

## AERONAUTICAL CIRCULAR CIVIL AVIATION AUTHORITY – MACAO, CHINA

**SUBJECT:** *Scheme of Working Hours of Air Traffic Controllers*

**EFFECTIVE DATE:**

31 May 2019

**CANCELLATION:**

AC/ATS/001R00

**GENERAL:**

The President of Civil Aviation Authority – Macao, China, in exercise of his power under Paragraph 89 of the Air Navigation Regulation of Macao (ANRM) and Article 35 of the Statutes of Civil Aviation Authority, approved by the Decree-Law 10/91/M, established this AC.

### **1 Purpose**

The purpose of this Scheme of Working Hours of Air Traffic Controllers is to ensure, so far as reasonably possible, that the controller fatigue is mitigated and thereby the safe and efficient ATC service can be provided to all aircraft operating within Macao aerodrome traffic zone.

### **2 Scope**

The requirements described in this document apply to all air traffic controller license holders working at the ATC Tower of Macau International Airport.

### **3 Definitions**

#### **3.1 Period of duty**

The period during which the Macao Air Traffic Controller License holder is required to carry out any task associated with the ATC service provider, includes breaks and any extension of duty.

### 3.2 Operational duty

The period during which an air traffic controller is actually exercising the privileges of the controller's license at operational positions.

### 3.3 Night duty

A period of duty of not less than four hours between 2200 hours and 0700 hours next following in local time.

### 3.4 Standby duty

A period during which, by prior arrangement, a controller is required to be available to report at Macao ATC Tower with the intention of providing an air traffic control service. Standby duty is calculated at half period of duty time.

### 3.5 Break period

The period during which an air traffic controller is free of any duty from ATC service provider within a period of duty.

### 3.6 Rest area and facilities

The minimum rest facilities should consist of a separate room, which is remote from the operations room and reasonably quiet. There should be sufficient and adequate furniture for the number of staff likely to be on a fatigue break at one time.

## 4 Limitations

### 4.1 Maximum period of duty

No period of duty shall exceed 10 hours. Within 720 consecutive hours (30 days) the aggregate of periods of duty and standby duties shall not exceed 300 hours provided that periods of duty do not exceed 200 hours.

### 4.2 Maximum period of duty during Typhoon

During typhoon periods with signal No.8 or above being hoisted, the maximum period of duty can be extended up to 15 hours, provided that:

- a) The air traffic controller shall have one consecutive break period not less than the time being extended from the maximum period of duty prescribed in paragraph 4.1;
- b) Proper rest area and facilities are provided to the air traffic controllers; and
- c) The air traffic controller shall not extend his/her period of duty at any time if he/she does not feel fit to do so.

#### 4.3 Intervals between periods of duty

There shall be an interval of not less than 12 hours period of duty. Within 720 consecutive hours (30 days) there shall be not fewer than three intervals of a minimum of 60 hours each between the conclusion of one period of duty and the commencement of the next period of duty.

#### 4.4 Limit on and interval following consecutive periods of duty

Upon the conclusion of six consecutive periods of duty within 144 consecutive hours (6 days), or upon consecutive periods of duty within 144 consecutive hours (6 days) reaching a total of 50 hours, whichever is the earlier, there shall be an interval of a minimum of 60 hours before the commencement of the next period of duty.

#### 4.5 Limits on night duties

Not more than two night duties may be worked in immediate succession.

#### 4.6 Interval after night duties

Upon the conclusion of two night duties in immediate succession, there shall be an interval of a minimum of 54 hours before the commencement of the next period of duty.

#### 4.7 Reduction of intervals for handover

In this scheme where an interval of a minimum of 60 hours or 54 hours between periods of duty is stipulated, that interval may be reduced by up to 30 minutes solely for the purpose of orderly shift handover.

#### 4.8 Adjustment of workload in operational duty

No operational duty shall exceed a period of two hours without changing operational positions except for the supervisor position. The period on

operational position should be adjusted to avoid the performance degradation concerning the traffic volume and complexity. Although this period may be adjusted to reflect intensity of workload, a period on operational position beyond four hours is prohibited. The air traffic controller / supervisor is considered to be providing an air traffic control service when he / she is supervising a trainee air traffic controller who is working at an operational position.

## **5 Modification of limitations**

The Civil Aviation Authority – Macao, China (AACM) may in its discretion modify any Limitation. Modifications may be made as a requirement of the AACM or in exceptional or extraordinary circumstances on the application of the ATC service provider.

In exercising its discretion to make or grant a modification, the AACM shall have regard to:

- a) The amount, type and complexity of recent and anticipated traffic handled by the position concerned.
- b) The published operational hours of Macao ATC Tower.
- c) The pattern of shifts in operation at the time of any shift involved.
- d) The qualifications and availability of support and supervisory staff.
- e) Exceptional temporary staffing problems.
- f) The equipment in use at the Macao ATC Tower.
- g) Exceptional temporary equipment problems.
- h) The type of operating position at Macao ATC Tower.
- i) Factors which may compensate for or benefits which may arise from any modification.
- j) Such other matters as the AACM considers to be relevant.

## **6 Report of Non-Compliance**

The ATC service provider is required to report the circumstances of each non-compliance of Scheme of Working Hours of Air Traffic Controllers. For this purpose a notification shall be submitted to the AACM within 24 hours of the non-compliance occurred, using form ATC/GEN/001 - Report of Non-Compliance of Scheme of Working Hours of Air Traffic Controllers and the form can be found in Appendix 1. A subsequent report with further details of the non-compliance (including all

justifications, corrective & preventive actions) shall be submitted to the AACM within 2 weeks of the non-compliance occurred.

## **7 Notification of roster details**

Upon the request of the AACM, the ATC service provider shall supply the details of a roster as actually worked including records of the periods of duty worked not later than 30 days after receiving the request.

- *END* -

## REPORT OF NON-COMPLIANCE OF SCHEME OF WORKING HOURS OF AIR TRAFFIC CONTROLLERS

<b>1. DUTY CONTROLLER DETAILS</b>	
Controller name:	Shift:
On duty as	Working Position(s):
Start time of shift:	Actual finish of shift:
Breach details – AC/ATS/001 reference(s):	
NARRATIVE (Give additional relevant information):	
<div style="text-align: right;">Date and Sign:</div>	

2. ATC SUPERVISOR REPORT	
NARRATIVE (Give reasons for the non-compliance):          	
Name of ATC Supervisor:	Date and Sign:

3. MANAGEMENT ACTION	
NARRATIVE (Give details for the follow-up action):	
<div style="display: flex; justify-content: space-between; margin-top: 100px;"> <div>Name of Manager and Title:</div> <div>Date and Sign:</div> </div>	

<b>4. SUBMISSION INSTRUCTIONS</b>
After completion please submit to the AACM within 24 hours of the non-compliance occurred.