

Accident

Aircraft Type and Registration:	Piper PA-18-150, G-CLYI	
No & Type of Engines:	1 Lycoming O-320-A2B piston engine	
Year of Manufacture:	1981 (Serial no: 18-8109006)	
Date & Time (UTC):	13 May 2023 at 1415 hrs	
Location:	Sleap Aerodrome, Shropshire	
Type of Flight:	Private	
Persons on Board:	Crew – 1	Passengers – None
Injuries:	Crew – None	Passengers – N/A
Nature of Damage:	Damage to propeller, rudder strut and windscreen	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	22 years	
Commander's Flying Experience:	610 hours (of which 32 were on type) Last 90 days – 35 hours Last 28 days – 10 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot.	

Synopsis

The aircraft pitched over onto its back while making a short field landing at the end of a short takeoff and landing event. This was probably as a result of braking while landing with a tailwind. The aerodrome has identified actions to improve the safety management of flying events.

History of the flight

At the end of a short takeoff and landing (STOL) event, the aircraft made an approach to a grass strip at the left edge of Runway 18. G-CLYI, a tail wheel aircraft, was equipped with large bush wheels and a large propeller to enhance its STOL performance. The pilot stated that after touch down on the main wheels he applied gentle braking. However, as the aircraft slowed to below 10 kt with the tail remaining off the ground, the wind shifted to a light tailwind, and the tail lifted further into the air. In response, he attempted to give "a blip of throttle" to raise the nose, but without effect. As the tail lifted further into the air, the pilot reduced the throttle to idle and turned off the magnetos, at which point the propeller struck the ground. The aircraft tipped further onto its nose and then onto its back. The pilot turned off the electrics and fuel and exited the aircraft uninjured. The propeller, windscreen, struts and rudder were damaged.

STOL event

The event had been advertised only to members and other pilots, and not to the public. The pilot of G-CLYI stated that, as airfield accountable manager, he had previously been on the ground during the competition, supervising the adjudicators. He then took G-CLYI for a short flight towards the end of the event to conduct a STOL. The wind at the time was reported as light and variable.

Video evidence

A video (from which Figure 1 is a still image) showed two people adjacent to a line of cones at the point the aircraft touched down and two further people where the aircraft tipped over onto its back. These people had been adjudicating the STOL event.



Figure 1

Video screenshot of G-CLYI after landing

Aerodrome information

Sleap Aerodrome has licensed Runways 05/23 and 18/36. Runway 18/36 is 18 m wide, requiring a runway strip to the side of 30 m from the centreline to be maintained clear in accordance with CAP 168. A line of cones was placed 45 m from the runway centreline and delineated the aircraft parking area to the east from the runway and runway edge strip. The grass strip used for the STOL event was not a licensed runway but was part of the runway edge strip to the left of Runway 18.

Analysis

It is likely the aircraft landed with a tailwind and that this, combined with the application of brakes while attempting to perform a landing in as short a distance as possible, caused the loss of control. Persons adjudicating the STOL event were positioned beyond the limit of the runway edge strip for Runway 18. However, the use of the grass strip eroded the effectiveness of the measures in place to assure suitable separation between persons and aircraft operating on it.

The pilot stated that, as accountable manager, from the point that he went flying he had not exercised proper control of people on the ground, as he had not delegated his responsibilities during that time. To reduce the chance of reoccurrence the accountable manager identified several areas for improvement including:

- To appoint a deputy regardless of the scale of the event.
- To include risk management as part of event planning within the Safety Management System (SMS).
- To nominate a separate safety officer for events, to help identify safety issues from a different viewpoint.
- To work closely with experienced event planners and flying display directors for future events at the airfield.

The following safety actions have been taken.

- The SMS has been updated to include risk management in event planning.
- The airfield manager has gained a Tier 1 Flying Display Director accreditation.

Conclusion

It is likely the aircraft pitched over because of a combination of a light tailwind and braking to achieve a short landing.