

AIRCRAFT AFFECTED - GEMINI TRIKE

Bulletin No. 34

16th July, 1990

Subject: FRONT STUB HEAVY LANDING OVERLOAD DAMAGE

No. 1	<u>Aircraft Affected</u>	<u>Unit/part affected</u>
	All Gemini Trikes up to Serial No.534	Gemini front stub ref BRG/00/136 Stock No-032-156
No. 2	<u>Reason:</u>	

An incident has been reported of the failure of a Gemini front stub. The reported failure occurred in flight leaving the lower end of the front stub unsupported. The pilot and passenger, flying in turbulent conditions, continued to make a normal, precautionary landing.

Inspection of the failed component by Mainair revealed pre-failure, heavy landing damage, resulting in serious weakening of the component eventually leading to failure.

No. 3 Action:

Closely inspect the front stub for any deformation or tearing of the metal. A very heavy landing will result in the front of the stub being bent downwards by compressive loads in the front strut resolving the inertia loads of the wing mass, reacting against the upward force from the nose wheel via the steering head. Furthermore, a nose wheel overload can cause the bottom end of the tube to be belled out.

Check that the front stub is straight, a mirror and powerful lamp will assist with the inspection.

Check the steering head bearing and the steering head down tube for deformation. The nose wheel should be lifted off the ground for this check.

No. 4 Compliance:

Compliance with this alert service bulletin has been classed as MANDATORY by the United Kingdom Civil Aviation Authority for aircraft in the UK register and is to be carried out -

- (a) before next flight
- (b) after each heavy landing

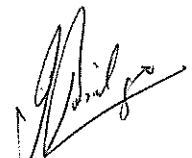
The inspection (a) may be made by the pilot or owner, but if in any doubt a BMAA Inspector must conduct the inspection.

The inspection (b) after a heavy landing must always be made by a BMAA inspector.

It is strongly recommended that the inspection should be included in the normal pre-flight inspection, especially if the aircraft is being operated from a very rough field.

No. 5 Documentation

Any damage or repairs carried out on the airframe must be signed off in the log book by a BMAA Inspector.


John Bridge
Technical Manager