AAIB Bulletin: 3/2021	D-IPPY	AAIB-26971
SERIOUS INCIDENT		
Aircraft Type and Registration:	Piaggio P 180 Avanti II, D-IPPY	
No & Type of Engines:	2 Pratt & Whitney Canada PT6A–66B turboprop engines	
Year of Manufacture:	2018 (Serial no: 3010)	
Date & Time (UTC):	19 September 2020 at 0755 hrs	
Location:	Near Southend-on-Sea, Essex	
Type of Flight:	Commercial Air Transport (Passenger)	
Persons on Board:	Crew - 2	Passengers - 3
Injuries:	Crew - None	Passengers - None
Nature of Damage:	None	
Commander's Licence:	Commercial Pilot's Licence	
Commander's Age:	42 years	
Commander's Flying Experience:	4,400 hours (of which 1,600 were on type) Last 90 days - 180 hours Last 28 days - 60 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and additional enquiries by the AAIB	

The aircraft departed London Luton Airport en route to Riviera Airport, Albenga, Italy, without event. During the climb passing FL220, the commander, who was PF, heard a dull sound that he believed was an outflow valve opening in the rear of the aircraft. Upon observing the cabin altitude, it indicated a climb of about 4,000 ft/min. The PM informed ATC that they were going to level off at FL230 in order to monitor the cabin altitude. As the cabin altitude continued to climb, and was approaching 10,000 ft, the commander manually deployed the passenger's oxygen masks and the crew donned theirs.

A PAN was declared and an emergency descent to FL100 requested to ATC. The aircraft was initially cleared to FL200, due to traffic below, but was soon re-cleared to FL100. The descent was continued and the appropriate checklist completed. The aircraft diverted to London Biggin Hill Airport where it landed, with the RFFS in attendance, without further event. There were no injuries.

The engineering investigation discovered a clamp connecting a hose to the Environmental Control System had become lose, possibly as a result of vibration, leading to a loss of cabin pressure. After rectification the aircraft was released to service.

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