

## SECTION 3 NAVIGATION AND INSTRUMENT FLYING STANDARDS

### NAV Navigate aircraft

#### 1 Unit description

This unit describes the knowledge and skills required to plan and conduct a flight from a departure aerodrome to a destination aerodrome, or an alternate aerodrome, and navigating the aircraft under the applicable flight rules. This includes pre-flight planning, compliance with airspace, departure and arrival procedures, and navigation under normal and abnormal conditions.

#### 2 Elements and performance criteria

##### 2.1 NAV.1 – Prepare documents and flight plan

- (a) select and prepare appropriate navigation charts for the intended flight;
- (b) select a suitable route and altitude considering weather, terrain, airspace, NOTAMs and alternate landing areas;
- (c) obtain and interpret meteorological forecasts, NOTAMs and operational information applicable to the planned flight;
- (d) determine whether the planned flight can be conducted under the applicable flight rules and taking account of the beginning and end of daylight times;
- (e) except for the RPL navigation endorsement and the PPL, calculate and document critical point (CP) and point of no return (PNR) locations;
- (f) complete a flight plan to the planned destination and alternates;
- (g) lodge suitable flight notification for search and rescue (SAR) purposes.

##### 2.2 NAV.2 – Comply with airspace procedures while navigating

- (a) identify airspace restrictions and dimensions applicable to the flight;
- (b) obtain and comply with air traffic clearances, if applicable;
- (c) comply with airspace procedures applicable to the airspace classification throughout the flight.

##### 2.3 NAV.3 – Conduct departure procedures

- (a) organise cockpit to ensure charts, documentation and navigational calculator are accessible from the control seat;
- (b) comply with all departure procedures, clearances and noise abatement requirements;
- (c) establish planned track on departure within 5 nm of airfield or apply alternative procedure if required;
- (d) calculate estimated time of arrival (ETA) for first waypoint.

##### 2.4 NAV.4 – Navigate aircraft en route

- (a) maintain a navigation cycle that ensures accurate tracking, and apply track correctional techniques to re-establish track prior to waypoint or destination;
- (b) maintain heading to achieve a nominated track;
- (c) maintain and revise ETAs ( $\pm 2$  minutes) for waypoint or destination;
- (d) maintain track in accordance with published flight path tolerances in controlled airspace;
- (e) navigate using accepted map-reading techniques;
- (f) maintain navigation and fuel log to monitor tracking, ETAs and fuel status;
- (g) use appropriate techniques to obtain a positive fix at suitable intervals;
- (h) maintain awareness of route, en route terrain, en route and destination weather, and react appropriately to changing weather conditions;
- (i) perform pre-descent and turning point checks;