AAIB Bulletin No: 2/96 Ref: EW/C95/9/1 Category: 1.1

INCIDENT

Aircraft Type and Registration: Fokker F28 Mk 070, G-BVTF

No & Type of Engines: 2 Rolls-Royce TAY 62015 turbofan engines

Year of Manufacture: 1995

Date & Time (UTC): 17 September 1995 at 1026 hrs

Location: Stand B2, London Heathrow Airport

Type of Flight: Commercial

Persons on Board: Crew - 6 Passengers - 15

Injuries: Crew - None Passengers - None

Nature of Damage: None to aircraft, minor to refuel bowser

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: Not relevant

Commander's Flying Experience: Not relevant

Information Source: AAIB Field Investigation

With the flight crew on board, the aircraft was embarking passengers prior to a flight to Leeds/Bradford Airport when the loadmaster and No 1 stewardess became aware, from the reaction of several passengers, that something unusual was happening outside to the right of the aircraft. They quickly established that a small fire was burning in the region of the diesel engine of the bowser refuelling the aircraft. An announcement was made over the public address system directing the passengers to leave the aircraft via the jetway through which they had just boarded, with which the passengers complied. The commander of the aircraft, on hearing this announcement, made his way into the cabin, by which time both the fire and the passengers were no longer to be seen.

The bowser driver/refueller, upon seeing the fire, had stopped the refuelling operation and disconnected the hose from the aircraft. Together with a colleague and airline employee, the fire was extinguished using portable extinguishers, two of them from the subject vehicle, which were discharged into the fire from beneath the bowser's engine. Approximately one minute after the alarm was raised, the Airport Fire Service was in attendance.

Initial examination of the bowser, and a subsequent partial strip examination conducted at the fuel company's facility at the airport, revealed a small primary region of fire around the starter motor and oil pressure switch low down on the right side of the engine, with a secondary area of heat damage in the region of the exhaust/turbo unit on top of the engine. It was apparent that a small oil leak had developed from the oil pressure switch which had then ignited after spreading through the engine compartment.

The bowser in question had been the subject of a full service/inspection by the fuel company concerned some three months before the incident, during which it was recorded that no fuel, or oil leaks, were present in or around the engine.

In common with most airlines and airports, refuelling of aircraft with passengers on board is allowed, subject to certain safeguards. The Operations Manual of the airline concerned states the following:-

"Fuelling with passengers on board, boarding or disembarking is permitted provided:-

- it is not prohibited by the airport authorities
- wide cut fuel is not involved or fuel that does not contain anti-static additive
- airstairs, steps or a jetty is in position at the main door
- the ground area beneath each door and emergency exit is kept clear
- the passengers, other than those who are sleeping or in transit, have been advised that refuelling is taking place, and advised not to use lighters, matches, etc
- boarding or disembarking passengers are kept well clear of wings, tank vents and refuelling equipment
- the Fasten Seat Belts signs are off, and all passengers seat belts are unfastened
- the No Smoking signs are on and no one is smoking
- sufficient emergency lighting is illuminated to enable emergency exits to be identified
- no electrical equipment or switches are operated
- no HF transmissions are made
- radar is not operated
- a member of the cabin crew is stationed at each main door and emergency exit to deploy escape slides if required, (except escape slides need not be armed)
- with the exception of jetties or steps the drivers of vehicles are advised that they must move equipment away on their own initiative if fire breaks out".