

GA1333

Posted on 28.02.2023 by Steve Forward

Category: [General Aviation](#)

Report Title Propwash

Initial Report

While visiting various airfields I have become aware of what seems to be a total lack of knowledge of propwash and the damage it can cause. I have seen pilots starting engines and taxiing away from open hangars and turning aeroplanes in close proximity to other machines with no regard to the possible damage that can be caused. I took an instructor to task having watched him blast another aeroplane causing the controls to slam to their stops, he seemed almost oblivious that he could have possibly caused any damage!

Comment

The reporter raises an important issue about propwash (and similarly downwash from helicopters) that bears consideration by all. Not only can excessive propwash potentially cause damage to unrestrained control surfaces on aircraft behind, but there is also the risk of kicking up and depositing FOD. Individual aircraft will have differing degrees of propwash depending on their power and propellor combination but it is a common-sense precaution to ensure that the throttle is reduced to the minimum possible setting whilst the tail of your aircraft is pointing towards any other aircraft, and to ensure that you are as far away as practical before pointing the tail of your aircraft towards others. If you are departing from a line of aircraft then that may mean ensuring sufficient (safe) momentum before reducing the throttle as you turn (having completed a brake check first!), or taxiing straight ahead and turning as late as practical. Propwash is not just a problem for taxiing aircraft, it is also a consideration when starting up the engine so ensure there are no aircraft close behind when doing so. We're told that the CAA are currently reviewing their Wake Turbulence material and, although not specifically a wake turbulence issue, they agree that there might be value in including propwash/downwash considerations as an aside. We also think that the CAA Safety Sense leaflet No.1 (Airmanship) and the Skyway Code could both usefully include information about propwash/downwash and practical considerations for reducing its impact.

Key Issues

Dirty Dozen Human Factors

The following 'Dirty Dozen' Human Factors elements were a key part of the CHIRP discussions about this report and are intended to provide food for thought when considering aspects that might be pertinent in similar circumstances.

Awareness – consideration of the effects of propwash/downwash on other aircraft

Complacency – consideration of risks to other aviators

Deviation – not adopting best practice procedures for reduction of propwash/downwash

loss_of_awarenessAwareness

complacencyComplacency

normalisation_of_deviationDeviation



