VTSF AD 2.1 AERODROME LOCATION INDICATOR AND NAME

VTSF - NAKHON SI THAMMARAT / NAKHON SI THAMMARAT AIRPORT

VTSF AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	083222.62N 0995641.01E Centre of RWY 1060 M. from THR RWY19		
2	Direction and distance from (city)	10 KM N, from city		
3	Elevation/Reference temperature	4M (13 FT) /33°C		
4	Geoid Undulation at AD ELEV PSN	NIL		
5	MAG VAR/Annual change	0.39°W (2016)/0.01°E		
6	AD Administration, address, telephone, telefax, telex, AFS	Director of Nakhon Si Thammarat Airport Nakhon Si Thammarat Airport Amphoe Muang Nakhon Si Thammarat 80000 Thailand Tel: +667 536 9540 +667 536 9541 +667 536 9543 Fax: +667 536 9542 AFS: VTSFYDYX		
7	Types of traffic permitted (IFR/VFR)	IFR/VFR		
8	Remarks	Operator: Department of Airports		

VTSF AD 2.3 OPERATIONAL HOURS

1	Aerodrome Operator	2300-1500
2	Customs and immigration	O/R
3	Health and sanitation	NIL
4	AIS Briefing Office	HJ*
5	ATS Reporting Office (ARO)	HJ*
6	MET Briefing Office	NIL
7	ATS	2300-1100
8	Fuelling	0100-1000
9	Handling	NIL
10	Security	NIL
11	De-icing	NIL
12	Remarks	*Other this period 3 HRS PN to ATC

VTSF 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

VTSF AD 2.5 PASSENGER FACILITIES

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

VTSF 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

VTSF AD 2.7 SEASONAL AVAILABILITY - CLEARING

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

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

1	Apron surface and strength	APRON A : Surface: Concrete and Asphalt Strength: PCN 42/F/C/X/T APRON B : Surface : Concrete Strength : PCN 45/R/C/X/T
2	Taxiway width, surface and strength	Width: TWY A, B and D = 23 M, TWY C = 10.5 M Surface: Concrete and asphalt Strength: TWY A, B and D : PCN 42/F/C/X/T TWY C: 5.3 T
3	Altimeter checkpoint location and elevation	NIL
4	VOR checkpoints	NIL
5	INS checkpoints	NIL
6	Remarks	NIL

VTSF 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 and TWY: Marked and lighted
3	Stop bars	NIL
4	Remarks	NIL

VTSF AD 2.10 AERODROME OBSTACLES

	In approach/TKOF area	as	In circling areas and at AD		Remarks
1			2		3
RWY/Area affected Obstacle type Elevation Markings/LGT		Coordinates	Obstacle type Coordinates Elevation Markings/LGT		
a b		с а		b	
	Radio Mast HGT 60 M MARKED RED LGT ON TOP	083452N 0995658E	NIL	NIL	NIL

VTSF AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	Aeronautical Meteorological Station-Nakhon Si Thammarat, Southern East-Coast Meteorological Center, Thai Meteorological Department (TMD)		
2	Hours of service MET Office outside hours	2300-1300 NIL		
3	Office responsible for TAF preparation Periods of validity	Supply TAF from Southern East-Coast Meteorological Center 24 HR		
4	Type of landing forecast Interval of issuance	TREND 1 HR		
5	Briefing/consultation provided	Personal Consultation Tel: +667 546 6646, +668 6498 0632		
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 Si Thammarat TWR		
10	Additional information (limitation of service, etc.)	NIL		

VTSF 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
01	006.49°	2100x45	PCN 42/F/C/X/T Concrete and asphalt	083148.51N 0995637.41E	THR 13 FT TDZ 13 FT
19	186.49°	2100x45	PCN 42/F/C/X/T Concrete and asphalt	083256.73N 0995644.61E	THR 13 FT TDZ 13 FT

Slope of RWY-SWY	Slope of RWY-SWY SWY dimensions (M)		Strip dimensions (M)	OFZ	Remarks
7 8		9	10	11	12
0% 60x60		NIL	2340x300	NIL	NIL
0% 60x60		NIL	2340x300	NIL	NIL

VTSF AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
01	2100	2100	2160	2100	NIL
19	2100	2100	2160	2100	NIL

VTSF 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
01	SALS 420M LIH	Green	PAPI Left 3°	NIL	NIL	2100 M 60 M White, LIM	Red	NIL	NIL
19	SALS 420M	Green	PAPI Left 3°	NIL	NIL	2100 M 60 M White, LIM	Red	NIL	NIL

VTSF AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: At tower building FLG WG EV 7 SEC
2	LDI location and LGT Anemometer location and LGT	LDI(1): wind cone at 300 M from THR 01 off set Left side 102.5 M, illuminated LDI(2): wind cone at 300 M from THR 19 off set Left side 102.5 M, illuminated
3	TWY edge and centre line lighting	EDGE: All taxiways
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

VTSF 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

VTSF AD 2.17 ATS AIRSPACE

1	Designation and lateral limits	A circle of 5 NM radius centred on Nakhon Si Thammarat DVOR/DME (083229.95N 0995648.67E)
2	Vertical limits	2000 FT/AGL
3	Airspace classification	С
4	ATS unit call sign Language(s)	Nakhon Si Thammarat Tower English, Thai
5	Transition altitude	11000 FT
6	Remarks	NIL

VTSF AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
APP	Nakhon Si Thammarat Approach	119.75 MHZ 129.6 MHZ 305.4 MHZ	23:30-14:30	Primary Freq. Secondary Freq.
TWR	Nakhon Si Thammarat Tower	122.55 MHZ 236.6 MHZ	23:00-11:00	
GND	Nakhon Si Thammarat Ground	121.9 MHZ	23:00-11:00	
ATIS		123.4 MHZ	2300-1100	

VTSF 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
DVOR/DME	NKS	117.4 MHZ CH121X	H24	083229.95N 0995648.67E		Due to mountainous terrain surround DVOR/DME station coverage check does not provide adequate signal to 40 NM, at required altitudes is various areas: RDL 001-190 beyond 40 NM should not below 2500 FT. RDL 191-240 beyond 40 NM should not below 7000 FT. RDL 241-280 beyond 25 NM should not below 8000 FT. RDL 281-320 beyond 40 NM should not below 7000 FT. RDL 321-360 beyond 40 NM should not below 5000 FT.
LOC RWY19 ILS CAT I	INKS	109.7 MHZ	H24	083138.445N 0995636.378E		
GP		333.2 MHZ	H24	083245.315N 0995647.386E		GP: 3 DEG, RDH 50 FT
DME		CH34X (333.2 MHZ)	H24	083245.315N 0995647.386E		DME: Paired with GP FREQ.

VTSF AD 2.20 LOCAL AERODROME REGULATIONS

NIL

VTSF AD 2.21 NOISE ABATEMENT PROCEDURES

NII

VTSF AD 2.22 FLIGHT PROCEDURES

- 1. The Continuous Descent Opertions (CDO) for arrivals into Nakhon Si Thammarat Airport
- 1.1 Introduction
- 1.1.1 CDO is an operation, enabled by airspace design, procedure design and ATC facilitation, in which an aircraft descends continuously, to the greatest possible extent, by employing minimum engine thrust, ideally in a low drag configuration, prior to Final Approach Fix / Final Approach Point.
- 1.1.2 Vertical profile of CDO aims to improve flight stability (minimal level-off), increase terrain safety, ensure environmental friendly procedures by reducing aircraft noise, fuel consumption and emissions, enhanced flight punctuality and predictability, as well as other economic benefits for flights into Nakhon Si Thammarat Airport.
- 1.2 Condition of Use
- 1.2.1 Conditions for Conducting a CDO
- 1.2.1.1 CDO application must be under surveillance environment.
- 1.2.1.2 CDO can be requested by pilot or initiated by ATC. Pilot should request CDO at least 5 minutes prior to reaching Top of Descent (TOD) for any type of approach.
 - Note: 1. There is limited benefit if CDO clearance is received at altitude lower than 10,000 FT.
 - **Note:** 2. In case of CDO procedure being impractical due to an emergency, weather condition, traffic situation or any other reasons, an alternate instruction will be issued by ATC, or requested by pilot.
- 1.2.2 Application of Other ATC Procedures
- 1.2.2.1 When conducting CDO, standard ATC procedures continue to apply. ATC may issue clearance to an intermediate approach level while facilitating a CDO profile.
- 1.2.2.2 In doing so, ATC shall endeavour to issue further descent clearance prior to the CDO flight reaching the last assigned altitude so as to prevent aircraft from levelling off.
- 1.2.3 Change of Runway-In-Use
- 1.2.3.1 In case of change on Runway-in-Use prior to aircraft reaching Final Approach Fix, i.e. from RWY19 to RWY01 CDO procedure shall be cancelled.
- 1.2.3.2 Pilot should then re-plan arrival route to the revised landing runway and inform ATC if the flight would still be able to meet all required speed/altitude restrictions.
- 1.2.4 Aircraft Type
 - CDO procedure is applicable for FMS capable aircraft.
- 1.2.5 Arrival Routes
 - CDO procedure is in place for all aircraft on W35 inbound from Bangkok to Nakhon Si Thammarat Airport.
- 1.2.6 Operations Time
 - CDO is available 24 hours.
- 1.2.7 Available Runway
 - CDO procedure is available for RWY19

- 1.2.8 Types of Approach
- 1.2.8.1 ILS or LOC z RWY19
- 1.2.8.2 RNAV (GNSS) RWY19
- 1.2.9 Speed

When traffic permits, aircraft will operate at an optimum speed calculated by FMS, depending on aircraft type. The following speed guidance should be applicable in case of high traffic volume.

Flight Status	Speed Range
Above 10 000 FT	250 - 320 IAS
Below 10 000 FT	220 - 250 IAS
Final Segment (up to 4 NM)	160 - 180 IAS

- 1.2.10 Minimum Flight Altitude
- 1.2.10.1 Outside NKS TMA, aircraft shall comply with altitude constraints of the CDO procedure.
- 1.2.10.2 During CDO, minimum safety altitudes are identical to those within Instrument Approach Procedures requested.
- 1.3 CDO Procedure
- 1.3.1 Before aircraft reaching TOD (approximately 150 NM from the airport), either pilot or ATC can initiate CDO using phraseologies described in para 1.4.
- 1.3.2 When all requirements for CDO are met and situation permits, CDO will commence.
- 1.3.3 Pilot shall operate aircraft FMS to plan optimal descent profile and report CDO execution Nakhon Si Thammarat commencing descent.
- 1.3.4 Aircraft should descend continuously on normal arrival route to NKS TMA.
- 1.3.5 Longitudinal separation required will be at least 5 minutes (15 NM) between CDO traffic.
- 1.3.6 Operations without Vectoring
- 1.3.6.1 ILS or LOC z RWY19 Procedure
- 1.3.6.1.1 Aircraft Arriving on W35

After passing, 20 NM from NKS DVOR, altitude not lower than 8,000 FT., then proceed to TAWIT, altitude not lower than 5,000 FT. and follow ILS or LOC z RWY19 procedure, or

The pilot may request permission to fly directly to (IF); however, this would be an ATC's jurisdiction whether the request can be approved, depending on traffic conditions. In this case, the pilot shall fly directly to (IF) altitude 3,000 FT., and cross 20 NM from NKS DVOR, altitude not lower than 8,000 FT., following the ILS or LOC z RWY19 procedure.

Note: CDO will be operated within radar coverage.

- 1.3.6.2 RNAV (GNSS) RWY19 Procedure
- 1.3.6.2.1 Aircraft Arriving on W35

After passing, 20 NM from NKS DVOR, altitude not lower than 8,000 FT., then proceed to TAWIT, altitude not lower than 5,000 FT. and follow the RNAV(GNSS) RWY19 procedure, or

The pilot may request permission to fly directly to (IF); however, this would be an ATC's jurisdiction whether the request can be approved, depending on traffic conditions. In this case, the pilot shall fly directly to (IF) altitude 3,000 FT., and cross 20 NM from NKS DVOR, altitude not lower than 8,000 FT., following the RNAV (GNSS) RWY19 procedure.

Note: CDO will be operated within radar coverage.

- 1.3.7 Operations under Vectoring
- 1.3.7.1 Pilot should receive CDO clearance at altitude not lower than 10,000 FT.
- 1.3.7.2 ATC shall provide vectoring guidance and track mile estimate to pilot.
- 1.3.8 Radio Communications Failure
- 1.3.8.1 In the event of radio communication failure, CDO flight will be terminated immediately.
- 1.3.8.2 Pilot is to apply radio failure procedures stated in AIP Thailand ENR 1.6-6 para 6
- 1.4 Phraseology
- 1.4.1 The following phraseology enables clear and concise communications between pilot and controller to maintain safety of CDO arrivals.
- 1.4.2 ATC-initiated CDO
 - "(aircraft call sign), (ATC unit), CDO AVAILABLE, DO YOU ACCEPT?"
- 1.4.3 Pilots response to ATC-initiated CDO
- 1.4.3.1 "(aircraft call sign), ACCEPT CDO"
- 1.4.3.2 "(aircraft call sign), NEGATIVE CDO"
- 1.4.4 Pilot-requested CDO
 - "(ATC Unit), (aircraft call sign), REQUEST CDO (type of approach) APPROACH"
- 1.4.5 Approval by Bangkok Area Control Centre
 - "(aircraft call sign), CLEARED DIRECT TO (point), CDO DESCEND [(level) or (altitude), QNH (number)]"
- 1.4.6 Denial from Bangkok Area Control Centre
- 1.4.6.1 "(aircraft call sign), NEGATIVE CDO, DUE TO (reason)"
- 1.4.6.2 "(aircraft call sign), EXPECT CDO FROM NAKHON SI APPROACH"
- 1.4.7 Approval by Nakhon Si Approach Control Unit
- 1.4.7.1 "(aircraft call sign), DIRECT TO (point), DESCEND [(level) or (altitude), QNH (number)], CLEARED CDO (type of approach) APPROACH, REPORT ESTABLISHED"
- 1.4.7.2 "(aircraft call sign), DESCEND INITIALLY [(level) or (altitude), QNH (number)], CDO APPROVED"
- 1.4.8 When vectoring for CDO
 - "(aircraft call sign), VECTORING FOR CDO, FLY HEADING (number) DESCEND [(level) or (altitude), QNH (number)], TRACK MILE (number)"
- 1.4.9 CDO Cancellation
- 1.4.9.1 "(aircraft call sign), CANCEL CDO DUE TO (reason), (STOP) DESCEND [(level) or (altitude), QNH (number)]"
- 1.4.9.2 "(aircraft call sign), DUE TO (reason), CDO IS NOW TERMINATED"
- 1.4.10 Resuming CDO
 - "(aircraft call sign), RESUME CDO, DCT (point), DESCEND [(level) or (altitude), QNH (number)], CLEARED (type of approach) APPROACH"
- 1.4.11 Pilot report leaving
 - "(aircraft call sign), CDO LEAVING (level)"
- 1.4.12 Warning of aircraft below CDO Profile
 - "(aircraft call sign), BELOW CDO PROFILE, ALTITUDE SHOULD BE (altitude) OR ABOVE"

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- 1.5 Information / Training
- 1.5.1 Each airline must ensure that, for each type of aircraft, pilots are aware of CDO performance requirements.
- 1.5.2 Airlines are expected to define strategy to be adopted to drag-generating parts extension to stabilize aircraft in landing configuration at an altitude in compliance with flight safety, taking into account glide path at 3° in Final Approach.

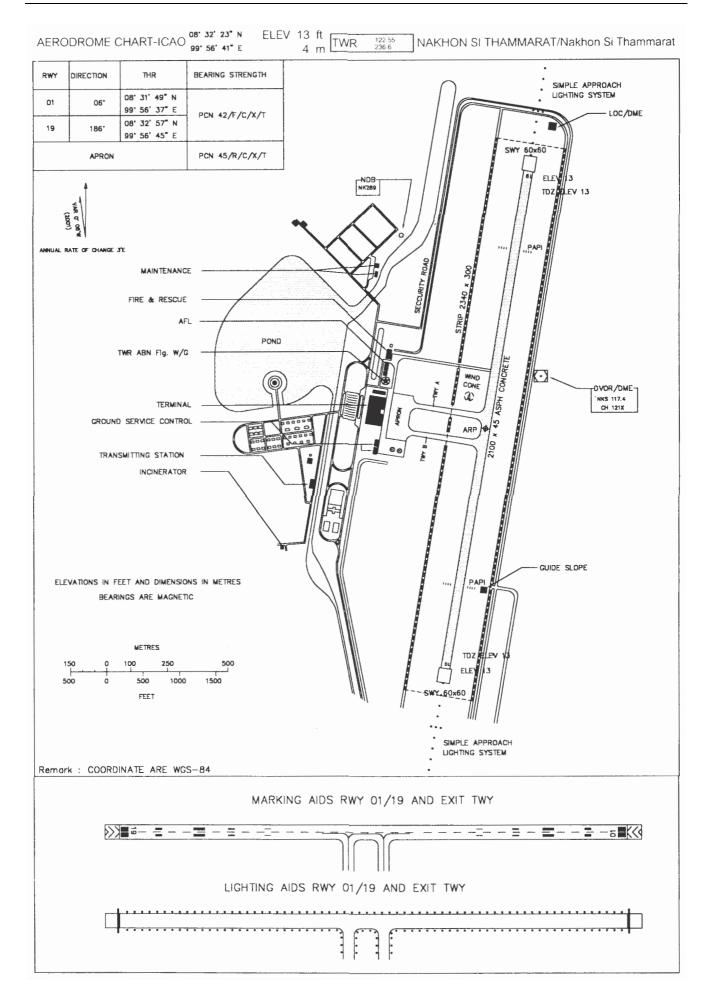
VTSF AD 2.23 ADDITIONAL INFORMATION

NIL

VTSF AD 2.24 CHARTS RELATED TO AN AERODROME

Chart name	Page
Aerodrome Chart - ICAO	AD 2-VTSF-2-1
Standard Departure Chart - Instrument (SID) - ICAO - RNAV RWY 01 - GIFBY1A TAWIT1A PEDOR1A PUYOL1A WADEZ1A	AD 2-VTSF-6-1
Standard Departure Chart - Instrument (SID) - ICAO - RNAV RWY 01 - GIFBY1A TAWIT1A PEDOR1A PUYOL1A WADEZ1A (Tabular description)	AD 2-VTSF-6-2
Standard Departure Chart - Instrument (SID) - ICAO - RNAV RWY 19 - GIFBY1B TAWIT1B PEDOR1B PUYOL1B WADEZ1B	AD 2-VTSF-6-3
Standard Departure Chart - Instrument (SID) - ICAO - RNAV RWY 19 - GIFBY1B TAWIT1B PEDOR1B PUYOL1B WADEZ1B (Tabular description)	AD 2-VTSF-6-4
Instrument Approach Chart - ICAO - VOR RWY 01	AD 2-VTSF-8-1
Instrument Approach Chart - ICAO - VOR RWY 01 (Fix and point list table)	AD 2-VTSF-8-2
Instrument Approach Chart - ICAO - VOR y RWY 19	AD 2-VTSF-8-3
Instrument Approach Chart - ICAO - VOR y RWY 19 (Fix and point list table)	AD 2-VTSF-8-4
Instrument Approach Chart - ICAO - VOR z RWY 19	AD 2-VTSF-8-5
Instrument Approach Chart - ICAO - VOR z RWY 19 (Fix and point list table)	AD 2-VTSF-8-6
Instrument Approach Chart - ICAO - ILS or LOC y RWY 19	AD 2-VTSF-8-7
Instrument Approach Chart - ICAO - ILS or LOC y RWY 19 (Fix and point list table)	AD 2-VTSF-8-8
Instrument Approach Chart - ICAO - ILS or LOC z RWY 19	AD 2-VTSF-8-9
Instrument Approach Chart - ICAO - ILS or LOC z RWY 19 (Fix and point list table)	AD 2-VTSF-8-10
Instrument Approach Chart - ICAO - RNAV (GNSS) RWY 01	AD 2-VTSF-8-11
Instrument Approach Chart - ICAO - RNAV (GNSS) RWY 01 (Tabular description)	AD 2-VTSF-8-12
Instrument Approach Chart - ICAO - RNAV (GNSS) RWY 19	AD 2-VTSF-8-13
Instrument Approach Chart - ICAO - RNAV (GNSS) RWY 19 (Tabular description)	AD 2-VTSF-8-14

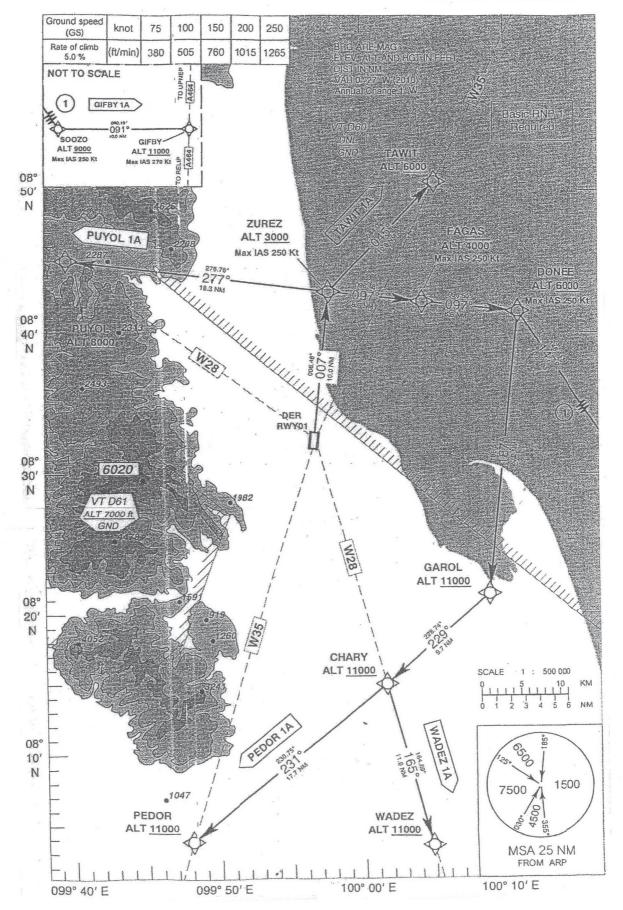






STANDARD DEPARTURE CHART-INSTRUMENT (SID) - ICAO

APP: 119.75, 240.0 TWR: 122.55, 236.6 NAKHON SI THAMMARAT / Nakhon Si Thammarat (VTSF) SID RNAV RWY 01 GIFBY 1A TAWIT 1A PEDOR 1A PUYOL 1A WADEZ 1A

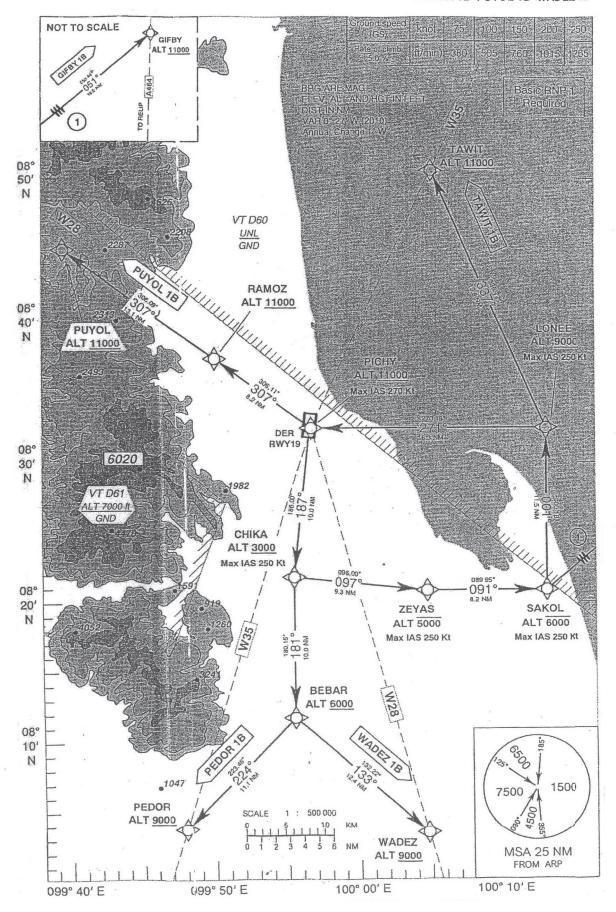


NAKHON SI THAMMARAT / Nakhon Si Thammarat (VTSF) SID RNAV RWY 01

Fix identifier	WGS-84 Coordinates		Path		Course	Turn		Speed	Magnetic	Navigation
(Waypoint name)	Latitude	Longtitude	descriptor	Flyover	° M (° T)	direction	Altitude	imit	variation	performance
DER RWY01	083256.70 N	0995644.63 E	CF	-	007°(006.48°)	. •		-	0.5	RNP1
ZUREZ	084256.38 N	0995747.97 E	TF	-	007°(006.48°)	L,R	+3000	250	0.5	RNP1
TAWIT	085042.75 N	1000521.15 E	TF		045°(044.02°)	R	+6000	-	0.5	RNP1
PUYOL	084505.88 N	0993925.35 E	TF		277°(276.76°)	R	+8000		0.5	RNP1
FAGAS	084214.54 N	1000427.26 E	TF	-	097°(096.48°)		-4000	250	0.5	RNP1
DONEE	084132.52 N	1001107.17 E	TF		097°(096.50°)	R	+6000	250	0.5	RNP1
SOOZO	083226.42 N	1001708.69 E	TF		147°(146.61°)	L	+9000	250	0.5	RNP1
GIFBY	083224.27 N	1002714.36 E	TF	_	091°(090.19°)	L	+11000	270	0.5	
GAROL	082120.78 N	1000858.58 E	TF		187°(186.51°)	R	+11000	-	0.5	RNP1
CHARY	081456.10 N	1000138.50 €	TF	-	229°(228.74°)	L,R	+11000	-	0.5	RNP1
PEDOR	080342.01 N	0994750.96 E	TF	-	231°(230.75°)	L	+11000		0.5	RNP1
WADEZ	080325.22 N	1000448.33 E	TF	-	165°(164.69°)	-	+11000	-	0.5	RNP1 RNP1

STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

APP: 119.75, 240.0 TWR: 122.55, 236.6 NAKHON SI THAMMARAT / Nakhon Si Thammarat (VTSF) SID RNAV RWY 19 GIFBY 1B TAWIT 1B PEDOR 1B PUYOL 1B WADEZ 1B



NAKHON SI THAMMARAT / Nakhon Si Thammarat (VTSF) SID RNAV RWY 19

Fix identifier	WGS-84 Coordinates		Path		Course	Turn		Speed	Magnetic	Navigation
(Waypoint name)	Latitude	Longtitude	descriptor	Flyover	° M (° T)	direction	Attude	imt	variation	performance
DER RWY19	083148.48 N	0995637.43 E	CF	-	187°(186.00°)	-	-	-	0.5	RNP1
CHIKA	082150.77 N	0995534.39 E	TF	-	187°(186.00°)	L,R	+3000	250	0.5	RNP1
BEBAR	081147.77 N	0995532.78 E	TF	•	181°(180.15°)	L	+6000	*	0.5	RNP1
PEDOR	080342.01 N	0994750.96 E	TF	-	224°(223.46°)	L ·	+9000	-	0.5	RNP1
WADEZ	080325.22 N	1000448.33 E	TF	-	133°(132.22°)	R	+9000	-	0.5	RNP1
ZEYAS	082052.17 N	1000453.96 E	TF	-	097°(096.00°)	L	-5000	250	0.5	RNP1
SAKOL	082052.48 N	1001312.92 E	TF	~	091°(089.95°)	L	-6000	250	0.5	RNP1
GIFBY	083224.27 N	1002714.36 E	TF	-	051°(050.44°)	L	+11000	~	0.5	RNP1
LONEE	083227.17 N	1001315.10 E	TF .	-	001°(000.18°)	L	+9000	250	0.5	RNP1
PICHY	083229.93 N	0995648.66 E	TF	-	271°(270.18°)	R	+11000	270	0.5	RNP1
RAMOZ	083722.03 N	0995006.16 E	TF	*	307°(306.11°)		+11000	-	0.5	RNP1
PUYOL	084505.88 N	0993926.35 €	TF	-	307°(306.09°)	-	+11000	-	0.5	RNP1
TAWIT	085042.75 N	1000521.15 5	TF	-	337°(336.72°)	R	+11000		0.5	RNP1