

TURBULENT G-APNZ PRESERVATION SOCIETY

CHAIRMAN'S REPORT 2024

The year just ended has been a challenging one for the team! The Light Aircraft Association (LAA) is the organisation acting on behalf of the UK regulator. It is the LAA that our Preservation Society must seek approval for all aspects affecting safety culminating with a Permit to Fly. I have previously reported on the difficulties and delays associated with an electronic ignition system which is now working well during taxiing trials.

The LAA required that two modifications we deemed appropriate needed their formal approval. Firstly was the installation of a back up electric fuel pump despite this embodying an aviation approved pump and associated plumbing, electrical circuit protection and a properly labelled switch. Satisfactory fuel flow measurements had also been recorded. Secondly the LAA required that both ignition circuits be fitted with visible status lights. This involved two LEDs and associated minor wiring changes.

The LAA modification procedure is a two stage process starting with an outline request and if acceptable in principle, a unique reference number is provided for use to accompany a more detailed, second application. Once finally approved the modifications are formally recorded in the aircraft's documentation. Initial applications for both the Turbulent's modifications were made in August 2022 but sadly still await clearance to the second stage. As a consequence the necessary Permit Flight Release Certificate (PFRC) cannot be provided. Despite continuing pressure from us the LAA has yet to advance these modifications despite their simplicity (and adoption on other aircraft). As a consequence and after successful taxiing trials the aircraft was not started for a long period of time. Sadly that resulted in an engine corrosion problem causing a lack of compression. Rectification involved removal of the cylinder heads, relapping of the valves and seats and reassembly of the engine. This was carried out successfully and re-established the compressions.

However a fault was revealed as a "flat spot" between idle and full power sometimes resulting in stoppage. It was thought that the carburettor was the culprit. This was removed, stripped, internally cleaned, reassembled, with new seals and gaskets and refitted. The problem remained and the carburettor was removed for further examination more than once. The particular carburettor is of automotive origin and no longer in production. This presented delay with the supply of critical spares and no option of complete replacement. The engine would run satisfactorily with a different carburettor on test but this was no solution without considerable redesign of the engine installation and cowlings. In desperation a final strip down revealed a blockage in a tiny internal drilling that had stubbornly remained despite previous attention. Finally the original carburettor was refitted and all was well.

Taxiing trials showed up the need to adjust the brakes necessitating a new spacer in the operating linkage.

As of now the aircraft is ready but still awaiting the necessary LAA clearance.

Flight insurance will have to be in place. Funding for this is a problem and Trustees will be asked to contribute.

Clearly the test flying program needs to be completed here at Derby Airfield. This will involve a number of local flights to comply with the regulations. Once completed and the Permit to Fly has been validated the aircraft will be flown to Duxford. There it will be on display to a much wider public audience than can be provided here at Derby Airfield. We are reaching out to a Duke of Edinburgh group in the area local to Duxford to ensure that the Turbulent is maintained clean and presentable.

As ever the Trust is indebted to the continuing actions of the vital volunteers here at Derby. Thanks are therefore due to three Johns, two Peters, Mark, Martin, Ken, George, Ben, Paul and two Davids. Without their unstinting support the restoration would not have reached this advanced stage.

Martin Jones
Chairman of the Turbulent G-APNZ Preservation Society.
www.theturbulent.co.uk