UGANDA

ADVISORY CIRCULAR

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GUIDANCE ON DEVELOPMENT OF JOB DESCRIPTION FOR TECHNICAL STAFF PROVIDING METEOROLOGICAL SERVICES FOR AIR NAVIGATION

1.0 PURPOSE

1.1 The purpose of this Advisory Circular is to guide the Meteorological Service Provider (MSP) 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 in accordance with Regulation 7(d) of the Civil Aviation (Meteorological Services for Air Navigation) Regulations, 2022.

2.0 REFERENCES

2.1 The Civil Aviation (Meteorological Services for Air Navigation) Regulations, 2022.
2.2 The Civil Aviation (Certification of Air Navigation Services) Regulations, 2022
2.3 ICAO DOC. 8896; Manual of Aeronautical Meteorological Practice.
2.4 WMO Technical Regulations (Doc-No.49) Vol I - General Meteorological Standards and Recommended Practices

3.0 GUIDANCE AND PROCEDURES

3.1 Job descriptions of Technical Staff Providing Aeronautical Meteorological Services

The meteorological service provider shall ensure that the duties and responsibilities of Meteorological Technical Staff providing meteorological services for air navigation, takes into consideration the area of responsibility; the impact of meteorological phenomena and parameters on aviation operations; aviation user requirements; national regulations and other relevant procedures issued by the authority from time to time.

The Technical staff shall be of four categories as follows; Aeronautical Meteorological Forecaster, Aeronautical Meteorological Observer, Aeronautical Meteorological Communication Personnel and Meteorological Instrument Technician.

3.1.1 Job description for Aeronautical Meteorological Forecaster

3.1.1.1 Job purpose

(a) Carry out efficient and effective provision of Meteorological Services for air navigation by ensuring compliance with National and International aviation regulations and standards;
(b) Develop operational manuals and procedures to enable effective implementation of Civil Aviation Regulations;
(c) Ensure that meteorological services for air navigation are provided for the safety, regularity and efficiency of air navigation by supplying users with meteorological information necessary for the performance of their respective functions.
(d) Demonstrate effective understanding of Meteorological facilities available at aerodromes and forecast offices.

3.1.1.2 Principal Responsibilities

The principal responsibilities of aeronautical meteorological forecaster should include, but not limited to the following;

(a) Developing and reviewing operational manual and procedures for implementation of the requirements for meteorological services for air navigation
(b) Preparing and/or obtaining 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;
(c) Maintaining a continuous survey of meteorological conditions and projecting their expected changes over time in the Uganda airspace and around the vicinity of the aerodromes.
(d) Preparing and/or obtaining 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 and the Ugandan airspace.
(e) Providing briefing, consultation and flight documentation to flight crew members and/or other flight operations personnel;
(f) Maintaining the quality of meteorological information and services provided to support safety of air navigation;
(g) Exchanging meteorological information with other aerodrome meteorological offices;
(h) Supplying information received on pre-eruption volcanic activity, volcanic eruption or volcanic ash cloud to the ATS Units, AIS Units and Meteorological Watch Offices.
(i) Supplying 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
(j) Maintaining watch of meteorological conditions affecting flight operations within Ugandan airspace.
(k) Preparing and/or obtaining SIGMET and other information relating to Uganda airspace and supplying SIGMET information, as required to associated air traffic services units, aeronautical information services and operators.
(l) Preparation and dissemination of climatological summaries and tables for the different aerodromes.

3.1.2 Job description for Aeronautical Meteorological Observer

3.1.2.1 Job purpose

(a) An aeronautical meteorological observer is required to constantly monitor the meteorological conditions at the aerodrome and its vicinity; and to have skills and knowledge in the use of aviation specific codes and practices as well as understanding of the impact of their observations on aviation operations as required by the Civil Aviation (Meteorological Services for Air Navigation) Regulations, 2022.
(b) An aeronautical meteorological observer is required to distribute meteorological data and information to users; and issuance of routine and non-routine reports in accordance with prescribed standards in the Civil Aviation Regulations.

(c) Demonstrate knowledge of Meteorological Observation facilities available at aerodromes and aerodrome meteorological offices.

3.1.2.2 Principal Responsibilities

The principal responsibilities Meteorological Observer should include, but not limited to the following;

(a) Conducting surface meteorological observations and recording of weather parameters that make up a meteorological message; encode the observations in the standard format and transmit coded information to relevant stakeholders.
(b) Conducting 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
(c) Making and disseminating aeronautical weather observations in accordance with the Civil Aviation (Meteorological Services for Air Navigation) Regulations, 2022 and WMO requirements.
(d) Identifying and reporting weather conditions hazardous to aviation and their likely impact on aircraft operations and procedures.
(e) Maintaining continuous observations of the weather situation over the aerodrome and its vicinity.
(f) Observe, measure and record meteorological phenomena and parameters that are of significance to aviation operations;
(g) Receiving and preparing for use the routine and special aircraft observation reports from the air traffic control centre.
(h) Preparing and disseminating routine and special meteorological reports for the aerodrome concerned.
(i) Ensure the quality of system performance and of meteorological information supplied to aviation users;
(j) Communicate meteorological information to internal and external users.
(k) Assisting the aeronautical meteorological forecaster in their daily operations of effectively providing aeronautical meteorological service.

3.1.3 Job description for Aeronautical Meteorological Communication Personnel

3.1.3.1 Job purpose

(a) Meteorological Communication personnel are required to distribute aeronautical meteorological data to users and ensure that the data is disseminated without delay and in a format that enables an easy interpretation and application to aviation operations without compromising quality and integrity of data.
(b) Ensure availability of telecommunications infrastructure for rapid dissemination of meteorological data and messages between the meteorological offices and all users both on and off the aerodrome in accordance with prescribed standards in the Civil Aviation Regulations.

3.2.3.2 Principal Responsibilities

The Meteorological Communication Personnel shall be responsible for, but not limited to the following;

(a) Ensuring adherence to communications protocols in dissemination of all essential data at National Meteorological Centre (NMC).
(b) Ensuring that aeronautical meteorological data and information from all observatories across the country are received, edited and transmitted to all relevant users and on to the Aeronautical Fixed Telecommunication Network (AFTN) for International use.
(c) Conducting regular sorting and key entry of all relevant aeronautical meteorological data before dissemination to users.
(d) Ensuring aeronautical meteorological data is exchanged within aerodrome meteorological stations across the country.

(e) Implementing procedures that guarantees the quality of aeronautical meteorological data, messages and reports is achieved through screening faulty reports and where possible, correcting the errors by ascertaining that telecommunication facilities and other equipment used in disseminating meteorological data to the users have functional quality controls.
(f) Ensuring that data requirements from the AFTN and Global Telecommunication System (GTS) users are met in a timely manner.
(g) Monitoring quality of internet connectivity, radio reception and modem performance and liaising with engineering section for correction action in case of faults and defects to the communication lines.
(h) Ensuring that the Aeronautical Fixed Telecommunication Network (AFTN) is serviceable at all times and report any defects to the Engineering section.

3.1.4 Job description for Meteorological Instrument Technician

3.2.4.1 Job purpose

Carry out installation, maintenance and calibration of all meteorological instruments required for measuring and recording weather parameters of significance to aviation operations in accordance with the specifications provided by the Civil Aviation (Meteorological Services for Air Navigation) Regulations, 2022.

3.2.4.4 Principal Responsibilities

The Meteorological Instrument Technician should be responsible for, but not limited to the following;

(a) Installation of all Meteorological instruments required for measuring and recording weather parameters of significance to aviation operations in accordance with the specifications provided by the Civil Aviation (Meteorological Services for Air Navigation) Regulations, 2022;
(b) Maintenance of aeronautical meteorological stations at aerodromes by ensuring that routine checks are conducted as scheduled.
(c) Conduct regular calibration of aeronautical meteorological instruments and facilities at the aerodrome meteorological stations and offices.
(d) Train users of the meteorological instruments and facilities on proper operational use of all installations and facilities at the aerodrome meteorological stations and offices.
(e) 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.
(f) Install and maintain communication facilities to enable internal and external communication between the meteorological service provider and all its relevant stakeholders.
(g) Ensuring that all meteorological equipment and facilities available at aerodromes are properly used in provision of meteorological services for air navigation.

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