Issue 1/2012



Canadian Aviation Service Difficulty Reports

TP 6980E (3/2012)



Reproduced with permission of Bombardier Inc.





# TABLE OF CONTENTS

Heads Up	3
Fixed Wing	
Engines	
Hangar Noise	
Equipment Airworthiness Directives (ADs)	
Special Airworthiness Information Bulletins (SAIBs)	
Service Difficulty Reports (SDRs)	
Civil Aviation Internet Sites	

## Front cover picture

The Bombardier 415 amphibious aircraft is the backbone of firefighting missions around the globe. Launched in 1994, this high-wing, all-metal amphibian is specifically designed for aerial firefighting. Its proven technology and fire-extinguishing power make it the most effective machine for the job.

The Bombardier 415 aircraft takes only 12 seconds to scoop its 6,137-litre (1,621-US-gallon) load while skimming at high speed over water. It delivers repeated direct attacks, with foam suppressant added to its load, without returning to an airfield.

Feedback is published quarterly by the Continuing Airworthiness Division of Transport Canada, informing the aviation community of reported day-to-day problems that affect aircraft airworthiness in Canada.

Reprints of original *Feedback* material are encouraged, but credit must be given to Transport Canada's Feedback magazine. Please forward one copy of the reprinted article to the Editor.

To obtain information concerning copyright ownership and restrictions on reproduction of the material, please address your correspondence to:

Jérémie Laviolette, Editor Feedback Transport Canada (AARDG)

Place de Ville, Tower C Ottawa ON K1A 0N8

E-mail: jeremie.laviolette@tc.gc.ca

Tel.: 613-952-4360 Fax: 613-996-9178

To view *Feedback* online or to receive it electronically please visit: www.tc.gc.ca/feedback-magazine The articles contained in *Feedback* are derived from *Service Difficulty Reports* (SDRs) submitted by Aircraft Maintenance Engineers (AMEs), owners, operators and other sources in accordance with *Civil Aviation Regulation* (CAR) 521.

SDRs are normally published verbatim. Transport Canada assumes no responsibility for the accuracy or content of any of these reports. Only spelling errors are corrected and content may be reduced as well as personal references deleted.

All defects or occurrences should be reported to Transport Canada through the Service Difficulty Reporting Program. For additional information about this program or concerning an article in *Feedback* magazine, contact your nearest Transport Canada Centre.

Feedback est aussi disponible en français.

© Her Majesty the Queen in Right of Canada, as represented by the Minister of Transport (2012).

ISSN 1925-8429 (Online)

TP 6980E (01/2012)

TC-1004499

# HEADS UP

SERVICE DIFFICULTY REPORT (SDR) # 20110526008

## The Consequences of Not Following Procedures

Canadian Repair Station Service Difficulty Report (SDR) text (abbreviation):

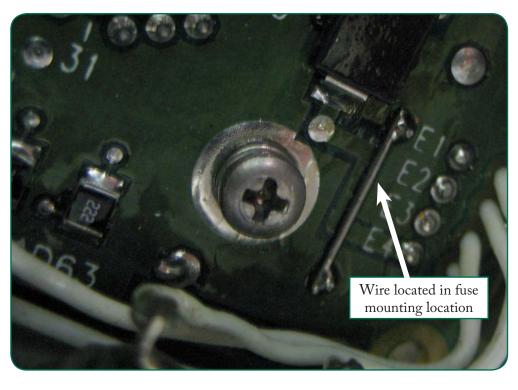
"We recently received a Multi-Function Control Display Unit (MCDU) (part number 100-601702-002) for repair from a European Operator. While conducting maintenance on the product, we noted that during a previous repair, a fuse (F1 on the 28 volt input line of the lightning protection circuit board) had been replaced with a solid wire.

The product is being repaired and brought back to conformity and drawing specification."

#### Airline's response:

"The MCDU was looked at by our Avionics shop for troubleshooting before being sent for repair.

The technician saw that the power supply fuse F1 was unserviceable. He tried with an ammeter to see if the power was ok. The power was correct, and he has installed the wire to continue with "comfort" the troubleshooting[sic]. When it was discovered that the repair could not be done at home, the MCDU was assembled but the "comfort" wire was forgotten. The wire was used only for troubleshooting purposes."



# Transport Canada Comments:

Maintenance, overhaul and standard practice manuals give detailed instruction on trouble shooting and repair of the products they support. They also list approved tools for specific tasks. Deviation from them puts the maintainer in a dangerous area where simple mistakes could end up creating major problems. In the above example, a latent condition could have been created resulting in serious failure or fire.

AEROSPATIALE, ATR 42 300 SDR # 20101108015

## Nose Landing Gear Collapse

While at the ramp and with the right engine running in hotel mode (ground idle, feathered and propeller brake ON), the left engine was started. As the left engine propeller was coming out of feather, the nose gear slowly retracted, collapsing the aeroplane's nose to the ground. Prior to the collapse, the parking brake had been on and the landing gear select lever was in the gear down position, where indications showed all three gears down and locked. After the nose gear collapsed, the nose gear indication turned red and signified that it was unlocked.

The aeroplane's nose was jacked and the nose gear was repositioned manually to its down locked position where several retraction/extensions were completed with no fault found.

As a precaution, the decision was made to replace the nose gear assembly, drag brace, retract actuator, gear selector valve and gear control lever. All removed parts were forwarded for teardown investigation.

After the replacement of the removed parts, the aeroplane performed all functional and operational required tests and returned to service where no further problems with gear operations have been noted to date.

The ATR 42's gear and retraction system is designed as such that while on ground, weight-on-wheels (WOW);

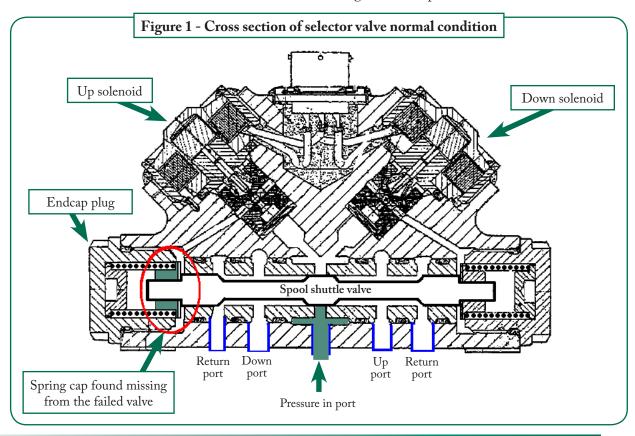
gear cycling operations are inhibited in-order to prevent inadvertent activation. Transport category aeroplanes are designed using this requirement which is stated in CAR part V, Airworthiness Manual chapter 525.

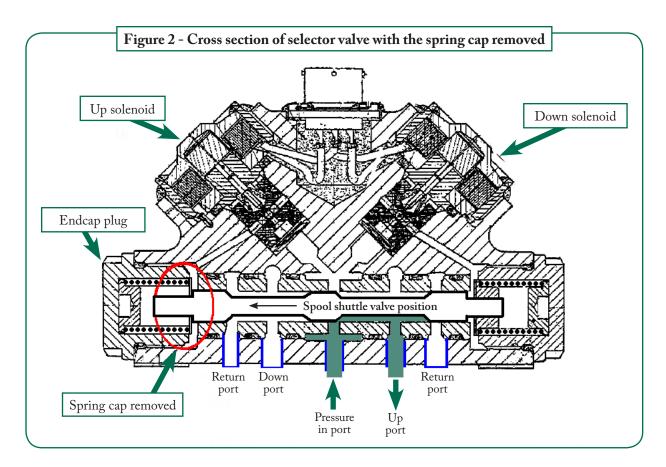
With the starting of the left engine, which in turn pressurized the #1 main hydraulic system, the aeroplanes nose landing gear (NLG) unintentionally unlocked and cycled towards retraction collapsing the nose of the aeroplane to the ground.

Through the shop bench test and tear-down report of the gear selector valve, the following was confirmed;

- the unit failed an internal pressure drop test
- the unit used an unknown type of lockwire for the end-cap plugs
- the lockwire installation was "sloppy" with long pigtails
- upon the valves disassembly, the spring cap for the spool shuttle valve of the "UP" solenoid side was found missing

The standard operation of the selector valve when the gear is not in motion or "static", fully extended or retracted, with available hydraulic system #1 pressure is portrayed in figure 1. The spool shuttle valve within the selector





valve will be in its relaxed or central position, removing all hydraulic pressure from the gear retract actuators.

It is believed that due to the missing spring cap, the spool shuttle valves last set position was such as to allow the inadvertent direction of hydraulic pressure to the "UP port" or retract side of the three gear retract actuators, portrayed in figure 2.

With this event, the NLG was the only gear to retract because of the fully loaded aeroplane weight to which the main gear actuators could not over-come.

An aeroplane product or part, such as this selector valve, carries its own unit type certification where any form of maintenance or repair work done to it, can only be accomplished by an approved Aircraft Maintenance Organization (AMO) rated for that specific product.

As defined in CAR 571.11 subsection (3);

"no person shall sign a maintenance release in respect of maintenance performed on an aircraft operated under Part IV or VII, or on parts intended to be installed on the aircraft, unless;

(a) the person is authorized to sign in accordance with a maintenance policy manual (MPM) established by the holder of an AMO certificate issued under section 573.02 with a rating of a category appropriate to the work performed.

With this incident, it is suspected that this gear selector valve had been tampered with by an unapproved individual or facility due to the shop bench test and teardown findings.

In a situation where a unit or part of an aircraft is suspected of being tampered with or "non-compliant", then this part is to then be designated as a "Suspected Unapproved Part" (SUP) as defined in CAR Standard 571.13, information note:

A person who has reasonable grounds to believe that a part installed or intended for installation in a type certified aeronautical product that was not manufactured or certified in accordance with the applicable regulations of the state of production, or that is improperly marked, or that is documented in such a manner as to mislead with regard to the origin, identity or condition of the part shall submit to the Minister a report of the suspected unapproved part, using the service difficulty reporting system set out in section 521.401 of the CARs.

Transport Canada Civil Aviation would like to advise all maintainers and operators of the noted CARs and the importance to always favor the side of safety, as this operator did, when addressing a serious incident.

## Fan Cowl Departures In Flight

Upon landing, the right-hand engine lower fan cowl fell off the aeroplane and onto the runway. The aeroplane then taxied to the gate without incident. A maintenance investigation revealed that an 'A'-check had been accomplished the night before where the cowls were removed. This was the second landing of the day when the cowl departed the aeroplane. Inspection of the cowl and nacelle shows evidence that not all of the fasteners were secured, specifically, the inboard fasteners appeared to be unlocked. The damaged cowls were replaced and the aeroplane returned to service.



# Transport Canada Comments:

This is not the first instance of an engine fan cowl departing an aeroplane in flight. If certain fasteners are not properly secured, air loads in flight are sufficient to deform the cowl and overcome the remaining fasteners. The critical area appears to be in the forward inboard location. The issue seems to be the fastener design and location. As the spring in the fastener and cams in the receptacle wear, its locking ability is compromised. Even with an apparently full rotation, one can get the impression of a fully engaged device. Compounding this problem is the proximity of the fastener row to the pylon structure. As seen in the photograph, there is little room to get a straight push on the tool. A short screwdriver is required making it even more difficult to apply adequate torque and pressure.

Extra vigilance is required when installing these units. Special attention should be paid to fastener wear including the receptacles, cross pins and springs. \*

# FIXED WING

BOEING, 727 227

SERVICE DIFFICULTY REPORT (SDR) # 20110422001

## Nose Landing Gear Up-Lock Support Failure

#### SDR submitted:

As the aeroplane taxied away from the ramp, and on arrival to the runway threshold, the flight crew noticed a loss of hydraulic fluid pressure and hydraulic fluid quantity.



Maintenance was alerted and the aeroplane was towed back to the ramp. Hydraulic fluid was found coming from the belly drains aft of the Nose Landing Gear (NLG) bay. Further maintenance investigation found the NLG lock actuator leaking due to the lock actuator support bracket being cracked.

The bracket, actuator, hydraulic pump case drain filters and pressure filter were replaced, gear swing functional accomplished, leak checks and engine runs carried out and the aeroplane was made serviceable.

## Transport Canada Comments:

Transport Canada Civil Aviation would like to advise all Boeing 727 operators of possible NLG lock actuator support bracket fatigue cracks. 🛠

BOEING, 727 227 SDR # 20110620010

# Main Landing Gear Torque-Tube Failure

#### SDR submitted:

On approach, the crew selected the gear down but did not get confirmation (green indicator) of that the right main gear down and locked. The crew proceeded to perform the alternate extension procedure and was successful in acquiring the 'down and locked' indication.

After an uneventful landing, maintenance discovered the right-hand down lock torque tube sheared near the universal joint.

The torque tube was replaced, no further discrepancies were identified, and the aeroplane was returned to service.

## Transport Canada Comments:

universal joint attachment end was corroded, causing its failure.

The operator noted that the torque-tube

Right Main Landing Gear down lock torque-tube and corrosion noted

Transport Canada Civil Aviation is advising all Boeing 727 operators and maintainers to pay close attention to this torque-tube assembly for any indication of possible corrosion. 🛠

BOEING, 737 7CT SDR # 20110426005

#### **Brake Fuse Failure**

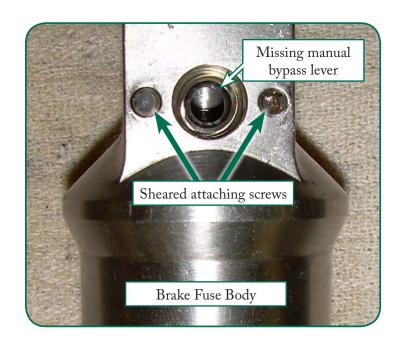
#### SDR submitted:

Maintenance discovered a hydraulic fluid leak in the right-hand wheel well. The right-hand normal brake hydraulic fuse was found to be leaking fluid where the fuse was subsequently replaced as per the Aircraft Maintenance Manual (AMM) 32-41-72, making the aeroplane serviceable.

It was noted by maintenance that the manual bypass lever and its hold down plate were missing. Also the attachment screws which secure the hold down plate were both fractured.

## Transport Canada Comments:

Transport Canada Civil Aviation would like to advise all Boeing 737 operators and maintainers of this possible brake fuse failure scenario.



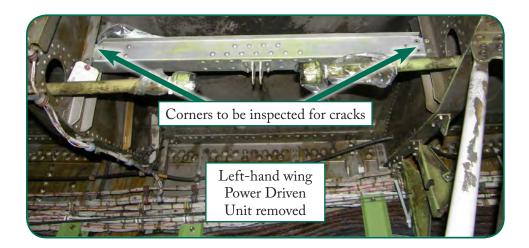
BOEING, 747 SPJ6 SDR # 20110421005

## Flap Power Driven Unit Support Channel Crack

#### SDR submitted:

Upon removing the flap Power Drive Unit (PDU) for access, maintenance found the support beam channel of the PDU cracked. The part was removed for repair per Structural Repair Manual 51-40-03 and the aeroplane was made serviceable.

An inspection was called by the operator for all leading edge flap PDU support beam channels on the remaining fleet.



#### Transport Canada Comments:

The initiative to inspect the complete fleet taken by this operator in order to advert a potential flap system failure is a proactive and responsible approach to aviation safety.

BOEING, 767 375 SDR # 20110503004

## Wire Harness Clamp Failure

#### SDR submitted:

During the operational check of the hydraulic Power Transfer Unit (PTU) system, arcing was observed at a wiring harness clamp approximately 60 centimeters (cm) (2 feet) from the right hand electric hydraulic pump power connector.

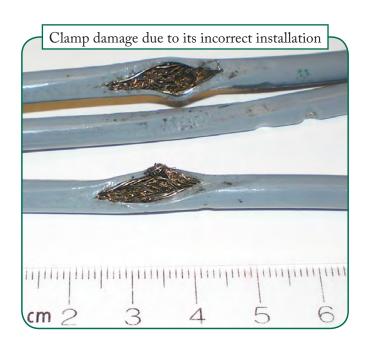
The operational check was stopped; the wiring clamp removed which revealed chaffing and arcing of the electric hydraulic pump wiring.

The wiring was repaired; its associated clamp properly reinstalled and the aeroplane was made serviceable.

## Transport Canada Comments:

Correct clamping for all electrical harnesses is essential for the continued and safe operation of all systems.

When a harness is clamped, there should be enough compression to gently support the wiring but enough slack to allow for sideways movement. \*



CANADAIR, CL 215 6B11(CL415)

SDR # 20110510002

# Main Landing Gear Upper Support Lug Crack

#### SDR submitted:

During a scheduled gear inspection, maintenance found a 36 millimeter (mm) long by 5.5 mm deep crack on the forward left-hand lug of the upper member.

#### Transport Canada Comments:

Further investigation by the operator has found other similar cracks in their fleet.
Canadair has been involved in ongoing corrective action and has released an Alert Service Bulletins (ASB) detailing the Liquid Penetrant Inspection (LPI) as well as Eddy Current (EC) inspection procedures. The LPI is detailed in Service Bulletin (SB) 215-A4450 and SB 215-A547. The EC inspection is detailed in SB 215-A4451 and SB 215-A548.

Transport Canada has recently issued Airworthiness Directive CF-2011-35 mandating these inspections. \*



CANADAIR, CL 215 /415 SDR # 20110701003

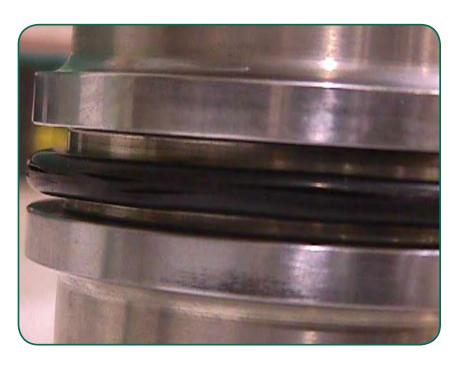
## Hydraulic Leaks Undetected

#### SDR submitted:

Maintenance had been adding a litre of hydraulic oil after every water bombing mission. They found the nose landing gear actuator relief valve, part number 150-323, assembly had been spraying hydraulic oil under pressure out of the valve's air vent hole when the nose landing gear was selected down. The actuator was removed and disassembled. Inspection found 2 O-rings severely damaged. Piston O-ring, part number MS28775-334, was split radially along the outside surface. The second O-ring, part number MS28775-225, had been rolled, cut and damaged. Any leakage out of the vent hole of the relief valve is a major cause for concern and the actuator should be removed for repair. Finding leaking oil in the nose wheel well area can be difficult as some water scooping operations may wash out the well.

# Transport Canada Comments:

Any closed fluid system will lose some fluid. When an excessive amount needs to be added at regular intervals,



it is an indication of a problem. In the above example, the washing of the nose compartment in scooping operations was likely masking the condition. Good job by the engineer who remained vigilant and discovered this snag. \*\*

CANADAIR, CL600 2B19 (RJ100)

SDR # 20110502001

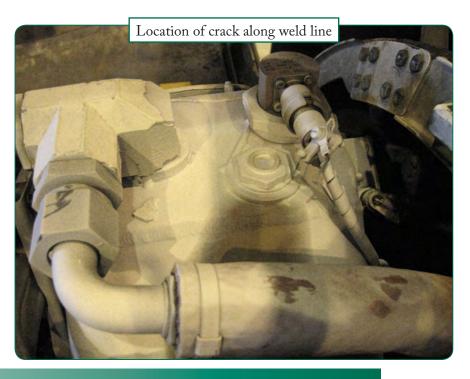
#### Cracked Oil Tank

#### SDR submitted:

During a routine maintenance, high oil consumption was noted on the right-hand engine. The initial investigation indicated an oil leak on the engine. The engine was cleaned and ground runs were carried out. A crack in the top weld of the oil tank was found. The right-hand engine oil tank, part number 5079T05G01, was replaced and the aeroplane was returned to service.

## Transport Canada Comments:

While the use of dye penetrant developer is a great tool for locating leaks, precaution must be taken to ensure that the developer is not applied to any surface that it might be incompatible with.



Feedback 1/2012

## Nose Landing Gear Door Failure

#### SDR submitted:

During a post flight walk around, the flight crew noticed damage to the aft Nose Landing Gear (NLG) door assembly. The aeroplane was grounded and a maintenance team dispatched.



After evaluation of the damages, the door assembly was removed and the aeroplane ferried to a maintenance base for repair. Visual inspection of the NLG area revealed that the aft door had sustained significant damage and

needed replacement including both actuating rods. Also replaced was the NLG aft door drive bracket being bent and the steering control module.

The failure likely occurred during the gear extension of the flight as there was no abnormal noise or condition reported by the flight crew during flight.

## Transport Canada Comments:

Transport Canada Civil Aviation is presently working with Bombardier Aerospace concerning this issue.

All operators and maintainers need to pay close attention to this area for condition and integrity.

DEHAVILLAND, DHC 8 102

SDR # 20110615005

# Engine Oil Cooler - Broken Adaptor Fitting

#### SDR submitted:

The take-off was rejected (below 70 knots) when the left-hand engine oil pressure gauge indicated zero Pounds per Square Inch (PSI).

Maintenance soon discovered that the right-hand oil inlet tube adaptor fitting that connects to the left-hand oil cooler was broken and disconnected. This resulted in

the loss of a substantial amount of oil in a very short period of time.

The oil cooler and the inlet fitting were replaced and the aeroplane returned to service. The oil cooler (part number 28E99-8) was only recently installed. It is suspected that the adaptor fitting may have had a hairline crack during the last installation. Please note that the adaptor fitting remains with the aeroplane when the oil cooler is replaced.

## Transport Canada Comments:

Although fittings can suddenly fail without warning, it is important to always check for signs of oil leaks around the engine area. \*

Feedback 1/2012 11

## #1 Hydraulic System Depletion

#### SDR submitted:

During climb; the crew observed that the #1 Hydraulic System was gradually depleting. Rather than return to the departure airfield, the pilot elected to continue on to the planned destination due to weather conditions and runway length considerations. Near the planned destination, the crew declared an "emergency" and landed without incident.

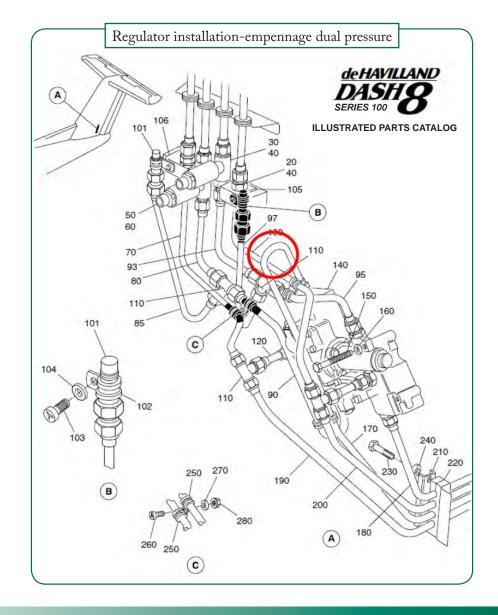
The loss of #1 Hydraulic System resulted in the loss of wing flaps, inboard roll spoilers, lower rudder actuator, normal braking and anti-skid function.

Maintenance personnel found that the leak originated somewhere in the tail section area. Further investigation revealed 3 pin holes on the pressure supply hydraulic tube that connects to the rudder dual pressure regulator. The holes are located on the outside of a 180-degree elbow. The defective hydraulic line and engine driven hydraulic pump were replaced and the aeroplane returned to service.

## Transport Canada Comments:

Any bends in hydraulic tubing can result in stresses that can fail without notice. It is important to ensure bends do not exceed manufacturers' recommendations.

In this case, depletion of #1 hydraulic system presented the crew with a very challenging landing.



DEHAVILLAND, DHC 8 311 SDR # 20110620005

## Dangers of Homemade Tooling

#### SDR submitted:

Aeroplane parts (propeller cuff) were found on runway. The parts were given to a local shop where the director of maintenance determined they were off of a Hamilton Sunstrand propeller (identified by the part number on the pieces found).

The director of maintenance contacted the aeroplane operators who use the airport. It was determined the part separated during the take-off. The aeroplane was identified and taken out of service for repair.

Investigation revealed the part may have been damaged from tooling used to remove the spinner during a propeller balance session. The tooling was located and a test conducted to determine if the tool (homemade) could have caused the damage. This was confirmed and the tool was removed from service. All personnel involved were given coaching to prevent reoccurrence. A new blade cuff was reinstalled. The aeroplane was returned to service.

## Transport Canada Comments:

Instances such as the one above are most likely to occur when deviating from the manufacturer's approved tool list and/or procedures. Extra caution must be used, particularly when combined with the time constraints this industry often imposes.

DIAMOND, DA 20C1 SDR # 20110531005

#### Rudder 'S-tube' Wear

#### SDR submitted:

Prior to start-up, the pilot noticed that he wasn't able to adjust the rudder pedals. After a visual inspection, the Aircraft Maintenance Engineer (AME) noticed that the left pilot side rudder pedals 'S-tube' had the rudder cable protruding from one of the bends. Both pilot side rudder pedals were replaced and further inspection revealed that the right side had significant wear.

## Transport Canada Comments:

According to the manufacturer, the only time the cables move through these tubes is during pedal adjustment. In a situation where an individual pilot is operating the aeroplane and little or no pedal

adjustments are made, this should never be an issue. In a flight-training environment where many pilots are operating the machine, extra care must be taken by the maintainer to inspect this area carefully.

The manufacturer is looking into alternate lubricants that may help reduce wear. 🛠



DIAMOND, DA 42 SDR # 20110427001

## Flap Bellcrank Wear

#### SDR submitted:

The split flap bellcrank has a 0.1524 millimeters (mm) (0.006 inches) deep wear mark on the flap actuator lower arm. The material thickness in this area is 1.651 millimeters (mm) (0.065 inches). The wear was caused by interference with the flap actuator rod end. The combination of both the rod end alignment and bushing location can cause wear.

## Transport Canada Comments:

This appears to be an area that could be difficult to detect any anomalies. Operators should be aware of this potential wear spot. \*\*



GROB-WERKE, G120A SDR # 20110412009

## **Chaffed wiring**

#### SDR submitted:

Multiple wires on ground block module VN220, behind the right-hand instrument panel, were found with abrasion damage caused by chaffing on the engine instrument display. Several wires were found with the insulation damaged through to the conductor.

#### Transport Canada Comments:

Great job by the maintenance engineer who discovered this issue before it became a bigger problem. A fine example of vigilance and thorough inspection.



14 Feedback 1/2012

LEARJET, 35A SDR # 20110316006

## Spoiler Panel Quality Escape

#### SDR submitted:

During a routine wing spoiler panel change and installation, maintenance found the hinge holes on both replacement panels to be beyond serviceable diameter limits. They also found fasteners missing and holes not even drilled on all three mounts. Maintenance contacted the supplier and was told that they did an inspection of their stock of spoiler panels and found numerous issues with other spoiler boards.

This Service Difficulty Report was issued due to the fact that these defects could easily be overlooked by the installer.

#### Transport Canada Comments:

Through the co-operative research done with Learjet engineering and the Federal Aviation Authority (FAA), it was determined that the missing fasteners noted on the new spoiler panels were intentionally not installed in order to provide for initial fitting of the panel upon installation. Special spares kit # SSK 0936E provides the necessary work instructions and are to be complied with when installing and fitting new replacement spoiler panels.

Also confirmed with Learjet engineering, the hinge hole size was incorrect and is considered a quality escape to which all affected spoiler panels were purged and quarantined from stock.

Learjet is planning to issue a Service Bulletin to address this issue for all in-service operators along with an Aircraft Maintenance Manual (AMM) revision to reflect correct spoiler panel installation procedures.

15

# **ENGINES**

# Engine nonpreservation contributing factor in fatal crash

#### Subject:

The following text is taken from the Transportation Safety Board of Canada, Aviation Investigation Report A07C0114. The full text is available at:

www.tsb.gc.ca/eng/rapports-reports/aviation/2007/index.asp

"The pilot of the Eurocopter AS 350 B-2 helicopter was ferrying the helicopter, with one passenger. An electronic flight notification was sent by the passenger to another member of his survey company indicating an arrival time of 1905 Central Standard Time. When the helicopter did not arrive, the survey company initiated emergency procedures at 1945. Debris was found the following day in Bernick Lake, approximately 25 nautical miles (nm) southwest of Points North Landing. The helicopter was found at the bottom of the lake with extensive damage and both occupants sustained serious injuries at water impact, but drowned when the

Investigation revealed the following:

helicopter sank."

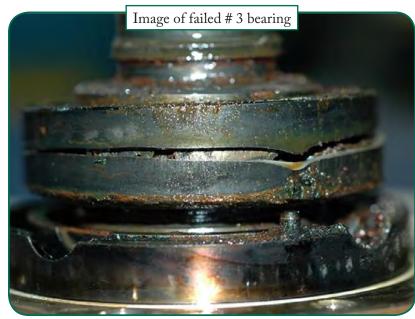
"The engine (Honeywell LTS101-700D-2, serial number LE-46040C) was removed from the airframe and sent to the TSB Engineering Laboratory for teardown...

The number two bearing was examined visually and localized areas of corrosion were noted. Rub marks were found in the corrosion and the pit edges on the rollers. Inner ring was burnished and plastically deformed, indicating that the number two bearing was operated for some time subsequent to the formation of the corrosion pits. The number three bearing was destroyed.

The engine was a rental engine and had been installed on 17 June 2007. At the time of installation the engine had zero time since overhaul and 6728 hours since new. At the time of the accident, the engine had flown an additional 74.5 hours. There were no reports of engine magnetic chip-detector actuation in the period before the accident. The engine had been in storage and was not operated during the period from 28 May 2004 to 06 June 2007.

Both the number two and number three bearings examined were in the engine during this period of time.

The corrosion had to occur when the engine was idle for a period of time and was not stored in accordance with the manufacturer's procedures. Because both bearings were installed in the engine and as there are no records indicating that the engine had been preserved in accordance with the maintenance manual from 28 May 2004 to 06 June 2007, the corrosion likely occurred during this period"



# Transport Canada Comments:

Regardless of how insignificant a maintenance action or procedure may seem it could have major consequences at a future point in time. In the above example, procedures were not followed resulting in a latent condition that led to a catastrophic failure.

When an appliance or part is received for installation, one might assume that the part is serviceable (as long as it has the appropriate documentation). It can be difficult or impossible to know how long it has been in storage or if the manufacturer's storage procedures were followed. As aviation professionals, we must be aware of all operating requirements for the equipment we maintain.

## **Inspect New Parts Prior to Install**

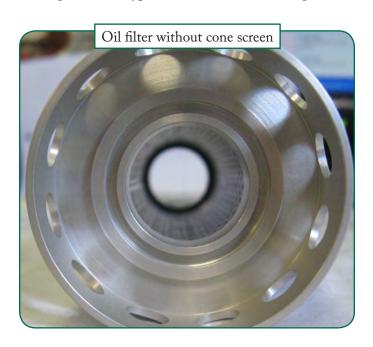
#### SDR submitted:

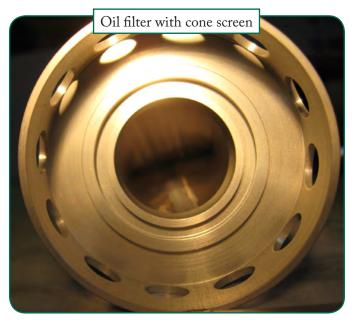
When an apprentice engineer received an oil filter Parts Manufacturer Approval (PMA) part number 7579522AM, equivalent to Pratt & Whitney Canada part number 3024084 or 3033315, from the company's store department, he noticed that the fine cone shaped screen was missing from the end of the filter, that is first inserted into the oil filter housing. This is the first filter that the company has found with the cone screen missing from that type of oil filter. The remaining stock

of oil filters in the store's department were inspected and found serviceable.

## Transport Canada Comments:

Excellent job on the part of the apprentice to discover this defect! This is a good example of remaining vigilant.





TELEDYNE CONTINENTAL IO-240-B

SDR # 20110512001

17

# Worn Throttle Lever Spline

#### SDR submitted:

During cruise flight, the pilot tried to reduce the power to idle, when he discovered that he was unable to, he returned to home base. An uneventful landing was accomplished using mixture idle cut-off. Upon inspection of throttle linkage, it was discovered that the splines on the throttle lever and shaft were worn. It is speculated that the lever was installed on the shaft with splines misaligned. After an undetermined amount of time, the splines may have realigned themselves with some 'play' in actuation, causing additional wear to continue until such a time that the lever would rotate on the shaft without rotating the lever. Originally, Teledyne Continental Motors (TCM) had no splines on the lever, however it was made from a softer material (bronze), allowing it to 'set' in place on the throttle shaft.

## Transport Canada Comments:

A simple task likely carried out many times in the past, and then a small design change created the potential for an accident. 🛠

Feedback 1/2012

# HANGAR NOISE

DORNIER, 228 202 SDR # 20110707005

## Elevator In-flight Failure

During climb out through 5000 feet, the flight crew began feeling elevator vibration and then heard a loud bang followed by mild elevator oscillations. Immediately following the bang, the pilot flying (captain) commenced a level off flight and reduced power to maintain at or below 120 knots. The aeroplane was easily controllable and it was found that the elevator oscillations, approximately 2.54-5.08 centimeters (cm) (1-2 inches) of uncommanded elevator travel, diminished further at 120 knots speed.

Air Traffic Control (ATC) was advised that they were troubleshooting a flight control problem and that they would proceed in a holding pattern. The crew carried out a controllability check by extending the landing gear while maintaining 120 knots and no abnormal control tendencies were noted.

The crew declared an emergency and intentions with ATC, along with their pertinent details of fuel, souls on board, and dangerous cargo. They then conducted a no flap approach to maintain 120 knots until touchdown and landed without incident where they were met by maintenance at the ramp.

Upon maintenance inspection, it was found that a substantial portion of the right-hand elevator fabric skin had come loose. The elevator fabric failed through delamination and separated from the structure of the control surface, causing the airframe buffeting and uncommanded elevator oscillations.

The horizontal stabilizer, elevator control system, and empennage of the aeroplane, were all inspected and found serviceable. The right-hand elevator was removed and a serviceable elevator was installed and the aeroplane was returned to service.

## Transport Canada Comments:

It is essential that fabric covered aeroplane surfaces, and in particular to this incident, polyester fabric flight control surfaces, are to be kept in a water tight and secure condition.

Any form of imperfection with a fabric surface will promote the possibility of contamination and delamination damage.

Dornier Aircraft Maintenance Manual 51-70-20 provides the inspection and repair requirements to prevent possible icidents such as this.

PILATUS PC-12 /47 SDR # 20110530011

# **Electrical Failure With Single Engine Operation**

After take-off, the first officer attempted to select gear up but could not due to the gear handle release solenoid. Shortly thereafter, the captain's Electronic Flight Instrument System (EFIS) screens went blank. The captain initiated a visual circuit and landing. The first officer's screens went blank and they noticed the Crew Alert Warning System (CAWS) panel indicated "gen 1 off", non-essential bus. The crew had lost the radios, screens and other components were beginning to dim. Fortunately, the pilots were able to perform a safe landing.

During troubleshooting it was discovered that the starter relay had engaged as soon as they took off and drained the battery. It was found that the auto start system (starter timer) had failed and powered the starter relay in flight. This disengaged "gen 1" thus running off battery power only. (Auto start is an internal feature of the Engine Instrument System (EIS) screen on the pc-12/47.) The EIS screen and starter solenoid was replaced.

# Transport Canada Comments:

This condition is potentially dangerous. Operators and maintainers need to be aware of the possibility of total electrical system failure.

18 Feedback 1/2012

# Equipment Airworthiness Directives (ADs)

Transport Canada (TC) endeavours to send copies of new Airworthiness Directives (ADs), which are applicable in Canada to the registered owners of the affected products. Equipment/appliance ADs are often only distributed to our regional offices because the owners of aircraft affected by this type of AD are not generally known.

Aircraft Maintenance Engineers (AMEs) 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 Transport Canada Centre (TCC), their Principal Maintenance Inspector (PMI), or from the Civil Aviation AD website at: www.tc.gc.ca/cawis-swimn

Manufacturer	AD Number	Origin	Description
Apical Industries Inc.	2011-25-01	United States	Emergency Float Kit - Supplemental Type Certificate (various)
Koito Industries Ltd.	2011-12-01	United States	Failure of the escape slide
Pratt & Whitney -	CF-2011-40	Canada	Separation of Turbine Exhaust Duct Flanges
Canada			
Texas Turbine	2011-12-02	United States	Failure in the escape slide
Conversions, Inc.			
Société de Motorisations	2008-0078	European	Engine Air - Air Inlet Manifold Hose Clamps - Inspection
Aéronautique		Union	
SMS (Trading as	2011-0239	European	ATA 34 - Navigationû Radio Altimeter Indicatorû Modification
Cobham Avionics)		Union	
Diamond Aircraft	2011-21-10	United States	Vapor Cycle System Installed as per Supplemental Type Certificate
Industries			
Timken Alcor Arospace	2011-25-12	United States	Failure of a certain Parts Manufacturer Approval sun gear
Technologies Inc.			

# SPECIAL AIRWORTHINESS INFORMATION BULLETINS (SAIBS)

A Special Airworthiness Information Bulletin (SAIB) is an information tool that alerts, educates, and makes recommendations to the general aviation community. It is non-regulatory information and guidance that does not meet the criteria for an Airworthiness Directive (AD).

SAIB NUMBER	Make/Company	Subject	Issue Date
Federal Aviat	rion Authority - www.faa.go	V/AIRCRAFT/SAFETY/ALERTS/ <b>SAI</b> B/	
CE-11-58	Zenair Ltd.	Landing Gear, Nose: Zenair CH2000 Nose Landing Gear Weld Cracking	9/27/2011
CE-11-29R1	Cessna Aircraft Company	Flight Control System	9/27/2011
CE-11-59	Alenia Aermacchi S.p.A. Industrie	Engine Fuel and Control: Fuel Selector Valve and Fuel Shut Off Cock	9/28/2011
SW-11-61	Honeywell International	Honeywell (formerly Bendix King) KRA 405B Radio Altimeter	9/29/2011
NM-11-60	Hawker Beechcraft Corporation	Landing Gear	9/29/2011
NE-06-31R5	Lycoming Engines	Engine Lubricating Oils	10/19/2011
CE-12-01	Extra Flugzeugproduktions- und Vertriebs- GmbH	Flight Controls: Rudder Cable Maintenance	10/24/2011
CE-12-02	Cessna Aircraft Company	Alternative Method of Compliance to Airworthiness Directive 2001-06-17	10/24/2011
CE-12-03	Cessna Aircraft Company	Fuel Control; Engine Performance with the Throttle Control at Idle	10/26/2011
NE-12-04	Pratt & Whitney Canada Corp.	Turbine/ Turboprop Engine: Reduction Gearbox	11/1/2011
CE-12-06	General Aviation	Aircraft Fuel System; water contamination of fuel tank systems	11/2/2011
CE-12-05	Piaggio Aero Industries S.p.A.	Navigation: Water freezing in Pitot-Static System	11/2/2011
HQ-12-07	Avox Systems, Inc.	Emergency Equipment – Contaminated Iodine Wipes	11/3/2011
CE-12-08	M7 Aerospace LP	Flight Controls, Elevator Control System	11/8/2011
CE-12-09	Diamond Aircraft Industries Inc	Landing Gear, Nose: Diamond DA20 Nose Landing Fork Assembly	12/22/2011
European Avi	ation Safety Agency - Ad.EA	ASA.EUROPA.EU/SIB-DOCS/PAGE- <b>1</b>	
2011-25		Repair and/or Fabric Recovering of Rudder and Elevator	9/16/2011
CE-11-57	Air Tractor, Inc.	AT-400 and AT-402 Series Aeroplanes - Engine Mount Section	9/16/2011
SAFO11008	Robinson Helicopter Co.	R44 helicopters - Hydraulic Flight Control System Boost Servos	9/19/2011
NM-11-60	Hawker Beechcraft (formerly Raytheon, British Aerospace)	BAe125 and Hawker Series aeroplanes - Nose Landing Gear Drag Stay Assembly	10/4/2011
SW-11-61	Honeywell International (formerly Bendix King)	KRA 405B Radar Altimeter - Erroneous Altitude Information	10/5/2011
AV 11_2011	Embraer	ERJ 170/175 and ERJ 190/195 Aeroplanes - Flap or Slat Torque Tubes Improper Installation	10/6/2011
NE-06-31R5	Lycoming Engines	O-320 and (L)(T)O-360 series Engines - Approved Lubricating Oils - AMOC to FAA AD 80-04-03R2	10/20/2011
2011-26	Bombardier (formerly Canadair)	CL-600-2B19 - Heading Deviations	10/21/2011
CE-12-02	Cessna Aircraft Company	172R/172S- Alternative Method of Compliance (AMOC) for FAA AD 2001-06-17	10/25/2011
CE-11-29R1	Cessna Aircraft Company	414A and 421C, if modified by S-TEC Corporation STC - Flight Control System	10/25/2011
CE-12-03	Cessna Aircraft Company	172R and 172S Fuel Control; Engine Performance with the Throttle Control at Idle	11/2/2011
CE-12-08	M7 Aerospace (formerly Fairchild, Swearingen)	SA226 and SA227 aeroplanes - Elevator Control System	11/9/2011
2009-39R1	c	Contaminated Halon 1211 (BCF) and 1301 (BTM) Supplies	11/10/2011
HQ-12-07 2011-27	Avox Systems, Inc.	First Aid Kits - Contaminated Iodine Wipes Suspect (Bogus - Counterfeit) Integrated Circuits	11/14/2011 11/18/2011
NM-11-48	Learjet Inc.	31, 31A, 35, 35A, 36 and 36A aeroplanes - Wing Transverse Duct Assembly	11/21/2011

SAIB Number	Make/Company	Subject	Issue Date						
European Aviation Safety Agency - ad.easa.europa.eu/sib-docs/page-1									
CASA-2011-08	Bell Helicopter Textron Canada (BHTC)	206L Series Helicopters - Main Rotor Blade Separation In-Flight	11/21/2011						
UPN2011- 20110418007	Master Machine Products	Bushings (P/N BACB28AT07D030C) manufactured by Master Machine Products in Monrovia, California (USA) and sold by First Wave Aviation in Tulsa, Oklahoma (USA)	11/22/2011						
2011-29	Bombardier	Operation of CRJ 100/200/440 and Challenger 850 and 600 series aircraft in cold weather or icing conditions during take-off.	12/6/2011						
2011-28	Airbus	A318/A319/A320/A321 aeroplanes - Maintenance of Emergency Evacuation Systems	12/8/2011						
CASA-2011-07	Diamond Aircraft Industries Inc	DA20 aeroplanes - NLG Fork Assembly Inspection / Replacement	12/19/2011						
2011-30	Eurocopter	EC 120 / EC 130 helicopters - Risk of Flight Control Jamming due to lack of Cyclic Friction	12/22/2011						
2012-02	Continental	(L)TSIO-360 Engines - Air Reference Tube failures	1/5/2012						

# SERVICE DIFFICULTY REPORTS (SDRs)

## **LEGEND**

JASC: Joint Aircraft System Code number

defining assembly/system/components

SDR No.: Transport Canada Civil Aviation (TCCA)

-assigned SDR control number — please

quote in any correspondence or inquiries

Region (RGN): TCCA region of SDR submitter:

PAC = Pacific PNR = Prairie and Northern

**ONT** = Ontario QUE = Quebec

**ATL** = Atlantic NCR = Ottawa (Headquarters)

**VAR** = Various

AIRCRAFT  AEROSPATIALE  AS 350 0  AS 350B 0  AS 350B2 0	CONTROL LEVER FUEL PRESSURE TRANSMITTER	350A33152600 642792002	USED		
AS 350 0 AS 350B 0	FUEL PRESSURE TRANSMITTER		LICED		
AS 350 0 AS 350B 0	FUEL PRESSURE TRANSMITTER		LICED		
AS 350B 0	FUEL PRESSURE TRANSMITTER		USED	20111202005	ATL
	TRANSMITTER		LEAKING	20111215001	QUE
AS 350B2 0		* / - * -			<u> </u>
	START DRAIN VALVE	174078030	LEAKING	20111208012	ONT
AS 350B2 2821		112104105	UNSERVICEABLE	20111027002	PNR
AS 350BA 5532		350A14002260	CRACKED	20111031002	QUE
ATR 72 212 3350	EMERGENCY LIGHT	3012000	BURNT	20111020002	ONT
	POWER SUPPLY				
AIRBUS					
A310 308 2530	OVEN	67254M	BURNT	20111026013	QUE
A319 112 5610		66642870	SHATTERED	2011115003	QUE
	COMPUTER				
A319 114 2780			RESET	20111111004	QUE
A319 114 2781		831A000005	FAILED	20111103009	QUE
A319 114 2910		AE7074203	FAILED	20111019014	QUE
A319 114 2910			LEAKING	20111111003	QUE
A319 114 2910	HYDRAULIC YELLOW		LEAKING	20111219012	QUE
	SYSTEM				
A319 114 2910			FAILED	20111003006	QUE
A319 114 3610	BLEED PRESSURE	6714D060000	FAILED	20111205004	QUE
	REGULATOR VALVE				
A320 211 2213		C12850AC02	FAILED	20111005004	QUE
A320 211 2530			BURNT SMELL	20111005005	QUE
A320 211 2750			RESET	20111103008	QUE
A320 211 2780		830A000002	RESET	20111021004	QUE
A320 211 2782		830A000004	TRIPPED	20111123003	QUE
1000 011	ACTUATOR #6	D000F0004000	DAIL DD	20111010010	OTTE
A320 211 2930		D90ST2004000	FAILED	20111019013	QUE
A320 211 3230		17400007	CRACKED	20111027003	QUE
A320 211 3520 A321 211 2800		17408096 E0415C3LM004	FAILED UNSERVICEABLE	20111005006 20111115001	QUE QUE
71321 211 2800	SWITCH	L0413C3LW1004	ONSERVICEABLE	20111113001	QUE
A330 343 2160		964A000004A	FRACTURED	20111221002	QUE
BAE - (RAYTHEON)	LOW CONTROL VALVE	/UT/10000UT/1	TMETURED	20111221002	QUE
HAWKER 800XP 3497	TERMINAL		CORRODED	20111028008	PNR
BAE - UK 3497	I ERMINAL		CORRODED	20111028008	LINIX
	EXTINGUISHING SYSTEM		CHAFFING	201111114000	PNR
3112 2620 3112 2721			INCORRECTLY	20111114008 20111011015	PNR PNR
3112 2721	RODDER I KIM CABLES			20111011015	TIVIX
2212 2721	IINIWEDCAL IOINT	137437E401	INSTALLED	20111212000	DND
3212 2721	UNIVERSAL JOINT	13/43/E4Ul	SEPERATED	20111213009	PNR
BEECH	DOD HIMIOUT STOR	101501100=	) (10 A I I C) 'PP	201111::::::	DAG
1900C 2701		1015241097	MISALIGNED	20111114012	PAC
	BRACKET				

1900D			Part Number	Condition	SDR No.	RGN
	2100	INSULATOR	7654131	CRACKED	20111216002	ATL
1900D	2730	STABILIZING WEIGHT	1015241433	DAMAGED	20111213005	ATL
1900D	2730	WEIGHT ASSEMBLY	11452406117	DAMAGED	20111212006	ATL
1900D	2730	WEIGHT ASSEMBLY	11452406117	DAMAGED	20111222010	ATL
1900D	3220	UPPER SHOCK TUBE	11482002213	CORRODED	20111117002	PNR
200	3210	LANDING GEAR MOTOR	11538000025	UNSERVICABLE	20111121011	PNR
200	3246	BEARING	21400100	FAILURE	20111027004	ONT
200	5610	WINDSHIELD	10138402523	BURNT	20111107003	PNR
A100	2750	FLAP MOTOR	1005240731	USED	20111118001	PNR
A100	5210	CHANNEL	50430043619	CRACKED	20111108004	QUE
A100	5753	FLAP TRACK	501600183	BROKEN	20111116006	QUE
B200	3610	PNEUMATIC LINE	131823H	MELTED OFF	20111003013	PNR
B200	5330	WING SKIN	5011002593	USED	20111219019	PNR
B200	5341	BATHTUB FITTING	351150595	DAMAGED	20111114011	PNR
B200	7400	IGNITOR	CH34055	USED	20111219007	PNR
B300	5280	ATTACH FITTING	5082017933	CRACKED	20111124007	PNR
D		REINFORCING		DD 011-011		DITE
B300	7530	BLEED AIR FIREWALL VALVE		BROKEN	20111114013	PNR
C90A	5412	CONNECTOR	MS3456KT367	BROKEN	20111129007	ONT
C99	3230	DOWN LOCK HOOK	508103385	CRACKED	20111027005	PNR
BELL TEXTRON	CAN					
206B	5302	BULKHEAD	206030446001F	CRACKED	20111020004	PAC
206B	6210	MAIN ROTOR BLADE	206010200133	FAILING	20111129011	PAC
206B	6310	FREEWHEEL ASSEMBLY	206040270	MAKING METAL	20111109010	PNR
206L 4	6520	OUTPUT SEAL	406340105101	NEW	20111012005	ONT
222U	0	ARM ASSEMBLY	222031604129	DAMAGED	20111130011	PAC
407	0	STATIONARY INNER RING	406010410121	CRACKED	20111104007	PAC
407	6210	MAIN ROTOR BLADE	407015001137	DELAMINATED	20111013007	PAC
407	6220	SHEAR BEARING	407310101105	DEBONDED	20111026003	PAC
412CF	6220	BEARING	412010187101	DELAMINATED	20111014001	QUE
412CF	6220	SPINDLE BEARING	412010105101	DELAMINATED	20111026006	QUE
429	0	BONDING CABIC	300332315CH	NEW	20111103011	ONT
429	0	PITCH LINK BEARING	429010108101	FAILED	20111115015	QUE
429	7800	EXHAUST EJECTOR BLANKET	429363111102	SEPERATED	20111109011	QUE
BELL TEXTRON -	USA					
205A 1	0	MAIN ROTOR BLADE	212015501115	CRACKED	20111220005	PNR
212	0	FITTING	212040106105	SCRAP	20111104008	PNR
212	3210	CROSSTUBE	205050400063	FAILED	201111018004	QUE
BELLANCA						
7GCBC	2810	LEFT HAND FUEL TANK	71449	CRACKED	20111026005	PNR
8GCBC	2810	TANK - INBOARD RIGHT	71449 71493R	CRACKED	201111020003	PNR
	2010	MINK-INDOMED MOITI	/1 <del>1</del> /310	CRECED	20111113013	TIVIX
BOEING		D. DIMID ONLO D		7111 PP		D.1.0
727 200	2613	DETECTOR	356644400	FAILED	20111025007	PAC
727 225	2740	CRUISE TRIM ACTUATOR	56024003	INCORRECTLY WIRED	20111017003	ONT
727 260	2721	RUDDER MODULE	65178234	BY-PASSING	20111212015	ONT
737 275C	5753	FLAP SPINDLE	654782130	SHEARED	20111012011	PNR
737 6CT	5297	S961 (AFT CARGO DOOR INDICATOR)	10622151	UNSERVICEABLE	20111208015	PNR
737 6CT	5610	CAPTAIN'S #1 WINDOW	5893543149	SERVICEABLE	20111114009	PNR
737 76N	3414	AIR DATA INERTIAL REFERENCE UNIT		RESET	20111118008	PNR
737 76N	5210	GUIDE ARM ROD END	BACB10A223L	SHEARED	20111219011	PNR
737 7CT	2131	CABIN PRESSURE	71211997101AC	FAILED	20111116009	PNR
· · · · · · · ·		CONTROLLER				
	2742	CONTROLLER MOTOR STABILIZER TRIM	6355C000101	UNSERVICEARLE	20111031003	PNR
737 7CT 737 7CT	2742 2751	MOTOR STABILIZER TRIM FLAP SKEW SENSOR	6355C000101 90004212	UNSERVICEABLE UNSERVICEABLE	20111031003 20111202003	PNR PNR

Make/Model	Jasc	Part Name	Part Number	Part Condition	SDR No.	RGN
737 7CT	3040	WINDOW HEAT CONTROL UNIT	8300005604	DIRTY	20111107007	PNR
737 7CT	3830	VACUUM BLOWER MOTOR	6451722	FAILED	20111107005	PNR
737 7CT	5610	WINDOW HEAT CONTROLLER	8300005604	UNSERVICEABLE	20111114010	PNR
737 7CT	5610	WINDOW HEAT CURLY CORD	ABC57021	UNSERVICEABLE	20111026010	PNR
737 81Q	3246	BOLT	2613109	BROKEN	20111109007	ATL
737 8BK	0	CONNECTOR		CHAFING	20111229002	ONT
737 8BK	4930	FUEL MANIFOLD	38838362	CRACKED	20111223005	ONT
737 8CT	2520	RADIO FREQUENCY DISTRIBUTOR AMPLIFIER	3042849101	FAILED	20111130010	PNR
737 8CT	2730	COMPUTER ELEV/ RUDDER FEEL	162700100	INTERMITTENT	20111108006	PNR
737 8CT	3120	AUDIO SELECTOR PANEL	5145177	FAILED	20111011011	PNR
737 8CT	5610	CAPTAIN'S #2 SLIDING WINDOW	141A48107	SHATTERED	20111215006	PNR
757 28A	0	CLAMP ASSEMBLY	BC1083074S	BROKEN	20111228002	ATL
757 2B7	3417	AIR DATA COMPUTER	4040800912	NO VISIBLE DAMAGE	20111201010	PNR
767 375	2410	INTEGRATED DRIVE GENERATOR	739515C	FAILED	20111026011	QUE
BOMBARDIER						
BD 100 1A10	2150	AIR CYCLE MACHINE	3471A020000	FAILED	20111025001	QUE
BD 100 1A10	2612	FIRE DETECT ELEMENT	44670134	NO VISIBLE DAMAGE	20111012009	QUE
BD 100 1A10	2722	RUDDER POWER CONTROL UNIT	C61701003	LEAKING	20111208004	QUE
BD 100 1A10	3230	PROXIMITY SENSOR		FAILED	20111122001	QUE
BD 100 1A10	3230	SELECTOR VALVE	41220103	DEFECTIVE	20111109003	QUE
BD 100 1A10	520	NO PARTS		STALL	20111021008	QUE
BD 100 1A10	5210	CAM FOLLOWER		BROKEN	20111115012	QUE
BD 700 1A10	2450	ALTERNATING CURRENT POWER CENTER	GL51211011	FAILED	20111103014	QUE
BD 700 1A10	2742	PITCH TRIM ACTUATOR	GT41240015	DAMAGED	20111103002	QUE
BD 700 1A10	2910	TUBE ASSEMBLY	GD47812031	FAILED	20111103004	QUE
CL600 2B19 (RJ100)	2110	AIR CYCLE MACHINE	78279015	FAILED	20111116003	QUE
CL600 2B19 (RJ100)	2130	DUCT	601R9521553	FAILED	20111205011	QUE
CL600 2B19 (RJ100)	2710	AILERON SYSTEM		STIFF	20111021006	ATL
CL600 2B19 (RJ100)	2710	PULLEY	600908004	STIFF	20111021005	ATL
CL600 2B19 (RJ100)	2710	PULLEYS	600908002	SEIZED	20111021003	ATL
CL600 2B19 (RJ100)	2722	RUDDER POWER CONTROL UNIT	274001	LEAKING	20111221001	QUE
CL600 2B19 (RJ100)	2730	ELEVATOR CONTROL		JAMMED	20111209003	QUE
CL600 2B19 (RJ100)	2750	BRAKE PRESSURE SENSOR UNIT	855D10013	FAILED	20111205010	ATL
CL600 2B19 (RJ100)	2820	TUBE ASSEMBLY	601R6240121	CRACKED	20111209006	ATL
CL600 2B19 (RJ100)	3197	WIRE	1FP9F22BLU	BURNT	20111222002	ATL
CL600 2B19 (RJ100)	3230	MICROSWITCH	604EN1436	INTERMITTENT	20111026001	ATL
CL600 2B19	3230	SELECTOR VALVE	601R751461	FAILED	20111114005	ATL

Make/Model	Iasc	Part Name	Part Number	Part Condition	SDR No.	RGN
CL600 2B19	3230	SELECTOR VALVE	750005000	FAILED	20111121002	ATL
(RJ100)	3230	SELECTOR VALVE	730003000	FAILED	20111121002	ALL
CL600 2B19 (RJ100)	3230	SELECTOR VALVE	750006000	FAILED	20111202001	ATL
CL600 2B19	3230	SPRING	16227101	BROKEN	20111121004	PAC
(RJ100) CL600 2B19 (RJ100)	3231	BASE	6008610411	CRACKED	20111125002	ATL
CL600 2B19	3260	PROXIMITY SWITCH		ICED	20111212012	ATL
(RJ100) CL600 2B19	3610	BLEED DUCT		IMPROPER	20111108001	QUE
(RJ100) CL600 2B19	5220	DOOR	601R330501	INSTALLATION CORRODED	20111215003	ATL
(RJ100) CL600 2B19	5312	PRESSURE BULKHEAD		CRACKED	20111220002	ATL
(RJ100)		ALD OD A DEL CIVIN				
CL600 2B19 (RJ100)	5330	AIRCRAFT SKIN		CRACKED	20111222003	ATL
CL600 2B19 (RJ100)	5330	DOOR SKIN LANDING	60033052	CRACKED	20111005009	ATL
CL600 2B19 (RJ100)	5330	DOOR SKIN LANDING	600330529	CRACKED	20111005007	ATL
CL600 2B19 (RJ100)	5610	WINDSHIELD LEFT HAND	139321003	SHATTERED	20111011009	QUE
CL600 2B19	5610	WINDSHIELD	NP1393215	SHATTERED	20111109001	ATL
(RJ100) CL600 2B19 (RJ100)	5610	LEFT HAND WINDSHIELD RIGHT HAND	601R3303314	SHATTERED	20111124004	ATL
CL600 2B19	5720	ANGLE	601R100111314	CRACKED	20111125005	ATL
(RJ100) CL600 2B19 (RJ100)	5720	ANGLE	601R100111314	CRACKED	20111125006	ATL
CL600 2B19	5720	ANGLE	601R100111314	CRACKED	20111222009	ATL
(RJ100) CL600 2B19 (RJ100)	5720	ANGLE	601R1001113A	CRACKED	20111116010	ATL
CL600 2B19	5720	ANGLE	601R1001114A	CRACKED	20111117009	ATL
(RJ100) CL600 2B19 (RJ100)	5730	WING PLANK	601R10046	CRACKED	20111214008	QUE
CL600 2B19	2750	FLAP SYSTEM		FAILED	20111216001	QUE
(RJ440) CL600 2C10 (RJ700)	2120	MACHINE AIR CYCLE	GG670950095	SEIZED	20111003007	QUE
CL600 2C10	2150	AIR CYCLE MACHINE	GG6708722	FAILED	20111205008	QUE
(RJ700) CL600 2C10 (RJ700)	5610	SIDE WINDOW	NP1393229	SHATTERED	20111005002	QUE
CL600 2C10	5610	WINDSHIELD	1393226	SHATTERED	20111209004	QUE
(RJ700) CL600 2C10	5610	WINDSHIELD	NP13932114	SHATTERED	20111214007	QUE
(RJ700) CL600 2C10	5610	WINDSHILED	601R3303313	SHATTERED	20111213004	QUE
(RJ700) CL600 2D15 (705)	2120	AIR CONDITIONING SYSTEM		SMELL	20111219002	ATL
CL600 2D15 (705)	2750	TORQUE TUBE	59113602	CHAFFED	20111216004	ATL
CL600 2D15 (705)	2910	HOSE ASSEMBLY	AE7178121	CHAFFED	20111101004	ATL
CL600 2D15 (705)	3210	SPRING	493183	BROKEN	20111123001	ATL
CL600 2D15 (705)	3340	LENS	9EL41051106	CRACKED	20111212011	ATL

Make/Model	Jasc	Part Name	Part Number	Part Condition	SDR No.	RGN
CL600 2D15 (705)	3610	PRESSURE REGULATING AND SHUT OFF VALVE	GG67080002	FAILED	20111215002	ATL
CL600 2D24 (RJ900)	2530	GALLEY EQUIPMENT		BURNT	20111111002	QUE
(RJ900) CL600 2D24 (RJ900)	2740	MODULAR COMPONENT UNIT	70744	FAILED	20111123009	QUE
CL600 2D24 (RJ900)	3210	MAIN LANDING GEAR LEG	4905016	CRACKED	20111122002	QUE
CL600 2D24 (RJ900)	3251	ELECTRONIC CONTROL UNIT	4480000601	FAILED	20111205009	QUE
CL600 2E25 (RJ1000)	5751	SEAL	601R1024446	BENT	20111102004	QUE
CANADAIR						
CL600 2A12(601)	5310	WINDSHIELD LOWER SILL	604330353	CRACKED	20111216007	QUE
CL600 2B16(604)	2410	INTEGRATED DRIVE GENERATOR	731759C	FAILED	20111202004	QUE
CESSNA						
152	3222	NOSE FORK	442503497	CRACKED	20111103013	ONT
152	3300	LANDING LIGHT SWITCH	C9065	STIFF	20111013004	ONT
152	5510	RIGHT HAND SKIN	43200154	CRACKED	20111021010	PNR
172L	5753	FLAP TRACK/ RIB ASSEMBLY	52323113	CRACKED	20111004009	PAC
172N	3245	TIRE TUBE	XA1AD600X6	SPLIT	20111201008	ONT
172N 172R	5753 2701	RIGHT FLAP BULKHEAD	52390138 51336012	TORN ELONGATED	20111208009 20111101007	ONT PNR
				HOLE		
172S	2710	AILERON CABLE	510105364362	WORN	20111118004	ONT
172S	2710	AILERON CABLE	510105365	WORN	20111003004	ONT
172S	2710	AILERON CABLES	510105362364	WORN	20111118005	ONT
180J	5753	LOWER BULKHEAD	512133	TORN USED	20111005003	PAC
182P 208B	3246 2752	FLOAT STRUT FLAP ACTUATOR	30A02000195 99105864RX	UNSERVICEABLE	20111117003 20111121010	PAC PNR
208B	3213	LOWER STRUT FITTING	26210091	USED	20111121010	PAC
550	7603	RETURN SPRING	556580310	USED	20111117004	PNR
560	3251	LOCK NUT	MS210426	UNSERVICEABLE	20111128008	PAC
680	7830	BUSHING	NAS77A4009	CRACKED	20111215008	PAC
A185E	3246	SPREADER BAR	16550	CRACKED	20111021011	PNR
TR182	7800	COMPLETE EXHAUST		WARPED	20111025009	PNR
U206E	3222	TRUNNION	12434034	CRACKED	20111103015	ONT
CONVAIR - CAN						
340 DASSAULT	5300	BRACKET	3403360020	CRACKED	20111025011	PNR
FALCON 2000EX	3240	PRESSURE SWITCH	1203P0224	LEAKING	20111129010	QUE
DEHAVILLAND -						
DHC 2 MKI	2497	ELECTRICAL CABLE		BURNT	20111104005	ONT
DHC 3	5510	BLOCK ASSEMBLY	C3FS795	LOOSE	20111101003	PNR
DHC 3	5551	ACTUATOR ASSEMBLY	C3CF2909	FLOODED	20111103012	ONT
DHC 6	1000	ADAPTER ASSEMBLY	C6WM1162	NEW	20111110007	PAC
DHC 6	1000	LATCH ASSEMBLY COWLING	C6EC100293	NEW	20111124006	PAC
DHC 7 102	3244	TIRE	DR22620T	SEPARATED	20111110001	ONT
DHC 8 102	1420	CANON PLUG	MS3476L2241S	BURNT	20111209001	ATL
DHC 8 102	1440	POWER SYSTEM	70270010	BURNT	20111024004	ATL
DHC 8 102 DHC 8 102	2100 2100	AIR CYCLE MACHINE	78279018 78279016	SEIZED USING OIL	20111011010	ATL ATL
DHC 8 102 DHC 8 102	2497	AIR CYCLE MACHINE WIRES	10217010	SHORTED	20111018006 20111021007	ATL
			82740029103	UNSERVICEABLE	20111021007	ATL
DHC 8 102 DHC 8 102	2710	HOUSING AILERON GUST LOCK	02740027103	ONSERVICEMBEE	20111200011	1112
	2710 2750	GUST LOCK FLAP CONTROL	02/1002/103	SEIZED	2011123005	ATL

				D		
Make/Model	Jasc	Part Name	Part Number	Part Condition	SDR No.	RGN
DHC 8 102	2910	#1 HYDRAULIC TUBE	82970009105	CHAFFED	20111215004	ATL
DHC 8 102	3230	VALVE SOLENOID	54C546347	FAILED	20111205006	ATL
DHC 8 102	5755	SPOILER	85711503001	CRACKED	20111115014	QUE
DHC 8 102	5755	SPOILER ACTUATOR	A44700009	CRACKED	20111004003	ATL
DHC 8 300	2913 2497	HYDRAULIC LINE WIRE	82970009331	CRACKED CHAFFED	20111104001	ONT ATL
DHC 8 311 DHC 8 311	2697	WIRE		BROKEN	20111104009 20111101001	ATL
DHC 8 400	2497	POWER SYSTEM WIRING		BURNT	20111107001	ONT
DHC 8 400	2497	POWER SYSTEM WIRING		BURNT	20111110004	ONT
DHC 8 402	1420	CANON PLUG	D3899926JJ24SN	BURNT	20111216006	ATL
DHC 8 402	1420	CANON PLUG	D3899926WJ4SN	PIN NOT LOCKED	20111228003	ATL
DHC 8 402	2844	PRESSURE SWITCH	312242604	FAILED	20111222005	ATL
DHC 8 402	3230	HYDRAULIC HOSE	46455117	BURST	20111202009	QUE ATL
DHC 8 402 DHC 8 402	5200 5240	CONNECTOR ACCESS DOOR	JD3899924WB5SN 85414708103	PIN NOT LOCKED MISSING	20111212009 20111018007	ATL
	3240	ACCESS DOOR	03414700103	MISSING	20111018007	ALL
DIAMOND - CAN	22.45	Time	VAIAC	CDLIT	20111212002	ONT
DA 20 A1 DA 20 C1	3245 2421	TUBE ALTERNATOR BRACKET	XA1AC 2224121400	SPLIT CRACKED	20111212002 20111121007	ONT ATL
DA 20 C1 DA 20 C1	3213	BOLT'	AN5	LOSS OF TORQUE	20111121007	ATL
DA 20 C1	5540	RUDDER TOWER	2055450700	CRACKED	20111101009	ATL
DA 20 C1	7602	MIXTURE ARM	656209	DAMAGED	20111219005	ONT
EMBRAER						
EMB 500	0	BRAKE CONTROL UNIT	900050344	USED	20111230002	PNR
EMB 500	3240	BRAKE CONTROL UNIT	900050344	FAILED	20111123012	PNR
ERJ 170 200 SU	2121	RECIRCULATION FAN		FAILED	20111123004	QUE
ERJ 170 200 SU	2752	FLAP ACTUATOR 2R	C1548152	FAILED	20111024003	QUE
ERJ 170 200 SU	2780	SLAT FAIL		RESET	20111219015	QUE
ERJ 170 200 SU	2780	SLAT SYSTEM	4704 4007 404	RESET	20111208016	QUE
ERJ 170 200 SU	3610	T-DUCT ASSEMBLY	17014806401	CRACKED Burnt	20111004004	QUE
ERJ 190 100 IGW ERJ 190 100 IGW	2120 2520	DUCT PASSENGER	CDA10110002	CABIN SMELL	20111024007 20111205003	QUE QUE
EKJ 170 100 IGW	2320	COMPARTMENT EQUIPEMENT		CADIN SWIELL	20111203003	QUE
ERJ 190 100 IGW	2710	BONDING STRAP		INTERFERENCE	20111026012	QUE
ERJ 190 100 IGW	2750	FLAP FAIL		RESET	20111206015	QUE
ERJ 190 100 IGW	2751	SKEW SENSOR	59128437	FAILED	20111103007	QUE
ERJ 190 100 IGW	2761	MULTI-FUNCTION SPOILER	4148001009	LEAKING	20111027001	QUE
ERJ 190 100 IGW	2781	SKEW SENSOR	1702286B	FAILED	20111003005	QUE
ERJ 190 100 IGW	2781	SKEW SYSTEM		OUT OF RIG	20111205002	QUE
ERJ 190 100 IGW	2781	SLAT HARNESS W612	1702000 A	FAILED FAILED	20111116001	QUE
ERJ 190 100 IGW ERJ 190 100 IGW	2782 2782	SLAT ACTUATOR TYPE D SLAT ACTUATOR	1703909A 1703909D	TRIPPED	20111115002 20111024001	QUE QUE
ERJ 190 100 IGW	2822	FUEL PUMP CARTRIDGE	9C1484	LEAKING	20111024001	QUE
ERJ 190 100 IGW	2824	FUEL CROSS-FEED SHUT-	2950004304	FAILED	20111208003	QUE
•		OFF VALVE ACTUATOR				~
ERJ 190 100 IGW	2910	HYDRAULIC LINE		LEAKING	20111219016	QUE
ERJ 190 100 IGW	5342	REAR FUSE SKIN		CRACKED	20111118012	QUE
ERJ 190 100 IGW	5610	ANCHOR (DOME) NUTS	NAS1473S4	DAMAGED	20111005001	QUE
EUROCOPTER DE	EUT					
BK117 A 4D	0	DRIVE SPLINE	2542373	CRACKED	20111103006	PAC
BK117 B 2D	0	MAINTRANSMISSION	1171200501	UNSERVICEABLE	20111228004	PNR
BO105 S CDN	6210	LEAD EDGE STRIP	10515150	DEBONDED	20111107002	ONT
BS 4						
EUROCOPTER FR	ANCE					
EC 120 B	6520	MAGNETIC PLUG ASSEMBLY	BM1021	REMOVED	20111016001	QUE
FAIRCHILD						
SA227AC	2120	MIXING VALVE	BYLB504371	FAILED	20111024010	ONT
SA227DC	3230	PLUNGER SPRING	LE075G6SS	FAILED	20111012006	PNR
GROB-WERKE						
G 115C	7800	MUFFLER LEFT HAND	115C6401	BROKEN PIPE	20111110006	ONT
G 120A	1420	WIRING	8268842	GOOD	20111213001	PNR

				D		
Make/Model	Jasc	Part Name	Part Number	Part Condition	SDR No.	RGN
G 120A	2731	ELEVATOR CONTROL ROD	120A44082	GOOD	20111128005	PNR
G 120A	2752	RIGHT HAND FLAP ACTUATOR	120A4262	GOOD	20111026008	PNR
G 120A	2820	FUEL VENT LINE		LOOSE	20111003009	PNR
G 120A	3242	BRAKE PADS	6610600	USED	20111026009	PNR
G 120A	3242	BRAKE PADS	6610600	USED	20111110003	PNR
G 120A	7410	IGNITION SWITCH	103572101	GOOD	20111028003	PNR
G 120A	7430	IGNITION SWITCH	103572101	GOOD	20111201006	PNR
GULFSTREAM - I	SRAEL					
GULFSTREAM 100	2916	DRAIN PLUG	MS358441	SHEARED THREADS	20111003008	ONT
GULFSTREAM 100	4940	CURRENT LIMITER	ANL300	OVERHEATED	20111123010	ONT
HUGHES						
369D	0	BRACKET ASSEMBLY	369A7304	BROKEN CAP	20111201007	PNR
LAKE						
LA 4 200	2720	PUSHROD ASSEMBLY - RUDDER	2710351	CORRODED	20111028007	ONT
LEARJET						
35A	3230	MAIN LANDING GEAR ACTUATOR	2327100012	LEAKING	20111205005	PNR
45	2510	FOOT WARMER		SHORTED	20111013003	QUE
55	3110	POTENTIOMETER	1903895	SHORTED	20111013003	PNR
60	3244	MAIN TIRE	178K431	UNSERVICEABLE	20111114007	QUE
60	3244	TIRE	178K431	NEW	20111203010	PNR
MCDONNELL DO			170131	TALLYY	20111001001	1111
			000D2101001107	INCEDIACEARIE	20111125000	DNID
MD 900	0	CENTERING BEARING	900R3101001107	UNSERVICEABLE	20111125008	PNR
MD 900	0	MAIN ROTOR BLADE	900R1150001113	UNSERVICEABLE	20111125009	PNR
MORAVAN						
Z242L	2810	DIAPHRAGM	HP41332204	STIFF	20111021001	ONT
Z242L	5753	FLAP UPLOCK SPRING	Z4243300014	BROKEN	20111005008	ONT
PILATUS - SW						
PC 12 45	2520	HEATER	9696781504	OVERHEATED	20111212010	ONT
PC 12 45	2520	RELAY	9740926111	FUSED	20111213006	ONT
PC 12 45	5697	WIRE	H307C12	BURNT	20111020001	ONT
PC 12 47E	2131	CONTROLLER	6130C000002	INTERMITTENT	20111123007	PAC
		ENVIRONMENTAL				
		CONTROL SYSTEM				
PIPER						
PA28RT 201T	5532	FIN AFT TIP FAIRING	3840205	DAMAGED	20111107008	PNR
PA31 350	5711	WING SPAR	404870607	BUCKLED WEB	20111228007	PAC
PA32R 300	5543	ASSEMBLY-RUDDER CONTROL	6345703	BROKEN	20111209002	ONT
PA34 200T	2400	MASTER SWITCH	587837	UNSERVICEABLE	20111107004	PAC
PA44 180	2750	FLAP CABLE	9668100	FRAYED	20111110002	PNR
PA44 180	3221	TUBE ASSEMBLY	86262003	CRACKED	20111108005	ATL
PA44 180	7800	MUFFLER	86299007	BROKEN	20111215010	ATL
PA44 180 PITTS	7800	MUFFLER	86299007	CRACKED	20111012002	ATL
S2B	3222	TAIL WHEEL FORK	TW61A	CRACKED	20111021009	PNR
X2C	7314	FUEL PUMP	R617980D	NOT SECURED	20111019019	PAC
ROBINSON						
R44 II	2822	FUEL PUMP	19001B	FAILED	20111011013	PNR
R44 II	3213	STRUT	D0461	CRACKED	20111024011	PNR
SAAB						
SF340A	2110	AIR CYCLE MACHINE	7769106	SEIZED	20111116004	ATL
SF340A SF340A	2913	HYDRAULIC PUMP/	4018502	NOISY	20111116004	ATL
		MOTOR	.010000			
SF340A	5320	ICE SHIELD		LOOSE	20111116007	ATL

Make/Model	IASC	Part Name	Part Number	Part Condition	SDR No.	RGN
		TAKI I WILL	TART TOWNER	CONDITION	551(110.	ROIT
SHORT&HARLAN SD3 60	2460	CIRCUIT BREAKER	727421	UNSERVICEABLE	20111017006	PAC
VIKING CANADA		CIRCUIT BREAKER	727421	UNSERVICEABLE	20111017006	PAC
DHC 6 400	1000	STRAP	C6FS262231	NEW	20111025013	PAC
DHC 6 400	5210	DOOR HANDLE	VSC3132	BROKEN	20111216009	PAC
DHC 6 400	5300	STRAP	C6FS262231	NEW	20111222007	PAC
ENGINE						
ALLISON						
250-C20B	7170	TUBE ASSEMBLY	6853464	CHAFFED	20111006003	PNR
250-C20F 250-C47B	7261 8300	TUBE ASSEMBLY REAR POWER	6859956	CRACKED USED	20111125001 20111222012	QUE PAC
230-C47B	8300	TAKE-OFF BEARING		USED	20111222012	IAC
AVCO LYCOMING	!	TAKE-OFF BEARING				
IO-540-AE1A5	7414	DISTRIBUTOR BLOCK	10357426	CRACKED	20111215005	PNR
IO-540-AE1A5	8530	INTAKE VALVE		UNSERVICEABLE	20111217001	PNR
IO-540-C4B5	7314	LEFT HAND MECANICAL FUEL PUMP	LW15473	LEAKING	20111115008	QUE
IO-540-C4B5	7314	RIGHT HAND MECANICAL FUEL PUMP	LW15473	LEAKING	20111115009	QUE
LO-360-E1A6D	8500	CASE		CRACKED	20111206001	ATL
LTS-101-700D-2	7230	LINK	406100807	BROKEN	20111013005	ATL
O-235-L2C	0	CARB AIRBOX ASSEMBLY	4500523	SEPARATED	20111012010	ONT
O-235-L2C O-235-L2C	8530 8530	PISTON PISTON PIN PLUG	SL18729 LW11625	BURNT NEW AT	20111012007 20111006002	ONT PNR
0-233-L2C	6330	1131ON 11N 1 LOG	LVV 11023	OVERHAUL	20111000002	INK
O-320-E2D	8530	VALVE		STUCK	20111025010	QUE
O-320-H2AD	0	STUD	3116	BROKEN	20111223006	PNR
O-360-E1A6D	7414	DISTRIBUTOR BLOCK	K3823	NEW	20111116011	PNR
T5317A	7800	EXHAUST DIFFUSER	115024006	USED	20111222011	PAC
TIO-540-J2BD	7810	EXHAUST	LW10163	UNSERVICEABLE	20111109004	PNR
CFM INTERNATI		DDDCCLIDE CHATCLI	O 1 07005	NODMAI	20111004007	DNID
CFM56-7B22/3 CFM56-7B24	7314 8011	PRESSURE SWITCH STARTER	QA07995 1851M36P10	NORMAL FRACTURED	20111004007 20111004005	PNR PNR
GARRETT	0011	SIMKILK	1031111301 10	TRACTORED	20111004003	TIVIX
TFE731-60-1C	0	OIL COOLER	30610424	WORN	20111227004	PNR
1112/31 00 10	O	SUPPLY TUBE	30010424	WORK	20111227004	11111
TPE331-10	7100	ENGINE	TPE33110	FLAME OUT	20111108003	ONT
TPE331-10UA-	7261	OIL FILTER	30014361	DAMAGED	20111205007	PAC
511G						
TPE331-10UA-	8300	TORQUE SENSOR	31035851	DAMAGED	20111024009	PNR
511G		SPUR GEAR B		nn avenv		D1 1D
TPE331-10UGR-	7100	LINE ASSEMBLY	8943822	BROKEN	20111017005	PNR
516H TPE331-11	1.400	EITTINC	21020201	CDACKED	20111112015	ONT
TPE331-11 TPE331-11	1400 7200	FITTING FITTING	31039391 31021602	CRACKED FRACTURED	20111118015 20111118014	ONT ONT
TPE331-11	7400	IGNITION EXCITOR	103920002	UNSERVICEABLE	201111220006	ONT
TPE331-11U	7310	FITTING	2764065011	CRACKED	20111118016	ONT
GENERAL ELECT	TRIC					
CFM56	0	STAGE 1 BLADE RETAINER	9523M11G03	BROKEN	20111227005	PNR
PRATT & WHITN	EY-CAN					
PT6A-28	7200	POWER SECTION	3013340	SEIZED	20111216005	ONT
PT6A-34	7210	RING GEAR	E3024765C	BROKEN TEETH	20111007002	PNR
PT6A-42	3610	CHECK VALVE	340400	UNSERVICEABLE	20111026004	PNR
PT6A-42	7240	OUTER COMBUSTION LINER	311485001	CRACKED	20111118010	PNR
PT6A-42	7250	STATOR FIRST STAGE	3030262	CRACKED	20111118011	PNR

Make/Model	Jasc	Part Name	Part Number	Part Condition	SDR No.	RGN
PT6A-60A	6122	FLYWEIGHT PIVOT BEARING	1401240	BROKEN	20111212017	PNR
PT6A-67D	7314	FUEL PUMP	3040760	UNSERVICEABLE	20111117010	PNR
PT6A-67P	7300	FUEL CONTROL UNIT	311989207	FAILED	20111208014	PAC
PT6T-3	7500	TUBE ASSEMBLY	3028325	CRACKED	20111123011	PAC
PW120	7197	ELECTRICAL WIRING HARNESS	3038579	UNSERVICEABLE	20111123002	QUE
PW120	7321	HYDRO MECHANICAL UNIT	78639215	NO VISIBLE DAMAGE	20111201011	PNR
PW120A	7261	OIL TEMP VALVE		STUCK OPEN	20111116002	ATL
PW120A	7997	WIRING		CHAFFED	20111019016	ATL
PW307A	2435	ENGINE DIRECT CURRENT GENERATOR	30089005	UNSERVICEABLE	20111121003	ONT
PRATT & WHITNE	EY-USA					
R-985-AN-14B	6100	THRUST NUT	1019	UNDER TORQUE	20111024008	ONT
WASP CA3	7120	MOUNT CORE	MR3636	UNSERVICEABLE	20111219008	ATL
WASP CA3  ROLLS ROYCE - G	8530 Y	CYLINDER BASE STUD	2055235	BROKEN	20111025012	PNR
BR700-715C1-30	7200	#4 BEARING ASSEMBLY	BRH21058	FAILED	20111108002	QUE
BR700-715C1-30	7250	TURBINE BLADES	FW64379	BROKEN	20111100002	QUE
DART 529-8X	7261	BREATHER COUPLING	159P1001975	SWOLLEN	20111003001	QUE
THIELERT						
TAE 125-01	2000	FULLY AUTHORIZED DIGITAL ELECTRONIC CONTROLLER ELECTRONIC CONTROL UNIT	02761055003R1	REPAIRED	20111024002	ONT
PROPELLER						
DOWTYROTOL						
R408/6-123-F/17	3060	BUS BAR	697070213	BROKEN	20111128001	ONT
R408/6-123-F/17	6114	PROPELLER	697037001	LEAKING	20111004001	ONT
HAMILTON STANI	DARD					
14SF-19	6110	COLLAR	80225312	NEW	20111020003	ATL
14SF-19	6111	PROPELLER BLADE	201012026819	ALMOST NEW	20111020003	QUE
14SF-23	6100	BOLT	7826691	RECERTIFIED	20111012001	PNR
14SF-7	3060	ELECTRICAL LEAD	8204444	BURNT	20111212003	ATL
14SF-7	6114	BEARING RACE	7823011	FRACTURED	20111122004	ATL
14SF-7	6114	HUB NUT	HDACLH7461T	NEW	20111129008	PAC
14SF-7	6114	PROPELLER HUB NUTS	7847761	CRACKED	20111121005	PNR
14SF-7	6120	PROPELLER CONTROL UNIT		LEAKING	20111114006	ATL
HARTZELL						
HC-C2YK-2CUF	6114	HUB	D65221	CRACKED	20111215007	PNR
HC-C2YR-2CEUF	6100	CYLINDER	B24231	GOUGED	20111213007	QUE
HC-D4N-3C	3060	RELAY	MS24187D1	USED	20111117027	PNR
HC-D4N-3C	6100	SEAL	3026652	USED	201111118002	PNR
HC-E4A-3	3060	SLIP RING	4H30081	NEW	20111209005	ONT
HC-E4N-3G	0	BRUSH	RA15437	USED	20111228009	PNR
HC-E4N-3G MCCAULEY	6120	GOVERNOR-OVERSPEED	210638F	FAILED	20111117019	PNR
1C160/ DTM7557-M1	6113	FORWARD SPINNER BULKHEAD	5503214	USED	20111117005	PAC
4HFR34C652	3080	SPINNER	E5367	GOOD	20111121001	PNR
4HFR34C771	6121	PROPELLER SYNC CONTROL	A213796	USED	20111121001	PNR
B3DF36C526/ 80HJA-0	2000	JOINT ASSEMBLY	469153	RUSTED	20111123014	PNR

Make/Model	Jasc	Part Name	Part Number	Part Condition	SDR No.	RGN
EQUIPMENT						
AIRCRAFT APPLI	ANCES					
CMA1100	3460	ELECTRONIC FLIGHT BAG	245604128000	UNSERVICEABLE	20111028001	QUE
AM-SAFE						
502985401	2510	SHOULDER HARNESS	5029854012251	NEW	20111202006	ONT
ARTEX						
4535002	2562	G SWITCH		INTERMITTENT	20111220004	PNR
4535002	2562	G SWITCH		UNSERVICEABLE	20111123008	PNR
4535002	2562	G SWITCH		UNSERVICEABLE	20111125007	PNR
4535002	2562	G SWITCH		UNSERVICEABLE	20111216008	PNR
C406N	2562	G SWITCH	140172001	FAILED	20111017009	PNR
AVCO LYCOMING						
LTO360E1A6	7414	MAGNETO	D4RN3000	LEAKING	20111116012	PAC
BEECHCRAFT						
1U1490016	3421	HORIZON	1U1490016	USED	20111117028	PNR
235010616	3421	HORIZION	235010616	USED	20111117029	PNR
BENDIX						
7000622901	3421	VERTICAL GYRO	7000622901	USED	20111118019	PNR
KLN900	0	RECEIVER	66040340104	FAILED	20111219010	ONT
BOEING						
273A36105	3252	PISTON	273A36112	CRACKED	20111107006	PNR
CESSNA						
152	3340	LANDING LIGHT SWITCH	C9065	STUCK	20111017007	ONT
2350117	3421	ATTITUDE INDICATOR	2350117	USED	20111121009	PNR
CMC						
CMA1100	2572	ELECTRONIC DISPLAY UNIT	245604128000	FAILED	20111115007	QUE
COLLINS AVIONI	CS					
6221204003	3444	RADAR ALTIMETER	6221204003	USED	20111118003	PNR
6226136002	3422	DIRECTIONAL GYRO	6226136002	USED	20111118009	PNR
EQUIPMENT	0	VERTICAL GYRO	6224565001	USED	20111219013	PNR
EQUIPMENT	0	VERTICAL GYRO	6224565001	USED	20111219014	PNR
EQUIPMENT	3421	VERTICAL GYRO	7000622901	USED	20111118021	PNR
DEHAVILLAND -	CAN					
DHC8402	2530	COFFEE BREWER	400179402	SWITCH EXPOSED	20111206004	ATL
DHC8402	2530	COFFEE BREWER	400179402	SWITCH	20111206005	ATL
				EXPOSED		
DHC8402	2530	COFFEE BREWER	400179402	SWITCH EXPOSED	20111206007	ATL
DHC8402	2530	COFFEE BREWER	400179402	SWITCH EXPOSED	20111206009	ATL
DHC8402	2530	COFFEE BREWER	400179402	SWITCH EXPOSED	20111206010	ATL
DHC8402	2530	COFFEE BREWER	400179402	SWITCH EXPOSED	20111206011	ATL
DHC8402	2530	COFFEE BREWER	400179402	SWITCH EXPOSED	20111206012	ATL
DHC8402	2530	COFFEE BREWER	400179402	SWITCH EXPOSED	20111206013	ATL
DHC8402	2530	COFFEE BREWER	400247501	SWITCH EXPOSED	20111206008	ATL
FAIRCHILD						
GA1000000	2560	POWER SUPPLY MODULE		USED	201111118020	PNR
GOODRICH						
23085001	2435	ARMATURE	230851503	SHORTED	20111003014	PNR
23085001	2435	DRIVE END BEARING	3600918	FAILED	20111108008	PAC

Make/Model	Iasc	Part Name	Part Number	Part Condition	SDR No.	RGN	
HONEYWELL	Jizo						
RE100CS	4940	IGNITER	CH34549	UNSERVICEABLE	20111004008	PNR	
KELLY AEROSPAC	.,	IGNITER	C1134347	CIVIERVICERIBLE	20111004000	TIVIC	
4810449002	8120	BUTTERFLY VALVE		OVERHAULED	20111025008	PNR	
LUCAS	0120	BOTTERED VIEWE		O VERTICEEDS	20111023000	1111	
23078019	2435	END BEARING	3601018	FAILED	20111124002	PNR	
MARATHON							
PC173	0	STATIC INVERTER	PC173	OVERHAULED	20111219017	PNR	
PC173	2422	STATIC INVERTER	PC173	USED	20111121008	PNR	
TELEDYNE BENL	DΙΧ						
BL3493504	7414	CARBON BRUSH	10160844	MISSING	20111019018	PAC	
TELEDYNE CONTINENTAL							
IO360G	8540	ACCESSORY BEVEL GEAR	640802	NEW	20111206006	PNR	
THALES AVIONIC	S						
457400GA1311	3400	NAVIGATION SYSTEM		REPAIRED	20111130008	PAC	
WOODWARD							
212076005	6730	HYDRAULIC SERVO	212076005011	OVERHAULED	20111214009	PAC	
212076005	6730	HYDRAULIC SERVO	212076005101	OVERHAULED	20111214006	PAC	
UNAPPROVED PART							
AEROSPATIALE							
3012000	2000	EMERGENCY LIGHT	3012000	BURNT	20111020002	ONT	
		POWER SUPPLY					
LOCKHEED							
188A	7311	COOLER		UNAPPROVED PART	20111115011	PNR	
THIELERT							
EQUIPMENT	2000	FULLY AUTHORIZED DIGITAL ELECTRONIC CONTROLLER ELECTRONIC CONTROL UNIT	02761055003R1	REPAIRED	20111024002	ONT	

# **H**EADQUARTERS

Transport Canada (AARDG) Place de Ville, Tower C Ottawa ON K1A 0N8

Tel: 613-952-4357

# REGIONAL OFFICES

#### Atlantic

Transport Canada 95 Foundry St., 6th Floor Moncton, NB E1C 5H7

Tel: 1-800-387-4999

#### Prairie and Northern

Transport Canada 344 Edmonton Street Winnipeg, MB R3C 0P6

Tel: 204-983-3152 1-888-463-0521

#### Ontario

Transport Canada 4900 Yonge St., Suite 400 Toronto, ON M2N 6A5

Tel: 416-952-0230

#### Quebec

Transport Canada 700 Leigh Capreol Dorval, QC H4Y 1G7

Tel: 514-633-3319

## **Pacific**

Transport Canada 800 Burrard St., Suite 620 Vancouver, BC V6Z 2J8

Tel: 604-666-3518



North America	1-888-830-4911
National Capital Region	613-991-4071
Fax	613-991-2081
E-Mail	MPS@tc.gc.ca

# **CIVIL AVIATION INTERNET SITES**

# Civil Aviation Homepage

www.tc.gc.ca/eng/civilaviation/menu.htm

## Continuing Airworthiness

www.tc.gc.ca/eng/civilaviation/certification/continuing-menu-1432.htm

#### Canadian Aviation Regulations (CARs)

www.tc.gc.ca/eng/civilaviation/regserv/cars/menu.htm

#### Airworthiness Directive

www.tc.gc.ca/cawis-swimn

#### Civil Aviation Safety Alerts (CASA)

www.tc.gc.ca/civil-aviation-safety-alert

Web Service Difficulty Reporting System (WSDRS)

www.tc.gc.ca/wsdrs