No: 10/83 Ref: EW/G83/01/11

Aircraft type and registration: Chargus Titan G-MBMV (single-engined

Microlight aircraft)

Year of Manufacture: 1981

Date and time (GMT): 8 January 1983 at 1100 hrs

Location: Botolph Claydon, near Buckingham

Type of flight: Private

Persons on board: Crew - 1 Passengers - Nil

Injuries: Crew – Nil Passengers – N/A

Nature of damage: Aircraft severely damaged

Commander's Licence: Private Pilot's Licence Group 'D' (Microlights)

Commander's Age: 30 years

Commander's total flying experience: 130 hours

The aircraft had recently been fitted with an emergency parachute deployment system designed to bring pilot and aircraft safely to earth in the event of a serious in-flight malfunction. Both the Microlight manufacturer and the parachute system manufacturer had been involved in fitting the system, which had achieved four flights without incident.

However, when the pilot had accomplished a normal take-off and was about 10 seconds into his climb, he suddenly felt the control bar wrench itself out of his arms, the aircraft appeared to stop dead in mid-air and rolled 90° to starboard. It then side-slipped in this attitude towards the ground, gathering speed and the pilot pulled the parachute release 'D' handle. At a height of about 70 feet, the aircraft suddenly righted itself and the rate of descent reduced. It then struck the ground on its back wheels with a loud bang. Although the aircraft was severely damaged, the pilot was uninjured.

A serviceable Quicksilver with the king post set in the same position as found on the accident microlight was used to give some indication of the likely consequences of slack rigging. With the rigging wires slack and with the missing pip-pin removed the top right hand tail boom still remained attached to the rear spar because the end load on the boom was sufficient to ensure that the open tube end was located over the bolt attaching the bracket to the spar. The point of contact between the tube end and the bracket coincided with the position of the fretting damage found on the crashed microlight. The joint could be made to come apart by pulling on the tail boom. If the rigging was correctly tensioned the joint remained in position and could not be separated except by excessive force.

Photographic evidence provided by visitors to the boat show revealed that on the previous day the microlight had landed on the beach and it was apparent that the rigging wires were slack. Photographs taken at the time of the accident showed the right tail boom beginning to separate in flight, and then twisting round as the microlight dived towards the dock.

The pilot, who was unlicenced, was not under the supervision of a qualified instructor as the regulations require. Furthermore, he had not obtained any dispensation from the low flying regulations from the CAA to enable him to fly within 3000 feet of a crowd of 1000 persons or more.