

**SERIOUS INCIDENT**

<b>Aircraft Type and Registration:</b>	SD3-60 Variant 100, G-GPBV	
<b>No &amp; Type of Engines:</b>	2 Pratt & Whitney Canada PT6A-67R turboprop engines	
<b>Year of Manufacture:</b>	1988	
<b>Date &amp; Time (UTC):</b>	19 August 2008 at 2018 hrs	
<b>Location:</b>	On departure from Inverness Airport	
<b>Type of Flight:</b>	Commercial Air Transport (Cargo)	
<b>Persons on Board:</b>	Crew - 2	Passengers - None
<b>Injuries:</b>	Crew - None	Passengers - N/A
<b>Nature of Damage:</b>	Nil	
<b>Commander's Licence:</b>	Airline Transport Pilot's Licence	
<b>Commander's Age:</b>	31 years	
<b>Commander's Flying Experience:</b>	2,960 hours (of which 250 were on type) Last 90 days - 74 hours Last 28 days - 15 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

**Synopsis**

Shortly after departure the crew became aware of an electrical burning smell. They attempted to don their oxygen masks but had some difficulty in using them because they were different from the masks on which they had received their training. The crew returned to their departure airfield and landed safely.

**History of the flight**

During the takeoff the commander noticed a large amount of water spilling into the area around the flap lever. Shortly afterwards, whilst climbing through FL60, the crew became aware of an electrical burning smell and identified the source of the smell as coming from behind the flap lever. They attempted to don their oxygen masks and declared an emergency; when cleared

by ATC they descended to 3,500 ft. The co-pilot was still having difficulties in donning his oxygen mask. The commander had his mask on, and it was supplying oxygen, but he had difficulties in communicating both with his co-pilot and with ATC.

During the pre-flight briefing the crew had stated that, in the event of an emergency, they would return to Inverness for an ILS for Runway 05. The crew followed this plan, landed safely and the aircraft was met by the fire crews and an aircraft engineer.

Throughout the emergency neither of the crewmembers was able to get their oxygen mask to work to their satisfaction.

**Comment**

The operator had three Short 360s, with this aircraft being the most recent to join its fleet. The other two aircraft had a different mask and oxygen system from that fitted to this aircraft, and the operating crew had no prior knowledge of this. During their initial and recurrent training on the aircraft, they had both used the masks and oxygen systems fitted to the other two aircraft.

The operator has confirmed that the cause of the electrical smell was water entering past the window

seals and causing an electrical short circuit behind the flap lever. The leaking window seals have since been repaired.

The company stated that the oxygen masks were serviceable, and that the difficulties experienced by the crew were because of a lack of familiarity with the system. The company has now introduced additional training to ensure that all their crews are fully conversant with the differences between the aircraft in their fleet.