

ACCIDENT

Aircraft Type and Registration:	Avro 146-RJ85, G-JOTR
No & Type of Engines:	4 Lycoming LF507-1F turbofan engines
Year of Manufacture:	1996 (Serial no: E2294)
Date & Time (UTC):	19 January 2021 at 1428 hrs
Location:	London Biggin Hill Airport, Kent
Type of Flight:	Commercial Air Transport (positioning flight)
Persons on Board:	Crew - 5 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Front left fuselage punctured
Commander's Licence:	Airline Transport Pilot's Licence
Commander's Age:	62 years
Commander's Flying Experience:	10,618 hours (of which 5,761 were on type) Last 90 days - 76 hours Last 28 days - 11 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

The crew boarded G-JOTR while it was parked on a taxiway, but airfield restrictions required it to be towed to a designated area on the apron for engine start (Figure 1). The towing route followed the edge of the apron, which was damp and downhill, and involved a 90° left turn to line up for start. A combination of unfamiliarity with a relatively new operating base, towing in reverse and difficulty interpreting "indistinct" taxiway markings meant the tug driver entered the left turn later than intended. The late entry made the turn excessively tight, and the tug lost traction on the damp surface and jackknifed. The resulting combination of a sharp towing angle and the aircraft's downhill momentum caused the towbar shear pin to break. The commander applied the brakes immediately on hearing "the sound of snapping metal" but was unable to prevent the aircraft rolling forward into the tug.

The operator's internal investigation report made several safety recommendations, including a review of towing procedures, enhanced driver training, the use of radios by towing teams and improvements to taxiway markings. The company also reviewed its apron risk assessment and towing was added to their audit plan.

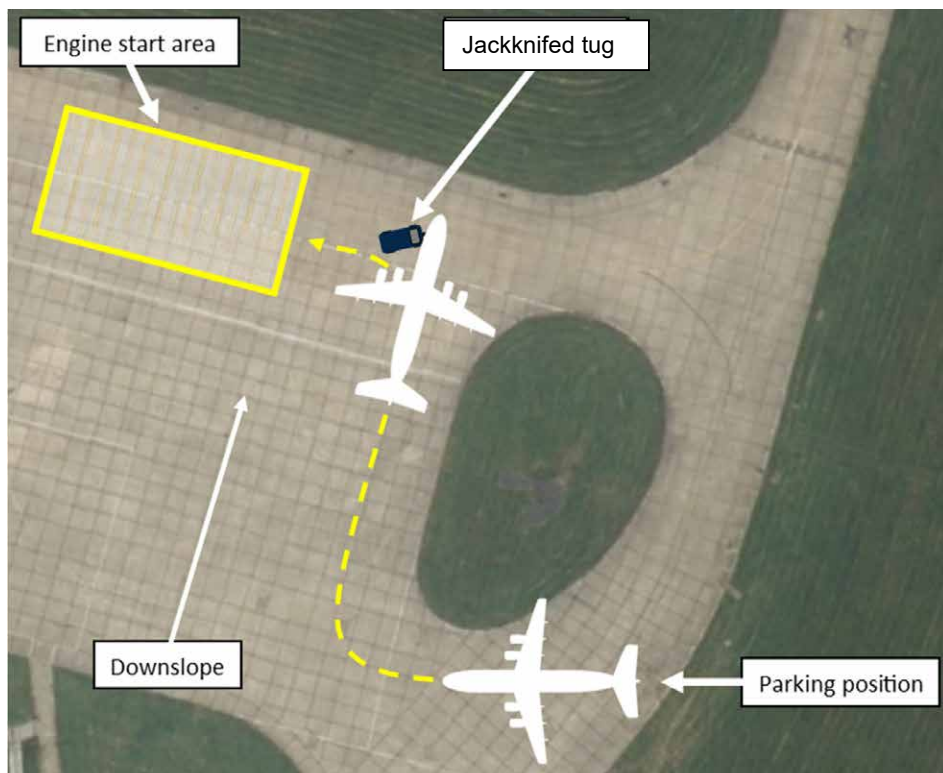


Figure 1

Approximate towing route and accident location
(Image courtesy of Ordnance Survey © 2021 TomTom)