P-Factor propeller spin and its AOA



1. Increase Prop RPM



2. Climb



right side: blade down left side: blade up

3. Result



3. Conclusions

Left Turn Tendency: **P-Factor** Prop Slip Stream Torque Gyroscopic Precision

P-Factor is largest at low airspeed with high thrust (power) highest at high power (thrust) and low airspeed it is realized on Take Offs (TO) and climbs it decreases with gaining higher air speed

and the wind direction (head or cross wind) affects a bit

the opposite effect happens on descents and idle power (a right turn tendency with idle power/low thrust)

Remark:

relative propeller wind is largest on highest prop RPM and lowest airspeed (plane on ground, before starting acceleration) (faster plane airspeed results in less propeller wind speed, the wind speed difference on prop decreases)