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NOISE ABATEMENT PROCEDURES AT MUSCAT INTERNATIONAL AIRPORT

1- Introduction

- 1.1** The way aircraft are operated in day-to-day operations may present impacts in terms of the noise that reaches the ground. ICAO provides guidelines on the development and standardization of low noise operational procedures that are safe and cost-effective. The possibilities include noise preferential runways and routes and noise abatement procedures for take-off and landing.
- 1.2** The procedures below are intended to prevent excessive noise on and around the Muscat international airport. As the pilots' contribution is essential for reaching the aim of the conceived noise abatement procedures, they are highly requested to stick to these procedures aiming at reducing the embarrassment due to the airplanes' noise around the airport.
- 1.3** Aeroplane operating procedures must ensure that the necessary safety of flight operations is maintained while minimizing exposure to noise on the ground.

2- Take-off procedures:

The intention of this procedure is to provide noise reduction for noise sensitive areas in close proximity to the departure end of the runway in use.

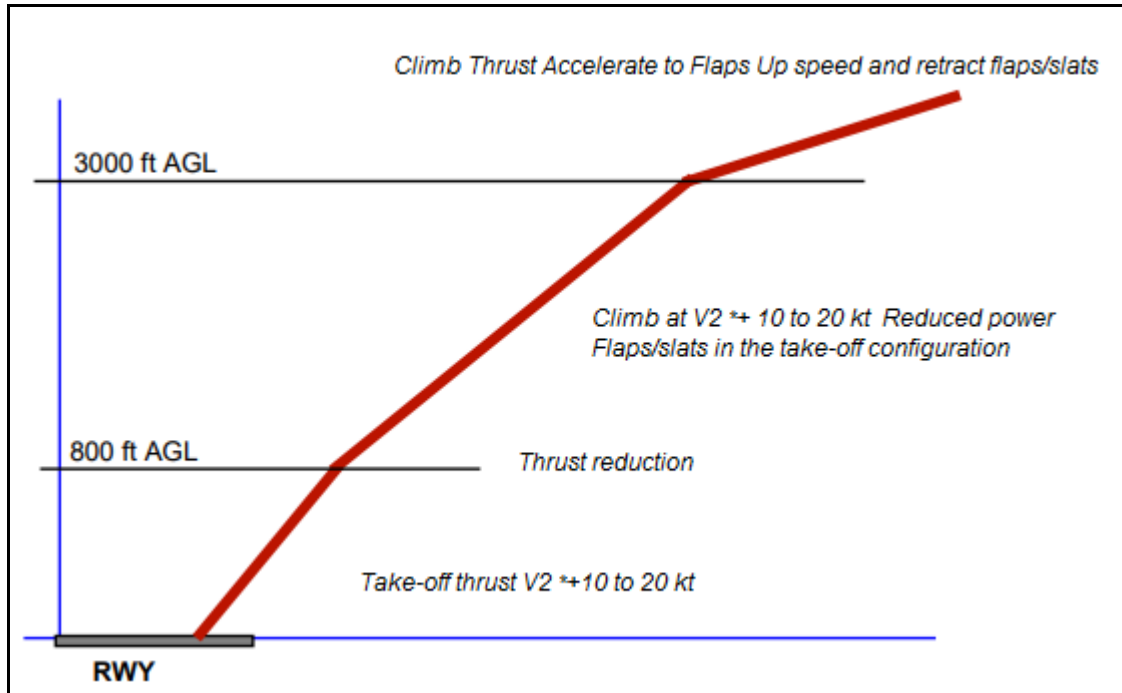
2.1 All types of aeroplanes:

Paths are to be followed (according to the operational standards of each individual aeroplane) in such a way as to reach a height of 3000 ft above aerodrome elevation as soon as possible.

2.2 Turbojet aeroplanes:

In addition to the preceding provisions, pilots are to comply with the climb procedures hereunder:

- i. The noise abatement procedure is not to be initiated at less than 800 ft above aerodrome elevation.
- ii. The initial climbing speed to the noise abatement initiation point shall not be less than V2 plus 10 kt.
- iii. On reaching an altitude at or above 800 ft above aerodrome elevation, adjust and maintain engine power/thrust in accordance with the noise abatement power/thrust schedule provided in the aircraft operating manual. Maintain a climb speed of V2 plus 10 to 20 kt with flaps and slats in the take-off configuration.
- iv. At no more than an altitude equivalent to 3000 feet AGL, while maintaining a positive rate of climb, accelerate and retract flaps/slats on schedule.
- v. At 3000 feet AGL, accelerate to normal en-route climb speed.



2.3 Operational Limitations

Aeroplane operating procedures for the departure climb shall ensure that the safety of flight operations is maintained while minimizing exposure to noise on the ground. The following requirements need to be satisfied:

- i. The procedure design gradient shall be observed,
- ii. Conduct of noise abatement climb procedures is secondary to meeting obstacle clearance requirements,
- iii. The power or thrust settings to be used subsequent to the failure or shutdown of an engine or any other apparent loss of performance, at any stage in the take-off or noise abatement climb, are at the discretion of the pilot-in command, and noise abatement considerations no longer apply,
- iv. Noise abatement climb procedures are not to be required in conditions where wind shear warnings exist, or the presence of wind shear or downburst activity is suspected,
- v. The maximum acceptable body angle specified for an aeroplane type shall not be exceeded.

3- Approach and Landing Procedures

3.1 The operators will keep respect of approach procedures at minimum noise and drag as defined in their operations manual.

3.2 For ILS approaches, in order to reduce noise nuisances, pilots must fly their approach so as to maintain the last altitude assigned by ATC services until intercepting the ILS glide slope. After intercepting the ILS glide slope, the final approach must be carried out so as not to fly below this glide slope.

3.3 In case a visual approach is permitted, the clearance will be attended by the following conditions:
The aircraft must be aligned on the RWY centerline at minimum 7 NM of the runway.

3.4 On landing, thrust reversers and reverse pitch devices may only be used beyond reverse idle for technical or safety reasons (e.g. tail wind, runway surface conditions, etc).

3.5 Operational Limitations

Compliance with published noise abatement approach procedures is not required in adverse operating conditions such as:

- i. if the runway is not clear and dry, i.e. it is adversely affected by water, mud, rubber, oil or other substances;
- ii. in conditions when the ceiling is lower than 150 m (500 ft) above aerodrome elevation, or when the horizontal visibility is less than 1.9 km (1 NM);
- iii. when the crosswind component, including gusts, exceeds 28 km/h (15 kt);
- iv. when the tailwind component, including gusts, exceeds 9 km/h (5 kt); and
- v. when wind shear has been reported or forecast or when adverse weather conditions, e.g. thunderstorms, are expected to affect the approach.

4- Engine Tests

"Engine test" means any operation carried out on stationary aircraft with its engines running either for more than 5 minutes or at a power more than those used for starting and taxiing sequences. Prior agreement of Muscat ATC Tower through radio (Ground Frequency 121.800) is required before any engine test. Muscat ATC Tower will notify the location where tests are possible, as also the aircraft orientation to be observed.

5- Entry into Force

5.1 The provisions of the present AIC come into force from 11 October 2018.

END

-This AIC includes 3 pages-