

SECTION 3.2 TYPE RATINGS

Unit 3.2.1 TYPA: Pilot type rating – aeroplane

1. General note: for this unit

- 1.1.1 Applicants for a multi-crew certified aircraft type rating are required to satisfy the knowledge standards specified for the ATPL of the same aircraft category, that are relevant to the operation of the aircraft. The following knowledge standards may not be relevant for all aircraft type ratings and can be ignored if not applicable to an aircraft type.

2. Aeroplane limitations and documentation

- 2.1.1 Identify aircraft limitations and able to locate information contained in the AFM and POH.
- 2.1.2 Perform pre-flight inspection and determine serviceability of the aircraft for flight.
- 2.1.3 Apply MEL and CDL, where applicable.
- 2.1.4 Determine the effects of ADs, ASB/SB where pilot action may be required, as applicable to type.
- 2.1.5 Aware of licensing obligations for variants, where applicable.

3. Weight and balance

- 3.1.1 Calculate CG for aircraft and determine if within prescribed limits.
- 3.1.2 Determine trim settings and MAC, where applicable.
- 3.1.3 Describe the effects of fuel use and management on CG, if any.
- 3.1.4 Describe the effects of changes to CG on aircraft performance.
- 3.1.5 Awareness of aircraft weight limitations, loading limits, cargo hold limitations, and any load/weight limitations for operational equipment contained in the flight manual supplement

4. Meteorology and adverse weather operations

- 4.1.1 Interpret weather forecasts typically required to conduct a flight in the aeroplane.
- 4.1.2 State the requirements for low-visibility operations.
- 4.1.3 Describe the effect on aircraft operations for the following conditions:
 - (a) ice, slush or snow (as applicable);
 - (b) turbulence penetration;
 - (c) heavy rain or falling snow;
 - (d) windshear techniques during take-off, approach and landing (as applicable);
 - (e) cold weather operations (as applicable);
 - (f) low-visibility operations (as applicable).

5. Aerodynamics and performance

- 5.1.1 Describe basic aerodynamics and high speed aerodynamics for turbo-jet powered aircraft.
- 5.1.2 Describe the effect of changes in airspeed on longitudinal stability for swept-wing aeroplanes.
- 5.1.3 Describe the minimum climb gradient performance requirements for each segment for aeroplanes that are certified as a transport or commuter category aircraft.
- 5.1.4 Describe the effects on airflow over aerofoils and the aerodynamic effects of the following if installed on the aircraft:
 - (a) spoiler;
 - (b) speed brakes;
 - (c) flaps and slats.