

APPENDIX B

GUIDELINES FOR THE CONDUCT OF A VIRTUAL CLASS

1 Introduction

- 1.1 The world has been very badly affected by the spread of Covid-19 and this has directly impacted the aviation industry worldwide. Currently, all training in the Approved Training Organisations (ATOs) has stopped due to the Movement Control Order (MCO) introduced by the Government of Malaysia on 18 March 2020 until 31 March 2020. This MCO has since been extended, to 28 April 2020 and latest until 12 May 2020.
- 1.2 It is anticipated that the MCO may continue beyond 28 April 2020 if we based on the number of cases which is still on the rise in Malaysia. During the MCO, social distancing has been imposed and it is not encouraged to congregate in any group of more than 05 people.
- 1.3 It is in view of this that Flight Operations Division has decided to come up with the following guidelines that need to be fulfilled should an ATO chooses to embark on providing Virtual Class to its students. This is just an option for an ATO, which otherwise will continue its classes after the MCO and an extension will be given as per the duration of the MCO.
- 1.4 If the conduct of the Virtual Class satisfies in full every aspect of the requirement stipulated in the Guidelines, the hours carried out will be recognised as part of the total hours required for the Theoretical Knowledge phase.
- 1.5 Nevertheless, ATOs must be reminded that due to the present system of conducting an examination, even if the Virtual Class has been conducted, the actual examination will not take place until after the MCO is lifted as per the current regulations that these examinations are carried out exclusively in the approved locations regardless of how the course is delivered i.e. via "face-to-face/in presence" or "Virtual Classroom".

2 Software and Period Permitted For The Conduct Of The Virtual Class

- 2.1 The recommended software for this purpose is Microsoft Teams (MS Teams), which allows communities, groups, or teams to join through a specific URL or invitation sent by a team administrator or owner. However, an ATO may decide on a different software that meets all the requirement stipulated in the guidelines.
- 2.2 The period allowed for the conduct of the Virtual Classes is only during the MCO and not beyond nor should it be seen as a means of conducting future classes after the MCO has been lifted.

3 Guidelines For The Conduct Of The Virtual Classes

3.1 Management of Virtual Classroom

3.1.1 Access and Ability

- a) The Authority must be granted a dedicated connection and given access to do surveillance on the team at any time during the lessons;
- b) The ability of teacher / students interaction and document projection. The "Virtual Classroom" system must be able to allow everybody to interact with each other. So, the remotely connected students can interact with the virtual classroom, raising questions to the TKI (even with chat tool) and answering to questions;
- c) The ability to make available technology such as the use of live blackboard, break-out sessions and one-on-one collaboration will assist with delivery of subjective content;
- d) The ability to see all connected users simultaneously. The system must be laid in such a way that a technical problem of any user, even the TKI, does not affect the other users, and the virtual classroom is always available;
- e) The ability to record duration and attendance as indicated in the approved manuals. The system should allow the recording of the lessons, and permit the students to review past lessons. Any student who is not able to start or complete a lesson by the "virtual classroom" system, that lesson will be logged as "not attended";
- f) The availability of Instructor's and Student's Standard Operating Procedures (SOPs) prior to the commencement of the course underlining all the important elements for conducting and undergoing a Virtual Class;
- g) Before the course commencement date, the expected attendees are required to join a virtual test class to check whether the attendee's equipment is working as it should and familiarize with the user's interface;
- h) To ensure a proper management of the virtual classroom, a maximum of 12 attendees are allowed per session; and

- i) The availability of on-site technicians who are qualified to rectify any technical problems during any pre-, during and post- sessions.

3.2 System Description

3.2.1 In order to use the "Virtual Classroom" system, classrooms of the ATO shall be equipped as follows:

- a) Personal Computer with microphone, webcam and internet access (ADSL connection or faster), dedicated to the Theoretical Knowledge Instructor (TKI);
- b) Secondary monitor of at least 18 inches, which allows TKI to see the students remotely connected;
- c) Additional camera filming the whiteboard when necessary and showing the equipment (if any in classes such as Airframe, Systems and Instrumentations); and
- d) Application and hardware that allows adequate instructor-student interaction and the instructor to share, with a good level of quality, the audio and video content of the lesson.

3.2.2 The student, in order to connect and attend to the lessons, needs the following equipment:

- a) Personal Computer/Tablet, with at least a 10" screen size, with audio system, microphone, webcam and a reliable and stable internet access;
- b) Headset or earbuds; and
- c) Internet connection via ADSL line (with or without WiFi).

3.3 Instructors Familiarization Training

3.3.1 The Lesson in "Virtual Classroom" must be held by a qualified TKI;

3.3.2 Every TKI involved must attend a familiarization training on the use of the software before commencing to teach (proof of training);

3.3.3 The topics in the training must include but not limiting to the following subjects:

- a) instruction guide to the new system; and

- b) best way to zoom on the equipment (if relevant) with the camera in order to show the equipment to the attendees (if necessary).

3.4 Virtual Lesson Rules

3.4.1 The ATO must ensure the following elements:

- a) The emails and telephone contacts of the attendees shall be available; this is in order to get in touch with them in case of any technical issue;
- b) The minimum requirements for the device used by the participant to follow the video conference lessons must be determined;
- c) It shall be maintained such that students are able to concentrate on their studies, without undue distraction or discomfort;
- d) Instructions on how to access the virtual classroom, including the procedures to be adopted in case of technical connection problems be made known to the students;
- e) The rules to be followed (delay tolerated on the start of the lesson, notification of absences and early disconnections);
- f) Before starting the lesson, and after each break, the instructor must verify the presence of the participants through the recognition via webcam;
- g) The registration of presences and absences must be carried out in the same way as for the classroom lessons;
- h) The maximum number of daily training hours shall be the same provided for classroom lessons;
- i) For anything not specified, rules already in use for classroom lesson are applied such as the following student ground rules:
 - i. Be on time (at least 15 minutes before start of class) to ensure all systems are working;
 - ii. Camera/video to remain "ON" during the whole session;
 - iii. Mic to be set on MUTE, mobile phone OFF and away from computer and fans not blowing directly

near the computer so as to avoid background noise interruption;

- iv. No one-on-one side conversation using the chat function; and
- v. Other elements which should be included and have been specified in the SOPs.

3.5 Assessment

- 3.5.1 It is suggested that the TKI ends the class with a quiz to ascertain the level of understanding by the students. This can be done by using Google Forms or any other platforms. The answers can be done as a revision to recap previous lesson in the next class. This is also a means of gauging the effectiveness of the class and its delivery.

4 Conclusion

The option of conducting the Theoretical Knowledge phase via “Virtual Class” is an option available to the ATOs. However, the effectiveness of the teachings is the main concern to CAAM. As such, it is deemed important that all students shall be able to have a reliable and stable access to the Virtual Classes with proper monitoring by the ATOs. No Virtual Class shall be approved until and unless an ATO satisfies (with evidences) all the requirements as stipulated in the guidelines.