Service Investigation Accident / Incident Report P&WC 8114 (11-98)



Report No.: 02-031 Page 1 of 24

I ANALYSIS

1.0 ACCIDENT SYNOPSIS

After take off, and normal power reduction to cruise, the pilot reported that the engine started to lose power. There was no response to power lever movement and the aircraft made a forced landing in a field near Lamesa, Texas, during which it flipped over causing considerable damage. The engine was forwarded to the Pratt & Whitney Canada Corp. (P&WC) Service Centre in Addison, Texas where P&WC Field Support Representative, Mr. Fletcher Sharp, in the presence of NTSB and FAA Representatives, reviewed its condition. At the request of the NTSB, the engine FCU and Fuel Pump were removed and forwarded to P&WC for further analysis.

The engine had previously been converted from a PT6A-15AG model and identified as a PT6A-34 under FAA STC No. SE7677SW by Airforce Turbine Service, Tynan, Texas (Photo No. 1). This modification is not supported or approved by P&WC.

2.0 SUMMARY OF FINDINGS

The FCU and fuel pump were externally dirty. The FCU throttle lever was bent with its adjacent housing cracked. The governor cam lever was fractured. Disassembly of both units showed that all of the other internal components were accounted for, with no major distress observed. A high level of contaminants consisting mainly of fertiliser and water was found throughout the fuel sections of both components.

3.0 CONCLUSIONS

The examination of the FCU and Fuel Pump revealed no mechanical anomalies that would have prevented their proper operation prior to the accident.

The damage observed on the FCU throttle lever and the governor cam lever was most likely caused by impact.