



SAFETY NOTICE

Issued by Angus Pinkerton - Chairman of the Flying & Safety Committee 26 November 1999

All FLPA pilots must READ, DIGEST AND TAKE ACTION on the contents of this Notice and keep it for future reference.

If you hold a copy of the BHPA Technical Manual this notice must be inserted into it and retained until it is withdrawn or superseded on instructions from the Chairman FSC.

PARAMOTOR REPLACEMENT WOODEN PROPELLER

Having broken the four bladed propeller on his paramotor, the owner decided (on the grounds of cost and availability) to replace it with a wooden one copied from the original by a local propeller manufacturer. This was the largest propeller the manufacturer had made.

During ground runs the propeller disintegrated, and a bystander was injured.

The basic design of the propeller is two separate two bladed units which are 'joggled' together at the hub so that all four blades run in the same plane. At the BHPA's request the AAIB have carried out a full engineering investigation of this incident, aided by the Timber Research and Development Association. (The full text can be seen in AAIB Bulletin 11/99 on the AAIB web site at <http://www.open.gov.uk/aaib/aaibhome.htm>)

In their conclusions, the AAIB state that 'the manufacture of joggled blades without due consideration of aeroelastic forces or fibre continuity in the load path is inherently dangerous.' BHPA members are strongly advised against the use of propellers from sources unqualified to assess such risks.