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AVIATION MAINTENANCE ALERTS



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**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, DC 20590**

AVIATION MAINTENANCE ALERTS

The Aviation Maintenance Alerts provide a common communication channel through which the aviation community can economically interchange service experience, cooperating in the improvement of aeronautical product durability, reliability, and safety. This publication is prepared from information submitted by those who operate and maintain civil aeronautical products. The contents include items that have been reported as significant, but have not been evaluated fully by the time the material went to press. As additional facts such as cause and corrective action are identified, the data will be published in subsequent issues of the Alerts. This procedure gives Alerts' readers prompt notice of conditions reported via a Malfunction or Defect Report (M or D) or a Service Difficulty Report (SDR). Your comments and suggestions for improvement are always welcome. Send to: FAA; ATTN: Aviation Data Systems Branch (AFS-620); P.O. Box 25082; Oklahoma City, OK 73125-5029.

(Editor's notes are provided for editorial clarification and enhancement within an article. They will always be recognized as italicized words bordered by parentheses.)

AIRPLANES

AVIAT

Aviat: A-1; Uncoupled Elevator Pushrod; ATA 2730

The submitting mechanic stated, "...a pilot reported total loss of elevator control on final approach to Blairstown airport. The boot around the rear control stick was removed—*(we)* found the elevator push rod was no longer connected. The aft belly ban was removed and a loose bolt and washer were found. The nut was not found. The other rod ends were *(also)* inspected for safety; the self-locking nut and bolt for the aft interconnect push rod was very loose. This existing hardware was not reinstalled because it was *(found)* loose *(during)* this inspection. *(New hardware was installed for each noted discrepancy, replacing the old with)* AN bolts, washers, nuts, and cotter pins in the rear control stick rod-end connection points. After inspection and repair of the flight controls the aircraft was deemed airworthy. The owner was advised to have a factory Aviat service center inspect the aircraft and make repairs according to the maintenance manual and parts book.

"The probable cause for the loose hardware could be from the reuse of the hardware or incorrect torque applied to the nuts and bolts. (A castle nut and cotter pin were installed in place of self-locking nuts...a proven method of safety for flight controls.)" *(No part numbers accompanied this discrepancy.)*

Part Total Time: (unknown).

BEECH

Beech: B60; Corroded Flight Control Cables; ATA 2730

A mechanic says, "During an annual inspection *(I)* found several control cables that were corroded due to *(their)* being submerged in water (and later exposed to evaporation of that same water) which had collected in the belly of the aircraft. These control cables will be removed and replaced, the water dried up, and possible leak areas inspected and corrected as needed. *(I)* also found control cable pulleys seized: the L/H elevator pulleys aft of the aft spar, the aileron pulleys forward of the forward spar, and the elevator pulleys in the tail-cone. These pulleys

will be removed and replaced.” (No part numbers accompanied this discrepancy. The Service Difficulty Reporting System (SDRS) data base includes one description of a B60’s flap motor and electrical wire submerged in water! See last month’s Cessna 500: corroded brake line—for the very same topic.)

Part Total Time: (unknown).

Beech: B60; Improper Safety of Emergency Escape Hatch; ATA 5220

(The same mechanic from the previous submission continues his inspection on this same B60 aircraft.)

“(Further inspection of this airplane...) found the hinged cover for the emergency exit release handle to be safety (wired) closed with .020 inch stainless steel wire—not copper break-away wire of .010 to .012 inch. (I) had to cut the wire with cutting pliers in order to be allowed access to the release handle...in order to remove the escape hatch. (Once the handle was free we also found...) this escape hatch would not move freely in and out of the (airframe) hole. The first item noted for this (problem) was the weld bead on the support striker at the forward lower corner. It had an excessive amount of material from the weld bead, causing it to bind between the hatch and airframe. This excess material will be blended and abrasion dressed. The next item found was the wiring to the passenger communication-control box which passed through the aft lightening holes of the hatch. We had to cut the wiring in order to remove the hatch completely. The wiring will be repaired or replaced and rerouted to allow the escape hatch to be removed and replaced without obstruction.” (Escape hatch P/N 60-430053-601. Stainless wire on the handle? Electrical wire through the hatch? I hope the owner thanked you for saving his or another’s life—Ed.)

Part Total Time: (unknown).

Beech: 65-A90-1; Broken Elevator Bell Crank Fork; ATA 2730

A technician for an air-operator writes, “(I) found a broken fork on the elevator bell crank support arm at the forward end of the elevator L/H pushrod. The pushrod forward attach bolt had been over-torqued so much as to create a 0.016 – 0.021 inch depression in each (magnesium) fork—where they pressed into the rod end bearing. Raytheon's Service Bulletin SB2231r2 includes: 1) inspection for cracks in this area of the elevator bell crank, 2) inspection for proper gap between the rod end and support arm forks (0.00 to 0.01 inch gap), and 3) proper torque of the pushrod attach bolt (70 to 108 inch pounds).

“I recommend following the proper inspection, installation, and torque (procedures) when installing the bell crank and pushrods. Follow the instructions in the maintenance manual and SB2231r2.” (Bell crank assembly P/N 50-524401. See also this next article, and then flip back to last month’s Beech 65.)

Part Total Time: (unknown).

Beech: C90A; Crushed Rudder Pushrod Bearings; ATA 2720

A repair station submitter writes, “During (this aircraft’s) first scheduled Phase 1 and Phase 2 inspections, (we) investigated a pilot complaint of stiff nose wheel steering. We verified the complaint, finding the nose wheel stiff—and loud popping noises coming from the cockpit under-floor area when the (aircraft) was taxied from the co-pilot’s position. We accessed the cockpit area rudder control system and found the pilot’s side, outboard rudder control pushrod to have excessive play. Upon removing (this pushrod) the bearings fell out from the rod end bearing assembly. Further investigation showed the L/H side rudder bell crank assembly (P/N 50-524455-3) operation to be tight—the pivot bolt (P/N 130909B47) was over-tightened. We also found the L/H to R/H rudder controls interconnect tube attaching hardware over-tightened.

“The other, L/H side rudder control attaching hardware was also found (*excessively*) tight. We examined (*this system’s*) hardware for serviceability and reinstalled (*it*) as required with recommended torques. The interconnect rod was adjusted as required. The pilot’s outboard pushrod assembly bearings were replaced (and this unit) reinstalled. Both the nose wheel steering and rudder operation were found to be normal after reassembly. (*It is...*) suspected this hardware was over-tightened during initial assembly; this aircraft was also subject to special flight control system inspection following manufacture. We recommend further investigation by the manufacturer to determine if a one-time service bulletin or safety communiqué should be issued for further inspections.”

Part Total Time: 201.3 hours.

CESSNA

Cessna: 120—337 (see list); Main Landing Gear Fatigue; ATA 3213

(The following alert originates from the Wichita Aircraft Certification Office. It affects the following Cessna model aircraft: 120, 140, 150, 152, 170, 172, 175, 177, 180, 182, 185, 188, 190, 195, 205, 206, 207, 208, 210, 336, and 337. Contact information is found at the article’s end.)

“The Wichita ACO (Aircraft Certification Office) conducted statistical analyses on SDR’s (*Service Difficulty Reports*) and accident data from the NTSB (National Transportation and Safety Board). The analyses indicate wearout (fatigue failure) of the landing gear spring struts. The spring struts, axles, and associated hardware on the above aircraft need to be visually inspected at or before 1400 flight hours, and at 100-hour or during annual inspections, thereafter. The ACO further recommends the spring struts be inspected using magnetic particle or florescent dye-penetrant at or before 1400 flight hours, and at 100-hour or during annual inspections, thereafter. These inspections target corrosion, pitting, and cracking on gear springs—particularly on those airplanes having had skis installed and/or having been operated on rough, unimproved runways.

“Cessna has released six Temporary Revisions (TR’s) to the maintenance manuals. All of these documents are dated July 1, 2007 and include:

- D138-1-13: TR5 (100 series...1953-1962)
- D637-1-13: TR7 (100 series...1963-1968)
- D2000-9-13: TR5 (180 & 185 series...1969-1980)
- D2067-1-13: TR5 (180 & 185 series...1981-1985)
- D2007-3-13: TR7 (206 & T206 series...1966-1976)
- D2070-3-13: TR8 (206 series...1977-1986)

The following twelve TR’s will be released soon:

- D238: 1TR6 (336 series)
- D470: TR5 (200 series)
- D606: 1TR6 (200 series)
- D693: 1TR7 (210...year 1969)
- D849: 5TR5 (FR172 series)
- D971: 3TR4 (150 series)
- D972: 4TR4 (172 series)
- D2006: 4TR4 (182 series)

- D2054: 1TR6 (188 series)
- D2500: 2TR8 (337 series)
- D2506: 8TR8 (337 series)
- D2516: 9TR7 (P337 series).

An example of these TR's is presented next. Since the information is the same for all TR's, the example presented may be used as a guide for airplanes not listed."

(Only the relevant portions of published Temporary Revision number 5 is shown below in "J-Peg" format: a cut section of the heading page showing the "Reason for Temporary Revision," item 2; and section 5-5A: "CORROSION CONTROL ON LANDING GEAR SPRINGS.")



TEMPORARY REVISION NUMBER 5

DATE July 1, 2007

MANUAL TITLE	<u>180-185 (1969-1980) Service Manual</u>		
MANUAL NUMBER - PAPER COPY	<u>D2000-9-13</u>		
MANUAL NUMBER - AEROFICHE	<u>D2000-9-13AF</u>		
TEMPORARY REVISION NUMBER	<u>D2000-9TR5</u>		
MANUAL DATE <u>15 September 1972</u>	REVISION NUMBER <u>9</u>	DATE <u>2 October 1995</u>	

This Temporary Revision consists of the following pages, which affect and replace existing pages in the paper copy manual and supersede aerofiche and CD information.

SECTION	PAGE	AEROFICHE FICHE/FRAME	SECTION	PAGE	AEROFICHE FICHE/FRAME
2	21	1B16			
2	22	1B17			
5	2	1D18			
5	2A	ADD			
5	2B	ADD			

REASON FOR TEMPORARY REVISION

1. Incorporate inspection of horizontal stabilizer trim actuators (Section 2).
2. Incorporated inspection of flat spring main landing gear (Section 5).

5-5A CORROSION CONTROL ON LANDING GEAR SPRINGS.

a. General

- (1) The main landing gear springs are made from high strength steel that is shot peened on the lower surface to increase the fatigue life of the part.
- (2) The shot peened layer is between 0.010 and 0.020 inch thick.
- (3) If the protective layer of paint is chipped, scratched, or worn away, the steel may corrode (rust).

NOTE: Corrosion pits that extend past the shot peen layer of the gear spring will cause a significant decrease in the fatigue life of the spring.

- (4) Operation from unimproved surfaces increases the possibility of damage.

5-2

D2000-9-13 Temporary Revision 5 - July 1/2007

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b. Corrosion removal and repair.

WARNING: Do not use chemical rust removers or paint strippers on landing gear springs. High-strength steel parts are very susceptible to hydrogen embrittlement. Acidic solutions, such as rust removers and paint strippers, can cause hydrogen embrittlement. Hydrogen embrittlement is an undetectable, time-delayed process. Since the process is time delayed, failure can occur after the part is returned to service.

- (1) Examine for signs of corrosion (red rust) if damage to the paint finish of the landing gear spring is found.
- (2) Carefully remove any rust by light sanding.
 - (a) The sanding must blend the damage into the adjacent area in an approximate 20:1 ratio.

EXAMPLE: An 0.005-inch deep pit. The pit must be blended to a 0.10-inch radius or 0.20-inch diameter.
 - (b) Make sure the last sanding marks are along an inboard-to-outboard direction, or along the long dimension of the spring.
- (3) After the sanding is complete, measure the depth of the removed material from the damaged area.

NOTE: The maximum combined depth of removed material to the top and bottom or leading and trailing edge is not to be more than 0.063 inch at any two opposite points on the gear spring. This measurement limitation includes areas that have previously been damaged and repaired.

- (a) Make sure the depth of the damage area on the bottom of the gear spring is not more than 0.012 inch deep.
 - 1 If the damage is deeper than 0.012 inch deep and less than 0.063 inch deep, replace or shot peen the gear spring. The gear spring must be removed and sent to an approved facility to be shot peened.
 - a The shot peen specification is to be Almen intensity of 0.012 to 0.016 with 330 steel shot.
 - (b) Make sure the depth of any damage on the leading edge, trailing edge, or top of the gear spring is not more than 0.063 inch deep.
 - 1 If the damage is deeper than 0.063 inch deep, replace the gear spring.
- (4) Touch-up paint as required.

NOTE: Additional information regarding corrosion control can be found in FAA document AC-43-4, Chapter 6, or AC43.13-1B Chapter 6.

c. Axle bolt hole corrosion.

- (1) Operation of an airplane on skis increases the loads on the lower part of the gear spring because of the unsymmetrical and twisting loads.
 - (a) The increased loads have produced spring fractures that originate from pits in the axle attach holes.
 - 1 Catastrophic failures can occur from fatigue cracks as small as 0.003 to 0.010-inch long that originated at pits.

NOTE: Although operation on skis causes more loads, the criteria apply to all airplanes.

- (2) There is no maximum damage depth for pits that develop in the axle bolt holes. If pits or corrosion is found, ream to remove it, subject to the following limitations:
 - (a) Remove the minimum material necessary to repair the damage.

- (b) Make sure the diameter of the axle attachment holes are no more than 0.383 inch for 3/8- inch bolts.
- (c) Make sure the diameter of the axle attachment holes are no more than 0.321 inch for 5/16- inch bolts.
- (d) If reaming to the maximum dimension does not remove all signs of corrosion, discard the landing gear spring.

5-6. INSTALLATION.

- a. Slide seal and external fairing plate over upper end of landing gear spring.
- b. Slide gear spring into place and work shims in position under inboard end of spring.
- c. Install bolt, washer and nut to secure inboard end of spring.

5-2B

D2000-9-13 Temporary Revision 5- July 1/2007

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(For additional information reference Alert number 277 of August 2001, pages 5-6 and Alert number 288 of July 2002, pages 4-5. Readers may also contact Aerospace Engineer Gary Park: Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Wichita, Kansas, 67209; phone 316-946-4123.)

Part Total Time: (N/A).

GULFSTREAM

Gulfstream: G550; Arcing Emergency Inverter; ATA 2422

“When turning the main battery switches on,” writes the submitter, “the mechanic heard a loud popping sound, followed by the aroma of smoke in the entrance area of the aircraft. The floorboard was removed and *(we)* found water from the forward lavatory area had been running onto the top of the emergency inverter *(P/N 1-002-0102-1346)*, causing water and AC voltage to meet (the water won). The lavatory areas on both of our G550’s were inspected for leaks...*(none were found, but...)* areas were found where water had been sitting. It is possible that, when stowing the sink (it’s hinged—folds up into a close-out) residual water is dumping into the close-out. The emergency inverter was replaced, and we shut the water supply off to the forward lavatory sinks *(on both aircraft).*”





Part Total Time: 1,383.1 hours.

POWERPLANTS

LYCOMING

Lycoming: O-360A4M; Cylinder Separation; ATA 8530

A mechanic states, “The pilot experienced a noticeable pop sound in the engine compartment, followed by roughness. The engine oil pressure started to deteriorate and the pilot elected to shut down the engine, stopping the propeller from turning by putting the aircraft (*Cessna 172N*) in a nose high attitude. He managed to glide to a major airport and successfully dead-stick land without accident. Investigation showed the number one cylinder head had separated from the barrel.... This cylinder was replaced 206 hours earlier—when the engine was overhauled. The cylinder was purchased new from ECI in San Antonio, Texas. The popular name is Titan Cerminil (*P/N AEL 65102*). A new Titan cylinder was installed. The engine ran normally with no adverse problems noted. The separation of the cylinder is thought to be (*caused by*) stress cracking due to threads cut in the cylinder head having little or no radius in the valley of the threads—thereby setting up stress risers. Separation tear marks belie earlier cracking that eventually led to total fracture of the head assembly.” (*The SDRS data base provides 341 records for the 8530 JASC code, 10 of which specify cylinder separation.*)

Part Total Time: 206.0 hours.

Lycoming: O-320-D36; Leaking Carburetor Float; ATA 7322

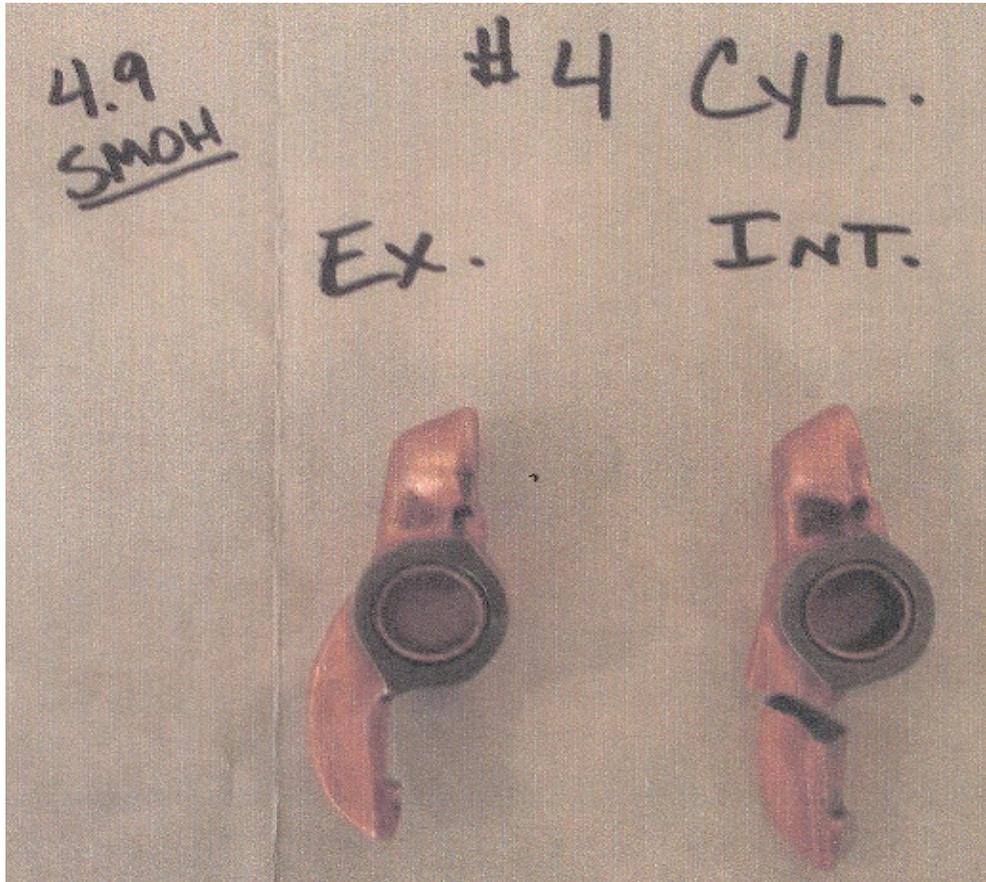
“On shutdown (*this aircraft’s engine*) RPM increased 400 RPM,” writes an unidentified submitter. “At idle the engine would (*run*) at 600 RPM, drop to 300 RPM, then die. Upon opening the carburetor (*I found*) one half of the white plastic float was 80 per cent full of fuel—it did not leak out over night.” (*Precision Airmotive carburetor, P/N LW 15986-85; float P/N 30-804. The SDRS data base reports at least four fuel-laden carburetor floats.*)

Part Total Time: (unknown).

Lycoming: O-360-J2A; Broken Rocker Arm; ATA 8530

A mechanic working a Robinson R22 Beta II provides a short description and two photographs of this engine’s defect. “The number four cylinder intake rocker arm cracked and split into two pieces (*P/N 17F19357*). The probable cause (*for its failure*) is aggressive machining of the rocker arm and/or the rocker arm incorrectly contacting the keeper spring assembly. (*Part time since overhaul: 4.9 hours.*)





(Thanks for the photo effort—Ed.)

Part Total Time: (unknown).

AIR NOTES

INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE

The Federal Aviation Administration (FAA) Internet Service Difficulty Reporting (iSDR) web site is the front-end for the Service Difficulty Reporting System (SDRS) data base that is maintained by the Aviation Data Systems Branch, AFS-620, in Oklahoma City, Oklahoma. The iSDR web site supports the Flight Standards Service (AFS), Service Difficulty Program by providing the aviation community with a voluntary and electronic means to conveniently submit in-service reports of failures, malfunctions, or defects on aeronautical products. The objective of the Service Difficulty Program is to achieve prompt correction of conditions adversely affecting continued airworthiness of aeronautical products. To accomplish this, Malfunction or Defect Reports (M or Ds) or Service Difficulty Reports (SDRs) as they are commonly called, are collected, converted into a common SDR format, stored, and made available to the appropriate segments of the FAA, the aviation community, and the general public for review and analysis. SDR data is accessible through the “Query SDR data” feature on the iSDR web site at: <http://av-info.faa.gov/SDRX/>.

In the past, the last two pages of the Alerts contained a paper copy of FAA Form 8010-4, Malfunction or Defect Report. To meet the requirements of *Section 508, this form will no longer be published in the Alerts; however, the form is available on the Internet at: <http://forms.faa.gov/forms/faa8010-4.pdf>. You can still download and complete the form as you have in the past.

*Section 508 was enacted to eliminate barriers in information technology, to make available new opportunities for people with disabilities, and to encourage development of technologies that will help achieve these goals.

A report should be filed whenever a system, component, or part of an aircraft, powerplant, propeller, or appliance fails to function in a normal or usual manner. In addition, if a system, component, or part of an aircraft, powerplant, propeller, or appliance has a flaw or imperfection, which impairs or may impair its future function, it is considered defective and should be reported under the Service Difficulty Program.

The collection, collation, analysis of data, and the rapid dissemination of mechanical discrepancies, alerts, and trend information to the appropriate segments of the FAA and the aviation community provides an effective and economical method of ensuring future aviation safety.

The FAA analyzes SDR data for safety implications and reviews the data to identify possible trends that may not be apparent regionally or to individual operators. As a result, the FAA may disseminate safety information to a particular section of the aviation community. The FAA also may adopt new regulations or issue airworthiness directives (ADs) to address a specific problem.

The iSDR web site provides an electronic means for the general aviation community to voluntarily submit reports, and may serve as an alternative means for operators and air agencies to comply with the reporting requirements of 14 Title of the Code of Federal Regulations (CFR) Section 121.703, 125.409, 135.415, and 145.221, if accepted by their certificate-holding district office. FAA Aviation Safety Inspectors may also report service difficulty information when they conduct routine aircraft maintenance surveillance as well as accident and incident investigations.

The SDRS data base contains records dating back to 1974. At the current time, we are receiving approximately 40,000 records per year. Reports may be submitted to the iSDR web site on active data entry form or submitted hardcopy to the address below.

The SDRS and iSDR web site point of contact is:

Pennie Thompson
Service Difficulty Reporting System, Program Manager
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125
Telephone: (405) 954-1150
SDRS Program Manager e-mail address: 9-AMC-SDR-ProgMgr@faa.gov

IF YOU WANT TO CONTACT US

We welcome your comments, suggestions, and questions. You may use any of the following means of communication to submit reports concerning aviation-related occurrences.

Editor: Daniel Roller (405) 954-3646
FAX: (405) 954-4570 or (405) 954-4655

E-mail address: Daniel.Roller@faa.gov

Mailing address: FAA, **ATTN: AFS-620 ALERTS**, P.O. Box 25082, Oklahoma City, OK 73125-5029

You can access current and back issues of this publication from the internet at:
<http://av-info.faa.gov/>. Select the General Aviation Airworthiness Alerts heading.

AVIATION SERVICE DIFFICULTY REPORTS

The following are abbreviated reports processed for the previous month, which have been entered into the FAA Service Difficulty Reporting (SDR) System data base. This is not an all-inclusive listing of Service Difficulty Reports. For more information, contact the FAA, Regulatory Support Division, Aviation Data Systems Branch, AFS-620, located in Oklahoma City, Oklahoma. The mailing address is:

FAA
Aviation Data Systems Branch, AFS-620
PO Box 25082
Oklahoma City, OK 73125

To retrieve the complete report, click on the Control Number located in each report. These reports contain raw data that has not been edited. Also, because these reports contain raw data, the pages containing the raw data are not numbered.

If you require further detail please contact AFS-620 at the address above.

Federal Aviation Administration

Service Difficulty Report Data

Sorted by aircraft make and model then engine make and model. This report derives from unverified information submitted by the aviation community without FAA review for accuracy.

Control Number	Aircraft Make	Engine Make	Component Make	Part Name	Part Condition
Difficulty Date	Aircraft Model	Engine Model	Component Model	Part Number	Part Location
CA070912001		CONT		GEAR	FAILED
8/27/2007		IO520F		536421	CRANKSHAFT
(CAN) WHILE TROUBLESHOOTING A STARTER PROBLEM. THE CRANKSHAFT GEAR WAS FOUND TO BE MISSING 2 TEETH. ENGINE WAS DISASSEMBLED, INSPECTED AND REPAIRED AS NECESSARY. PART OF THE MAGNETO IMPULSE CAM BROKE OFF, FELL DOWN INTO THE CRANK AND CAMSHAFT GEARS. THE GEARS JAMMED AND BROKE THE TEETH OFF. (TC NR 20070912001)					
CA070912002		LYC		EXHAUST VALVE	BROKEN
8/24/2007		AEIO360A1E			ENGINE
(CAN) EXHAUST VALVE BROKE AT HEAD. BROKEN PART EJECTED THROUGH EXHAUST PORT. CYLINDER/VALVES/PISTON REPLACED. NEW VALVES ON ORDER FOR REMAINING CYLINDER. ENGINE HAS SPENT MOST OF ITS TOTAL TIME AT HIGH POWER AEROBATIC USE. (NEGLECTABLE WEAR ON PISTON CYLINDER). (TC NR 20070912002)					
2007FA0000966		LYC		VALVE	WRONG PART
8/10/2007		O360E1A6		LW15322	CYLINDER
DURING ASSEMBLY OF THE ENGINE AFTER MAJOR OVERHAUL, ONE OF THE FACTORY NEW CYLINDERS (PN LW15322) HAD A DIFFERENT INTAKE VALVE INSTALLED (PN 73938), AND THE CORRECT VALVE PN LW15314 WAS INSTALLED BY THE CYLINDER SHOP. THIS CYLINDER WAS FACTORY NEW. (K)					
CA070912008	AEROSP	ALLSN		PUMP	DEFECTIVE
9/10/2007	AS355F2	250C20F		6899253	FUEL SYSTEM
(CAN) ENGINE AUTO-REIGNITION ACTIVATED IN FLIGHT. REPORTS OF SOFT (BANG) PRECEEDING DECEL. INVESTIGATION REVEALED AIR IN FUEL SYSTEM, SUBSEQUENT TROUBLESHOOTING FOUND ENGINE DRIVEN FUEL PUMP DEFECTIVE. (TC NR 20070912008)					
CA070914005	AEROSP	PWA		SEAL	LEAKING
7/10/2007	ATR42*	PW121		3032490B	O/SPEED GOVERNOR
(CAN) THE LOW ENGINE OIL PRESSURE WARNING ACTIVATED IN CRUISE AND THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED A LEAKING OVERSPEED GOVERNOR HIGH PRESSURE PUMP SEAL. (TC NR 20070914005)					
CA070914018	AEROSP	PWA		WIRE HARNESS	SHORTED
9/7/2007	ATR42300	PW120			HYD PUMP
(CAN) DEFECT - BLUE HYDRALULIC PUMP U/S. RECTIFICATION, AC WILD BLUE PUMP WIRING SHORTED AND BURNED IN HYDRAULIC BAY DURING TROUBLESHOOTING OF UNSERVICEABLE BLUE HYDRAULIC PUMP. (TCNR 20070914018)					
CA070927002	AEROSP	PWA		GCU	FAILED
9/24/2007	ATR42300	PW120			NR 2 GENERATOR
(CAN) AFTER DEPARTURE, THE CREW OBSERVED A NR 2 DC GENERATOR TRIP. THE AIRCRAFT RETURNED TO POINT OF DEPARTURE AND LANDED WITHOUT FURTHER DIFFICULTY. MAINTENANCE REPLACED THE NR 2					

GENERATOR CONTROL UNIT AND THE AIRCRAFT WAS RETURNED TO SERVICE AFTER SATISFACTORY GROUND RUN. (TC NR 20070927002)

CA070911001	AEROSP	PWA	STARTER GEN	MALFUNCTIONED
9/6/2007	ATR42300	PW120	8260123	NR 2

(CAN) AFTER DEPARTING, THE CREW OBSERVED A NR 2 GENERATOR FAULT AND THE CREW ELECTED TO RETURN TO POINT OF DEPARTURE. MAINTENANCE REPLACED THE NR 2 GENERATOR CONTROL UNIT (GCU) AN THE AIRCRAFT WAS CHECKED SERVICEABLE AN RETURNED TO SERVICE. THE PROBLEM REOCCURRED APPROXIMATELY ONE HOUR AFTER THE AIRCRAFT HAD MADE A SECOND DEPARTURE. THE AIRCRAFT RETURNED TO POINT OF DEPARTURE WITHOUT FURTHER PROBLEM. MAINTENANCE REPLACED THE NR 2 STARTER GENERATOR AND THE AIRCRAFT RETURNED TO SERVICE WITHOUT FURTHER PROBLEM REPORTED. (TC NR 20070911001)

CA071016014	AEROSP	PWA	REGULATOR VALVE	FAULTY
8/31/2007	ATR42300	PW121	310573401	ENGINE OIL PRESS

(CAN) THE ENGINE LOW OIL PRESSURE WARNING ACTIVATED AND THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED A FAULTY OIL PRESSURE REGULATING VALVE. (TC NR 20071016014)

CA071016002	AEROSP	PWA	ENGINE	DAMAGED
9/2/2007	ATR42320	PW121		

(CAN) ENGINE TORQUE AND OIL PRESSURE WERE SEEN TO FLUCTUATE AND THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED INTERNAL ENGINE DAMAGE. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071016002)

CA071016009	AEROSP	PWA	AUTOFEATHER SYS	FAULTY
8/28/2007	ATR42500	PW127		

(CAN) DURING CLIMB THE PROPELLER FEATHERED UNCOMMANDED AND RECOVERED. SUBSEQUENT INSPECTION REVEALED A FAULTY AUTOFEATHER UNIT.

CA070914015	AEROSP	PWA	PUMP	FAULTY
7/14/2007	ATR42500	PW127		FUEL SYSTEM

(CAN) ON TAKEOFF ROLL, THE ENGINE WAS FOUND NOT TO PRODUCE COMMANDED POWER AND THE TAKEOFF WAS ABORTED. THE ENGINE FUEL PUMP AND MFCU WERE SUBSEQUENTLY REPLACED. (TC NR 20070914015)

CA071003015	AEROSP	PWA	ENGINE	MAKING METAL
8/7/2007	ATR72	PW124B		

(CAN) THE ENGINE FLAMED OUT IN CRUISE. SUBSEQUENT INSPECTION REVEALED METAL DEBRIS IN THE OIL SYSTEM.

CA071003011	AEROSP	PWA	SENSOR	MISINSTALLED
8/5/2007	ATR72	PW127		AUTOFEATHER SYS

(CAN) ON DESCENT THE ENGINE EXPERIENCED AN UNCOMMANDED REDUCTION IN POWER ACCOMPANIED BY FEATHERING OF THE PROPELLER. PRELIMINARY INSPECTION REVEALED IMPROPERLY TORQUED TORQUE SENSOR AND POOR CONTINUITY BETWEEN THE AFU AND FUEL CONTROL.

CA070917011	AEROSP	PWA	PACKING	LEAKING
4/17/2007	ATR72	PW127	ST3367009	FUEL MANIFOLD

(CAN) ST3367-009 PACKINGS SUPPLIED, FOUND LEAKING AT FUEL MANIFOLD. SUSPECTED UNAPPROVED PARTS - PACKINGS MANUFACTUED / SUPPLIED WITHOUT PMA AUTHORIZATION FROM MFG. ST3367 IS A MFG PROPRIETARY SPECIFICATION. (TC NR 20070917011)

CA070914008	AEROSP	PWA	FCU	FAULTY
7/8/2007	ATR72	PW127	32448716	ENGINE

(CAN) THE ENGINE LOST POWER ON APPROACH AND WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED A FAULTY MECHANICAL FUEL CONTROL UNIT. (TC NR 20070914008)

CA070914006	AEROSP	PWA	HMU	MALFUNCTIONED
7/9/2007	ATR72201	PW124B	324485516	

(CAN) THE ENGINE EXPERIENCED AN UNCOMMANDED POWER REDUCTION IN CLIMB FOLLOWING TAKE-OFF. SUBSEQUENT INVESTIGATION IDENTIFIED A FAULTY HYDROMECHANICAL FUEL CONTROL UNIT. (TC NR 20070914006)

CA071003009	AEROSP	PWA	TUBE	LEAKING
8/2/2007	ATR72202	PW124B	3034677	ENGINE OIL

(CAN) DURING CLIMB, ENGINE OIL PRESSURE WAS SEEN TO DECREASE AND THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED A LEAKING OIL PRESSURE TUBE AT THE REAR INLET CASE. (TC NR 20071003009)

CA071016012	AEROSP	PWA	ENGINE	MAKING METAL
9/15/2007	ATR72202	PW124B		

(CAN) DURING CLIMB THE ENGINE FLAMED OUT AND OIL SMELL WAS EVIDENT IN THE CABIN. SUBSEQUENT INSPECTION REVEALED METAL DEBRIS IN THE ENGINE OIL. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20071016012)

CA071003013	AGUSTA	PWC	ENGINE	POWER LOSS
8/5/2007	A109E	PW206C		

(CAN) DURING TAKEOFF, THE PILOT REPORTED A POWER LOSS ACCOMPANIED BY AN LOW TORQUE WARNING INDICATION. THE AIRCRAFT WAS DAMAGED IN THE RESULTING FORCED LANDING.

CA070924006	AIRBUS	CFMINT	O-RING	FAILED
9/23/2007	A320211	CFM565A1		PTU MANIFOLD

(CAN) FOLLOWING A YELLOW HYDRAULIC SYSTEM FAILURE, THE AIRCRAFT SUBSEQUENTLY EXPERIENCED A GREEN HYDRAULIC SYSTEM FAILURE, AND DIVERTED BACK TO DEPARTURE POINT. THE FLIGHT DECLARED AN EMERGENCY, AND LANDED 4000 KG OVERWEIGHT. AFTER LANDING, A NR 1 AND 3 BRAKE FIRE WAS ENCOUNTERED, WHICH WAS EXTINGUISHED BY CFR. THE AIRCRAFT WAS TOWED TO THE HANGAR. THE YELLOW SYSTEM WAS WORKED ON THE 18TH, AND A CHECK VALVE PACKING WAS REPLACED FOLLOWING AN INFLIGHT PRESSURE LOSS. (TC NR 20070924006)

CA070905009	AIRBUS	RROYCE	FAN	MELTED
9/4/2007	A330300	RB211*		

(CAN) AFTER T/O, SMOKE AND UNUSUAL SOUND COMING FROM L2 AREA. HAZE REPORTED IN THE CABIN. FLT RETURNED TO AIRPORT. ELECTRICAL ODOR WAS COMING FROM THE L2/R2 AREA WITH HAZE VISIBLE AT 5 DIFFERENT TIMES. IT WOULD APPEAR AND THEN DISAPPEAR. AREA INSPECTED AND FOUND MID-GALLEY CHILLER DUCT CLAMP ADRIFT, CAUSING UNUSUAL SOUND (S513) AND THE PROJECTOR 7DG (B-CLASS) OVERTEMP LIGHT ON. FOUND COOLING FAN MELTED. CONNECTOR PLUG REMOVED. NEW CHILLER CLAMP INSTALLED. PROJECTOR REPLACED. (TC NR 20070905009)

CA071016016	AIRTRC	PWA	ENGINE	POWER LOSS
8/20/2007	AT401	PT6A34		

(CAN) DURING SPRAYING OPERATIONS THE ENGINE EMITTED A LOUD NOISE AND LOST POWER, RESULTING IN A FORCED LANDING.

CA071016013	AIRTRC	PWA	ENGINE	POWER LOSS
9/14/2007	AT602	PT6A65AG		

(CAN) THE ENGINE LOST POWER IN FLIGHT AND THE AIRCRAFT WAS DAMAGED IN THE RESULTING FORCED LANDING. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR

20071016013)

CA071016015	AIRTRC	PWA	ENGINE	POWER LOSS
9/17/2007	AT802A	PT6A65AG		

(CAN) THE ENGINE LOST POWER DURING FIREFIGHTING OPERATIONS RESULTING IN A FORCED LANDING.

CA070914004	AYRES	PWA	ENGINE	POWER LOSS
7/2/2007	S2RT15RESTD	PT6A15AG		

(CAN) THE ENGINE EXPERIENCED AN UNCOMMANDED POWER REDUCTION DURING SPRAYING OPERATIONS RESULTING IN A FORCED LANDING AND SUBSTANTIAL AIRFRAME DAMAGE. MFG WILL MONITOR INVESTIGATION OF THE EVENT AND ADVISE OF ROOT CAUSE ONCE DETERMINED. (TC NR 20070914004)

CA071016004	AYRES	PWA	ENGINE	POWER LOSS
6/20/2007	S2RT15RESTD	PT6A34AG		

(CAN) DURING SPRAYING OPERATIONS, THE ENGINE LOST POWER AND THE AIRCRAFT SUBSEQUENTLY CRASHED. MFG WILL INVESTIGATE THE INCIDENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20071016004)

CA070914003	BAG	PWA	TUBE	FRACTURED
7/18/2007	ATP	PW126A	3035466	FUEL P3 AIR

(CAN) THE ENGINE SHUTDOWN UNCOMMANDED IN CRUISE. SUBSEQUENT INSPECTION REVEALED A FRACTURED FUEL CONTROL P3 AIR SUPPLY TUBE. (TC NR 20070914003)

CA070919007	BAG		ROD	LEAKING
9/17/2007	JETSTM3101		1847L	LT MLG

(CAN) ON A WALKAROUND OF THE AIRCRAFT, THE LT MLG RADIUS ROD WAS FOUND TO BE LEAKING A SIGNIFICANT AMOUNT OF MIL-5606 HYDRAULIC FLUID FROM THE PISTON SEAL AREA. THE OVERHAUL INTERVAL FOR THIS PART IS 10000 CYCLES OR 6 YEARS, AND THIS ROD WAS INSTALLED FOR ONLY 1421 CYCLES AND APPROXIMATELY 21 MONTHS. THIS RADIUS ROD WAS PURCHASED ON PO NR 1609. THIS ROD WAS REMOVED FROM SERVICE 09/18/2007 AND REPLACED WITH AN OVERHAULED UNIT. (TC 20070919007)

CA070927003	BAG	GARRTT	BOLT	SHEARED
9/25/2007	JETSTM3101	TPE33110UG	A1029E	NLG

(CAN) DURING INSPECTION IAW AD 024-05-87 BAE SB 53-A-JA870510R1 PART B, IT WAS NOTED THAT THE TWO UPPER BOLTS WERE SHEARED. THE AIRCRAFT WAS REMOVED FROM SERVICE AT THIS TIME. THE LOWER 2 BOLTS HAVE NOT YET BEEN REMOVED FOR INSPECTION. DUE TO THIS FINDING AND THE POSSIBLE SAFETY RISK, HAVE ELECTED TO CARRY OUT A DVI OF THE NLG RETRACT JACK ATTACH FITTINGS FOR THE REMAINING J-3112'S IN OUR FLEET. NO OTHER DEFECTS WERE FOUND. EVALUATING WHAT CHANGES TO THE INSPECTION FREQUENCY AND POSSIBLE BOLT LIFE LIMITS MAY BE REQUIRED. REMAINING BOLTS AND SURROUNDING STRUCTURE WILL BE INSPECTED TODAY, A REPORT WILL FOLLOW. (TC NR 20070927003)

CA071012001	BAG		BRACKET	BROKEN
10/10/2007	JETSTM3212		137414B100	RT MLG DOOR

(CAN) RT MAIN LANDING GEAR DOOR AFT HINGE BRACKET FOUND BROKEN (ONE LUG OF TWO) DURING INSPECTION. NEW BRACKET INSTALLED, GEAR SWINGS CARRIED OUT. (TC NR 20071012001)

CA070919009	BAG		LANDING GEAR	MISOVERHAULED
9/18/2007	JETSTM3212		B00A703066A	RIGHT

(CAN) (AD)2006-0087 WAS REVIEWED AS PART OF THE NEW AIRCRAFTS BRIDGING INSPECTION. DURING REVIEW OF THIS AD IT WAS FOUND THAT THE RT MAIN LANDING GEAR HAD BEEN REASSEMBLED AT OVERHAUL WITH THE WRONG PART NUMBER UPPER AND LOWER TOGGLES INSTALLED. THE INSTALLED UPPER TOGGLE P/N 184514 IS OF THE WRONG EFFECTIVITY FOR THIS GEAR LEG AND SHOULD BE P/N 100A703090. THE INSTALLED LOWER TOGGLE P/N 184513 IS ALSO OF THE WRONG EFFECTIVITY FOR THIS GEAR AND SHOULD BE P/N 100A703093 OR 101A703093. THE AIRCRAFT WILL NOT ENTER SERVICE UNTIL THIS ISSUE HAS BEEN RECTIFIED. MLG LEG S/N

BADL 479 WAS OVERHAULED ON THE SECOND OF AUGUST 2006. IT WAS THEN INSTALLED ON SEPTEMBER 1 2006. THE AIRCRAFT WAS OPERATED WITH THIS GEAR FROM DATE OF INSTALL UNTIL DATE OF PURCHASE. THE GEAR ACCUMULATED 133 CYCLES AND 137.8 HOURS DURING THIS PERIOD. THE GEAR'S CYCLES SINCE NEW ARE 18944 CYCLES. (TC NR 20070919009)

CA070926001	BEECH	PWA	VALVE	WORN
9/24/2007	1900C	PT6A65B	3012347	TORQUE METER

(CAN) FOUND WORN TORQUE METER VALVE IN POWER SECTION OF ENGINE GIVING ERRATIC ENGINE TORQUE INDICATION AT COCKPIT INDICATOR. VALVE REPLACED. NO OTHER PROBLEMS NOTED. (TC NR 20070926001)

CA071016006	BEECH	PWA	TURBINE BLADES	DAMAGED
8/2/2007	1900D	PT6A67D		ENGINE

(CAN) ON TAKEOFF ROLL THE ENGINE EMITTED A LOUD NOISE AND THE TAKEOFF WAS ABORTED. SUBSEQUENT INSPECTION REVEALED DAMAGED POWER TURBINE BLADES. (TC NR 20071016006)

2007FA0000918	BEECH	PWA	STARTER GEN	FAILED
9/27/2007	300BEECH	PT6A60A	23085001	LEFT

PILOT REPORTED LT GENERATOR GOING OFF-LINE ON APPROACH. FOUND STARTER/GENERATOR INOPERATIVE. UPON REMOVAL NOTICED EVIDENCE OF COOLING FAN TIPS RUBBING ON HOUSING, BEARINGS WORN (ARMATURE ASSY LOOSE).(K)

CA070914011	BEECH	PWA	ENGINE	LEAKING
7/3/2007	400A	JT15D5		

(CAN) ON CLIMB, THE ENGINE LOW OIL PRESSURE WARNING ACTIVATED AND THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED INTERNAL ENGINE OIL LEAKAGE. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE DETERMINED. (TC NR 20070914011)

2007FA0000911	BEECH	PWA	STRUCTURE	CRACKED
9/17/2007	400A	JT15D5		NLG DOOR

FOUND DURING INSPECTION. NOSE GEAR FOLLOW UP DOOR PN 45A31615-21 ON BRACKETS PN 45A31613-9 AND 45A31613-7 AT ATTACHING RIVET HAS CRACKS GOING FORWARD TO AFT THROUGH THE FIRST RIVET ALONG THE RIVET ROW. RELATIVE WIND PUSHING AFT ON THE DOOR WHILE GEAR IS EXTENDED FOR TAKEOFF AND LANDING AND VIBRATION. USING THICKER MATERIAL DURING MFG AND OR ADDING A DOUBLER. (K)

2007FA0000912	BEECH	PWA	WINDOW	CRACKED
10/1/2007	400A	JT15D5	45AS3101012	COCKPIT

WHILE PERFORMING A SCHEDULED A-D INSPECTION FOUND NR 2 (COPILOT) SIDE WINDOW CRACKED USING THE PRISM INSPECTION METHOD. THE D-INSPECTION REQUIRES THAT BOTH WINDSHIELD RETAINERS OR USING OPTICAL PRISM INSPECTION METHOD. THE IS NO STATEMENT IN THE AIRCRAFT MM OR IN THE A-D INSPECTION CHECKLIST THAT REQUIRES YOU TO INSPECT THE COCKPIT SIDE WINDOWS IN THE SAME MANNER AS THE WINDSHIELDS. ALL OF THE WINDOWS IN THE COCKPIT AREA ARE INSTALLED OR FASTENED IN THE SAME MANNER AS THE WINDSHIELDS. IT IS SUSPECTED THAT THE COPILOT WINDOW CRACKED FROM FATIGUE, OR TT INSTALLED. WOULD RECOMMEND THAT INSPECTIONS OF ALL COCKPIT WINDOWS WITH A PRISM AT SCHEDULED INTERVALS BE COMPLETED. (K)

CA071002005	BEECH	CONT	PISTON	DAMAGED
9/28/2007	95B55	IO470L		ENGINE

(CAN) DURING CRUISE FLT, RT ENGINE BEGAN TO LOOSE OIL PRESSURE. OIL TEMP & CHT INCREASED. PILOT ELECTED TO SHUTDOWN ENGINE AS A VIBRATION BECAME APPARENT & OIL PRESSURE DECREASED TO NEAR ZERO. AN EMERGENCY DECLARED & AIRCRAFT LANDED WITHOUT FURTHER INCIDENT. UPON INSPECTION, NR 5 CYLINDER & PISTON FOUND DAMAGED. PISTON FOUND WITH A HOLE IN SIDE JUST BELOW COMPRESSION RINGS. HOLE DOES NOT APPEAR TO BE CAUSED BY OPERATIONAL DAMAGE & ONLY 98 HRS TSO IS UNLIKELY. LOOKS LIKE A MANUFACTURING DEFECT OR SOME TYPE OF MECHANICAL DAMAGE. HOLE CAUSED CRANKCASE TO PRESSURIZE & THERFORE CAUSE ENGINE TO VENT IT'S OIL OVERBOARD THROUGH BREATHER TUBE. SAME

AIRCRAFT & ENGINE EXPERIENCED SAME PROBLEM A WEEK PRIOR TO THIS EVENT BUT MAINTENANCE ACTIONS REVEALED NO DISCREPANCIES AS TO WHY OIL WOULD VENT THROUGH BREATHER. COMPRESSION TESTS WERE PERFORMED & REVEALED NO PROBLEMS & GROUND RUNS & OPS CHECKS COMPLETED WITHOUT ANY PROBLEMS. AIRCRAFT RETURNED TO SERVICE & OPERATED FOR 1 WEEK PRIOR TO 2ND EVENT WITH NO ABNORMALITIES INDICATED. CONSULTED ENGINE OVERHAUL FACILITY. DISASSEMBLED & EVALUATED ENGINE & DETERMINED ENGINE SHOULD BE REMOVED, DISMANTLED, INSPECTED, FLUSHED & REPAIRED PRIOR TO BEING RETURNED TO SERVICE.

TIMR20070008	BEECH	PWA		SWITCH	INOPERATIVE
10/31/2007	99A	PT6*			POWER LEVER

GEAR-IN-TRANSIT LIGHT DID NOT EXTINGUISH AFTER TAKE-OFF AND GEAR UP. PILOT CYCLED GEAR AGAIN WITH SAME RESULT. PILOT RETURNED TO DEPARTURE AND LANDED. MECHANIC FOUND THAT THE LT POWER LEVER SWITCH HAD FAILED. REPLACING THE SWITCH RESOLVED THE PROBLEM.

2007FA0000932	BEECH	LYC		CAMSHAFT	SPALLED
10/18/2007	A2324	IO360A1A		AS18840	ENGINE

556 HOURS SINCE MAJOR OVERHAUL, CAMSHAFT AND LIFTERS SPALLED AND CORROSION IS EVIDENT. ENGINE HAS BEEN OPERATED ON PHILLIPS XC 20W50 OIL.

2007F00064	BEECH			BEARING RACE	CORRODED
10/18/2007	B100			13889	NLG

FOUND BOTH NOSE WHEEL BEARINGS PN 13889, AND RACES, PN 13836 TO BE CORRODED. CHANGED THESE SAME BEARINGS AND RACES AT LAST INSPECTION DUE TO SAME PROBLEM. BEARINGS HAVE 200 HOURS OR 4 MONTHS ON THEM. NOSE WHEEL IS AN STC WHEEL AND BRAKE ASSEMBLY. WE ALSO REPLACED THESE SAME BEARINGS AND RACES 1 YEAR PRIOR. (K)

CA070831005	BEECH	PWA	PWA	PIN	LOOSE
8/29/2007	D18S	R985AN14B		39785A	MASTER ROD

(CAN) CREW ATTEMPTED TO CHECK FOR HYDRAULIC LOCK PRIOR TO START, AND WAS UNABLE TO TURN THE ENGINE MORE THAN 180 DEGREES. THROUGH DIAGNOSIS AND DISCUSSION WITH ENGINE OVERHAUL FACILITY, IT WAS ELECTED TO REMOVE A CYLINDER AND CONFIRM THE INTEGRITY OF THE MASTER ROD ASSEMBLY. ONE OF THE LINK PINS SECURING THE LINK RODS TO THE MASTER ROD WAS FOUND BACKED OUT OF ITS HOLE AND WAS STRIKING THE INSIDE OF THE CRANKCASE, PREVENTING THE FULL ROTATION OF THE CRANKSHAFT. FAILURE OF THIS LINK PIN WOULD HAVE BEEN CATASTROPHIC FOR THIS ENGINE. (TC NR 20070831005)

2007FA0000955	BEECH	CONT		CYLINDER HEAD	SEPARATED
9/21/2007	F33A	IO520*			NR 2

IN-FLIGHT NR 2 CYLINDER HEAD SEPARATED FROM CYLINDER BASE AT TOP OF SLEEVE. PUSHRODS AND TUBES BENT. EXHAUST MANIFOLD BENT. NOZZLE ASSEMBLY DAMAGED. (K)

CA070828004	BELL	LYC		BEARING	WORN
8/21/2007	204B	T5313B		204011761001	TAIL ROTOR HEAD

(CAN) PILOT WAS FLYING HELICOPTER AND FELT TWO SLIGHT YAWS TO THE RT APPROXIMATELY 30 TO 40 SECONDS APART. AT FIRST THE PILOT SUSPECTED IT MIGHT HAVE BEEN A GUST OF WIND, BUT THE SECOND YAW ALERTED THE PILOT TO A PROBLEM WITH THE TAIL ROTOR AS IT WAS ACCOMPANIED BY A NOTICEABLE RELUCTANCE OF THE AIRCRAFT TO RECOVER TO THE NOSE POINTED IN THE DIRECTION OF FLIGHT. THE PILOT MADE A SUCCESSFUL UNSCHEDULED LANDING WITH NO DAMAGE TO THE AIRCRAFT. UPON A MAINTENANCE INSPECTION OF THE T/R CROSSHEAD, IT WAS DETERMINED THAT THE DUPLEX BEARING INSIDE THE CROSSHEAD, BEARING P/N 204-011-761-001, HAD SEIZED. NEW PARTS WERE SUBSEQUENTLY ORDERED AND INSTALLED. PARTS HAVE BEEN SHIPPED TO MAIN BASE FOR FURTHER INVESTIGATION. (TC NR 20070828004)

CA070919008	BELL	ALLSN	HONEYWELL	SHAFT	SEIZED
9/14/2007	206B	250C20			GOVERNOR

(CAN) WHILE THE PILOT WAS DOING HIS PREFLIGHT SYSTEM CHECKS, HE NOTICED THAT HIS GOVERNOR RANGE

HAD SHIFTED DOWN FROM THE NORMAL RANGE OF 100 PERCENT DOWN TO 97 NR ROTOR RPM. THE GOVERNOR WAS INSPECTED BY THE ENGINEER AND HE FOUND THAT THE GOVERNOR LEVER SHAFT WAS SEIZED. HE CONTINUED INSPECTING THE GOVERNOR CONTROL LINKAGE AND NOTICED THAT THE DROOP COMPENSATION TORQUE SHAFT WAS TWISTED DO TO THE GOVERNOR SHAFT BEING SEIZED. THE GOVERNOR AND THE DROP COMPENSATION LEVER ASSEMBLY WERE REPLACED, GOVERNOR RIGGED AND BEEP RANGE SET. THE HELICOPTER WAS TEST FLOWN AND FOUND SATISFACTORY. (TC NR 20070919008)

CA071001006	BELL	ALLSN	SHAFT	CRACKED
6/21/2007	206B	250C20	23037413	ENGINE

(CAN) POWER TURBINE ACTION DISMANTLED TO DETERMINE CAUSE OF OIL CONSUMPTION AND SMOKING. UPON TEARDOWN AND DETAIL INSPECTION IT WAS NOTED THAT THE PT OUTER SHAFT HAD A LARGE CRACK ORIGINATING AT ROOT OF 1 CURVIC COUPLINGS AND SPLITTING INTO 2 FURTHER DOWN SHAFT. CRACKING AND MATERIAL DAMAGE TO CURVIC RESULTED IN LOSS OF 1 OF CURVICS WHICH WAS NOT RECOVERED. FRETTING DAMAGE IS ALSO OBSERVED ON MATING CURVICS OF 3RD AND 4TH STAGE WHEELS. REPORTED OIL CONSUMPTION AND SMOKING ASSOCIATED WITH THIS TURBINE LIKELY RESULT OF OIL AND OIL MIST MOVING THROUGH TIGHT FIT OF PT INNER AND OUTER SHAFT. NORMAL TIGHT FIT BETWEEN THESE COMPONENTS WOULD HAVE BEEN AFFECTED BY CRACKING OF OUTER SHAFT RESULTING IN OIL FLOW ACROSS THIS AREA AND SUBSEQUENT LEAKAGE INTO TURBINE THROUGH CURVICS OR THE CRACK OF PT OUTER SHAFT ITSELF. HEAT TINTING SEEN ON THE NICKEL OF PT OUTER SHAFT IS LIKELY RESULT OF RESIDUE AND/OR HEAT FROM OIL BURNING AS IT LEAKED THROUGH CURVIC AREA.

CA070726003	BELL	ALLSN	HONEYWELL	SLEEVE	CRACKED
7/9/2007	206L	250C20R2		2542102	FUEL CONTROL

(CAN) PILOT STARTING A/C, THROTTLE OPENED, NO ENGINE LIGHT OFF OCCURED. OPENED ENGINE COWL TO INVESTIGATE, NOTICED FUEL DRIPPING FROM AROUND START DE-RICHMENT ADJUSTMENT OF FCU, ONTO THE STARTER GENERATOR. CONTACTED MAINTENANCE PERSONNEL TO INVESTIGATE. FUEL CONTROL UNIT WAS REMOVED, AND O/H'D UNIT INSTALLED - NO FURTHER DEFECT NOTED ON START-UP. OVERHAUL SHOP WORK ORDER DETAILS REVEALED A CRACKED SLEEVE ASSY P/N 2542102, AND CRACKED SCREWS P/N 334S606 (TC NR 20070726003)

CA070914007	BELL	PWA	TURBINE BLADES	FRACTURED
6/22/2007	412	PT6T3		ENGINE

(CAN) THE ENGINE COULD NOT BE RELIGHT IN FLIGHT FOLLOWING A SIMULATED ENGINE-OUT TRAINING EXERCISE. SUBSEQUENT INSPECTION REVEALED FRACTURED TURBINE BLADES. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

CA071016005	BELL	PWA	GEARBOX	MAKING METAL
9/6/2007	412EP	PT6T3		

(CAN) THE POWER SECTION CHIP DETECTOR ACTIVATED AND THE ENGINE WAS SHUT DOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED METAL DEBRIS IN THE ACCESSORY GEARBOX. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20071016005)

2007F00065	BELL	GE	TRANSMISSION	CRACKED
10/16/2007	UH1F	T58GE3	204040016005	MAIN ROTOR

CRACK FOUND ON MAIN GEARBOX (TRANSMISSION IN VERTICAL CAST WEBBING ABOVE ENGINE TO TRANSMISSION DRIVE QUILL. MILITARY TECHNICAL MANUAL ALLOWS .2500 INCH RADIUS/POLISH INTO WEBBING THIS CRACK HAS BEEN FOUND ON THREE (3 EACH) TRANSMISSIONS ON OTHER AC WITH ONE PENETRATING THE GEARBOX AND LEAKING FLUID. (K)

CA070911004	BOEING	RROYCE	TURBINE BLADES	FAILED
8/27/2007	717200	BR700715A130	FW35594	HP1

(CAN) DURING ENGINE THROTTLE FOR TAKEOFF, ISSUED (TGT-OVRTP, MAX=1146 LIMIT=900) AND ENGINE SURGE. THE PILOT THROTTLED DOWN, THE AIRCRAFT WAS RETURNED TO THE GATE AND PASSENGERS WERE UNLOADED. METAL (TURBINE BLADE PARTICLES) WERE FOUND IN THE TAILPIPE UPON VISUAL INSPECTION.

ENGINE JUST BEING INDUCTED AT MFG FOR INVESTIGATION. FURTHER DETAILS WILL BE SUBMITTED AFTER ENGINE DISSASSEMBLY. (TC NR 20070911004)

CA071001001	BOEING	RROYCE	TURBINE BLADES	FAILED
9/9/2007	717200	BR700715A130	FW35594	ENGINE

(CAN) DURING ENGINE THROTTLE FOR TAXI OVERTEMP SIGNAL, AIRCRAFT ABORTED TAKEOFF. VISUAL INSPECTION REPORTED METAL IN TAIL PIPE, SUSPECT HP 1 TURBINE BLADE FAILURE. FURTHER INFORMATION WILL BE SUBMITTED AFTER ENGINE TEAR DOWN. ENGINE BEING INDUCTED AT RRC. (TC NR 20071001001)

CA071010006	BOEING	PWA	TURBINE WHEEL	FAILED
9/27/2007	727225	JT8D15	500310401	ENGINE

(CAN) AT THE RUNWAY THRESHOLD THE FLIGHT CREW ADVANCED THE THROTTLES TO 1.2 EPR, STABLE ENGINES WERE CALLED. ADVANCED THRUST LEVERS AND APPROACHING TAKEOFF THRUST, BEFORE REACHING APPROXIMATELY 20 KTS, A LOUD BANG AND VIBRATION OCCURRED. THE FLIGHT CREW REJECTED THE TAKEOFF AND CLEARED THE RUNWAY. THE NR1 ENGINE WAS SHUT DOWN AFTER OBSERVING N2 SPOOL DOWN AND INCREASING EGT INDICATION. THE AIRCRAFT RETURNED TO THE GATE. MAINTENANCE FOUND THAT THE ENGINE TURBINE HAD FAILED. THE ENGINE WAS REMOVED AND REPLACED WITH A SERVICEABLE ASSEMBLY. (TC NR 20071010006)

CA070911012	BOEING	PWA	STUD	DISLODGED
9/5/2007	727260	JT8D17	547344P3	GEARBOX

(CAN) DURING CRUISE, THE NR 2 OIL QUANTITY SLOWLY DECREASED TO ZERO. WHEN THE OIL QUANTITY WENT BELOW THE GREEN ARC THE FLIGHT CREW SHUTDOWN THE ENGINE USING THE APPROPRIATE CHECKLIST AND AN EMERGENCY WAS DECLARED INTO AIRFIELD. THE AIRCRAFT LANDED WITHOUT FURTHER INCIDENT. MAINTENANCE INVESTIGATED AND A STUD WAS FOUND ADRIFT FROM THE ACCESSORY DRIVE GEARBOX, FORWARD LOWER SPLIT LINE. THE THREADS WERE INSPECTED AND FOUND TO BE SERVICEABLE. THE STUD WAS REINSTALLED AND TORQUED. THE ENGINE OIL FILTER WAS REMOVED AND INSPECTED. NO CONTAMINATION WAS FOUND AND THE OIL FILTER WAS REPLACED WITH A NEW UNIT. ENGINE GROUND RUN AND LEAK CHECK WAS CARRIED OUT AND WAS CHECKED SERVICEABLE WITH NO LEAKS. THE AIRCRAFT DEPARTED WITHOUT ANY ADDITIONAL FAULTS. (TC NR 20070911012)

200700026	BOEING	PWA	WIRE	CHAFED
10/17/2007	737205	JT8D17	WMBMS136OT7C4G20	TE FLAPS

TRAILING EDGE FLAPS ASYMMETRY LOCKOUT BETWEEN ZERO AND ONE DEGREE. THERE IS A SPLIT IN T/E FLAP INDICATION, LT T/E FLAPS INDICATE ONE DEGREE AND RT T/E FLAPS INDICATE ZERO. FLIGHT CREW EXPERIENCED AN UNEVENTFUL LANDING AND NO UNCOMMANDED ROLL. MAINTENANCE DISCOVERED RT T/E FLAP POSITION TRANSMITTER WIRE HARNESS HAD CHAFED WIRES. REPLACED WIRE HARNESS FROM RT TRANSMITTER TO DISCONNECT STATION 720R CONNECTOR D4876P.

CA071003020	BOEING	CFMINT	SEAL	FAILED
9/30/2007	737800*	CFM567B26US		EXTINGUISHER

(CAN) ON SEPTEMBER 30, 2007 THE FLIGHT CREW REPORTED THAT THE PORTABLE FLIGHT DECK FIRE EXTINGUISHER PARTIALLY DISCHARGED DURING CRUISE ON A/C 803. THE FIRE EXTINGUISHER WAS REPLACED WITH NO FURTHER ACTION REQUIRED.

CA070822003	BOEING		HOSE	DAMAGED
8/5/2007	767306		AS11510K0324	HYDRAULIC SYS

(CAN) AIRCRAFT WAS ONE HOUR OUT OF DEPARTURE PLACE AND ON ROUTE TO ENGLAND WHEN EICAS ILLUMINATED WITH THE FOLLOWING MESSAGES: C HYD SYS FLUID LOSS - C HYD SYS PRESS AIRCRAFT DIVERTED TO NEAREST AIRPORT WHERE IT WAS FOUND THAT THE LT MAIN LANDING GEAR TRUCK TILT ACTUATOR RETURN FLEX HOSE WAS DAMAGED. THE FOLLOWING MAINTENANCE ACTIONS WERE PERFORMED: - DAMAGED HYDRAULIC HOSE REPLACED (TC NR 20070822003)

CA071001004	BOEING	GE	WARNING SYSTEM	NO TEST
9/30/2007	767328	CF680C2B6F	285T03855	FIRE/OVERHEAT

(CAN) DURING DAILY CHECK AN OPERATIONAL CHECK OF AUTOMATIC FIRE/OVERHEAT LOGIC TEST SYSTEM WAS CARRIED OUT AND WAS DISCOVERED THAT AURAL WARNING IS INOPERATIVE. SYSTEM BELL AND CHIME MODULE REPLACED AND SYSTEM FUNCTION CHECKED SERVICEABLE. (TC NR 20071001004)

CA071017001	BOMBDR	HNYWL	GENERATOR	FAILED
10/16/2007	BD1001A10	AS90711A	A3579101	RIGHT

(CAN) IN CRUISE FLIGHT RT GENERATOR FAILED. AFTER FOLLOWING PROCEDURES A/C LANDED WITHOUT ANY MORE INCIDENT. TROUBLESHOOTING WITH MDC REPORTED PCB6 AT FAULT FROM GCU P/N R608-003. FURTHER TROUBLESHOOTING REVEALED RT GENERATOR WAS AT FAULT NOT THE GCU. GENERATOR WAS REMOVED AND REPLACED AND A/C RETURNED TO SERVICE. NORMAL TBO FOR GENERATOR IS 3000 HRS GENERATOR HAD ONLY 329.7 HRS. MANUFACTURER OF GENERATOR IS AUXILEC (F0296) TAKEN ON DATA PLATE. (TC NR20071017001)

2007FA0000975	BOMBDR		RELAY	FAILED
10/31/2007	BD7001A10		M835366022M	

MASTER CAUTION RELAY (WIRING DIAGRAM 31-52-00 SHEET 1 - K28), LOCATED ON CIRCUIT CARD DB5 OF JUNCTION BOX 4 FAILED CAUSING BOTH MASTER CAUTION WARNING ENUNCIATORS TO STAY ILLUMINATED - NO RESET AVAILABLE. THIS IS A SINGLE POINT OF FAILURE FOR THE WARNING/CAUTION CONTROL SYSTEM. THREE INTEGRATED AVIONICS COMPUTERS FEED THIS MASTER CAUTION RELAY - SAME WITH THE MASTER WARNING. AFTER DOING A LIMITED INDEPENDENT SURVEY, I DETERMINED THAT THIS HAS OCCURRED ON SEVERAL OTHER AIRCRAFT.

2007FA0000967	BOMBDR		RELAY	FAILED
10/31/2007	BD7001A10		M835366022M	MASTER CAUTION

MASTER CAUTION RELAY (WIRING DIAGRAM 31-52-00 SHEET 1 - K28, LOCATED ON CIRCUIT CARD DB5 OF JUNCTION BOX 4 FAILED CAUSING BOTH MASTER CAUTION WARNING ANNUNCIATORS TO STAY ILLUMINATED - NO RESET AVAILABLE. THIS IS A SINGLE POINT OF FAILURE FOR THE WARNING/CAUTION CONTROL SYSTEM. (3) INTEGRATED AVIONICS COMPUTERS FEED THIS MASTER CAUTION RELAY - SAME WITH THE MASTER WARNING. AFTER DOING A LIMITED INDEPENDENT SURVEY, I DETERMINED THAT THIS HAS OCCURRED ON SEVERAL OTHER AIRCRAFT.

CA070921001	BOMBDR		SEQUENCE VALVE	FAILED
9/17/2007	DHC8400		483023	NLG

(CAN) DURING LANDING GEAR `UP` SELECTION FOLLOWING TAKEOFF, THE NLG `RED` GEAR UNSAFE LIGHT REMAINED `ON`. CREW LOWERED THE LANDING GEAR BY ALTERNATE EXTENSION, WITH ALL LANDING GEARS INDICATING THREE GREENS GEAR SAFE, THE AIRCRAFT WAS RETURNED TO BASE WHERE A NORMAL APPROACH AND LANDING WAS CARRIED OUT WITHOUT INCIDENT. LINE MAINTENANCE INVESTIGATION IDENTIFIED FAILURE OF THE NLG SOLENOID SEQUENCE VALVE. AFFECTED VALVE WAS REPLACED AND FOLLOWING APPROPRIATE CHECKS IAW THE AIRCRAFT'S MM THE AIRCRAFT WAS RETURNED TO SERVICE WITHOUT FURTHER INCIDENT. (TC NR 20070921001)

CA070914009	BOMBDR	PWC	ENGINE	MAKING METAL
7/13/2007	DHC8400	PW150A		

(CAN) ENGINE OIL PRESSURE REDUCED IN FLIGHT FOLLOWED BY A CHIP DETECTOR WARNING INDICATION. THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED METAL DEBRIS IN THE TURBOMACHINE OIL SYSTEM. MFG WILL INVESTIGATE THE INCIDENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20070914009)

CA070914017	BOMBDR	PWC	CONTROL UNIT	MALFUNCTIONED
7/30/2007	DHC8400	PW150A		PROPELLER

(CAN) ON LEVELING OFF FROM DESCENT, THE PROPELLER WENT TO AN OVERSPEED CONDITION AND THE ENGINE WAS FOUND NOT TO RESPOND TO THROTTLE INPUT. THE ENGINE WAS SHUTDOWN IN FLIGHT. THE MFG PROPELLER ELECTRIC CONTROL, SPEED SENSOR AND ASSOCIATED ENGINE HARNESS WERE SUBSEQUENTLY

REPLACED. MFG WILL MONITOR INVESTIGATION OF THESE COMPONENTS AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20070914017)

CA070906004	BOMBDR	PWC	SEQUENCE VALVE	FAILED
9/4/2007	DHC8400	PW150A	483023	LEFT NACELLE

(CAN) ON DEPARTURE FROM AIRPORT, THE LEFT MAIN LANDING GEAR DOORS REMAINED OPEN. VISUALLY CONFIRMED BY THE PURSER THAT THE LT GEAR DOORS WERE LEFT OPEN. CREW SELECTED GEAR DOWN AND LEFT GEAR DOORS CLOSED WHILE THE OTHER GEAR DOORS OPENED. CREW PERFORMED ALTERNATE EXTENSION OF THE MAIN LANDING GEAR AND RETURNED TO CYUL. MAINTENANCE INVESTIGATION REVEALED THAT WHEN THE LEFT GEAR DOOR CLOSED THE MAIN LANDING GEAR CAME DOWN DAMAGING THE LEFT MAIN OUTBOARD GEAR DOOR.

CA071002006	BOMBDR	PWC	FILTER ADAPTER	CLOGGED
9/30/2007	DHC8400	PW150A	20011610	HYD SYSTEM

(CAN) AFTER TAKEOFF, CREW HAD TROUBLES WITH LANDING GEAR, MAIN GEARS WOULD NOT RETRACT. NOSE RETRACTED NORMALLY. ALTERNATE LANDING GEAR EXTENSION ACC. CHECKLIST DONE. UNEVENTFUL LANDING. AIRCRAFT HANDED OVER TO MAINTENANCE. NO FAULTS CODES. FOUND BYPASS VALVE FILTER COLLAPSED, FILTER REPLACED, A/C RTS. (TC NR 20071002006)

CA070921005	BOMBDR	MENASCO	SWIVEL	LOOSE
9/19/2007	DHC8402		SJ5049172	MANIFOLD

(CAN) FLIGHT CREW NOTICED A PUDDLE OF FLUID AROUND THE NLG WHILE DOING A WALK AROUND. MAINTENANCE REPORTED THAT THE JAMB NUT FOUND ON THE STEERING MANIFOLD PRESSURE AND RETURN LINE WERE LOOSE. TIGHTEN JAMB NUTS. (TC NR 20070921005)

CA070911010	BRAERO	GARRTT	FUEL CONTROL	FAULTY
8/29/2007	HS125700A	TFE7313R1H	307080022	ENGINE

(CAN) - MANUAL MODE SELECTION PROVIDES IDLE ONLY FUEL. NO SPOOL UP WITH POWER LEVER INCREASE. ENGINE FUNCTIONS NORMALLY IN AUTO - COMPUTER (ON) MODE. (TC NR 20070911010)

CA070905002	BRAERO	RROYCE	ALTERNATOR	INOPERATIVE
8/28/2007	HS7482A	DART5342		NR 2

(CAN) AFTER DEPARTING AND ENROUTE, THE CREW OBSERVED NR 2 ALTERNATOR HAD TRIPPED OFFLINE AND DID NOT RESET. THE AIRCRAFT RETURNED TO POINT OF DEPARTURE AND LANDED WITHOUT FURTHER PROBLEM. MAINTENANCE REPLACED THE NR 2 ALTERNATOR. THE AIRCRAFT COMPLETED A SATISFACTORY GROUND RUN AND WAS RETURNED TO SERVICE. (TC NR 20070905002)

CA070910003	BRAERO	RROYCE	LINE	RUPTURED
9/6/2007	HS7482A	DART5342	T2C5000605500	HYDRAULIC SYS

(CAN) 10 MINUTES PRIOR TO LANDING, THE PORT AND STARBOARD HYDRAULIC PUMP LIGHTS ILLUMINATED WITH MAIN PRESSURE DEPLETING AND STOPPING AT ACCUMULATOR PRESSURE. THE CREW CARRIED OUT THE APPROPRIATE PROCEDURES AND LANDED WITH NO FURTHER INCIDENT. MAINTENANCE FOUND A HYDRAULIC FLEX LINE, IN THE RT WHEEL BAY, WHICH GOES TO THE HIGH-PRESSURE HYDRAULIC FILTER RUPTURED. THE FLEX LINE, ALONG WITH BOTH HYDRAULIC PUMPS, WAS REPLACED AND THE SYSTEM FUNCTION CHECKED SERVICEABLE. (TC NR 20070910003)

CA071001005	BRAERO	RROYCE	IMPELLER	DAMAGED
9/28/2007	HS7482A	DART5342	RK49612	ENGINE

(CAN) WHILE ON CLIMB AFTER DEPARTING, THERE WAS A BANG FROM THE RT ENGINE, TOTAL LOSS OF POWER AND FIRE WARNING. THE FWD PART OF THE ENGINE WAS SEEN TO BE ON FIRE, WHICH WAS EXTINGUISHED BY (2) SHOTS OF THE EXTINGUISHER SYSTEM. THE AIRCRAFT RETURNED TO DEPARTURE AND MADE AN EMERGENCY LANDING WITH NO FURTHER INCIDENT. INSPECTION REVEALED THAT THE LP IMPELLER CASING WAS PUNCTURED IN SEVERAL PLACES AROUND ITS EDGE. THE COWLINGS WERE ALSO SEVERELY DAMAGED BY THE FIRE. THIS ENGINE WILL BE RETURNED TO MFG FOR INVESTIGATION.

2007FA0001001	CESSNA		CONTROL CABLE	FRAYED
11/9/2007	150E		040010740	TE FLAP
ASSYMETRIC DEPLOYMENT OF FLAPS ON FINAL APPROACH. LOUD SNAP HEARD NOVING FLAPS FROM 30 TO 40 DEGREES. MAINTENANCE FOUND THE LEFT FLAP EXTEND CABLE BROKEN AT THE OUTBOARD PULLEY.				
CA070910006	CESSNA	CONT	CYLINDER	STUCK
9/1/2007	150L	O200A	641917	EXHAUST VALVE
(CAN) ON CLIMB OUT AFTER TAKEOFF, THE PILOT NOTICED MILD TO MODERATE ENGINE VIBRATION WITH A PARTIAL LOSS OF POWER. A RETURN TO THE AIRSTRIP WAS CARRIED OUT WITH A SUCCESSFUL LANDING. ON INVESTIGATION BY AN AME, THE PROBLEM WAS NOTICED AS AN EXHAUST VALVE STUCK OPEN ON THE NR 3 CYLINDER. THE CYLINDER WAS REMOVED AND WAS SENT TO AN ENGINE OVERHAUL SHOP FOR REPAIRS. THE CYLINDER IS STILL BEING REPAIRED AND WILL BE REINSTALLED UPON RETURN FROM THE SHOP. (TC NR 20070910006)				
CA070912010	CESSNA	LYC	STARTER	STICKING
9/10/2007	152	O235L2C	MMU4001	
(CAN) STARTER FOUND STICKING. (TC NR 20070912010)				
CA070822007	CESSNA	LYC	RELAY	BURNED
8/16/2007	152	O235L2C	87818	STARTER
(CAN) STARTER RELAY STUCK CLOSED AFTER ENGINE START. SUBSEQUENT DAMAGE WAS NOTED ON STARTER AS WELL. (TC NR 20070822007)				
2007FA0000920	CESSNA	LYC	ALTERNATOR	INOPERATIVE
10/2/2007	172M	O320*	DOFF10300JR	ENGINE
ALTERNATOR, DEFECT UNKNOWN, FAILED INTERNALLY, GROUND POST LOOSE INTERNALY EXCESSIVE ARMATURE END PLAY. RETURNED FOR WARRANTY. (K)				
2007FA0000921	CESSNA	LYC	ALTERNATOR	INOPERATIVE
10/2/2007	172M	O320*	DOFF10300JR	ENGINE
ALTERNATOR, DEFECT UNKNOWN, FAILED INTERNALLY. RETURNED FOR WARRANTY. (K)				
CA070911015	CESSNA	LYC	TAPPET	BROKEN
9/7/2007	172M	O320E2D	72877	ENGINE
(CAN) THE ENGINE HAS BEEN DOWN ON POWER FOR QUITE SOMETIME. UPON OVERHAUL TEARDOWN, IT WAS DISCOVERED THAT THE NR 1 AND NR 2 EXHAUST AND INTAKE TAPPET BODIES HAD BROKE. THE PIECES WERE TOO BIG TO BE DISCOVERED IN THE OIL SCREEN. (TC NR 20070911015)				
CA070827013	CESSNA	LYC	VALVE SPRING	BROKEN
8/27/2007	172M	O360A4M	AEL11800	INTAKE
(CAN) ALUMINUM PARTICLES WERE FOUND IN THE OIL FILTER. UPON TEARDOWN OF THE ENGINE, A BROKEN INTAKE VALVE SPRING (OUTER) HAS DAMAGED THE ALUMINUM CYLINDER HEAD. (TC NR 20070827013)				
CA071011009	CESSNA	CONT	ROCKER SHAFT	DAMAGED
10/11/2007	180A	O470K	652984	NR 4 CYLINDER
(CAN) POOR DIFF ON INSPECTION, EXH VALVE ROCKER SHAFT FOUND DAMAGED DUE TO LACK OF OIL, CAUSING OVERHEATING AND FAILURE OF ROCKER BUSHING. VALVE DAMAGED DUE TO LACK OF COOLING OIL ALSO. CAUSE OF OIL LOSS TO ROCKER UNKNOWN, MAY POSSIBLY HAVE BEEN A BLOCKED GALLERY AT SOME POINT. (TC NR 20071011009)				
CA070830002	CESSNA	CONT	HUB	CRACKED
7/19/2007	180E	O470R	2339	PROPELLER

(CAN) HUB THREADS FOUND CRACKED DURING OVERHAUL PROCESS (TC NR 20070830002)

CA070823010	CESSNA	CONT	CESSNA	TORQUE TUBE	LOOSE
7/25/2007	182G	O470R		07341102	ELEVATOR

(CAN) MINOR PLAY (UP AND DOWN) ON THE RT ELEVATOR CAUSE BY LOOSE RIVETS ON THE TORQUE TUBE (TC NR 20070823010)

EA25070193	CESSNA	CONT		LANDING GEAR	DEPARTED
10/19/2007	182P	O470S		3400	FWD RT

AIRCRAFT ALTERED IAW STC SA02031NY INSTALLATION OF 3400 AMPHIBIOUS FLOATS APPROXIMATELY 36 HOURS PRIOR TO OCCURRENCE. ON TAKEOFF FROM HARD SURFACE RUNWAY, RT FORWARD WHEEL AND SUPPORT ASSY DEPARTED LANDING GEAR STRUT. WHEEL AND SUPPORT ASSY LT GEAR STRUT CLEANLY AND ONLY DAMAGE APPEARED TO BE FROM GROUND IMPACT. AIRCRAFT MADE SUBSEQUENT WATER LANDING WITHOUT INCIDENT. INSPECTION OF AIRCRAFT SHOWS THAT WHEEL AND SUPPORT ARE ATTACHED TO GEAR STRUT THROUGH USE OF A SPRING AND PAWL MECHANISM. IMPOSSIBLE TO TELL IF SPRING OR PAWL FAILED WITHOUT FURTHER DISASSEMBLY. POSSIBLE THAT ASSEMBLY WAS OVER-GREASED OR GREASED TOO QUICKLY, AS PLACARD NEAR GREASE FITTING WARNS TO (APPLY GREASE SLOWLY). WILL FORWARD THIS INFORMATION DIRECTLY TO NY ACO RESPONSIBLE FOR STC SA02031NY.

2007FA0000963	CESSNA	LYC		FITTING	CHAFED
10/18/2007	182T	IO540AB1A5		07436062	NLG STRUT

LOWER STRUT SUPPORT FITTING CLAMPING RING CENTER BORE IS NOT CENTERED. THIS CAUSES THE STEERING COLLAR AND LOWER STRUT SUPPORT TO CHAFE AND FOR METAL TO METAL CONTACT TO OCCUR. HAVE TRIED TWO OTHER NEW LOWER STRUT SUPPORT FITTING RESULTING WITH METAL TO METAL CHAFING. INITIALLY CONTACTED MFG AND REPORTED THE PROBLEM REVEALING NUMEROUS IDENTICAL PARTS HAVE THE SAME DEFECT. RECOMMEND THAT CONTACT BE MADE WITH MFG AND TO MEASURE FOR PROPER THICKNESS OF THE RING ON THE LOWER STRUT SUPPORT FITTING. (K)

CA070828007	CESSNA	CONT		EXHAUST VALVE	BURNED
8/27/2007	185A	IO520*		637781	NR 2 CYLINDER

(CAN) DURING A 100 HOUR INSPECTION, FOUND THE NR 2 CYLINDER LOW COMPRESSION, RESULT WAS THE EXHAUST VALVE EDGE WAS BURNED. (TC NR 20070828007)

CA070914014	CESSNA	PWA		ENGINE	UNKNOWN
7/21/2007	208B	PT6A114A			

(CAN) FOLLOWING TAKEOFF A LOUD NOISE WAS HEARD ACCOMPANIED BY AN UNCOMMANDED REDUCTION IN ENGINE POWER. A FORCED LANDING WAS CARRIED OUT RESULTING IN AIRFRAME DAMAGE. MFG WILL INVESTIGATE THE INCIDENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20070914014)

CA071016003	CESSNA	PWA		ENGINE	POWER LOSS
9/5/2007	208B	PT6A114A			

(CAN) IN CRUISE, THE ENGINE EMITTED A NOISE ACCOMPANIED BY VIBRATION AND A COMPLETE LOSS OF POWER. THE AIRCRAFT CRASHED DURING FORCED LANDING. WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20071016003)

CA071016010	CESSNA	PWA		ENGINE	POWER LOSS
9/11/2007	208B	PT6A114A			

(CAN) FOLLOWING TAKEOFF THE ENGINE LOST POWER. THE AIRCRAFT WAS DAMAGED IN THE RESULTING FORCED LANDING.

CA071016011	CESSNA	PWA		ENGINE	POWER LOSS
8/31/2007	208B	PT6A114A			

(CAN) THE ENGINE LOST POWER FOLLOWING TAKEOFF AND THE AIRCRAFT WAS DAMAGED IN THE RESULTING

FORCED LANDING.

2007FA0000954	CESSNA	CONT	AMERI KING	BATTERY	DAMAGED
10/11/2007	210C	IO470*			ELT

DURING ANNUAL INSPECTION FOUND DRIED ALKILINE BATTERY SUBSTANCE ON EXTERIOR OF CASE. OPEND CASE AND FOUND THAT THE BATTERIES, ALKALINE BATTERIES WERE COMING APART AT THE SEAMS AND LEAKING. CLEANED BATTERY COMPARTMENT AND INSTALLED FRESH SET OF BATTERIES. FUNCTION TESTED OK. THIS IS THE THIRD SUCH OCCURENCE THIS YEAR. OF ACID LEAK INTO THE TRANSMITTER. UNIT HAD TO BE REPLACED. (K)

CA070912005	CESSNA	CONT		SPAR	CORRODED
8/23/2007	210J	IO520J		1217029	WING

(CAN) DURING A MAINTENANCE FUNCTION SEVERE CORROSION WAS DISCOVERED ON THE BOTTOM OF THE WING SPAR ENTRE SECTION. THIS SECTION OF THE SPAR HAS HIGH DENSITY FOAM GLUED TO THE SPAR WHICH PREVENTS ADEQUATE INSPECTION. THE CORROSION WAS SUCH THAT THE WING SPAR CENTRE SECTION REQUIRED REPLACEMENT. (TC NR 20070912005)

2007FA0000956	CESSNA	CONT		BRACKET	INOPERATIVE
9/19/2007	310R	IO520*		50270025	RT MLG WW

THE RT MAIN LANDING GEAR WOULD NOT RETRACT INTO WHEEL WELL. PILOT REPORTED LOUD BANG HEARD AFTER RETRACTING OF GEAR. WHEN EXTENDING THE GEAR FOR LANDING, THE RT GEAR WOULD NOT INDICATE GREEN BUT WAS VISUALLY CONFIRMED DOWN. PILOT LANDED WITHOUT INCIDENT AND GREEN LIGHT ILLUMINATED UPON TOUCHDOWN. INSPECTION OF THE RT GEAR FOUND THE TORQUE TUBE SUPPORT BRACKET ASSY, PN 50270025, BEARING PULLED LATERALLY FROM BRACKET AND ROD END FOR THE UPLOCK PUSH-PULL TUBE BROKEN OFF AT THE TORQUE TUBE ATTACH POINT PN HM4, AND FORWARD TORQUE TUBE ATTACH BOLT, PN NAS146-40, BENT SLIGHTLY. FAILURE OF THE SUPPORT BRACKET PN 5027002-5 POSSIBLY DUE TO FATIGUE. (K)

CA070917002	CESSNA	PWA	GOODYEAR	TUBE	DESTROYED
9/15/2007	425	PT6A112	650C063	302039402	TIRE

(CAN) UPON LANDING EITHER THE TIRE WAS ALREADY FLAT OR IT BLEW OUT. THE PILOT CONTROLLED THE AIRCRAFT TO A STOP WITH OUT ANY HARM TO THE AIRCRAFT. THE LT MAIN TIRE, TUBE WERE DESTROYED DURING THE ROLLOUT. NO DEFINITE CAUSE HAS BEEN DETERMINED TO THIS POINT, BUT THIS IS ONE OF MANY ISSUES WE HAVE HAD SINCE CHANGING AND NOW WILL BE REPLACING ALL PRODUCTS ON OUR FLEET OF AIRCRAFT. (TC NR 20070917002)

CA070917003	CESSNA	PWA	GOODYEAR	TUBE	SPLIT
8/27/2007	425	PT6A112		G156006	TIRE

(CAN) DURING GROUND HANDLING AFTER LANDING THE NOSE TIRE WAS NOTED TO BE LOW IN PRESSURE AND HISSING COULD BE HEARD FROM THE TIRE. TIRE / INNERUBE WAS DISASSEMBLED AND INNER TUBE WAS FOUND TO HAVE SMALL SPILT / CUTS AND PIN PUNCTURES IN SIDE WALLS. TORE WAS INSPECTED FOR ANOMALIES AND NONE WERE FOUND. NEW ASSEMBLIES WERE INSTALLED. (TC NR 20070917003)

CA071003021	CESSNA	PWC		ENGINE	MALFUNCTIONED
8/7/2007	510	PW615FA			

(CAN) IN CRUISE IN LIGHT ICING CONDITIONS, ENGINE N1 SPEED REDUCED UNCOMMANDED. THE N1 RETURNED TO NORMAL SETTINGS IN DESCENT. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

CA070911009	CESSNA	PWA		SKIN	CORRODED
8/30/2007	550	PW530A		652230553	WING

(CAN) DE-ICE BOOT REPLACEMENT AT MFG. AFTER REMOVAL OF DE-ICE BOOT NOTED AREA OF FUEL STAINING, CORROSION NOTED. DISCONTINUED BOOT REPLACEMENT, OBTAINED FERRY PERMIT AND RELOCATED AIRCRAFT. FURTHER INVESTIGATION SHOWS: SEVERAL LOCATIONS OF CORROSION DAMAGE WERE NOTED ON

THE IB, LT WING, LEADING EDGE SKIN (P/N 6522305-53) BETWEEN WS 86.20 AND WS 91.00. THE DAMAGE WAS SUCH THAT THE SKIN PANEL WAS REQUIRED TO BE REPLACED. CORROSION DAMAGE WAS ALSO NOTED ON THE OB, LT WING, LEADING EDGE SKIN (P/N 5522300-45) BETWEEN WS 91.00 AND WS 91.50. SEE PAGE 2.1 ATTACHED FOR DAMAGE LOCATION. MFG HAS INDICATED OTHER SAME TYPE AIRCRAFT HAVE NEEDED SKIN REPAIRS DUE TO THE SAME TYPE CORROSION PROBLEM. THIS SEVERE CORROSION OCCURS UNDER THE WING DE-ICE BOOT, AND ALLOWS FUEL LEAKAGE AND COMPROMISES (WEAKENS)THE INTEGRITY OF THE WING LEADING EDGE STRUCTURE AND FUEL TANK, LOCATED BEHIND THE LEADING EDGE. (TC NR 20070911009)

CA070822005	CESSNA	PWA		WIRE HARNESS	CHAFED
8/16/2007	560CESSNA	JT15D5		65280042	WING

(CAN) WHILE DOING SKIN REPAIRS ON RT WING WE FOUND WIRES CHAFED IN THE FLAP BAY AREA WHERE THE BUNDLE WAS TY WRAPPED TO A NYLON ANCHOR. THE TY WRAP WAS ONLY PUT THROUGH ON LEG OF THE ANCHOR NOT BOTH. THE CONDITION WAS FOUND AT 4 ANCHORS. THE LT WING WAS INSPECTED. THE WIRE BUNDLE THERE WAS TY WRAPPED THROUGH BOTH LEGS OF THE ANCHOR AND NO DEFECT WAS FOUND. THE P/N OF THE ANCHOR IS S1471-4. THE TY WRAPS ANCHORING THE WIRE BUNDLES SHOULD BE REMOVED TO REALLY INSPECT FOR DAMAGE AS THE AREA IS DIFFICULT TO INSPECT AND THE DAMAGE IS AT THE BOTTOM OF THE WIRE BUNDLE. (TC NR 20070822005)

CA071016017	CESSNA	PWA		LINER	DAMAGED
9/25/2007	560CESSNA	JT15D5			COMBUST CHAMBER

(CAN) THE ENGINE WAS REPORTED TO HAVE REPEATEDLY FLAMED OUT DURING TAXI OPERATIONS. INSPECTION REVEALED A DAMAGED/WORN COMBUSTION CHAMBER LINER. (TC NR 20071016017)

CA070917004	CESSNA	PWA		TIRE	OUT OF BALANCE
9/13/2007	560CESSNA	PW535A		229K482	MLG

(CAN) PILOTS REPORTED VIBRATION DURING LANDING IN MAIN WHEELS. INSPECTION AND DISASSEMBLY SHOWS LT MAIN WHEEL TIRE BALANCE PATCH IS FALLING OFF CAUSING THE MAIN TIRE TO BE IN AN UNBALANCE CONDITION. ASSEMBLY REPLACED AND NO FURTHER VIBRATIONS NOTED. (TC NR 20070917004)

CA070914010	CESSNA	PWA		FCU	FAULTY
7/17/2007	560CESSNA	PW535A		10078001	ENGINE

(CAN) ON TAKEOFF ROLL, THE ENGINE CONTROL FAULT LIGHT ILLUMINATED AND ENGINE POWER WOULD NOT INCREASE TO THROTTLE INPUT. THE TAKEOFF WAS ABORTED. SUBSEQUENT INSPECTION REVEALED A FAULTY FUEL CONTROL UNIT. (TC NR 20070914010)

CA071003014	CESSNA	PWA		FCU	UNRESPONSIVE
8/8/2007	560XL	PW545A		8273002	ENGINE

(CAN) ON DESCENT, THE ENGINE WAS FOUND NOT TO RESPOND TO THROTTLE INPUT. THE FUEL CONTROL UNIT WAS REPLACED.

CA070919004	CESSNA	ALLSN		RING	MISINSTALLED
9/19/2007	750	AE3007C		23062462	VANES

(CAN) DURING ENGINE DISASSEMBLY IT WAS FOUND THAT 1 OFF LOCATING PLUG WAS INTERCHANGE WITH THE BOROSCOPE PLUG. THE LPT2 VANE RING IS HELD IN PLACE BY 3 LOCATING PLUGS, 2 PLUGS ONLY WERE FOUND CORRECTLY INSTALLED. LPT2 VANE RING WAS FOUND HEAVILY RUBBED ON THE TRAILING EDGE AT THE OUTER SHROUD LOCATION OVER AN ARC OF 75 DEG. APPROX.. THE INNER SHROUD LOCATION WAS ALSO FOUND HEAVILY RUBBED AT THE INNER PLATFORM LOCATION OVER THE SAME ARC DISTANCE. THE LPT2 BLADES (L/E SIDE), WAS FOUND HEAVILY RUBBED AT THE INNER AND OUTER SHROUD LOCATIONS, MATCHING THE LPT2 VANE RING RUB. THE LOCATING PLUG THAT WAS FOUND INSTALLED AT THE WRONG LOCATION WAS WORN. PREVIOUS SIMILAR EVENT HAD CAUSED A MAJOR ENGINE FAILURE AND ABORTED TAKE OFF (SDR20041122006). THIS ENGINE LPT MODULE WAS NEVER DISMANTLED FROM PREVIOUS VISIT OR MANUFACTURE. (TC NR 20070919004)

2007FA0000930	CESSNA	CONT	CONT	LINK ROD	WORN
10/18/2007	A185F	IO520D		632558A1	THROTTLE

THROTTLE BUTTERFLY (P/N: 625601G) AND THROTTLE BODY (P/N: 639437) ARE WORN, ALLOWING BUTTERFLY SHAFT TO SLIDE SIDE TO SIDE CAUSING THE LINK ROD ASSEMBLY (P/N: 632558A1) TO WEAR CHAFING THE WAVE WASHER AND COTTER PIN. THE COTTER PIN AND WAVE WASHER AT THE THROTTLE BODY WERE MISSING AT THE TIME OF INSPECTION. IF THE LINK ROD FROM THE THROTTLE BODY ARM AND THE METERING BLOCK ARM DETACHES, PROPER FUEL METERING CEASES.

CA070823003	CESSNA	LYC	LOCK	BROKEN
8/21/2007	T206H	TIO540AJ1A	SPL19251	SEAT

(CAN) RT SEAT LOCKING PIN SHEATH FOUND BROKEN AT THE SEAT LEG ATTACH POINT. THE LOCKING PIN WOULD RETRACT BUT NOT ENGAGE ON THAT SIDE. THE SEAT LOCK MECHANISM COMPRISES OF A SPRING LOADED HANDLE , WITH TWO CABLES ATTACHED AND TWO SHEATHS SECURED TO THE SEAT LEG WHICH SURROUND THE LOCKING PINS. PART REPLACED. (TC NR 20070823003)

CA070823007	CESSNA	LYC	PUMP	LEAKING
8/21/2007	T206H	TIO540AJ1A	A10055B	FUEL BOOST

(CAN) FUEL DYE RESIDUE NOTED ON ELECTRIC FUEL BOOST PUMP HOUSING, FOUND TO BE FROM AN AUX PORT PLUG. PLUG RESEALED, FURTHER CHECK FOR SEEPING SATISFACTORY. (TC NR 20070823007)

2007FA0000974	CESSNA	LYC	SLICK	COIL	OPEN
10/31/2007	T206H	TIO540AJ1A		K3975	RT MAGNETO

PILOT REPORTED RT MAGNETO FAILED WHEN CHECKED DURING RUN UP. FOUND COIL HAD OPEN CIRCUIT WHEN CHECK IAW TABLE SEVEN IN UNISON'S 4300/6300 SERIES MM P/N L-1363C.

CA070912003	CESSNA	CONT	GEAR	DAMAGED
8/30/2007	U206G	IO520F	536421	CRANKSHAFT

(CAN) PILOT/OPERATOR CONVEYED A STARTING ABNORMALITY. TROUBLESHOOTING FOUND THAT TWO TEETH WERE MISSING FROM CRANKSHAFT GEAR. ENGINE REMOVED AND SENT FOR FURTHER EVALUATION AT ATC AMO NR 59-96. SEE SDR NR 20070912001 FROM AMO 59-96 FOR FURTHER FOLLOW UP. (TC NR 20070912003)

2007FA0000957	CIRRUS	CONT	MAGNETO	MISOVERHAULED
10/4/2007	SR22	IO550N	10500556101	ENGINE

AIRCRAFT ENGINE RUNNING ROUGH AND BACKFIRING ON FLIGHT TEST. PILOT RETURNED AND GROUNDED AIRCRAFT FOR MAINTENANCE. MAINTENANCE PERSONNEL PERFORMED INTERNAL INSPECTION OF CONVERTED MAGNETOS TO PRESSURIZED. MAGNETO CONVERTED TO PRESSURIZED, INSPECTION REVEALED CARBON BRUSHES MISSING ON BOTH MAGNETOS, INTERNAL TIMING WAS WRONG ON ONE OF THE MAGNETOS, WIRES WERE CHAFED, EXCESS GREASE WAS FOUND ON ROTOR BRUSH ASSEMBLY. FURTHER INVESTIGATION OF AIRCRAFT WITH MAGNETO PN 10-550556-101 MODIFIED, INSTALLED ON AIRCRAFT FOR TURBO NORMALIZING. 6 ADDITIONAL MAGNETOS EXHIBITED THE SAME CONDITIONS LISTED ABOVE. RECOMMENDATIONS FOR CORRECTION ARE TO CONVERT MAGNETOS IAW PUBLISHED SPECS AND PROCEDURES. (K)

CA071003004	CNDAIR	PWA	PLATE	MISSING
10/3/2007	CL2151A10	AWASP	21587525	MLG

(CAN) ADJUSTING PLATE P/N 215-87525 MISSING ON A NEWLY OVERHAULED LOWER MEMBER P/N 160-600-35 S/N H126. A/C HOURS 4658.7 CYCLES 2973 DROPS16691 (TC NR 20071003004)

CA071001007	CNDAIR	PWA	PISTON	CRACKED
9/28/2007	CL2151A10	AWASP	33130131	WATER DOOR

(CAN) WHILE DOING A C CHECK OUR NDT CONTRACTOR ADVISED US THAT HE HAS BEEN FINDING CRACKS IN THIS AREA WHILE WORKING FOR OTHER CUSTOMERS. WE ARE CHECKING THE REST OF OUR FLEET AS THIS FAILURE WOULD RESULT IN A UNCOMMANDED BOMB DOOR OPENING.

CA071012002	CNDAIR	PWA	HAMSTD	BLADE	CRACKED
10/12/2007	CL2151A10	CWASP	43E60583	6903A10	PROPELLER

(CAN) DURING COMPLIANCE WITH AD 81-13-06R2 AND S/B 664 A CRACK WAS FOUND EMANATING FROM ONE OF

THE BUSHING RETENTION SCREW HOLES. CRACK HAS BECOME LARGER DURING REWORK PROCEDURES RENDERING THE BLADE U/S. (TC NR 20071012002)

CA070914016	CNDAIR	PWA	TORQUE SENSOR	FAULTY
7/27/2007	CL2156B11215	PW123	311555701	ENGINE

(CAN) IN LEVEL FLIGHT, THE ENGINE LOST POWER ACCOMPANIED BY A LOUD NOISE. THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED A FAULTY TORQUE SENSOR. (TC NR 20070914016)

CA070824003	CNDAIR	PWA	FUEL CELL	LEAKING
8/24/2007	CL2156B11215	PW123	215640751	

(CAN) LEAK FROM BOTTOM SURFACE ON FUEL CELL NR 8 RT. A/C HOURS 3381 CYCLES 2237. DROPS 15187 MFG. (TC NR 20070824003)

CA070830003	CNDAIR	PWA	FUEL CELL	LEAKING
8/19/2007	CL2156B11215	PW123	215640024	RT WING

(CAN) FUEL LEAK, RT WING FUEL CELL, NR 2 REPLACED DUE TO LEAKS IN FUEL CELL (TC NR 20070830003)

CA070830004	CNDAIR	PWA	FUEL CELL	LEAKING
8/19/2007	CL2156B11215	PW123	2156400212	RT WING

(CAN) FUEL LEAK RT WING, FUEL CELL NR 3 REPLACED DUE TO HOLE IN THE CELL. (TC NR 20070830004)

CA070830005	CNDAIR	PWA	FUEL CELL	LEAKING
8/19/2007	CL2156B11215	PW123	2156400212	RT WING

(CAN) FUEL LEAK RT WING FUEL CELL NR 7 REPLACED DUE TO HOLES IN THE FUEL CELL. (TC NR 20070830005)

CA070828002	CNDAIR	GE	LINE	CHAFED
8/24/2007	CL6002B19	CF343A1	601R75239463	HYD SYSTEM

(CAN) DURING C-CHECK INSPECTION, CHAFING DAMAGE WAS NOTED ON THE HYDRAULIC PUMP 3B SUCTION LINE P/N 601R75239-463. THIS HYDRAULIC TUBE LINE WAS RUBBING AGAINST THE UPLOCK NR 3 HYDRAULIC TUBE LINE (P/N 601R75239-273) THAT FEEDS INTO THE EXTEND LINE FOR THE RHS MAIN LANDING GEAR RETRACTION ACTUATOR. THE HYDRAULIC LINE HAS BEEN ORDERED AND WILL BE REPLACED BEFORE THE AIRCRAFT LEAVES THE HEAVY CHECK. (TC NR 20070828002)

CA070828003	CNDAIR	GE	LINE	CHAFED
8/24/2007	CL6002B19	CF343A1	601R75239463	HYD SYSTEM

(CAN) DURING A C-CHECK INSPECTION IN THE RT MAIN LANDING GEAR WHEEL WELL, THE HDRAULIC SUCTION TUBE ASSY(P/N 601R75239-463) OF HYDRAULIC PUMP 3B WAS FOUND WITH CHAFING DAMAGE. THIS TUBE WAS RUBBING AGAINST THE HYDRAULIC LINE(P/N 601R75239-273),WHICH IS THE UPLOCK NR 3 LINE FEEDING INTO THE RT MAIN LANDING GEAR RETRACTION ACTUATOR.THE HYDRAULIC LINE HAS BEEN ORDERED AND WILL BE REPLACED BEFORE THE AIRCRAFT LEAVES THE HEAVY MAINTENANCE CHECK. (TC NR 20070828003)

CA070902003	CNDAIR	GE	WINDSHIELD	CRACKED
8/24/2007	CL6002B19	CF343A1	NP1393219	LEFT

(CAN) FL 330 LT, WINDSHIELD CRACKED. AIRCRAFT CONTINUED TO DESTINATION. NO FURTHER REPORTED DETAILS. (TC NR 20070902003)

CA070827004	CNDAIR	GE	BALLAST	BURNED
8/24/2007	CL6002B19	CF343A1	BR95005	CABIN LIGHT

(CAN) CREW REPORTED WHEN THEY APPLIED EXT AC POWER TO THE AIRCRAFT AND TURNED ON THE SWITCH IN THE COCKPIT, THEY COULD SMELL SOMETHING BURNING AND SAW A BLUE HAZE IN THE AIR. THEY IMMEDIATELY TURNED POWER OFF AND CALLED MAINTENANCE CONTROL. MAINTENANCE INSPECTION REVEALED THAT LIGHT BALLAST AT 7DF WAS FOUND TO BE THE SOURCE OF THE SMOKE/SMELL. THE BALLAST WAS REMOVED AND THE LIGHT WAS DIFFERED SO THE A/C COULD RETURN TO DEPARTURE FOR REPAIRS. ONCE

IN THE AREA WHERE BALLAST WAS INSTALLED WAS INSPECTED AND BURNED INSULATION WAS FOUND. AN INSULATED TAPE REPAIR WAS CARRIED OUT AND THE BALLAST AT 7DF WAS REPLACED. THE APU WAS RUN FOR HALF HOUR WITH PACKS ON TO VERIFY NO OIL SMELL. THE A/C WAS THEN DEODORIZED AND CHECKED SERVICEABLE. (TC NR 20070827004)

CA071005001	CNDAIR	GE	SHROUD	CHAFED
10/4/2007	CL6002B19	CF343A1	CA447	BS 559

(CAN) DURING A HEAVY CHECK THE FUEL SHROUD ASSY AND FUEL LINES AT FRAME 559 WERE REMOVED TO FACILITATE A SHEET METAL REPAIR. IT WAS DISCOVERED THAT BOTH SHROUD AND FUEL LINES HAVE CHAFING BEYOND LIMITS. THIS SAME REPAIR IS BEING C/O ON A/C C-FZSI(126) AND SIMILAR DAMAGE WAS FOUND IN THE SAME LOCATION. THE FUEL LINES AND SHROUD ASSY. HAVE BEEN ORDERED FOR BOTH A/C AND WILL BE REPLACED BEFORE THE A/C LEAVES THE HEAVY CHECK. (TC NR 20071005001)

CA070917007	CNDAIR	GE	FLEX DRIVE	WORN
9/13/2007	CL6002B19	CF343A1	1104SD100201	TE FLAPS

(CAN) CREW REPORTED THAT THE FLAPS OPERATED NORMALLY ON APPROACH, WHEN SELECTED TO FLAPS 45. AFTER LANDING AND DURING TAXI, WHEN THE CREW SELECTED FLAPS 0, THEY RECEIVED A FLAP FAIL AND THE FLAPS REMAINED AT 45. CONTRACT MAINTENANCE RETRIEVED THE CODES FROM THE FECU AND THE IDENTIFIED A POSSIBLE MISRIG OF THE BPSU. THE FLAPS WERE THEN CYCLED THREE TIMES WITH NO FAULTS FOUND, A/C WAS RETURNED TO SERVICE. BPSU RIGGING WAS CHECKED SERVICEABLE. THE A/C WAS FLOWN FOR A BEAM REPAIR AND IT WAS DECIDED THAT TASK RJ2-275002 (FLAP LUBE AND INSPECTION WOULD BE COMPLETED.) IT WAS DISCOVERED THAT LT AND RT NR 2 FLAP FLEX DRIVES WERE UNSERVICEABLE, ONE WAS WORN, THE OTHER HAD A SLIGHT KINK AND REQUIRED REPLACEMENT. BOTH WERE REPLACED AND THE FLAP SYSTEM WAS CHECKED SERVICEABLE. (TC NR 20070917007)

CA070925003	CNDAIR	GE	PRIORITY VALVE	FAILED
9/23/2007	CL6002B19	CF343A1	46193	MLG

(CAN) AFTER TAKEOFF THE FOLLOWING MESSAGES WERE DISPLAYED IN THE COCKPIT: STEERING INOP, GEAR DISAGREE, W.O.W. SENSOR FAILURE AND W.O.W. STATUS. NOSE GEAR REMAINED IN DOWN POSITION WITH MAIN GEAR RETRACTED. AIRCRAFT TURNED-BACK AND LANDED UNEVENTFULLY. MAINTENANCE REPLACED THE MLG PRIORITY VALVE AND THE ELECTRIC MOTOR DRIVEN PUMP HYDRAULIC SYSTEM 3B (P/N 848847), FOLLOWED BY SUCCESSFUL GEAR SWINGS.

CA070928002	CNDAIR	GE	SCAVENGE PUMP	FLUCTUATES
9/27/2007	CL6002B19	CF343A1	6087T04P05	NR 1 ENGINE OIL

(CAN) SHORTLY AFTER TAKEOFF THE NR ONE ENGINE OIL HIGH TEMPERATURE/LOW PRESSURE CAUTION LIGHT CAME ON. FLIGHT RETURNED TO DEPARTURE AIRPORT. FLIGHT LANDED APPROX 1000 POUNDS OVERWEIGHT. NO EMERGENCY DECLARED BUT EMERGENCY VEHICLES ON STANDBY. MAINTENANCE TROUBLESHOOTING DRAINED 1 LITER OF OIL FROM OIL TANK, INSPECTED OIL PRESSURE AND TEMPERATURE WIRE HARNESSSES AND COMPLETED GROUND ENGINE RUNS. OIL PRESSURE SLOW TO RISE ON START. OIL TEMP ROSE 1 EVERY 2 SECONDS. TEMPERATURE ROSE TO 156 WITH YELLOW CAUTION. FUEL FLOW ALSO FLUCTUATING. AFTER GROUND RUN FOUND OIL OVER SERVICED AGAIN. AGB FOUND WITH 5 LITERS OF OIL, SHOULD HAVE ONLY .75 LITERS. NR 1 LUBE/SCAVENGE OIL PUMP REPLACED AND OIL SYSTEM ADJUSTED TO CORRECT LEVEL. FUEL FLOW TRANSMITTER REPLACED. GROUND RUN CARRIED OUT WITH NO FAULTS PER FIM 79-20-05. OVERWEIGHT LANDING INSPECTION DETERMINED NOT REQUIRED IAW FDR READING AND REQUIREMENTS OF AMM 05-51-01-210-801. (TC 20070928002)

CA071015002	CNDAIR	GE	BPSU	FAULTED
10/11/2007	CL6002B19	CF343B1	855D10011	FLAP SYSTEM

(CAN) EVENT OCCURRED AT GATE PUSHBACK, PREFLIGHT FLAP SELECTION. FLAP FAIL CAUTION ILLUMINATED WHEN SELECTED TO 20 DEGREES. LT FLAPS SHOWING 2 DEGREES/RT SIDE SHOWING ZERO. BOTH FLAPS WERE PHYSICALLY AT 2 DEGREES. FAULT CODES SHOWED BPSU AT FAULT. DURING REPLACEMENT WAS ALSO FOUND THE FLAP DRIVE SHEARED. BOTH PARTS REPLACED AND RIGGED. FLAP SYSTEM TEST COMPLETED WITH NO FURTHER FAULT NOTED. SYSTEMS CHECKS SERVICEABLE. (TC NR 20071015002)

CA071009002	CNDAIR	GE	RIB	DENTED
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10/7/2007 CL6002B19 CF343B1 601R120474 RT WING

(CAN) REMNANTS OF A BIRD WAS FOUND ON ARRIVAL. INSP REVEALED A DENT IN THE RT WING LEADING EDGE AT WING. THE DENT WAS APPROXIMATELY 4 INCHES BY 2 INCHES AND .25 INCHES DEEP. MAINTENANCE REMOVED THE DENT AND REPLACED RIB AT WING STATION 167.00 AND THE L/E WAS RE-INSTALLED AND WING ANTI ICE WAS FUNCTION CHECKED SERVICEABLE. (TC NR 20071009002)

[CA071009001](#) CNDAIR GE ACTUATOR FROZEN

10/5/2007 CL6002B19 CF343B1 852D10021 TE FLAPS

(CAN) ON DESCENT CREW RECEIVED FLAP FAIL MESSAGE UPON SELECTION OF FLAPS DOWN. FLAPS FAILED AT ZERO DEGREES. FLIGHT LANDED WITHOUT INCIDENT. UPON INVESTIGATION IT WAS FOUND THAT THE ACTUATORS WERE FROZEN. ALL IB AND OB ACTUATORS REPLACED (8), FLAP RIGGING CARRIED OUT AND SYSTEM OPERATIONAL CHECK CARRIED OUT WITH NO FAULTS FOUND. AIRCRAFT RETURNED TO SERVICE. (TC NR 20071009001)

[CA070823012](#) CNDAIR GE SWITCH FAILED

8/21/2007 CL6002B19 CF343B1 14034012 RT FIRE DETECT

(CAN) DURING LANDING ROLLOUT CREW RECEIVED MOMENTARY ILLUMINATION OF (BOTTLE ARMED PUSH TO DISCH) FOR RT ENG. CREW WAS CHECKING FOR TRAFFIC AS HAD BEEN CLEARED ACROSS ANOTHER RUNWAY. WHEN ACROSS THIS RUNWAY NOTICED RED (R ENG OIL PX) AND RT ENG N1 AND N2 (ZERO). CREW CARRIED OUT RT ENG SHUTDOWN PROCEDURE. MAINTENANCE INSPECTION FOUND RT ENG FIRE PUSH SWITCH FAULTY. SWITCH REPLACED, FUNCTION CHECKS CARRIED OUT, AIRCRAFT RETURNED TO SERVICE. NOTE: ACTIVATION OF ENG FIRE PUSH SWITCH WILL SHUT OFF FUEL/HYD CAUSING ENGINE TO SHUT DOWN. (TC NR 20070823012)

[CA070911013](#) CNDAIR GE BPSU FAULTED

9/8/2007 CL6002B19 CF343B1

(CAN) THE CREW RECEIVED A FLAP FAIL MESSAGE AFTER SELECTING THE FLAP TO 0 DEGREE AFTER LANDING. THE FECU TO LT BPSU WIRING WAS INSPECTED AND NO FAULT WAS FOUND. FECU WAS REPLACED, FUNCTIONAL TEST COMPLETED AND THE AIRCRAFT RELEASED INTO SERVICE, FOUR FLIGHTS LATER THE CREW EXPERIENCED A FLAP FAIL MESSAGE WHEN FLAP WERE SELECTED FROM 0 TO 8 DEGREES IN PREPARATION FOR TAKE OFF. THE FECU FAULT CODE WAS AGAIN INDICATING PROBLEM WITH WIRING BETWEEN THE LT BPSU AND FECU. WIRING WAS INSPECTED AND NO FAULT WAS NOTICED. FURTHER INVESTIGATION REVEALED THAT THE RT BPSU WAS AT FAULT. R/H BPSU WAS REPLACED, FUNCTIONAL TEST COMPLETED AND THE AIRCRAFT RELEASED INTO SERVICE. (TC NR 20070911013)

[CA071003001](#) CNDAIR GE SELECTOR VALVE INOPERATIVE

10/2/2007 CL6002B19 CF343B1 750005000 MLG

(CAN) ON APPROACH (GEAR DISAGREE) WARNING MESSAGE AT LDG SELECTION. MLG`S WOULD NOT COME DOWN, NLG OK. CYCLED LDG SAME. ALTERNATE EXTENSION USED, OK. AIRCRAFT LANDED. SNAG CAN BE REPRODUCED ON JACKS. MLG SELECTOR VALVE FOUND INOPERATIVE. REPLACED VALVE. A/C RTS. (TC NR 20071003001)

[CA071003003](#) CNDAIR GE ACTUATOR MALFUNCTIONED

10/1/2007 CL6002B19 CF343B1 852D10019 TE FLAP

(CAN) FLAPS FAIL CAUTION MSG AND 40 DEG. RAN QRH PROCEDURES AS REQUIRED AND COMPLIED WITH INSTRUCTIONS. A/C DISPATCHED UNDER PROVISIONS OF FAA AD 2006-12-21 (DEFERRAL FOR 72 HRS). AT OVERNIGHT MAINTENANCE, FOUND RT WING FLAP DRIVE SYSTEM TORQUE VALUE AT 25 IN/LBS. FOUND RT IB (NR 1 ACTUATOR) WITH HIGH TORQUE. REPLACED RT NR 1 FLAP ACTUATOR IAW CRJ AMM 27-53-01. (TC NR 20071003003)

[CA070902002](#) CNDAIR GE CONTROL ROD UNKNOWN

8/12/2007 CL6002C10 CF34* BA6709260213 VERTICAL STAB

(CAN) AFTER ENGINE START FOR DEPARTURE FLIGHT AF 7836 ,THE ELEVATOR WAS FOUND JAMMING DURING CHECK LIST . AIRCRAFT RETURNED TO THE GATE. THE EFFORTS ARE NORMAL ON CONTROL COLUMN UNTIL HALF WAY THE BECOMES HARD. EICAS INDICATION FOR THE ELEVATOR SHOWS FULL DEFLECTION WHEN THE

CONTROL COLUMN REACHES HALF WAY . IN REFERENCE TO N16/07 THE ACFT WAS IN CHECK AND COMPLETED ALL GROUND AND FLT TESTS SATISFACTORY . THE ACFT WAS REPOSITIONED. THE SB 670BA-27-022 WAS DONE AND INSPECTED BUT A BUSHING REPLACEMENT WAS PENDING TO FULLY COMPLETE THE SB . DURING THIS BUSHING REPLACEMENT AN INVERSION OF THE ACTUATING RODS WAS DONE BETWEEN UPPER AND LOWER POSITION ON THE LEVER. THE RODS WERE REPOSITIONED IN NORMAL CONFIGURATION AND SYSTEM WORKED SATISFACTORY.

CA070902001	CNDAIR	GE	ACM	FAILED
8/13/2007	CL6002C10	CF348C1	GG670950093	RIGHT

(CAN) RT PACK GOES FULL HOT AND FAILS WITH BURNING ODOR. (TC NR 20070902001)

CA070828006	CNDAIR	GE	BLADES	DAMAGED
8/27/2007	CL6002D24	CF34*		NR 1 ENGINE

(CAN) ON WALK AROUND ON THE RAMP, IT WAS DISCOVERED THAT NR 1 ENGINE HAD BLADE AND STATOR DAMAGE CAUSED BY UNKNOWN FOD. THE A/C WAS TAXIED TO THE HANGER FOR INSPECTION AND BOROSCOPE. THE INSPECTION REVEALED THAT NR 14 BLADE HAD A SMALL DENT, FURTHER INVESTIGATION REVEALED DAMAGE AT THE 1ST STAGE STATOR AT THE 5 O-CLOCK POSITION AND A PUNCTURE TO THE ENGINE LINER. (APPROX 1.4X1.0 HOLE JUST AFT THE NR1 FAN AND JUST FORWARD OF STATOR AT APPROX 4 O'CLOCK POSITION LOOKING AFT.) DUE TO THE SKIN CONTAINMENT DAMAGE 1 INCH X .40 , MM DOES NOT ALLOW FOR ANY DAMAGE IN THIS AREA. ENGINE CHANGE HAS BEEN C/O. PRESENT A/C HOURS:6692:52 AND CYCLES:3126.

CA071003002	CNDAIR	GE	BUSS BAR	OVERHEATED
10/2/2007	CL6002D24	CF34*		COCKPIT

(CAN) ON APPROACH CREW RECEIVED WING ANTI ICE FAULT STS MSG FOLLOWED BY DC BUS 1 CAUTION MESSAGE. AIR TURN BACK MAINTENANCE FOUND CB'S D6, D7 AND THEIR BUS BAR OVERHEATED. REPLACED C/B'S AND BUS BAR. PARTS REPLACED: BUS BAR CIRCUIT BREAKER D6 (80A) CIRCUIT BREAKER: D7 (3A) BUS BAR: S6938-1 CIRCUIT BREAKER D6 (80A): MS25361-80 CIRCUIT BREAKER D7 (3A): MS22073-3 (TC NR 20071003002)

CA070917005	CNDAIR		UNKNOWN	MULTIPLE FAIL
9/13/2007	CL6013A			

(CAN) AIRCRAFT EXPERIENCED FLAP FAILURE ON PREPARATION FOR LANDING, THEN FLEW APPROXIMATELY A FURTHER 10 MINUTES ATTEMPTING, UNSUCCESSFULLY, TO DEPLOY THE FLAPS. ON TOUCHDOWN THE THRUST REVERSERS (TR) DID NOT DEPLOY WHEREUPON THE CREW RECYCLED THE TR ARM SWITCH AFTER WHICH THE TRS DEPLOYED. AFTER LANDING THE AIRCRAFT WAS TAXIED TO THE RAMP AND PARKED. THE BRAKE FIRE WAS OBSERVED POST CREW AND PASSENGER DEPLANE TO ATTEND CUSTOMS. NR 2 BRAKE CAUGHT FIRE, NRS 3 AND 4 BRAKE FUSES BLEW WHILE NR 1 TIRE HELD PRESSURE. (TC NR 20070917005)

CA070913001	CNDAIR	GE	ADG	UNWANTED DEPLOY
9/10/2007	CL604	CF343B1	820465	LEFT

(CAN) DURING TAKEOFF, AS SOON AS A/C LEFT GROUND ADG DEPLOYED. CREW DECIDED TO CONTINUE FLIGHT USING ADG DEPLOY FLIGHT PROCEDURES. A/C LANDED WITHOUT INCIDENT. ADG AUTODEPLOY UNIT WAS FOUND TO HAVE BEEN REPLACED A FEW HOURS BACK DUE TO FAILURE OF UNIT'S SELF TEST. THE INSTALLED SERVICEABLE REPAIRED UNIT WAS FOUND TO BE AT FAULT. UNIT WILL BE REPLACED AND A/C RETURNED TO SERVICE. (TC NR 20070913001)

CA070911011	CURTIS	PWA	UNKNOWN	UNKNOWN
9/10/2007	C46DAIRLIFT	R280051M1		ENGINE

(CAN) PRECAUTIONARY SHUTDOWN DUE TO ROUGH RUNNING, ENGINE RUNUP ON GROUND BY MAINTENANCE AND SUSPECT BAD MAGNETO. THE ENGINE WILL BE INSPECTED AND TIMED ACCORDINGLY. (TC NR 20070911011)

CA070906006	CVAC	ALLSN	GEARBOX	UNKNOWN
9/3/2007	340CVAC	501D13D		NR 2

(CAN) NR 2 ENGINE OIL PRESSURE AND QUANTITY INDICATION BOTH SHOWED A DECREASE UPON REACHING CRUISE ALT. NR 2 ENGINE SHUTDOWN AND RETURNED TO DEPARTURE. NR 2 REDUCTION GEARBOX BEING

REPLACED AND AIRCRAFT RETURNED TO SERVICE. (TC NR 20070906006)

CA070913004	CVAC	ALLSN	LORAL	TIE BOLT	MISSING
8/20/2007	340CVAC	501D13D	9540512	NAS14651	MAIN WHEEL

(CAN) DURING DAILY INSPECTION OF AIRCRAFT, THE NR3 MAIN WHEEL ASSEMBLY WAS FOUND TO HAVE 4 MISSING TIE BOLTS. THE WHEEL ASSEMBLY WAS REPLACED WITH A SERVICEABLE UNIT, AN AXLE INSPECTION WAS CARRIED OUT AND THE AIRCRAFT WAS RETURNED TO SERVICE. AFTER INVESTIGATION, THE OVERHAUL PROCEDURE HAS BEEN REVISED TO DISCARD TIE BOLTS AND NUTS DURING WHEEL OVERHAUL/REPAIR. THE WHEEL OVERHAUL TASK CARD HAS ALSO BEEN REVISED TO INCLUDE THIS INFORMATION. (TC NR 20070913004)

CA070925002	DHAV	PWA		ENGINE	LEAKING
9/25/2007	DHC2MKI	R985AN14B			

(CAN) ENGINE LEAKING EXCESSIVE OIL OUT OF GENERATOR DRIVE. ENGINE CASE FILLING WITH OIL. (TC NR 20070925002)

CA070921003	DHAV	PWA	PWC	CYLINDER	CRACKED
9/21/2007	DHC2MKI	R985AN14B		ENGINE	

(CAN) AIRCRAFT CAME IN FOR 100 HOUR INSPECTION WITH ENGINE OIL LEAK UPPER LT SIDE. ON GROUND RUN ENGINE VIBRATION WAS EVIDENT, MAG CHECKS WERE NORMAL, ONCE COWLINGS WERE REMOVED IT WAS DISCOVERED THAT THE CYLINDER HEAD OF NR 1 CYLINDER WAS LOOSE ON THE BARREL. FURTHER INVESTIGATION REVEALED THAT THE CYLINDER HEAD HAD COMPLETELY SEPARATED FROM THE CYLINDER BARREL. ASSY WAS REMOVED AND REPLACED WITH SERVICEABLE CYLINDER ASSY. (TC NR 20070921003)

CA071022012	DHAV	PWA		SPAR	CRACKED
10/22/2007	DHC2MKI	R985AN14B		C2TP57	STAB

(CAN) STAB SPAR FOUND CRACKED IAW AWD CF-1991-42R1 S.B 2/47. INSPECTED IAW PEN REQUIREMENTS, SPAR CRACKED ABOVE BOTH FWD ATTACH BRACKETS. ALL SPAR MODS C/W 4200HRS AGO ALONG WITH A NEW VIKING SPAR. (1992). CRACKS ABOUT .7500 INCH LENGTH RUNNING HORIZONTALLY .2500 ABOVE TOP ATTACH BOLTS, NOT IN RADIUS OF SPAR. VIKING NOTIFIED OF CRACKS IAW SB. (TC NR 20071022012)

CA071001011	DHAV	PWA	PWC	DUCT	DAMAGED
7/15/2007	DHC3	PT6A34	PT6A34	310926302	ENGINE

(CAN) WHILE PERFORMING A BOROSCOPE INSPECTION DURING A REGULARLY SCHEDULED FUEL NOZZLE CHANGE, DAMAGE WAS FOUND ON THE LARGE EXIT DUCT (LED). THE LED WAS CHANGED AND UPON CLOSER INSPECTION IT WAS FOUND THAT A LARGE HOLE HAD BEEN BURNED THROUGH ONE LAYER OF THE DUCT. A CRACK THAT TRAVELED APPROXIMATELY .2500 OF THE CIRCUMFERENCE OF THE OUTER PORTION OF THE LED WAS ALSO NOTICED. (TC NR 20071001011)

CA070924005	DHAV	PWA	BOMBDR	FITTING	MISMANUFACTURED
9/24/2007	DHC6300	PT6A27			CONTROL CABLE

(CAN) NEW AILERON CABLE P/N JNL-C6CF1125-3 FROM JNL (W.O. 091) THE CSP FITTING ON IT MEASURES .4405. THE CSP FITTING WILL NOT ENGAUGE INTO THE RECEPTICAL ON THE QUADRANT. THE CABLE REMOVED MEASURES .4310. (TC NR 20070924005)

CA070924007	DHAV	PWA		FITTING	DAMAGED
9/24/2007	DHC6300	PT6A27			CONTROL CABLE

(CAN) NEW AILERON CABLE P/N JNL-C6CF1153-3 FROM JNL (W/O 022. THE CSP FITTING MEASURES .4405. THE CSP FITTING WILL NOT ENGAUGE INTO THE AILERON QUADRANT. ORIGINAL CABLE CSP FITTING MEASURES .4320 (TC NR 20070924007)

CA071001003	DHAV	PWA		POWER SUPPLY	DAMAGED
9/29/2007	DHC6300	PW123		18271	COCKPIT LIGHTS

(CAN) DURING CRUISE, THE INTERNAL COCKPIT LIGHTING WAS SWITCHED ON, OVERHEAD PANEL LIGHTS DID NOT ILLUMINATE. OVERHEAD PANEL LIGHT CIRCUIT BREAKER WAS OBSERVED AS TRIPPED. CIRCUIT BREAKER

WAS RESET. A FEW MINUTES LATER A SUSPECTED ELECTRICAL BURNING SMELL WAS OBSERVED. F/A 1 WAS CONTACTED AND ASKED TO COME TO THE FLIGHTDECK. F/A 1 CONFIRMED THE SMELL AND STATED IT WAS STRONGER NEAR THE WARDROBE. QRH ACTIONS FOR FIRE/SMOKE UNKNOWN SOURCE WERE CARRIED OUT. A UNSCHEDULED LANDING COMPLETED. ENGINEERING INVESTIGATION REVEALED THAT THE NR 2 DC POWER SUPPLY EXHIBITED SIGNS OF OVERHEATING, AND DAMAGE DUE TO POSSIBLE EXCESSIVE CURRENT DRAW. UNIT ALSO HAD STRONG BURNED SMELL. THE NR 2 DC POWER SUPPLY WAS REPLACED IAW THE AIRCRAFT MM 33-10-00. (TC NR 20071001003)

CA070830006	DHAV	PWA	ROD	BROKEN
8/23/2007	DHC7102	PT6A50	72740251001	SPOILER IND

(CAN) DURING TROUBLESHOOTING, A PFCS INDICATOR PROBLEM, IT WAS NOTICED THAT THE ROD FOR THE RT IB ROLL SPOILER TRANSMITTER HAD SHEARED INSIDE OF THE ROD END AT THE SPOILER END. THERE WAS NO INDICATIONS OF THE ROD CONTACTING ANY OTHER SURFACE TO CAUSE IT TO BREAK, THE BREAK MAY HAVE DEVELOPED FROM A CRACK. THE ROD WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. (TC NR 20070830006)

CA070829004	DHAV	PWA	INTAKE DUCT	CORRODED
8/27/2007	DHC7102	PT6A50	75420022101	NACELLE

(CAN) LEVEL 3 CORROSION WAS FOUND BETWEEN THE LOWER INTAKE FORWARD LIP AND THE NACELLE STRUCTURE. (TC NR 20070829004)

CA070924004	DHAV	PWA	WINDSHIELD	BROKEN
9/15/2007	DHC8*	PW120A	8SC0043013	COCKPIT

(CAN) AN AIRCRAFT WAS CRUISING AT 23,000 FT WHEN THE LHS WINDSCREEN SHATTERED. THE OPERATOR BELIEVES THE HEATING ELEMENT FUSED, CREATING A HOT SPOT AND SHATTERING THE OUTER GLASS PAIN OF THE WINDSCREEN. LHS WINDSHIELD REPLACED AND THE AIRCRAFT RETURNED WAS TO SERVICE. (TC NR 20070924004)

CA071015003	DHAV		BRACKET	CRACKED
10/15/2007	DHC8102			SPOILER

(CAN) DURING THE ACCOMPLISHMENT OF A PRE CHECK, A SPACE WAS OBSERVED BETWEEN THE SPOILER ACTUATOR AND THE SPOILER ACTUATOR BRACKET. FURTHER INVESTIGATION FOUND THAT THE BRACKET WAS CRACKED. (TC NR 20071015003)

CA071004002	DHAV	PWA	WIRE HARNESS	CHAFED
9/28/2007	DHC8102	PW120A		

(CAN) WIRE BUNDLE AT STATION FS 510 (BELOW FLOOR BOARD) CROSSING OVER FROM STARBOARD TO PORT SIDE. WIRE BUNDLE CURVES UPWARD RUNNING BENEATH SEAT RAIL STRUCTURE THEN GOES FORWARD ONTRAY. WIRE BUNDLE FOUND NOT PROTECTED AS IT CURVES UP BENEATH SEAT RAIL STRUCTURE (PORT SIDE). FOUR WIRES WERE CHAFING AGAINST THIS STRUCTURE OF WHICH 3 OF THEM HAD WORN THROUGH THE INSULATOR. WIRES WERE REPAIRED AND WIRE BUNDLE PROTECTED. (TC NR 20071004002)

CA070904002	DHAV	PWA	LEVER	BROKEN
9/2/2007	DHC8102	PW120A	85770068003	GROUND SPOILER

(CAN) THE FLIGHT CREW SNAGGED THAT THE GROUND SPOILER LIGHT ILLUMINATED IN FLIGHT. UPON INVESTIGATION MAINTENANCE FOUND THE LT OB GROUND SPOILER LEVER BROKEN AT THE SPOILER ACTUATOR ATTACH POINT. THE LEVER WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. (TC NR 20070904002)

CA070827002	DHAV	PWA	HOUSING	CRACKED
7/25/2007	DHC8102	PW120A	A44700009	ACTUATOR

(CAN) WHILE DOING A LAYOVER INSPECTION A HYDRAULIC LEAK WAS FOUND IN THE LT FLAP AREA. THE LEAK WAS FOUND TO BE COMING FROM THE LT OB ROLL SPOILER ACTUATOR. UPON REMOVAL OF THE ACTUATOR IT WAS FOUND THAT THE HOUSING HAD CRACKED IN THE AREA SUROUNDING ONE OF THE PLUGS CAUSING THE PLUG TO DISLODGE. THE CRACK EXTENDED AROUND THE ENTIRE CIRCUMFERENCE OF THE ACTUATOR BODY

WHERE THE PLUG IS THREADED IN. THE ACTUATOR WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE (TC NR 20070827002)

CA070913007	DHAV	PWA	SELECTOR	MALFUNCTIONED
9/11/2007	DHC8102	PW120A	574205A	LANDING GEAR

(CAN) IN DESCENT, THE PILOT SELECTED GEAR DOWN. THE GEAR FAILED TO EXTEND AND THE PILOT CYCLED THE GEAR 4 TIMES WITH NO RESULT, ON THE 5 CYCLE, THE GEAR EXTENDED. MAINTENANCE PLACED THE AIRCRAFT ON JACKS AND NOTED THAT WHEN GEAR EXTENSION WAS SELECTED, IT TOOK ABOUT 10 SECONDS BEFORE THE GEAR INITIATED THE COMMAND. THE LANDING GEAR SELECTOR WAS FOUND TO BE CAUSING THE DELAY, THE SELECTOR WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. (TC NR 20070913007)

CA070906003	DHAV	PWA	ATTACH FITTING	CRACKED
9/2/2007	DHC8102	PW120A	85311176009	NLG ACTUATOR

(CAN) DURING SCHEDULED NOSE LANDING GEAR CHANGE, IT WAS DISCOVERED THAT THE NLG UPLOCK ACTUATOR FITTING ASSEMBLY P/N 85311176-009 WAS CRACKED. FITTING REPLACED AND FITTING FASTENERS INSTALLED IAW RD8-53-3805. AFTT: 42865 HRS. TOTAL CYCLES: 50005. (TC NR 20070906003)

CA070911005	DHAV	PWA	LUCAS	ADAPTER	PULLED
9/6/2007	DHC8102	PW120A		31708500	GENERATOR

(CAN) WHILE ENROUTE FLIGHT CREW RECEIVED A NR 1 ENGINE OIL PRESSURE LOW INDICATION AND ALSO HAD A VISUAL INDICATION OF DECLINING OIL PRESSURE. CREW SHUTDOWN NR 1 ENGINE AND DIVERTED TO AN ALTERNATE AIRPORT. CREW DID NOT DECLARE AN EMERGENCY AND LANDED SAFELY WITHOUT FURTHER INCIDENT. MAINTENANCE TROUBLESHOOTING FOUND THAT THE AC GENERATOR ATTACH STUDS HAD PULLED THROUGH THE ADAPTOR MOUNTING PLATE CAUSING THE AC GENERATOR TO BECOME LOOSE AND LEAK OIL. MOUNTING PLATE AND AC GENERATOR WERE REPLACED. ENGINE WAS SERVICED WITH OIL, FUNCTION AND LEAK CHECKS COMPLETED WITH NO FURTHER FAULTS FOUND. (TC NR 20070911005)

CA071016008	DHAV	PWA	ADAPTER	LEAKING
9/6/2007	DHC8102	PW120A		GEARBOX

(CAN) AFTER TAKEOFF ENGINE OIL PRESSURE WAS LOST AND THE ENGINE WAS SHUT DOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED A LEAKING GENERATOR MOUNTING PAD ADAPTER. (TC NR 20071016008)

CA071003006	DHAV	PWA	MOUNT	CRACKED
10/2/2007	DHC8102	PW120A	72760059101	ACTUATOR

(CAN) DURING RIGGING OF LOWER RUDDER ACTUATOR SPRING STRUT, NOTICED ACTUATOR ADAPTOR FLEXING. ADAPTOR FOUND TO BE CRACKED FROM OUTER FLANGE HORIZONTALLY ACROSS RADIUS TO INNER FLANGE. ADAPTOR REPLACED. (TC NR 20071003006)

CA071016001	DHAV	PWA	TURBINE BLADES	FAILED
8/31/2007	DHC8103	PW121		ENGINE

(CAN) FOLLOWING TAKEOFF, THE ENGINE EMITTED A LOUD NOISE AND WAS SHUT DOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED FRACTURED POWER TURBINE BLADES. ASSOCIATED FRACTURE OF THE EXHAUST DUCT CLAMP RESULTED IN EXHAUST IMPINGING ON THE LANDING GEAR STRUT IN THE AIRCRAFT WHEELWELL, TRIGGERING A FIRE WARNING INDICATION. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20071016001)

CA071003012	DHAV	PWA	ENGINE	SMOKE
8/8/2007	DHC8106	PW121		

(CAN) FOLLOWING TAKEOFF OIL ODOR AND SMOKE WERE EVIDENT IN THE CABIN. THE ENGINE WAS SHUTDOWN IN FLIGHT.

CA070907005	DHAV		HINGE FITTING	MIGRATED
9/7/2007	DHC8301		85740337105106	AILERON

(CAN) THE BEARINGS ON THE AILERON HINGE FITTINGS LOCATED AT YW515.19 WERE FOUND TO BE MIGRATED.

IT WAS FOUND THAT THE HINGE FITTING P/N'S 85740337-105/-106 WERE MANUFACTURED INCORRECTLY SINCE THE DISTANCE BETWEEN THE TWO LUG FACES (0.850 INCH NOMINAL) MEASURES 0.970 INCH. (TC NR 20070907005)

CA070903001	DHAV	PWA	ACTUATOR	MALFUNCTIONED
9/2/2007	DHC8301	PW123	8400105	MLG

(CAN) ON DEPARTURE THE LANDING GEAR RETRACTED NORMALLY. APPROXIMATELY 20 SECONDS LATER, THE NOSE GEAR CYCLED UNSAFE AND THEN RETRACTED. APPROXIMATIVE 10 SEC. LATER IT OCCURRED AGAIN BUT THIS TIME DID NOT RETRACT. FLIGHT CREW CYCLED GEAR DOWN MANUALLY IAW QRH BOOK, RECEIVED 3 GREEN LIGHTS (DOORS CLOSED) AND WHEN SELECTED GEAR UP, THE GEAR RETRACTED NORMALLY AND LOCKED. ON LANDING AT DESTINATION, LANDING GEAR EXTENDED NORMALLY AND AIRCRAFT LANDED NORMALLY. MAINTENANCE REPLACED THE NLG DRAG STRUT ACTUATOR. (TC NR 20070903001)

CA071002002	DHAV	PWA	CHECK VALVE	CRACKED
10/2/2007	DHC8301	PW123	DSC1896	NR 2 HYD SYS

(CAN) AN AIRCRAFT EXPERIENCED A LOSS OF HYDRAULIC SYSTEM NR 2 DURING TAKEOFF. FLIGHT ABORTED. ALTERNATE LDG EXTENSION USED. MAINTENANCE FOUND SPU NR 2 CHECK VALVE WITH A CIRCUMFERENTIAL CRACK ON ITS BODY. (TC NR 20071002002)

CA070919003	DHAV	PWA	PROBE	FAULTED
9/16/2007	DHC8311	PW123	311090801	NR 2 TORQUE

(CAN) ON FIRST START OF THE DAY, THE NR 1 ENGINE OVERTORQUED TO AN UNDETERMINED VALUE. TORQUE WAS SEEN TO BE DECREASING THROUGH 70 PERCENT. IT WENT BACK TO 30 PERCENT AND THEN STARTED TO ACCELERATE AGAIN. ENGINE WAS SHUTDOWN AT 50 PERCENT TORQUE. FDR DOWNLOADED AND READ MAX TQ EXPERIENCED ON FDR READING IS 69 PERCENTS. TROUBLESHOOTING FOUND THE NR 2 TORQUE PROBE TO BE AT FAULT. TORQUE PROBE REPLACED ON NR1 ENGINE. GROUND RUNS COMPLETED, CHECKED SERVICEABLE.

CA070918003	DHAV	PWA	SEAL	LEAKING
9/17/2007	DHC8311	PW123	8173881	PROP BLADE

(CAN) AFTER FLIGHT, OIL LEAK NOTED FROM NR 2 PROP LEAK TRACED TO NR 2 BLADE SEAL. NR 2 SEAL REPLACED. ABRASION MARKS NOTED ON SEALING SURFACE. (TC NR 20070918003)

CA071010001	DHAV	PWA	CONTROL VALVE	OBSTRUCTED
10/5/2007	DHC8315	PW123	1321536250	FUEL SYSTEM

(CAN) DURING TEST FLIGHT, RT AUX TO MAIN FUEL TRANSFER SYSTEM STOPPED TRANSFERRING. BOLT FOUND IN LEVEL CONTROL VALVE CAUSING VALVE TO STOP TRANSFER SYSTEM. BOLT REMOVED, SYSTEM FUNCTIONED NORMALLY. SAME SNAG REPORTED DURING CUSTOMER ACCEPTANCE FLIGHTS AT MFG. THIS F.O.D. HELD THE VALVE CLOSED INTERMITTENTLY. (TC NR 20071010001)

CA070927005	DIAMON	CONT	GEAR	LOOSE
9/26/2007	DA20C1	IO240B	36066	MAGNETO

(CAN) FOLLOWING A 50HR OIL CHANGE, IT WAS NOTED THE AC WAS VERY DIFFICULT TO START TO CARRY OUT THE REQUIRED LEAK CHECK. TROUBLESHOOTING REVEALED A DEFECTIVE MAGNETO. WHEN THE MAG WAS REMOVED IT WAS NOTED THAT THE DRIVE GEAR P/N 36066 WAS LOOSE ON THE DRIVE GEAR SUPPORT CASTING (P/N N/A). UPON REMOVAL OF THE NUT P/N M3019 IT WAS NOTED THAT A AN960-616L WASHER WAS NEXT TO THE GEAR, AND BEHIND THE LARGE P/N M3172 WASHER. THIS INSTALLATION SEQUENCE WOULD NOT ALLOW FOR SUFFICIENT CLAMP UP OF THE P/N M3172 WASHER NEXT TO THE P/N 36066 DRIVE GEAR, AND OVER TIME WOULD LEAD TO THE LOOSENESS ENCOUNTERED. THE MAGNETO WAS REPLACED AND THE WASHER INSTALLATION REVERSED, WITH THE AN 960-616L WASHER PLACED NEXT TO THE NUT. THE GEAR WAS FOUND TO BE VERY SECURE, THE MAGNETO WAS REINSTALLED AND THE ENGINE STARTED EASILY. NOTE: PREVIOUS INSPECTION TIMING CHECKS FOUND LARGE LAG DRIFTS IN THE LT MAG TIMING. (TC NR 20070927005)

CA070927006	DIAMON	CONT	GEAR	LOOSE
9/26/2007	DA20C1	IO240B	36066	MAGNETO

(CAN) THE AIRCRAFT WAS HARD TO START WITH NO APPARENT REASON. AFTER TROUBLESHOOTING, A HARD STARTING PROBLEM ON ONE OTHER A/C IN THE FLEET AND FINDING A LOOSE DRIVE GEAR ON THE LT MAG IT WAS DECIDED TO CHECK THIS A/C FOR A SIMILAR PROBLEM. THE LT MAG WAS REMOVED AND IT WAS NOTED THAT THE MAG DRIVE GEAR WAS LOOSE AS WAS THE CASE WITH THE OTHER A/C. (REFER: SDR 9/27/07 C-FNTJ) THE GEAR P/N 36066 AND WASHER P/N M3172 WERE REMOVED AND INSPECTED. AS WITH THE OTHER A/C IT WAS NOTED THAT A AN960-616L WASHER HAD BEEN PLACED ON THE BACKSIDE OF THE M3172 WASHER AND NEXT TO THE 36066 GEAR, RESULTING IN INSUFFICIENT CLAMP UP OF THE GEAR. THE GEAR WAS REASSEMBLED TO THE MAG WITH THE WASHER POSITIONS REVERSED AND THE NUT RETORQUED AND SAFETIED. THE GEAR WAS FOUND TO BE VERY SECURE. THE MAGNETO WAS REINSTALLED. THE ENGINE STARTED NORMALLY. PREVIOUS INSPECTION TIMING CHECKS FOUND LARGE LAG DRIFTS IN THE LT MAG TIMING. (TC NR 20070927006)

CA071018001	DIAMON	CONT		ENGINE	STALLED
10/16/2007	DA20C1	IO240B		IO240B	

(CAN) DURING POWER ON STALL THE PROPELLER CAME TO A FULL STOP, THROTTLE WAS AT 1700 RPM AND THE NOSE POINTED UP FOR A STALL CONFIGURATION AND ON POWER APPLICATION THE ENGINE CAME TO A FULL STOP. THE AIRCRAFT WAS THEN POINTED NOSE DOWN, THE PROPELLER STARTED WIND MILLING AND ON THROTTLE APPLICATION THE ENGINE RE-STARTED. A/C RETURNED TO BASE WITH NO PROBLEM. THIS WAS A NEW RETROFIT EQUIPPED A/C WITH A COMPLETE -54 ENGINE CONFIGURATION. MFG WERE INFORMED AND THE COMPONENTS ARE SCHEDULED TO BE TESTED AND REMOVED BY MFG AT THE END OF THIS WEEK. (TC NR 20071018001)

FA20071025001	DIAMON	CONT	SLICK	GEAR	BROKEN
10/25/2007	DA20C1	IO240B	4309	655845	MAGNETO

IN CRUISE, NOTICED DROP IN OIL PRESSURE BELOW YELLOW ARC NOT INDICATED DURING RUN UP & TAKEOFF. MADE PRECAUTIONARY RETURN TO HOME BASE & LANDED APPROX 7-8 MINUTES AFTER NOTICING DROP IN OIL PRESSURE. OIL PRESSURE INDICATED ZERO PSI DURING TAXI BACK TO HANGER. PRELIMINARY INSP & MAINT PERFORMED. REMOVED OIL FILTER, CUT OPEN AND INSPECTION SATISFACTORY, NO METAL PRESENT. REPLACED OIL PRESSURE TRANSDUCER WITH NEW AND RAN ENGINE. LOW OIL PRESSURE STILL INDICATED. CHECKED OIL PRESSURE WITH CALIBRATED SHOP GAGE. LOW OIL PRESSURE INDICATED. REMOVED AND CHECKED OIL PRESSURE RELIEF VALVE, FOUND FERROUS METAL CHUNK APPROX SIZE .060 DIA AT VALVE SEAT. RAN ENGINE & OIL PRESSURE IN INDICATED IN THE GREEN ARC. INSPECTED FOUND METAL PIECE & CONSULTED WITH MFG REP. DETERMINED CAUSE FOR FURTHER INSPECTION & GROUNDED. REMOVED STARTER, NORMAL WEAR ON GEAR TEETH NO DISCREPANCIES NOTED. REMOVED LT AND RT MAGNETOS. RT MAGNETO DRIVE GEAR HAD BROKEN & MISSING TOOTH WITH SOME GEAR TEETH EXHIBITING SEVERE PITTING. LT MAGNETO HAD MASHED & ROLLED METAL ON GEAR TEETH & SOME TEETH EXHIBITED SEVERE PITTING. REMOVED ENGINE & OIL SUMP & ACCESSORY CASE HOUSING. DISASSEMBLED OIL PUMP. OIL PUMP GEARS INSPECTION SATISFACTORY. CAM GEAR EXHIBITED DAMAGED GEAR TEETH. CLEANED OIL SUMP & RECOVERED MISSING MAGNETO GEAR TOOTH & SEVERAL OTHER PIECES OF FERROUS METAL. LAST 500 HR INSPECTION OF MAGNETOS DID NOT INDICATE TOOTH DISTRESS OF THESE GEARS.

2007FA0000919	DIAMON	LYC		CONTROL ARM	BROKEN
9/13/2007	DA40	O360A4M			CARB HEAT

CARBURETOR HEAT CONTROL ARM BROKE OFF OF CARB AIR BOX CAUSING UNCONTROLLED SELECTION OF CARB HEAT VS RAM (COLD) AIR INTAKE. (K)

2007FA0000947	DIAMON			ACTUATOR	INOPERATIVE
10/3/2007	DA42			X110061	MLG

PILOTS WERE UNABLE TO EXTEND RT MLG WITH THE EMERGENCY EXTENSION HANDLE IN FLIGHT. EMERGENCY SYSTEM OPERATED WITHIN LIMITS ON THE GROUND. UPON REMOVAL, THE ACTUATOR WAS FOUND TO BE VERY DIFFICULT TO MOVE. (K)

CA070912009	DORNER			RMU	FAILED
9/10/2007	DO328100			7013270936	

(CAN) ENROUTE RMU NR1 FAIL CAS MESSAGE, QRH PROCEDURES COMPLETED, THE ODOR OF ELECTRICAL FIRE/SMOKE WAS DETECTED IN THE COCKPIT. DECLARED AN EMERGENCY AND INITIATED ODOR OF SMOKE IN

COCKPIT DRILL. PROCEEDED WITHOUT FURTHER INCIDENT. PAX DEPLANED AT GATE, NORMALLY, FIRE DEPARTMENT INVESTIGATED FOR FURTHER DAMAGE. MAINTENANCE DETERMINED THAT THE RMU HAD SHORTED INTERNALLY AND CAUSED A SMOKE ODOR IN THE COCKPIT. THE NR 1 RMU WAS DISCONNECTED AND THE CIRCUIT BREAKER PULLED AND COLLERED. THE A/C WAS FERRY FLOWN, THE FOLLOWING DAY, A REPLACEMENT RMU IS IN TRANSIT. (TC NR 20070912009)

CA071001012	EMB	ALLSN	ENGINE	MAKING METAL
9/28/2007	EMB135ER	AE3007A		NR 1

(CAN) N13992/145284 ENGINE NR 1 (A1P, CAE311496) EXPERIENCED AN UNCOMMANDED INFLIGHT SHUTDOWN ON APPROACH TO EWR FROM MEM, FLIGHT 2144, ON 27 SEP. THE CREW OBSERVED AN ENG 1 OUT MESSAGE ON THE EICAS DURING FINAL APPROACH AND ATTEMPTED AN UNSUCCESSFUL RESTART. UPON SAFE LANDING, MAJOR AMOUNTS OF METAL CHIPS AND FLAKES WERE FOUND ON BOTH OIL TANK MCDS WITH LIGHT AMOUNTS OF DEBRIS ON REMAINING MCDS. ENGINE ALLOCATED TO ROLLS-ROYCE CANADA FOR INVESTIGATION, FURTHER DETAIL WILL BE SUBMITTED FOLLOWING ENGINE TEARDOWN (TC NR 20071001012)

CA070824001	EMB	GE	ACTUATOR	MALFUNCTIONED
8/3/2007	ERJ190100IGW	CF34*	1703911	TE FLAPS

(CAN) ON APPROACH, SLAT FAIL AND COUNTLESS MESSAGES ON EICAS ON INITIAL SELECTION. SLAT 0, FLAP 1. FOUND LT NR 4 ACTUATOR RT NR 4 ACTUATOR AND RT NR 7 ACTUATOR TRIPPED. ACTUATORS CHANGED IAW AMM 27-81-01. OPERATION CHK C/O, FOUND SYS SERVICEABLE. OTHER P/NS AFFECTED: 1703909, S/N 216 1703911, S/N 229 (TC NR 20070824001)

CA070913009	EMB	GE	MOUNT	DAMAGED
9/13/2007	ERJ190100IGW	CF34*		ENGINE

(CAN) AFT ENGINE MOUNT. THE REVERSER THERMAL BLANKETS CONTACT THE MOUNT AND WITH ENGINE VIBRATION, CAUSE THE DAMAGE. THE MOUNT INSTALLED ON THE SPARE ENGINE SHOWED THE SAME TYPE OF DAMAGE. THE WEAR DAMAGE WAS APPROXIMATELY .080 IN TO .210 IN IN WIDTH X.600 IN LONG WITH A DEPTH OF .008 IN. THE DAMAGE WAS BEYOND LIMIT IAW THE CF34-10E ENGINE MANUAL. AT THE PRESENT TIME NO DAMAGE LIMIT IS ALLOWED. GE IS PRESENTLY REVISING THE SITUATION. THE ROOT CAUSE HAS BEEN DETERMINED THAT THE THERMAL BLANKETS HAD NO CLEARANCE WHEN THE ENGINE COWL IS CLOSED. MFG DIDN'T DETERMINE A SOLUTION YET. (TC NR 20070913009)

CA070914012	FOKKER	PWA	ENGINE	MAKING METAL
7/23/2007	F27MK50	PW125B		

(CAN) THE CREW OBSERVED SMOKE IN THE CABIN AND ENGINE OIL PRESSURE FLUCTUATIONS IN FLIGHT. THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED METAL DEBRIS IN THE TURBOMACHINERY OIL SYSTEM. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20070914012)

CA071003010	FOKKER	PWA	ENGINE	MAKING METAL
8/3/2007	F27MK50	PW125B		

(CAN) DURING DESCENT OIL ODOR AND SMOKE WERE EVIDENT IN THE CABIN. ENGINE BLEED WAS SELECTED OFF. SUBSEQUENT INSPECTION REVEALED METAL PARTICLES IN THE ENGINE OIL.

2007FA0000951	FOUND	LYC	BAFFLE	BROKEN
7/13/2007	FBA2C1	TIO540*	56G23399	OIL SUMP

OIL BAFFLE IN SUMP RUBBING ON BOTTOM OF SUMP. 4 OUT OF 6 HOLES CRACKED OUT AROUND MOUNTING AREA. 2 HOLES COMPLETELY WORN THROUGH AND STILL HAD PARTS OF BAFFLE UNDER WASHER AND MOUNTING SCREW. (K)

CA071003007	FOUND	LYC	BAFFLE	FAILED
8/10/2007	FBA2C2	IO540L1A5	LW13383	OIL SUMP

(CAN) ENGINE OIL SUMP BAFFLE CONTACTING BOTTOM OF OIL SUMP. REPLACED OIL SUMP WITH A NEW ONE FROM MFG. INSPECTION ACCOMPLISHED BECAUSE OF REQUEST FROM CUSTOMER WHO SUBMITTED FAA SDR

NR 2007FA0000760 AND 1. (TC NR 20071003007)

CA070827009	FRCHLD	GARRTT	ACTUATOR	STIFF
8/8/2007	22C7A	TPE331*	2776016105	LT AILERONS

(CAN) PILOT COMPLAINED ABOUT AILERON STIFF TO MOVE AND WOULD OCCASIONALLY STICK IN THE FULL RT POSITION. UPON MAINTENANCE TROUBLESHOOTING IT WAS NOTICED THAT THE LT AILERON TRIM ACTUATOR THAT WAS RECENTLY REPLACED, APPROXIMATELY 80 HOURS PREVIOUS, WAS AGAIN STIFF TO OPERATE. IT WOULD ALSO STICK IN THE FULL EXTENDED POSITION. TRIM ACTUATOR WAS REPLACED AND AIRCRAFT RETURNED TO SERVICE. TRIM ACTUATOR WAS PASSED INTO QA WHO SENT TRIM ACTUATOR FOR FURTHER INVESTIGATION.

CA070827008	FRCHLD	GARRTT	WIRE	DAMAGED
8/23/2007	SA227DC	TPE33112UHR		CONNECTOR

(CAN) AFTER AIRCRAFT LANDED AND WAS TAXING THE SPEED LEVERS WERE PULLED BACK INTO LOW IDLE THE RT ENGINE OIL LIGHT CAME ON AT WHICH POINT THE CREW REALIZED THE RT ENGINE HAD SHUT ITSELF DOWN. CREW CONTACTED MAINTENANCE. MAINTENANCE INVESTIGATED AND REPAIRED WIRING ON CONNECTOR PLUG AND RAN AIRCRAFT WHICH THEY WERE NOT ABLE TO DUPLICATE ENGINE SHUT DOWN. TEST FLIGHT WAS COMPLETED AND UPON LANDING ENGINE SHUTDOWN AGAIN WHEN SPEED LEVERS WERE BROUGHT BACK INTO LOW IDLE. FUEL SHUT OFF WAS REPLACED AT THIS TIME AND ENGINE SHUTDOWN COULD NOT BE DUPLICATED. AIRCRAFT RETURNED TO SERVICE. (TC NR 20070827008)

CA071005004	FRCHLD	GARRTT	BOLT	MISSING
10/2/2007	SA227DC	TPE33112UHR	AN17722	RT MLG

(CAN) PILOT CALLED AND REPORTED THAT THE BOLT WAS MISSING FROM THE RT MLG TORQUE KNEE. MAINTENANCE INSPECTED TORQUE KNEE ASSEMBLY AND NO SECONDARY DAMAGE WAS NOTED. NEW BOLT WAS INSTALLED AND SECURED AND AIRCRAFT RETURNED OUT OF SERVICE. (TC NR 20071005004)

CA070910008	FRCHLD	GARRTT	FCU	MALFUNCTIONED
8/27/2007	SA227DC	TPE33112UHR	8978012	RT ENGINE

(CAN) AFTER AIRCRAFT LANDED AND SPEED LEVERS WERE PULLED BACK INTO LOW IDLE THE RT ENGINE LIGHT CAME ON AT WHICH POINT THE CREW REALIZED THAT THE ENGINE HAD SHUTDOWN. THE FCU AND FUEL PUMP WERE REPLACED. AIRCRAFT CHECKED OUT SERVICIBLE AND NO FURTHER REPORTED INCIDENTS. (TC NR 20070910008)

CA070910009	GRUMAN	WRIGHT	BRAKE	FAILED
9/7/2007	TS2ACALFORST	982C9HE2	147515	MLG

(CAN) ON LANDING RT BRAKE FAILED. RT BRAKE FOUND TO BE LEAKING A LARGE QUANTITY OF HYDRAULIC FLUID. BRAKE WAS REPLACED. (TC NR 20070910009)

PAI52007S4751	GULSTM		LINE	RUPTURED
10/24/2007	690B		T610488109	HYD SYSTEM

HYDRAULIC PRESSURE FLEX LINE AT RT ENGINE DRIVEN HYDRAULIC PUMP RUPTURED IN FLIGHT CAUSING LOSS OF HYDRAULIC FLUID.

2007FA0000958	GULSTM	RROYCE	REGULATOR	FAILED
9/13/2007	G1159A	SPEY5118	CASC216	FUEL FLOW

PILOTS REPORT FELT HEAVY VIBRATION FOR 3 TO 4 SECONDS, THEN HEARD A LOUD BANG FOLLOWED BY LT ENGINE SPOOLING DOWN. AIRCRAFT SAFELY LANDED AT AIRPORT. CONTACTED MFG, WHO DISPATCHED A RESPONSE CREW TO AIRPORT. FOUND THAT THE FUEL FLOW REGULATOR HAD FAILED IN FLIGHT. (K)

CA070907002	GULSTM	GARRTT	HOSE	CRACKED
9/6/2007	GULFSTREAMGV	TFE73140	LPMILH55934	STATIC SYS

(CAN) DURING PITOT STATIC CHECKS IT WAS FOUND THE SYSTEM WAS SLIGHTLY LEAKING. FURTHER VISUAL INSPECTION FOUND THE STATIC HOSE GOING TO THE ADC WAS WEATHER CRACKED AND LEAKING NEAR THE

FITTING. THE HOSE WAS MFG THE FIRST QUARTER OF 2001.(1Q01).(25W752005-063H) PREVIOUSLY G100 C-FHRL SN NR 150 HAD 3 HOSES REPLACED FOR THE SAME REASON AND BY ERROR AN SDR WAS NOT SUBMITTED. ALSO 1 OF THE SAME BASE NR HOSES WAS REPLACED ON C-FHNS G100 SN NR 156. ASTRA SPX (G100) NR 087 C-FRJZ WERE LOOKED AT AND THE HOSES WERE FINE. THIS SEAMS SOMEWHAT PREMATURE AGING FOR THESE HOSES. THE HOSES ARE LOCATED IN THE NOSE COMPARTMENT AREA AND THERE ARE 2 IAW ADC HAVING THE SAME BASE NR AND DIFFERENT DASH NRS. (TC NR 20070907002)

CA071015004	HUGHES	ALLSN	RROYCE	SPLINE	FAILED
10/12/2007	369D	250C20			GOVERNOR

(CAN) PILOT COMPLAINED OF EXCESSIVE (ROTOR) DROOPING. CHECKED AIRCRAFT RIGGING AND LOOSE ENGINE AIR LINES. REMOVED GOVERNOR FOR BLEED CLEANING AND THE DRIVE ASSY ON THE GOVERNOR WAS COMPLETELY DISCONNECTED FROM THE PT GOVERNOR. COMPONENT WAS SHIPPED FOR FURTHER ANALYSIS. (TC NR 20071015004)

CA070927007	HUGHES	ALLSN	ALLSN	STATOR VANE	FAILED
9/5/2007	369D	250C20B			COMPRESSOR

(CAN) NR 6 STATOR VANE FAILURE (1 VANE ONLY). NO EROSION TO NEIGHBORING VANES OR PLASTIC COATING. FOUND BY HELICOPTER OPERATOR. (TC NR 20070927007)

CA070928001	HUGHES	ALLSN	ALLSN	STATOR VANE	FAILED
8/31/2007	369D	250C20B		23057142	COMPRESSOR

(CAN) PILOT REPORTS UNUSUAL NOISE COMING FROM AIRCRAFT DURING GROUND RUN. AIRCRAFT IS GROUNDED UNTIL ENGINEER INVESTIGATES THE UNUSUAL NOISE. NOISE IS DESCRIBED AS A (KNOCKING NOISE COMING FROM THE ENGINE) AND TOT HOTTER THAN USUAL. DURING THE GROUND RUN THE EXACT SYMPTOMS WERE DUPLICATED. THE ENGINEER DISASSEMBLED THE ENGINE TO FIND THE 6TH AXIAL ROW OF STATORS IN THE COMPRESSOR HAD A MISSING BLADE. BOTH COMPRESSOR AND TURBINE WERE SENT INTO THE ENGINE SHOP FOR REPAIR. ENGINE REPAIR SHOP ALSO FILED SDR REPORT. (TC NR 20070928001)

CA071011007	HWKSLY	GARRTT		ATTACH FITTING	CRACKED
9/14/2007	HS125600A	TFE7313R		25FN1609	NLG

(CAN) AFTER REPAINT OF A/C INSPECTION REVEALED A CRACK ON SIDE OF ATTACH POINT. LDG WAS PULLED TO REPLACE ATTACH POINT BRACKET AND ATTACH POINT BRACKET BOLTS. THESE BOLTS WERE SHOWING WEAR MARKS ON THE SHANK, SUGGESTING THE NUTS WERE THREAD BOUND, INDICATING NOT ENOUGH WASHERS WERE USED. THE LDG SIDEWALL WAS ALSO SHOWING WEAR DUE TO THE BRACKET VIBRATING. WITH ALL THESE FINDING IT WAS DECIDED TO CHECK BOLT HOLE CLEARANCE ON THE LDG SIDEWALL, ALL BOLT HOLES WERE ELONGATED. DUE TO INSUFFICIENT WASHER BUILD UP THE TORQUES WERE INACCURATE CAUSING THE BRACKET TO SHIFT WITH EACH LDG CYCLE. THE CRACKS FOUND ON BRACKET COULD BE AN INDICATION OF EXCESSIVE SIDE LOAD POSSIBLY DURING CROSSWIND LANDING, INCORRECT TAXI PROCEDURES OR TOWING PROCEDURES. (TC NR 20071011007)

2007FA0000976	ISRAEL	ALIDSG		ROTOR	SEPARATED
10/29/2007	ASTRASPX	TFE7313AR		30606266	LPT3

IAW SERVICE BULLETIN TFE731-72-5175. BLADE SEPARATION ON ONE LPT3 BLADE AS LISTED IN TABLE 1 OF S/B 72-5175.

2007FA0000959	LEAR	GARRTT		PUMP	FAILED
10/2/2007	35LEAR	TFE73122B		30708507	RT ENGINE FUEL

RT ENGINE FAILED ON TAKEOFF ROLL JUST BEFORE 80 KNTS IAS. AIRCRAFT WAS STILL ON GROUND. FUEL PUMP, FAILED TO PUMP FUEL. (K)

CA070918002	LKHEED	ALLSN		PANEL	CRACKED
9/16/2007	188A	501D13		8398011	LT WING

(CAN) AFTER A (WATER - FIRE SUPPRESSION) BOMBING MISSION, FUEL WAS FOUND LEAKING FROM A CRACK THAT WAS COMING FROM AN OLD REPAIR. THE A/C WAS DOWN LOADED WITH WEIGHT AND THE A/C WAS

FERRIED TO THE COMPANY MAINTENANCE STATION. (TC NR 20070918002)

2007FA0000960	MAULE	LYC	BRAKE	INOPERATIVE
9/6/2007	MX7180A	O360*		PARK SYS

PARK BRAKE CABLE HANGING ON 90 DEGREE CABIN FITTING COMING THROUGH FIREWALL. AIRCRAFT BRAKES LOCKED ON WHEN LANDING. DISCONNECTED PARK BRAKE CABLE AND SAFETY WIRED BRAKE LOCK LEVERS ON MASTER CYLINDER IN NEUTRAL/OFF POSITION PLACARD PANEL MADE LOG BOOK ENTRY. (K)

CA070914002	PIAGIO	PWA	TURBINE BLADES	FRACTURED
7/13/2007	P180	PT6A66		ENGINE

(CAN) THE ENGINE SHUTDOWN IN FLIGHT ON APPROACH. SUBSEQUENT INSPECTION REVEALED FRACTURED POWER TURBINE BLADES. MFG WILL INVESTIGATE THE INCIDENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20070914002)

CA070914001	PILATS	PWA	ALTIMETER	MALFUNCTIONED
9/12/2007	PC1245	PT6A67B	066030620010	

(CAN) DURING APPROACH THE PILOTS ENCODING ALTIMETER WAS STICKING AND THE FLAG DISPLAYED. THE ALTIMETER WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE (TC NR 20070914001)

CA071016018	PILATS	PWA	TURBINE BLADES	FRACTURED
9/27/2007	PC6	PT6A27		ENGINE

(CAN) DURING AIRCRAFT STALL RECOVERY TRAINING, THE ENGINE FLAMED OUT. SUBSEQUENT RE-LIGHT ATTEMPTS WERE UNSUCCESSFUL. INSPECTION REVEALED FRACTURED COMPRESSOR TURBINE BLADES. (TC NR 20071016018)

CA070917006	PIPER	LYC	THROTTLE CABLE	FAILED
9/12/2007	PA12	O320A2B	12694002	ENGINE

(CAN) AIRCRAFT ON FLOATS. PILOT DEPARTED RIVER AND WHEN THE PILOT PULLED THE ENGINE BACK THE RPM WOULD NOT RETARD. PILOT TURNED ONE MAG OFF AND HELD THE AIRCRAFT NOSE UP TO PREVENT ENGINE OVER-SPEED AND RETURNED TO STARTING POINT. PILOT PULLED MIXTURE WHEN HE KNEW HE COULD MAKE THE LANDING SUCCESSFULLY. THROTTLE CABLE REPLACED WITH NEW PART. (TC NR 20070917006)

2007FA0000962	PIPER	LYC	BUNGEE	FAILED
10/18/2007	PA28140	O320*	3526202	NLG STEERING

SHORTLY AFTER TAKEOFF, AIRCRAFT WENT INTO SHARP RT TURN. THE PILOT, BY USING FULL OPPOSITE RUDDER AND AVAILABLE RUDDER TRIM, WAS ABLE TO LAND AIRCRAFT SUCCESSFULLY. INSPECTION DETERMINED THAT THE RT NOSE GEAR STEERING BUNGEE SPRING RETAINER HAD DEPARTED AND THE SPRING WAS EXTENDED FROM THE BARREL ASSY. THE TURN WAS ALSO EXAGGERATED BY THE LARGE FIN USED ON THE NOSE WHEEL FAIRING. AS IT IS DIFFICULT TO EXAMINE THE RETAINER DUE TO THE LOCATION OF THE BUNGEE ASSY UNDER THE EXHAUST SYSTEM, IT CAN NOT BE DETERMINED IF THE BACK SIDE OF THE RETAINER IS BEING WORN OR CORRODED. THIS PART IS ONLY HELD IN PLACE BY A FEW TWISTS OF SAFETY WIRE. IT IS SUGGESTED THAT THE MFG LOOK AT THIS AS A MAJOR SAFETY ISSUE AND EITHER RETROFIT A BETTER RETAINER OR ADD AN ADDITIONAL RETAINER IN CASE OF FAILURE OF THE ORIGINAL PART. (K)

2007FA0000953	PIPER	LYC	AMERIKING	BATTERY	DAMAGED
10/11/2007	PA28151	O320*			ELT

FOUND ELT BATTERY CASE BULGED ON BOTTOM. FOUND ALL CONTACTS WITHIN BATTERY COMPARTMENT LOOSE DUE TO HIGH TEMPERATURE (COULD SEE WHERE PLASTIC HAD MELTED) COULD NOT DETERMINE WHAT CAUSED THE SHORT. REPLACED ELT. (K)

2007FA0000952	PIPER	LYC	CYLINDER	FAILED
10/10/2007	PA28161	O320*	AEL85099	NR 4

CYLINDER HAD FAILURE, SEPARATION FROM BARREL AT 733 HRS, NOT INCORPORATED IN AD2006-12-7. (K)

[CA070919001](#) PIPER CONT TUBE BROKEN
9/17/2007 PA28R201T TSIO360F 641098 FUEL DISCHARGE
(CAN) FUEL DISCHARGE TUBE BROKE, ENGINE LOST POWER. SUSPECT MID-TUBE CLIP P/N: 626477-2 MAY HAVE FAILED FIRST. (TC NR 20070919001)

[CA070924001](#) PIPER LYC PUMP WEAK
9/24/2007 PA31 TIO540A2C RG9080JAM FUEL SYSTEM
(CAN) RT ENGINE DRIVEN PUMP WEAK. (TC NR 20070924001)

[CA070928003](#) PIPER LYC CONTROLLER LEAKING
9/21/2007 PA31350 LTIO540J2BD LW16840 ENGINE
(CAN) DURING TAKEOFF A VIBRATION AND LOW EGT WAS FELT ON THE LT ENGINE. TAKEOFF POWER WAS STILL ACHIEVED FOR THE FLIGHT. THE AIRCRAFT RETURNED TO LAND. BOTH THE DENSITY AND DIFFERENTIAL CONTROLLERS WERE FOUND TO HAVE OIL LEAKS. THE OIL WOULD CONTAMINATE THE AIR PASSAGES IN THE FCU AND CAUSE THE LOSS OF POWER AND VIBRATION. THE CONTROLLERS WERE REPLACED AND RUNUPS COMPLETED WITH NO FURTHER PROBLEMS. (TC NR 20070928003)

[2007FA0000961](#) PIPER PWA HEATER LEAKING
7/18/2007 PA31T PT6A60A 1386725 COCKPIT
DURING OPERATION OF COMBUSTION HEATER, THE PILOT NOTED JET FUEL ODOR AND SMOKE IN CABIN. HEATER OPERATION WAS TERMINATED, CABIN WAS VENTED. EMERGENCY WAS DECLARED AND AIRCRAFT LANDED AT NEAREST AIRPORT WITHOUT INCIDENT. UPON REMOVAL, A FUEL LEAK WAS NOTED AT COMBUSTION HEAD AND FUEL SOLENOID AREA. HEATER WAS REPLACED WITH A SERVICEABLE UNIT. (K)

[2007FA0000933](#) PIPER LYC SHUNT BLOWN
10/19/2007 PA32R301T TIO540* MS915861 MASTER BATTERY
COMPLETE ELECTRICAL FAILURE. WHEN BATTERY MASTER SWITCH WAS TURNED ON, NO POWER REACHED MAIN BUSS. FOUND BATTERY AMMETER SHUNT BURNED THROUGH. BATTERY AMMETER SHUNT INSTALLED WAS 30 AMP VALUE. (P/N MS91586-1) BATTERY AMMETER SHUNT SHOULD BE 100 AMP VALUE. NO RECORD OF BATTERY AMMETER SHUNT BEING REPLACED SINCE AIRCRAFT WAS MANUFACTURED. INSTALLED CORRECT AMP VALUE SHUNT AND ELECTRICAL SYSTEM OPS CHECKED GOOD. PIPER P/N 486-684 (MS91586-6) RECOMMEND THAT ALL SHUNTS BE CHECKED FOR ALL THIS MODEL AIRCRAFT. (ALTERNATOR AMMETER SHUNT IS SAME P/N)

[CA070815001](#) PIPER LYC PIPER SPRING BROKEN
8/13/2007 PA44180 O360A1H 7872322 487495 DOWNLOCK SPRING
(CAN) ON A LANDING APPROACH, THE PILOT NOTICED THAT THE LT (GREEN) GEAR DOWN AND LOCKED LIGHT WAS NOT ILLUMINATED. AS THE AIRCRAFT WAS SLOWED DOWN ON FINAL THE (GEAR) UNSAFE LIGHT CAME ON. THE PILOTS ELECTED TO GO AROUND AND INFORMED FLIGHT SERVICES ABOUT THEIR CIRCUMSTANCES AND THE LOCAL FIRE DEPARTMENT WAS INFORMED ALSO. MAINTENANCE WAS NOTIFIED AND SPOKE DIRECTLY TO THE PILOTS. IT WAS LEARNED THAT AN EMERGENCY EXTENSION WAS CARRIED OUT AND THE RESULT WAS THE SAME. IT WAS ALSO ESTABLISHED THAT THE LT MAIN GEAR WAS GOING FULL TRAVEL AND JUST NOT LOCKING DOWN. IT WAS DECIDED TO HAVE THE EMERGENCY EXTENSION KNOB PUSHED BACK INTO ITS NORMAL POSITION AND THE GEAR RETRACTED AND EXTENDED HYDRAULICALLY. IT WAS AT THIS TIME THAT A DECISION TO LAND WAS MADE. THE AIRCRAFT LANDED WITHOUT INCIDENT AND WAS FOLLOWED BY THE FIRE CREW TO THE HANGAR. UPON INVESTIGATION OF THE LT MAIN LANDING GEAR IT WAS FOUND THAT THE DOWNLOCK SPRING WAS BROKEN AT THE UPPER END. THIS SPRING IS WHAT PULLS THE DOWNLOCK HOOK ONTO THE PIN AND PUSHES THE PLUNGER ON THE GEAR INDICATION SWITCH. THE SPRING WAS REPLACED, GEAR RETRACTIONS AND EXTENSIONS WERE CARRIED OUT NORMALLY. THE AIRCRAFT WAS RETURNED TO SERVICE. DURING ROUTINE AND DETAILED LANDING GEAR INSPECTIONS THE SPRING ENDS SHOULD BE CLOSELY INSPECTED. (TC NR 20070815001)

[2007FA0000935](#) PIPER LYC PIN GROOVED
10/18/2007 PA44180 O360E1A6 MAGNETO
STOP PINS GROOVED BEYOND LIMITS.

20073	ROBSIN	LYC	ATTACH BRACKET	CRACKED
10/16/2007	R22BETA	O320*	A3592	T/R PEDAL

TAIL ROTOR PEDALS JAMMED DURING FLARE TO A HOVER. AIRCRAFT LANDED WITHOUT INCIDENT. UPON INSPECTION IT WAS FOUND THAT THE TAIL ROTOR PEDAL BLOCK SUPPORT BRACKET ON THE RT SIDE HAD CRACKED AT THE AFT PEDAL BLOCK ATTACH POINT ALLOWING THE PEDAL BLOCK TO PIVOT DOWN AND JAM THE PEDALS. REPLACED BRACKET WITH NEW.

CA070827015	ROBSIN	LYC	ALTERNATOR	MALFUNCTIONED
8/10/2007	R44	O540F1B5	ALX8521	ENGINE

(CAN) DURING LANDING THE ALTERNATOR LIGHT FAILED TO EXTINGUISH. CHARGING SYSTEM WAS CHECKED AND THE ALTERNATOR WAS THE DEFECTIVE PART. THE ALTERNATOR WAS REPLACED AND NO FURTHER ISSUES WERE NOTED. (TC NR 20070827015)

CA070904001	ROBSIN	LYC	EXHAUST VALVE	WORN
9/2/2007	R44	O540F1B5	LW19001	NR 1 CYLINDER

(CAN) AN INTERMITTENT SLIGHT POWER LOSS WAS INITIALLY MISDIAGNOSED AS A FAULTY GOVERNOR CONTROL BOX. WHEN THE PROBLEM PERSISTED, IT WAS DETERMINED THAT THE EXHAUST VALVE IN THE NR 1 CYLINDER WAS WORN AND HAD A SMALL PIECE MISSING. THE CYLINDER ASSEMBLY IS CURRENTLY BEING REPLACED. (TC NR 20070904001)

CA070827016	ROBSIN	LYC	SERVO	LEAKING
6/26/2007	R44RAVENII	IO540AE1A5	D2121	FLT CONTROL

(CAN) DURING A 50/300 HR INSPECTION, IT WAS NOTED THAT THE AFT SERVO WAS LEAKING. SERVO WAS REPLACED AND NO FURTHER DEFECTS WERE NOTED. (TC NR 20070827016)

CA070827017	ROBSIN	LYC	PUMP	DEFECTIVE
6/26/2007	R44RAVENII	IO540AE1A5	D7431	FUEL SYS

(CAN) DURING A MAINTENANCE INSPECTION A FUNCTION CHECK WAS CARRIED OUT ON THE AUX FUEL PUMP AND SOUNDS BEGAN TO COME FROM THE PUMP WHICH IS NOT PART OF IT'S NORMAL OPERATION. PUMP WAS REPLACED AND NO FURTHER ISSUES WERE NOTED. (TC NR 20070827017)

CA070827012	ROBSIN	LYC	MAGNETO	FAILED
7/29/2007	R44RAVENII	IO540AE1A5		BL600646201

(CAN) DURING START UP THE AIRCRAFT THE RT MAGNETO FAILED. MAGNETO WAS REPLACED AND NO FURTHER ISSUES WERE NOTED. (TC NR 20070827012)

CA070827014	ROBSIN	LYC	TRANSMITTER	ERRATIC
6/26/2007	R44RAVENII	IO540AE1A5	A5501	AUX FUEL CELL

(CAN) DURING A 50 HR INSPECTION IT WAS NOTED THAT THE AUX FUEL TANK INDICATION SYSTEM HAD ERRATIC MOVEMENT. THE SENDER WAS REPLACED, FUEL SYSTEM CALIBRATION WAS CARRIED AND NO FURTHER ISSUES WERE NOTED.

CA070917008	ROBSIN	LYC	MAGNETO	FAILED
8/29/2007	R44RAVENII	IO540AE1A5	BL60064620	RIGHT

(CAN) DURING START UP THE AIRCRAFT THE RT MAGNETO FAILED. MAGNETO WAS REPLACED AND NO FURTHER ISSUES WERE NOTED. (TC NR 20070917008)

CA071004007	ROBSIN	LYC	STARTER	MALFUNCTIONED
9/18/2007	R44RAVENII	IO540AE1A5	14924HTH	ENGINE

(CAN) STARTER WOULD NOT DISENGAGE AFTER START. AFTER SHUTDOWN GEAR HAD TO BE PRYED BACK TO DISENGAGE. (TC NR 20071004007)

CA070914013	URO COP	PWC	LINE	CONTAMINATED
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7/23/2007

EC135P1

PW206C

FUEL SYS P3 AIR

(CAN) ON TAKEOFF ENGINE POWER REDUCED UNCOMMANDED. SUBSEQUENT INSPECTION REVEALED CONTAMINATION / BLOCKAGE OF THE FUEL CONTROL P3 AIR PRESSURE FITTING AT THE NR 8 BEARING CARBON SEAL LOCATION. (TC NR 20070914013)

END OF REPORTS