

Subject: Hong Kong VACC Training Syllabus

Virtual Air Traffic Simulation Network*

POLICY DOCUMENT

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1. DISTRIBUTION AND SCOPE

1.1. DISTRIBUTION

1.1.1. The intended audience is both the training team of Hong Kong VACC, including instructors and mentors and all controllers who receive instruction through the guidelines of this document at Hong Kong VACC.

1.2. SCOPE

1.2.1. This syllabus document is written to provide an official guideline to the training content and timeline for all training activities within Hong Kong VACC and to maintain consistency.

1.3. EXCLUSION OF LIABILITY

1.3.1. This manual is for use on the VATSIM Network only and should never be adopted for real world use. The information published by VATSIM within this document is made available without warranty of any kind; the Organization accepts no responsibility or liability whether direct or indirect, as to the currency, accuracy or quality of the information, nor for any consequence of its use.

2. OBS to S1 SYLLABUS

2.1. TIME SCALE

- 2.1.1. Excluding the preparation readings and video lecture of the trainee prior to each training session, the overall training timespan should be approximately 2 to 2.5 hours. Additional time or training sessions may be necessary in case a trainee requires more practice. The trainee alone can perform the theoretical knowledge training by using the video lecture, followed by the S1 theory exam on ATSIM. This normally shall take 6 to 7 hours.
- 2.2. An S1 controller at Hong Kong VACC shall demonstrate competency in the following areas:
 - 2.2.1. RADIOTELEPHONY
 - ✓ Basic phraseologies and communication
 - ✓ RT pace and clarity, monitoring pilot readbacks, communication priority
 - 2.2.2. COORDINATION
 - ✓ Understanding means to work with other controllers
 - ✓ Coordination with TWR for departures and VFR traffic
 - 2.2.3. PLANNING
 - ✓ Aerodrome knowledge and Area of Responsibility
 - ✓ Reading and understanding charts
 - ✓ Datablock, flight plan and departure list maintenance
 - ✓ Workload management
 - 2.2.4. CONTROLLING (GENERAL)
 - ✓ Demonstrates understanding of the ATS role

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- ✓ Displays service delivery awareness
- ✓ Displays situational awareness
- ✓ Manages communications promptly
- ✓ Displays professional behaviour and pleasant attitude

2.2.5. SAFETY

✓ Order and expedition consistent with safety

2.2.6. METEOROLOGY AND ALTIMETRY

- ✓ Basic METAR knowledge
- ✓ TAF knowledge (optional)
- ✓ RUNWAY selection
- ✓ Understanding meteorological effects and aerodrome operations
- ✓ Understanding QNH and QFE

2.2.7. CONTROLLING (CLEARANCE DELIVERY)

- ✓ IFR Departure clearances (format, flight plan review, amendments)
- ✓ Correctly identifies aircraft and applicable flight rule
- ✓ Understanding the purpose and how to work with ATIS
- ✓ Applies basic altimetry

2.2.8. CONTROLLING (GROUND)

- ✓ Issues appropriate GND instructions where/when required
- ✓ Taxi instructions, taxi routings and stand allocations
- ✓ Correctly transfers aircraft to TWR where required

2.2.9. RADAR CLIENT

- ✓ Understanding the essentials functions and features of the preferred radar client (controller may choose between VRC or Euroscope, or both)
- ✓ Setup, configure and connect to the network
- ✓ Manages flight strips, tags and flight plans

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2.3. SESSION PLAN GUIDELINE

Welcoming/Orientation (Optional; may be performed via email)*

Time: 0.5-1 hours

Trainee shall:

- ✓ Ensure that he/she is properly registered on CERT (under VATSEA and HKVACC)
- Review Facility General Policy, the Training Syllabus and other relevant VATSIM policies

Trainer shall:

- ✓ Provide an introduction to HKVACC (welcome, personnel, regulations etc.)
- ✓ Provide an overview of the training programme and timeline
- ✓ Ensure the trainee understands the expectation for a controller at HKVACC
- ✓ Direct the trainee to the library of training video to begin the training on theoretical knowledge



Theoretical Knowledge (Self-study using HKVACC training videos)

Time: Variable

Trainee shall:

- ✓ Review the library of videos related to S1 training provided online by the HKVACC Training Department and complete each quiz in each of the video
- ✓ Should the trainee have any questions over the materials presented in the video, they should raise the question by emailing their trainer or submit a ticket via the HQ System

Trainer shall:

✓ Respond to any questions asked by the students as he/she progresses through the self-training on theoretical knowledge



Theoretical Knowledge Review and Q&A

Time: 1 hour

Trainee shall:

- ✓ Submit the answers to the quizzes prior to this session
- ✓ Be prepared to answer verbally any question from the trainer over the materials of the training video

Trainer shall:

- ✓ Verify that the answers to the guizzes submitted by the students are correct
- ✓ Verbally ask the students a certain number of questions to ensure that they have a concrete understanding of the materials on theoretical knowledge
- ✓ Assign the theoretical exam on ATSIM after this session



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First Session - Preparation for online control

Time: 2 hours

(This may occur either prior to or after the trainee has passed the S1 exam on ATSIM)

Trainee shall:

- ✓ Read and review SOP001, SOP002, SOP003, SOP007, SOP011, SOP012 and SOP013 PRIOR to the session
- ✓ Install the radar client (preferably Euroscope) prior to the session. If there are difficulties and the trainee would like the trainer to remotely configure the radar client on the computer, they may choose to install TeamViewer for the remote assistance. However, this is optional.

Trainer shall:

- ✓ Answer questions the trainee may have over the training manual and/or SOP
- ✓ Provide assistance to trainee with radar client installation and configuration
- ✓ Highlight the important functions and features of the radar client(s)
- ✓ Review important points from the SOP documents above with the trainee
- ✓ Introduce the Hong Kong FIR airspace and departure procedures from clearance delivery to the boundary of HK FIR to the trainee



Second Session - Online control training

Time: 1-2 hours

Trainer shall:

- ✓ Provide examples of flight plan review and options for amendment
- ✓ Provide examples of clearance delivery format
- ✓ Provide examples of push back and start up procedures
- ✓ Explain the sectorisation of ground control to the trainee
- ✓ Provide examples of ground control phraseologies and methods
- ✓ Provide examples of conflict prevention on ground

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2.4. ASSESSMENT

- 2.4.1. Members wishing to obtain the S1 rating must pass a multiple-choice exam over related theoretical knowledge on the ATSIM exam system. This exam must be completed and passed before the second training session mentioned in Section 2.3 of this document. The content of this exam shall be consistent with the requirement of the VATSIM Global Rating Policy. A second attempt is permitted if the trainee fails the first attempt. If the trainee fails the second attempt, the trainer shall discuss with the trainee and identify any misconception and areas of incompetency. Once they are identified, the trainee may be given the third and last attempt to pass the S1 exam.
- 2.4.2. Throughout the course of training, trainer shall track and record the performance and competency of the trainee as specified by the Training Manager of Hong Kong VACC. This record will be used to determine when the trainee is ready for the S1-to-S2 training, as well as used for internal evaluation.

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3. S1 to S2 SYLLABUS

3.1. PREREQUISITE

- 3.1.1. In order to begin the training process of S1 to S2, an S1 controller shall fulfil the following criteria:
 - 3.1.1.1. Maintaining **active controller status** at the beginning of and throughout the training process, and;
 - 3.1.1.2. Having accumulated a minimum of **40 hours** of controlling in Hong Kong FIR as an S1 controller. However, this may be waived if the controller was admitted to the controller team as a controller with real-world experience or with experience on another flight-simulation network, subject to the discretion of both the Training Manager of Hong Kong VACC and the Training Director of VATSEA.
 - 3.1.1.3. Having participated and staffed Hong Kong VACC position as a S1 rated controller in two or more advertised events hosted by the Hong Kong VACC.

3.2. TIME SCALE

- 3.2.1. The two training sessions for S2 training will take approximately **2.5 hours**, in addition to the preparation work and readings outside of these sessions, which should take 1.5 to 2 hours on average. Controllers training under Solo Tower Validation should take into account the additional hours incurred prior to their practical exam.
- 3.3. An S2 controller at Hong Kong VACC shall demonstrate competency in the following areas:
 - 3.3.1. CONTROLLING (TOWER)
 - ✓ Selects suitable Active Runway
 - ✓ Generates ATIS
 - ✓ Issues appropriate TWR instructions where/when required
 - ✓ Issues takeoff clearances
 - √ Issues landing clearances
 - ✓ Applies correct runway separation
 - ✓ Handles missed approaches
 - ✓ Manages circuit traffic
 - ✓ Correctly transfers aircraft to next ATC unit.

3.3.2. COORDINATION

- ✓ Correctly hand off traffic to the next ATC unit.
- ✓ Ability to coordinate with ground control on traffic separation
- ✓ Ability to coordinate with Terminal Airspace controllers (APP/DEP) on traffic separation

3.3.3. VFR operations

- ✓ Understanding the differences between Visual Flight Rules (VFR) and Instrument Flight Rules (IFR)
- ✓ Understanding Visual Meteorological Conditions (VMC)
- ✓ Understanding the differences between Visual Flight Rules (VFR) and Special Visual Flight Rules (SVFR)

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- ✓ Understanding the separation methods for VFR and SVFR traffic
- ✓ Being familiar with the classes of airspace within Hong Kong FIR
- ✓ Ability to issue VFR and SVFR clearances to aircraft
- ✓ Ability to control aircraft within a traffic circuit
- ✓ Sufficient knowledge of the operations of Hong Kong Control Zones (CTR) to properly hand off traffic from ATZ to CTR Zones

3.4. SESSION PLAN GUIDELINE

Preparation prior to 1st session: (This is not an instructor session)

Time: 2-3 hours

Trainee shall:

- ✓ Review sections within the training manual (HKVACC-TM-GEN-001) that are relevant to S2. (Sections that are marked "S2")
- ✓ After reviewing the training manual, take the S2 theory exam on ATSIM.
- ✓ Review SOP001, SOP002, SOP003 and pay particular attention to the sections regarding Tower Control.
- ✓ Review SOP006 regarding VFR control in Hong Kong FIR

Trainer shall:

- ✓ Assign the S2 exam for the trainee on ATSIM
- ✓ Ensure that trainee had no issues with understanding the training materials



First Session – Preparation for online TWR control

Time: 1.5 hours

(This may occur either prior to or after the trainee has passed the S2 exam on ATSIM)

Trainer shall:

- ✓ Answer questions the trainee may have over the training manual and/or SOP
- ✓ Review important points from SOP001, SOP002, SOP003 and SOP006 with the trainee
- ✓ Review the basics of Visual Flight Rules (VFR)
- ✓ Introduce the VHHH, VMMC and VHHX Aerodrome Traffic Zones (ATZ) to the trainee
- ✓ Discuss the responsibility of each Tower position
- ✓ Discuss the methods for departure separation and how wake turbulence categories impact separation
- ✓ Discuss methods of issuing landing clearance and its restrictions
- ✓ Discuss the procedures of VFR control with each ATZ
- ✓ Discuss the procedures of controlling aircraft within a traffic circuit



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Second Session - TWR Online control training

Time: 1 hour Trainer shall:

- ✓ Provide examples of landing clearance and takeoff clearance
- ✓ Provide examples of separation between aircraft using the active runway(s)
- Explain the responsibilities of TWR controlling the Aerodrome Traffic Zone (ATZ)
- ✓ Provide examples for VFR clearance
- ✓ Provide examples of VFR control with ATZ



Solo Tower Validation

Time: Varies (Max. 90 days per VATSIM regulations)

Trainees shall take advantage of the Solo Tower Validation programme to refine their newly obtained skills on TWR control and to prepare themselves for the OTS Exam.

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3.5. ASSESSMENT

- 3.5.1. Members wishing to obtain the S2 rating must pass a promotional exam consisting of two parts:
 - 3.5.1.1. A multiple-choice exam over related theoretical knowledge on the ATSIM exam system. This exam must be completed and passed before the second training session mentioned in Section 3.4 of this document. The content of this exam shall be consistent with the requirement of the VATSIM Global Rating Policy. A second attempt is permitted if the trainee fails the first attempt. If the trainee fails the second attempt, the trainer shall discuss with the trainee and identify any misconception and areas of incompetency. Once they are identified, the trainee may be given the third and last attempt to pass the S2 exam.
 - 3.5.1.2. A Controller Practical Test (CPT) either online or via Sweatbox. This exam shall be taken and passed any time within the period of Solo Validation in accordance to the requirements of VATSEA division.
- 3.5.2. The passing percentage of both parts of the exams is 70%.
- 3.5.3. Throughout the course of training, trainer shall track and record the performance and competency of the trainee as specified by the Training Manager of Hong Kong VACC. This record will be used to determine when the trainee is ready for the S2-to-S3 training, as well as used for internal evaluation.

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4. S2 to S3 SYLLABUS

4.1. PREREQUISITE

- 4.1.1. In order to begin the training process of S2 to S3, an S2 controller shall fulfil the following criteria:
 - 4.1.1.1. Maintaining **active controller status** at the beginning of and throughout the training process, and;
 - 4.1.1.2. Having accumulated a minimum of 40 hours of controlling in Hong Kong FIR, of which 20 hours shall be accumulated as a S2 controller. However, this may be waived if the controller was admitted to the controller team as a controller with real-world experience or with experience on another flight-simulation network, subject to the discretion of both the Training Manager of Hong Kong VACC and the Training Director of VATSEA.
 - 4.1.1.3. Having participated and staffed Hong Kong VACC position as a S2 rated controller in two or more advertised events hosted by the Hong Kong VACC.

4.2. TIME SCALE

- 4.2.1. The two training sessions for S3 training will take approximately **2.5 hours**, in addition to the preparation work and readings outside of these sessions, which should take **1.5 to 2 hours** on average. Controllers training under Solo Approach Validation should take into account the additional hours incurred prior to their practical exam.
- 4.3. An S3 controller at Hong Kong VACC shall demonstrate competency in the following areas:
 - 4.3.1. DEPARTURE (DEP) CONTROL:
 - ✓ Correctly identifies aircraft and applicable flight rule
 - ✓ Cancels SID and vectors aircraft for sequencing or separation
 - ✓ Issues amended 'maintain' level where necessary for positive separation
 - ✓ Correctly transfers aircraft to the Enroute controller
 - 4.3.2. APPROCH (APP) CONTROL:
 - ✓ Ensures pilot is in receipt of correct ATIS information
 - ✓ Cancels STAR and vectors aircraft for sequencing or separation.
 - ✓ Issues descent and provides runway assignment or reiteration
 - ✓ Provides position and distance to run to aircraft
 - ✓ Correctly positions aircraft for approach type
 - ✓ Correctly issues the approach clearance
 - ✓ Correctly transfers aircraft to the TWR controller
 - 4.3.3. TRAFFIC MANAGEMENT
 - ✓ Verifies mode C level of aircraft when commencing radar service
 - ✓ Issues appropriate TMA instructions where/when required
 - ✓ Provides suitable vectors to aircraft when required
 - ✓ Initiates holding when necessary to regulate traffic flow

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4.3.4. SEPARATION

- ✓ Applies appropriate vertical separation between aircraft
- ✓ Applies appropriate lateral separation between aircraft

4.3.5. AIRSPACE SERVICES

- ✓ Passes traffic information where required
- ✓ Provides additional information or navigation service
- ✓ Correctly processes aircraft entering CTA from Class G airspace
- ✓ Correctly processes aircraft leaving CTA into Class G airspace
- ✓ Implements flight following procedures when requested

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4.4. SESSION PLAN GUIDELINE

Preparation prior to 1st session: (This is not an instructor session)

Time: 2-3 hours

Trainee shall:

- ✓ Review sections within the training manual (HKVACC-TM-GEN-001) that are relevant to S3. (Sections that are marked "S3")
- ✓ After reviewing the training manual, take the S3 theory exam on ATSIM.
- ✓ Review SOP004.

Trainer shall:

- ✓ Assign the S3 exam for the trainee on ATSIM
- ✓ Ensure that trainee had no issues with understanding the training materials

First Session - Preparation for online TMA control

Time: 1.5 hours

(This may occur either prior to or after the trainee has passed the S3 exam on ATSIM)

Trainer shall:

- ✓ Answer questions the trainee may have over the training manual and/or SOP
- Review important points from SOP004 and the training manual with the trainee
- ✓ Explain the sectorisation of terminal airspace to the trainee
- Review controlling methods Visual Flight Rules (VFR) outside Aerodrome Traffic Zone (ATZ)
- ✓ Introduce Hong Kong Terminal Airspace (TMA) to the trainee
- ✓ Discuss the responsibility of each TMA position
- ✓ Discuss the methods for separations
- ✓ Discuss the system of SID, STAR and IAP of each aerodrome within Hong Kong FIR

Second Session - TMA Online Control Training

Time: 1 hour

Trainer shall:

- ✓ Provide examples radar identifying aircraft
- ✓ Demonstrate and provide examples separation within the TMA airspace
- ✓ Demonstrate how to effectively control aircraft on SID and STAR
- Provide examples of clearing an aircraft for its IAP
- ✓ Provides examples of effective handoff to the next controller

Solo Approach Validation

Time: Varies (Max. 90 days per VATSIM regulations)

Trainees shall take advantage of the Solo Approach Validation programme to refine their newly obtained skills on APP/DEP control and to prepare themselves for the OTS Exam.



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4.5. ASSESSMENT

- 4.5.1. Members wishing to obtain the S3 rating must pass a promotional exam consisting of two parts:
 - 4.5.1.1. A multiple-choice exam over related theoretical knowledge on the ATSIM exam system. This exam must be completed and passed before the second training session mentioned in Section 4.4 of this document. The content of this exam shall be consistent with the requirement of the VATSIM Global Rating Policy. A second attempt is permitted if the trainee fails the first attempt. If the trainee fails the second attempt, the trainer shall discuss with the trainee and identify any misconception and areas of incompetency. Once they are identified, the trainee may be given the third and last attempt to pass the S3 exam.
 - 4.5.1.2. A Controller Practical Test (CPT) either online or via Sweatbox. This exam shall be taken and passed any time within the period of Solo Validation in accordance to the requirements of VATSEA division.
- 4.5.2. The passing percentage of both parts of the exams is 70%.
- 4.5.3. Throughout the course of training, trainer shall track and record the performance and competency of the trainee as specified by the Training Manager of Hong Kong VACC. This record will be used to determine when the trainee is ready for the S3-to-C1 training, as well as used for internal evaluation.

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5. S3 to C1 SYLLABUS

5.1. PREREQUISITE

- 5.1.1. In order to begin the training process of S3 to C1, an S3 controller shall fulfil the following criteria:
 - 5.1.1.1. Maintaining **active controller status** at the beginning of and throughout the training process, and;
 - 5.1.1.2. Having accumulated a minimum of **70 hours** of controlling in Hong Kong FIR positions, of which 30 hours shall be accumulated as a S3 controller. However, this may be waived if the controller was admitted to the controller team as a controller with real-world experience or with experience on another flight-simulation network, subject to the discretion of both the Training Manager of Hong Kong VACC and the Training Director of VATSEA.
 - 5.1.1.3. Having participated and staffed Hong Kong VACC position as a S3 rated controller in two or more advertised events hosted by the Hong Kong VACC.

5.2. TIME SCALE

- 5.2.1. The two training sessions for C1 training will take approximately 4 hours, in addition to the preparation work and readings outside of these sessions, which should take 1.5 to 2 hours on average. Controllers training under Solo Approach Validation should take into account the additional hours incurred prior to their practical exam.
- 5.3. A C1 controller at Hong Kong VACC shall demonstrate competency in the following areas:
 - 5.3.1. TRAFFIC MANAGEMENT:
 - ✓ Issues appropriate CTR instructions where/when required
 - ✓ Applies advanced altimetry concepts
 - ✓ Provides suitable vectors to aircraft when required
 - ✓ Initiates holding when necessary to regulate traffic flow
 - ✓ Adjusts aircraft speed or track to achieve initial sequencing for arrival
 - ✓ Correctly transfers aircraft to the next ATC unit.

5.3.2. SEPARATION:

- ✓ Provides separation service appropriate for class of airspace
- ✓ Applies appropriate vertical separation to aircraft operating in the RVSM band
- ✓ Applies time separation between aircraft in non-radar environment
- ✓ Applies separation between aircraft in radar environment
- ✓ Pre-emptively applies separation assurance to avoid rather than resolve conflicts

5.3.3. AIRSPACE SERVICES

- ✓ Provides traffic services appropriate for class of airspace
- ✓ Provides additional information or navigation service
- ✓ Issues airways clearance to aircraft entering Area Radar sectors
- ✓ Terminates services for aircraft leaving Area Radar sectors
- ✓ Issues STAR Clearance where necessary
- ✓ Provides services appropriate to VFR aircraft

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5.4. SESSION PLAN GUIDELINE

Preparation prior to 1st session: (This is not an instructor session)

Time: 2 hours

Trainee shall:

- ✓ Review sections within the training manual (HKVACC-TM-GEN-001) that are relevant to C1. (Sections that are marked "C1")
- ✓ After reviewing the training manual, take the C1 theory exam on ATSIM.
- ✓ Review SOP005 and SOP051
- ✓ Review all LOA to understand handoff procedures

Trainer shall:

- ✓ Assign the C1 exam for the trainee on ATSIM
- ✓ Ensure that trainee had no issues with understanding the training materials

First Session - Preparation for online CTR control

Time: 1 hour

(This may occur either prior to or after the trainee has passed the C1 exam on ATSIM)

Trainer shall:

- ✓ Answer questions the trainee may have over the training manual and/or SOP
- ✓ Review important points from SOP005 and the training manual with the trainee
- ✓ Explain the sectorisation of Area Radar to the trainee
- ✓ Introduce the Area Radar airspace and the FIR border to the trainee
- ✓ Discuss handoff procedures to neighbouring FIRs
- ✓ Discuss separation methods in the context of Area Radar airspace
- Discuss how to initiate descent for arrival aircraft

Second Session - CTR Online Control Training

Time: 1 hour

Trainer shall:

- ✓ Provide examples radar identifying aircraft
- ✓ Demonstrate and provide examples separation within the Area Radar airspace
- ✓ Demonstrate how to initiate the descent of an arrival aircraft and properly sequence it for arrival
- ✓ Provide examples of effective handoff to neighbouring FIRs
- ✓ Provides examples of effective handoff to the next controller

Solo Radar Validation

Time: Varies (Max. 90 days per VATSIM regulations)

Trainees shall take advantage of the Solo Radar Validation programme to refine their newly obtained skills on CTR control and to prepare themselves for the OTS Exam.



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5.5. ASSESSMENT

- 5.5.1. Members wishing to obtain the C1 rating must pass a promotional exam consisting of two parts:
 - 5.5.1.1. A multiple-choice exam over related theoretical knowledge on the ATSIM exam system. This exam must be completed and passed before the second training session mentioned in Section 5.4 of this document. The content of this exam shall be consistent with the requirement of the VATSIM Global Rating Policy. A second attempt is permitted if the trainee fails the first attempt. If the trainee fails the second attempt, the trainer shall discuss with the trainee and identify any misconception and areas of incompetency. Once they are identified, the trainee may be given the third and last attempt to pass the C1 exam.
 - 5.5.1.2. A Controller Practical Test (CPT) either online or via Sweatbox. This exam shall be taken and passed any time within the period of Solo Validation in accordance to the requirements of VATSEA division.
- 5.5.2. The passing percentage of both parts of the exams is 70%.
- 5.5.3. Throughout the course of training, trainer shall track and record the performance and competency of the trainee as specified by the Training Manager of Hong Kong VACC. This record will be used to determine when the trainee is ready for the C1-to-C3 training, as well as used for internal evaluation.

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6. C1 to C3 SYLLABUS

6.1. PREREQUISITE

- 6.1.1. According to VATSIM's Global Rating Policy (GRP) no ATC position can require a higher rating than Enroute Controller (C1). However the Senior Controller rating C3, whilst not directly linked to an ATC position as such, is considered to be the highest controller rating recognizing the knowledge, skill and seniority that a member can achieve and one achieved, remains a permanent rating
- 6.1.2. All members holding a C1 rating are eligible to apply for a promotion to C3 rating based on the following criteria. The member shall:
 - ✓ Be C1 rated for at least one year.
 - ✓ Have completed 100 hours as a C1 on Hong Kong FIR ATC positions.
 - ✓ Have served 75 hours as active ATC within the last 12 months.
 - ✓ Be recommended for promotion by the VACC Director.
 - ✓ Have spent 20 hours as a mentor in a C1 position (acknowledged by vACC Director).
 - ✓ Be able to prove that he/she has made a positive contribution to the development/promotion of student controllers in VATSEA.
 - ✓ Have successfully passed a CPT (to be determined by at least two examiners, with at least one divisional examiner and at least one local examiner).

6.2. ASSESSMENT

- 6.2.1. The Controller Practical Test (CPT) must be conducted on a CTR position. The Controller Practical Test (CPT) normally shall be conducted in VATSIM online environment in accordance to the guidelines set by the VATSEA Training Department. If a local vACC Training Department is unable to arrange the CPT within a reasonable timeframe after having been requested to do so by the member, the member can opt to forego the local Examiner conducting the CPT at a known field and request that a VATSEA examiner steps in and conducts the CPT (whose evaluation will be final) at a randomly chosen field. This divisional policy comes into force with its publication on the VATSEA website.
- 6.2.2. The appertaining Controller Practical Test (CPT) will focus on the following:
 - ✓ Ability to service multiple airports/positions
 - ✓ Ability to handle IFR and VFR flights sharing the same airspace
 - ✓ Ability to handle abnormal situations
 - ✓ Steady traffic-flow
 - ✓ Traffic awareness
 - ✓ Keeping "the big picture"
 - ✓ Ability to coordinate with adjacent controllers
 - ✓ Ability to use correct phraseology in English

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7. FAST TRACK UPGRADE

(Available for Real Life Air Traffic Controllers and Commercial and Airline Pilots; need to contact VATSEA Training Director)

This program is applicable to real life Air Traffic Controllers and pilots holding relevant licenses aiming at reducing the time required for theoretical examination in ATSimTest. In this program, applicants are obliged to take the relevant ATSimTest theory test as well as the Controller Practical Test (CPT) for the targeted rating.

The procedure for Fast Track program is as follows:

- 7.1. Candidate for the Fast Track program applies to the VACC Director or Training Manager for Fast Track program with the evidence that he/she holds a valid pilot or controller license. The best acceptable evidence is the copy of his/her license. A brief resume explaining the real life aviation experience of the candidate is also required.
- 7.2. The VACC Director or Training Manager confirms to VATESEA Training Department that the applicant is eligible for the Fast Track program.
- 7.3. VATSEA Training Director grants candidate access to the Fast Track program.
- 7.4. The CPT for the targeted rating (and any rating level below if deemed necessary), will be conducted by Hong Kong VACC Training Department, as stipulated by Divisional Policy and the Global Rating Policy. The respective VACC must prove the candidate's practical abilities for all rating levels up to and including the targeted rating, i.e. skills related to Controller Clients such as VRC or Euroscope. Practical Tests are to be conducted at the respective vACCs discretion.
- 7.5. Refusal of "Fast Track Upgrade" application is the discretion of VATSEA Training Department if the applicant:
 - * fails to submit his real life licenses and/or relevant documents.
 - proves to have bad VATSIM record.
 - displays immature behavior.
 - * fails to understand and comply with the concepts of virtual controlling.
 - * fails to pass 3 ATSimTest theory tests.

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8. TRANSFER FROM OTHER NETWORKS

In order to encourage members from other networks and at the same time taking into consideration their virtual experience in the other network, Hong Kong VACC, in accordance to the guidelines set by VATSEA Training Department, has implemented a standard transfer policy.

8.1. TRANSFER FROM IVAO

- 8.1.1. All transferring members are eligible to apply once for acceptance in the rating corresponding to their last rating held in IVAO for at least six months.
 - ✓ All IVAO members holding ACC (Center Controller) level and above can apply for C1 Level.
 - ✓ All IVAO members holding APC (Approach Controller) level can apply for S3 level.
 - ✓ All IVAO members holding ADC (Aerodrome Controller) level can apply for S2 level.
 - ✓ Any IVAO member holding INS level or above wishing to transfer shall contact VATSEA Training Department directly. Since INS level is no controller rating but a functional rating a transfer shall usually take place to C1 level.
- 8.1.2. All transferring members will need to pass the relevant ATSimTest theory test for the target rating. The test can only be retaken twice after failing it. The CPT for the targeted rating (and any rating level below if deemed necessary), will be conducted by the Hong Kong VACC Training Department, as stipulated by Divisional Policy and the Global Rating Policy. Hong Kong VACC must prove the candidate's practical abilities for all rating levels up to and including the targeted rating, i.e. skills related to Controller Clients such as VRC or Euroscope. Practical Tests are to be conducted at the discretion of Hong Kong VACC. In order to process a transfer application the followings are also required:
 - a.) Recommendation or introduction from the VACC Director, and;
 - b.) Proof of IVAO Rating being claimed by the transferring member.
- 8.1.3. Refusal of transferring of the last hold rating in IVAO is at the discretion of VATSEA Training Department if the applicant:
 - fails to submit evidence of the claimed IVAO rating
 - * fails to meet the set rating requirements
 - proves to have bad VATSIM record
 - displays immature behaviour
 - * fails to understand and comply with the concepts of virtual controlling
 - fails to pass 3 consecutive tests
- 8.1.4. Please note that the above policy is not mandatory. VATSEA Training Department will implement this policy upon receiving a transfer request from the VACC Director. Otherwise, the General and Binding rules of minimum requirements for upgrading will apply.



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8.2. TRANSFER FROM OTHER NETWORKS

8.2.1. For the time being there are no other transfer rules in force. Members transferring from other networks than IVAO are deemed to be new members and shall proceed as normal.

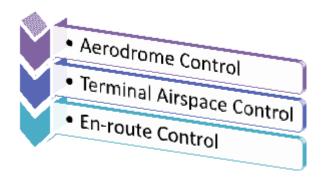
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9. VISITING CONTROLLER TRAINING

- 9.1. Hong Kong VACC welcomes active controllers from other facilities to provide ATC service in Hong Kong FIR using the ATC rating granted by their home facilities. Hong Kong VACC only provides training related to local procedures to visiting controllers. Visiting controllers are expected to be proficient in the general ATC knowledge as outlined within the Global Rating Policy prior to joining Hong Kong VACC.
- 9.2. Visiting Controller training at Hong Kong VACC is divided into 3 parts:



9.3. AERODROME CONTROL TRAINING

- 9.3.1. This training covers topics related DEL, GND and TWR positions within Hong Kong FIR. At the end of the training, the trainee shall be able to perform duties as expected from a S2 controller at Hong Kong VACC. The following is a list of topics to be covered during the training:
 - ✓ Under Area of Responsibility within each aerodrome
 - ✓ Ability to locate and decipher charts of Hong Kong FIR
 - ✓ Correctly and properly setting up radar client
 - ✓ Understanding Flight Plan formats at Hong Kong FIR
 - ✓ RUNWAY selection at each aerodrome
 - ✓ IFR Departure clearances (format, flight plan review, amendments)
 - ✓ Understanding the ATIS format at Hong Kong FIR
 - ✓ Coordination with TWR for departures and VFR traffic as a DEL/GND controller
 - ✓ Correctly identifies aircraft and applicable flight rule
 - ✓ Issues appropriate GND instructions where/when required
 - ✓ Taxi instructions, taxi routings and stand allocations
 - ✓ Issues appropriate TWR instructions where/when required
 - ✓ Issues takeoff clearances and landing clearances in the local format
 - ✓ Understanding the differences between Visual Flight Rules (VFR) and Special Visual Flight Rules (SVFR) in Hong Kong FIR
 - ✓ Understanding the separation methods for VFR and SVFR traffic
 - ✓ Being familiar with the classes of airspace within Hong Kong FIR
 - ✓ Ability to issue VFR and SVFR clearances to aircraft
 - ✓ Ability to control aircraft within a traffic circuit in all ATZ

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 Sufficient knowledge of the operations of Hong Kong Control Zones (CTR) to properly hand off traffic from ATZ to CTR Zones

9.3.2. SESSION PLAN GUIDELINE

Preparation prior to 1st session: (This is not an instructor session)

Time: 1-2 hours

Trainee shall:

- ✓ Review SOP001, SOP002, SOP003, SOP006, SOP011, SOP012, SOP013 and SOP051.
- ✓ Review the Facility General Policy of Hong Kong VACC
- ✓ Locate charts and information on the Hong Kong AIP and Macau AIP websites

Trainer shall:

- ✓ Provide an introduction to HKVACC (welcome, personnel, regulations etc.)
- ✓ Provide an overview of the training programme and timeline
- ✓ Ensure the trainee understands the expectation for a controller at HKVACC
- ✓ Ensure that trainee had no issues with understanding the training materials

First Session - Preparation for online control

Time: 1 hour

Trainer shall:

- ✓ Answer questions the trainee may have over the training manual and/or SOP
- ✓ Review important points from the SOPs with the trainee
- ✓ Introduce the Hong Kong FIR airspace and departure procedures from clearance delivery to the boundary of HK FIR to the trainee
- ✓ Discuss ground control procedures within Hong Kong FIR
- ✓ Review the basics of Visual Flight Rules (VFR)
- ✓ Introduce the VHHH, VMMC and VHHX Aerodrome Traffic Zones (ATZ) to the trainee
- ✓ Discuss the responsibility of each Tower position
- ✓ Discuss the methods for departure separation and how wake turbulence categories impact separation
- ✓ Discuss methods of issuing landing clearance and its restrictions
- ✓ Discuss the procedures of VFR control with each ATZ
- ✓ Discuss the procedures of controlling aircraft within a traffic circuit

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Second Session - Online control training (after passing written exam)

Time: 1 hour

Trainer shall:

- ✓ Provide examples of flight plan review and options for amendment
- ✓ Provide examples of clearance delivery format
- ✓ Provide examples of push back and start up procedures
- ✓ Explain the sectorisation of ground control to the trainee
- ✓ Provide examples of ground control phraseologies and methods
- ✓ Provide examples of conflict prevention on ground
- ✓ Provide examples of landing clearance and takeoff clearance
- ✓ Provide examples of separation between aircraft using the active runway(s)
- ✓ Explain the responsibilities of TWR controlling the Aerodrome Traffic Zone (ATZ)
- ✓ Provide examples for VFR clearance
- ✓ Provide examples of VFR control with ATZ

9.3.3. ASSESSMENT

9.3.3.1. Assessment of the Aerodrome Training consists of a multiple-choice written exam with 15 questions. While such exam is open-book, trainee shall not seek unauthorised help from another person. The passing mark for the exam is 70%. Once the trainee has passed the written exam, the trainer may proceed with the online control training, after which aerodrome control certification may be given to the trainee.

9.4. TERMINAL AIRSPACE CONTROL

- 9.4.1. This training covers topics related APP and DEP positions within Hong Kong FIR. At the end of the training, the trainee shall to perform duties as expected from a S3 controller at Hong Kong VACC. The training may take place concurrently with the aerodrome control training. The following is a list of topics to be covered during the training:
 - ✓ Apply appropriate separations with respect to the Hong Kong FIR airspace
 - ✓ Verifies mode C level of aircraft when commencing radar service
 - ✓ Issues appropriate TMA instructions where/when required
 - ✓ Provides suitable vectors to aircraft when required
 - ✓ Initiates holding when necessary to regulate traffic flow
 - ✓ Ensures pilot is in receipt of correct ATIS information
 - ✓ Cancels STAR and vectors aircraft for sequencing or separation
 - ✓ Issues descent and provides runway assignment or reiteration
 - ✓ Correctly positions aircraft for approach type
 - ✓ Correctly issues the approach clearance
 - ✓ Passes traffic information where required

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- ✓ Provides additional information or navigation service
- ✓ Correctly processes aircraft entering radar sectors from Class G
 airspace
- ✓ Correctly processes aircraft leaving radar sectors into Class G airspace
- ✓ Implements flight following procedures when requested
- ✓ Correctly handoff aircraft to the next controller

9.4.2. SESSION PLAN GUIDELINE

Preparation prior to 1st session: (This is not an instructor session)

Time: 1-2 hours

Trainee shall:

✓ Review SOP004.

Trainer shall:

✓ Ensure that trainee had no issues with understanding the training materials

First Session - Preparation for online TMA control

Time: 1.5 hours

Trainer shall:

- ✓ Answer questions the trainee may have over the training manual and/or SOP
- ✓ Review important points from with the trainee
- Explain the sectorisation of terminal airspace to the trainee
- Review controlling methods Visual Flight Rules (VFR) outside Aerodrome Traffic Zone (ATZ)
- ✓ Introduce Hong Kong Terminal Airspace (TMA) to the trainee
- ✓ Discuss the responsibility of each TMA position
- ✓ Discuss the methods for separations
- ✓ Discuss the system of SID, STAR and IAP of each aerodrome within Hong Kong FIR

Second Session - TMA Online Control Training

Time: 1 hour

Trainer shall:

- ✓ Provide examples radar identifying aircraft
- ✓ Demonstrate and provide examples separation within the TMA airspace
- ✓ Demonstrate how to effectively control aircraft on SID and STAR
- ✓ Provide examples of clearing an aircraft for its IAP
- ✓ Provides examples of effective handoff to the next controller

9.4.3. ASSESSMENT

9.4.3.1. Assessment of the TMA Training consists of a multiple-choice written exam with **10 questions**. While such exam is open-book, trainee shall not seek unauthorised help from another person. The passing mark for the exam is **70%**.



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Once the trainee has passed the written exam, the trainer may proceed with the online control training, after which TMA control certification may be given to the trainee.

9.5. EN-ROUTE CONTROL TRAINING

- 9.5.1. This training covers topics related CTR positions within Hong Kong FIR. At the end of the training, the trainee shall to perform duties as expected from a C1 controller at Hong Kong VACC. The training may take place concurrently with the aerodrome control training and TMA control training. The following is a list of topics to be covered during the training:
 - ✓ Issues appropriate CTR instructions where/when required
 - ✓ Adjusts aircraft speed or track to achieve initial sequencing for arrival
 - ✓ Provides separation service appropriate for class of airspace
 - ✓ Correctly transfers aircraft to the next ATC unit
 - ✓ Issues airways clearance to aircraft entering CTA
 - ✓ Terminates services for aircraft leaving CTA
 - ✓ Issues STAR Clearance where necessary
 - ✓ Provides services appropriate to VFR aircraft

9.5.2. SESSION PLAN GUIDELINE

Preparation prior to 1st session: (This is not an instructor session)

Time: 2 hours

Trainee shall:

- ✓ Review SOP005 and SOP051
- ✓ Review all LOA to understand handoff procedures

Trainer shall:

✓ Ensure that trainee had no issues with understanding the training materials

First Session - Preparation for online CTR control

Time: 1 hour

Trainer shall:

- ✓ Answer questions the trainee may have over the SOP
- ✓ Review important points from SOP005 with the trainee
- ✓ Explain the sectorisation of Area Radar to the trainee
- ✓ Introduce the Area Radar airspace and the FIR border to the trainee
- ✓ Discuss handoff procedures to neighbouring FIRs
- ✓ Discuss separation methods in the context of Area Radar airspace
- ✓ Discuss how to initiate descent for arrival aircraft



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Second Session - CTR Online Control Training



Time: 1 hour Trainer shall:

- ✓ Provide examples radar identifying aircraft
- ✓ Demonstrate and provide examples separation within the Area Radar airspace
- ✓ Demonstrate how to initiate the descent of an arrival aircraft and properly sequence it for

arrival

✓ Provide examples of effective handoff to neighbouring FIRs

9.5.3. ASSESSMENT

- 9.5.3.1. Assessment of the En-route Training consists of a multiple-choice written exam with 10 questions. While such exam is open-book, trainee shall not seek unauthorised help from another person. The passing mark for the exam is 70%. Once the trainee has passed the written exam, the trainer may proceed with the online control training, after which TMA control certification may be given to the trainee.
- 9.6. Should a visiting controller receives a promotion in rating by the home facility, it is the responsibility of the controller to inform the instructional team of Hong Kong VACC to update the training profile and the roster. In addition, if applicable, an upgrade by the home facility **DOES NOT** automatically grant the visiting controller the certification of the next level. The controller shall undergo training as described in this section (Section 9) prior to controlling positions of the next level.

(Example: A visiting controller who has just received the C1 rating must complete the en-route control training as described in Section 9.5 prior to staffing CTR positions within Hong Kong VACC.)

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10. TRANFERRING FROM ANOTHER FACILITY ON VATSIM

- 10.1. When a controller originally from another facility transfers to Hong Kong VACC as a local controller, such controller is assumed to be proficient in the knowledge with respect to the current rating held by the controller. However, the controller must learn the local procedures related to the current rating. To accomplish that, prior the new controller granted certification to control at Hong Kong VACC, the controller shall be enrolled in visiting controller courses up to his current rating.
 - (Example: A newly transferred controller with a C1 rating must undergo visiting controller training at Aerodrome, TMA and En-route levels prior to being granted certification to control at Hong Kong VACC)
- 10.2. Assessment of newly transfer controller shall be identical to visiting controller assessment. The training and assessments at different levels may be completed concurrently or separately. After receiving the certifications up to the level corresponding to the current rating of the controller, the controller will continue the training at Hong Kong VACC as a local controller.

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11. KEEPING CONTROLLER STATUS CURRENT

11.1. General

- 11.1.1. This section applies to all local controllers within the Hong Kong VACC. All local controllers will have their controller status mark inactive every six month unless one of the actions in Section 11.2 is completed. (The online hour requirement still applies on top of this policy.) After completing the action in Section 11.2, controller status will be extended for another six months from the date of completing require action.
- 11.2. How to renew or extend controller Status:
 - ✓ Complete a controller rating recurrency check completed by an INS rated instructor or a mentor appointed by the Training Manager of the VACC; or
 - ✓ Complete any online training session with an INS rated instructor or a mentor appointed by the Training Manager of the VACC; or
 - ✓ Complete a Controller Practical Test; or
 - ✓ Being approved by an INS rated instructor for an extension.
- 11.3. Exemption to the rule stipulated in Section 11.1 may be waived if the controller has been granted a Leave of Absence by the Director of Hong Kong VACC or the Training Manager of Hong Kong VACC, provided that the Director of Hong Kong VACC or the Training Manager of Hong Kong VACC has reasonable grounds to believe that the controller will be able to maintain his/her proficiency upon return from the leave.

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12. REVISION OF THIS SYLLABUS

12.1. This syllabus shall be periodically reviewed every FOUR (4) months by the Training Manager and the Director of Hong Kong VACC. All necessary revisions shall be clearly documented in the Record of Revision table on the last page of this document.

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RECORD OF REVISION

(Note: All changes made at the current revision are in red colour for recognition.)

DATE	REV.	REVISION CONTENT	APPROVAL
25 JAN 2017	01	1. Section 3.1.1.2, "having accumulated a minimum of 40 hours of	A. TANG
		controlling as an S1 controller." revised to "having accumulated a	
		minimum of 20 hours of controlling as an S1 controller"	
		2. Section 4.1.1.2, "having accumulated a minimum of 40 hours of	
		controlling as an S2 controller." revised to "having accumulated a	
		minimum of 40 hours of controlling on any position, of which 20 hours	
		shall be accumulated as a S2 controller."	
		3. Section 5.1.1.2, "having accumulated a minimum of 40 hours of	
		controlling as an S3 controller." revised to "having accumulated a	
		minimum of 70 hours of controlling on any position, of which 30 hours	
		shall be accumulated as a S3 controller."	
		4. Section 6.1.2, "Have completed 500 hours as a C1 on any ATC	
		position" becomes "Have completed 100 hours as a C1 on any ATC	
		position".	
		5. Added Table of Content.	
1 AUG 2018	02	1. Rewrite Section 2.1.1 to include the use of video lecture for	A. TANG
		theoretical training	O. CHUI
		2. Rewrite Section 2.3 to include the use of video lecture and	
		improvements to the flow of S1 training	
		3. All hours requirement are restricted to Hong Kong FIR positions.	
		4. Promotion requires having controller 2 advertised events or	
		more except for C3 promotion.	
		5. Added Section 11. Subsequent section numbers increase by 1.	