

	<b>TANZANIA CIVIL AVIATION AUTHORITY</b> DIRECTORATE OF SAFETY REGULATIONS AIR NAVIGATION INSPECTORATE	Revision: 3 <b>Advisory Circular</b>
Document No.: TCAA/QSP/SR/AC/ANI - 10	<b>Title: Job Descriptions for Technical Staff Providing Meteorological Services for Air Navigation</b>	Page 1 of 4

## 1.0 PURPOSE

- 1.1 The purpose of this Advisory Circular is to guide Aeronautical Meteorological Service Providers (AMSP) in developing job descriptions for technical staff providing meteorological services for air navigation.
- 1.2 This Advisory Circular provides guidelines to ensure Job Descriptions for the Technical Staff are aligned to the overall objectives, functions and activities of Meteorological Services described in Civil Aviation (Meteorological Service for Air Navigation) Regulations, 2017

## 2.0 REFERENCES

- 2.1 The civil aviation (Meteorological Services for International air Navigation), Regulations 2017.
- 2.2 The Civil Aviation (Meteorological Service for International Air Navigation) (Amendment) Regulations, 2023
- 2.3 ICAO DOC. 8896; Manual of Aeronautical Meteorological Practice
- 2.4 Technical Regulations (WMO No.49), Volume I — General Meteorological Standards and Recommended Practices, Part V — Qualifications and Competencies of Personnel Involved in the Provision of Meteorological (Weather and Climate) and Hydrological Services.

## 3.0 INTRODUCTION

- 3.1 Meteorological services shall be provided for the safety, regularity and efficiency of air navigation. This is achieved by supplying users with meteorological information necessary for the performance of their respective functions. The Authority shall determine the type of meteorological services which will be provided to meet the needs of air navigation including areas over the high seas in the Flight Information Region.
- 3.2 The Civil Aviation (Meteorological Services for International air Navigation), Regulations 2017(as amended), requires the Authority to designate a service provider to provide meteorological services for air navigation and prescribes rules, requirements, procedures or standards of designation of such service provider. The regulations further require that the services provided by the designated service provider be in accordance with conditions prescribed by the Authority.
- 3.3 The Civil Aviation (Meteorological Service for Air Navigation) Regulations, 2017. (as amended) requires that the designated Meteorological Services provider to:
  - i) comply with the requirements of the World Meteorological Organization (WMO) in respect of qualifications, competences, education and training of Meteorological Personnel providing service for Air Navigation and any other requirements as may be prescribed by the Authority.

- ii) establish a procedure to assess the competency of personnel authorized to install Meteorological facility for operational use and to perform Meteorological Services; and
- iii) Maintain the competence of the personnel authorized to provide the services through periodic competence assessments.

#### **4.0 FUNCTIONS AND ACTIVITIES OF METEOROLOGICAL SERVICES FOR AIR NAVIGATION**

- 4.1 In order to meet the objectives of Meteorological Services for Air Navigation, the designated Meteorological Authority shall establish and implement a properly organized Quality System comprising procedures, processes and resources necessary for the timely provision of Meteorological Information.
- 4.2 The designated Meteorological Authority shall in this regard establish one or more Aerodrome and/or other Meteorological offices which shall be adequate for the provision of Meteorological Services required to satisfy the needs of Air Navigation.
- 4.3 The designated Meteorological Authority shall develop Job Descriptions for Technical Staff providing Meteorological Services for Air Navigation in order to ensure that their functions and activities are aligned to the requirements the Civil Aviation (Meteorological Services for Air Navigation) Regulations, 2017 (as amended)

#### **5.0 JOB DESCRIPTIONS OF METEOROLOGICAL TECHNICAL STAFF**

- 5.1 Job description for Aeronautical Meteorological Forecaster
  - The Aeronautical Meteorological Forecaster shall be responsible for the following;
  - 5.1.1 Develop and review operational manual and procedures for implementation of the requirements for meteorological services for air navigation
  - 5.1.2 Prepare and disseminate Terminal Aerodrome Forecasts (TAF) in accordance with the regulatory requirements.
  - 5.1.3 Prepare and/or obtain forecasts and other relevant information for flights; the extent of responsibility to prepare forecasts shall be related to the local availability and use of en-route and aerodrome materials received from other offices;
  - 5.1.4 Prepare and/or obtain forecast of aeronautical meteorological phenomena and parameters of significance to aviation local meteorological conditions;
  - 5.1.5 Maintaining a continuous survey of meteorological conditions and project their expected changes over time in the United Republic of Tanzania airspace and around the aerodromes.
  - 5.1.6 Prepare and/or obtain warnings and alerts of meteorological phenomena that are hazardous to safe operations of aircrafts (such as wind shear and turbulence) in the vicinity of the aerodromes.
  - 5.1.7 Provide briefing, consultation and flight documentation to flight crew members and/or other flight operations personnel;
  - 5.1.8 Maintain the quality of meteorological information and services provided to support safety of air navigation;

- 5.1.9 Exchange meteorological information with another aerodrome meteorological offices;
- 5.1.10 Supply information received on pre-eruption volcanic activity, volcanic eruption or volcanic ash cloud to the ATS Units, AIS Units and Meteorological Watch Offices.
- 5.1.11 Supply information received concerning the accidental release of radioactive materials into the atmosphere within his/her area of responsibility to the air traffic services providers for dissemination
- 5.1.12 Maintain watch of meteorological conditions affecting flight operations within the United Republic of Tanzania FIR.
- 5.1.13 Prepare and/or obtain SIGMET and other information relating to United Republic of Tanzania airspace
- 5.1.14 Supply SIGMET information and, as required, other meteorological information to associated air traffic services units, aeronautical information services and operators.
- 5.1.15 Prepare and disseminate wind shear and aerodrome warnings in accordance with regulatory requirements.
- 5.1.16 Preparation and dissemination of climatological summaries and tables for the different aerodromes.

5.2 Job description for Aeronautical Meteorological Observer

The Aeronautical Meteorological Observer shall be responsible for the following.

- 5.2.1 Conduct surface meteorological observations; observe and record the parameters that make up a meteorological message; encode the observations in the standard format; transmit coded information.
- 5.2.2 Conduct the aerodrome continuous weather watch by analysing weather in the local area and be in a position to identify probable significant changes in weather at the aerodrome station; know and understand the region-specific weather phenomena; be aware of likely weather sequences that are expected to affect the aerodrome
- 5.2.3 Make and disseminate aeronautical weather observations in accordance with the Civil Aviation (Meteorological Services for Air Navigation) Regulations, 2017 (as amended) and WMO requirements.
- 5.2.4 Identify and report weather conditions hazardous to aviation.
- 5.2.5 Maintaining continuous observations of the weather situation over the aerodrome and its vicinity.
- 5.2.6 Receive and prepare for use the routine and special aircraft observation reports from the air traffic control centre.
- 5.2.7 Prepare and disseminate local routine and special meteorological reports; METARS and SPECI for the aerodrome concerned.
- 5.2.8 Ensure the quality of system performance and of meteorological information supplied to aviation users;
- 5.2.9 Communicate meteorological information to internal and external users.

5.2.10 Assist the aeronautical meteorological forecaster in their daily operations of effectively providing aeronautical meteorological service.

5.3 Job description for Meteorological Instrument Technicians/Officers

The Meteorological Instrument Technician/Officer shall be responsible for the following:

- 5.3.1 Installation of all Meteorological instruments required for measuring and recording weather parameters of significance to aviation operations in accordance with regulatory requirements;
- 5.3.2 Maintenance of aeronautical meteorological stations at aerodromes by ensuring that routine checks are conducted as scheduled.
- 5.3.3 Conduct regular calibration of aeronautical meteorological instruments and facilities at the aerodrome meteorological stations and offices.
- 5.3.4 Train users of the meteorological instruments and facilities on proper operational use of all installations and facilities at the aerodrome meteorological stations and offices.
- 5.3.5 Install, maintain and configure the aeronautical meteorological information system to ensure management, reception and dissemination of meteorological data, information and services to internal and external users.
- 5.3.6 Install and maintain communication facilities to enable internal and external communication between the meteorological service provider and all its relevant stakeholders.



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**Tanzania Civil Aviation Authority**