

Limerick Flying Club AT-3 R100 Briefing notes for club pilots converting from other aircraft...

- Please Use the checklist provided
- The parking brake can be turned to 'on' with no pressure in the line to the brakes. Unlike the Tecnam (where the 'tap' is actually a non-return valve) once set 'on' the port toe brakes are disconnected from the brake pads.
- The starboard pilot's toe brakes operate a separate set of brake pads and are not affected by the parking brake. Only use the parking brake when absolutely necessary.
- The aircraft has a castoring nose wheel. The primary method of steering the AT-3 at slow taxiing speeds is through differential braking using the toe brakes. This can also be said for the beginning of the take-off run. Pilots should be aware that they may need to use gentle pressure on the toe-brakes at the beginning of the take-off run to maintain the centre-line until the rudder becomes "live", as it does around 20-25 kts. The UK distributor recommends initially only applying approx. 70-75% power relatively quickly but smoothly...then applying full throttle once the rudder becomes fully active. In most cases, relatively little brake should be required after this point, unless perhaps there is a notable crosswind from the left.
- At about 80% deflection, the forces on the rudder can be quite high, which leads some pilots to believe they are "on the stop", however applying more force to the pedal will overcome the control forces and give true full deflection. It is this last 20% deflection of the rudder that really helps to compensate the yaw experienced at high rpm and low airspeeds.
- ***NB on Grass especially with wind from the left, you will need lots of right rudder and may need brake to avoid loss of directional control during the initial take-off run. (If you don't understand why, look up PPL notes on torque effect and 'P' factor)***
- The seats and pedals are fixed; no mechanical adjustment is possible. There is a seat back 'cushion' for those that need it. You **must** be able to apply full right rudder and operate the toe brake comfortably to fly this aircraft.
- There is an oil cooler control flap. Keep it pulled out (closed) to speed up oil temperature rise on the ground if necessary (definitely after first starts of the day). Open (push in) for take-off.
- It is Critically important that operation of the tip-up canopy is understood.
 - o There are 2 levers on each side; one black & one red. The black levers on each side unlock the canopy. Check the canopy is symmetrical when closing.
 - o The 2 red levers, 1 each side approx 6 inches forward of the canopy opening levers, are the canopy jettison levers.
- Accurate speed control on finals is vital for successful landings with this aircraft in Coonagh.
 - The normal approach is flown at 55kts with power on, decreasing to 50kts over the threshold.
 - This speed is 'on the 'back side' of the drag curve.. ie, the slower you fly the more drag there is. Therefore, if the speed increases slightly, drag reduces and so the speed increases even more; ie the aircraft is in the 'speed unstable' range.
 - The approach must therefore be stable – ie the speed and rate of descent must be constant, then the landing is simply a question of gently closing the throttle and checking the Rate of descent a foot or so off the ground.

