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.

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.
- 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 braking to maintain the taxi speed while maintaining the recommended power setting.
- 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.

Braking

Directional control

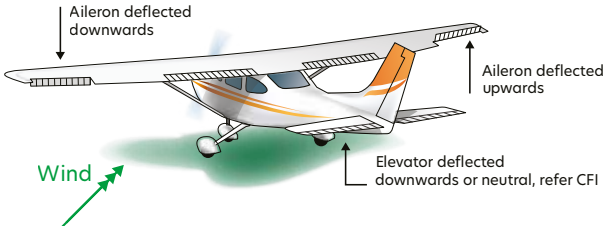
- Nosewheel steering is achieved by using the rudder pedals. Push on the left rudder and the aeroplane turns left and vice versa. Use differential braking as required to tighten the radius of turn.
- Wind affects the speed across the ground. Tailwind makes you go faster, headwind slower, and crosswind 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.

Directional control

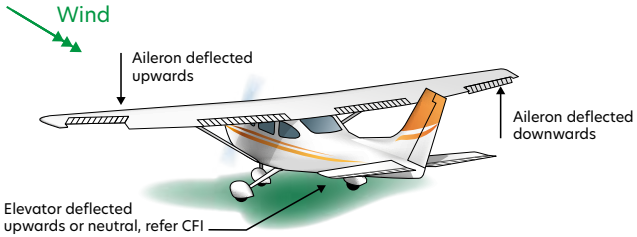
Control positioning

- 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 directly behind – control column forward (elevator deflected downwards), ailerons neutral.
- Wind from directly ahead – elevator deflected upwards or neutral, refer CFI.
- 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 right.

Wind *quartering* from left and behind



Wind *quartering* from left and in front



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.

Airmanship

- Check the right of way rules.
- Check the aerodrome chart.
- Check windsock for wind.
- Always carry *AIP* Vol 4 and VNCs.
- Radio communication.

Aeroplane management

- Don't use power versus 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.

Human factors

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