

INCIDENT

Aircraft Type and Registration:	ATR 42-300, G-TAWE	
No & Type of Engines:	2 Pratt & Whitney Canada PW120 turboprop engines	
Year of Manufacture:	1994	
Date & Time (UTC):	20 January 2006 at 2107 hrs	
Location:	Runway 31 at Glasgow Prestwick Airport	
Type of Flight:	Public Transport (Passenger)	
Persons on Board:	Crew - 3	Passengers - 34
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Nose gear uplock bent and five runway edge lights damaged	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	57 years	
Commander's Flying Experience:	13,233 hours (of which about 5,000 were on type) Last 90 days - 123 hours Last 28 days - 38 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and report by Glasgow Prestwick Airport	

Synopsis

The commander initiated a night takeoff when lined up with the left runway edge lights.

History of the flight

While taxiing for a departure from Runway 31, the commander was given clearance to enter the runway by either 'R1' or 'Q'. The disposition of these holding points is as shown in Figure 1. He elected to enter by 'Q' and lined up the aircraft in a position he thought was just to the left of the runway centreline. The first officer then commented that he did not think that the 'perspective' looked quite right and the commander taxied G-TAWE to the left until it was lined up exactly over lights.

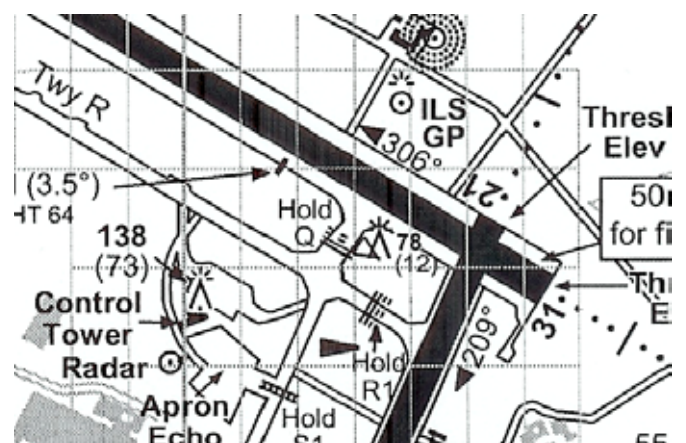


Figure 1

Disposition of the holds for Runway 31

Both crew members agreed that they were now on the centreline and the commander commenced the takeoff. However, almost immediately the crew were aware of increasingly loud ‘bumps’ from beneath the aircraft and the commander abandoned the takeoff.

He realised that he may have lined up on the left edge lights of the runway and obtained permission from ATC to return to ‘stand’. He subsequently informed ATC that the aircraft may have struck some lights. An inspection by ATC confirmed that five edge lights had been damaged.

Other information

Airport

Runway 31 has a declared width of 46 m but has a hard surface extending a further 23 m from each edge. Because of the width of the hard surface, the UK AIP contains the following warning:

‘Because of the extreme width of the concrete/asphalt surface forming Runway 13/31 (92 m) paved shoulders extend beyond each side of the runway. In certain conditions (poor visibility and at night) the runway edge lights may be mistaken for the centre-line (albeit the edge lights are raised and the centre lights are flush mounted). Pilots of departing aircraft should exercise extreme caution when lining up on the centre-line of the runway in such circumstances.’

All taxiways have green centreline lights except for the entry to Runway 31 by holding point ‘Q’. There are blue edge lights on all taxiways. The lights were on at the time of the incident.

Weather

The METARs for Prestwick for both 2050 and 2120 hrs were as follows: Surface wind 300°/12 kt; visibility greater than 10 km; cloud few at 1,200 feet and scattered at 2,800 feet.

Rain showers had been reported both before and after the incident. The commander of G-TAWE stated that there had been a heavy rain shower as he lined up on the runway.

Discussion

The commander, who was familiar with the airport assessed that the incident would have been avoided if he had followed the taxiway centreline lights from ‘R1’. He also considered that the heavy rain shower had distorted his vision.

The UK AIP contains a warning about the possibility of mistaking the runway edge lights for the centreline lights. In the incident involving G-TAWE, the use of ‘Q’, which has no centreline lights as a lead-in to the runway was a contributing factor. Since the incident, ATC no longer allow aircraft to use ‘Q’ when entering the runway at night or in poor visibility.