

LAA/AWA/19/20(2)
28th October 2019

Auster 6A (Series) and Beagle Terrier (Series)

Inspection of Flap Auto-Trim Interconnect Cables

NOTE: This AWA was raised to issue (2) to accommodate a small change in the narrative and the re-issue of the related AILs.

The pilot of an Auster 6A recently encountered a situation where, after a normal take-off, the aircraft pitched nose up and a large forward force on the joystick was required to maintain the correct attitude. After a short while the pitch-up force through the control stick became difficult to manage and the aircraft's correct climb attitude was only maintained by the pilot engaging the assistance of the passenger.

After a successful landing on the nearest available runway, the pitch control system was inspected and it was discovered that the flap's auto-trim interconnect cable had broken. For reasons that aren't fully understood, the cable had jammed inside the Bowden cable where it passes through the tailplane, this meant that the trim tab itself was held in the fully down position – a position it would, under normal circumstances, never go to.

The Auster 6 (Series) aircraft and its derivatives were fitted with Fowler flaps situated behind the trailing-edge of the wing; when lowered, these flaps introduce a pitch down moment. This pitching moment is normally automatically countered by the downward movement of an elevator-mounted trim tab which is moved when flap is lowered by cables attached to the flap bell crank.

Because of this recent incident, LAA Engineering has issued an Airworthiness Information Leaflet (AIL) requiring operators of Auster and Beagle Terrier aircraft to inspect the flap-trim interconnect cables each 100 hrs. or every three years coincident with the Permit renewal inspection.

Within the LAA system there are three marks of Auster, each with their own Type Number:

For Auster 6 (Series) and A.O.P. 6 aircraft LAA/MOD/896/001 Issue 2 applies and a copy can be downloaded [HERE](#).

For Beagle Terrier (Series 1) aircraft LAA/MOD/912/001 Issue 2 applies and a copy can be downloaded [HERE](#).

For Beagle Terrier (Series 2/3) aircraft LAA/MOD/908/001 Issue 2 applies and a copy can be downloaded [HERE](#).

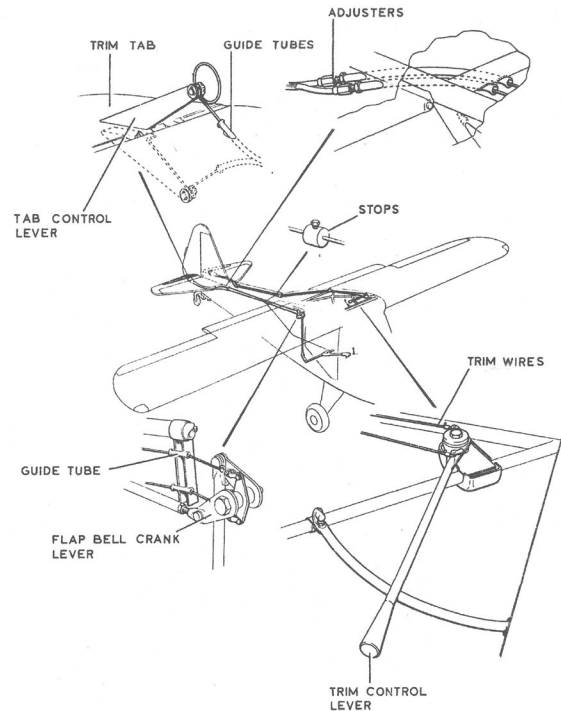


Fig 1. This sketch, extracted from the Beagle Terrier maintenance manual, shows the key elements in the two longitudinal trim systems fitted to Auster types.

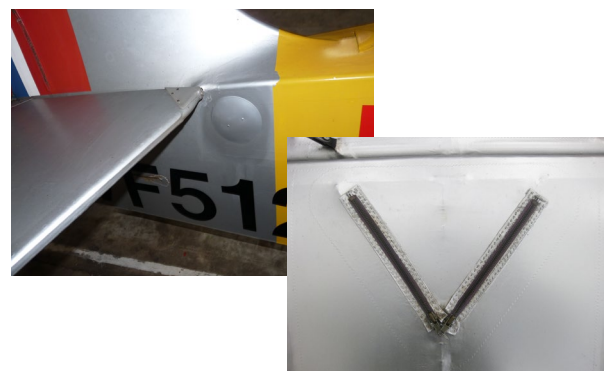


Fig 2. The internal structure of the fuselage on many tail-draggers is a difficult area to access and therefore to inspect fully. This latest AIL introduces a repetitive inspection of the trim cables so, though not mandated by the AIL, to improve access to the cables it is recommended that Auster owners fit an inspection pop-panel or a more weather-proof aircraft quality zipper in the side of the fuselage, as shown above.