



mainair sports

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TRI-FLYER - GENERAL BULLETIN No. 8

If you have sold your Tri-flyer please let us know the address of the new owner so that we can keep him up to date.

General

Enclosed is a brochure on the cockpit we have available for single-seater trikes. It makes amazing difference to performance and comfort. Unlike other available models, our cockpit completely encloses the pilot. Tests have proved that the addition of a nose cone only actually increases drag and that it is essential to clean up the whole area rear of the cockpit edge. In addition, there is a dashboard for mounting a range of useful instruments. We are currently developing a cockpit for our dual-seater Tri-flyer and this should be available in about a month.

Tri-flyer Challenger

May have read about this project in the ultralight press. It's going well and we have flown a single-seat 440cc special trike unit. Geoff Ball, our test pilot and power manager, has made the foam core for the carbon fibre shell and we hope to be extending the existing records very shortly. Geoff's been getting in practise recently with a 14,300 ft climb in a dual trike during the Long Marston week-end.

Trike Improvements and Up-dates

440cc Dual-Seater We have established that the torque-control rigging suffers from fatigue at the thimble-end junction on the side strut. We have improved this by attaching this via a tang. If you're dual-seat trike has the pip pins directly through the thimble eyes, please write in for free tangs and instructions.

Rear Engine Plate

Stress Cracking has occurred in our two-seater rearward plates. These are the plates which hold the torque rigging and rear tube struts. The damage is caused during transport when the trike is folded and we now have replacement plates and strengthening channels which cure the problem. Please send for them, if required.

General Trike Range

bolts. Please inspect the main bearing housing jacking bolts for fracturing. Early 330s and the 330 unit have reported bolt breakages owing to fatigue. Please check these before flying again. We believe the problem is mainly caused by unbalanced propellers.

Plug caps. There have been two reported cases of plug cap failure. It can be serious if you lose power unexpectedly. We have found that the brass insert inside the plastic caps can part company from the internal wire attachment. We recommend replacement with rubber-type caps which can be bought from motor cycle shops or ourselves.

Exhausts. Exhausts continue to be a source of trouble. The single cylinder is particularly prone to stress fracturing. It seems totally unavoidable and only continuous maintenance by welding up cracks before they become serious will cure the problem. Twin-cylinder engines seem far less brutal on the exhaust and, so far, we have only has one in for repair. This was from a training two-seater and had seen a lot of hours.

Propellers and Vibration. The industry in general is slowly becoming aware of the necessity for propeller care. Wood absorbs moisture and if the trike is stored prop vertical, this leads to a heavy low blade, unbalance and vibration. Mitchell Aircraft Company in the U.S.A. recommend that propellers be checked for balance every 20 hours. It's good advice as they do go out of balance and this leads to lots of other more major problems. Our advise is to check and balance your propeller every 40 hours or 3 months - at least. Always leave the propeller horizontal whenever the trike is not in use. Repair chips and damage and re-varnish to seal the wood.

Wheels Nylon-centred wheels are fine for general use. Remember, this is an aircraft, not a dune buggy. Frequently clean and re-grease the wheel bearings, particularly after use over beaches or near salty, sea air.