

**FATIGUE MANAGEMENT PROGRAMME
FOR AIR TRAFFIC CONTROLLERS**

Purpose— This AC provides guidance to demonstrate compliance with, and information related to requirements on the establishment of a fatigue management programme for air traffic controllers.

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SECTION 1: GENERAL

1.1. STATUS OF THIS ADVISORY CIRCULAR

This is the first edition of this advisory circular.

1.2. BACKGROUND

Advisory Circulars (ACs) are issued by Rwanda Civil Aviation Authority (RCAA) to provide practical guidance or certainty in respect of the statutory requirements for aviation safety. ACs contain information about standards, practices and procedures acceptable to RCAA. An AC may be used to demonstrate compliance with a statutory requirement.

1.3. APPLICABILITY

This AC is applicable to the ATS Provider operating in accordance with the Aviation regulations provided by RCAA.

1.4. RELATED REGULATIONS

The following regulations are directly applicable to the guidance contained in this Advisory circular –

- ◆ RCAR Part 22, Air Traffic Services.

1.5. RELATED READING MATERIAL

For further information on this topic, organizations are advised to review the following publications and regulatory requirements—

- 1) Rwanda Civil Aviation Authority (RCAA)
 - ◆ Rwanda Civil Aviation Regulation Part 22
- 2) International Civil Aviation Organization (ICAO)
 - ◆ Annex 11 – Air Traffic Services
 - ◆ Manual for the Oversight of Fatigue Management Approaches (Doc 9966)

SECTION 2: ACRONYMS

The following acronyms and abbreviations are used in this advisory circular—

- 1) **AC** – Advisory Circular
- 2) **ATS** – Air Traffic Services
- 3) **RCAR** – Rwanda Civil Aviation Regulations
- 4) **FMP** – Fatigue Management Programme
- 5) **RCAA** – Rwanda Civil Aviation Authority
- 6) **ATCO** – Air Traffic Controller
- 7) **RCAR** – Rwanda Civil Aviation Regulations
- 8) **ICAO** - International Civil Aviation Organization (ICAO)

SECTION 3: FATIGUE MANAGEMENT

3.2. This AC provides guidance and information to the ATS provider on the development of a fatigue management programme (FMP) in accordance with paragraph 22.145 of the RCAR part.

3.3. The ATS provider should note that a fatigue-related risk should be managed using the safety management system.

SECTION 4: ROSTERING AND MONITORING PROCESS

4.2. For the purpose of demonstrating compliance with the approved scheduling limits, the ATS provider should:

- (a) implement a rostering system that will plan an air traffic controller (ATCO) roster based on the scheduling limits in the FMP and track the ATCO's actual deployment;
- (b) establish a back-up means of tracking to ensure continuity in rostering and monitoring;
and
- (c) submit a monthly report to the ATS inspector, which includes a summary of any instances of deviation from the approved scheduling limits with the following details:
 - (i) Name of the ATCO;
 - (ii) Stream of the ATCO;

- (iii) Date of the deviation; and
- (iv) Scheduling limit(s) that was deviated.

(d) provide evidence of compliance with prescriptive limits, records will be kept for (3) months of the duties performed and non-duty periods achieved so as to facilitate inspection by the service's authorized personnel and audit by the authority.

ATCO Roster

4.3. The roster should be published sufficiently in advance and to provide ATCOs the opportunity to plan adequate rest and to minimize late changes to the roster.

4.4. When the ATS provider permits for the ATCO to swap duties, procedures should be established to ensure that the scheduling limits are not exceeded.

4.5. The roster should put in consideration the cumulative effects of undertaking long duty hours interspersed with minimum non-work periods, and of avoiding rosters that result in the serious disruption of an established pattern of working and sleeping.

4.6. In order to avoid any detriment to an ATCO's performance, adequate drinking water should be provided in control rooms and opportunities to consume a meal must be arranged when the duty period exceeds 6 hours.

4.7. The service provider should not require an ATCO to undertake any safety related task if it is known or suspected that the ATCO is fatigued to the extent that safety may be adversely affected.

Actual deployment under certain operation circumstances

4.8. The ATS Provider may include in the FMP the types of operational circumstances under which an ATCO may be deployed based on the following two limits:

4.8.1. The number of consecutive work days may be extended from 6 to 7 days, where there must be a minimum interval of 48 hours between the end of one consecutive period of duty days and the next;

4.8.2. The minimum duration of a non-duty period (between the end of one duty period and the start of the next duty period) of each ATCO may be reduced from 10 hours to 9 hours.

SECTION 5: DEVIATION FROM SCHEDULING LIMITS

5.1. The ATS Provider should implement procedures to exercise discretion to deviate from the approved scheduling limits to address any additional risks associated with unforeseen operational circumstances. The procedures should include the following:

- (a) Scenarios to exercise discretion to deviate from the scheduling limits in the FMP;
- (b) Roles and responsibilities of the relevant personnel;
- (c) Identification of fatigue-related risks and their appropriate mitigations; and
- (d) Notification to the ATS inspector as required.

SECTION 6: VARIATION TO ADDRESS STRATEGIC OPERATIONAL NEEDS

6.1. The ATS provider should include procedures in the FMP for seeking approval from the ATS inspector to vary the scheduling limits to address strategic operational needs and that any associated risk will be managed to attain at least an equivalent level of safety. The procedures should include the following:

- (a) situations for seeking a variation;
- (b) methodology used to carry out the risk assessment to demonstrate that any associated risk will be managed to attain an equivalent level of safety;
- (c) documentation and recording of the variation;
- (d) service provider's capability to allow continued monitoring through existing SMS activities; and
- (e) personnel or appointment holder responsible for seeking the approval.

6.2. The ATS provider should submit the application to vary a scheduling limit to the ATS inspector at least 3 weeks (or a shorter timeframe as agreed by the ATS inspector) prior to the planned commencement of the variation.

SECTION 7: TRAINING ON FATIGUE MANAGEMENT

- 7.1. The ATS provider should provide fatigue management training to familiarize the ATCOs and relevant personnel with the principles of fatigue management and ATS provider’s policies on fatigue management. Such training should be developed based on scientific principles and cover the effects of sleep loss or extended wakefulness, circadian phase, or workload (mental or physical activity) that can impair an ATCO’s alertness and ability to perform safely.
- 7.2. The ATS provider should keep such training records accordingly.



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DIRECTOR FLIGHT SAFETY SERVICES
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