH
007	IF	JUMPA (IAF)	15 21 31.74 N	104 38 06.52 E	-	191°(189.90°)	0.83	8.8	-	5000	-	-	RNP APCH
008	IF	TAEPA (IAF)	15 24 18.58 N	104 39 59.05 E	-	197°(196.23°)	0.83	11.9	-	5000	-	-	RNP APCH
006	IF/TF	PANIN (IAF)	15 12 51.92 N	104 36 33.08 E	-	142°(141.38°)	0.83	7.7	L	5000	-	-	RNP APCH
009	TF	MAYSA (IF)	15 06 48.76 N	104 41 31.61 E	-	052°(051.46°)	0.83	7.3	L, R	3300	-	-	RNP APCH
010	TF	UBPSF (FAF)	15 11 22.76 N	104 47 25.87 E	-	052°(051.46°)	0.83	5.1	-	2200	-	-	RNP APCH
011	-	MAPt (THR 05)	15 14 34.17 N	104 51 33.46 E	Y	-	0.83	-	-	930	-	-	RNP APCH
012	CA	-	-	-	-	-	0.83	-	L	1400	-	-	RNP APCH
013	DF	MAYSA (IF)	15 06 48.76 N	104 41 31.61 E	-	-	0.83	-	-	-	-	-	RNP APCH
014	HM	MAYSA (IF)	15 06 48.76 N	104 41 31.61 E	Y	052°(051.46°)	0.83	-	R	-	230	-	RNP APCH

CHANGE: CHART TITLE:

INSTRUMENT APPROACH CHART - ICAO
AERODROME ELEV 406 FT
HEIGHTS RELATED TO THR RWY 23 - ELEV 392 FT
BARO-VNAV NA BELOW 0°C

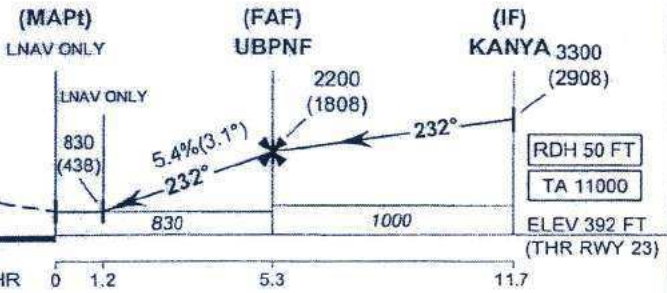
APP : 123.5, 257.8
TWR : 119.9, 274.5
GND : 121.9, 275.8

UBON RATCHATHANI /
Ubun Ratchathani (VTUU)
RNP RWY23



MISSED APPROACH:
No turn before MAPt.
Climb on track 232° to 1400 (1008) FT then turn right to IF at 3300 (2908) FT and hold or as directed by ATC.

Descent gradient not coincident with PAPI (3.0°).



CHANGE:ROUTE Y20, Y21, Y22 ADDED.

OCA/H	A	B	C	D	NM to THR 23	1.2 NM	2 NM	3 NM	4 NM	5 NM	FAF	
LNAV / VNAV	740 (348)	750 (358)	790 (398)	820 (428)	Altitude (Height)	830 (438)	1100 (708)	1425 (1033)	1755 (1363)	2080 (1688)	2200 (1808)	
LNAV	830 (438)				Ground speed (GS)	knot	100	120	140	160	180	200
Circling (OCH AAL)	1350 (944)				Rate of descent	(ft/min)	545	655	765	875	985	1095

INSTRUMENT AERODROME ELEV 406 FT
APPROACH HEIGHTS RELATED TO
CHART - ICAO THR RWY 23 - ELEV 392 FT
BARO-VNAV NA BELOW 0°C

APP : 123.5 , 257.8
TWR : 119.9 , 274.5
GND : 121.9 , 275.8

UBON RATCHATHANI /
Ubon Ratchathani (VTUU)
RNP RWY 23

Serial Number	Path Descriptor	Waypoint Identifier	WGS-84 Coordinates		Flyover	Course M (° T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KT)	VPA/ TCH	Navigation Specification
			Latitude	Longitude									
001	IF	POSAI (IAF)	15 21 52.72 N	105 22 06.99 E	-	274°(273.09°)	0.83	19.1	-	5000	-	-	RNP APCH
002	IF	NUMFA (IAF)	15 13 00.71 N	105 22 56.83 E	-	297°(296.35°)	0.83	22.2	-	5000	-	-	RNP APCH
003	IF	KATB (IAF)	15 08 28.67 N	104 31 17.73 E	-	052°(051.68°)	0.83	32.4	-	5000	-	-	RNP APCH
004	IF	PANIN (IAF)	15 12 51.92 N	104 36 33.08 E	-	053°(052.33°)	0.83	25.7	-	5000	-	-	RNP APCH
005	IF	JUMPA (IAF)	15 21 31.74 N	104 38 06.52 E	-	070°(069.39°)	0.83	20.1	-	5000	-	-	RNP APCH
006	IF	TAEPA (IAF)	15 24 18.58 N	104 39 59.05 E	-	077°(075.78°)	0.83	17.6	-	5000	-	-	RNP APCH
007	TF	NANOI	15 28 38.06 N	104 57 38.09 E	-	142°(141.45°)	0.83	7.3	R	5000	-	-	RNP APCH
008	TF	KANYA (IF)	15 22 53.99 N	105 02 20.58 E	-	232°(231.49°)	0.83	6.4	L, R	3300	-	-	RNP APCH
009	TF	UBPNF (FAF)	15 18 53.96 N	104 57 09.73 E	-	232°(231.49°)	0.83	5.3	-	2200	-	-	RNP APCH
010	-	MAP1 (THR 23)	15 15 35.02 N	104 52 52.29 E	Y	-	0.83	-	-	830	-	-	RNP APCH
011	CA	-	-	-	-	-	0.83	-	R	1400	-	-	RNP APCH
012	DF	KANYA (IF)	15 22 53.99 N	105 02 20.58 E	-	-	0.83	-	-	-	-	-	RNP APCH
013	HM	KANYA (IF)	15 22 53.99 N	105 02 20.58 E	Y	232°(231.49°)	0.83	-	L	-	230	-	RNP APCH

CHANGE: CHART TITLE.