

United Kingdom Overseas Territories Aviation Circular

**OTAC 65-5
OTAC 172-12**

The Use of Synthetic Training Devices in the Training of Air Traffic Service (ATS) Personnel

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GENERAL

Overseas Territories Aviation Circulars are issued to provide advice, guidance and information on standards, practices and procedures necessary to support Overseas Territory Aviation Requirements. They are not in themselves law but may amplify a provision of the Air Navigation (Overseas Territories) Order or provide practical guidance on meeting a requirement contained in the Overseas Territories Aviation Requirements.

PURPOSE

The purpose of this OTAC is to provide information and guidance on the use of Synthetic Training Devices (STD) in the training of ATS personnel.

CHANGE INFORMATION

First issue.

ENQUIRIES

Enquiries regarding the content of this Circular should be addressed to Air Safety Support International at the address on the ASSI website (www.airsafety.aero) or to the appropriate Overseas Territory Aviation Authority.

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1. INTRODUCTION

This OTAC provides guidance on the use of Synthetic Training Devices (STD) in the training of ATS personnel; specifically, Air Traffic Control Officers (ATCO) and Aerodrome Flight Information Service Officers (AFISO). The OTAC covers only those aspects of professional training which are specified in the Service Provider's Unit Training Plan (UTP) and provides guidance on the way in which simulators may be used to support that training.

2. RELATED REQUIREMENTS

Service Providers are reminded that the use of STD is subject to regulatory oversight and approval as specified in ICAO Annex 1, Appendix 2, Paragraph 5.3 which states: *Synthetic training devices shall be qualified according to requirements established by the State and their use shall be approved by the Licensing Authority to ensure that they are appropriate to the task.*

3. METHODOLOGY

A STD is any type of device by which operational conditions are simulated, including simulators and part-task trainers. All UTP are required to indicate the amount of training, if any, that will be conducted on a STD. The Service Provider is required to demonstrate how the STD and the associated exercises will provide adequate support for the UTP. The extent to which the STD achieves these criteria will be used to determine the adequacy of the STD for the proposed use. As a general principle, the greater the degree of replication of the operational position being represented, the greater the use that will be possible to support the UTP.

Those parts of the UTP for which the training organisation proposes to use a STD should be based on an assessment against the criteria listed below.

The criteria are:

- (a) Suitability of the general environment, which should provide an environment in which simulator exercises may be run without undue interference from unrelated activities;
- (b) Suitability of the equipment to meet the training objectives, including:
 - (i) the simulator layout;
 - (ii) the equipment provided;
 - (iii) the display presentation, functionality, and updating of operational information;
 - (iv) data displays, including strip displays, where appropriate;
 - (v) co-ordination facilities; the ability of the simulated environment to enable students to meet the stated objectives of the practical training exercises;
 - (vi) aircraft performance characteristics, including the availability of manoeuvres, eg holding or ILS operation, required for a particular simulation;
 - (vii) the availability of real-time changes during an exercise;
 - (viii) the ability of the simulator and its exercises to enable the performance objectives to be assessed to the level determined in the UTP;
 - (ix) the ability of the simulated environment to enable students to meet the stated objectives of the practical training exercises;

- (c) The processes by which the Service Provider can be assured that staff associated with the conduct of the simulation are competent.

The types of ATS training which may be provided are listed below. This list is not exhaustive and Service Providers may wish to consider additional elements for which the use of a STD may be appropriate.

- (a) Abnormal and Emergency Situation (ABES) Training.
- (b) Manoeuvring Area and surface movement familiarisation.
- (c) Radio and Voice procedures.
- (d) On the Job Training (OJT).
- (e) Human Factors.
- (f) Procedural elements.
- (g) VFR procedures.
- (h) IFR procedures.
- (i) Integration of visual circuit and instrument traffic.
- (j) Low Visibility Procedures (LVP).

4. LIAISON WITH REGULATORY AUTHORITIES

Service Providers are encouraged to discuss changes to their UTP, which may involve incorporating additional STD elements, with the appropriate Overseas Territory Aviation Authority (OTAA) ATS Inspector prior to implementation.