

Air Traffic Management in Malaysia

How does ATM affect UAS Operations



Sky for All

Increasing Safe, Secure, Efficient Mobility through Air in Skies of 2035 and Beyond

Classification of Airspace Used in Malaysia

- *Class A.*

IFR flights only are permitted, all flights are provided with air traffic control service and are separated from each other.

- *Class C.*

IFR and VFR flights are permitted, all flights are provided with air traffic control service and IFR flights are separated from other IFR flights and from VFR flights. VFR flights are separated from IFR flights and receive traffic information in respect of other VFR flights.

- *Class G.*

IFR and VFR flights are permitted and receive flight information service if requested.

OPERATIONS

- Rules of The Air (Annex 2)
- Collision Avoidance (Detect and Avoid)
 - responsible for detecting and avoiding potential collisions and other hazards
 - can see other aircraft and thereby avoid collisions, maintain sufficient distance from other aircraft so as not to create a collision hazard, and follow the right-of way

Air Traffic Services

- Remote Piloted Aircraft (RPA)
 - ATM provisions may need to be amended
 - Need to review emergency and contingency procedures
 - RPA must not increase the risk to other aircraft or third parties and should not prevent or restrict access to airspace
 - Wake Turbulence
 - Flight Plans

Air Traffic Services

- Communications
 - Phraseology
 - Transaction Times
- Aerodrome
 - Integration of RPA with Manned Aircraft
 - Traffic Information
 - Ability to detect and follow/position itself
- Search and Rescue

LICENSING AND TRAINING FOR AIR TRAFFIC CONTROLLERS

- Licensing of air traffic controllers will not be affected by UAS. However, when UAS are introduced within an ATC environment, additional training requirements specific to different types of UAS characteristics could be required for
 - ATC personnel including, inter alia, performance, behaviour, communication, operating limitations and emergency procedures.

THANK YOU