

**SECTION 1.9 OPERATIONS, PERFORMANCE AND PLANNING (OP)****Unit 1.9.1 POPC: PPL operations, performance and planning – all aircraft categories****1. Reserved****2. General flight planning and performance****2.1 Loading**

2.1.1 Describe the following terms:

- (a) arm, moment, datum, station, index unit;
- (b) centre of gravity (CG) and CG limits;
- (c) empty weight, zero fuel weight (ZFW), ramp weight;
- (d) maximum take-off and maximum landing weights;
- (e) floor loading limits.

**2.2 Speed limitations**

2.2.1 Explain the following terms/abbreviations:

- (a) normal operating speed ( $V_{no}$ );
- (b) never exceed speed ( $V_{NE}$ );
- (c) maximum manoeuvre speed ( $V_A$ );
- (d) turbulence penetration speed ( $V_B$ );
- (e) limit and design load factors;
- (f) flap operating speed ( $V_{FO}$ ) and flap extended speed ( $V_{FE}$ ).

2.2.2 Describe situations which may result in an aircraft exceeding speed limits and load factor limits.

**2.3 ERSA**

2.3.1 Apply all items of information contained in ERSA which are relevant to VFR (day) operations.

**2.4 Flight plan preparation**

2.4.1 Apply the responsibilities of a pilot in command with regard to weather and operational briefing prior to planning a VFR flight.

2.4.2 Given a route:

- (a) select appropriate visual charts for the flight;
- (b) list the operations for which it is mandatory to obtain meteorological and operational briefing;
- (c) list the weather services available, and nominate the sources and methods of obtaining this information;
- (d) apply CASA requirements/instructions for flight notification of VFR flights and state the preferred methods of submitting this notification;

2.4.3 Given an aerodrome forecast, determine whether holding or alternate requirements apply and if so:

- (a) nominate an appropriate alternate aerodrome;
- (b) determine the quantity of additional fuel required for holding or flight to the alternate.

**2.5 PPL – completion standard**

2.5.1 Given:

- (a) a departure place and 2 landing points;
- (b) weather and operational briefing;
- (c) passenger and/or baggage requirements;