INCIDENT

Aircraft Type and Registration: Beech King Air 350, F-GVLB

No & Type of Engines: 2 Pratt & Whitney PT6A-60A turboprop engines

Year of Manufacture: 2000

Date & Time (UTC): 9 December 2007 at 1752 hrs

Location: En route Galway to Paris

Type of Flight: Commercial Air Transport (Passenger)

Persons on Board: Crew - 2 Passengers - 8

Injuries: Crew - None Passengers - None

Nature of Damage: Right side circuit breaker panel

Commander's Licence: Commercial Pilot's Licence

Commander's Age: 42 years

Commander's Flying Experience: 3,600 hours (of which 170 were on type)

Last 90 days - 170 hours Last 28 days - 39 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

Synopsis

During cruising flight at Flight Level (FL) 330, the crew reported an electrical burning smell and smoke in the cockpit, and diverted to Cardiff Airport. The cause was subsequently found to have been caused by electrical shorting due to moisture ingress into the right circuit breaker panel, located directly below the direct vision (DV) panel in co-pilot's side window. Before the flight, the aircraft had been parked outside for two days at Galway, during which time it had rained.

History of the flight

The aircraft was operating a commercial air transport flight between Galway, Ireland and Paris Le Bourget Airport, France. Whilst at FL330, the crew became aware of the acrid smell of burning electrical insulation.

A 'MAYDAY' was transmitted to ATC and an emergency descent to FL120 was performed. Although no visible smoke was visible in the cockpit, the commander initiated the Smoke Removal drill. Shortly thereafter, the acrid smell returned, accompanied by smoke, prompting the crew to divert to Cardiff Airport, where an uneventful emergency landing was performed. The smoke dissipated prior to landing. The airport emergency services attended but on inspecting the aircraft could find no evidence of fire.

Subsequent investigation revealed that the burning smell had been caused by electrical shorting due to moisture ingress into the right circuit breaker panel, which is located directly below the DV panel in the co-pilot's side window.

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The aircraft had been parked outside for two days at Galway, during which time it had rained, and water had seeped past the DV panel seal and run down on to the circuit breakers.

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