

VTUW AD 2.1 AERODROME LOCATION INDICATOR AND NAME

VTUW - NAKHON PHANOM / NAKHON PHANOM AIRPORT

VTUW AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	172307.22N 1043830.80E
2	Direction and distance from (city)	15 KM W from city
3	Elevation/Reference temperature	587 FT
4	Geoid Undulation at AD ELEV PSN	NIL
5	MAG VAR/Annual change	0.98°W (2016)/0.02°W
6	AD Administration, address, telephone, telefax, telex, AFS	Director of Nakhon Phanom Airport Nakhon Phanom Airport Tambon Photak, Amphoe Muang Nakhon Phanom Province 48000 Thailand Tel: +664 253 1586 Fax: +664 253 1587 AFS: VTUWYDYX
7	Types of traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	Operator: Department of Airports

VTUW AD 2.3 OPERATIONAL HOURS

1	Aerodrome Operator	2300-1400
2	Customs and immigration	On request
3	Health and sanitation	On request
4	AIS Briefing Office	NIL
5	ATS Reporting Office (ARO)	2300-1400
6	MET Briefing Office	NIL
7	ATS	2300-1400
8	Fuelling	NIL
9	Handling	NIL
10	Security	NIL
11	De-icing	NIL
12	Remarks	ATS Reporting Office (ARO): Located at Udon Thani Air Traffic Control Centre (1st floor of tower building) Tel: +664 223 0124 +669 2262 3477 Fax: +664 224 2797

VTUW AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	NIL
2	Fuel/oil types	NIL
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

VTUW AD 2.5 PASSENGER FACILITIES

1	Hotels	In the city
2	Restaurants	In the city
3	Transportation	Limousine, Car Rental
4	Medical facilities	NIL
5	Bank and Post Office	NIL
6	Tourist Office	NIL
7	Remarks	NIL

VTUW AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	Category 7
2	Rescue equipment	Yes
3	Capability for removal of disabled aircraft	NIL
4	Remarks	NIL

VTUW AD 2.7 SEASONAL AVAILABILITY - CLEARING

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

VTUW 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 41/F/C/X/T
3	Altimeter checkpoint location and elevation	NIL
4	VOR checkpoints	NIL
5	INS checkpoints	NIL
6	Remarks	NIL

VTUW 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	NIL
2	RWY and TWY markings and LGT	RWY: Marked
3	Stop bars	NIL
4	Remarks	NIL

VTUW 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	
NIL	NIL	NIL	NIL	NIL	NIL

VTUW AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	Aeronautical Meteorological Station-Nakhon Phanom, Upper Northeastern Meteorological Center, Thai Meteorological Department (TMD)
2	Hours of service MET Office outside hours	0100-1300 NIL
3	Office responsible for TAF preparation Periods of validity	Supply TAF from Upper Northeastern Meteorological Center 24 HR
4	Type of landing forecast Interval of issuance	TREND 1 HR
5	Briefing/consultation provided	Personal Consultation Tel: +664 253 1532
6	Flight documentation Language(s) used	NIL
7	Charts and other information available for briefing or consultation	S, U85, Daily Weather Forecast, satellite and radar images
8	Supplementary equipment available for providing information	Automated Weather Observation System (AWOS)
9	ATS units provided with information	Nakhon Phanom TWR
10	Additional information (limitation of service, etc.)	NIL

VTUW 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 end coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
15	144.96°	2500x45	PCN 61/F/C/X/T Concrete and asphalt	172334.95N 1043810.44E	THR 587 FT TDZ 587 FT
33	324.96°	2500x45	PCN 61/F/C/X/T Concrete and asphalt	172228.37N 1043859.32E	THR 555 FT TDZ 555 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	2620x150	NIL	NIL
NIL	60x60	NIL	2620x150	NIL	NIL

VTUW AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
15	2500	2500	2560	2500	NIL
33	2500	2500	2560	2500	NIL

VTUW 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
15	CAT1 900 M	Green WBAR	PAPI Left 3°	NIL	NIL	2500 M 60 M White, LIH	Red	NIL	NIL
33	SALS 420 M LIH	Green WBAR	PAPI Left 3°	NIL	NIL	2500 M 60 M White, LIH	Red	NIL	NIL

VTUW AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: At Tower Building, FLG W EV 7 SEC
2	LDI location and LGT Anemometer location and LGT	NIL
3	TWY edge and centre line lighting	NIL
4	Secondary power supply/switch-over time	Secondary power supply to all lighting at the air field lighting (AFL). Switch over time : 15 sec.
5	Remarks	NIL

VTUW 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

VTUW AD 2.17 ATS AIRSPACE

1	Designation and lateral limits	A circle of 5 NM radius centred on Nakhon Phanom DVOR/DME (172317.87N 1043818.01E)
2	Vertical limits	2000 FT/AGL
3	Airspace classification	C
4	ATS unit call sign Language(s)	Nakhon Phanom Tower English, Thai
5	Transition altitude	11000 FT
6	Remarks	NIL

VTUW AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
APP	Sakon Nakhon Approach	123.35 MHZ 284.0 MHZ 121.5 MHZ ¹⁾	23:00-15:00	¹⁾ Emergency frequency
TWR	Nakhon Phanom Tower	122.5 MHZ 121.5 MHZ ¹⁾ 236.6 MHZ	As AD OPR HR	
GND	Nakhon Phanom Ground	121.9 MHZ	As AD OPR HR	
ATIS	Nakhon Phanom Airport	383 KHZ	As AD OPR HR	

VTUW 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	NP	383 KHZ	H24	172332.69N 1043833.44E		Output 400 watts. 50 NM Coverage clockwise orbit data refer from commissioning checked as follow: -Bearing 170-350 degree at 2100 FT -Bearing 351-169 degree unable to check due to border limited.
DVOR/DME	NKP	111.6 MHZ CH53X	H24	172317.87N 1043818.01E		DVOR/DME restriction due to mountainous terrain surround DVOR/DME station, coverage check does not provide adequate signal to 40 NM at required altitudes in various areas as follows: <ul style="list-style-type: none"> - Radial 181°-190° altitude should not below 2 500 FT - Radial 191°-260° altitude should not below 4 000 FT - Radial 261°-320° altitude should not below 2 500 FT - Radial 321°-180° unable to check (Due to border limited)
LOC RWY15 ILS CAT I	INKP	109.7 MHZ		172220.65N 1043904.98E		LOC: Designated operation coverage unable to perform 10 DEG/ 90 HZ 18 NM and 35 DEG/ 90 HZ 10 NM due to LAOS PDR border ALT 6000 FT AMSL.
GP		333.2 MHZ		172324.48N 1043813.98E		GP: 3 DEG, RDH 50 FT
DME	INKP	CH 34X (109.7 MHZ)		172219.39N 1043903.02E	552.54 FT	Paired with LOC FREQ.

VTUW AD 2.20 LOCAL AERODROME REGULATIONS

NAKHON PHANOM FLYING TRAINING AREA

VFR Departure/Arrival route flying training area within VTD64 in BANGKOK FIR

DEPARTURE ROUTES:

Runway 15 (To Training Area 1)

Climb straight ahead until ALT 500 FT AGL. Turn right to crosswind leg, and climb on crosswind leg until ALT 1500 FT. Then proceed direct to point TANGO (172724.77N 1042630.25E / NKP R-290/12D), continue climbing to not above ALT 2000 FT at point TANGO. After point TANGO climb to final altitude and enter training area 1.

Runway 15 (To Training Area 2)

Climb straight ahead until ALT 1500 FT. Turn right proceed direct to point SIERRA (170833.95N 1043502.60E / NKP R-192/15D), continue climbing to not above ALT 2000 FT at point SIERRA. After point SIERRA climb to final altitude and enter training area 2

Runway 33 (To Training Area 1)

Climb straight ahead until ALT 1500 FT. Then turn left to point TANGO (172724.77N 1042630.25E / NKP R-290/12D), continue climbing to not above ALT 2000 FT at point TANGO. After point TANGO climb to final altitude and enter training area 1

Runway 33 (To Training Area 2)

Climb straight ahead until ALT 1100 FT. Turn left to crosswind leg and downwind leg, continue climbing on downwind until ALT 2000 FT. Then maintain ALT 2000 FT proceed direct to point SIERRA (170833.95N 1043502.60E / NKP R-192/15D). After point SIERRA climb to final altitude and enter training area 2.

ARRIVAL ROUTES:

Runway 15/33 (From Training Area 1)

Leaving training area 1, climb or descend, as appropriate, to ALT 3000 FT proceed to point PAPA (171714.81E 1042726.80E / NKP R-240/12D). Then proceed to point UNIFORM (172036.61N 1043511.55E / NKP R-228/4D) descending to ALT 1500 FT, and join downwind to the active runway as cleared by ATC. In case of PFL, from point PAPA, proceed to point UNIFORM descending to ALT 2500 FT and carry out PFL as cleared by ATC.

Runway 15/33 (From Training Area 2)

Leaving training area 2, climb or descend, as appropriate, to ALT 3000 FT proceed to point PAPA (171714.81E 1042726.80E / NKP R-240/12D). Then proceed to point UNIFORM (172036.61N 1043511.55E / NKP R-228/4D) descending to ALT 1500 FT, and join downwind to the active runway as cleared by ATC. In case of PFL, from point PAPA, proceed to point UNIFORM descending to ALT 2500 FT and carry out PFL as cleared by ATC.

CIRCUIT PROCEDURES:

Standard circuits shall be flown at ALT 1500 FT. Patterns shall be flown to the West of airfield (i.e. RWY15 RH, RWY33 LH circuits). Any deviation of this procedure is upon approval by ATC.

HOLDING POINTS IN TRAINING AREA

If required, you may be instructed to hold in the training area. The following are the points designated for holding:

Area 1 Point KILO (173547.38N 1041536.09E / NKP R-300/25D)

Area 2 Point NOVEMBER (165705.22N 1043103.47E / NKP R-195/27D)

Point CHARLIE (165652.14N 1042533.65E / NKP R-205/29D)

VTUW AD 2.21 NOISE ABATEMENT PROCEDURES

NIL

VTUW AD 2.22 FLIGHT PROCEDURES

NIL

VTUW AD 2.23 ADDITIONAL INFORMATION

NIL

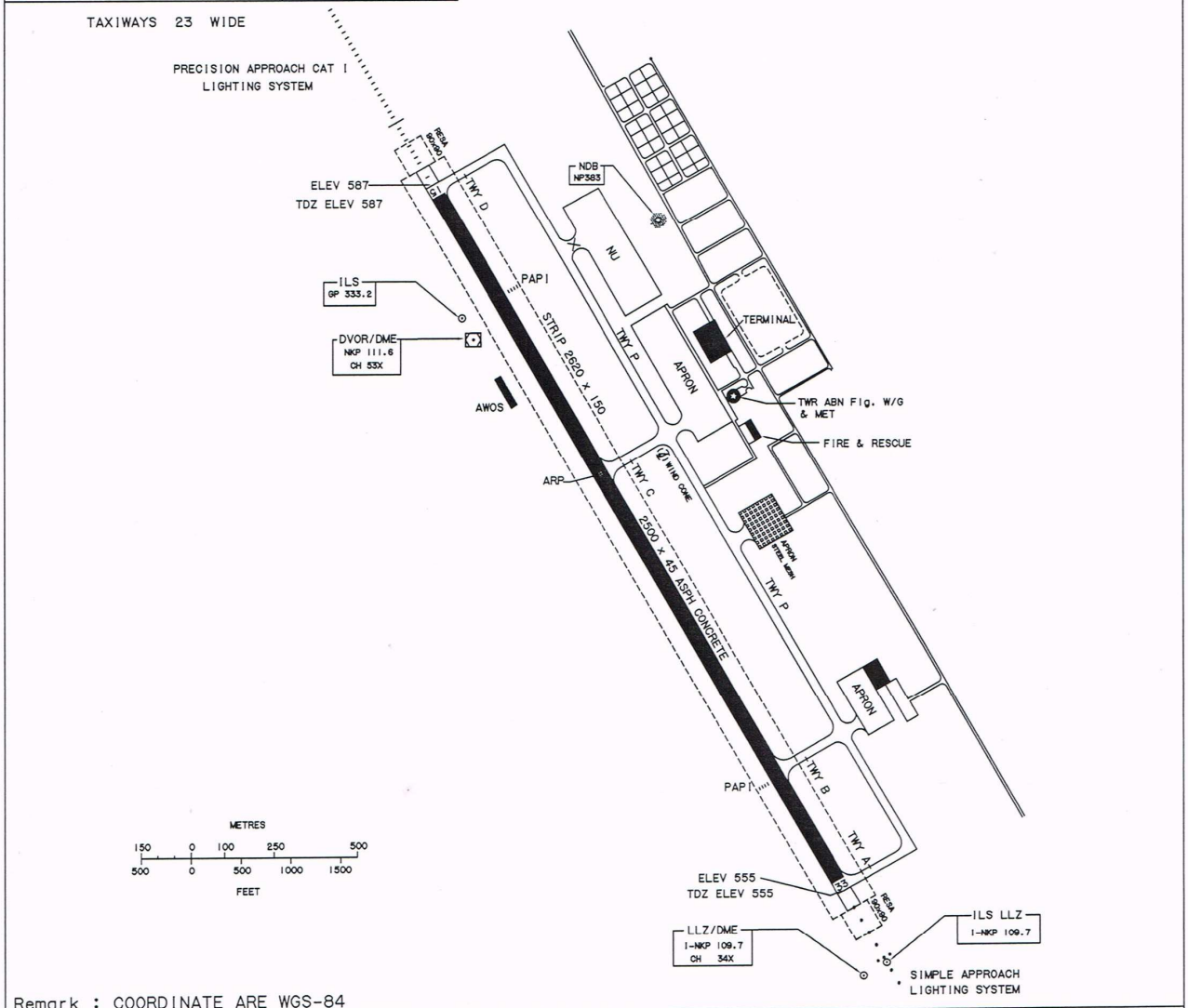
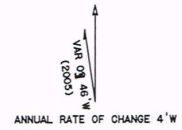
VTUW AD 2.24 CHARTS RELATED TO AN AERODROME

Chart name	Page
Aerodrome Chart - ICAO	AD 2-VTUW-2-1
Instrument Approach Chart - ICAO - VOR RWY 15	AD 2-VTUW-8-1
Instrument Approach Chart - ICAO - VOR RWY 15 (Fix and point list table)	AD 2-VTUW-8-2
Instrument Approach Chart - ICAO - VOR RWY 33	AD 2-VTUW-8-3
Instrument Approach Chart - ICAO - VOR RWY 33 (Fix and point list table)	AD 2-VTUW-8-4
Instrument Approach Chart - ICAO - ILS or LOC RWY 15	AD 2-VTUW-8-5
Instrument Approach Chart - ICAO - ILS or LOC RWY 15 (Fix and point list table)	AD 2-VTUW-8-6
Instrument Approach Chart - ICAO - RNP RWY 15	AD 2-VTUW-8-7
Instrument Approach Chart - ICAO - RNP RWY 15 (Tabular description)	AD 2-VTUW-8-8
Instrument Approach Chart - ICAO - RNP RWY 33	AD 2-VTUW-8-9
Instrument Approach Chart - ICAO - RNP RWY 33 (Tabular description)	AD 2-VTUW-8-10

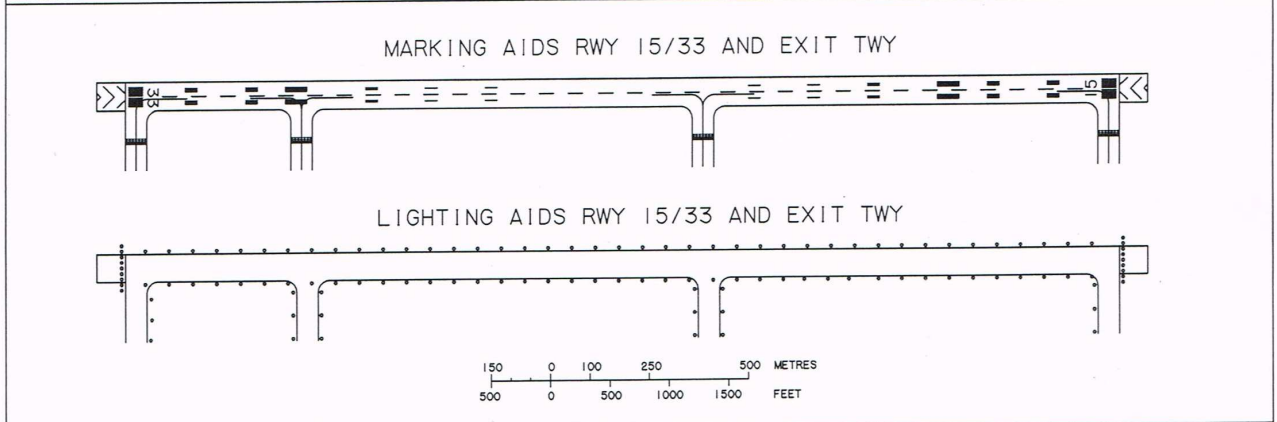
AERODROME CHART-ICAO 17°23' 07" N ELEV 587 ft TWR 122.5
104°38' 31" E 179 m 236.6 NAKHON PHANOM/Nakhon Phanom

RWY	DIRECTION	THR	BEARING STRENGTH
15	145°	17°23' 35" N 104°38' 10" E	PCN 61/F/C/X/T
33	325°	17°22' 28" N 104°38' 59" E	runway and all taxiways
APRON			PCN 61/R/C/X/T

ELEVATIONS IN FEET AND DIMENSIONS IN METRES
BEARINGS ARE MAGNETIC



Remark : COORDINATE ARE WGS-84



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**INSTRUMENT
APPROACH
CHART - ICAO**

**AERODROME ELEV 587 FT
HEIGHTS RELATED TO
AERODROME ELEV**

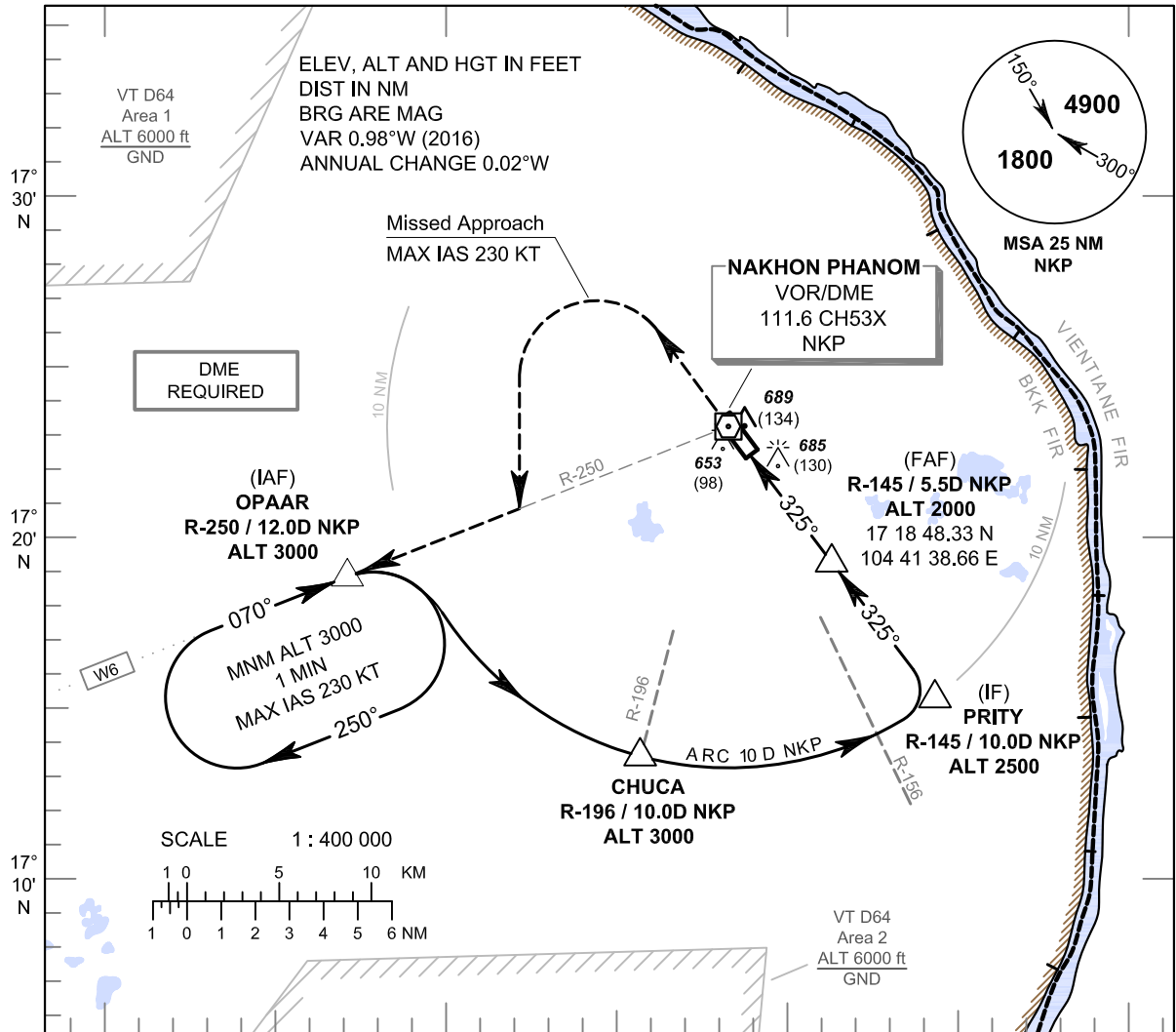
**NAKHON PHANOM / Nakhon Phanom
(VTUW)
VOR RWY15**

FIX/POINT		COORDINATES	
(IAF) OPAAR	R-250 / 12.0D NKP	17 19 12.67 N	104 26 29.87 E
(IF) YACOB	R-326 / 10.0D NKP	17 31 32.46 N	104 32 19.51 E
(FAF)	R-326 / 4.6D NKP	17 27 02.82 N	104 35 33.86 E
(MAPt)	R-326 / 0.3D NKP	17 23 32.77 N	104 38 07.22 E

INSTRUMENT APPROACH CHART - ICAO
AERODROME ELEV 587 FT
HEIGHTS RELATED TO THR RWY33 - ELEV 555 FT

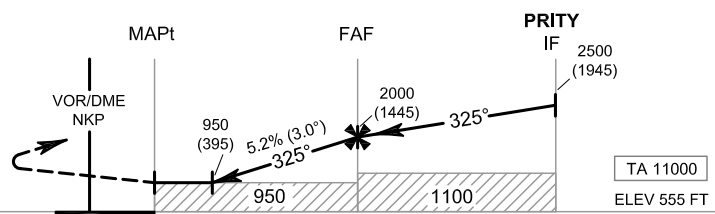
APP : 123.35 , 284.0
TWR : 122.5
GND : 121.9

NAKHON PHANOM / Nakhon Phanom (VTUW)
VOR RWY33



MISSED APPROACH :

No turn before MAPt.
Speed restricted to MAX IAS 230 KT until after turn.
Climb straight ahead to 2400 FT then turn left to intercept outbound R-250 NKP VOR then proceed to OPAAR at 3000 FT and hold or as directed by ATC.



	DME FM VOR/DME				0	1.1	2.2	5.5	10.0			
	NM FM THR				0	1.1	4.4	8.9				
OCA/H	A	B	C	D	Distance to NKP	2.2 D	3 D	4 D	5 D	FAF		
Straight - in Approach	950 (395)				Altitude (Height)	950 (395)	1205 (650)	1520 (965)	1835 (1280)	2000 (1445)		
					Ground speed	knot	70	90	100	120	140	160
Circling (OCH AAL)	1100 (513)		1300 (713)		Rate of descent (5.2%)	(ft/min)	369	474	527	632	737	843

CHANGE : MAG VAR. ANNUAL CHANGE. WPT NAME. IAF AND IF ALT.

INSTRUMENT APPROACH CHART - ICAO
AERODROME ELEV 587 FT
HEIGHTS RELATED TO
THR RWY33 - ELEV 555 FT

NAKHON PHANOM / Nakhon Phanom (VTUW)
VOR RWY33

FIX/POINT		COORDINATES	
(IAF) OPAAR	R-250 / 12.0D NKP	17 19 12.67 N	104 26 29.87 E
CHUCA	R-196 / 10.0D NKP	17 13 43.41 N	104 35 18.32 E
(IF) PRITY	R-145 / 10.0D NKP	17 15 10.07 N	104 44 20.80 E
(FAF)	R-145 / 5.5D NKP	17 18 48.33 N	104 41 38.66 E
(MAPt)	R-145 / 1.1D NKP	17 22 26.35 N	104 38 56.36 E

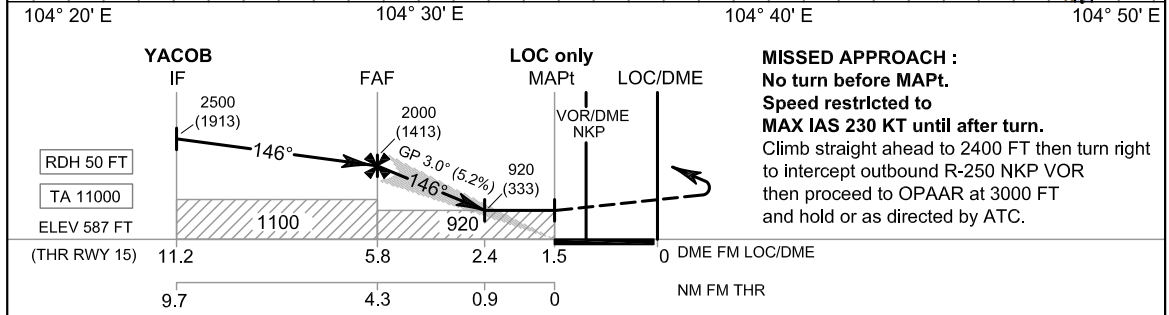
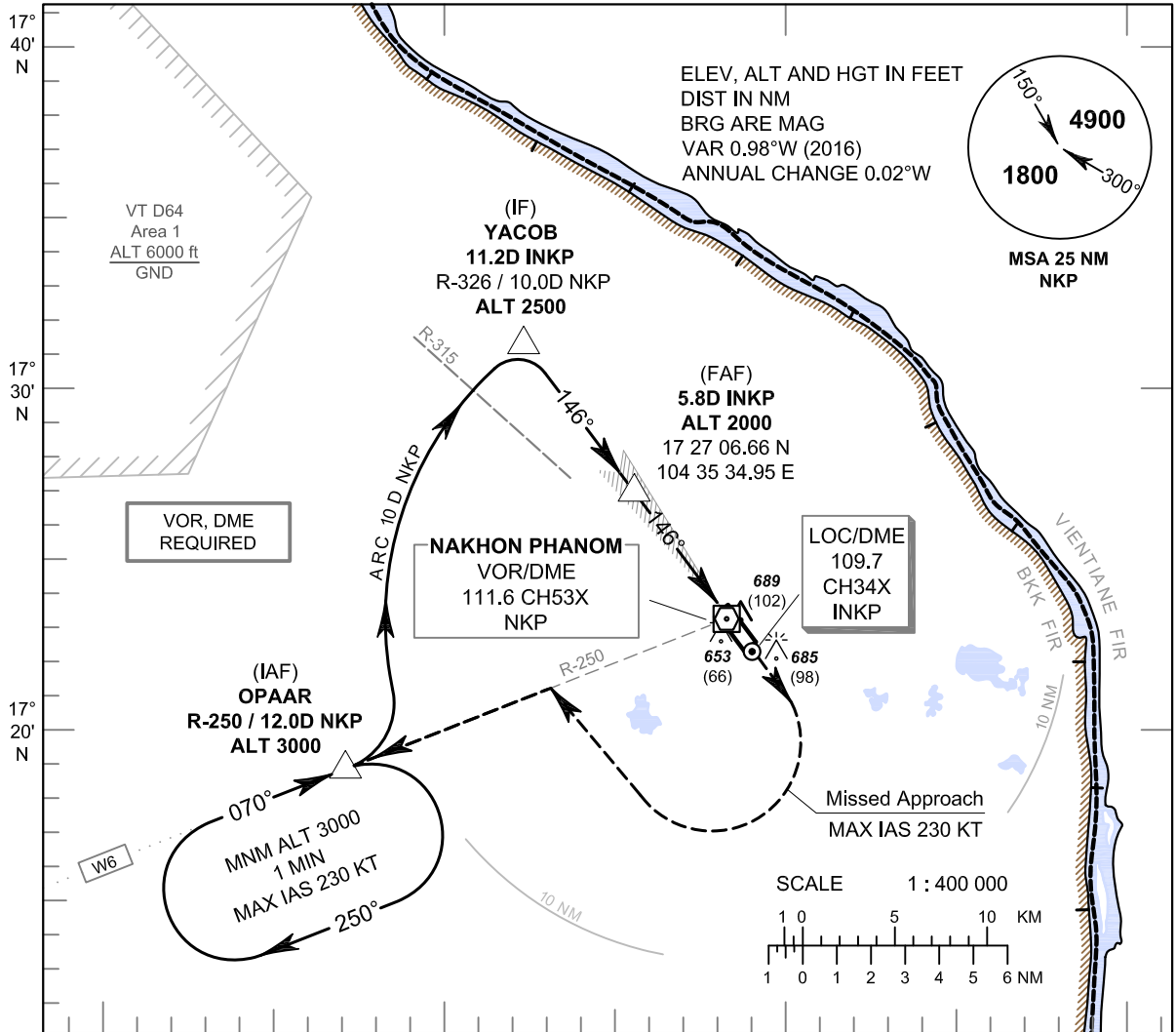
**INSTRUMENT
APPROACH
CHART - ICAO**

**AERODROME ELEV 587 FT
HEIGHTS RELATED TO
THR RWY15 - ELEV 587 FT**

APP : 123.35 , 284.0
TWR : 122.5
GND : 121.9

**NAKHON PHANOM / Nakhon Phanom
(VTUW)**

ILS or LOC RWY15



OCA/H	A	B	C	D	GS	Distance to INKP	FAF	5 D	4 D	3 D	2.4 D		
Straight - in Approach	800 (213)				out	Altitude (Height)	2000 (1413)	1740 (1153)	1425 (838)	1110 (523)	920 (333)		
LOC only	920 (333)					Ground speed	knot	70	90	100	120	140	160
Circling (OCH AAL)	1100 (513)	1300 (713)				Rate of descent (3.0°)	(ft/min)	372	478	531	637	743	849

CHANGE : MAG VAR. ANNUAL CHANGE. WPT NAME. IAF AND IF ALT. DME CH.

INSTRUMENT APPROACH CHART - ICAO **AERODROME ELEV 587 FT**
HEIGHTS RELATED TO
THR RWY15 - ELEV 587 FT

NAKHON PHANOM / Nakhon Phanom (VTUW)

ILS or LOC RWY15

FIX/POINT		COORDINATES	
(IAF) OPAAR	R-250 / 12.0D NKP	17 19 12.67 N	104 26 29.87 E
(IF) YACOB	11.2D INKP	17 31 32.46 N	104 32 19.51 E
(FAF)	5.8D INKP	17 27 06.66 N	104 35 34.95 E
MAPt (LOC only)	1.5D INKP	17 23 34.95 N	104 38 10.44 E

INSTRUMENT **AERODROME ELEV 587 FT**
APPROACH **HEIGHTS RELATED TO**
CHART - ICAO **AERODROME ELEV**

NAKHON PHANOM / Nakhon Phanom
(VTUW)
RNP RWY15

TABULAR DESCRIPTION

RNP RWY15											
Serial	Path	Waypoint Identifier	Flyover	Course	Magnetic	Distance	Turn	Altitude	Speed	VPA/	Navigation
Number	Descriptor			° M (° T)	Variation	(NM)	Direction	(FT)	(KT)	TCH	Specification
010	IF	OPAAR (IAF)	-	-	+1.0	-	-	@3000	-	-	RNP APCH
020	TF	XASSY	-	360°(358.97°)	+1.0	8.2	R	@3000	-	-	RNP APCH
030	TF	YACOB (IF)	-	056°(054.76°)	+1.0	7.0	-	@2500	-	-	RNP APCH
010	IF	YACOB (IF)	-	-	+1.0	-	-	@2500	-	-	RNP APCH
020	TF	UW152 (FAF)	-	146°(144.80°)	+1.0	5.4	-	@2000	-	-	RNP APCH
030	TF	UW151 (MAPt)	Y	146°(144.80°)	+1.0	4.3	-	@637	-	-3.0/50	RNP APCH
040	CA	-	-	146°(144.80°)	+1.0	-	-	+2400	-	-	RNP APCH
050	DF	OPAAR (IAF)	-	-	+1.0	-	R	+3000	-230	-	RNP APCH
060	HM	OPAAR (IAF)	Y	070°(068.52°)	+1.0	1 minute	R	+3000	-230	-	RNP APCH

WAYPOINT LIST

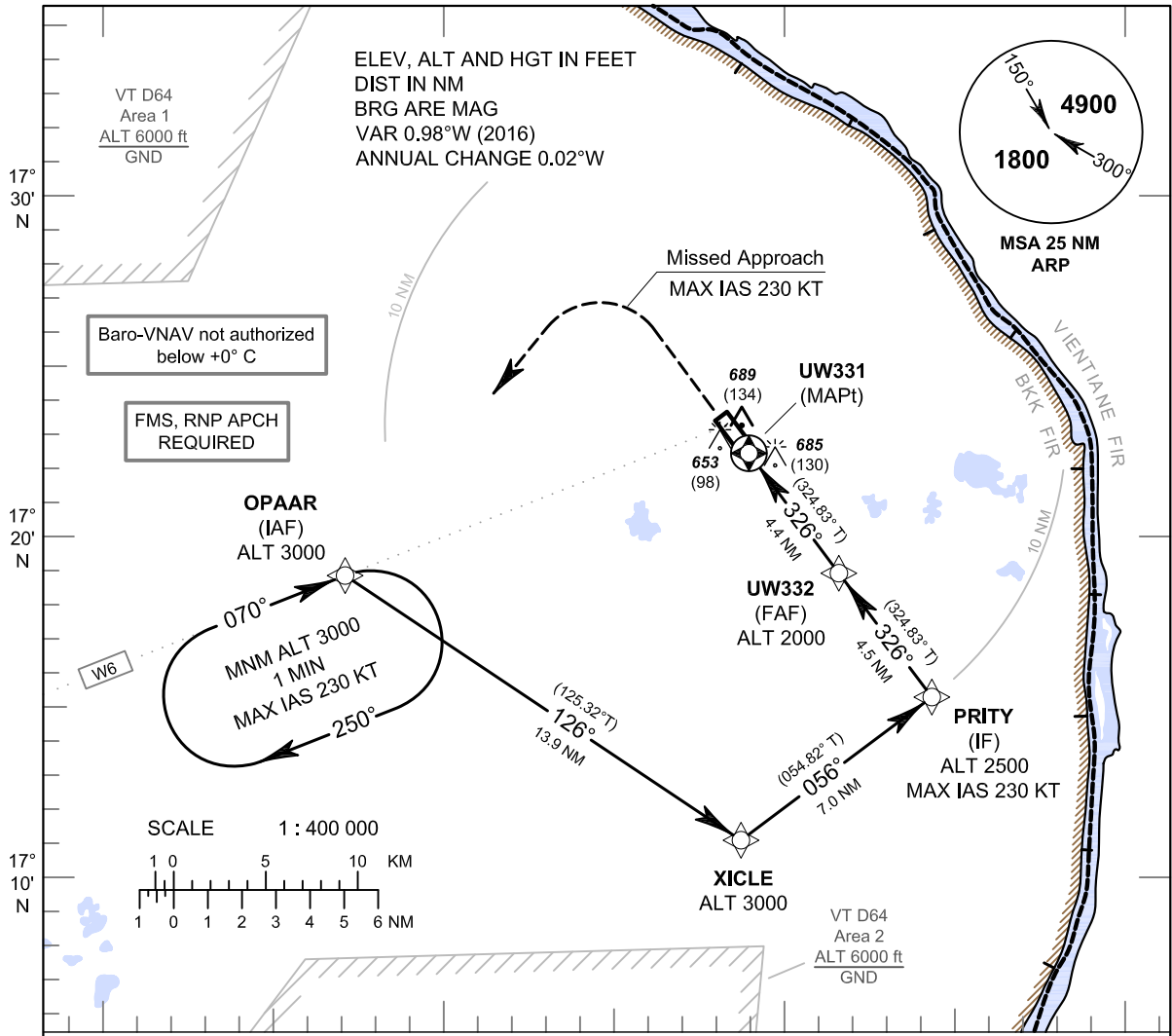
RNP RWY15		
Waypoint Identifier	Coordinates	
OPAAR	17° 19' 12.67" N	104° 26' 29.87" E
XASSY	17° 27' 29.23" N	104° 26' 20.55" E
YACOB	17° 31' 32.46" N	104° 32' 19.51" E
UW152	17° 27' 06.66" N	104° 35' 34.95" E
UW151 (THR15)	17° 23' 34.95" N	104° 38' 10.44" E

**INSTRUMENT
APPROACH
CHART - ICAO**

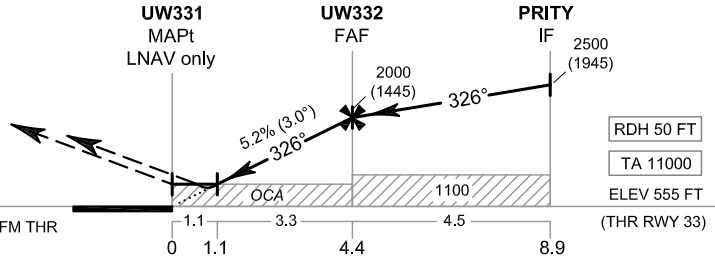
**AERODROME ELEV 587 FT
HEIGHTS RELATED TO
THR RWY33 - ELEV 555 FT**

APP : 123.35 , 284.0
TWR : 122.5
GND : 121.9

**NAKHON PHANOM / Nakhon Phanom
(VTUW)
RNP RWY33**



MISSED APPROACH :
No turn before MAPt.
Speed restricted to
MAX IAS 230 KT until after turn.
Climb on track 326° to 2400 FT
then turn left direct to OPAAR at 3000 FT
and hold or as directed by ATC.



CHANGE: CHART TITLE.

OCA/H	A	B	C	D	NM to NEXT WPT	1.1 NM	2 NM	3 NM	4 NM	FAF
LNAV/VNAV	850 (295)				Altitude (Height)	950 (395)	1235 (680)	1550 (995)	1870 (1315)	2000 (1445)
LNAV	950 (395)				Ground speed	knot	70	90	100	120 140 160
Circling (OCH AAL)	1100 (513)	1300 (713)		Rate of descent (5.2%)	(ft/min)	369	474	527	632	737 843

INSTRUMENT AERODROME ELEV 587 FT
APPROACH HEIGHTS RELATED TO
CHART - ICAO THR RWY33 - ELEV 555 FT

NAKHON PHANOM / Nakhon Phanom
(VTUW)
RNP RWY33

TABULAR DESCRIPTION

RNP RWY33											
Serial	Path	Waypoint Identifier	Flyover	Course	Magnetic	Distance	Turn	Altitude	Speed	VPA/	Navigation
Number	Descriptor			° M (° T)	Variation	(NM)	Direction	(FT)	(KT)	TCH	Specification
010	IF	OPAAR (IAF)	-	-	+1.0	-	-	@3000	-	-	RNP APCH
020	TF	XICLE	-	126°(125.32°)	+1.0	13.9	L	@3000	-	-	RNP APCH
030	TF	PRITY (IF)	-	056°(054.82°)	+1.0	7.0	-	@2500	-230	-	RNP APCH
010	IF	PRITY (IF)	-	-	+1.0	-	-	@2500	-230	-	RNP APCH
020	TF	UW332 (FAF)	-	326°(324.83°)	+1.0	4.5	-	@2000	-	-	RNP APCH
030	TF	UW331 (MAPt)	Y	326°(324.83°)	+1.0	4.4	-	@605	-	-3.0/50	RNP APCH
040	CA	-	-	326°(324.83°)	+1.0	-	-	+2400	-	-	RNP APCH
050	DF	OPAAR (IAF)	-	-	+1.0	-	L	+3000	-230	-	RNP APCH
060	HM	OPAAR (IAF)	Y	070°(068.52°)	+1.0	1 minute	R	+3000	-230	-	RNP APCH

WAYPOINT LIST

RNP RWY33		
Waypoint Identifier	Coordinates	
OPAAR	17° 19' 12.67" N	104° 26' 29.87" E
XICLE	17° 11' 07.18" N	104° 38' 22.09" E
PRITY	17° 15' 10.07" N	104° 44' 20.80" E
UW332	17° 18' 51.70" N	104° 41' 38.31" E
UW331 (THR33)	17° 22' 28.37" N	104° 38' 59.32" E