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INAPPROPRIATE QUALIFICATION OF FLIGHT SIMULATION TRAINING DEVICES AND INAPPROPRIATE AWARDING OF TRAINING CREDITS TO FSTDs

1. Applicability

The South African Civil Aviation Regulations (SACAR) of 2011 (As amended) and the International Civil Aviation Organisation (ICAO) Document 9625 are applicable.

This notice is issued under the provisions of regulation 11.01.3(1).

This general notice is applicable to all aviation training organisations certificated in terms of SACAR Part 141 who have a flight simulation training device (FSTD) qualified in terms of SACAR Part 60 and SACAA FSTD (A) or (H) as appropriate.

2. Purpose of this General Notice

This General Notice serves to address inappropriately awarded qualification of flight simulation training devices and inappropriate award training credits to FSTDs.

Some licences and ratings have been issued as a result of training and testing carried out on FSTDs that were awarded inappropriate qualifications and/or inappropriate training credits. The SACAA must address the safety risk and inherent international reputational damage which could result in the possible loss of recognition of SA pilot licences.

The SACAA reserves the right to amend the decisions contained in this notice should circumstances dictate the necessity thereof.

3. General condition

The use of Flight Simulator Training Devices in South Africa is Regulated by Part 60 of the SA Civil Aviation Regulations, 2011 and Document SA-CATS 60. Part 60 of the Regulations refer to the qualification requirements for aeroplane FSTDs in SACAA FSTD (A) and for helicopters in SACAA FSTD (H).

The South African Civil Aviation Authority, on 3 February 2011, adopted the SACAA-FSTD A as a basic harmonization of the JAR-FSTD A and the FAA Part 60 for the Qualification of FSTD's according to the Qualification Criteria used for the Initial Qualification of the FSTD in South Africa. SACAA FSTD (H) was adopted in late 2012.

The content of FSTD (A) and (H) had been prepared using the expertise available in this field as well as the ICAO Document 9625, the "Manual for the Qualification of Flight Simulators" and added to using existing JAR-FSTD A regulations and the Federal Aviation Requirements of the United States of America, where acceptable.

SACAA-FSTD (A) and (H) were issued with no Variants, however, it was agreed that the SACAA FSTD (A) and (H) should be applied in practice and the lessons learned embodied in future amendments. The SACAA is therefore committed to early amendment in light of experience.

Guidance on "GRANDFATHERED" rights were sourced from Section 2.15 of ICAO DOC 9625 page II-2-14.

2.15.1 The regulatory standards for the qualification of FSTDs will continue to develop to cater for: changing training needs; data revisions; relocations; the introduction of new equipment, procedures and technologies; and mandated measures to address safety issues. The introduction of changes to the regulatory standards should not necessarily result in making existing qualified FSTDs obsolete. To enable accredited training to continue on them, "grandfathering" of the qualification should be applied. This allows continued training on the device provided it continues to meet the qualification standard achieved at its initial qualification.

2.15.2 When CAA's implement these technical requirements into their regulations they should make provisions for the grandfathering of FSTDs that are in existence, on order, or under development. In addition, the regulations should include provisions to retroactively mandate certain updates that are considered important for aviation safety.

Grandfather Rights, for aeroplanes, are regulated in terms of SACAA FSTD (A) A.035 to A.40. Grandfather Rights is the industry acronym given to a FSTD which no longer meets the qualification requirements of changed standards when implemented by an authority. The original qualification, for example: "Level D" is then followed by the letter "G" in brackets, for example: Level D (G). This allows a FSTD device that cannot be upgraded to a new technical specification standard to continue to be operated for the purpose it was originally designed without duress by the operator.

Grandfather Rights awarded to a specific FSTD are lost if the FSTD is moved or sold. Grandfather Rights may also not be transferred from one authority to another. An authority may at its own discretion decide if Grandfather Rights may continue to be awarded to a device moved or sold, but which still remains under the oversight of the authority.

All FSTD devices currently operated in South Africa must be qualified in terms of SACAA FSTD (A) and (H) and licences and ratings are issued in terms of credits allowable by Document SA-CATS 60.

A foreign authority may decide to qualify the device of another country, however, training and testing may not be conducted on that particular device for the issue of a SA Licence or Rating if the standard is lower than FSTD (A). By example, if South Africa qualifies a particular device as a Level C device, which means that an applicant for an aircraft type rating will have to carry out a number of flight exercises in the actual aircraft as well as the FSTD in order to obtain the rating, whilst a person undergoing training in a Level D may find it possible to carry out all aspects of training in the FSTD in order to obtain the rating. A FSTD originally qualified as Level D, but granted Grandfather Rights (G) when no longer meeting the standard, when sold, will lose its Grandfather Rights and will possibly only be awarded a level C or lower qualification.

4. Safety Risk

The SACAA has conducted an internal investigation of FSTD qualification files and has found that in some cases an inappropriate qualification was awarded to a FSTD by granting Grandfather Rights.

It has also been found that inappropriate training credits and testing for type ratings as well as pilot proficiency checking had been awarded to devices that did not meet the specifications of ICAO Document 9625.

Since 2011, a number of licences and ratings have been inappropriately issued due to the incorrect qualification awarded to the device. A number of AOC holders are conducting proficiency checking on devices which are not qualified to do so.

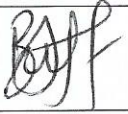
The SACAA has also found that some foreign authorities have also qualified some devices inappropriately within the borders of South Africa.

Using the IATA Safety Management Risk Matrix, the probability of occurrence is frequent (Value 5) in that it is likely to occur many times or has occurred frequently. The severity of the occurrence is hazardous (Value - B) in that there is a large reduction in safety margins, physical distress or workload such that operators cannot be relied upon to perform their tasks accurately or completely. The risk value is therefore 5B and the assessment is that it is therefore unacceptable under the existing circumstances.

The consequences of not taking appropriate action could be the failure to recognise ratings granted as a result of the training conducted on these devices as well non-compliance with Part 121 in terms of proficiency checking. Added to this is the high risk of an accident occurring with hull loss and extensive loss of life.

5. Decision by the Director of Civil Aviation

- a. Grandfather Rights. Inappropriate grandfather right qualifications awarded to a FSTD are to be withdrawn with immediate effect. Affected devices shall be requalified against SACAA FSTD (A) or (H) as appropriate.
- b. Training Credits. Inappropriate training credits awarded to devices that are in conflict with ICAO Document 9625 are withdrawn with immediate effect and Training Credits for FSTDs are to be published in SA-CATS 60 that are aligned to ICAO Document 9625.
- c. Inappropriate Foreign Qualification. Where a foreign authority has awarded an inappropriate qualification in contravention of ICAO Document 9625, then that authority shall be informed of the situation in order to correct the error.

Issued by the South African Civil Aviation Authority (SACAA)		
	POPPY KHOZA	18 February 2019
SIGNATURE OF DIRECTOR OF CIVIL AVIATION	NAME IN BLOCK LETTERS	DATE