



No.	CF-1999-06R1	1/2
Date	13 April 2000	

AIRWORTHINESS DIRECTIVE

THE FOLLOWING AIRWORTHINESS DIRECTIVE (AD) MAY BE APPLICABLE TO AN AIRCRAFT, WHICH OUR RECORDS INDICATE IS REGISTERED IN YOUR NAME. ADS ARE ISSUED PURSUANT TO **CANADIAN AVIATION REGULATION (CAR) 593**. PURSUANT TO **CAR 605.84** AND THE FURTHER DETAILS OF **CAR STANDARD 625, APPENDIX H**, THE CONTINUING AIRWORTHINESS OF AN AIRCRAFT IS CONTINGENT UPON COMPLIANCE WITH ALL APPLICABLE ADS. FAILURE TO COMPLY WITH THE REQUIREMENTS OF AN AD MAY INVALIDATE THE FLIGHT AUTHORIZATION OF THE AIRCRAFT. ALTERNATIVE MEANS OF COMPLIANCE SHALL BE APPLIED FOR IN ACCORDANCE WITH **CAR 605.84** AND THE ABOVE-REFERENCED **STANDARD**. THIS AD HAS BEEN ISSUED BY THE CONTINUING AIRWORTHINESS DIVISION, AIRCRAFT CERTIFICATION BRANCH, TRANSPORT CANADA, OTTAWA.

CF-1999-06R1 BOMBARDIER

Applies to all Bombardier Inc. (formerly de Havilland) Model DHC-3 "Otter" aircraft powered by Pratt & Whitney (P&W) reciprocating, nine-cylinder, radial, air-cooled engines.

Compliance is required as indicated, unless already accomplished.

The initial type approval basis for the DHC-3 aircraft was ICAO Annex 8, 2nd Edition (Transport Category D) which specifies fire detecting and extinguishing provisions. Maintaining a serviceable fire detection system has proven difficult, primarily due to the fire detection sensing element having become time-expired; replacements were not available and there was no available approved substitute. A few approvals were previously granted to authorize the removal of the fire detecting and extinguishing (FDE) system. The Airworthiness Directive Review Board has reviewed the engine fire related history for P&W powered DHC-3 aircraft and confirmed the need for a serviceable FDE system; an FDE system is now available.

Airworthiness Directive (AD) CF-99-06 mandated the inspection of FIREX and FIRDET systems, and the installation of serviceable approved ones. This revision extends the compliance time for installation of serviceable approved systems.

To ensure that the P&W powered DHC-3 aircraft is in compliance with its type approval basis, accomplish the following:

1. Within 60 days after the effective date of this directive, inspect the fire extinguishing system (FIREX) in accordance with the DHC-3 Maintenance Manual, PSM 1-3-2, pages 122 and 122A (revised 15 September 1963), paragraph 4.11.4. If the FIREX is found unserviceable, no later than 30 November 2000, repair or replace it with a serviceable system approved by Transport Canada.
2. Within 60 days after the effective date of this directive, determine if the fire detection system (FIRDET) is time-expired by making reference to the appropriate Gravinier Ltd. literature such as Maintenance Leaflet ML 066, dated April 1981. If the FIRDET is determined to be time-expired, no later than 30 November 2000, replace it with a serviceable system approved by Transport Canada.
3. For aircraft that have had the FIREX and/or the FIRDET removed, no later than 30 November 2000, replace the missing system(s), as applicable, by installing a serviceable FIREX and/or FIRDET approved by Transport Canada. This directive supersedes and cancels the authority granted in any Supplemental Type Certificate, Supplemental Type Approval, Limited Supplemental Type Certificate or Limited Supplemental Type Approval that authorized the removal of the FIREX and/or FIRDET.

Note: This directive has been issued to provide a temporary alleviation for those aircraft that are out of compliance with the DHC-3 type approval basis due to the FIREX and/or FIRDET systems being inoperative or time-expired or having previously been granted permission to remove the FDE system. Transport Canada has approved the following two Supplemental Type Certificates (STCs) for a substitute engine FIRDET, and is in the process of approving a new FIRDET and FIREX that are acceptable for compliance with the requirements of this directive.

Transport Canada Approved FIRDET Systems

STC SA98-43

Avro Labrador Aviation Services Inc.
P.O. Box 748, Stn. C
Happy Valley, Goose Bay
Labrador, Newfoundland
Canada A0P 1C0
Telephone: (709) 896-4185 / 5663
Facsimile: (709) 896-9102

STC SA99-213

Air Saguenay (1980) Inc.
P.O. Box 1102
Chicoutimi, Quebec
Canada G7H 5G4
Telephone: (418) 673-6262
Facsimile: (418) 673-3692

This revision supersedes Airworthiness Directive CF-99-06 issued 9 March 1999.

This directive retains the 23 April 1999 effective date of the original issue CF-99-06.

For Minister of Transport



B. Goyaniuk
Chief, Continuing Airworthiness

For further information, contact a Transport Canada Centre, or Mr. Ramon A. Raoux, Continuing Airworthiness, Ottawa, telephone (613) 952-4365, facsimile (613) 996-9178 or e-mail raouxr@tc.gc.ca.