No: 8/84 Ref: EW/G84/07/04

Percival Gull Six G-AERD (light single engine fixed wing aircraft) Aircraft type and registration:

Piper PA-28-140E G-BEEU (light single engine fixed wing aircraft)

Year of manufacture: 1937, Gull 6

1973, PA-28

Date and time (GMT): 8 July 1984 1205 GMT

Location: Cranfield Airfield

Type of flight: Pleasure

Injuries:

Persons on board: Crew - 1 Passengers — 2

(both aircraft) (both aircraft)

Crew - Nil (both aircraft) (both aircraft)

Nature of damage: Gull 6 - Damage to port wing and undercarriage

PA-28 — Major damage to fin and rudder, starboard wing and slight

Passengers — Nil

distortion to fuselage

Commander's Licence: Private Pilot's Licence, both commanders

Commander's Age: Gull 6, N/K

PA-28, 56 years

Gull 6, 1503 hours (of which 32 hours were on type) Commander's total flying

PA-28, 709 hours (of which 284 hours were on type) experience:

Accident Report Pro-Forma completed by the pilots Information Source:

Both aircraft had been attending a large light aircraft rally at Cranfield, an annual event which customarily attracts many hundreds of light aircraft over the weekend.

The aircraft, on this occasion, had been partitioned such that the spectator and aircraft parking areas were confined to the north of R/Ws 08/26 and 22/04, allowing the full length of these runways to be available for take-off and landing. A grass runway, 1870 ft in length, had been marked out adjacent to the northern edge of R/W 08 for use by tail wheel or skid aircraft unable to use the hard runways. It terminated at the intersection of R/Ws 08 and 36 (inactive but used as a taxiway). It was 25 m wide and 75 m south of the spectator area boundary fence, ref. figure (1).

The pilot of G-BEEU, who had just landed on R/W 08, turned off to the left on R/W 36 and was following marshaller's directions prior to parking his aircraft.

Coincidentally, following ground marshallers' directions, G-AERD had lined up on R/W 08 (grass) and commenced the take-off run. The pilot later stated that he was very much aware of aircraft using the tarmac R/W 08, immediately on his right, and turning left to taxi across the upwind end of the grass R/W 08.

As the take-off run continued the aircraft started to swing right, which the pilot had expected it to do in the crosswind of 110°/10-15 kt, so he harshly applied left brake in an attempt to prevent the aircraft from running onto the active R/W 08. This action was partially effective but also had the effect of reducing the aircraft's acceleration and causing the nose to dip. Further along the runway, as it became airborne, the left wing dropped and the pilot states that use of rudder and alleron proved ineffective in correcting the situation. By now the aircraft was at a height estimated at 20 ft, was turning to the left and heading for the aircraft parking/spectator area. As a crash now appeared inevitable to the pilot he closed the throttle and the aircraft immediately contacted the ground on the inactive runway/taxiway 36. As it did so, G-AERD struck the fin and rudder of G-BEEU, with its left wing tip and also the right wing with the underside of its left wing. Both aircraft pivoted to the left and came to rest on the taxiway several hundred yards from R/Ws 08 and 36 intersection. There was no fire, none of the occupants or spectators were injured and the rescue services were quickly on the scene.

The pilot of G-AERD assessed the cause of the accident as being due to a combination of the difficult crosswind characteristics of his aircraft and the relatively confined position of R/W 08 grass.

An advisary air traffic control service was available throughout the rally although, in this instance, since the radio transmitter on G-AERD was unserviceable the pilot states he had been keeping only a listening watch.

