

	<p style="text-align: center;">TANZANIA CIVIL AVIATION AUTHORITY AIR NAVIGATION SERVICES INSPECTORATE</p>	<p style="text-align: right;">Revision: 1</p>
<p>Document No: TCAA/QSP/SR/AC/ANS - 22</p>	<p>Title: Training Programme for Instrument Flight Procedure Design staff</p>	<p style="text-align: right;">Page 1 of 4</p>

1.0 PURPOSE

- 1.1. Under Regulation 18(c) of the Civil Aviation (Certification of Air Navigation Service Providers) Regulations 2017, an Air Navigation Services Provider (ANSP) shall not engage personnel in the design or publishing of visual and instrument flight procedures for use in designated airspaces and aerodromes unless they have completed approved training
- 1.2. The ANSP shall develop and implement training programmes for all personnel involved in the development and publishing of flight procedures basing on the guidelines in this advisory circular
- 1.3. Guidance to personnel involved in the construction of procedures is contained in TCAA/QSP/SR/AC/ANS-06.

2.0 REFERENCES.

- 2.1 Tanzania Civil Aviation (Construction of Visual and Instrument Flight Procedures) Regulations, 2017.
- 2.2 Doc 8168 - OPS/611 Aircraft Operations;

3.0 GUIDANCE AND PROCEDURES

3.1 General

- 3.1.1 Approaches and departures are the most critical phases of flight considering that the aircraft is operated in close proximity to obstacles at low speeds and in some cases in adverse weather conditions. The need to develop procedures to facilitate a safe transfer of flight from en-route to landing and departure to en-route cannot be overemphasized.
- 3.1.2 The Authority is hereby recommending a systematic approach in the provision of training to personnel engaged in procedure design in order to ensure flight safety and uniformity in both design and approval of the procedures.

3.2 Categories of personnel to be trained

- 3.2.1 The following categories of personnel are covered by this circular

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- a) Flight procedure designers
- b) Cartographers
- c) Flight procedure inspectors

3.2.2 Flight check for approval requires that the procedure be flown by a competent pilot specifically for that purpose.

3.3 Approved training organizations

3.3.1 A number of organizations provide training in flight procedure design. An ANSP shall request the Authority to approve training organizations intended for the provision of training.

3.3.2 The ANSP shall meet the costs of approval.

3.4 Requirements for training

3.4.1 Basic flight procedure design training

3.4.1.1 Basic flight procedure design shall be provided to all personnel to be involved in the design, development, drawing and flight inspection. The training should provide participants with basic skills to develop non-precision approach and departure procedures using the ICAO PANS-OPS Doc 8168 criteria.

3.4.1.2 The training will form a foundation for progression in the areas of specialization for each individual.

3.4.2 Specialized training

3.4.2.1 Flight procedure design is a wide discipline and it is not practicable for an individual to cover all aspects of the subject. The ANSP needs to identify individual talents and provide specialized training as follows;

- a) Precision approach procedures
- b) RNAV and RNP procedures
- c) Quality control in flight procedure design
- d) Flight procedures inspection

3.4.3 On-the-Job Training

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3.4.3.1 The ANSP shall ensure that performance based OJT programmes involving designing, developing, drawing and flight inspection of procedures are conducted before any individual can be approved to carry out specified duties.

3.4.3.2 The ANSP shall engage qualified OJT instructors to carry out specialized training in the field.

3.4.4 Refresher training

3.4.4.1 The technology employed in developing procedures as well as the airborne and space based system used in navigation are in a constant state of evolution. To cope with changing technology and operating procedures, it is necessary that the ANSP provide personnel with courses of instruction designed to bring knowledge and skills up to date.

3.4.4.2 Refresher courses may range from in-house to fully fledged training in specialized training organizations.

3.4.5 Recurrent training

3.4.5.1 Considering the level of activities in an organization, it might not be cost effective to establish a fully fledged flight procedure design unit. The personnel will only be called when a need to develop new procedures or review existing once is identified.

3.4.5.2 Recurrent training will be provided to ensure that the procedure designers remain current and that there is no need to retrain personnel following a long period of not practicing.

3.5 Training records

3.5.1 The ANSP shall ensure that training records, including OJT are properly kept for inspection by the CAA as may be required.

3.5.2 The training records shall include certificates, OJT tasks performed and any other documents related to training and approval of jobs performed.

3.6 Requirement for approved curriculum

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3.6.1 The ANSP shall develop training curricula for all types of training as required by this circular.

3.6.2 The curricula shall be approved by the Authority.



Tanzania Civil Aviation Authority