Taxiing

Objective

Use the aircraft controls correctly to manoeuvre the aircraft on the ground at a speed appropriate for the prevailing conditions and situation, following a selected path and stopping at a nominated point.

1. Considerations

Speed Control

Throttle controls speed. Forward is more power, and rearwards is less power

- More power is required to get started and overcome inertia

Minimum power setting

- Taxi speed is affected by surface, slope, wind, and power used
- Should be a fast walking pace – 5 to 10 km/h
- May need occasional gentle (cadence) braking to maintain the taxi speed while maintaining the recommended power setting

Speed = fast walking pace

- Stop by closing the throttle and using the toe brakes to come to a halt
- Park brake is set by holding down the toe brakes and engaging the lever

Directional Control

- Nosewheel steering is achieved by using the rudder pedals, push on the left rudder and the aeroplane turns left and vice versa
- Wind affects the speed across the ground. Tailwind makes you go faster, headwind slower, and crosswind will push the tail and make the aeroplane turn into wind
- Make sure you look at a point in the distance, not one just ahead of the aeroplane

Control Positioning

- Complete details are in the Flight Manual
- Aim to deflect the control surface that will be affected by the wind, so the wind cannot 'pick it up'.
- Wind from behind – control column forward (elevator deflected downwards), ailerons neutral
- Wind from ahead – no elevator deflection needed
- Wind from the left – control column left (left aileron raised)
- Wind from the right – control column right (right aileron raised)
- Combination of the above when wind is quartering. For example, wind from the left and behind – control column forward and left.

2. Airmanship

- Check the right of way rules
- Check the aerodrome chart
- Check windsock for wind
- Always carry a Vol 4 and aerodrome chart
- Radio communication

3. Aeroplane Management

- Don't use power Vs. brakes
- Seat positioned for full rudder deflection and height
- Engine warm before moving
- Brake check soon after first moving
- Carb heat ON only for checks
- Face into wind when stopped
- Taxi on centreline
- Watch for wingtip clearance
- No reverse available
- Caution, surface conditions

4. Human Factors

- Clean windscreen
- Move head and body to avoid blind spots

5. Ground Exercise

- Seat is adjusted and comfortable
- Once engine is warm, use enough power to overcome inertia
- Test brakes after moving off
- Maintain safe taxi speed – fast walking pace
- Maintain the centreline (if applicable)
- Turn using the rudder pedals to turn the nosewheel
- Take account of the wind, and the change in the wind as you turn
- Wingtip clearance can be judged using shadows
- Caution slipstream and jet blast from other aircraft
- Slipstream (the air blown back by the propeller), can blow objects and people around behind you
- During the taxi and while turning, check instruments
- Stop by applying the toe brakes
- Apply park brake