

Tecnam P2002 JF Operation Handling Notes

There are some significant differences between flying the Tecnam and the Rallye airplanes that you may be more familiar with. The main difference is that it does not have a castoring nosewheel or differential braking. Instead it has a steerable nosewheel and a central brake. The Tecnam also has a high power to weight ratio which requires a different technique for ground handling, take offs and landings. The following operational notes should be followed when operating the Tecnam.

Taxying & Turning: Use low power settings
Steer using the nosewheel (rudder)
Turns use only turning circle and runway width extensions
Turn aircraft at slow speed
Using full rudder deflection during turn
Use brake as needed

Normal Take off: The aircraft has a high power to weight ratio
Therefore a tendency to swing to the left
Flaps 15 deg
Feed in full power slowly (2100 rpm) over a five second period
Keep nose wheel on ground
Steer using rudder pedals to keep aircraft in center of runway
Raise nose wheel a little off runway above 30Kt
Rotate and take off 45Kt
Right rudder still needed to keep aircraft balanced and prevent yaw
Flaps up at 300ft
Establish climb at 65Kt

The Circuit: Normal circuit use 1700-1800RPM gives 70-80Kt
In light winds aircraft does not descend quickly so descent may have to be started towards end of downwind leg

Normal Landing: Base leg power to 1100-1200rpm (Depending on wind strength) 15deg flap, speed to 60Kt
Finals 40deg flap, speed 60Kt slowing to 50Kt in light wind conditions
Normal flare and touch down lower nose to surface to steer aircraft and slow aircraft using hand brake.

NB. Maximum crosswind component allowed for operating club Tecnams is 10Kt

Cross wind Take off: The aircraft has a high power to weight ratio
Flaps 15 deg
In cross winds from the left it has a higher tendency to swing to the left even in light cross winds leave nosewheel on the ground until rudder is effective
Feed in full power slowly (2100 rpm) over a five second period
Keep nose wheel on ground some left or right aileron needed according to wind direction (not as much as with Rallies)
Steer using rudder pedals to keep aircraft in center of runway
Raise nose wheel a little off runway between 30- 40Kt
Rotate and take off 45Kt
Right rudder still needed to keep aircraft balanced and prevent yaw.
Flaps up at 300ft
Establish climb at 65Kt

Cross wind landing: Base leg power to 1100-1200rpm (Depending on wind strength) 15deg flap, speed to 60Kt
Finals 40deg flap, speed 60Kt slowing to 50Kt in light wind conditions
Crab aircraft as normal into wind
The aircraft will not descend as quickly as when the wind is down the runway this will have to be taken into account when planning approach
Over the hedge align aircraft with runway and wing down into wind, flare and touch down lower nose to runway as soon as possible before rudder starts to lose effectiveness, steer aircraft using nosewheel and slow aircraft using hand brake.

Cruising: 2000rpm will give cruise of 100kt
In rough air reduce to 1800rpm to reduce stress on aircraft
Keep eye on ASI it creeps into the caution arc

Steep Turns: Steep turns are not allowed above 60 deg angle of bank.

Stalling:

1. Carburettor to Hot, fuel booster pump on.
Power off / no flaps hold nose attitude as speed reduces
Note sloppy controls, stall warning comes on at 50Kt,
Aircraft stalls at 40Kt indicated may be slight wing drop
(normally left wing)
Reduce angle of attack / apply full power / further yaw
prevented by application of opposite rudder. Recover
2. Carburettor to Hot, fuel booster pump on
Power off / reduce speed to flap range 68kt, full flap hold
nose attitude as speed reduces note sloppy controls, stall
warning comes on below 40Kt.
Aircraft stalls at 26Kt indicated more pronounced wing
drop (normally left wing)
Reduce angle of attack / apply full power / further yaw
prevented by application of opposite rudder. Recover
Start taking up flap once positive rate of climb indicated
3. Carburettor to Hot, fuel booster pump on.
Power 1500 rpm / reduce speed to flap range 68kt,
full flap hold nose attitude as speed reduces note sloppy
controls, stall warning comes on below 40Kt.
Aircraft stalls at 26Kt can have quite more pronounced
wing drop (normally left wing)
Reduce angle of attack / apply full power / further yaw
prevented by application of opposite rudder. Recover
Start taking up flap once positive rate of climb indicated
4. Carburettor to Hot, fuel booster pump on.
Power 1300 rpm. Place aircraft in 20 degree bank
hold nose attitude as speed reduces note sloppy
controls, stall warning comes on above 40Kt.
Recover once stall warning sounds
Reduce angle of attack / apply full power / further yaw
prevented by application of opposite rudder. Recover.

Note: If flying with full tanks feed from left tank initially.
If you use the right tank first any excess fuel is fed back into the left tank which being full will overflow and vent to air wasting fuel.

All of the above must be practised with a club instructor and signed off by him before being cleared to perform them.

These notes are intended only as a guide, the flight manual should be consulted for performance figures / flight data / speeds / fuel consumption etc.

A handwritten signature in black ink, appearing to read 'Brendan Beegan', with a long horizontal flourish extending to the right.

Brendan Beegan

CFI

Limerick Flying Club

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