



feed**back**

Canadian Aviation Service Difficulty Reports

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hangar *noise*

A Message for Aircraft Maintenance Personnel

SDR Logic Chart - Revision 1....a new look

The SDR Logic Chart had been in circulation for approximately two years and has been very positively received by operators and maintainers. Revision 1 incorporates minor changes with the objective of improving and clarifying some of the modified text.

Submitter Type Section:

- ➔ New sub-headings of Mandatory and Voluntary Reporting to better emphasize applicable CAR requirements;
- ➔ Flight Training Units and Private Operators have been added to include their regulatory obligation. General Aviation operators have also been added to invite voluntary SDR submissions. For convenience, the applicable CAR references are included.

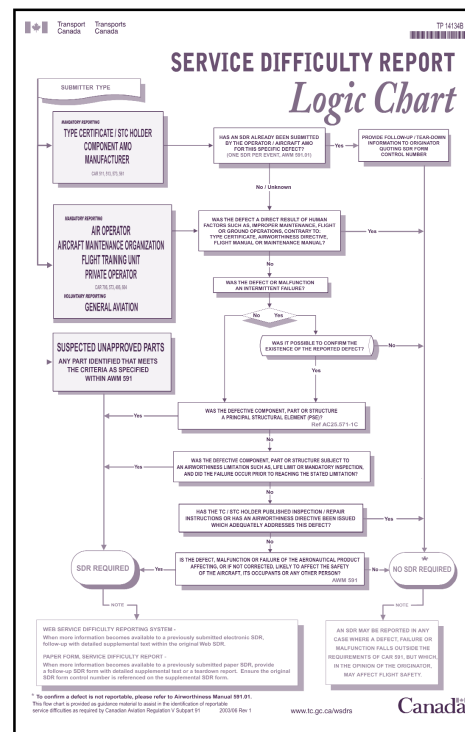
Center Column:

- ➔ Several center boxes have minor changes including a new box that specifically addresses Principal Structural Elements (PSE), including the reference to Advisory Circular AC25-571-1C:

Principal Structural Element (PSE) is an element that contributes significantly to the carrying of flight, ground, or pressurization loads and whose integrity is essential in maintaining the overall structural integrity of the airplane.

Bottom Right Column:

- ➔ An asterisk * has been added to the "NO SDR" box. This "*" directs the submitter to AWM 591.01 for confirmation that no SDR is required.



This SDR Logic Chart is provided as convenient guidance material to assist the user in identifying reportable service difficulties.

Note:

Revision 1 SDR Logic Chart (TP14134B) has a two-sided bilingual format and a new background appearance. SDR Logic charts are available at your local Transport Canada Center (TCC) or can be requested via e-mail address: SDRS@tc.gc.ca.

For more information or copies of **feedback** or other Civil Aviation publications, call 1-800-305-2059 or visit our web site at www.tc.gc.ca/civilaviation/certification. To ensure continued delivery, send any address changes to:

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Cette publication est aussi disponible en français.

fixed *wing*

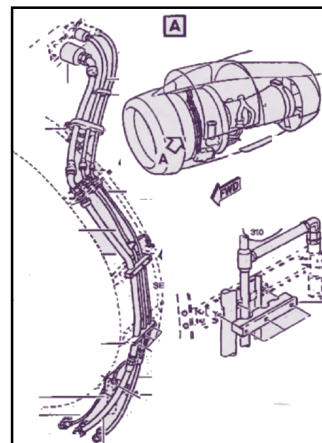
AIRBUS A320

Hydraulic Hose Chafed

A hydraulic hose was found chafed through on Engine 1 green hydraulic system pump pressure transducer of an A320. This resulted in substantial fluid loss, emergency decent and a subsequent unscheduled landing.

Most power plants have a myriad of lines for the various engine and airframe systems, located out of necessity in close proximity to various other lines and components.

The SDR program continues to receive many reports of line failure due to inadequate clearance to adjacent structure. By ensuring adequate clearance and/or protection, both at initial installation and during maintenance, the risk of this costly failure is negated.



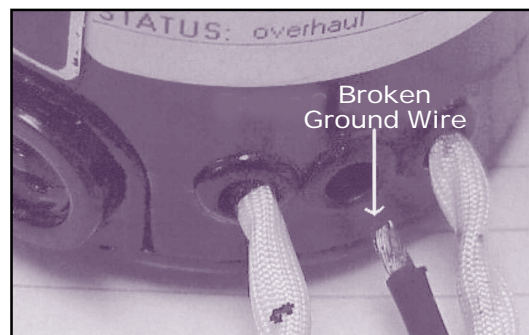
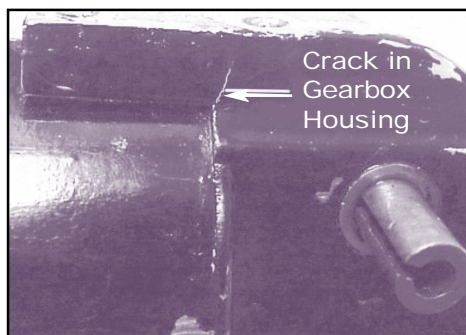
BEECH 58P

Flap Motor Defective

SDR # 20030506006

Subsequent to the installation of a newly overhauled flap motor (P/N 3536415157); the AME noticed intermittent flap indications during functional checks.

Upon removal and investigation of the suspect flap motor; the source of the problem was traced to a faulty/loose internal wire. A further inspection of the flap motor revealed an obvious crack in the gearbox housing.

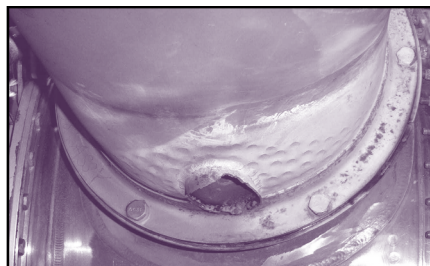


Transport Canada reminds maintainers to carefully examine all aeronautical parts for defects and also for traceability before installation. The SDR data base lists many other similar reports of this nature.

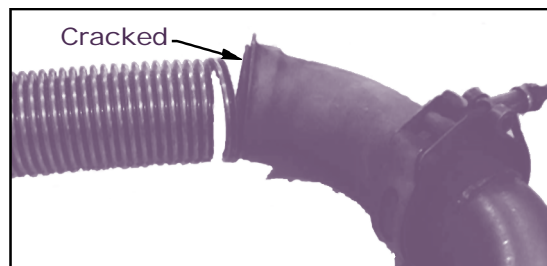
BEECH C90A

Anti-Ice Boss Cracked

SDR # 20030115006



During a routine inspection on a Beech C90A, the anti-ice boss on the LH exhaust stack (P/N 109-950000-1) was found broken off with the anti-ice flex tube. The flex tube was also cracked around the lower elbow.



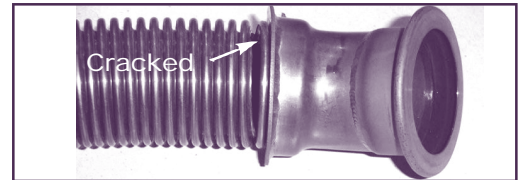
A heads up for maintainers when inspecting this area.

BEECH C90A

SDR # 20021125012

Anti-Ice Tubes Cracked

During inspection on a Beech C90A, the R/H engine cowl was removed and the anti-ice flexible tube, PN 90-910100-17 that routes exhaust air to heat the engine cowl intake was discovered cracked. The crack extended approximately 1/3 of the circumference of the tube.



Time Since New (TSN): 124.6 hrs

Manufacturer's Service Bulletin 71-3142 was issued to reduce cracking in this area. However, cracks have been reported subsequent to compliance with SB71-3142.

Transport Canada recommends increased vigilance in this area for cracks.

CESSNA 150

SDR # 20030423006

Horizontal Stabilizer Cracking

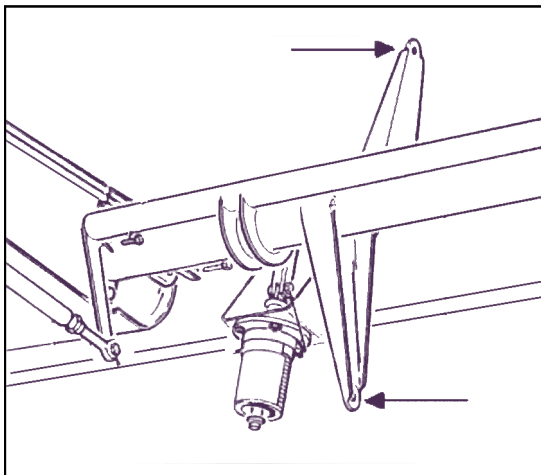
Leading Edge Rib assemblies on a Cessna 150, part numbers 0432001-46 & 0432001-6, are very difficult to see. The use of a mirror through the horizontal spar and rib lightening holes is the only way to visually inspect for cracks along the tabs.

The submitter believes the ribs are cracking due to improper ground handling. The practice of pushing the aircraft's tail down by its spar in order to rotate the aircraft in position may be damaging these ribs. Both ribs were replaced with new.

Small aircraft may be moved by hand, however damage can be inflicted on these aircraft by improper procedures. Be sure to use a tow bar.

DE HAVILLAND DHC 2 MKI

SDR # 20030318009

Cable Attach Point Elongated

During inspection, the elevator torque tube, part number C2T7A, lower cable attach point was found to be elongated.

TSN: 21,878 hours.

Frequently, this sort of defect is discovered only when other maintenance requires the removal of an associated component. Diligent inspection was necessary to turn up this defect that may otherwise have gone unnoticed.

Defects occurring within a cable loop may be indicated by an unexplained change in cable tension or the inability to obtain constant cable tension readings when rigging.

To accurately inspect for this kind of defect, control cables must be loosened in order to detect any play in the attachment ends.

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DE HAVILLAND DHC 7 102

SDR # 20030514008

Wiring Chafed

During heavy maintenance inspection on DHC 7 102, two wires were found (2610-300 13a22 and 2610-30006a22) chafed and broken at deteriorated clamps in the lower aft firewall area. The rubber cushion had torn away allowing the metal clamp to wear the wires. These wires are for the fire loop system on the #3 engine, which was working when the aircraft was taken down for maintenance. Only the support clamps were holding the wires together.

The fire loop system has been snagged many times in the past; it would fail the pre-flight test three or four times per year, mostly on cold winter mornings. It was usually repaired by cleaning/replacing the connections in the fire loop. It is suspected that the bad connection in these chafed and broken wires may have increased the resistance in the system and caused the test to fail in the past.

This defect illustrates wiring damaged as a result of a deteriorated clamp cushion. It was found during inspection of an aircraft approaching the "aged stage" of its life (20 years).

ISRAEL ASTRA SPX

SDR # 20030424004

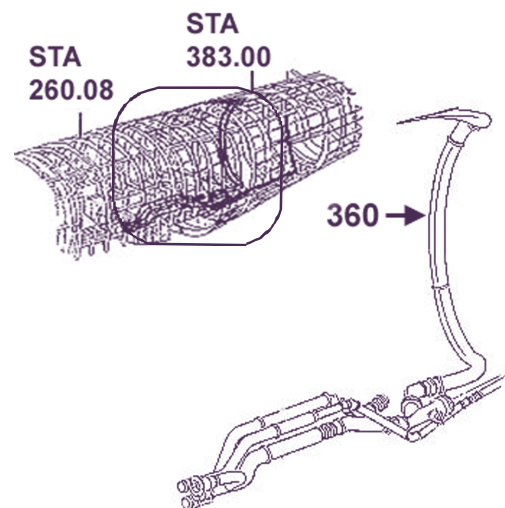
Duct Cracked

During a 1000-hour inspection, the aft baggage compartment interior was removed, allowing access to the ram air duct. This plastic duct is located on the right side tucked tightly against the fuselage skin at STA 350.

During inspection, a 10-inch circular crack was found in the duct (P/N 25W783016011) adjacent to the fuselage skin at approximately Stringer #6R (counting down from upper stringer).

The nature of this crack allowed the duct to open up when internal pressure was applied. This crack was only evident by feel, or using a flashlight and mirror.

The duct is used to clear the fuselage interior in the event of in-flight fire/smoke. Replacement of the duct was required.



Israel Aircraft Industries has introduced a new part number duct.

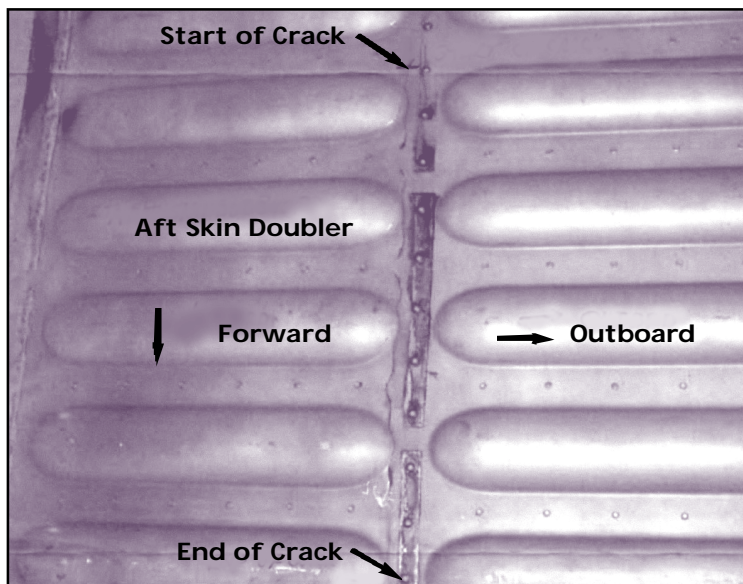
PIPER PA23 250

SDR # 20030409015

Down Lock Mechanism Failed

When the pilot selected landing gear up, the gear did not retract. The submitter discovered that the down lock mechanism PN 1764500 was contaminated with dirt. The landing gear was cleaned and lubricated, and gear retractions were successfully carried out. The aircraft was returned to service.

There are many Service Difficulty Reports in the Transport Canada database identifying deficient landing gear cleaning and lubrication. AC 43.13 emphasizes that cleanliness is important during and after lubrication. Cleanliness may prevent unnecessary dirt accumulation and prevent component malfunctions.

**PIPER PA 28 140**

SDR # 20030214006

Wing Walk Doublers Cracked

The doublers on the bottom of the wing walk skins PN 00-62061-002/804 just outboard of the stamped stiffeners were severely cracked. The aft skin crack was 42cm in length. The forward skin had three cracks 5cm in length.

This area is not normally accessible. However, this aircraft (PA28 140) has an extra inspection hole installed from a previous Service Bulletin. The submitter advises that this area be inspected with a boroscope, especially on higher time aircraft.

TSN: 9402 hrs

PIPER PA 31T2

SDR # 20030313003

Pneumatic Regulator Valve Failed

On approach of a Piper PA31T2, the crew noticed multiple avionics failures. The VOR signal strength was very weak; #1 radio and most navigation equipment were inoperative. The pneumatic pressure was noted as being at 21 PSI, when it should have been at 18 PSI. The pneumatic regulator valve PN 584228(1H5210) had failed.

This failure caused hot air to be released at the pressure relief valve, which is located in close proximity to an antenna coaxial cable bundle. The hot air hardened and damaged the cables, causing the avionic failures mentioned above.

SHORTS HARLAND SD 360

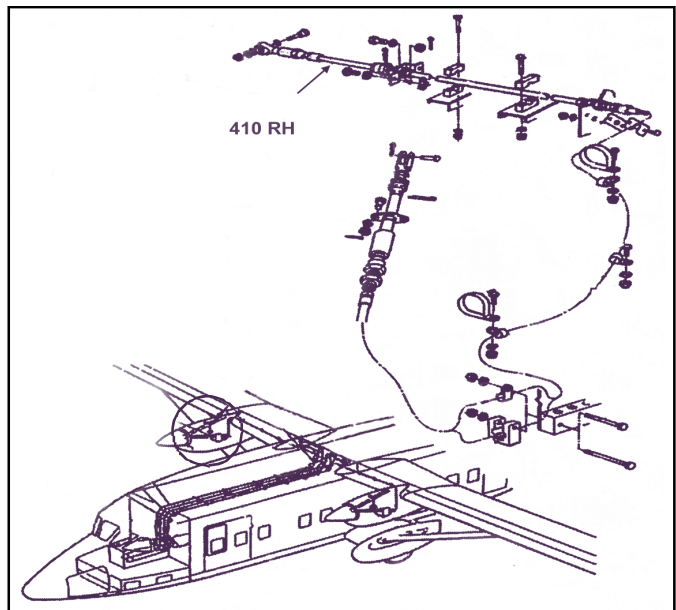
SDR # 20030422002

Teleflex Cable Broken

On approach the pilot could not get R/H engine power low enough for approach power setting. The aircraft landed at a higher than normal power setting and after landing, neither beta nor reverse selections were possible. Maintenance personnel discovered that the power lever movement in the cockpit was limited in the forward direction, and no movement in either direction was visible at the engine.

Investigation revealed that the R/H power control Teleflex cable (P/N A55 2326 Post Mod A8457) had broken inside its conduit. Location of the break was at a 180-degree bend in the cable just below the engine control cam cluster. The problem may have been compounded by the lower cowl interference with the cable conduit when the cowl was in the closed position, causing additional stress in the area of the bend. It was noted that the cowl interfering with the cable would be difficult to see with the cowl closed.

There was no significant damage to the exterior conduit so this defect would unlikely be detected in advance.



This SDR stresses the importance of proper routing and ensuring adequate clearance is obtained with the adjacent structure.

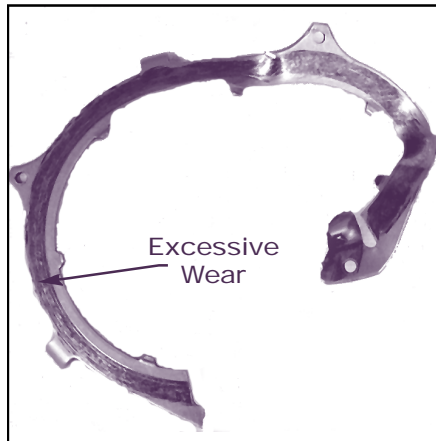
rotorcraft

AEROSPATIALE AS 350BA

SDR # 20030429002

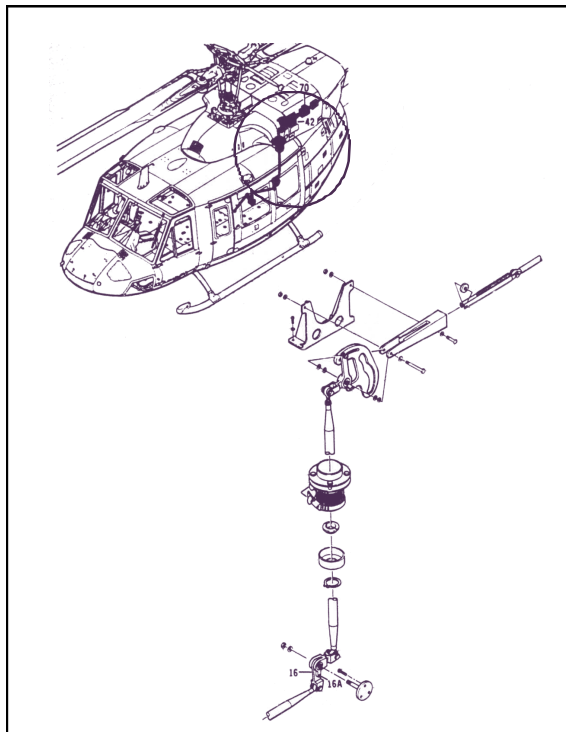
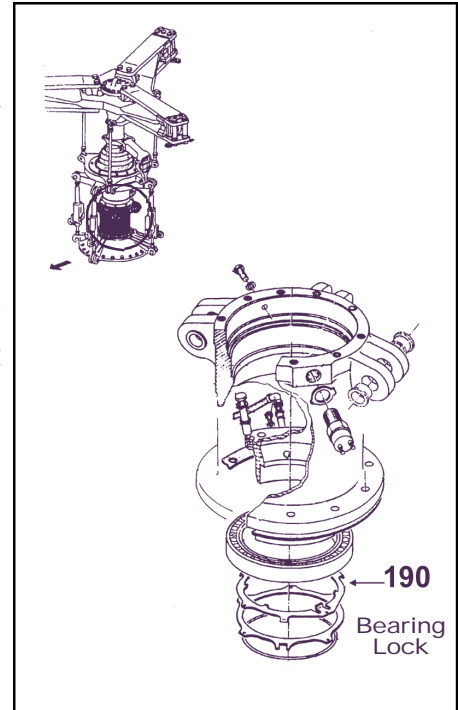
Main Rotor Mast, Bearing Lock Broken

Main rotor gearbox was removed for metal contamination and sent for overhaul. Upon disassembly, the bearing lock (P/N 350A37-1183-22), located between the lower bearing inner race and the epicyclic carrier shoulder, was found broken into multiple fragments. This caused extensive damage to the epicyclic and contaminated the reduction gearbox assembly.



A service history review of past failures of the subject lock indicates that cracks may be a result of inadequate torque pre-load on the mast bearing lock. When replacing any one of the two mast bearings, the thickness of the shims must be adequate to obtain specified pre-load. If not, looseness and unwanted vibrations may result causing damage.

Transport Canada reminds maintainers to verify the bearing shim stack-up and to carefully check the subject lock for wear whenever mast seals require replacement.



BELL 212

RDS # 20030416003

Bellcrank Shear Rivet Sheared

While on approach, the droop compensator system of a Bell 212 failed to respond and engine rpm increased as the collective lever was lowered. The pilot adjusted engine rpm using the electrical trim system (beep switch).

Subsequent inspection found that the engine governor control bellcrank shear rivet (P/N MS20470B3) had sheared. No binding could be found in the governor control system linkages. Failure of the shear rivet is likely the result of fatigue.

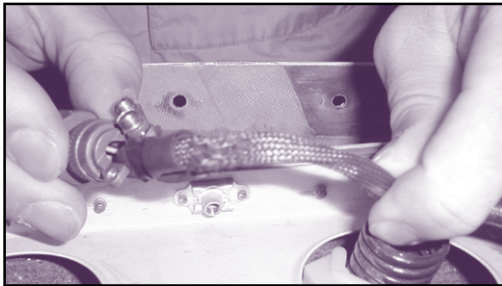
EUROCOPTER EC 120 B

SDR # 20030409012

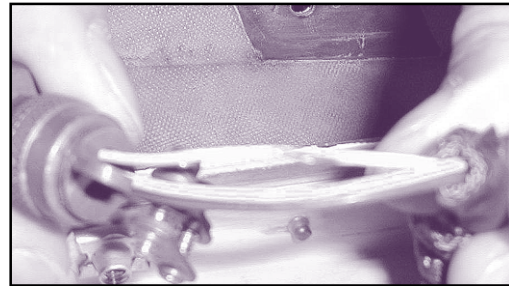
Cabin Smoke

During cruise flight, smoke was noticed in the cabin. Shortly after an immediate and uneventful landing, all electrical power was lost (including battery power).

over 1000 hours time since new (TSN). A similar occurrence had previously occurred on a foreign registered EC 120 B rotorcraft.



Ground wire to metal on top of vertical plate



Light Ancillary Control Unit (LACU)

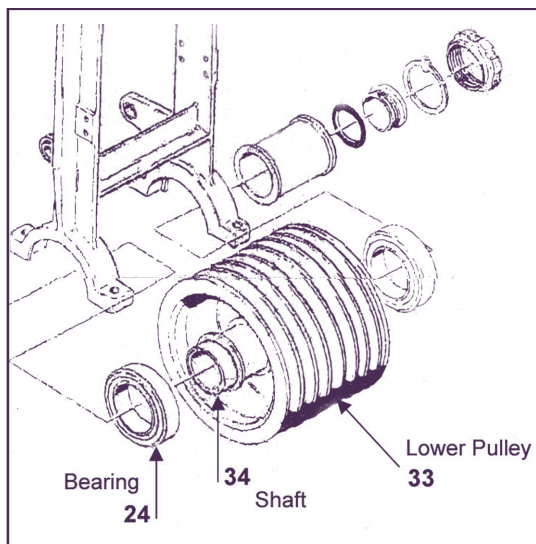
Follow-up investigation revealed that the wire harness leading directly to the anti-collision light on the upper vertical fin had chafed through causing a direct electrical short to the Light Ancillary Control Unit (LACU). The wiring was repaired and the rotorcraft returned to service. This particular rotorcraft has been in service for

There are numerous inputs into the LACU such as landing/strobe/position lights, master battery "on", generator switch, fuel pump, pitot heat, rotor RPM, fire test, etc.

Transport Canada recommends that all EC 120 operators inspect this area for similar wire chafing pending further action from the manufacturer.

SCHWEIZER 300C

SDR # 20030425008

Main Rotor Drive, Lower Pulley Shaft Bearing Slipped

Drive Assembly and Main Rotor Transmission

While carrying out a detailed inspection of the belt drive (300-hour inspection), the engineer noted that the inner race of bearing, P/N 269A5050-85, had slipped on the shaft, P/N 269A5497-9, as indicated by the slippage marks. Upon disassembly of the "H" frame, it was noted that the bearing could be hand rotated on the shaft. The assembly was removed from service because the shaft and bearing are press fitted.

Investigation revealed that some shafts might have been manufactured incorrectly by the OEM with a very slight taper, which later resulted in the bearing becoming loose enough to rotate on the shaft. The OEM has a repair for tapered shafts, which is to grind and then nickel-plate the shaft.

Close attention to the slippage marks on the shaft should adequately detect any unwanted movement of the bearing.

heads *up*

BEECH 95B55

SDR # 20030507007

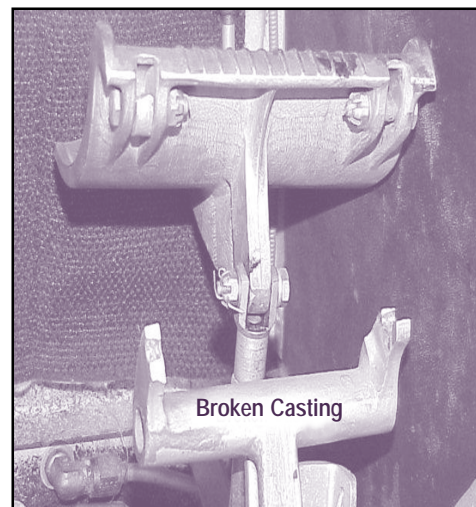
Rudder Pedal Cracked

During a flight control operational check during scheduled maintenance, the L/H rudder pedal PN 505243263 fractured at its attachment point. Oblong wear was discovered in the attachment area.

The wear was not easily noticed due to design and attachment to the brake master cylinder. Therefore removal of attaching hardware securing the pedal was required to inspect for any additional wear. A subsequent inspection of the remaining company Beech 95B55 aircraft revealed similar defects.

TSN: 6189.4 hrs

This rudder pedal part number is employed in various Raytheon/Beech aircrafts; pay close attention when inspecting this area.



equipment *ADs*

Transport Canada endeavours to send copies of new ADs which are applicable in Canada to the registered owners of the affected products. This type of AD is often only distributed to our regional offices because the owners of aircraft affected by equipment/appliance ADs are not generally known.

The following new equipment ADs have been received by Transport Canada in the last three months. Maintainers and Operators of the affected products are encouraged to obtain further information or a copy of the ADs from their regional TC office, their local TCC, their PMI, or from the Civil Aviation AD website at:

<http://www.tc.gc.ca/civilaviation/certification/continuing/ad.htm>

MANUFACTURER	AD NUMBER	ORIGIN	DESCRIPTION
ANJOU AÉRONAUTIQUE	2002-104(AB)R2	FR	SAFETY BELTS & RESTRAINT SYSTEMS TYPE 343-1 ANJOU AERONAUTIQUE SB 343-1-25-01
ANJOU AÉRONAUTIQUE	2002-105(AB)R2	FR	SAFETY BELTS & RESTRAINT SYSTEMS TYPE 343 SB 343-25-02
APIC	2002-453(B)R1	FR	AUXILARY POWER UNIT EXHAUST TAILPIPE EJECTION CRACKS IN INNER LINER - APIC
BRUGGEMANN GMBH	2003-162	GY	EMERGENCY PARACHUTE- RETTUNGSFALLSCHIRM RFS II- OPENING MECHANISM - SBNR. LBA 001

AGING AIRCRAFT (PART II)



→ **Ramon (Ray) Raoux, P. Eng.**

Background

Feedback Issue 1/2003 described the structural concerns and the subsequent maintenance activities that were developed for maintaining the airworthiness of aging aircraft. While the structural matters were being addressed in the 1990s, concerns were raised that the electrical systems in older aircraft might also need similar action. There had been a number of onboard fires, such as the Air Canada DC-9 near Cincinnati in 1983 and the fuel tank explosion in a B737 in Manila in 1990; however, these events did not lead to any high profile committees to study electrical systems. It was the 1996 explosion and crash of TWA B747 Flight 800 off Long Island, New York and the subsequent extended newsworthy investigation that put electrical systems and wiring under the microscope. In the USA, the White House Commission on Aviation Safety and Security recommended to the FAA "In cooperation with airlines and manufacturers, the FAA's Aging Aircraft program should be expanded to cover non-structural systems". This recommendation spurred the establishment in late 1998 of the Aging Transport Systems Rulemaking Advisory Committee (ATSRAC) to address, initially, electrical systems including wiring, connectors, and other components such as circuit breaker devices. The onboard cabin fire and crash of Swissair MD 11 Flight 111 near Peggy's Cove, Nova Scotia in September 1998 hastened the announcement of the creation of ATSRAC and added to the urgency for addressing electrical system concerns.



ATSRAC Membership

ATSRAC has representation from airworthiness authorities, manufacturers, airlines and other interested groups. The FAA, the European Joint Aviation Authority and Transport Canada represent the airworthiness authorities; Airbus, Boeing and Dassault represent aircraft manufacturers; AirTran Airways and Northwest Airlines represent the airlines. Some of the other ATSRAC members are NASA, the US Department of Defense, Air Line Pilots Association, International Association of

Machinists, Air Transport Association of America and General Aviation Manufacturers Association. In general terms, ATSRAC has been tasked to advise on regulations and supporting advisory material which may be necessary to assure that transport airplane non-structural systems are designed, manufactured, and maintained in a manner that will assure their safety throughout their service life.

The approach taken by ATSRAC to address aircraft wiring concerns was similar to the approach that was used to address aging aircraft structures. In the first phase, five working groups were formed and given specific tasks. One working group (WG) coordinated the inspection of wiring [in accordance with a specific inspection protocol] in over 100 large transport-category aircraft while they were undergoing heavy maintenance checks, in order to

determine the general condition of the wiring and associated hardware. Wire-related service bulletins (SBs) and airworthiness directives (ADs) were reviewed to determine if SBs should be mandated or ADs amended to incorporate terminating actions.

Intrusive inspections [where sections of wire bundles are removed] were performed on six aircraft recently retired from service and the removed wire bundles were sent to laboratories for further testing, primarily to categorize the effects of age-related service on the insulation characteristics of the wires. Another WG evaluated the effectiveness of maintenance programs with respect to wiring systems. A review of training programs and Electrical Standard Wire Practice Manuals (ESWPMs) were scrutinized by two other WGs.

ATSRAC WG Findings

Not surprisingly, these WGs submitted a multitude of recommendations based on their investigations. With respect to the condition of wiring on these older aircraft, typical findings, to mention just a few, included clamps being too small or too large, wires chaffing against structure, wires not adequately secured, wires tied to fuel lines, oxygen lines and hot air pipes. However, the most commonly found condition [and the one likely of most

concern] was the accumulation of dirt and debris consisting of lint, fluid spills and metal shavings; cleanliness would need to become paramount. The need for better wire marking and wire separation was noted. The difficulty of inspecting wires, particular due to inaccessibility and when in thick wire bundles, was also recognized.

In general, the need for a cultural change in the industry's and the regulator's approach to wiring was noted. During visual inspections, wires should no longer be considered as obstacles to be navigated around in order to perform other maintenance actions. A coffee spill does not just wet carpeting. As expected, there were training-related recommendations for more emphasis on wiring, recommendations for a standard format and standard minimum content in ESWPMs, and recommendations supporting the need for an Enhanced Zonal Analysis Procedure (EZAP).

ATSRAC WG Recommendations

It took these five ATSRAC WGs two years [Phase 1] to complete their taskings and submit their recommendations. In Phase 2, the ATSRAC, in light of the recommendations that were made, was tasked to recommend appropriate rulemaking action to effect implementation of the Phase 1 recommendations. Working Group 6 was formed to incorporate new wire system certification standards into Federal Aviation Regulation (FAR), Part 25 [Airworthiness Standards; Transport Category Airplanes]; revising this FAR would ensure that the ATSRAC recommendations addressing such matters as wire separation and markings would become a requirement for new aircraft designs. Guidance material for the development of Wire System Training Programs was produced that would be applicable to Air Carriers, Repair Stations and Training Institutions. Training would be tailored to each group's requirement; and there would be detailed procedures and precautions for hands-on mechanics and inspectors and general awareness information on the importance and criticality such as for flight and cabin crews and airline managers. The requirement to implement EZAP into an operator's approved maintenance program would be mandated by the FAA issuing a Special FAR. In addition, there would be regulatory action to mandate a one-time inspection of wiring systems within a five year time period. Although the FAA regulatory actions would

only be applicable to US-registered aircraft, Transport Canada (TC) and European Joint Aviation Authority (EJAA) shared the FAA's concern and participated in ATSRAC activities; this was intended to allow TC and EJAA to mandate similar requirements simultaneously with the FAA.



Although the aging aircraft activities have been focused on large transport-category aircraft, it is recognized that small [less than 30 passengers and/or 7500 pound payload] transport-category aircraft are not immune to age-related deterioration of wiring. Accordingly, as part of the ATSRAC Phase 2 activities, WG 10 performed evaluations of 39 business-jet aircraft representing eight models by five manufacturers. The findings of WG 10 indicated that the wiring observations for both large and small transport-category aircraft were similar.

Mandating the initiatives mentioned above is a start to addressing wiring system concerns, but more activities need to be, and are being, done. A future issue of Feedback will describe the importance of EZAP and the other activities underway to address wiring concerns.

For those readers who wish more details about ATSRAC, a comprehensive description of the ATSRAC activities is posted on its web site www.mitrecaasd.org/atstrac/index.html.

Ray Raoux
*Manager, Corrective Action
 Continuing Airworthiness
 Aircraft Certification
 Transport Canada*

Photos: Courtesy of J.R. (Rod) Digney



suspected *unapproved* PARTs

The submitters of the following Service Difficulty Reports (SDRs), received during the previous quarter, indicated that an unapproved part (SUP) was suspected. The list is provided here for information only and should not be construed as an identification of confirmed unapproved parts. In Canada, SUPs should be reported on a regular SDR form, indicating your suspicion of an unapproved part.

NOTE: Feed Back Issue 2/2003 contained errors in the Suspected Unapproved Parts.

Below is the revised list that contains data related to Quarters 2 and 3.

MAKE/MODEL: AEROSPATIALE AS 350A

PART NAME: BEARING

PART NUMBER: BOGUS

PART CONDITION: SEIZED

SDR #: 20030319003

DESCRIPTION

THE DRIVE END BEARING SEIZED DURING FLIGHT AND SPUN IN THE BEARING LINER. THIS WORE THE OUTER DIAMETER OF THE BEARING RACE DOWN TO THE POINT THAT THE ARMATURE BEGAN RUBBING ON THE STATOR. THIS WEAR CONTINUED UNTIL SUFFICIENT TORQUE BUILT UP TO SHEAR THE DRIVE SHAFT AT THE QUILL SECTION. A TEARDOWN OF THE UNIT REVEALED THAT THE BEARINGS INSTALLED ARE BOGUS PARTS. THE CORRECT PART IS MADE BY THE OEM, APC, AND IS P/N 150SG1052B. THE BEARINGS FOUND WERE MARE "JAF 6203RS JAPAN". THE SEIZED BEARING SHED ITS SEALS, EXPOSING THE BALLS. IT IS OF DIFFERENT DESIGN COMPARED THE CORRECT PART. THE BOGUS BEARINGS HAVE TWO ROWS OF EIGHT BALLS, WHILE THE OEM PART HAS ONE ROW OF EIGHT BALLS. THIS UNIT WAS LAST OVERHAULED, ACCORDING TO THE COMPONENT HISTORY CARD, PRIOR TO MAY 1998. PER THE OWNER, THE UNIT WAS INSTALLED ON AN AIRCRAFT WHEN IT WAS IMPORTED, AND IT IS LIKELY THAT THE OVERHAUL WAS DONE IN PORTUGAL. THE BEARINGS ARE BEING HELD IN QUARANTINE PENDING TRANSPORT CANADA INSPECTION.

MAKE/MODEL: BOEING 737 217

SDR #: 20030321011

DESCRIPTION

THE UNSCHEDULED REMOVAL OF A B737 RUDDER PCU WHICH OCCURRED ON FEB 25/26 2003 IN YVR WAS IN RESPONSE TO A REQUEST FROM MATERIAL SERVICES BASED ON A FAA UNAPPROVED PARTS NOTIFICATION NO 2001-0089 DATED AUG 12,2002. THE SUSPECT PCU P/N 1U1150-3 S/N 737 WAS LISTED IN THE NOTIFICATION. -AIR CANADA SHOULD HAVE BEEN NOTIFIED OF THE SUSPECT UNITS BY TRANSPORT CANADA REF THE BAA CHAPTER 5 ITEM 510 511 513. -. THE REMOVAL OF THE RUDDER PCU P/N 1U1150-3 S/N 0737 DOES CROSS REFERENCE TO FTN ZKMZP8 AND DOES INDICATE THAT IT WAS INSTALLED ON A/C 511, BUT THE SEPTRE HISTORY INDICATES THE UNIT WAS REPAIRED ON MARCH 13, 2000. THIS INFORMATION WAS CONFIRMED IN ARTOS. THE FTN HISTORY IN ARTOS INDICATES THAT THE UNIT WAS INSTALLED ON A/C 511 ON MARCH 21, 2000 UNTIL THE PRESENT DATE. THE FAA NOTICE INDICATES THAT THE SUSPECT UNITS WERE IMPROPERLY OVERHAULED DURING A PERIOD OF JANUARY 3-8 2001. -. THE REPAIR STATIONS AND VENDORS MENTIONED IN THE NOTIFICATION ARE NOT ON OUR APPROVED LIST. ALSO OUR SHOP REPORT ESTABLISHED THAT THE PART HAD MFG CODES WE ARE PRESUMING THAT THE PART LISTED ON THE FAA LISTING HAS BE FORGED.

MAKE/MODEL: CESSNA 150

PART NAME: ALTERNATOR **PART NUMBER:** DOFF10300F

PART CONDITION: FAILED

SDR #: 220030120006

DESCRIPTION

ON OVERHAUL OF THE ALTERNATOR THE RECTIFIER P/N ES4113, BRUSH P/N E4118, AND BEARING P/N ES4104. ALL THESE PART NUMBERS ARE NON-APPROVED. ALTERNATOR BUILD UP CARRIED OUT WITH APPROVED PARTS.

MAKE/MODEL: DE HAVILLAND DHC-2MK1

PART NAME: ELEVATOR

PART NUMBER: C2T29A

PART CONDITION: FAILED

SDR #: 20030131001

DESCRIPTION

PART WAS ACTUALLY REMOVED FROM STOCK FOR INSTALLATION BUT WOULD NOT FIT.

MAKE/MODEL: EUROCOPTER BO105 S CDN BS

PART NAME: BOLT

PART NUMBER: LN93556X32

PART CONDITION: TOO LONG

SDR #: 20030605012

DESCRIPTION

DURING INSPECTION TO COMPLY WITH AIRCRAFT SERVICES CAMPAIGN NOTICE 351-73-20-12 THE BOLT CONNECTING THE N2 CONTROL CABLES TO THE N2 LEVER ASSEMBLY WAS FOUND TO BE TOO LONG. THE EXTRA LENGTH HAD BEEN COMPENSATED FOR WITH THE USE OF EXTRA WASHERS UNDER THE BOLT HEAD. THE INCORRECT BOLT WAS REMOVED AND CORRECT BOLT P/N LN9355-6X32 INSTALLED AND TORQUE SEAL APPLIED TO THE END OF THE BOLT TO NUT-PLATE CONNECTION.

FAA unapproved PARTs notification

No. 2001-00274 issued June 17, 2001

AFFECTED PARTS

Turbochargers.

PURPOSE

The purpose of this notification is to advise all aircraft owners, operators, manufacturers, maintenance organizations, parts suppliers, and distributors regarding improper maintenance performed on Garrett and RayJay/Roto-Master turbochargers.

BACKGROUND

A joint suspected unapproved parts investigation conducted by the Federal Aviation Administration (FAA), Department of Transportation - Office of Inspector General, and the Federal Bureau of Investigation revealed that Thunderbird Accessories, Inc. (Thunderbird), improperly maintained and approved for return to service Garrett and RayJay/Roto-Master turbochargers. Thunderbird, located at 5406 N. Rockwell, Bethany, OK 73008, previously held Air Agency Certificate No. IC2R893K.

Evidence revealed that Thunderbird had failed to accomplish maintenance in accordance with the manufacturers' maintenance manuals; Instructions for Continued Airworthiness; or other methods, techniques, and practices acceptable to the FAA. Discrepancies noted included stop-drilling beyond allowable limits on exhaust housings, and the installation of unapproved bolts and bearings that were not designed for extreme heat applications. The FAA has been unable to determine all models and serial numbers affected; therefore, all turbochargers approved for return to service by Thunderbird should be considered suspect.

RECOMMENDATIONS

Regulations require that type-certificated products conform to their type design. Aircraft owners, operators, maintenance organizations, parts suppliers, and distributors should inspect their aircraft, aircraft records, and/or parts inventories for turbochargers approved for return to service by Thunderbird. Suspect turbochargers installed on aircraft should be inspected for conformity to type design. If any are found in existing stock, it is recommended that the turbochargers be quarantined to prevent installation until a determination can be made regarding each part's eligibility for installation.

FURTHER INFORMATION

Further information concerning this investigation and guidance regarding the above-referenced turbochargers may be obtained from the FAA Flight Standards District Office (FSDO) given below. In addition to the above recommendations, the FAA would appreciate any information concerning the discovery of the turbochargers, the means used to identify the source, and the action taken to remove any turbocharger from service.

This notice originated from the Oklahoma City FSDO, 1300 S. Meridian Blvd., Suite 601, Oklahoma City, OK 73108, telephone (405) 951-4200, fax (405) 951-4282; and was published through the FAA Suspected Unapproved Parts Program Office, AVR-20, telephone (703) 668-3720, fax (703) 481-3002, web: <http://www1.faa.gov/avr/sups/upn.cfm>.

**AME SYMPOSIA / TRADE SHOWS / WORKSHOPS
2003 - 2004****ONTARIO *October 22 - 24***

International Plaza Hotel & Conference Centre, 655 Dixon Road, Toronto ON M9W 1J4

Tel: 1-800-668-3656 or (416) 244-1711 **Fax:** (416) 244-8031

Internet: www.internationalplaza.com

NORTH WESTERN ONTARIO *November 6 - 7*

Victoria Inn & Conference Centre

555, Arthur Street West, Thunder Bay, ON

Tel: 1-800-387-3331 or (807) 577-8481 **Fax:** (807) 475-8961

Internet: www.vicinn.com

QUÉBEC *November 18 - 21*

Hilton de l'Aéroport - Dorval

12505 Côte-de-Liesse, Montréal (Québec) H9P 1B7

Tel: 1-800-567-2411 (514) 631-2411 **Fax:** (514) 631-01

Internet: www.hilton.com

PACIFIC *January 28 - February 2*

Best Western Richmond Hotel & Convention Centre

7551 Westminster Highway, Richmond, BC V6X 1A3

Tel: 1-800-663-0299 or (604) 273-7878 **Fax:** (604) 278-0188

Internet: www.richmond-hotel.ca

CENTRAL *March 3 - 5*

Best Western Victoria Inn (Winnipeg Airport)

1808 Wellington Avenue, Winnipeg, MB R3H 0G3

Tel: 1-800-928-4067 or (204) 786-4801 **Fax:** (204) 786-1329

Internet: www.vicinn.com

WESTERN *March 24 - 26*

Coast Plaza Hotel & Conference Centre

1316 - 33rd Street NE, Calgary, AB T2A 6B6

Tel: 1-800-661-1464 or (403) 248-8888 **Fax:** (403) 248-9

Internet: www.info@calgaryplaza.com

ATLANTIC *April 29 - May 1*

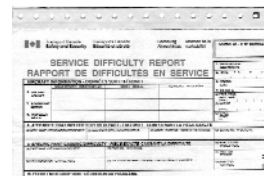
CASINO Nova Scotia Hotel

1919 Upper Water Street, Halifax, Nova Scotia B3J 3J5

Tel: 1-866-425-4329 or (902) 421-1700 **Fax:** (902) 422-5801

Internet: www.casinonovascotia.com

service difficulty reports



Received by Transport Canada from
1 April 2003 to 30 June 2003

MAKE/MODEL	ATA	PART NAME	PART NO.	PART CONDITION	SDR NO.	RGN	MAKE/MODEL	ATA	PART NAME	PART NO.	PART CONDITION	CTRL NO.	RGN
aircraft													
AEROSPATIALE													
AS 350B	2913	HYDRAULIC PUMP B	704A33690004	CRACKED	20030409001	QUE	200	3320	WIRE HARNESS W18	L139A22L139B22	BURNT	20030508002	ONT
AS 350B	6730	HYDRAULIC SERVO	SC5083	FAILED	20030527012	PNR	200	5210	PASSENGER/CREW D			20030612001	ATL
AS 350BA	2910	HYDRAULIC PUMP B	704A33690004	CRACKED/TORN	3 SDRs	QUE	200	5520	TORQUE TUBE-ELEV	1016100191	CORROSION	2 SDRs	ATL
AS 350BA	6300	BEARING LOCK	350A37118322	BROKEN	20030429002	ONT	200	5610	WINDSHIELD		FRACTURED	20030529002	QUE
AS 350BA	7250	MO2/MO3	70BM02106003109	UNSERVICEABLE	20030429002	PNR	200	7720	FIRE DETECTOR	302158	SERVICEABLE	20030429001	ONT
AS 350B2	3213	BOLT	22201TK080015X	U/S	20030429002	PNR	95B55	2720	RUDDER PEDAL	505243263	BROKEN/WORN	2 SDRs	VAR
AS 350B2	6720	HYDRAULIC HOSE	704A34412047	CRACKED	20030429002	PNR	95B55	2810	AIRFRAME			20030517001	PNR
AS 350B2	6730	SERVO, HYDRAULIC			20030527008	ONT	99A	3233	END CAP	4377113	CRACKED	20030424002	ONT
AS 350B2	7931	ENGINE OIL PRESS			20030612004	PNR	BELL						
AS 350D	6300	BEARING LOCK	350A37118322	BROKEN	20030502005	ONT	204B	5210	UPPER LONGERON	205030619	NEW	20030421005	ONT
AS 355F1	5531	RIB	350A14111925	CRACKED	20030617002	QUE	204B	5302	SPARE	20403082506	CRACKED	20030610011	PNR
AS 355F2	5302	BULKHEAD FRAME	350A23103600	CRACKED	20030407010	ONT	204B	5313	LONGERON	204032806079A	ORIGINAL	20030421004	ONT
AGUSTA							205A 1	2910	HYDRAULIC CHECK	2120763643	CRACKED	20030404003	PNR
A109 All	5302	VERTICAL FIN BUL	1090372441	CRACKED	20030527003	PAC	205A 1	6520	CONTROL TUBE ASSY	209011710005	CRACKED	20030610003	PNR
AIRBUS							206A	5532	TAIL FIN ASSEMBLY	206020113005	CRACKED	20030409013	PNR
A310 308	2900	HOSE ASSEMBLY	AE7060322	DAMAGE	20030403001	QUE	206B	0000	GOVERNOR		FAILED	20030627005	PNR
A310 308	3230	HYDRAULIC HOSE	AE7060322	RUPTURED	20030421001	QUE	206B	3213	SADDLE	D26651	CRACKED	20030407006	PAC
A310 308	5240	OIL ACCESS DOOR	2242277501	BROKEN	20030522002	QUE	206B	5347	ANGLE	206031103043	CRACKED	20030528004	ONT
A319 112	3242	BRAKE ASSY	21600	FIRE	20030521005	QUE	206B	5511	SPAR	206020120011	CRACKED	20030526011	PAC
A319 114	5520	R/H ELEVATOR			20030530004	QUE	206B	6320	DRAG PIN ASSY	2060315095	GOOD	20030617003	PNR
A319 114	5610	WINDOW	NP1653114	SHATTERED	20030505002	QUE	206L	5302	FITTING UPPER	LE206031329003	CRACKED	20030617001	ONT
A319 114	5610	WINDOW	NP1653114	SHATTERED	20030527004	QUE	206L 1	5302	FRAME	206032308103S	CRACKED	20030528005	ONT
A320 211	2720	RUDDER POS.FEEDBD	2727000601800	DAMAGED	20030410001	QUE	206L 3	6320	UPPER CASE	206040532005	CRACKED	20030528006	ONT
A320 211	2742	STAB ACTUATOR (47145131		20030526005	QUE	206L 3	0000	ENGINE MOUNT LEG	206069105101	CRACKED	20030627011	PAC
A320 211	2780	STEADY BEARING	801B170001	FAILED	20030624002	QUE	212	6320	TOP CASE	206040532005	BROKEN	20030401005	PNR
A320 211	5610	WINDSHIELD	NP1653115		20030523003	QUE	212	2912	ELBOW	MS219266	CRACKED	20030625001	ONT
A320 212	2133	OUTFLOW VALVE	90231570381		20030409007	ONT	212	5302	BULKHEAD	212030156047	CRACKED	20030603010	PNR
A340 313	7830	THRUST REVERSER			20030611003	QUE	212	5310	ANGLE	205030712037	CRACKED	20030603009	PNR
BEECH							212	6320	BEARING	205040249003	METAL SEPARATION	20030425003	PAC
A100	3233	ACTUATOR	99810057652	STRIPPED	20030604003	PNR	212	6320	SUPPORT CASE	212040054007	BROKEN	20030613009	PAC
B100	2160	ACTUATOR/VALVE	NLYC9871	NORMAL	20030428004	ONT	212	6330	LIFT LINK	212030104101	BROKEN	20030530001	PAC
B100	5510	INSERT REINFORCE	KNKDL428	STRIPPED	20030414002	PNR	212	6420	MAIN ROTOR BLADE	212015501115	CRACKED	20030530003	QUE
B100	5520	SPLINE TRAILING	115610010125	CRACK	20030408006	PNR	212	7310	BELL CRANK	212060745001	FAILED	20030416003	PAC
B100	7720	ENGINE TEMP. IND			20030428006	ONT	407	6220	STUDS (4)	407010105101	CRACKED	20030523001	ONT
B200	0000	PLATE, EXHAUST S	1019100751	LOOSE & LEAKING	20030627010	NCR	412CF	6230	BEARING & LINER	204010433001	LOOSE	20030401006	PNR
B200	2711	BOLT	130909B38		20030610005	PNR	BELLANCA						
B200	2752	FLAP ACTUATOR	1295210511	FAILED	20030610007	PNR	8GCBC	3220	FRAME TUBE	7147061	BROKEN OFF	20030616003	ONT
B200	3260	NOSE GEAR ACTUATOR	11238002221	LEAKING	20030424006	PNR	8GCBC#	2752	LH UPPER FLAP	CA19023	FRAYED	20030616002	ONT
B200	3600	PNEUMATIC AREGUL	1H7512	FAILED	20030610006	PNR	BOEING						
B200	7797	BALANCE RESISTOR	501A	LOOSE CONNECTION	20030425005	PNR	727 217	2612	CANNON PLUG	BACC45ZT18A31P6	SHORTED	20030411001	ONT
B200C	2121	BLOWER AAAY	1013841761	BAD BEARING	20030417010	ONT	727 22C	0000	SLAT ACTUATOR			20030627018	PAC
B200C	3230	PRESSURE SWITCH	570383	FAILED	20030609004	PAC	727 223	0000	HYD FLEX LINE	BACH8B04NN0157	RUPTURED	20030627012	ONT
B300	2750	BUSHING	50160020	U/S	20030604004	ATL	727 223	0000	WING TIP ASSEMBLY	6572719233	DAMAGED	20030627013	ONT
B300	5610	WINDSHIELD	10138402522	CRACKED	20030409016	QUE	727 225	0000	VERT STAB LEADIN		FAILED	20030627009	ONT
B90	2140	NOZZLE	H11D59	LEAKING	20030424007	QUE	727 225	2710	CABLE ASSY	BACC13AP6E2858	CHAFED	20030627001	ONT
B99	2750	FLAP DYNAMIC BRE	SM50D7	INTERMITTENT	20030512001	ONT	737 209	2797	WIRING SLAT		BURNT ODOR	20030520003	ATL
C90	2730	ELEVATOR CABLE	5052443929	INTERFERENCE	20030416002	ONT	737 209	5330	EXT. FUSELAGE		CRACKED	20030409017	ATL
C90A	2731	HINGE, ELEVATOR	5052442034	CRACKED/CORRODED	20030410002	ONT	737 209	5330	EXTERIOR FUSELAGE		CRACKED	20030409018	ATL
C90A	2752	90 DEGREE DRIVE	503801536	O.K.	20030410002	ONT	737 212C	3230	LANDING GEAR RET	65447619		20030528003	PNR
C90A	2820	FUEL TUBE	50921620235	GROOVED	20030603011	PNR	737 215	2900	AILERON PCU	65C343482		20030417011	PAC
C90A	3020	ANTI-ICE DUCT	9091010017	CRACKED	20030515004	ONT	737 217	5610	WINDOW		CRACKED	20030505003	PAC
C90A	3422	DIRECTIONAL GYRO	6226163002	PARTIAL FAILURE	20030623004	ONT	737 201	5330	L/H SIDE OF FUSE			20030605001	PNR
C90A	7160	ANTI-ICE FLEX TUBE	9091009913	CRACKED	20030401003	ONT	737 217	2600	APU			20030620004	PAC
C90A	7160	ANTI-ICE FLEX TUBE	9091009913	CRACKED	20030416001	ONT	737 242C	0000	NIL/UNKNOWN			20030620006	PNR
C90A	7510	ANTI-ICE FLEX TUBE	9091009913	CRACKED	20030408004	ONT	737 275C	3260	LANDING GEAR POS			20030418001	PNR
D18S	3230	CIRCUIT BREAKER		FAILED	20030417001	QUE	737 281	2710	AILERON PCU	654476114	CAP BROKEN	20030611002	PNR
100	2720	RUDDER RETURN	SP115524067	BROKEN	20030408002	PNR	737 76N	0000	MAIN WHEEL ASSEMBLY	NA		20030618001	PNR
100	3260	LIGHT SOCKET ASS	MS250413	GOOD	20030407008	ONT	737 76N	2897	WIRE	101656305	N/A	20030425010	PNR
100	5300	INTERCOSTAL BULK	504100491	CRACKED	20030514004	PNR	767 333	2565	CHUTE			20030528013	QUE
1900C	3230	RELAY	MS24171D1	NO FUNCTION	20030619002	PAC	BOMBARDIER						
1900C	6123	PRINTED CIRCUIT			20030516002	ONT	BD 700 1A10	2731	ELEVATOR TAB CON			20030520004	NCR
1900D	3211	UPPER TORQUE	KNE1018100329	SEPARATED	20030603002	ONT	CL600 2D24	2130	NIL/UNKNOWN			20030426001	NCR
1900D	5620	L/H CABIN WINDOW		CRACKED	20030603002	ONT	BRITISH AEROSPACE						
200	3230	ACTUATOR	9981005765	HARD TO TURN	20030508003	ONT	BAE 146 200	2621	DISCHARGE HEAD	3473641	CONTAMINATED	20030514015	ATL
200	3230	CONTROLLER	MC815AS1	STUCK IN UP MODE	20030501001	ONT	BAE 146 200	5310	UPPER WHEELWELL		CRACKED	3 SDRs	ATL
200	3230	MOTOR	1153800025	POPPED C B	20030501008	ONT	BAE 146 200	5610	FLIGHT COMPARTMENT	00025H8279		20030403003	ATL
							HS 748 2A	2110	HOSE ASSEMBLY	139379	BROKEN	20030611001	QUE
							HS 748 2A	2710	OPERATING LEVER	1F11792	FRACTURED	20030424001	ONT
							HS 748 2A	5200	LOCK SOLENIOD	UK	OVER HEATED	20030407004	ONT
							CANADAI						
							CL215 1A10	0000	CYLINDER		CRACKED	20030623001	PNR

MAKE/MODEL	ATA	PART NAME	PART NO.	PART CONDITION	SDR NO.	RGN	MAKE/MODEL	ATA	PART NAME	PART NO.	PART CONDITION	CTRL NO.	RGN
CL215 1A10	0000	REAR TRUNNION	1606042	WORN	20030506005	PNR	208B	3221	BUSHING	SNAS755006	MISSING	20030430007	PNR
CL215 6B11 (CL215T)	5720	DOUBLER	215K10105154	CRACK	20030407009	QNT	310L	3230	DOWNLOCK SPRING	50410051	BROKEN	20030520005	ONT
CL600 1A11 (600)	3010	PICCOLO TUBE	600800398	MISLABELED	20030606006	QNT	310L	3232	GEAR DOORACTUATOR	50450014	WELD CRACKED	20030506001	ONT
CL600 2B16 (604)	2910	NIL/UNKNOWN	6047523865	CHAFED	20030401007	ONT	310R	8000	STARTER CONTACT	008504691	ARCED	20030605003	PNR
CL600 2B16 (604)	3246	JANTE ROUE DE NE			20030409003	NCR	337A	2782	FLAP CONTROL CABLE			20030606010	PNR
CL600 2B19 (RJ)	0000	AIRCRAFT			20030623002	NCR	337G	2752	CABLE ASSEMBLY	14601007		20030602001	ATL
CL600 2B19 (RJ)	0000	PSEU		FAIL	20030619004	QUE	402B	3230	ADJUSTING FORK	50452112	SHEARED	20030523005	PAC
CL600 2B19 (RJ)	0000	SEE TEXT		CORROSION	20030624001	QUE	402B	3244	MAIN GEAR TIRE	0773450	BLOWN	20030521008	PAC
CL600 2B19 (RJ)	2120	BULKHEAD CHECK	V92E204	DISMANTLED	20030406001	NCR	414	2425	ALTERNATOR	ALV9407	FAILED	20030515005	PNR
CL600 2B19 (RJ)	2121	FLAPPER VALVE	101270	GROOVED	20030404009	ATL	500	3234	LANDING GEAR	66710		20030408001	ONT
CL600 2B19 (RJ)	2215	CAPSTAN DRIVE	GE6288713001	DOWELS SHEARED	20030603013	QUE	525	0000	STARTER GENERATOR			20030626004	QUE
CL600 2B19 (RJ)	2421	INTEGRATED DRIVE	755469B	METAL IN FILTER	20030603012	QUE	550	0000	ESCAPE HATCH SEAL	651125619	STUCK	20030626001	ONT
CL600 2B19 (RJ)	2710	AILERON CONTROL			20030516001	QUE	550	0000	INSULATION		SCORCHED	20030627002	PAC
CL600 2B19 (RJ)	2710	PCU OUTPUT LINK	272955	WORN	20030514002	NCR	550	0000	ISOLATION PISTON	66422172	PUNCTURED	20030625004	ONT
CL600 2B19 (RJ)	2761	POWER CONTROL UNIT	270007		20030612009	QUE	550	2750	SWITCH ASSEMBLY	656517543	MIS-RIGGED	20030605014	ONT
CL600 2B19 (RJ)	2910	HYDRAULIC LINE	6017523843	CHAFED	20030419001	NCR	550	3242	STATOR DISK	1338932	BROKEN	20030603006	PAC
CL600 2B19 (RJ)	2910	NIL/UNKNOWN			20030515006	NCR	550	5753	RIB EXTENSIONS	6525115	FRETTING WEAR	20030610001	PNR
CL600 2B19 (RJ)	2916	HYDRAULIC RESERVE		LEAKING	20030501003	ATL	550	7220	HEATED LIP PICO		CRACKED	20030409011	PNR
CL600 2B19 (RJ)	3234	GEAR SELECTOR	VA750005000	DEFECTIVE	20030421006	QUE	560	7830	HYDRAULIC HOSE	AE1009195G0130	RUPTURED	20030604002	PNR
CL600 2B19 (RJ)	3250	ELECT HYD SHUT	O16480101		20030603001	QUE	560XL	3244	TIRE MICHELIN	A10316138	EXTERNAL O.K	20030528012	QUE
CL600 2B19 (RJ)	3250	VALVE	750006000	FAILED	20030501005	QUE	650	3260	WIRE		BROKEN	20030520001	QUE
CL600 2B19 (RJ)	3418	AOA VANE	601R591541	OUT OF TOLERANCE	20030609010	QUE	CONVAIR						
CL600 2B19 (RJ)	4900	APU			20030514017	QUE	340	3230	VALVE			20030620005	PAC
CL600 2B19 (RJ)	5320	ISOLATION BLANKET	601R404672381	FAILED	20030514011	QUE	340	5314	KEEL BEAM	KF580532000012	NEW	20030404005	PAC
CL600 2B19 (RJ)	5340	NIL/UNKNOWN			20030417002	QUE	CURTISS WRIGHT						
CL600 2B19 (RJ)	5610	COCKPIT SIDE WINDSHIELD	601R3303312	CRACKED	20030612008	QUE	C46F	1000	COTTER PIN	MS24665143	NEW	20030528015	PNR
CL600 2B19 (RJ)	5610	COCKPIT WINDSHIELD			20030507001	NCR	DASSAULT						
CL600 2B19 (RJ)	5610	COCKPIT WINDSHIELD	601R3303313		20030514001	NCR	FALCON 20D	7931	OIL PRESSURE TRAP	11346AA		20030612002	ONT
CL600 2B19 (RJ)	5610	L/H SIDE WINDOW	601R3303311	SHATTERED	20030530011	QUE	FALCON 900	3411	MOISTURE TRAP	900000	CRACKED	20030514006	PNR
CL600 2B19 (RJ)	5610	SIDE WINDOW	NP1393221	SHATTERED	20030505001	NCR	FALCON 900	7830	SEAL/SHIELD	FGFB583800308	CRACKED	20030428008	ONT
CL600 2B19 (RJ)	5700	LEADING EDGE	601R120445	CRACKED	20030419002	NCR	DEHAVILLAND						
CL600 2B19 (RJ)	5740	BUSHING		MIGRATING	20030417004	QUE	CS2F 2	3260	DWNLOCK MICROSWITCH	MS213211	LOOSE	20030521009	PNR
CL600 2B19 (RJ)	5741	BUSHING		MIGRATION	6 SDRs	QUE	DHC 2 MKI	2720	MOUNT ASSY COPILOT	C2CF1777A		20030613004	PAC
CL600 2B19 (RJ)	5753		601R14501-1 601R145011		20030403004	NCR	DHC 2 MKI	5511	FRONT SPAR	CFTP57	CRACKED	2 SDRs	VAR
CL600 2B19 (RJ)	7200	ENGINE TURBINE			20030515007	QUE	DHC 2 MKI	5523	TORQUE TUBE ASSY	C2T29A	BROKEN	20030609009	ONT
CL600 2B19 (RJ)	7603	THROTTLE CONTROL			20030518001	QUE	DHC 2 MKI	7400	PLUG	SKL32138AN	SHORTED	20030526009	PAC
CL600 2B19 (RJ)	7603	THROTTLE GEAR BOX			20030518002	QUE	DHC 3	2742	ACTUATOR	C3CF2907	FAILED	20030416004	ATL
CL600 2B19 (RJ)	7897	STOW SWITCH	22850741115	MISADJUSTED	20030514018	NCR	DHC 3	7110	AS ABOVE	AC35500	CRACKED	20030620003	ONT
CL600 2C10 (RJ)	2613	BLEED SENSING LO	GG670801021		20030530014	QUE	DHC 6 300	2731	LEVER CONTROL	ASC6CF14191	FAILED	20030527011	PNR
CL600 2C10 (RJ)	5610	SIDE WINDOW	NP1393225	CRACKED	20030406002	NCR	DHC 6 300	5534	SPAR, FORWARD	C6TP103927	CRACKED	2 SDRs	ONT
CESSNA							DHC 6 300	5534	SPAR, AFT	C6TP103931	CRACKED	20030505009	ONT
A185E	5551	R/H AFT SUPPORT	07123022	CRACKED	20030501002	ONT	DHC 6 300	5753	RH INBOARD FLAP	C6WF10024	LOOSE RIVETS	20030613005	ONT
A185F	2750	FLAP PULLEY	S3782	WRONG PART	20030521006	QUE	DHC 6 300	7930	CHIP DETECTOR	3034081	CRACKED	20030609003	ONT
A188B	2701	SPRING	16001041	BROKEN	20030611005	ATL	DHC 7 102	2612	WIRE	261030013A22	CHAFED/BROKEN	20030514008	ONT
TU206G	2820	FUEL LINE	1200106253	SEVERED	20030606004	ONT	DHC 7 102	3234	LGSV SOLENOID	574205A	FAILED	20030616004	ONT
TU206G	5344	LEFT DOOR POST	TU206G	CRACKED	20030514016	ONT	DHC 7 102	5730	LIGHTNING SEAL	CVR67	SWOLLEN	20030609002	ONT
T310P	32301	DLR BELL CRANK	08421022	BROKEN	20030603007	PNR	DHC 8 102	0000	BEARING	MB543DDFS464	SEIZED	20030630001	ATL
U206B	8530	VACUUM AIR PUMP	212CW	FAILED	20030528001	ONT	DHC 8 102	0000	NLG STRUT	8800	WORN	20030619007	ONT
U206C	5310	L/H FWD DOOR POS	121340615	CRACKED	20030410004	ONT	DHC 8 102	2750	TORQUE SENSOR BR	85711423101	BROKEN & CRACKED	20030530005	PNR
U206G	5330	SKIN, LOWER CENT	1211650	CORRODED	20030505006	ONT	DHC 8 102	2761	LIFT DUMP HYDRAU	82950010269	LEAKING	20030501004	ATL
120	2720	RUDDER BELLCRANK	300433113	CRACKED	20030515003	ONT	DHC 8 102	2761	UNLOADING VALVE	659603		20030404008	ATL
150G	2720	STOPNEW			20030517002	ONT	DHC 8 102	2900	HYDRAULIC LINE	82960010115	CRACKED	20030620001	QUE
150L	5510	RIB ASSY LEADING	0432001646	CRACKED BROKEN	20030423006	ONT	DHC 8 102	2900	SHUTTLE VALVE	50841	BROKEN	20030602010	ATL
150L	5711	REINFORCEMENT	043200115	CRACKED	20030401004	ONT	DHC 8 102	2910	FLIGHT SPOILER	H82950010369	PIN HOLE	20030520002	ATL
150M	0000	CYLINDERS			20030626009	ONT	DHC 8 102	3232	CYLINDER ASSY	82970019007	CORRODED	20030513004	PNR
150M	5510	RIB ASSY LEADING	0432001646	CRACKED BROKEN	20030423004	ONT	DHC 8 102	3242	BRAKE ASSY	214665		20030423003	ATL
152	8530	ENGINE		FAILED	20030609012	QUE	DHC 8 102	3260	PSEU I/D. GEAR C	841005	CARD FAULT	2 SDRs	ATL
172M	0000	FUEL LINE ASSY	05001183	CHAFED	20030627015	ATL	DHC 8 102	5300	RANDOM	4426X210	BIRD STIKE	20030502001	ATL
172M	2430	CIRCUIT BREAKER	S159060L	FAILED	20030423002	ATL	DHC 8 300	3220	NLG STEERING ACT	8600113		20030625008	NCR
172M	2434	ALTERNATOR DOFF	10300J	FAILED	20030425006	ONT	DHC 8 301	3230	PROX SENSOR	858601	FAULT CODE	20030618003	ATL
172M	7160	CARB HEAT CONTRO	S123017	BROKEN WIRE	20030430005	PNR	DHC 8 311	2900	EDP HYDRAULIC	82970010477	PIN HOLE	20030507002	ATL
172N	3244	5.00 * 5 TIRE	AI53716	BLISTER	20030407001	ATL	DHC 8 311	3246	WHEEL BEARINGS	L812148	SPALLED/PITTED	20030526008	ATL
172N	5712	RIB-LH	05230301	CRACKED	20030408005	PNR	DHC 8 315	2721	ROTARY SWITCH	682015	INTERNAL FAULT	20030625007	NCR
172P	5541	RUDDER TOP RIB	05331531	CRACKED	20030410005	QUE	DHC 8 315	2913	ENGINE DRIVEN	U570347		20030515002	NCR
172R	2562	LANYARD, ELT	05118204	CHAFED	20030423007	ONT	DHC 8 400	2130	CABIN INDICATION	92148C010101		20030624003	NCR
172R	8011	STARTER PM	2401H	FAILED	20030528007	ONT	DHC 8 400	2610	FIRE LOOP DETECT			20030609001	NCR
172RG	2311	AUDIO PANEL	24700032		20030603005	ONT	DHC 8 400	3230	WOW2 / NOSE WHEEL			20030624004	NCR
172RG	5343	FITTING	24130023	CRACKED	20030409004	ONT	DHC 8 400	3260	NLG DOWNLOCK PRO	473901		20030515001	NCR
182S	2500	CYLINDER LOCK	05142132	COLLAPSED	20030427001	ONT	DHC 8 400	3297	HARNES	471515		20030625002	NCR
182S	5320	BULKHEAD	07137878	CRACKED	2 SDRs	ONT	DHC 8 400	3297	WOW 2 / NOSE WHEEL			20030625003	QUE
182S	5320	BULKHEAD	07137879	CRACKED	20030414006	ONT	DIAMOND						
182S	5320	LH FUSELAGE SKIN	07133343	CRACKED	20030414004	ONT	DA 20 A1	0000	ELEVATOR HINGE	B2053840204	BROKEN OFF	20030627017	ONT
208B	2750	FLAP MOTOR	C145350	UNKNOWN	20030421003	PNR	DA 20 A1	2720	LOCLOC OVAL	SLES124P		20030411006	ONT
208B	2810	FUEL RESERVOIR	261601741	CRACKED	20030514010	ONT	DA 20 A1	2720	OVAL SLEEVE	SL24P		20030404010	ONT

MAKE/MODEL	ATA	PART NAME	PART NO.	PART CONDITION	CTRL NO.	RCN	MAKE/MODEL	ATA	PART NAME	PART NO.	PART CONDITION	CTRL NO.	RCN
DOUGLAS													
DC9 83	2210	ELECTRICAL WIRE	2C610Y20RD	CHAFED	20030424008	QUE	PA31 350	3244	NOSE TIRE & TUBE	6006		20030613003	ATL
DC9 83	3425	PRIMARY FLIGHT	D4056510903	FAILED	20030514014	QUE	PA31T	2731	BEVEL GEAR	4536700	TWO TEETH BROKEN	20030421007	ONT
DC9 83	5210	CABIN DOOR SWITCH	2028B	NEED CLEANING	20030529004	QUE	PA31T	3210	PIVOT ARM	42042000	CRACKED	20030619005	QUE
EMBRAER							PA31T	3250	STEERING ARM BOL	AN3H7A	SHEARED	20030609008	ONT
EMB 120ER	5320	COMPOSITE PANELS			20030528011	QUE	PA38 112	7332	FUEL PRESSURE	TR486439	FAILED	20030625006	ONT
EUROCOPTER DEUT							PA44 180	2300	RADIO		FAILED	20030530008	ONT
BK117 B 1D	5302	SPLICE	1172213201	CRACKED	20030527014	PNR	PA44 180	2710	BALANCE CABLE	62701123	FRAYED	20030528009	ONT
BK117 B 1D	5310	SPLICE	1172213202	CRACKED	20030527015	PNR	PA44 180	3220	BOLT	NAS464P427	SHEARED	20030404002	ONT
BK117 B 1D	6320	U/K			20030530012	PNR	ROBINSON						
BO105 C BS	2910	VALVE BODY MANIFOLD	133756E01	SCRAP	20030516005	PAC	R44	6300	ACTUATOR	C0511	FAILED	20030514003	PNR
BO105 C BS	6320	BEARING	4638302023	SCRAP	20030405001	ONT	R44	7314	FUEL PUMP			20030527007	PNR
BO105 C CDN	6200	BOLT	LN93556X32	LOSS OF TORQUE	20030605013	ONT	SCHWEIZER						
BO105 C CDN	6200	BOLT	LN93556X32	TOO SHORT	6 SDRs	VAR	269C	6200	BEARING	269A505085	FAILED	20030425008	ONT
BO105 C CDN	6320	TAPERED ROLLER B	4619310069	SCRAP	20030405002	ONT	269C	6200	PULLEY SHAFT	269A54985	UNDERSIZE	20030425007	ONT
BO105 C CDN	7321	SHAFT	UNK	SHEARED	20030527009	ONT	SHORT&HARLAND						
BO105 C CDN	7600	BOLT, HEXAGON	LN93556X32	GOOD	20030502003	ONT	SD3 60	0000	CIRCUIT BREAKER,	SM600BA	FAILED CLOSED	20030619003	PAC
BO105 S CDN BS	7240	OUTER COMBUSTION	6870992J	CRACKED	20030404001	ONT	SD3 60	0000	SPRING	500221XX321	SPRING BROKEN	20030618006	PAC
EUROCOPTER FRANCE							SD3 60	0000	SWITCH, MASTER	LHA4B6101	JAMMED	20030618005	PAC
EC 120 B	2400	LACU	911TS08Y	FAILED	20030409012	PNR	SD3 60	7600	POWER CONTROL	CAA552326	BROKEN	20030422002	NCR
FAIRCHILD							SIKORSKY						
SA227CC	7230	P3 TUBE	8943825	FRACTURED	20030410006	ONT	S61L	5302	LOWER FITTING	S612066120002	CRACKED	20030421008	PAC
GULFSTREAM							S61N	6410	TAIL ROTOR BLADE	S611730101045	CRACKED	20030610002	PAC
G 1159A	0000	BALL RETURN TUBE	B120344	SHEARED	20030613001	ONT	S61N	6710	COLLECTIVE FRIC		STICKING	20030415003	ATL
G 1159A	2910	HYDRAULIC TUBES	1159P20518	CHAFED	20030409008	ONT	S76	4130	SEAL, OUTPUT	SB8208102		20030416005	PAC
HUGHES							SWEARINGEN						
369D	2820	FUEL BYPASS SWIT	369H81443	CRACKED	20030411002	PAC	SA226TC	0000	RECEPTAL	27200637	CRACKED	20030620002	PNR
369D	5511	SPAR	369D23623	CRACKED	20030618007	PNR	SA226TC	2110	TUBE ASSY	2784142007	BROKEN	20030527005	PNR
369D	6210	M/R BLADE PIN	369A10045	BROKEN	20030605010	PNR	VICTORY AIRCRAFT						
369D	6410	TAIL ROTOR BLADE	369D21640501	UNSERVICEABLE	20030408003	PAC	AVRO						
369D	6710	COLLECTIVE SUPPORT	369A7339	BROKEN	20030425009	PNR	LANCASTER MK X 3240	SAME	SAME		STRETCHED	20030615001	ONT
LEARJET													
35A	0000	KEYWAY LINER	9544008	BENT	20030618004	PNR							
35A	2910	TUBE ASSEMBLY	2607003453	HOLE	20030605009	QUE							
35A	3246	WHEEL HALF	95440263	CRACKED	20030618002	PNR							
35A	7321	FUEL CONTROL UNIT			20030605015	QUE							
45	7532	HP BLEED VALVE	6621000000073	FAILED	20030414001	ONT							
LOCKHEED							ALLISON						
L 1011 385 1 14	3510	L/P HOSE 02	4019374	LEAKING	20030428001	QUE	250	7230	BEARING	23004538		20030425004	PAC
L 1011 385 3	7280	OIL CAP	LK58367		20030428003	QUE	250-C20	2800	ACCUMULATOR	6875224	GOOD	20030421009	PAC
MITSUBISHI							250-C20	8012	COMPRESSOR CASE	2305714	GOOD	20030612007	PAC
MU 2B60(USA)	6140	TACHOMETER GENERA	G34	SHEARED	20030505004	ONT	250-C20B	7321	FUEL CONTROL UNIT	23065104	FAILED	20030430006	PNR
MORAVAN							250-C20B	7323	DRIVE GEAR		FAILED	20030527013	PNR
Z242L	3250	NOSE WHEEL CABLE	Z4242390000	BROKEN	20030619006	ONT	250-C20R/2	7240	OUTER COMBUSTION	23034114	CRACKED	2 SDRs	PNR
PILATUS							250-C30	7931	CVR ASSY, GB,	PW23059576	UNSERVICEABLE	20030509002	NCR
PC 12 45	0000	LED DISPLAY	9755084910		20030630002	ONT	250-C30S	7260	OIL PUMP	23031459	UNKNOWN	20030415004	PAC
PC 12 45	2750	FLAP FLEXIBLE DR			20030516006	ONT	250-C30S	7261	HYDRODYNAMIC OIL	23063371	DISINTEGRATED	20030409002	QUE
PC 12 45	2822	BOOST PUMP	9688411404		20030508001	ONT	AVCO LYCOMING						
PC 12 45	2897	BOOST PUMP	9688411404		20030422001	ONT	AEIO-360-A1B6	0000	CAMSHAFT	LW18840	SPALLED	20030626007	PAC
PC 12 45	2932	LANDING GEAR HYD	9738114306	LEAKING	20030509001	ONT	AEIO-360-A1B6	7810	INTERNAL BAFFLE	UK	BROKEN	20030526001	ONT
PC 12 45	3150	WARN LIGHT PANEL	9728132012		20030507003	ONT	AEIO-360-A1B6	8520	CAMSHAFTL	W18840	SPALLED	3 SDRs	QUE
PC 12 45	3242	ROTOR DISK	23203500	BROKEN	20030407005	PNR	GO-480-G2D6	0000	EXHAUST VALVE	71381	BROKEN	20030627014	PAC
PC 12 45	3246	FAIRING	15702100	CRACKED	20030430008	ONT	IO-360-A1B6D	8530	VALVE		BROKEN	20030604001	ONT
PC 12 45	3260	PROXIMITY SWITCH	973303311		20030410007	ONT	IO-540-K1B5	8520	ENGINE		FAILED	20030605004	PNR
PC 12 45	3340	LANDING LIGHT AS	9728769401	REPAIRED	20030528016	PAC	LTI0-540-J2BD	8520	CRANK CASE		CRACKED	20030523004	PNR
PC 12 45	3411	STATIC LINE		FAILED	20030527010	PNR	LTS-101-600A-3	7321	FUEL CONTROL UNI	430128807	FAILED	20030530010	QUE
PC 12 45	3418	AOA SWITCH	9754421421		20030428005	ONT	O-235-L2C	7414	MAGNETO	4381	U/S	20030526006	ATL
PC 12 45	3497	TORQUE TRANSMITTER	K22A24	SHORTED OUT	20030527016	PAC	O-320-B2C	7921	ENGINE OIL COOLER	20008A	LEAKING	20030603008	PNR
PC 12 45	7421	PLUG, IGNITOR	311614401		20030430009	PNR	O-320-E2D	7300	ENGINE		FAILED	20030530009	ONT
PC 12 45	7712	TORQUE LIMITER	311629401	MALFUNCTIONING	20030403002	ONT	O-320-E2D	7322	CARBURETOR	10S135	BROKEN	20030604007	PAC
PIPER							O-320-E2D	7414	MAGNETO	4371	FAILED	20030502002	ATL
PA18 150	3220	BOLT	AN721	SHEARED	20030409006	ONT	O-320-H2AD	7414	BREAKER POINTS	ES10384585	WORN	20030514007	ONT
PA18 150	5730	WING STITCHING		BROKEN	20030529003	ONT	O-320-H2AD	8520	CRANKCASE	LW15272	CRACKED	20030605006	ONT
PA23 250	3210	DRAGLINK FITTING	1754400	CRACKED	20030401002	ONT	O-360-A1F6D	7414	MAGNETO	ES1068255511	FAILED	20030424005	PNR
PA23 250	3210	TUBE	1742002	CRACKED	20030401001	ONT	O-540-F1B5	8530	ENGINE			20030407007	PNR
PA23 250	3230	DOWN LOCK MECHAN		HARD TO MANOEUVRE	20030409015	QUE	TIO-540-AJ1A	8520	CLAMP	40D22382	DEFECTIVE	20030530002	QUE
PA28 160	2710	AILRN BELCRANK	BR6210200	CRACKED	20030409014	ONT	TIO-540-A2B	6122	CRANKSHAFT	79027	FAILED	20030606008	ATL
PA30	0000	LUG - TRANSMISSI	2176000	BROKEN	20030627016	ATL	TIO-540-A2B	8520	CRANKCASE	11F20022S3	LEAKING	20030514013	QUE
PA30	3230	MAIN GEAR CONDUIT	455180	FAILED	20030610004	PNR	TIO-540-A2C	7310	TUBE ASSEMBLY	LW120980100	CASSIE	20030519001	QUE
PA31	2210	CLAMPS		JAMMED	20030606002	PAC	TIO-540-J2BD	8500	BRACKET	75414	BROKEN	20030616001	PNR
PA31	2730	PITCH SERVO BRDL		JAMMED	20030606003	PAC	TIO-540-J2BD	8520	CRANKSHAFT	13F17786	BROKEN	20030529001	QUE
PA31	2750	SHAFT FLEX DRIVE	486597	CRACKED	20030501009	PNR	TIO-540-J2BD	8520	CRANKSHAFT	LW12163	CRACKED	20030606007	ATL
PA31 350	2121	ELECTRIC MOTOR		BURNT ODOR	20030609011	QUE	BOMBARDIER ROTAX						
PA31 350	2730	AFT. TRIM CABLE	41734078	BROKEN	20030505005	ATL	RECIPROCATING	8530	EXHAUST VALVE		DESTROYED	20030605002	PNR
							912 S	8530	INTAKE VALVE		SEPARATED	20030521004	ONT

engines

ALLISON													
250	7230	BEARING	23004538							20030425004	PAC		
250-C20	2800	ACCUMULATOR	6875224	GOOD						20030421009	PAC		
250-C20	8012	COMPRESSOR CASE	2305714	GOOD						20030612007	PAC		
250-C20B	7321	FUEL CONTROL UNIT	23065104	FAILED						20030430006	PNR		
250-C20B	7323	DRIVE GEAR		FAILED						20030527013	PNR		
250-C20R/2	7240	OUTER COMBUSTION	23034114	CRACKED						2 SDRs	PNR		
250-C30	7931	CVR ASSY, GB,	PW23059576	UNSERVICEABLE						20030509002	NCR		
250-C30S	7260	OIL PUMP	23031459	UNKNOWN						20030415004	PAC		
250-C30S	7261	HYDRODYNAMIC OIL	23063371	DISINTEGRATED						20030409002	QUE		
AVCO LYCOMING													
AEIO-360-A1B6	0000	CAMSHAFT	LW18840	SPALLED						20030626007	PAC		
AEIO-360-A1B6	7810	INTERNAL BAFFLE	UK	BROKEN						20030526001	ONT		
AEIO-360-A1B6	8520	CAMSHAFTL	W18840	SPALLED						3 SDRs	PAC		
GO-480-G2D6	0000	EXHAUST VALVE	71381	BROKEN						20030627014	QUE		
IO-360-A1B6D	8530	VALVE		BROKEN						20030604001	ONT		
IO-540-K1B5	8520	ENGINE		FAILED						20030605004	PNR		
LTI0-540-J2BD	8520	CRANK CASE		CRACKED						20030523004	PNR		
LTS-101-600A-3	7321	FUEL CONTROL UNI	430128807	FAILED						20030530010	QUE		
O-235-L2C	7414	MAGNETO	4381	U/S						20030526006	ATL		
O-320-B2C	7921	ENGINE OIL COOLER	20008A	LEAKING						20030603008	PNR		
O-320-E2D	7300	ENGINE		FAILED						20030530009	ONT		
O-320-E2D	7322	CARBURETOR	10S135	BROKEN						20030604007	PAC		
O-320-E2D	7414	MAGNETO	4371	FAILED						20030502002	ATL		
O-320-H2AD	7414	BREAKER POINTS	ES10384585	WORN						20030514007	ONT		
O-320-H2AD	8520	CRANKCASE	LW15272	CRACKED						20030605006	ONT		
O-360-A1F6D	7414	MAGNETO	ES1068255511	FAILED						20030424005	PNR		
O-540-F1B5	8530	ENGINE								20030407007	PNR		
TIO-540-A1J1A	8520	CLAMP	40D22382	DEFECTIVE						20030503002	QUE		
TIO-540-A2B	6122	CRANKSHAFT	79027	FAILED						20030606008	ATL		
TIO-540-A2B	8520	CRANKCASE	11F20022S3	LEAKING						20030514013	QUE		
TIO-540-A2C	7310	TUBE ASSEMBLY	LW120980100	CASSIE						20030519001	QUE		
TIO-540-J2BD	8500	BRACKET	75414	BROKEN						20030616001	PNR		
TIO-540-J2BD	8520	CRANKSHAFT	13F17786	BROKEN						20030529001	QUE		
TIO-540-J2BD	8520	CRANKSHAFT	LW12163	CRACKED						20030606007	ATL		
BOMBARDIER ROTAX													
RECIPROCATING	8530	EXHAUST VALVE		DESTROYED						20030605002	PNR		
912 S	8530	INTAKE VALVE		SEPARATED						20030521004	ONT		

MAKE/MODEL	ATA	PART NAME	PART NO.	PART CONDITION	SDR NO.	RGN
CURTISS WRIGHT						
R-1820-80	8530	CYLINDER	893742C	PERFORATED	20030605007	ONT
GARRETT						
TFE731-3	7920	POWERPLANT	30728001	BIRD INGESTION	20030528002	ONT
TPE331-10N	7603	O-SPRING		BROKEN	20030605005	PNR
TPE331-10N	7722	TOGGLE SWITCH	MS3505929	INTERMITTENT	20030526010	PAC
TPE331-10UA	7250	BUSHING	310170318	NEW	20030512002	PNR
TPE331-10UA	7321	FUEL CONTROL UNIT	UNI8978017		3 SDRs	PNR
TPE331-10UGR516H	7321	TTL BYPASS VALVE	8974573	INTERMITENT	20030618008	PNR
TPE331-6-252B	7712	TORQUE SENSOR	31017253	UNKOWN	20030414003	PNR
ORENDA						
OE600A	7420	IGNITION HARNESS	T20016	HEAT DAMAGE	20030404006	ONT
OE600A	7920	HOSE STRAP	7033012	BROKEN	20030404007	ONT
PRAATT & WHITNEY						
JFTD12A-4A	7230	FUEL PRESS & DUM	586982	FAILED	20030609005	PAC
JT15D-4	7320	GOVERNOR LEVER	AS3240070	SEPARATED	20030528008	QUE
JT8D-9A	0000	ELECTRIC RECEPTA	BACC45FN12C3S	SHORTED	20030627008	ONT
JT8D-9A	7930	BY-PASS SWITCH	1163P181	FAILED	20030527002	QUE
PT6	7321	MAIN BODY	2525098	MACHINED DOWN	20030415002	QUE
PT6A-135A	7261	O-RING	AS3209017	SPLIT	20030501007	PAC
PT6A-28	7200	ENGINE		FAILED	2 SDRs	ATL
PT6A-28	7261	BY-PASS VALVE	SE3024566	WORN	20030613008	PNR
PT6A-28	7931	WIRING		FAILED	20030606005	PNR
PT6A-42	7310	ENGINE		FAILED	20030606009	ATL
PW120	7921	OIL COOLER FITTING	87900014103	BROKEN	20030423001	QUE
PW120A	7921	OIL COOLER	28E99X	LEAKING	3 SDRs	VAR
R-1830-92	8530	CYLINDER	114651	CRACKED	20030521007	ONT
R-2800-79	0000	CYLINDER	98181	FAILED	20030627004	PNR
R-2800-79	8520	MAIN BEARING		FAILED	20030417009	PNR
R-2800-79	8530	ROCKER JAM NUT		LOOSE	20030415001	PNR
R-2800-79	8530	SPARK PLUG		LOOSE	20030527006	PNR
R-985	8550	NIL/UNKNOWN			20030605019	PAC
R-985-AN-14B	8520	REAR CASE	126299	CRACKED	20030605018	PAC
R-985-AN-14B	8550	RECIPROCATING EN			20030609006	PAC
2800CA3	8550	NOSE CASE	519589	INSERT MISSING	20030604005	PNR
ROLLS ROYCE						
BR700-715A1-30	7250	HP COVER PLATE	BRH12388	DISINTEGRATED	20030501006	QUE
RB211TREN772B60	7532	IP VALVE	HTE4500019	HINGE BOLT BROKEN	20030522001	QUE
RB211-22B-02	7230	ENGINE			20030526002	QUE
RB211-534E4	7261	HP/IP TURB. BEARING	UL39099	FRACTURED	20030619001	QUE
SPEY 511-8	7120	RING LOCKING TRU	PEP6295	CRACKED	20030611004	NCR
SPEY 511-8	7250	BOLT	EU24036	BROKEN	20030507005	QUE
TELEDYNE CONTINENTAL						
IO-360-ES	2434	MOUNT BRACKET	654358	CRACKED	20030513001	ONT
IO-470-C	8530	CYLINDER	625859CP	CRACKED	20030430004	PNR
IO-470-L	8530	PISTON ASSEMBLY	AEC648029	BROKEN	20030423005	PNR
IO-470-L	8550	VALVE LIFTERS	646277	NEW	20030506003	PNR
IO-520-D	0000	ENGINE MOUNT		CRACKED	20030627003	PAC
IO-520-MB	0000	CON ROD	646476	BENT	20030626008	PAC
O-200-A	0000	SET SCREW	21153	LOOSE	20030627007	ONT
O-200-A	8011	STARTER	Z4214	BLOCKED	20030514012	QUE
TSIO-520-AF	8520	CRANKCASE ASSEMBLY	643989	WORN	20030409005	PAC
TSIO-520-E	8560	TURBOCHARGER	4066109025	CRACKED	20030609007	PNR
UNKNOWN	8011	STATER SHAFT GEAR	AEC639389	FAILED	20030613002	ONT
TURBOMECA						
ARRIEL 1B	7230	ENGINE		RUBBING	20030514005	PNR
ARRIEL 1D1	7250	2ND STAGE TURBINE	0292253350	CREEPING	20030424003	PAC
ARRIEL 1D1	7421	IGNITER	9550168760	U/S	20030528014	PAC
ARRIEL 1D1	7421	IGNITER	9550175400	U/S	20030610008	PNR

propeller

DOWTY ROTOL						
R333/4-82-F/12	6114	PISTON SEAL O-RING		BROKEN	20030407002	ONT
HAMILTON STANDARD						
2D30-301	6122	PROPELLER GOVERN1A2G5		FAILED	20030605008	ONT
HARTZELL						
HC-B3R30-4B	6100	NUT	B1894	CRACKED	20030605016	PAC
HC-B3R30-4B	6100	NUT	B1894	CRACKED	20030605017	PAC
HC-E2YR-2B	6111	BLADE	FC84754	CORRODED	20030604006	PAC
HC-E2YR-2B	6114	PROP ATTACH BOLT		FAILED	20030606001	PAC
HC-E3YR-2ATF	6114	BEARING	SA2202	WORN	20030604008	PNR
HC-E4A-3D	6140	WIRE HARNESS	30600003	SHORTED	20030514009	QUE

MCCAULEY						
2AF34C55	6114	HUB/NUT	D4883	CRACKED	20030530006	ONT
SENENICH						
W96JA-56	6114	SAME	SAME	CRACKED	20030527001	ONT

equipment

AMERIKING						
AK450	0000	BATTERIES		CORRODED	20030627006	ONT
ARTEX						
ELT1104	2562	BATTERY PACK	4520130	CRACKED	20030605011	ONT
AUOFLUG						
URHB37E	7410	SPARK PLUG(AUTOL	URHB37E	BROKE IN HALF	20030411003	ATL
AVIALL						
MS24665143	1430	COTTER PIN	MS24665143	DEFORMED	20030530007	NCR
B F GOODRICH						
211333	0000	BRAKE HOUSING	2158750218	CRACKED	20030619008	NCR
BEECH						
3536415157	2752	FLAP MOTOR AND	D3536415157	UNSERVICEABLE	20030506006	PNR
BENDIX						
430121200	7323	PT GOVERNOR			20030609013	PNR
430121204	7323	PT GOVERNOR			20030609014	PNR
GE						
2CM70D6A	2434	GENERATOR	2CM70D6A	OVERHAULED	20030506004	PNR
GOODRICH						
101161	3246	INNER WHEEL HALF	101161	CRACKED	20030603004	PNR
ISRAEL						
25W78301601	2120	RAM AIR DUCT	25W783016011	U/S	20030424004	NCR
KOLLSMAN						
31400117	0000	STANDBY ALTIMETER			20030625005	NCR
LUCAS						
230790021	2435	BEARING	03601018	DISINTEGRATED	20030421010	PNR
23079009	2435	STARTER/GENERATOR			20030407003	ONT
MARVELSCHB						
105193	7322	IDLE MIXTURE		SCRMISSING	20030421002	ONT
MESSIER						
82970014011	3232	OUTER CYLINDER	82970015005	CRACKED	20030516004	ATL
82970018009	3232	CYLINDER ASSY	82970018009	WORN & CORRODED	20030516003	ATL
PILATUS						
5005012117	2432	BATTERY HEATING	TAS203	BURNED	20030422003	ONT
POINTER						
PS400010	2562	EMERGENCY LOCATOR			4 SDRs	PNR
PRESTOLITE						
MZ4218	8011	ARMATURE	MZ2399S	BROKEN	20030506002	ONT
SLICK						
4371	7414	MAGNETO			20030425001	ONT
4372	7414	IMPULSE COUPLING	M3100	LOOSE RIVET	2 SDRs	ONT
UNKNOWN						
MARKSGONE	0000	RELAY	MS24171D1	SHORTED	20030628001	PNR

LEGEND

ATA Air Transport Association number defining assembly/system/component
SDR NO. TCA assigned SDR control number - please quote in any correspondence or inquiries
RGN TCA region of SDR submitter:
PAC = Pacific, PNR = Prairie Northern,
ONT = Ontario, QUE = Quebec, ATL = Atlantic,
NCR = Ottawa (HQ), VAR = more than one Region

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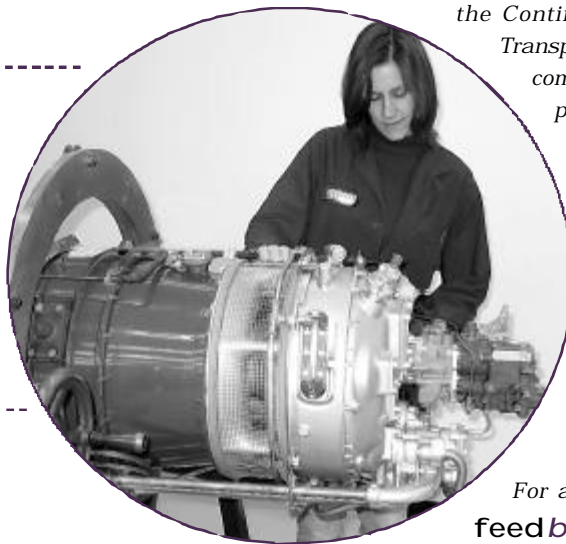
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