SOP	VATSIM (VIRTUAL AIR TRAFFIC SIMULATION) Standard Operating Procedure	
Subject:	Chiang Mai TMA	Final 2.0
Operations	Thailand vACC	12-November-2015

1. PURPOSE.

This Standard Operating Procedure (SOP) outlines the procedures to be used by controllers working Chiang Mai Approach to ensure that arrival flows are handled in as efficient and timely a manner as possible. By specifying standard handoff points, and arrival routes, coordination between Chiang Mai Approach and Bangkok Center sectors may be greatly reduced.

2. ROLES AND RESPONSIBILITIES.

The Office of Primary Responsibility (OPR) for this SOP is the Thailand vACC Director/Chief. This SOP shall be maintained, revised, updated or cancelled by the Thailand vACC Director/Chief or any organization that supersedes, replaces or assumes the Director's responsibilities. Any suggestions for modification/amendment to this SOP should be sent to the Director for review.

3. DISTRIBUTION.

This SOP is intended for use by controllers staffing Chiang Mai Approach/Departure and Chiang Mai Tower.

4. BACKGROUND.

Over time, controllers have found that having aircraft arrive via pre-approved arrival routes, either by STAR's (Standard Terminal Arrival Routes) or via vectors through pre-determined arrival "gates", provides for a more orderly traffic flow, and reduces the need for communication between Chiang Mai Approach and other Bangkok Center positions. It is also vitally important that all facilities understand what an airplane is going to do (i.e., what altitude he has been cleared to) when he approaches an adjacent controller's airspace. These procedures outline what instructions pilots will be issued as they go from controller to controller.

5. REQUIREMENTS.

- a. Frequencies:
 - 1. Chiang Mai Approach (VTCC_APP) shall use 129.600 (150 Mile Visibility setting)
 - 2. Chiang Mai Tower (VTCC_TWR) shall use 118.10 (25 Mile Visibility Setting)
 - 4. Chiang Mai Ground (VTCC_GND) shall use 121.90 (10 Mile Visibility Setting)
 - 5. Chiang Mai ATIS frequency will be 127.200

6. OPERATIONS.

A. Chiang Mai Expanded TMA Coverage:

- Approach Controllers for Mae Hong Son (VTCH), Lampang (VTCL) and Tak/Mae Sot (VTPM)
 TMA's are housed in the same facility as Chiang Mai Approach. When logging on as the Chiang
 Mai Approach controller the controller has the option of expanding control to include the
 previous mentioned TMA's.
 - a. ATC Coverage for Mae Hong Son (VTCH) Lampang (VTCL) Tak/Mae Sot (VTPM) TMA's shall be provided via Procedural or with SSR radar. There is no ASR radar at these facilities.

B. Chiang Mai Approach/Departure:

- Airspace:
 - a. Normal Operations Control Zone (CTR), Chiang Mai Approach/Departure owns that airspace

- depicted on the sector file in red from the surface to 2000 AGL, centered on CMA VOR extending out 10 NM.
- b. Normal Operations Terminal Control Area (TMA), Chiang Mai Approach/Departure owns that airspace depicted on the sector file in green from 2000 to 11000 MSL, centered on CMA VOR extending out 30 NM.
- 2. Special Instructions:
- a. When winds are 5 Knots or less Chiang Mai International Airport shall utilize runway 36 as its calm wind runway
- When winds are greater than 5 knots the runway most inline with the winds shall be used, except
 - i. When winds favor runway 18 but weather minimums are below all approach minimums.
 - ii. Upon special request from the pilot.
 - iii. When winds favor runway 18 and do to the pilots abilities he is unable to fly a RNAV approach to runway 18..

C. Chiang Mai Arrivals Normal Operations North Flow:

- 1. Non-RNAV/GPS/FMC equipped aircraft or any aircraft requesting shall be issued vectors from their entry gate to the final approach course or to the IAF to fly the approach assigned.
- 2. All RNAV, GPS and FMC (that are able to fly STARS) equipped aircraft shall be issued instructions and given a clearance to fly the appropriate RNAV arrival for their filed arrival gate.
- 3. Authorized RNAV STARS:

Airway	Gates/Arrival	Runway
(W9)	WARMY-WARMY1A	36
(W36)	WEEWA-WEEWA1A	36
(W20/A581)	NUNWA-NUNWA1A	36
(W12/R207)	EASEE-EASEE-1A	36
(W15)	EMMET-EMMET1A	36
(W16)	ANYAR-ANYAR1A	36
(W9)	PANTA-PANTA1A	36
(A464)	ALLAY-ALLAY-1A	36
(Y6)	MARNI-MARNI1A	36
(A581)	ZUGAR-ZUGAR1A	36
(W7)	ZARDY-ZARDY1A	36

D. Chiang Mai Arrivals Normal Operations South Flow:

- 1. Non-RNAV/GPS/FMC equipped aircraft: There is only one Non-RNAV approach for runway 18 which is the VOR 18/36 approach from airway W20/R581.
 - Aircraft needing to fly a instrument approach will have to fly the ILS or VOR approach to runway 36 and circle to runway 18. Weather minimums MUST be at or above Circling minimums.
- 2. All RNAV, GPS and FMC (that are able to fly STARS) equipped aircraft shall be issued instructions to fly from the arrival gate direct to the IAF for the RNAV 18 approach.

3. Authorized Gates:

Airway	Gates	Runway
(W9)	WARMY	18
(W36)	WEEWA	18
(W20/A581)	NUNWA	18
(W12/R207)	EASEE	18
(W15)	EMMET	18
(W16)	ANYAR	18
(W9)	PANTA	18
(A464)	ALLAY	18
(Y6)	MARNI	18

(A581)	ZUGAR	18
(W7)	ZARDY	18

E. Chiang Mai Departures Normal Operations North Flow:

- 1. Aircraft filing "NO SID" or are not RNAV/GPS/FMC equipped (or those that have not filed for an approved SID) shall be vectored as if on one of the approved SIDs, so that all traffic passes through the approved departure gates.
- 2. ALL non-RNAV/GPS/FMC equipped aircraft or aircraft NOT indicating "NO SID" in the remarks section of the flight plan shall be Assigned:
 - MHS1B SID for flight on airway W9 West
 - CTR1B SID for flights on airway W20/R581 NE
 - PR1B SID for flights on airway W15
 - PSL1B SID for flights on airway W9 South
 - Radar Vectors to Join all other airways
- 3. All Aircraft with RNAV/GPS/FMC equipment shall be received from tower and cleared to fly the filed RNAV departure.

F. Chiang Mai Departures Normal Operations South Flow:

- 1. Aircraft filing "NO SID" or are not RNAV/GPS/FMC equipped (or those that have not filed for an approved SID) shall be vectored as if on one of the approved SIDs, so that all traffic passes through the approved departure gates.
- 2. ALL departures shall be Assigned:
 - MHS1A SID for flight on airway W9 West
 - CTR1A SID for flights on airway W20/R581 NE
 - PR1A SID for flights on airway W15
 - PSL1A SID for flights on airway W9 South
 - Radar Vectors to Join all other airways
- 3. There are NO RNAV Departures for runway 18

G. Chiang Mai (VTCC) Operations (Tower)

- 1. Aircraft with RNAV/GPS/FMS capabilities will be issued the appropriate RNAV SID for their filed departure gate.
- 2. Aircraft with non-RVAV capabilities will be issued a "Pilot Nav" SID or departure instruction and

Advised to ecpect vectoring to their departure gate.

- 3. All turbo jet/turbo prop/prop aircraft will be issue there filed cruise altitude as the initial altitude. 3a. Approach/Center will issue any needed altitude restrictions.
- 4. Ground and Tower positions USING VRC/ARC will NOT Tag up (Track) aircraft.
- 5. Ground and Tower position using Euroscope will Tag up (Track) aircraft
- 6. All circle to land procedures shall be conducted to the east side of the field.

H. ATS Routing

- A. RVSM Procedures: The following procedures shall be applied when aircraft file for flights along these airways.
 - 1. **Y-7**
 - Single direction (South) RNAV airway / Odd Flight levels
- B. Normal Preferred Routing:
 - 1. VTCC to VTBD/VTBS and points South
 - a. RNAV-PANTA1N/RV PANTA W9 TL
 - b. Non-RNAV PSL1A/B PSL W9 TL
 - c. RNAV-ALLAY1N/RV ALLAY A464 SEMBO
 - d. Non-RNAV KEDOB1A/B KEDOB A464 SEMBO
 - 2. ALT Route VTCC to VTBD/VTBS Only
 - a. RNAV ONLY- PANTA1N/RV PANTA Y7 TL

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