

30th August 1990

Service Bulletin No. 35

FITTING OF NON-STANDARD COMPONENTS TO MAINAIR AIRCRAFT

It has been brought to the attention of Mainair Sports Limited that one of our aircraft has been fitted with a monopole which is an exact copy of the original component, but not manufactured by Mainair Sports Limited.

All pilot/owners are reminded that the build standard of the aircraft must be maintained, and only spare parts supplied by Mainair Sports Limited and approved under Mainair's CAA Approval should be fitted to the aircraft, otherwise the Permit to Fly will be invalidated.

Mainair Sports Limited has been aware in the past that small items not supplied by Mainair, such as fuel filters, have been fitted. Even a small component like this changes the build standard of the aircraft and invalidates the Permit to Fly. However, when a major structural member such as a monopole is fitted we take a very serious view of the matter.

For your own safety, make sure that all components fitted to your aircraft are supplied by Mainair Sports Limited.

Non-standard Propellers

Only propellers supplied by Mainair Sports are approved for our aircraft, except for the Newton props on 447 Flash 1 and 2 - pre-86 build dates.

All propellers supplied by Jim Romain are un-authorised copies of which we have no control. As we are unable to check the manufacturing standard and quality, we cannot accept responsibility for owners fitting these and other non-standard propellers. By doing so you will automatically invalidate your Permit to Fly, nullify your insurance cover and any liability for any interrelated manufactured components.

(reference BMAA General Note GN-90-42).

ALPHA BRAKE PEDAL MODIFICATION

Mainair has intruduced a new brake pedal assembly, replacing the nylon bearings with sintered oilite bearings, and revised brake pedal assembly. The modification introduces new routing for the brake cable. The improved brake assembly can be retro-fitted to an existing Alpha trike unit at our factory.

The price for the modification will be £25 inc VAT and postage.

GEMINI AND ALPHA LONG-RANGE TANK FUEL SUPPLY PROBLEM

During routine maintenance on an aircraft brought in for servicing, I became curious when after priming the engine from the long-range (under-seat) tank, the primer bulb was slow to expand again once it had been squeezed, suggesting a restriction in the fuel supply between the fuel tank and the primer bulb. Investigation into the cause revealed that the jubilee clip fastening the hose into the quick-release clip had been over tightened, and had flattened the part of the fitting inside the hose, thereby restricting the fuel flow. The aircraft had not exhibited any engine running problems, so evidently the restriction was not sufficient to affect the engine performance. However, we believe it would be possible for a jubilee clip to be over tightened to the point where engine performance would be affected.

Note: This problem will only occur on aircraft fitted with the plastic quick-release tank fitting. Earlier models with metal fittings are not affected.

ACTION

If the primer bulb is slow to expand following engine priming on the long-range tank, disconnect the fuel line from the 3-way tap. With the fuel tank full, syphon fuel through the system into a container using the primer bulb to start the flow. The container should be positioned well below the fuel level in the tank. A steady fuel flow of approximately half a litre per minute should be established. If there appears to be a restriction to the fuel flow remove the jubilee clip and inspect the fitting.

A repair kit with all the necessary components is available from Mainair Sports.

New Minor Modifications

462 Radiator Mounts

For some time, 462 engine owners have experienced problems with radiator mounts shearing. Like many parts on microlights, we use commercially available materials, and occasionally the quality varies. This has affected the reliability of this particular component. To remedy the situation, we have produced 2 steel 'L' brackets which sit onto the box mounts and radiators with a new, better quality rubber mount between them. The mount is repositioned so as it is under compression and not shear loads. This appears to have cured the problem.

If you want to up-date your 462 Gemini, please write or telephone us for an up-date kit - cost £11.00

Radio Console mounts

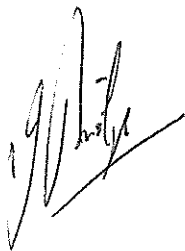
We have designed a fibreglass radio console which conveniently fits between the keel and cockpit. This is angled to facilitate ease of operation. It is secured by cable ties, eliminating the need to drill. We shall be stocking all colours to match your cockpit, and they should be available at the AGM - price £19.50

GEMINI SIDE STRUT SUSPENSION WEAR

Gemini trikes fitted with rubber ball side strut suspension should be checked regularly for wear when the aircraft is operated regularly off a sandy beach or other runway surfaces likely to cause ingress of dust and dirt. We suggest that at 100 hours the side struts are dismantled and checked for excessive wear. It may be convenient to replace the rubber ball suspension during this inspection.

Documentation

Any repairs must be entered in the aircraft engine and airframe log book and signed by a BMAA inspector.



John Bridge
Technical Manager