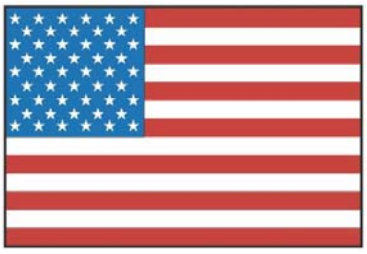
U.S. Department of Transportation
Federal Aviation Administration

AFS-600
Regulatory Support Division

ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



ALERT NUMBER 322

MAY 2005

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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 Mechanical Reliability Report (MRR), 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

AERONCA

Aeronca; 7 AC; Cracked Wing Ribs; ATA 5712

The submitter describes having found a crack in both the left and right wing's number one rib located inboard of the ailerons. These ribs were "...cracked along the radius of the attach tab where the rib is secured to the aft spar. This aircraft was subjected to years of prevailing winds quartering against the trailing edge of the left aileron. No gust locks were utilized. The ribs were repaired and wings recovered. The owner has erected a more suitable shelter." *(No other data accompanied this submission.)*

Part Total Time: unknown.

Aeronca; 11 CC; Cracked Rear Wing Spar; ATA 5711

A mechanic found a crack in the R/H wing's aft spar (P/N 5-147). He states, "This crack is running with the wood grain and *(is)* approximately 13 inches long. The crack is emanating left and right of center from the upper bolt-hole of the most inboard compression strut. After disassembly it was determined that the compression strut mount-bolt was previously over tightened, causing crushing of the spar wood, which precipitated the crack in the spar."

Part Total Time: 835.9 hours.

BEECHCRAFT

Beechcraft; F-33A; Landing Gear Extension Failure; ATA 3230

(The following is a composite of three identical aircraft having the same problem...with the same part.) An inbound pilot selected *gear down*, but nothing happened. The crew manually deployed the gear and landed without incident. An outbound second crew selected *gear up* and nothing happened--still maintaining three solid green lights. A third, inbound crew selected *gear down*--they too received no gear response...until later. Halfway through the manual extension checklist, the gear *decided* to extend on its own initiative, allowing for an uneventful landing. Technicians tracked the problem to the often reported, intermittent *Dynamic Breaker Relay*: P/N SM50D7. Recommendations are everywhere the same: a better relay is needed. *(Reported aircraft--numbers 2 and 3 had part total times of 527 and 100 hours, respectively. Part time for aircraft number 1 records on the next line below. These three aircraft will be entered into the SDR data base, currently returning 50 reports on this part number.)*

Part Total Time: 120 hours.

Beechcraft; B-60; Failed Fuel Quantity Transmitters; ATA 2842

The submitting mechanic describes this aircraft's fuel quantity indicators registering a maximum of 35 gallons, even with the tanks full. His investigation found the inboard and outboard leading-edge cell transmitters grounded to the airframe *(transmitter part numbers not provided)*. "Removal revealed P/N 330865 grommets deteriorated, allowing the transmitter case to touch the airframe." He recommends replacing these grommets with *(any)* fuel cell replacement, and also to use Beechcraft rubber gaskets (P/N 15-423) at the transmitters. He cautions, the "...parts catalog does not show grommets at the transmitter installation."

Part Total Time: 3,198.1 hours.

Beechcraft (Raytheon); A200; Flap Extension Failure; ATA 2750

A pilot describes selecting *approach flaps* while descending into Reading, Pennsylvania. The flaps failed to extend. Several attempts at resetting the circuit breaker and cycling the selector failed to produce flap movement. He made an uneventful, *no flaps* landing. Troubleshooting revealed the left split-flap fuse had failed (P/N AGX-10). Both the fuse and its holder were replaced, resolving the discrepancy. "*(We)* have had previous problems with fuses. We are going to add this as a change--to install a new fuse on the left and right flaps at each phase inspection."

Part Total Time: 400 hours.

CESSNA

Cessna; 172E; Cracked Wing Spar; ATA 5711

Replacement of a worn, L/H flap track assembly revealed a 2-inch crack running through the aft attachment rivet holes of the spar (P/N 0523400-50). The mechanic believes a probable cause was

flap overspeed during flight. *(Overspeed certainly is a factor—so too is the aircraft's time! See practically the same discrepancies last month.)*

Part Total Time: 15,628.63 hours.

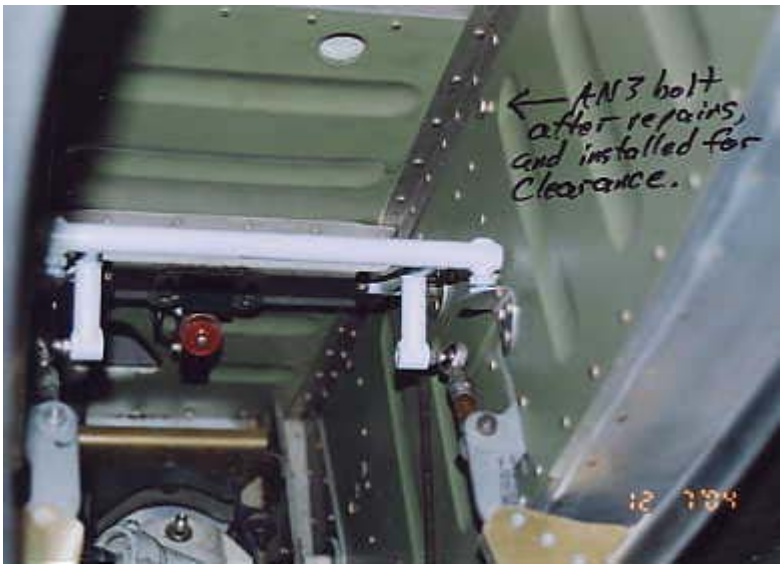
Cessna; 182T; Boost Pump Contamination; ATA 2822

This repair station received a Weldon Boost Pump (P/N A8160-D) for warranty work, accompanied by the customer's *complaint* the pump's operation caused sufficient current draw to consistently pop the circuit breaker. The technician states, "Preliminary inspection of the pump revealed foreign material in the inlet port. Further inspection of the pump revealed the foreign material tried to pass through the pump and had locked the rotor in the insert. This would cause the pump to draw high amps."

Part Total Time: 142 hours.

Cessna; R182; Nose Gear Extension Failure; ATA 3230

"On October 6, 2004 this aircraft sustained nose damage due to the failure of the nose gear to extend for landing. The propeller linkage runs down the outside of the nose landing gear tunnel, and is attached *(there)* in two places with Adel clamps, stand-offs, and AN-3 bolts. The aft attach hole is directly in line with the nose door actuator arm which is hollow...*(welded steel tubing: P/N 2213022-14)*." "This aircraft had the aft AN-3 bolt installed with the threads and nut protruding **into** the wheelwell...." The writer describes how the hollow actuator arm impacted the protruding bolt, causing it to loosen with each gear cycle. The moment arrived when sufficient *play* allowed the bolt's end "...to pop over into the end of the hollow actuator's arm tube. This now locked the actuator arm into *(its retracted)* position, and locked the gear doors closed, preventing gear extension. During repairs, the L/H tunnel side was replaced with a factory part (P/N 2213001-3), and the *(above described)* bolt's hole comes pre-drilled in the same location. *(Neither the Cessna)* maintenance manual or the parts catalog have reference to prop cable routing. This problem could easily repeat itself on similar aircraft." *(Two of five submitted photos are shown below: the first demonstrates the problem; the second, a very nice repair!)*



Part Total Time: unknown.

Cessna; T210L; Landing Gear Retraction Failure; ATA 3230

This aircraft's landing gear failed to fully retract after takeoff. The attending mechanic states, "...found the wire soldered to the hydraulic power pack pressure switch (P/N 9880710-1) had corroded beneath the heat-shrink tubing near the solder joint." He surmises acid core solder may have been used to attach the leads to the switch.

Part Total Time: 195.0 hours.

Cessna; 425; Failed Retractable Landing Light; ATA 3340

A technician describes how this aircraft's R/H wing retractable landing light unit had failed in August 2004, (Grimes; P/N 45-0148-9). The part was removed, sent to an overhaul shop, and reinstalled. The same unit failed again 3 months later. This time the light assembly was opened by mechanics at the repair station, accessing the unit's worm-drive. Inspection quickly determined mechanical failure was due to improper unit assembly: the worm-drive gear's Woodruff Key had not been installed. Setscrews were driving the gear, and stripping the parts. "A new worm-gear (P/N A6582) and Woodruff Key (P/N MS35756-1) furnished by the overhaul agency were delivered, and installed per standard practice in our shop by an A&P mechanic. Unit was installed, adjusted, and ops checked okay. The overhaul agency neglected an important part in the motor drive mechanism when they serviced the unit--a Woodruff Key--causing customer inconvenience. To help prevent recurrence I recommend closer inspection." *(Time since overhaul: 85 days.)*

Part Total Time: unknown.

CIRRUS

Cirrus; SR20; Failing Slick Magneto; ATA 7414

A 500-hour magneto inspection revealed internal arcing between a coil and a carbon brush, though the aircraft ran well with a 100 RPM drop *(preflight check)*. Arc damage occurred to both a brush and spring, and the mechanic noted part of the distributor block was missing. He recommends mandatory internal magneto inspections during annual inspections.

Part Total Time: 602.0 hours.

GULFSTREAM

Gulfstream; GIV; Failed Wheel Casting; ATA 3246

A landing initiated flange failure of the L/H inboard wheel casting (P/N 1159SCL203-43). The submitter states, "Approximately one-third of the flange area broke away and allowed the lock ring (still intact and safetied) to separate. Debris (flange or wheel half) crossed over and hit the right, inboard wheel, glanced up and punctured the right wing trailing edge box (composite material); and the tire made contact with the right wing flap and dented the inboard end." An attached note emphasizes: "The wing trailing edge box is not part of the fuel tank. It is for aerodynamic fairing of the wing."

Part Total Time: unknown.

PIPER

Piper; PA31-T1; Failed Heater; ATA 2141

The attending mechanic describes one indication of abnormal heater combustion from this aircraft's Janitrol Heater (P/N FR10E21-4EL) as a *soot trail* from the fuel drain vent. Inspection found the air-blower fan wheel had come apart (P/N B07D67). The fan motor would still run, but the air pressure switch (P/N 94E42) failed in the closed position. The mechanic notes AD 04-21-05 does not require operational testing this switch. "I recommend <u>all</u> combustion air pressure switches be tested," states the mechanic, "...and the combustion air-fan wheel assembly be inspected at the same intervals as called out by AD 04-21-05." *(Total time since major overhaul was provided as 276.4 hours. Two reports were submitted for this aircraft's heater: one for the switch; one for the fan. See the next entry for a very similar problem.)*

Part Total Time: unknown.

Piper; PA 31T3; Failed Heater; ATA 2141

That widely recognized *burned-electrics* smell turned this pilot back for home after 6 minutes of flight. An investigation produced noise and vibration from the blower when the Janitrol combustion heater was operated (P/N 89D22-2). The inspection found the heater motor's frame and end-plates loose, the fan hub loose, and paper measuring 1.5 by 0.5 inches lodged in the fan

louvers. The mechanic states, “Paper caused the fan to be out -of-balance, which led to the fan and motor components vibrating loose and causing the motor *(P/N CD-21402)* to run hot.”

Part Total Time: unknown.

RAYTHEON

Raytheon; 400A; Premature Wear of Pitch-Trim Actuator; ATA 2742

An inspector noticed a *clunk* sound while actuating the pitch-trim during an A and B inspection. The noise investigation found the pitch-trim actuator (P/N 45AS61023-139) in full nose-down position, contacting the vertical fin cap support. Measurement of the jackscrew free-play recorded .075 of an inch...maximum allowable is .020. The submitter states, “The actuator overhaul interval is 1800 hours…with 756.2 hours time since overhaul. The next scheduled overhaul is due in 1043.8 hours. Frame contact may have had an effect on premature wear.” *(The actuator manufacturer is given as GEC-Marconit.)*

Part Total Time: 756.2 hours.

Raytheon; 400A; Landing Gear Retraction Failure; ATA 3230

The landing gear on this aircraft failed to retract, prompting a return to base and investigation of a discrepant electrical system. The attending technician found “...P162 connector loose, not fully seated on A162 PC board assembly-J1 connector.” Re-seating the P162 to its A162J1 counter-part resolved this discrepancy. (*Airframe total time records 5,549.5 hours.)*

Part Total Time: unknown.

POWERPLANTS AND PROPELLERS

CONTINENTAL

Continental; GTSIO-520; Main Bearing Delamination; ATA 8520

This mechanic has contributed excellent photographs documenting apparent delamination for his engine’s number three main bearing (P/N 634503). He states, “All the brass or bronze separated from the bearing shell. The crankshaft number three journal does not show signs of oil starvation.” (No description of this engine’s operational circumstances was provided in this report. Two of the submitted photographs are shown below. The SDR data base provides six returns on this part number since 1996. One submission describes, “P/N 630571 (BEARING FOR PROP DRIVER GEAR IN ENGINE CRANKCASE) MARKED ON PACKAGING AS P/N 630571. BEARING ITSELF MARKED AS P/N 634503. P/N 634503 IS CRANKSHAFT MAIN BEARING. PURCHASED NEW FROM TELEDYNE CONTINENTAL MOTORS. BEARINGS WILL FIT IN CRANKCASE SADDLES WHEN SWITCHED, BUT OIL HOLES DO NOT LINE UP AND BEARING OIL GROOVES ARE DIFFERENT WIDTHS. COULD CAUSE BEARING FAILURE/OIL STARVATION. ”)

Part Total Time: 649.9 hours.

PRATT & WHITNEY

Pratt & Whitney; PT6A-114A; Accessory Drive Shaft Failure; ATA 7260

A pilot flying a Cessna 208B "...experienced a failure of the standby electrical power system, followed by a fluctuating and decreasing oil pressure. The pilot landed without incident. Maintenance personnel found that the aft end of the accessory drive (P/N 3008786) for the external scavenge pump had sheared off. This failure had allowed engine oil in the scavenge pump housing to exit by the plain seal and vent overboard through the alternator drive pulley assembly drain tube. The loss of oil resulted in a loss of oil pressure. A possible cause of failure of the scavenge pump drive shaft is a twist load induced by either the alternator drive pulley bearings or the alternator bearings."

Part Total Time: 1,040.5 hours.

ACCESSORIES

(The following Special Airworthiness Information Bulletins (S.A.I.B.) are reprinted here to enhance distribution. Their formats are slightly altered to fit this document. Original publications can be found at the same web site as this Alerts document: http://www.faa.gov/aircraft/safety/.)

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

U.S. Department of Transportation

Aircraft Certification Service
Washington, DC

Federal Aviation Administration

NE-05-40
March 18, 2005

http://www.faa.gov/aircraft
This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin alerts you, owners and operators of the **Textron Lycoming Corp**. engine models listed in Table 1, with fuel pump part number (P/N) LW-15473 and manufacturer's code 154733201, of the need to replace the pump within the next 25 hours of operation.

Table 1

AEIO-320	AIO-360	IO-540
AEIO-360	HIO-360	O-540-L3C5D
AEIO-540	IO-320	TO-360-C1A6D
AIO-320	IO-360	TO-360-F1A6D

Background

Lycoming has issued Mandatory Service Bulletin (MSB) No. 565 (attached) advising that, "... a number of diaphragm-type fuel pumps, Lycoming P/N LW-15473, may not have been manufactured in conformance with manufacturer's specifications. This can result in a restricted and/or loss of fuel flow." Additionally, the MSB states that, "If your Lycoming engine has a diaphragm-type fuel pump with P/N LW-15473 installed, and has a date code of 3201 (manufacturer's code 154733201), the pump must be replaced prior to next flight." The manufacturer's code consists of the Lycoming P/N followed by the date code. Figure 1 of MSB 565 shows where the manufacturer's code can be found on the pump. The fuel pump may have to be removed in order to read the manufacturer's code on some aircraft.

Recommendation

Perform the inspection specified in Lycoming MSB No. 565 within 25 hours and replace the fuel pump prior to next flight if the date code is 3201.

For Service Bulletin Copies, Contact

Lycoming, 652 Oliver St, Williamsport, PA 17701, phone: (570) 323-6181; fax: (570) 327-7101; or go to their website:

http://www.lycoming.textron.com/main.jsp?bodyPage=/support/publications/maintenancePublications/serviceBulletins.html
and click on SB 565.

For Further Information, Contact

Norm Perenson, Aerospace Engineer, FAA NYACO, ANE-171, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (516) 228-7337; fax: (516) 794-5531; email: norman.perenson@faa.gov

LYCOMING
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652 Oliver Street
Williamsport, PA 17701 U.S.A.
Tel. 570-323-6181
Fax. 570-327-7101
www.lycoming.textron.com

MANDATORY SERVICE BULLETIN

DATE: February 21, 2005

Service Bulletin No. 565
Engineering Aspects are
FAA Approved

SUBJECT: Diaphragm-Type Fuel Pump Inspection/Replacement

MODELS AFFECTED: New, rebuilt and overhauled engines shipped from Lycoming between October 1, 2001 and February 2, 2004 with fuel pump P/N LW-15473. Engine models affected are IO-320, -360, -540; AIO-320, -360; AEIO-320, -360, -540; HIO-360; TO-360-C1A6D, -F1A6D and O-540-L3C5D. Fuel pumps replaced in the field with a genuine Lycoming fuel pump after October 1, 2001 and up to the date of issuance of this Service Bulletin.

TIME OF COMPLIANCE: Next 25 hours or next oil change whichever occurs first, or earlier at owner's discretion.

Lycoming has received two reports that indicate a number of diaphragm-type fuel pumps, Lycoming P/N LW-15473, may not have been manufactured in conformance with specifications. This can result in restricted and/or loss of fuel flow.

WARNING

DO NOT INSTALL ANY FUEL PUMP WITH THE MANUFACTURER'S CODE OF 154733201.

If your Lycoming engine has a diaphragm-type fuel pump with Lycoming P/N LW-15473 installed, and has a date code of 3201, the pump must be replaced prior to next flight.

NOTE

Some installations may require removal of the fuel pump to read the manufacturer's code. When reinstalling or replacing the fuel pump use a new fuel pump gasket.

To identify affected pumps, check the manufacturer's code scribed on the pump. (See Figure 1.) If the number is 154733201, the pump is affected and must be replaced prior to next flight.

Make the appropriate logbook entry including fuel pump date code.

WARRANTY:

If replacement is required, reimbursement is available for a replacement fuel pump and for up to 1.5 hours labor through a Lycoming Distributor. Lycoming requires the replaced pump be returned with a valid warranty claim for warranty consideration. Warranty for pump replacement will be in affect for one year from the date of this Service Bulletin.

Page 1 of 2

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Service Bulletin No. 565

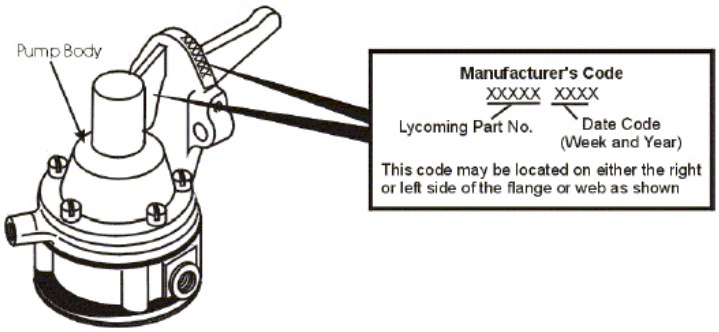

Figure 1

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

U.S. Department
of Transportation

Aircraft Certification Service
Washington, DC

Federal Aviation Administration

CE-05-03
October 20, 2004

http://www.faa.gov/aircraft
This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin advises you, **registered owners of GA aircraft,** of a possible problem with dry air pump installations using cork gaskets between the pump and engine drive pad. **This configuration could be found on both single and multiple engine aircraft** with dry air (vacuum) pump installations.

Background

We have been advised that some of the dry air pumps and possibly pump drive coupling kits provided by Parker Hannifin (Airborne), produced under a Parts Manufacture Approval, may have incorporated a cork gasket. Inspections found that the cork gasket was a contributing factor in several incidents involving loss of engine oil. We notified industry of this problem in the November 2002 issue of the Aviation Alerts, AC 43.16A. However, **we continue to receive reports of accidents/incidents involving loss of engine oil resulting from failure of cork type gaskets** installed between the dry air pump and the engine drive pad. Evidence also indicates that torque values on the attachment fasteners may decrease over time as the cork gasket material shrinks or is compressed during installation.

Recommendation

We recommend a one-time inspection for the presence of cork type gaskets between the dry air pump and the engine drive pad. Cork type gaskets can be identified by their light brown color. Non-cork type gaskets will be dark gray or black in color. If the gasket material is cork, you should replace the gasket with an approved non-cork type gasket before further flight. You should accomplish the replacement of the gasket in accordance with the airframe manufacturer's appropriate maintenance publications including proper torque sequence and torque values. If you find any presence of oil leakage due to the gasket, regardless of material type, you should replace it with an approved non-cork type gasket.

For Further Information Contact

Paul Pendleton, Aerospace Engineer, FAA
Wichita ACO, 1801 Airport Road, Rm 100,
Wichita, KS 67209; phone: (316) 946-4143;
email: paul.pendleton@faa.gov

Barry Ballenger, Continued Operational Safety,
FAA Small Airplane Directorate. 901 Locust,
Rm 301, Kansas City, MO 64106; phone: (816)
329-4152; email: barry.ballenger@faa.gov

AIR NOTES

ELECTRONIC VERSION OF FAA FORM 8010-4, MALFUNCTION OR DEFECT REPORT

One of the recent improvements to the Flight Standards Service Aviation Information Internet web site is the inclusion of FAA Form 8010-4, Malfunction or Defect Report. This web site is still under construction and further changes will be made; however, the site is now active, usable, and contains a great deal of information.

Various electronic versions of this form have been used in the past; however, this new electronic version is more user friendly and replaces all other versions. You can complete the form online and submit the information electronically. The form is used for all aircraft except certificated air carriers who are provided a different electronic form. The Internet address is: http://av-info.faa.gov/SDRX

When the page opens, select “M or D Submission Form” and, when complete, use the “Add Service Difficulty Report” button at the top left to send the form. Many of you have inquired about this service. It is now available, and we encourage everyone to use this format when submitting aviation, service-related information.

PAPER COPY OF FAA FORM 8010-4, MALFUNCTION OR DEFECT REPORT

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.

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) database 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, Mechanical Reliability Reports (MRRs), 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.

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 database 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:

John Jackson
Service Difficulty Reporting System, Program Manager
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125
Telephone: (405) 954-6486
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 submitted for the previous month, which have been entered into the FAA Service Difficulty Reporting (SDR) System database. 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**
2005FA0000321				LINK	INCORRECT
4/15/2004				C19347102	ESCAPE SLIDE

RECEIVED EVACUATION SLIDE FOR RECERTIFICATION. DURING DISASSY EACH FRANGIBLE LINKS (PN C19347-101, 4EA, PN C19347-102, 1EA, PN C19347-105, 2EA) WERE FOUND WITH (4) STRANDS OF BLACK NYLON THREAD SECURING EACH HALF OF FRANGIBLE LINK TOGETHER. FRANGIBLE LINKS WERE PREVIOUSLY BROKEN, REUSED BY SECURING HALVES TOGETHER WITH BLACK NYLON THREAD. NORMAL OR UNUSED FRANGIBLE LINKS ARE 2 LOOPS SECURED WITH STRANDS OR BRAKING WIRES, HAVING A SPECIFIC BREAKING STRENGTH WHICH ARE COVERED WITH HEAT SHRINK TUBING. IF SLIDE WAS DEPLOYED WITH MODIFIED FRANGIBLE LINKS, SLIDE WOULD POSSIBLY EXTEND RAPIDLY, TOE END OF SLIDE WOULD EXTEND UNDER THE AC. ONCE FRANGIBLE LINKS ARE BROKEN, REQUIRED TO BE REPLACED WITH NEW (2 OF 3)

2005FA0000431			HARTZL	SLEEVE	INCORRECT
3/25/2005				A249910	PISTON ROD

PROPELLER WAS REPAIRED AND O/H IN MY SHOP. PROP HAD A2499-10 HIGH PITCH STOP SLEEVE INSTALLED BUT APPARENTLY ASSEMBLER DID NOT KNOW IT TAKES A 2499-9. WHEN ASSEMBLED TO GET BLADE ANGLES CORRECT, ALTERED -10 TO A -9 IAW PRINT A2499. TT ON PROP 120 HRS SINCE NEW. (K)

2005FA0000433				TUBE	MISREPAIRED
3/25/2005					PISTON PILOT

PISTON PILOT TUBE, PAPER TOWEL INSTALLED INSIDE OF TUBE, BLOCKED OIL. PROP HAD / HOUR TIME ON IT.

2005FA0000319			AIRCRUISERS	LINK	INCORRECT
4/15/2004				C19347105	ECAPE SLIDE

RECEIVED EVACUATION SLIDE FOR RECERTIFICATION. DURING DISASSY EACH FRANGIBLE LINKS (PN C19347-101, 4EA, PN C19347-102, 1EA, PN C19347-105, 2EA) WERE FOUND WITH (4) STRANDS OF BLACK NYLON THREAD SECURING EACH HALF OF FRANGIBLE LINK TOGETHER. FRANGIBLE LINKS WERE PREVIOUSLY BROKEN, REUSED BY SECURING HALVES TOGETHER WITH BLACK NYLON THREAD. NORMAL OR UNUSED FRANGIBLE LINKS ARE TWO LOOPS SECURED WITH STRANDS OR BRAKING WIRES, HAVING SPECIFIC BREAKING STRENGTH WHICH ARE COVERED WITH HEAT SHRINK TUBING. IF SLIDE WAS DEPLOYED WITH MODIFIED FRANGIBLE LINKS, SLIDE WOULD POSSIBLY EXTEND RAPIDLY, TOE END OF SLIDE WOULD EXTEND UNDER THE AC. ONCE FRANGIBLE LINKS ARE BROKEN, REQUIRED TO BE REPLACED WITH NEW. (3 OF 3)

2005FA0000156				CARBURETOR	INOPERATIVE
2/28/2005				MA451048931	ENGINE

THROTTLE LEVER LOCKED UP AT ABOUT 20 PERCENT OPEN THROTTLE POSITION. DISASSEMBLED AND INSPECTED. FOUND AIR METERING JET AND PIN HAD SEPARATED. JET WAS BACKED OUT FAR ENOUGH THAT PIN FELL OUT AND LOCKED-UP. ALSO FOUND THAT RETENSION BALL FOR JET IS MISSING. THERE IS ALSO AND DRAG ON METERING PIN THREADS WHICH ALLOWED IT TO BACK OUT. (K)

2005FA0000315				CYLINDER	FAILED
5/5/2004				S8012	LIFE RAFT

DURING RECEIVING INSPECTION OF LIFE RAFT (PN RA4610220, SN F46392) IT WAS FOUND THAT THE CYLINDER

(PN S-801-2, SN 55396P, DATE OF MFG. 10-1973 WAS CHARGED AND INSTALLED ON THE LIFE RAFT. THE CYLINDER WHICH IS A DOT 3HT 3000 RATED CYLINDER HAD PAST ITS 24 YEAR SERVICE LIFE ON 10-1997 AND WAS HYDROSTATICALLY RETESTED ON 12-98 AND 12-02 BY REG NR PMMC AS SHOWN (STAMPED) ON THE CROWN OF THE CYLINDER. ONCE A DOT 3HT3000 RATED CYLINDER REACHES ITS 24 YEAR SERVICE LIFE IT CANNOT BE HYDROSTATICALLY RETESTED AND MUST BE REMOVED FROM SERVICE. THE COMPANY THAT SERVICE THE LIFE RAFT LAST, FAILED TO COMPLY THE REGULATIONS FOR SERVICING THE CYLINDER.

2005FA0000204	EXTINGUISHER	INOPERATIVE
1/4/2005	344	CABIN

FIRE EXTINGUISHER WENT THROUGH A WEIGHT AND PRESSURE CHECK AND PASSED BOTH CHECKS. UPON REINSTALATION OF THE EXTINGUISHER INTO THE AC THE TECH NOTICED THE HALON TO BE DEPLETED, ALL SAFETY SEALS WERE IN TACT AND THE EXTINGUISHER WAS NOT CONTACTING ANY OTHER OBJECTIVES WHILE SITTING STATIC IN THE CABINET, THIS IS THE 3RD EXTINGUISHER OF THIS MODEL TO DO THIS. ALSO NOTICED THE CYLINDER HEAD TO BE LOOSE. (K)

2005FA0000200	FIRE BOTTLE	DISCHARGED
1/20/2005	V651554	CABIN

PORTABLE FIRE EXT NOZZLE WAS FOUND TO BE LOOSE AND BOTTLE COMPLETELY DISCHARGED. REMOVED NOZZLE FROM BOTTLE AND FOUND NOZZLE AND BOTTLE THREADS CORRODED. ALSO, NOZZLE TO BOTTLE O-RING SEAL DETERIORATED. POSSIBLE CAUSE OF DEFECT COULD BE IMPROPER TORQUE VALUE USED DURING BOTTLE ASSEMBLY.

CA040804012	BATTERY PACK	LEAKING
8/4/2004	BS2173	ELT

(CAN) IN THIS LAST WEEK WE HAVE FOUND TWO REPLACEMENT BATTERY PACKS FOR THE DORNE& MARGOLIN DM ELT6, DM ELT 6.1, AND DM ELT8 SERIES OF ELTS, LEAKING CAUSING INTERNAL CASE CORROSION. IN ONE CASE ONE OF THE POWER WIRES COMING OUT OF THE BATTERY HAD CORRODED OFF THE BATTERY PACK. ONE BATTERYHAS A MANUFACTURING DATE OF MAY 2003, (EXPIRY DATE OF JUN 2005) AND SECOND ONE, HAS A MANUFACTURING DATE OF JUNE2003(EXPIRY DATE JUL 2005).

2005FA0000485	MAGNETO	MALFUNCTIONED
2/11/2005		ENGINE

UPON REINSTALLATION OF A MAGNETO (A 1940'S ERA MAG), INSTALLATION WAS NOT SUCCESSFUL AT FIRST. AFTER DOING THE REPAIR, FOUND THAT THE CONDENSER ON THIS ERA OF MAGNETO CAN BE REMOVED WITH JUST A FLATHEAD SCREWDRIVER AND TAKEN OUT WITHOUT REMOVING THE MAGNETO FROM THE ENGINE. STUDENTS OF MY MAINTENANCE SCHOOL WERE UNAWARE OF THIS, AND AS AN A&P I WOULD LIKE TO SPREAD THIS SERVICE DIFFICULTY REMEDY AROUND TO THE GENERAL AVIATION PUBLIC.

CA040914002	DORNEMARGLN	BATTERY PACK	LEAKING
8/6/2004	ELT81	BS2173	ELT

(CAN) UPON YEARLY INSPECTION, BATTERY PACK REFERENCED ABOVE WAS FOUND TO BE LEAKING ON MAIN CIRCUIT BOARD CAUSING THE BOARD TO SHORT CIRCUIT AND MALFUNCTION. NOTE TH AT THIS WAS A PASSIVE FAILURE AND THAT THE ELT WAS NOT TRANSMITTING UNCOMMANDED. PREVIOUS CERTIFICATION ON AUGUST 5, 2003 REFERENCE.

CA040923008	CONNECTOR	MISMANUFACTURED
9/23/2004	U384U	ELECTRICAL

(CAN) PRIOR TO REPLACING CONNECTOR, WE VERIFIED WITH A DMM CONTINUITY FROM CONNECTOR END TO SOLDER TERMINALS. (6) CONNECTORS WERE FOUND INPROPERLY MANUFACTURED, THE ORIENTATION OF THE SOLDER TERMINALS DID NOT MATCH THE CONNECTOR. I HAVE CONTACTED THE QUALITY CONTROL MANAGER AT NEXUS AND NOTIFIED HIM OF THE FINDING. PARTS REMOVED FROM QUARANTINED AND SHIPPED TO NEXUS FOR ANALYSIS.

CA041102005	SCREW	SHORT
10/28/2004	J4RF284001E2029	FUSELAGE

(CAN) TRANSISTOR SHORTED DUE TO WRONG (METAL) SCREWS INSTALLED IN PLACE OF THE NYLON SCREWS P/N JYRF284-001. HISTORY INDICATES THAT THE EL SHORT CAUSED BY METAL SCREWS CAN PRODUCE SMOKE IN CABIN. PHOTO ATTACHED.

CA041209011	WOODWARD	PILOT VALVE	CORRODED
12/8/2004		210332210316	CSU

(CAN) CSU WAS INVOLVED IN A PROP STRIKE THEREFORE OH IS MANDATORY. UPON DISASSY OF CSU IT WAS DISCOVERED THAT THE PILOT VALVE PN 210332 WAS PITTED AND CORRODED ON THE BALL BEARING RACE SURFACE. THE FLYWEIGHT DRIVER PN 210317 AND THE FLYWEIGHT HEAD PN 210316 AND THE FLYWEIGHT DRIVE SPRING PN 192662 WERE CORRODED BEYOND REUSE.THE CORROSION WAS OBSERVED ON THE EXTERNAL SURFACES. THE OVERHAUL WAS COMPLETED USING SERVICEABLE PARTS WHILE THE U/S COMPONETS WERE RETURNED TO OUR CUSTOMER.

CA050120004		CIRCUIT BOARD	FAILED
1/19/2005		25091	TEMP SENSOR

(CAN) VIBRATION TESTING REVEALED THAT MODEL 251 UNITS MFG WITH SPRAY CONFORMAL COATING ARE NON-COMPLIANT WITH DO-160C VIBRATION CATEGORY SPECIFIED IN TSO APPROVAL. FAILURE OF UNITS COULD RESULT IN LOSS OF OUTPUT TO PASSENGER ADDRESS SPEAKERS. TYPICAL APPLICATIONS INCLUDE PROVISION OF SEAT BELT AND NO SMOKING CHIME TONES, CABIN PAGER AUDIO, AND MUSIC AUDIO TO PASSENGER CABIN. FAILURE OF UNIT WILL BE OBVIOUS TO CREW AND/OR PASSENGERS, FAILED UNITS WILL BE REPLACED. FAILURES WILL NOT POSE THREAT TO SAFETY OF AIRCRAFT, COULD IMPACT SAFETY OF OCCUPANTS IF FAILURE OCCURS PRIOR TO OR DURING EMERGENCY FLT CONDITION, WHERE EMERGENCY INSTRUCTIONS TO OCCUPANTS OVER CABIN PAGING SYSTEM ARE NECESSARY FOR THEIR SAFETY.

2005FA0000265		LINE	UNSERVICEABLE
8/2/2004			HYD SYSTEM

HAD 3 HYDRAULIC LINE FAILURES CAUSING LOSS OF LANDING GEAR OPERATION WITHIN 70 HOURS. 2 FAILURES WERE DUE TO LOOSE B-NUTS, 1 WAS FAILURE OF LINE AT FLARE. LINES ARE SOFT ALUMINUM, THIN WALL TUBING WITH NO SPEC NUMBER APPEARS TO BE 3003-0 USED FOR AIR AND VACUUM LINES. SHOULD BE 5052-0 FOR GEAR HYDRAULIC SYSTEM.

2005FA0000317	AIRCRUISERS	FRANGIBLE LINK	INCORRECT
4/15/2004		C19347101	EVAC SLIDE

RECEIVED EVACUATION SLIDE FOR RECERTIFICATION. DURING DISASSY EACH FRANGIBLE LINKS (PNC19347-101, 4EA, PN C19347-102,1EA, PN C19347-105,2EA) WERE FOUND WITH (4) STRANDS OF BLACK NYLON THREAD SECURING EACH HALF OF FRANGIBLE LINK TOGETHER. FRANGIBLE LINKS WERE PREVIOUSLY BROKEN, REUSED BY SECURING HALVES TOGETHER WITH BLACK NYLON THREAD. NORMAL OR UNUSED FRANGIBLE LINKS ARE TWO LOOPS SECURED WITH STRANDS OR BREAKING WIRES, HAVING A SPECIFIC BREAKING STRENGTH WHICH ARE COVERED WITH HEAT SHRINK TUBING. IF SLIDE WAS DEPLOYED WITH MODIFIED FRANGIBLE LINKS, SLIDE WOULD POSSIBLY EXTEND RAPIDLY, TOE END OF SLIDE WOULD EXTEND UNDER THE AC. ONCE FRANGIBLE LINKS ARE BROKEN, REQUIRED TO BE REPLACED WITH NEW. (1 OF 3)

2005FA0000320		FRANGIBLE LINK	INCORRECT
4/15/2004		C19347101	EVAC SLIDE

RECEIVED EVACUATION SLIDE FOR RECERTIFICATION. DURING DISASSY EACH FRANGIBLE LINKS (PN C19347-101, 4EA, PN C19347-102, 1EA, PN C19347-105, 2EA) WERE FOUND WITH (4) STRANDS OF BLACK NYLON THREAD SECURING EACH HALF OF FRANGIBLE LINK TOGETHER. FRANGIBLE LINKS WERE PREVIOUSLY BROKEN, REUSED BY SECURING HALVES TOGETHER WITH BLACK NYLON THREAD. NORMAL OR UNUSED FRANGIBLE LINKS ARE TWO LOOPS SECURED WITH STRANDS OR BRAKING WIRES, HAVING A SPECIFIC BRAKING STRENGTH WHICH ARE COVERED WITH HEAT SHRINK TUBING. IF SLIDE WAS DEPLOYED WITH MODIFIED FRANGIBLE LINKS, SLIDE WOULD POSSIBLE EXTEND RAPIDLY, TOE END OF SLIDE WOULD EXTEND UNDER THE AC. ONCE FRANGIBLE LINKS ARE BROKEN, REQUIRED TO BE REPLACED WITH NEW. (1 OF 3)

2005FA0000322		FRANGIBLE LINK	INCORRECT
4/15/2004		C19347105	EVAC SLIDE

RECEIVED EVACUATION SLIDE FOR RECERTIFICATION. DURING DISASSY EACH FRANGIBLE LINKS (PN C19347-101, 4EA, PN C19347-102, 1EA, PN C19347-105, 2EA) WERE FOUND WITH (4) STRANDS OF BLACK NYLON THREAD SECURING EACH HALF OF FRANGIBLE LINK TOGETHER. FRANGIBLE LINKS WERE PREVIOUSLY BROKEN, REUSED BY SECURING HALVES TOGETHER. FRANGIBLE LINKS WERE PREVIOUSLY BROKEN, REUSED BY SECURING HALVES TOGETHER WITH BLACK NYLON THREAD. NORMAL OR UNUSED FRANGIBLE LINKS ARE 2 LOOPS SECURED WITH STRANDS OR BREAKING WIRES, HAVING A SPECIFIC BREAKING STRENGTH WHICH ARE COVERED WITH HEAT SHRINK TUBING. IF SLIDE WAS DEPLOYED WITH MODIFIED FRANGIBLE LINKS, SLIDE WOULD POSSIBLY EXTEND RAPIDLY, TO END OF SLIDE WOULD EXTEND UNDER THE AC. ONCE FRANGIBLE LINKS ARE BROKEN, REQUIRED TO BE REPLACED WITH NEW. (3 OF 3)

2005FA0000533		ENCODER	LEAKING
3/16/2005		AK350	ALTIMETER

STATIC AIR INPUT LEAKS 200 FEET PER MINUTE AT 1000 FEET AGL.

2005FA0000590		ENCODER	DEFECTIVE
3/14/2005		AK350	ALTIMETER

STATIC AIR INPUT LEAKS INTO CASE OF UNIT. UNIT IS NEW FROM STOCK.

2005FA0000591		ENCODER	DEFECTIVE
3/14/2005		AK350	ALTIMETER

STATIC AIR INPUT LEAKS INTO CASE OF UNIT. UNIT IS NEW FROM STOCK.

2005FA0000426		PIN	BROKEN
5/11/2004		B4460	PROPELLER

ON MAY 17, 2004, AUTHORIZED BY NTSB TO DO A TEARDOWN ONLY ON PROPELLER. UPON WHICH (PN 134460) ACTUATING PIN, WAS FOUND BROKEN IN HALF; START OF THREADS. PARTS INVOLVED WERE TAKEN BY FSDO. FSDO FORWARDED THEM TO NTSB FOR INVESTIGATION. CANNOT COMMENT ON PROBABLE CAUSE.

2005FA0000593	COLLINS	MOTOR	INTERMITTENT
3/25/2005	ADI85A	2300626020	INDICATOR

THE MOTORS HAVE HIGH RESISTANCE BETWEEN THE BRUSHES AND ARMATURE OF THE MOTOR. THIS CAUSES THE MOTOR TO STICK INTERMITTENTLY, CAUSING A FALSE ATTITUDE DISPLAY IN THE COCKPIT. THIS PROBLEM BEGAN WITH MOTORS DATE CODED 04/04 MANUFACTURED BY MOOG, INC.

2005FA0000528	COLLINS	MOTOR	INTERMITTENT
3/25/2005	ADI85A	2300626020	INDICATOR

MOTORS HAVE HIGH RESISTANCE BETWEEN THE BRUSHES AND ARMATURE OF THE MOTOR. THIS CAUSES THE MOTOR TO STICK INTERMITTENTLY, CAUSING A FALSE ATTITUDE DISPLAY IN THE COCKPIT. THIS PROBLEM BEGAN WITH MOTORS DATE CODED 04/04. THIS MOTOR WAS VERY NOISY IN OPERATION ALSO. BEARINGS SOUND ROUGH WHILE MOTOR IS OPERATING.

2005FA0000443	COLLINS	MOTOR	INTERMITTENT
3/25/2005	ADI85A	2300626020	INDICATOR

THE MOTORS HAVE HIGH RESISTANCE BETWEEN THE BRUSHES AND ARMATURE OF THE MOTOR. THIS CAUSES THE MOTOR TO STICK INTERMITTENTLY, CAUSING A FALSE ATTITUDE DISPLAY IN THE COCKPIT. CREW REPORTED ON CLIMB OUT, THE ADI DISPLAYED AN ATTITUDE FLAG. PITCH AXIS DID NOT RESPOND TO THE ATTITUDE CHANGE.

1838110		BULKHEAD	CRACKED
3/25/2005		3541046119	FUSELAGE

FRAME FOUND CRACKED WHEN ASSIST STEP WAS REMOVED FOR REPAIR. THE FLOOR MUST BE REMOVED TO ACCESS THE ATTACHMENT NUTS. THE BULKHEAD HAD BEEN PREVIOUSLY REPAIRED (AIRCRAFT HAD BEEN INVOLVED IN A GEAR UP INCIDENT IN THE PAST) AND WAS CRACKED PAST THE REPAIR DOUBLER. A NEW BULKHEAD WAS INSTALLED. A CLOSE INSPECTION OF THE STRUCTURE SHOULD BE PERFORMED WHEN THE

STEP IS REPAIRED AS THIS MAY BE THE ONLY TIME THE UNDERLYING MEMBERS CAN BE SEEN.

CA040315013		BEARING	IMPROPER PART
3/16/2004		03601018	ARMATURE

(CAN) LUCAS USES BARDEN BEARINGS WITH THE LUCAS LOGO AND PART NUMBER STAMPED ON. BEARINGS REMOVED MADE BY SKF. LUCAS NEVER USED SKF BEARINGS.

2005FA0000455		HUB	CRACKED
3/4/2005		D22013	PROPELLER

(2 EA) CRACKS WERE FOUND USING FLOURESCENT PENETRANT, INSIDE ENGINE SIDE HUB HALF. BOTH CRACKS WERE VERIFIED WITH EDDY CURRENT. CRACKS COUL HAVE BEEN CAUSE FROM A PAST GROUND STRIKE (HARD LANDING). (K)

2005FA0000133	ELECTROSYS	HOUSING	MISREPAIRED
9/19/2004		ALK1242AAS2	ALTERNATOR

IN PREPARING ALTERNATOR FOR INSTALLATION. CLOSE INSPECTION REVEALED THAT LIGHT PRESSURE ON NEGATIVE DIODE CAUSED DIODE TO BECOME UNSEATED FROM BORE IN HOUSING. INSPECTION OF BORE SHOWED THAT THE BORE WAS OVERSIZED AND HAD BEEN PAINTED DURING OVERHAUL. DIODE BORE DIMENSION (.499 INCH +/- .001 INCH) IS CRITICAL TO RELIABLE OPERATION OF THE ALTERNATOR. (THE DIODES RELY ON A PRESS FIT TO MAINTAIN ADEQUATE HEAT DISSIPATION AND CURRENT FLOW AND SHOULD NOT BE INSTALLED IN A BORE THAT HAS PAINT OR ANY OTHER ELECTRICALLY RESISTIVE MATERIAL IN IT.) THIS FAILURE IS EXACTLY THE SAME AT THE UNIT THAT WAS BEING REPLACED, HAVE SEEN NUMEROUS OTHER (LOOSE DIODES), RETURNED TO FACTORY FOR WARRANTY.

CA041102012	ALLSN	ENGINE	MAKING METAL
10/26/2004	250C20B		

(CAN) AFTER CLOSE INSP. OF THE BOTTOM CHIP PLUG, IT WAS FOUND TO HAVE A LARGE AMOUNT OF FERROUS METAL ON IT. THE ENGINE WAS REMOVED FROM SERVICE AND SENT TO A REPAIR FACILITY FOR FURTHER INVESTIGATION.

2005FA0000279	CONT	LIFTER	SPALLED
12/13/2004	IO550C	653877	ENGINE

ON 6 DIFFERENT ENGINES DURING OIL CHANGES OR TROUBLESHOOTING FOR LOW OIL PRESSURE, HAVE FOUND A SPALLED LIFTER. ONLY ONCE WAS THE PROBLEM WAS THE PROBLEM CAUGHT EARLY ENOUGH THAT THE CAMSHAFT WAS NOT DAMAGED AND NEEDING REPLACEMENT. (K) (1 OF 2)

CA041202001	GARRTT	RIVET	SEPARATED
12/1/2004	TPE33110UA		TURBINE WHEEL

UPON A REGULARLY SCHEDULED HOT SECTION INSPECTION THE NR 2 TURBINE WHEEL WAS FOUND TO HAVE A RIVET MISSING AT THE BASE OF ONE OF THE TURBINE BLADES. THIS RIVET INSTALLATION IS FOR EXPANSION PURPOSES. THE 3RD STAGE TURBINE AND STATOR ASSY WAS FOUND DAMAGED FROM THIS RIVET AS IT PASSED THROUGH IT AFTER DISLODGING FROM THE NR 2 TURBINE. OUR COMPANY TURBINE SHOP MANAGER HAS WITNESSED THIS SAME PROBLEM SEVERAL TIMES IN THE PAST.

CA050204003	GARRTT	CARBON SEAL	CRACKED
2/3/2005	TPE33111U	31025751	ENGINE

(CAN) CARBON SEAL FOUND CRACKED AFTER RECIEVING NEW PART FROM MFG NR 61634.

1622304	LYC	LYC	BOLT	FAILED
1/28/2005	IO360A3B6		AELSTD2213	CRANKGEAR

DURING ENGINE OVERHAUL, THE PMA CRANKGEAR BOLT P/N: AELSTD2213 MANUFACTURED BY ENGINE COMPONENTS INC FAILED BEFORE REACHING RECOMMENDED TORQUE VALUE. THE AREA JUST BELOW THE GRIP AREA STRETCHED.

2005FA0000521	LYC	OIL FILTER	SEPARATED
3/3/2005	IO540C4B5	ES48110	ENGINE

BOTH ENGINE OIL FILTERS WERE OPENED AFTER AN OIL CHANGE. BOTH FILTERS HAD THE PAPER FILTER MATERIAL PULLED AWAY FROM THE METAL CRIMP HOLDING THE ENDS TOGETHER.

CA050127005	PWA	SEAL	LEAKING
1/20/2005	JT15D1A		ENGINE

(CAN) CAUSE OF SMOKE ODOR IN CABIN DUE TO OIL CONTAM OF GAS PATH AIRFLOW DUE TO A LARGE NR OF AIR/OIL SEALS HAD EXCESSIVE CLEARANCES, ALLOWING OIL TO ENTER SECONDARY AIR SYS. ENG DID HAVE A SIGNIFICANT AMOUNT OF FRETTING DAMAGE ON COMBUSION COMPONENTS, WHICH INDICATED THAT ENG OPERATED WITH VIBRATION FOR SOME TIME. RETURNED ENG TO SERVICE, ALL WORN AIR SEALS WILL BE REPAIRED/REPLACED BACK TO THE O/H MANUAL LIMITS. NR 4 BEARING HOUSING WILL HAVE ALL PACKINGS & GASKETS CHANGED TO ENSURE NO FURTHER LEAK. FIT BETWEEN LOW COMPRESSOR SHAFT & LOW TURBINE SHAFT WILL BE RESTORED TO AVOID TO POSSIBILITY OF VIBRATION PROBLEMS. ENG WILL BE TESTED.

CA050201001	PWA	TURBINE	FAILED
1/26/2005	JT15D1A		ENGINE

(CAN) ENGINE WAS FOUND TO HAVE SUSTAINED A MAJOR INTERNAL FAILURE WITH EXTENSIVE DAMAGE TO THE IMPELLER AND THE ENTIRE TURBINE SECTION OF THE ENGINE. EVIDENCE OF A FAILED NR 2 BEARING, AN HP VANE ASSEMBLY WITH EXTENSIVE BURNING AND LOSS OF MATERIAL, AN HP TURBINE WITH FRACTURED AIRFOILS, AND AN LP TURBINE MISSING ALL OF THE FIRST STAGE ROTOR BLADES, THE PRIMARY FAILURE IS NOT IMMEDIATELY OBVIOUS AND THE POSSIBILITY OF COINCIDENTAL FAILURES EXISTS. THE ENGINE WILL BE CANNABALIZED TO SALVAGE ANY UNDAMAGED COMPONENTS FOR POSSIBLE RE-SALE. ALL ENGINE BEARINGS WILL BE SCRAPPED REGARDLESS OF CONDITION DUE TO THE AMOUNT OF METAL CONTAMINATION AND CONDITION OF THE ENGINE.

CA040914006	PWA	ENGINE	FAILED
8/31/2004	JT15D4		

(CAN) ENGINE WAS REMOVED FROM THE WING AFTER REPORTED HIGH VIBRATIONS. ENGINE SUFFERED AN IMPELLER FAILURE CAUSING SECONDARY DAMAGE TO DOWNSTREAM COMPONENTS. WITH THE MISSING MATERIAL FROM THE IMPELLER AND THE DAMAGE FOUND THE HIGH TURBINE BLADES, HIGH ROTOR BALANCE WOULD BE ADVERSELY AFFECTED AND THIS WAS LIKELY THE CAUSE OF THE HIGH VIBRATIONS.THE IMPELLER INSTALLED IN THIS ENGINE WAS P/N 3028345, PRE SB 7187. THESE IMPELLERS ARE PRONE TO FAILURE SIMILAR TO THE FAILURE ON THIS ENGINE. NO DAMAGE UP STREAM OF THE IMPELLER WAS FOUND TO INDICATE FOD DAMAGE.THE ENGINE WILL REQUIRE HPT BLADE AND IMPELLER REPLACEMENT, AND WILL UNDERGO A HSI TO DETERMINE WHICH COMPONENTS MAY BE RE-INSTALLED, REPLACED OR REPA IRED PRIORTO RETURNING ENGINE TO SERVICE.

CA050217001	PWA	DRIVE SHAFT	FAILED
2/4/2005	JT15D5		AGB

(CAN) UPON REMOVAL OF THE AGB FROM THE ENGINE IT WAS FOUND THAT THE AGB DRIVE SHAFT HAD DECOUPLED FROM THE HIGH ROTOR AND HAD FALLEN INTO THE GEARBOX CAUSING INTERNALDAMAGE. THE SHAFT FELL INTO THE AGB DUE TO THE SHAFT SUPPORT PLUG COMING OUT OF THE AGB DRIVE BEVEL GEAR (P/N 3105380-01). THE PIN THAT IS INTENDED TO RETAIN THE SHAFT SUPPORT PLUG IN THE GEAR APPEARED TO BE MISSING.

CA050213005	PWA	ENGINE	FAILED
1/4/2005	PT6*		

(CAN) THE ENGINE EXPERIENCED A FAILURE ON APPROACH AND A SINGLE ENGINE LANDING RESULTED. SUBSEQUENT INSPECTION EVIDENSED PUNCTURE HOLES IN THE GAS GENERATOR CASE. PWC WILL INVESTIGATE THE EVENT AND WILL SUPPLIMENT THIS REPORT TO REFLECT ROOT CAUSE AS AND WHEN ESTABLISHED.

CA050211002	PWA	ENGINE	FAILED

1/13/2005	PT6A114A		

(CAN) THE LOW OIL PRESSURE EVENT WAS RESULTS OF A CRACKED MAIN OIL PUMP HOUSING. OIL FILTER & CHIP DETECTOR WERE BOTH FOUND TO BE CLEAN & FREE OF DEBRIS DURING RECEIVING INSPECTION. THIS INDICATED THAT OPERATION OF ENGINE 19212 AT 85 PSIG (5 PSIG BELOW THE MINIMUM) FOR APPROX 20 MINS PRIOR TO LANDING DID NOT CAUSE ANY DETRIMENTAL DAMAGE TO ANY OF ENGINES INTERNAL GEARS OF BEARINGS. ENG TESTING AFTER REPLACEMENT OF MAIN OIL PRESSURE HOUSING INDICATED THAT OIL PRESSURE NOW 100 PSIG, MAXIMUM OF OPERATING LIMITS SPECIFIED BY PWC (90 TO 100 PSIG). ENGINE HAD NO FURTHER PROBLEMS WITH LOW OIL PRESSURE AFTER REPLACEMENT OF CRACKED OIL PUMP HOUSING. ENGINE RESTORED TO SERVICE.

CA050126005	PWA	BLADES	DAMAGED
1/14/2005	PT6A114A		ENGINE

(CAN) ON LANDING ENGINE TEMPERATURE WAS SEEN TO INCREASE, FOLLOWED BY AN UNCOMMANDED REDUCTION IN POWER. SUBSEQUENT INSPECTION REVEALED COMPRESSOR TURBINE AND POWER TURBINE BLADE DAMAGE. MFG WILL MONITOR THE INVESTIGATION OF THE INCIDENT AND WILL SUPPLIMENT THIS REPORT TO PROVIDE ROOT CAUSE, ONCE DETERMINED.

CA041018009	PWA	PLANETARY GEAR	FAILED
10/7/2004	PT6A28		ENGINE

(CAN) ENG REMOVED DUE TO METAL IN OIL. ENG SENT IN FOR INVEST & REPAIR. CUSTOMER DECIDED TO SEND ALL PARTS OF ENG TO OUR AMO FOR REVIEW. SOURCE OF METAL FROM A 2ND STAGE PLANETARY GEAR BEARING SLEEVE FAILURE. BRONZE PARTICLES GENERATED FROM SLEEVE BEARING BRONZE FACE DURING SEIZURE. SLEEVE SEIZED ONTO THE SHAFT - GEAR OVERCAME RESISTANCE OF GEAR/SLEEVE TIGHT FIT & GEAR STARTED TO TURN AROUND SLEEVE ON SLEEVE OUTSIDE SURFACE. ROTATION GENERATED METAL PARTICLES FROM GEAR BORE AND SLEEVE. ALL OF THE OIL STRAINERS IN BOTH 1ST & 2ND STAGE CARRIERS FOUND TO BE PARTIALLY BLOCKED. SEIZURE RELATED TO OIL STARVATION CAUSED BY THE BLOCKED STRAINERS.

CA050104002	PWA	LINE	WRONG PART
1/4/2005	PT6A42	3033736	FUEL SYSTEM

(CAN) DURING VISUAL INSPECTION AT PWC, WE HAVE IDENTIFIED THAT ONE FUEL PRESSURE HOSE WAS NOT GENUINE BUT WAS FITTED TO THE ENGINE S/N 42372 WHERE THE HOSE P/N 3033736 SHOULD BE FITTED. THIS HOSE IS BUILT IN 3 PIECES, A FLEXIBLE STEEL HOSE COVERED WITH AN ORANGE RUBBER HOSE WHICH IS CONNECTED AT EACH END WITH A FEMALE 90 DEG. CONNECTOR. THE PART ITSELF IS IDENTIFIED AS LEAVENS 10-943 LAM, 090 E4181G0070, AICOI PT BEB01, TEFLON 3 008SI, TSO 075A TYPE D NOC PART WAS REMOVED FROM THE ENGINE AND WILL BE KEPT IN QUARANTINE FOR 21 DAYS BEFORE BEING MUTILATED. THIS IS THE SECOND OCCURENCE IN THE PAST MONTH.

CA050211003	PWA	ENGINE	FAILED
1/13/2005	PT6A50		

(CAN) DESTRUCTION OF COMPRESSOR OF ENGINE RESULT OF TIE ROD BOLT STRETCH. LACK OF TORQUE REMAINING ON HALF OF TIE RODS INDICATES THAT 3 LOOSE TIE RODS STRETCHED & CAUSED COMPRESSOR TO LOSE AXIS OF ROTATION & ALLOWED COMPRESSOR TO RUB HEAVILY & CAUSE MATERIAL TO BE LIBERATED. APPEARS CT BLADE DAMAGE IS SECONDARY DAMAGED CAUSED BY LIBERATED MATERIAL FROM COMPRESSOR. DAMAGE ON CT BLADES MAY ALSO BEEN INCREASED BY HEAVY TIP RUB OF THE CT DISK AFTER COMPRESSOR LOST AXIS & CAUSED SIGNIFICANT VIBRATION ON ROTATING ASSY. DAMAGE ON POWER SECTION A RESULT OF MATERIAL LOST FROM CT BLADES & COMPRESSOR. COMPLETE OVERHAUL OF ENGINE. ALL TIE RODS & NR 1 & 2 BEARINGS WILL BE SCRAPPED REGARDLESS OF THEIR CONDITION.

CA050203004	PWA	PLANETARY GEAR	FAILED
1/28/2005	PT6A50		ENGINE RGB

(CAN) SOURCE OF METAL CONTAMINATION WAS FAILURE OF 1ST STAGE GEARS. GEARS WERE SENT TO METALLURGICAL LABORATORY FOR FURTHER INVESTIGATION THAT REVEALED THE EXISTENCE OF AN OLDER FATIGUE CRACK SURFACE ON PARTS OF A FRACTURED TOOTH ON THE 1ST STAGE SUN GEAR, SUN GEAR. PARTS OF THIS GEAR BROKE OFF IT IS BELIEVED THEY BECAME WEDGED BETWEEN THE SUN GEARE & THE 1ST STAGE PLANETARY GEAR CAUSING THE PLANET GEAR TOOTH TO SHATTER. SINCE DAMAGE TO RGB GEARING

SIGNIFICANT, DECIDED TO PERFORM FULL OVERHAUL LEVEL INSPECTIONS ON ALL RGB COMPONENTS, CLEAN & FLUSH & VISUALLY INSPECT REMAINING POWER SECTION COMPONENTS & TO CLEAN FLUSH & VISUALLY INSPECT OIL WETTED COMPONENTS UPSTREAM OF MAIN PRESSURE FILTER.

CA050323003	PWA	ENGINE	FAILED
3/14/2005	PT6A50		

(CAN) FOUND BETA CNTRL SYS WAS JAMMED. BETA CNTRL SLEEVE HAD WORN AGAINST PROPSHAFT DIA. RGB WAS REBUILT, IDENTICAL FAILURE IN TEST CELL. RGB WAS REBUILT, TESTED, RETURNED. NOT INSTALLED BUT RETURNED BECAUSE OF LOOSE MOUNT RING ON RGB. CORRECTED, ENG TESTED OK IN TEST CELL BEFORE BEING RETURNED TO OPER. OPER USED ENG FOR SHORT PERIOD UNTIL METAL WAS FOUND ON RGB CHIP DETECTOR AND IN OIL FILTER. ENG LOST ALL ITS OIL FROM IMPROPERLY SECURED FILTER BOWL, WAS EXPOSED TO PERIOD OF WINDMILLING OPERATION WITHOUT OIL. ENG HAS BEEN RETURNED TO O/H FACILITY. SOURCE OF METAL IN OIL WAS DETERMINED TO BE FROM ABRASIVE CONTACT WEAR BETWEEN BETA CNTRL SLEEVE, PROP SHAFT. NO EFFECTS NOTED FROM WINDMILLING WITH LIMITED OIL.

CA040819009	PWA	ENGINE	LACK OF LUBE
8/4/2004	PT6A50		

ENG REMOVED FROM WING WHEN OPERATOR FOUND BETA CONTROL SYSTEM JAMMED. ENG SHIPPED TO ENGINE AMO FOR INVESTIGATION & REPAIR. SEIZED BETA CONTROL LINKAGE RESULT OF HEAVY CONTACT WEAR BETWEEN REAR SEALING LAND OF BETA TRANSFER SLEEVE & PROP SHAFT. REASON FOR SEIZURE WAS A LACK OF LUBE.

CA040903003	PWA	ENGINE	FAILED
8/26/2004	PT6A50		

ENG REMOVED WHEN BETA CONTROL SYS JAMMED. SEIZED BETA CONTROL LINKAGE RESULT OF HEAVY CONTACT WEAR BETWEEN THE REAR SEALING LAND OF BETA TRANSFER SLEEVE AND PROP SHAFT. A PREVIOUS SIMILAR FAILURE INVESTIGATION HAD CONCLUDED THAT FAILURE RELATED TO LACK OF LUBRICATION SO A CHECK MADE TO SEE IF ANY OIL SUPPLY ROUTES WERE BLOCKED. AGAIN TWO SMALL HOLES IN PROP SHAFT THAT FEED CENTER PART OF BETA CONTROL SLEEVE WITH OIL WERE FOUND TO BE PLUGGED WITH SOME SOFT MATERIAL.

CA050208001	PWA	ENGINE	FAILED
1/31/2005	PT6A60A		

(CAN) ENG SUFFERED ONLY MINOR DAMAGE FROM PROP STRIKE WHICH WERE TIP RUBS IN COMPRESSOR, PWR TURBINE COMPONENTS. TIP RUBS FOUND ON PT BLADE PATHS ARE CONSIDERED TO BE MINOR AND NOT UNCOMMON TO FIND AT ANY DISASSEMBLY EVEN AFTER ONLY 77 HOURS OPERATION SINCE THIS ENG WAS LAST O/H. THESE RUBS ARE QUITE DEEP AND ALL AROUND BLADE PATH. PT BLADE RUB WAS EITHER A RESULT OF SUDDEN STOPPAGE OR STOPPAGE MADE IT MORE SEVERE THAN WOULD HAVE OCCURRED. RUBBING DAMAGES FOUND ON COMPRESSOR COMPONENTS ARE ALSO MINOR BUT AGAIN NOT UNCOMMON. AFTER ONLY MINIMAL OPERATING HOURS SINCE OVERHAUL THIS DAMAGE WOULD APPEAR TO BE EITHER A DIRECT RESULT OF SUDDEN STOPPAGE OR AT LEAST MADE WORSE BY INCIDENT.

CA041130009	PWA	RIVET	SHEARED
11/26/2004	PT6A67D		ENGINE

A FIELD SERVICE REPRESENTATIVE WAS SERVICING THE POWER SECTION WHEN HE NOTICED A LOOSE NR 3 BEARING COVER. THE LOOSE BEARING COVER HAD COME INTO CONTACT WITH THE 2ND STAGE PT DISK, RENDERING IT SCRAP. THE BEARING COVER LOCATES IN THE PT SHAFT HOUSING USING 6 LOCATING LUGS (P/N 3030491) AND 6 RIVETS (P/N AN123318). FIVE OF THE 6 RIVETS WERE SHEARED. THE RIVETS HAVE BEEN IN SERVICE FOR AT LEAST 5034 HOURS AND POSSIBLE AS HIGH AS 12757 HOURS.

CA050213003	PWA	ENGINE	MAKING METAL
2/1/2005	PT6A68		

(CAN) A CHIP DETECTOR WARNING ANNUNCIATED IN FLIGHT, REPORTED AS ACCOMPANIED BY PROPELLER SPEED FLUCTUATIONS. SUBSEQUENT INSPECTION REVEALED METAL PARTICLES AT THE CHIP DETECTOR AND OIL FILTER LOCATIONS. PWC WILL INVESTIGATE THE EVENT AND WILLSUPPLEMENT THIS REPORT TO PROVIDE

ROOT CAUSE AS AND WHEN DETERMINED.

CA050214002	PWA	ENGINE	INOPERATIVE
1/24/2005	PT6T3		

(CAN) FOLLOWING FIRST START OF THE DAY THE ENGINE EXPERIENCED AN UNCOMMANDED N2 ACCELERATION. THE PILOT SHUT THE ENGINE DOWN. MFG WILL INVESTIGATE THE EVENT AND WILL SUPPLEMENT THIS REPORT TO PROVIDE ROOT CAUSE, ONCE DETERMINED.

CA041217006	PWA	LINE	WRONG PART
12/17/2004	PT6T3B		ENGINE FUEL

(CAN) DURING ENGINE VISUAL INSPECTION AT PWC, WE HAVE IDENTIFIED THAT 2 ITEMS FROM THE FUEL PRESSURE TUBING WERE NOT GENUINE AND WERE MANUFACTURED BY AN UNKNOWN SOURCE. THOSE 2 ITEMS HAVE NO IDENTIFICATION NUMBERS BUT WERE INSTALLED IN REPLACEMENT OF: FUEL CONNECTOR P/N 3100499-01 CONNECTOR BOLT P/N 3100504-01 BOTH PARTS ARE KEPT IN QUARANTINE FOR 21 DAYS FOR TCCA REVIEW, AFTER WHICH THEY WILL BE DESTROYED.NOTE: THIS IS THE 2ND OCCURENCE RECENTLY

CA041217007	PWA	DATA PLATE	INCORRECT
12/16/2004	PT6T3B	3017809	ENGINE

(CAN) ENG RECEIVED WITH FALSE DATA PLATE (ORIGINAL DATA PLATE FOUND IN ENG LOGBOOK). THE FALSE DATA PLATE ENGRAVED WITH SN 63235 WHILE THE ENGINE INTERNAL COMPONENTS SHOWED THAT ALL THESE COMPONENTS WERE FITTED INTO ENGINE SN 60263. SIMULTANEOULY, REAL ENGINE SN 63235 WAS IN HOUSE FOR REPAIR WITH ITS REAL DATA PLATE AND THE S/N 63235 ENGRAVED ON IT.

CA040928010	PWA	COMPRESSOR	CRACKED
9/27/2004	PT6T6	3024211	ENGINE

(CAN) THE COMPRESSOR TURBINE DISK WAS INSTALLED ON AGUSTA BELL AB212. A CRACK INDICATION WAS FOUND DURING OVERHAUL NDT. PWC WILL CONDUCT INVESTIGATION TO ESTABLISH ROOT CAUSE.

CA041215005	PWA	TURBINE BLADES	FAILED
12/6/2004	PW121	312345201	ENGINE

(CAN) LP TURBINE BLADES WERE INSTALLED NEW DURING THE 1999 OVERHAUL OF ENGINE & HAD ACCUMULATED TSN = 10372.6 HOURS AND CSN = 11948 CYCLES. 41 BLADES WERE ROUTED FOR CREEP INSPECTION. REMAINING BLADES COULD NOT BE INSPECTED DUE TO DAMAGE ABLE TO CONCLUDE THAT THE LP TURBINE BLADES FAILED DUE TO CREEP, RESULTING IN SECONDARY IMPACT DAMAGE TO THE LP STATOR AND DOWNSTREAM GAS PATH COMPONENTS.

CA041209012	PWA	ENGINE	FLAMED OUT
12/1/2004	PW125B		

(CAN) DURING CLIMB THE ENGINE FLAMED OUT. A RELIGHT ATTEMPT WAS UNSUCCESSFUL AND THE AIRCRAFT DIVERTED TO POINT OF DEPARTURE.P&WC WILL MONITOR THE INVESTIGATION OFTHE EVENT AND SUPPLIMENT THIS REPORT TO REFLECT ROOT CAUASE, ONCE ESTABLISHED.

CA041222019	PWA	SHUTOFF VALVE	ACTIVATED
12/20/2004	PW305B		ENGINE FUEL

(CAN) ON TAXI PRIOR TO TAKEOFF, THE CREW WERE ALERTED TO SMOKE EMINATING FROM THE ENGINE. ON TAKEOFF THE ENGINE EXPERIENCED AN UNCOMMANDED SHUTDOWN. THE CREW DECLARED AN EMERGENCY AND RETURNED TO POINT OF DEPARTURE. INITIAL INSPECTION REVEALED THE EMERGENCY FUEL SHUT-OFF VALVE HAD ACTIVATED. PWC WILL INVESTIGATE THE EVENT AND SUPPLIMENT THIS REPORT TO REFLECT ROOT CAUSE, ONCE DETERMINED.

2005FA0000225	PWA	ROD	NICKED
10/25/2004	PW4060	50B043	LPC MODULE

ENGINE WAS RECEIVED FOR PHASE III MODEL CONVERSION. DURING TEARDOWN SEVERAL TIE RODS WERE FOUND WITH NICKED DOWN AREA IN THREADS. PARTS WERE SENT TO T.C. HOLDER FOR INVESTIGATION. REF

RMR NR 31481.

2005FA0000453		PWA	CRANKSHAFT	CRACKED
3/14/2005		R1340AN1	126211	ENGINE

DURING THE OVERHAUL PROCESS, THE FLYWEIGHT LINERS WERE REMOVED AND THE REAR HALF OF THE CRANKSHAFT WAS MAGNETIC PARTICLE INSPECTED. DURING THIS INSPECTION IT WAS DISCOVERED THAT A CRACK HAD DEVELOPED FROM AN ASSEMBLY RIVET HOLE OUT TO THE LINER BORE ON THE COUNTER WEIGHT ARM. UNKNOWN CAUSE. LINERS SHOULD BE REMOVED AT EACH OVERHAUL AND INSPECTED FOR CRACKS IN THIS AREA. (K)

CA040909005	AEROSP	ALLSN	PITCH LINK	BROKEN
9/5/2004	AS355F1	250C20F	350A37150802	MAIN ROTOR HEAD

(CAN) DURING CRUISE FLIGHT PILOT FELT SUDDEN VIBRATION IN THE M/R FLIGHT CONTROLS SYSTEM. A/C LANDED AT FIRST SUITABLE SITE. UPON INSPECTION, AME DISCOVERED THAT THE 'SCREW IN' RETAINING CUPS ON ONE OF THE M/R PITCH LINKS LOWER ROD ENDS DISINTEGRATED THUS ALLOWING THE BEARING INNER RACE TO SLIP OUT OF THE OUTER RACE.THE ANTI-ROTATION PINS IN ROD END WERE INTACT(REFER TO ATTACHED PHOTOS. SOME DAMAGETOTHE ROTATING SWASHPLATE HORNS WAS ALSO SUSTAINED.THIS PARTICULAR P/N ROD E ND IS SUBJECT OF EUROCOPTER AS355 SB 05.19. IT HAS BEEN FURTHER DETERMINED THAT THE ANTI-ROTATION RIVET WAS NOT ENGAGED IN N EITHER THE OUTER RACE' NOR ROD END'STHREADS - THUS NO LOCKING ACTION. ROD END P/N 350A37-1508-02, S/N 1608

CA050126007	AEROSP	PWA	ENGINE	FLUCTUATES
1/19/2005	ATR42*	PW121		

(CAN) THE ENGINE EXPERIENCED TORQUE FLUCTUATIONS IN CRUISE FOLLOWED BY AN UNCOMMANDED REDUCTION IN PROPELLER SPEED TO 12 PERCENT. THE PILOT SHUT THE ENGINE DOWN AND DIVERTED THE FLIGHT. MFG WILL MONITOR THE INVESTIGATION OF THE INCIDENT AND WILL SUPPLIMENT THIS REPORT TO PROVIDE ROOT CAUSE, ONCE ESTABLISHED.

CA050218009	AEROSP	PWA	VENT LINE	BLOCKED
2/16/2005	ATR42300	PW120		ENGINE BREATHER

(CAN) DURING TAXI FROM COMPANY RAMP THE LAVATORY SMOKE DETECTOR INDICATOR ILLUMINATED, VISIBLE SMOKE WAS OBSERVED IN THE CABIN. THE AIRCRAFT WAS RETURNED TO THE COMPANY RAMP AND SHUTDOWN. MAINTENANCE FOUND OIL DRIPPING FROM THE NR 2 ENGINE TAIL PIPE. IT WAS DETERMINED THAT A COUPLING HOSE IN THE ENGINE VENT LINE HAD FOULED DURING REASSEMBLY. THE INNER LINING OF THE COUPLING HAD CAUGHT ON THE TUBE FOLDING INWARD CAUSING A BLOCKAGE IN THE VENT LINE. THE COUPLING WAS REPLACED AND THE AIRCRAFT GROUND RUN AND TEST FLOWN BEFORE RETURNING TO SERVICE.

CA050124010	AEROSP	PWA	ENGINE	MALFUNCTIONED
12/22/2004	ATR72	PW124B		NR 1

(CAN) DURING LANDING ROLL, ONE ENGINE DID NOT RESPOND CORRECTLY TO SELECTION OF REVERSE THRUST. AS A RESULT, THE AIRCRAFT DEPARTED THE RUNWAY. VARIOUS ENGINE ACCESSORIES HAVE BEEN REMOVED FOR EVALUATION. MFG WILL MONITOR THE INVESTIGATION AND WILL SUPPLEMENT THIS REPORT TO PROVIDE ROOT CAUSE, ONCE ESTABLISHED.

CA050213001	AEROSP	PWA	ENGINE	FAILED
1/26/2005	ATR72	PW127		

(CAN) DURING CLIMB THE ENGINE LOST POWER ACCOMPANIED BY A LOUD NOISE AND VIBRATIONS. THE ENGINE WAS SHUT DOWN IN FLIGHT AND THE AIRCRAFT RETURNED TO POINT OF DEPARTURE. SUBSEQUENT INSPECTION REVEALED DAMAGE TO THE TURBOMACHINE MODULE. MFG WILL MONITOR THE INVESTIGATION OF THIS EVENT AND WILL SUPPLEMENT THIS REPORT TO PROVIDE ROOT CAUSE ONCE ESTABLISHED.

CA050224012	AEROSP	PWA	ENGINE	FAILED
2/17/2005	ATR72	PW127		

(CAN) ON TAKEOFF ROLL THE AIRCRAFT EXPERIENCED A YAW ACCOMPANIED BY AN UNCOMMANDED

REDUCTION IN ENGINE TORQUE AND TUBINE OVER TEMPERATURE AND LOW OIL PRESSURE WARNING ANNUNCIATIONS. TAKEOFF WAS ABORTED. MFG WILL INVESTIGATE THE INCIDENT AND WILL SUPPLIMENT THIS REPORT TO REFLECT ROOT CAUSE AS AND WHEN ESTABLISHED.

CA050307007	AEROSP	PWA	ENGINE	FAILED
2/25/2005	ATR72212A	PW127		

(CAN) DURING CLIMB, THE ENGINE EXPERIENCED AN INCREASE IN TURBINE TEMPERATURE ACCOMPANIED BY VIBRATION AND NOISE. THE CREW SHUT THE ENGINE DOWN IN FLIGHT AND DIVERTED TO POINT OF DEPARTURE. SUBSEQUENT INSPECTION REVEALED DEBRIS ON THE TURBO MACHINERY AND REDUCTION GEARBOX CHIP DETECTORS. MFG WILL INVESTIGATE THE EVENT AND WILL SUPPLIMENT THIS REPORT TO REFLECT ROOT CAUSE ONCE DETERMINED.

CA041026002	AGUSTA	PWC	ENGINE	FLUCTUATES
10/23/2004	A109	PW206C		NR 1 ENGINE

(CAN) ON A 'CAT A' TAKE-OFF (DURING THE REVERSING PHASE) THE PILOT REPORTED TORQUE FLUCTUATIONS ON THE NR 1 ENGINE. ALL ENGINE PARAMETER THEN WENT TO ZERO (ENGINE OUT). THE PILOT LOST CONTROL OF THE A/C, ITTURNED LT AND THE TAIL HIT AN OBSTACLE. THE PILOT COMPENSATED BY TURING RIGHT AND THE TAIL HIT THE SAME OBSTACLE AGAIN AFTER WHICH THE A/C FLIPPED ON ITS SIDE.IT WAS ALSO REPORTED THAT THE PILOT HA D DIFFICULTIES STARTING THE NO. 1 ENGINE BEFORE THE FLIGHT. P&WC WILL INVESTIGATE THE INCIDENT AND UPDATE THIS SDR ONCE ROOT CAUSE HAS BEEN ESTABLISHED.

2005FA0000333	AGUSTA	CONNECTOR	VIBRATION
12/9/2004	A109A2	3722514110	DME R/T

VIBRATION PROBLEM HAS BEEN IDENTIFIED WITH THE DISTANCE MEASURING EQUIPMENT (DME) RECEIVER-TRANSMITTER (RT) INSTALLED ON THE AIRCRAFT. THIS PROBLEM RESULTS IN INTERMITTENT DME DISPLAY OR LOSS OF POWER TO THE DME INDICATOR. THIS FAILURE OCCURS AFTER APPROX EVERY 400 HOURS OF OPERATION AND IS THE RESULT OF VIBRATION BETWEEN THE DME RT UNIT AND THE ROTORCRAFT MOUNTING SURFACE. THE DME RT UNIT IS HARD MOUNTED ON AN AVIONICS SHELF LOCATED IN THE TAILBOOM, AFT OF THE REAR BAGGAGE COMPARTMENT. VIBRATION BETWEEN THE AC HARNESS PLUG CONNECTOR AND THE DME RT MATING CONNECTOR RESULTS IN LOSS OF ELECTRICAL CONTACT BETWEEN SOME OF THE CONNECTOR PINS. PROBLEM CAN BE CORRECTED BY MOUNTING THE DME RT ON VIBRATION ISOLATORS. (K)

VW3R20050004	AIRBUS	AIRCRUISERS	GIRT BAR	DEFECTIVE
2/8/2005	A300*		D29601103	ESCAPE SLIDE

GIRT EXTENSION DOES NOT FIT PROPERLY ON GIRT BAR. GIRT EXTENSION PADS RIDE UP ON CAVITY RIDGE OF GIRT BAR. PLEASE NOTE THIS EVACUATION SLIDE IS ALSO USED ON A310 AIRCRAFT.

CA040916003	AIRBUS	AIRCRUISERS	RESERVOIR	DISCHARGED
8/1/2004	A310304		D17926101	ESCAPE SLIDE

(CAN) FL320, AROUND 2 HRS PRIOR TO ARRIVAL IN YYZ, LT OVERWING EMERGENCY EVACUATION SLIDE HAD STARTED TO PARTIALLY INFLATE IN FLIGHT. CREW DECIDED TO LAND AT CLOSEST SUITABLE AIRPORT WITH MX. AFTER ALL PAX DEPLANNED, DISARMED LT OVERWING DOOR & OPENED IT NORMALLY. AFTER INVESTIGATION FOUND MAIN AUTOMATIC INFLATION CO2 BOTTLE ON LT OVERWING DOOR PARTIALLY DISCHARGED IN THE RED BAND WITHOUT ANY VISUAL SIGN OF BOTTLE RUPTURE OR ANY EXTERNAL SIGN OF BOTTLE DAMAGE. SLIDE REMOVED IAW AMM AND A/C DISPATCHED IAW CZECH AIRLINES MEL BOOK. CSA STILL INVESTIGATE ON THIS INCIDENT BUT SUSPECT THE VALVE REGULATOR ASSEMBLY INSTALLED ON THE RESERVOIR WHICH IS SUPPOSE TO RETAINS THE GAS PRESSURE WHEN THE SLIDE IS UNDER NORMAL CONFIGURATION. A/C IS NOT A CANADIAN REGISTRATION (OK-WAB)

CA040909004	AIRBUS	GE	CONTROL UNIT	MALFUNCTIONED
9/6/2004	A310304	CF680C2A5	3905300101	NR 5 SPOILER

(CAN) IN CRUISE, NR 5 SPOILER EXTENDED MOMENTARY FOLLOWED BY SPOILER 5FAULT ON ECAM. SPOILER PANEL RETRACTED ON IT S OWN. SPOILER RESET AFTER LANDING AND CHECKED OK.TROUBLING SHOOTING INDICATED NR 2 EFCU AT FAULT. NR 2 EFCU REPLACED AND DFDR REMOVED AND SENT FOR READ OUT. FLIGHT CREW CONFIRMED MOMENTARY ROLL OF THE AIRCRAFT.

CA040924001	AIRBUS	GE	VAPOR BARRIER	DAMAGED
9/18/2004	A310304	CF680C2A5	A28110280000	LT A/C PACK

(CAN) DURING INVEST OF A PNEUMATIC LEAK AT LT A/C PACK DISCHARGE DUCT HEAT EXCHANGER CONNECTOR, FUEL VAPOR BARRIERS FOUND DAMAGED ABOVE THIS AREA. METAL FUEL VAPOR BARRIER HAD DAMAGE OF APPROX 2 SQ FT. FIBER FUEL VAPOR BARRIER PUNCTURED 2 SQ. IN. FUEL VAPOR BARRIER REPLACED & PNEUMATIC DUCT COUPLING ALSO REPLACED. FIBER FUEL VAPOR BARRIER REPAIRED IAW MM. A FLEET CAMPAIGN IN PROGRESS TO REPLACE ALL COUPLINGS IN A/C BAY AREA BUT ACRFT HAD NOT YET BEEN DONE. UNABLE TO DETERMINE IF FUEL VAPOR BARRIER DAMAGE CAUSED BY PNEUMATIC LEAK AT HEAT EXCHANGER COUPLING. A VISUAL INSPECT OF BARRIERS CARRIED OUT IN 08/04 DURING ROUTINE A-CHECK & NO FAULT NOTICED. AIRBUS CONTACTED & ASSIST REQUESTED IN EVAL OF FAILURE.

CA041020003	AIRBUS	GE	STRUT	LACK OF LUBE
10/16/2004	A310304	CF680C2A5	C2310961013	NLG DOWNLOCK

(CAN) ON APPROACH TO AIRPORT, FLIGHT CREW WAS UNABLE TO OBTAIN POSITIVE NOSE LANDING GEAR DOWN LOCK INDICATION EVEN AFTER SEVERAL CYCLES. A LANDING GEAR GRAVITY EXTENSION WAS CARRIED OUT SUCCESSFULLY.TROUBLE SHOOTING OF THE ELECTRICAL INDICATION SYSTEM DID NOT REVEAL ANY FAULTS. A FULL PHYSICAL INSPECTION WAS CARRIED OUT AND GEAR SWING OF NOSE LANDING GEAR. MAINTENANCE WAS UNABLE TO DUPLICATE THE FAULT. NOSE LANDING GEAR LUBRICATION WAS PERFORMED AND THE AIRCRAFT WAS RELEASE FOR RETURN TO SERVICE PENDING SATISFACTO RY TEST FLIGHT. AS PRECAUTIONARY MEASURE FROM TROUBLE SHOOTING AND AIRBUS TFU 32-31-24 .002 THE NOSE LANDING GEAR TELESCOPIC STRUT ASSEMBLY WAS REPLACED AS UNIT IS SUSCEPTIBLE TO MOISTURE INGRESS AND SUBSEQUENT FREEZING.

CA050103001	AIRBUS		SLEEVE	SEIZED
12/31/2004	A319112			AXEL

(CAN) THE CREW REPORTED A GRINDING NOISE COMING FROM THE NOSE GEAR. ON INVESTIGATION, MAINTENANCE FOUND THE RIGHT HAND NLG WHEEL INBOARD BEARING ASSY SEIZED ONTO THE AXEL SLEEVE. ATTEMPTS TO FREE THE SLEEVE HAVE BEEN UNSUCCESSFUL AND THE NOSE GEAR STRUT HAD TO BE REPLACED.

CA041123005	AIRBUS	CFMINT	PTU	LEAKING
11/18/2004	A319112	CFM565B6	410100211	FUEL PRESSURE

(CAN) AFTER TOW TO GATE, A LEAK WAS NOTICED COMING FROM THE PRESSURE TRANSFER UNIT. UNIT WAS REPLACED BEFORE FLIGHT.

CA040813004	AIRBUS		SELECTOR	MALFUNCTIONED
6/28/2004	A319114		058002003	PARK BRAKE

(CAN) WHILE STARTING ENG NR 1, PARKING BRAKE WOULD NOT SET. FOOT BRAKES WERE FINE, JUST PARK BRAKE HANDLE WOULD NOT SET UNTIL ENG NR 1 FULLY STARTED. CARRIED OUT OPERATIONAL TEST AS PER AMM. CONFIRMED NO POWERFROM 'NORMAL' SOURCE. REPLACED PARK BRAKE CONTROL VALVE-NIL FIX. REPLACED PARK BRAKE SELECTOR SWITCH-OPS CHK'D SERV.

CA041229002	AIRBUS		TIRE	FAILED
12/29/2004	A319114		32200022	NLG

(CAN) ON LANDING THERE WAS A NOISE FROM THE NOSE GEAR AND WAS DIFFICULT TO TAXI. ON INSPECTION,BOTH NOSE WHEEL TIRES WERE FLAT. COMPANY SAFETY REG REQ. FDR C/B PULLED. BOTH NOSE WHEELS REPLACED. CONDUIT BRACKET REPAIRED. BURST TIRE INSPECTION CARRIED OUT PER AMM 05-51-15. DFDR REPLACED.

CA040812009	AIRBUS	CFMINT	BYPASS VALVE	LEAKING
6/21/2004	A319114	CFM565A1	114087005	HYD SYSTEM

(CAN) GREEN HYDRAULIC LOW LEVEL, LOST ALL GREEN HYDRAULIC PRESSURE WHILE TAXING, DOOR BY-PASS VALVE LEAKING MPN 114087005 S/N CWDDDH8197

CA050222006	AIRBUS	CFMINT	SENSOR	OPEN

2/22/2005	A320211	CFM565A1		NLG DOOR

(CAN) LOWERED THE GEAR HANDLE AND GEAR SHOWED IN TRANSIT, THEN E-CAM FOR GEAR NOT DOWN AND LOCKED. RECYCLED THE HANDLE AND GEAR CAME DOWN, LANDED WITHOUT INCIDENT. POST FLT REPORT FLAGS RT NLG DOOR OPEN SENSOR 38GA. INTERCHANGED WITH C1 CARGO PROX SWITCH. LGCIU TESTED ON SYSTEM 1 AND 2 WITH NO FAULTS. SERV.

CA041209001	AIRBUS	CFMINT	STRUCTURE	VIBRATION
12/9/2004	A320211	CFM565A1		FUSELAGE

(CAN) VERT SIGNIFICANT RUMBLE/VIBRATION DURING CLIMB AND CRUISE. A/C ROUTED TO HANGAR FOR INVESTIGATION. NOTE: MORE INFO. WILL FOLLOW AS BECOME AVAIL.

CA041229003	AIRBUS	CFMINT	COMPUTER	MALFUNCTIONED
12/29/2004	A320211	CFM565A1		ELAC NR 2

(CAN) F/CTL ELAC 1 PITCH FAULT, F/CTL ELAC 2 PITCH FAULT, F/CTL STAB. JAM, APPEARED ON ECAM. ECAM PROCEDURE COMPLETED NORMALLY AND A/C REMAINED IN ALTN LAW. RESET ELAC 1 & 2 VIA PUSH BUTTONS AND SYSTEM RESET ITSELF. ELAC NR 2 REPLACED AND TESTED PER AMM.

CA040319003	AIRBUS	IAE	VALVE	MALFUNCTIONED
3/4/2004	A320231	V2500A1		FUEL SYSTEM

(CAN) CREW REPORTED SEVERAL INCIDENTS OF UNEXPLAINED FUEL LOSS FROM RT FUEL SYS RESULTING IN INCONSISTENT FUEL IMBALANCES ON VARIOUS OCCASIONS. NO VISIBLE SIGNS OF FUEL SYS LEAKAGES WITHIN ACRFT NOR ON GROUND. FUEL QTYS CLOSELY MONITORED BY CREW WHILE TROUBLE SHOOTING PERFORMED. AIR RELEASE VALVE, & SUCTION VALVE BOTH REPLACED DURING TROUBLESHOOTING THIS CORRECTED DISCREPANCY. BOTH VALVES HAVE BEEN SENT OUT FOR BENCH CHK, & RESULTS WILL BE SUBMITTED WHEN THE SHOP REPORTS ARE RETURNED TO IDENTIFY THE CULPRIT(S).

CA050321004	AIRBUS	IAE	COMPRESSOR	FAILED
3/18/2005	A320231	V2500A1		NR 2 ENGINE

(CAN) THE CAPTAIN REPORTED HEARING A LOUD BANG FROM ENG NR 2 WITH INCREASED EGT, 2 RESTARTS WERE ATTEMPTED WITH NO SUCCESS AND THE FIRE HANDLE WAS PULLED (BOTTLES WERE NOT DISCHARGED). DAMAGE TO THE 3RD AND 4TH STAGE HIGH PRESSURE COMPRESSOR WAS CONFIRMED.

CA041015007	AIRBUS	IAE	BLADE	FAILED
10/14/2004	A320231	V2500A1	6A7379	COMPRESSOR

(CAN) ON TAKE OFF WITH THROTTLES BETWEEN IDLE AND FLEX MCT. LOUD BANG FROM LT ENGINE HEARD IN THE COCKPIT. TAKE OFF ABANDONED AT 115 KTS. ACRFT RETURNED WITH ENGINE RETARDED TO IDLE. NO UNUSUAL PARAMETERS. BORESCOPE INSPECTION REVEALED ONE FAILED HPC STAGE 4 BLADE WITH RESULTANT IMPACTS TO OTHER STAGE 4 BLADES.

CA041026010	AIRBUS	IAE	FAN	FAILED
10/25/2004	A320231	V2500A1	ETV3454G	E/E BAY

(CAN) DURING FLT THE ACRFT HAD BEEN DIVERTED DUE TO FUMES DETECTED IN THE COCKPIT & CABIN. AIRFRAME VIBRATIONS FROM RT WERE REPORTED IN CONJUNCTION WITH THE FUMES. CAPTAIN HAD SELECTED OFF PACK NR 2 AND ECAM MESSAGE VENT BLOWER FAULT OCCURRED SIMULTANEOUSLY, FUMES DISSIPATED RAPIDLY & ACRFT LANDED SAFELY. FURTHER INVESTIGATIONS CARRIED OUT BY TECHNICAL STAFF REVEALED THAT THE AVIONICSFAN WAS THE SOURCE OF FUMES AND VIBRATIONS (CIRCUIT BREAKER FOUND POPPED OUT).

CA050124006	AIRBUS	IAE	RECORDER	BURNED
1/22/2005	A320232	V2527A5	RDAV400111	CABIN

(CAN) TROUBLE SHOOTING THE AFT VIDEO MONITOR NOT EXTENDING REVEALED THAT THE TAPEING UNIT WAS SHOWING SIGNS OF SMOKE DAMAGE. CLOSER INVESTIGATION REVEALED THAT THE TAPEING UNIT HAD GIVEN OF SUFFICIENT HEAT TO CAUSE BURNING OF THE INSULATION BLANKET DIRECTLY ABOVE. THIS IS THE SECOND SUCH OCCURRENCE ON THIS AIRCRAFT (REF SDR 20040223001) SB 613-996-9178 DEALS WITH THIS PARTICULAR

ISSUE BUT THE SUPPLY OF THE MODIFIED UNITS HAS BEEN SLOW. ONLY 7 UNITS HAVE BEEN MADE AVAILABLE ON AN EXCHANGE BASIS TO DATE WHICH IS HALF THE QUANTITY REQUIRED FOR THE AIRCRAFT. NO COMPLAINTS FROM PASSENGERS REGARDING SMOKE AND NO CIRCUIT BREAKERS POPPED.

CA041206002	AIRBUS	CFMINT	TRANSMITTER	FLUCTUATES
12/6/2004	A321211	CFM563B1US	41SG3811	ENGINE OIL

(CAN) IN CRUISE WE HAD TO SLOW DOWN OIL PRESS NR 2 FLASHED GREEN 14 PSI. HAD SOME POWER THE PRESSURE FLUCTUATED BETWEEN 18-19 PSI WHEN POWER WAS SELECTED TOWARD IDLE OIL PRESSURE WENT TO 10 PSI (RED). WE KEPT THE POWER UP DURING DECENT AND APPROACH. REPLACED OIL PRESS. TRANSMITTER. OPERATIONAL CHECK CARRIED OUT AT IDLE AND HIGH POWER OIL PRESSURE NORMAL. LEAK CHECK CARRIED OUT, NIL LEAKS.

CA041209002	AIRBUS	CFMINT	ENGINE	MALFUNCTIONED
12/9/2004	A321211	CFM565A3		NR 2

(CAN) THE CREW REJECTED TAKE-OFF AT A SPEED GREATER THAN 100 KNOTS. THE DECISION TO REJECT WAS A RESULT OF A NR 2 ENGINE ROLL BACK AFTER A N2 OVERSPEED. ACRFT RETURNED TO GATE. A/C OFFLINE FOR INVESTIGATION, DFDR REMOVED FOR READOUT. NOTE: MORE INFO WILL FOLLOW AS BECOME AVAIL.

CA041214006	AIRBUS	CFMINT	INTERFACE UNIT	MALFUNCTIONED
12/14/2004	A321211	CFM565B4	3957985114	IGNITION SYSTEM

(CAN) ENG 1 IGN 'A' FAULT, ENG 2 IGN 'A' FAULT. 1&2 IGN A C/B POPPED. ENG 1 CTLC/B POPPED. STRONG SMELL OF ELECTRICAL BURNING. CONNECTOR 473VC SHORTED, CONNECTOR REPLACED. BMC NR 1 DAMAGED, REPLACED PER MM 36-11-34-400. EIU NR 2 CAUSING INTFC PROBLEMS WITH AEVC. EIU NR 2 REPLACED PER M M 73-24-34-500. ENGINE RUN CARRIED OUT AND ALL TESTS OK.

2005FA0000328	AIRBUS	BOLT	CRACKED
11/5/2004	A330*		BYPASS VALVE

A DOOR BYPASS VALVE WAS RETURNED FOR INVESTIAGTION. THE REASON FOR RETURN WAS ON PUSHBACK, FLIGHT CREW REPORTED GREEN RESERVOIR LOW LEVEL, WHERE THE INVESTIGATION FOUND A LEAK ON THE DOOR BYPASS VALVE. THE INVESTIGATION IDENTIFIED THAT BOLT HAD SHEARED. FURTHER INVESTIAGTION AT MFG INDICATED THAT INITIATING FORCE HAD RESULTED IN A CRACK THAT PROPAGATED ACROSS THE BOLT SECTION, RESULTING IN FAILURE. THE BOLTS COULD BE YIELDED WHEN TIGHTENED. (K)

2005FA0000329	AIRBUS	PUMP	CORRODED
11/5/2004	A330*	568128300100	FUEL SYS

A FUEL PUMP SHOWS EVIDENCE OF CAVITATIONAL EROSION ON A STRUCTURAL PILLAR WITHIN THE PUMP. THIS PILLAR CONTAINS A PASSAGEWAY FOR ELECTRICAL WIRES, WHICH FORMS PART OF THE MOTOR EXPLOSION CONTAINMENT ZONE. THERE IS A CONCERN THAT THE EROSION COULD MIGRATE TO THE PASSAGEWAY AND THEREFORE BREACH THE EXPLOSION CONTAINMENT ZONE. MFG IS COMMUNITATING WITH AC MFG. (K)

2005FA0000325	AIRBUS	BOLT	CRACKED
11/5/2004	A330*	A10212D	BYPASS VALVE

DOOR BYPASS VALVE WAS RETURNED FOR INVESTIGATION. REASON FOR RETURN WAS ON PUSHBACK, FLIGHT CREW REPORTED GREEN RESERVOIR LOW LEVEL, WHERE THE INVESTIGATION FOUND A LEAK ON DOOR BYPASS VALVE. IDENTIFIED THAT BOLT HAD SHEARED. INVESTIGATION AT MFG INDICATED THAT INITIATING FORCE HAD RESULTED IN CRACK THAT PROPAGATED ACROSS BOLT SECTION, RESULTING IN FAILURE. BOLTS COULD BE YIELDED WHEN TIGHTENED. ALSO AFFECTED IS DOOR BYPASS VALVE. (K)

CA050210003	AIRBUS	RROYCE	BYPASS VALVE	LEAKING
2/10/2005	A330*	RB211TRENT77	MRH530014D	MLG DOOR

(CAN) FAULT: HYD GREEN FLUID UNDERFILLED. PRESSURE AT 3000 PSI, BRAKES FAILED AT 100 FEET FROM BRIDGE, REVERSE AND PARKING BRAKE USED TO STOP AIRCRAFT. ALTERNATE BRAKING NOT AVAILABLE. FOUND RT MLG DOOR BYPASS VALVE (5229GA), LEAKING AND SEAL PROTRUDING. CHANGED VALVE IAW AMM32-31-13-400-802 HYDRAULIC SYS TOPPED UP AND LEAK AND OPERATION CHECKED. S/V BRAKE SYSTEM TEST ALSO

PERFORMED, OK.

CA050127001	AIRBUS	RROYCE	ODOR	DETECTED
1/27/2005	A340*	RB211*		AIR CONDITIONING

(CAN) IN CRUISE LOUD GRINDING NOISE HEARD MID GALLEY, AFT J CLASS. AIRCRAFT FILLED WITH ACRID SMELL. AFT AND MID CABINS FILLED WITH SMOKE. SMELL AND SMOKE LASTED ONE TO TWO MINUTES. ALL SYSTEMS INDICATED NORMAL. PACK FLOW SET TO HIGH FOR 15 MINS. SMELL FOUND COMING FROM MID GALLEY AIR COOLER. CHILLER DE-ACT AND AIRCRAFT DISPATCHED UNDER MEL. NOTE: FURTHER INFO WILL FOLLOW AS AVAILABLE.

CA041214008	AIRBUS	CFMINT	ANTENNA	DAMAGED
12/14/2004	A340313	CFM565C4	6225136201	WX RADAR

(CAN) ON ND. SYSTEM RETURNED TO NORMAL BUT GIVEN HISTORY, RETURNED HNL. ANT. COULD BE FELT AND HEARD CLUNKING. REPLACED WX RADAR ANT IAW W/C 34-41-11-000-801-862-050. REPLACED BOTH RADAR T/R UNITS IAW W/C 34-41-313-400. RADAR ANTENNA 34-40-0247 OFF FTN 639J4G ON FTNRJTR38. NR 1 T/R 34-40-0249 OFF S/N 6050 ON S/N 9J1U NR 2 T/R OFF FTN 76W092 ON S/N 90 DC.

CA041214009	AIRBUS	CFMINT	ANTENNA	DAMAGED
12/14/2004	A340313	CFM565C4	6225136201	WX RADAR

(CAN) ON ND. SYSTEM RETURNED TO NORMAL BUT GIVEN HISTORY, RETURNED HNL. ANTENNA. COULD BE FELT AND HEARD CLUNKING. REPLACED WX RADAR ANTENNA AS PER W/C 34-41-11-000-801-862-050. REPLD BOTH RADART/R UNITS AS PER W/C 34-41-313-400. RADAR ANT 34-40-0247 OFF FTN 639J4G ON FTNRJTR38. NR 1 T/R 34-40-0249 OFF S/N 6050 ON S/N 9J1U NR 2 T/R OFF FTN 76W092 ON S/N 90DC.

CA050126001	AIRTRC	PWA	ENGINE	FAILED
1/12/2005	AT402A	PT6A11AG		

(CAN) DURING A SPRAYING RUN, THE ENGINE EXPERIENCED AN UNCOMMANDED POWER REDUCTION. THE AIRCRAFT CLIPPED TREES AND IMPACTED THE GROUND. MFG WILL PARTICIPATE IN THE INVESTIGATION OF THE INCIDENT AND WILL SUPPLEMENT THIS REPORT TO PROVIDE ROOT CAUSE, ONCE ESTABLISHED.

CA050213006	AIRTRC	PWA	ENGINE	FAILED
2/7/2005	AT502B	PT6A34AG		

(CAN) DURING FLIGHT ENGINE OIL PRESSURE AND TURBINE TEMPERATURE INCREASED. OIL PRESSURE SUBSEQUENTLY REDUCED, ACCOMPANIED BY FLAMES FROM THE ENGINE EXHAUST. THE PILOT SHUT THE ENGINE DOWN IN FLIGHT AND CARRIED OUT AN EMERGENCY LANDING. MFG WILL MONITOR INVESTIGATION OF THE EVENT AND WILL SUPPLIMENT THIS REPORT TO REFLECT ROOT CAUSE AS AND WHEN ESTABLISHED.

CA041210005	AIRTRC	PWA	ATTACH FITTING	CRACKED
12/10/2004	AT802	PT6A67A	306532,22	HORIZONTAL STAB

(CAN) DURING ANNUAL INSPECTION THE RT HORIZONTAL STABILIZER AUX FIN WAS LOOSE. UPON INVESTIGATION BY MAINTENANCE STAFF IT WAS NOTED THAT THE FORWARD AUX FIN ATTACH PLATE WAS COMPLTELY CRACKED THROUGH AND THE REAR ATTACH PLATE WAS CRACKED ON BOTH SIDES OF THE RADIUS. THE CRACK LENGTHS ON THE REAR PLATE WERE APPROXIMATELY 1INCH AND .3125 INCH IN LENGTH. THE TOTAL WIDTH OF THE PLATE IN THE AREA IS 1.75 INCHES. THE PARTS WILL BE REPLACED PRIOR TO THE AIRCRAFT RETURNING TO SERVICE.

2005FA0000462	AMD	GARRTT	BOLT	BROKEN
3/16/2005	FALCON10	TFE731*	GYS18525	MLG WHEEL

A BROKEN BOLT WAS NOTICED DURING A TIRE PRESSURE CHECK. THE WHEEL COVER WAS REMOVED TO INVESTIGATE. ALL TEN BOLTS WERE NDT`D BY PAG PARTICLE INSP AND 3 OTHER BOLTS WERE FOUND CRACKED. PART CYCLES (LANDINGS) SINCE O/H IS 176 CSO. (K)

CA041222007	AMD	GARRTT	SENSOR	OPEN
11/13/2004	FALCON10	TFE7312	30011690040012	LT FIRE LOOP

(CAN) DURING PREFLIGHT CHECKS, THE LT ENGINE FIRE WARNING FAILED TO TEST. TROUBLESHOOTING REVEALED A FAILED FIRE LOOP. FIRE LOOP WAS REPLACED WITH NEW PRIOR TO FURTHER FLIGHT.

CA041222008	AMD	GARRTT	AMPLIFIER	INOPERATIVE
12/15/2004	FALCON10	TFE7312	360930001	FUEL QTY IND

(CAN) DURING FLIGHT, THE CREW NOTICED THAT THE RT FUEL QUANTITY GAUGE HAD DROPPED TO ZERO. THE LOW LEVEL LIGHT DID NOT ILLUMINATE, ASSURING THE CREW THAT THIS WAS AN INDICATION PROBLEM ONLY. THE RT QUANTITY AMPLIFIER WAS REPLACED AND THE SYSTEM WAS PROPERLY CALIBRATED PRIOR TO THIS FLIGHT. THE RECENTLY REPLACED AMPLIFIER WAS FOUND TO HAVE FAILED INTERNALLY.

CA041222009	AMD	GARRTT	INDICATOR	FAILED
12/10/2004	FALCON10	TFE7312	7231602	FUEL FLOW

(CAN) DURING CRUISE FLIGHT THE RT FUEL FLOW GAUGE FAILED. GAUGE WAS REPLACED AND SYSTEM TESTED SERVICEABLE.

CA050208003	AMD	GE	FCU	LEAKING
2/3/2005	FALCON20	CF7002D2	5001T39G29G	ENGINE

(CAN) TAKEOFF WAS REPORTED AS NORMAL. ENGINE ANTI-ICE WAS SELECTED ON, AS AC CLIMBED THROUGH 2000 FT IT WAS NOTED THAT WITH POWER LEVER FIREWALLED, NR1 ENGINE COULD ONLY MAINTAIN AN EGT OF 640 C, N1 RPM AND N2 RPM WERE BOTH AT 90 PERCENT. AC CONTINUED TO CLIMB, 6000 FT, ENGINE ROLLED BACK TO IDLE AND FLAMED OUT. CREW WAS UNABLE TO RELIGHT ENGINE, ELECTED TO RETURN TO DEPARTURE AIRPORT. MAINT WAS ROUTED, ENGINE WAS INSPECTED AND NO FOD DAMAGE WAS FOUND. UPON OPENING ENGINE COWL, SIGNIFICANT AMOUNT OF FUEL WAS NOTED IN THE BOTTOM OF COWLS. FUEL SYSTEM WAS PRESSURIZED AND A LEAK WAS FOUND ON FCU. FCU WAS REPLACED, LEAK CHECKED AND GROUND RUN. TEST FLIGHT WAS COMPLETED. AC WAS RETURNED TO SERVICE.

CA050126010	AMD	GE	ENGINE	FOD
1/20/2005	FALCON20	CF7002D2	CF7002D2	NR 1

(CAN) WHILE DOING THE DAILY INSPECTION, TECHNICIAN NOTICED SUBSTANTIAL FOREIGN OBJECT DAMAGE TO THE BYPASS FAN AND THE FIRST STAGE COMPRESSOR BLADES OF THE ENGINE INSTALLED IN POSITION NR 1. AIRCRAFT HAD JUST COMPLETED 9.6 HOURS OF FLYING WITHOUT ANY INDICATION OF POWER LOSS. AIRCRAFT LANDED, THE FREIGHT WAS OFF LOADED AT THE FACILITY. AIRCRAFT ENGINES WERE STARTED AND THE AIRCRAFT WAS TAXIED BACK TO THE HANGAR FOR ROUTINE MAINTENANCE. ENGINE WAS REMOVED AND RETURNED FOR INVESTIGATION AND REPAIR.

CA041222015	AMD		START VALVE	FAILED
12/21/2004	FALCON2000		8216003	ENGINE

(CAN) THE ENGINE EXPERIENCED AN UNCOMMANDED SHUTDOWN DURING CLIMB AND THE AIRCRAFT DIVERTED TO NEAREST AIRPORT. SUBSEQUENT INSPECTION REVEALED THE AIRFRAME AIR-START VALVE STUCK IN THE OPEN POSITION AND EVIDENCE OF LOCALIZED OVER HEATING. A (START VALVE FAILED OPEN) EICAS MESSAGE WAS REPORTED.

2005FA0000238	AMD	CFE	CLAMP	LOOSE
11/18/2004	FALCON2000	CFE73811B		BLEED AIR

CLIMBING THROUGH 27,000 FT THE RT GENERATOR WENT OFFLINE, SHORTLY AFTERWARDS, LT GENERATOR WENT OFFLINE, AN EMERGENCY WAS DECLARED AND THE AC LANDED WITH NO FURTHER INCIDENT, INVESTIGATION FOUND A LOOSE CLAMP CONNECTING A BLEED AIR DUCT TO THE CABIN COLD TEMPERATURE CONTROL VALVE. IT IS SUSPECTED THAT BLEED AIR LEAKING AT THIS AREA CAUSED THE GENERATOR CONTROL UNITS TO STOP WORKING DUE TO OVERHEATING. THE CLAMP WAS TIGHTENED AND A LEAK CHECK PERFORMED. A FUNCTIONAL CHECK OF THE GENERATOR SYS PERFORMED. NO DISCREPANCIES WERE NOTED. GENERATOR CNTRL UNITS WERE REPLACED AS A PRECAUTIONARY MEASURE GCU`S WERE SENT TO THE MFG AND FOUND TO FUNCTION IAW DESIGN SPECIFICATION. (K)

2005FA0000230	AMD	GARRTT	SIGN	BURNED
9/8/2004	FALCON50MYST	TFE731*	F5053136501	LT CABIN

SMOKE WAS OBSERVED IN THE CABIN AFTER START OF TAXI TO ACTIVE RUNWAY, THE CREW SHUT DOWN ENGINES, SHUT OFF ALL POWER AND DISCONNECTED BATTERY. FOUND SOURCE OF SMOKE TO BE FROM A NO SMOKING/SEATBELT SIGN LOCATED IN THE LT SIDE OF CABIN AT FRAME 20. THE AIRCRAFT WAS SECURED AND FERRYED TO A MAINTENANCE BASE. UPON FURTHRE INVESTIAGTION, FUND NO CONCLUSIVE EVIDENCE BUT SUSPECT PROBLEM ORIGINATED AT THE INTERFACE OF THE WIRING TO THE NO SMOKING/SEATBELT SIGN.

2005FA0000226	AMD	GARRTT	POWER SUPPLY	FAILED
2/14/2005	FALCON50MYST	TFE731*	189411	CABIN LIGHT

CREW HAD POWER ON AIRCRAFT AND NOTICED AN ELECTRICAL BURNING SMELL COMING FROM THE CABIN. AFTER INVESTIGATING THEY FOUND THE CABIN INDIRECT LIGHTING CIRCUIT BREAKER POPPED. THE MAINTENANCE FACILITY TROUBLESHOT THE PROBLEM TO A POWER SUPPLY THAT HAD BURNED UP. RECOMMEND INVESTIGATION INTO THIS PN POWER SUPPLIES TO SEE IF THEY SHOULD BE TOTALLY REMOVED FROM SERVICE. MFG RECOMMENDED SB F50-335 FOR REPLACING POWER SUPPLIES WITH IMPROVED POWER SUPPLY THAT INCORPORATES A PROTECTION CIRCUIT. THESE LIGHTING SYS WERE INSTALLED UNDER MFG MODIFICATION F50 M2065+M2674. THIS AIRCRAFT WILL HAVE SB -335 INSTALLED AS SOON AS PART CAN BE PROCURED.

2005FA0000456	AMD	GARRTT	TURBINE	FAILED
3/10/2005	FALCON50MYST	TFE73140	30600501	NR 3 ENGINE

ENGINE SHUT DOWN AT FL360, ON DEPARTURE. FLIGHT CREW AND PASSENGERS HEARD LOUD BANG AND FELT VIBRATION. FLIGHT CREW OBSERVED NR 3 ENGINE N1 SPOOLDOWN AND 25 DEGREE HIGHER THAN NORMAL ITT, ENGINE OIL PRESSURE WAS NORMAL. ENGINE WAS SHUT DOWN AND FLIGHT RETURNED TO DEPARTURE. POSTFLIGHT INSP OF NR3 ENGINE REVEALED DEBRIS IN EXHAUST DUCT. NO VISIBLE DAMAGE TO THE LOW PRESSURE TURBINE. AFT OF FAN OR COMPRESSOR AREA, FWD. SUSPECT COMPONENT FAILURE FWD OF LOW PRESSURE TURBINE. ENGINE REMOVED FOR REPAIR, SHIPPED TO MFG. PENDING INSP TEARDOWN REPORT FROM MFG. NOT CERTAIN WHAT COMPOENT IN ENGINE FAILED. (K)

CA041028001	AMD	GARRTT	COMPRESSOR	FAILED
10/26/2004	FALCON900	TFE7315BR	TVT10728H3	ENGINE

(CAN) PRIOR TO DEPARTURE NOISE AND VIBRATION WAS OBSERVED COMING FROM THE AREA OF THE TURBOFAN. THE AIR CONDITIONING WAS SHUT DOWN AND THE PROBLEM DISAPPEARED. THE TURBOFAN WAS CHANGED AND THE FAULT CLEARED. THE FAILED UNIT EXHIBITED TURBINE BLADE TIP RUB PROBABLY DUE TO A FAILED BEARING IN THE FAN SHAFT.

CA050124007	AMD	GARRTT	TRANSFER TUBE	SEPARATED
1/21/2005	FALCON900	TFE7315BR	30748451	BLEED AIR SYS

(CAN) TUBE FOUND SEPARATED AND PROTRUDING FROM BEHIND PANEL AT BOTTOM OF BYPASS DUCT. PIPE HAD CRACKED/FATIGUED AND SEPARATED AT ONE END AND IN THE MIDDLE OF AN UNSUPPORTED SECTION. THE OPEN TUBE RESULTED IN A LOW PRESSURE COMPRESSOR BLEED AIR LEAK THAT COULD BE SEEN IN LOSS OF TEMPERATURE MARGIN BETWEEN LAST TWO PERFORMANCE PLOTS IN ENGINE LOG BOOK. IT IS SUSPECTED THE TUBE SEPARATED MORE THAN 300 HOURS PREVIOUSLY. ENGINE WAS NOT TEMPERATURE LIMITED. ENGINE WAS BEING REMOVED FOR CORE OIL CARBON SEAL FAILURE. TUBE FAILURE IS NOT CONSIDERED TO HAVE BEEN A CONTRIBUTORY FACTOR. A VIBRATION INSPECTION WAS REQUESTED BY MFG, IN ADDITION TO THE REPAIR THE ENGINE WAS REMOVED FOR. ENGINE FORWARDED TO O/H FACILITY .

2005FA0000210	AMD	GARRTT	ANTI-ICE VALVE	FAILED
12/29/2004	FALCON900B	TFE731*	7847232	

DURING TROUBLESHOOTING FOR (HIGHER THAN NORMAL) GASPER AIR TEMPERATURE, FOUND THE TURBOFAN TURBINE ANIT-ICE VALVE DISASSEMBLED BETWEEN THE VALVE AND THE MOTOR. NO DAMAGE CAN BE SEEN ON THE VALVE. THE 2 THREADED PARTS WERE FOUND UNTHREADED. THE DYSFUNCTIONAL PART WAS REMOVED AND REPLACED WITH A NEW VALVE PN 784723-3. REF AMM 21-512. (K)

2005FA0000227	AMD	GARRTT	PIPE	CHAFED
10/14/2004	FALCONF	TFE731*	M20R751804A1	HYD SYSTEM

2 HYDRAULIC PIPES WERE CHAFING AGAINST EACH OTHER IN THE RT ENGINE PYLON. THE 2 PIPES WERE

REMOVED AND REPLACED ENSURING NO CONTACT BETWEEN THEM. (GL19200501324). (K) (NR 2 OF 2)

2005FA0000206	AMD	GARRTT	LINE	CHAFED
10/14/2004	FALCONF	TFE731*	M20R751802A2	HYD SYSTEM

2 HYDRAULIC PIPES WERE CHAFING AGAINST EACH OTHER IN THE RT ENGINE PYLON. THE 2 PIPES WERE REMOVED AND REPLACED, ENSURING NO CONTACT BETWEEN THEM. (GL19200501324) (K) (NR1 OF 2)

2005FA0000370	AMD	GARRTT	WHEEL	CRACKED
11/1/2004	STCFALC50	TFE7312B	9543426	NLG

MAINTENANCE CREW FIRST NOTICED TIRE SERVICE BECOMING MORE FREQUENT OVER THE PERIOD OF 2 OR 3 DAYS. TIRE PRESSURES WERE DROPPING APPROX 10 PERCENT TO 15 PERCENT OVERNIGHT. SUBSEQUENT INSPECTION OF THE TIRE AND WHEEL ASSY REVEALED AIR ESCAPING THROUGH THE CASTING ADJACENT THE RAISED VALVE CORE BOSS. LIQUID LEAK DETECTOR ALSO CONFIRMED THE LEAK AND LOCATION. NOTE: SECOND WHEEL TO DEVELOP A LEAK IN SAME AREA, WAS RETURNED FOR EVALUATION INSPECTION AND THE DISPOSITION OF THIS WHEEL IS NOT KNOWN AT THIS TIME. (K)

CA040915002	BAC	LYC	LOCK BOLT	CORRODED
9/10/2004	146200A	ALF502R5	HL720PN1630	RT WING

(CAN) DURING REPAIR OF RIGHT WING FUEL LEAK, THE HEAD OF THE LOWER HYLOCK BOLT ATFUSELAGE TO WING ATTACHMENT ASSEMBLY AT STATION 29 WAS DISLODGED BY A PLASTIC P RC SCRAPER (REF IPC 53-30-01-15 PAGE 0 ITEM 75).FURTHER INVESTIGATION FOUND THE HEAD OF THE BOLT SEPARATED FROM THE SHANK DUE TOSEVERE CORROSION, AND THE BOLT HOLE PITTED. THE BOLT HOLE WAS CLEANED OUT, NDTINSPECTED, AND A NEW FASTENER INSTALLED PER SRM 51-45-00 WITH NO FURTHER FAULTS.

CA041217004	BAC	LYC	LINK	UNSERVICEABLE
11/16/2004	146200A	ALF502R5	HC536H04230	WING TO BODY

(CAN) DURING INSPECTIONS CARRIED OUT ON THE ABOVE NOTED ACRFT FOR THE LEASE RETURN, ENGINEERS FOUND WING TO FUSELAGE CONNECTING LINKS AT REAR SPAR FITTING S, FRAME 29 CORRODED IN THE BORE ON BOTH ENDS OF THE LINKS. BOLTS ASSOCIATED WITH THE LINKS WERE ALSO CORRODED UNDER THE HEAD AND AROUNDTHE UNDER CUT AREA OF THE THREADED END OF THEBOLT. INITIAL THRESHOLD FOR THESE INSPECTIONS IS AT 24000 FLTS AND THE REPEAT WAS TO BE DONE AT 12000 FLIGHTS THE TWO AIRCRAFT THAT HAVE HAD THE INSPECTIONS CARRIED OUT ON WERE ON A SAMPLING PROGRAM AND BEING TRACKED ACCORDINGLY.REPLACEMENT PARTS WERE ORDERED AND ARE INSTALLED ON THE ABOVE NOTED AIRCRAFT.

2005FA0000458	BAG	EXHAUST STACK	CRACKED
3/18/2005	JETSTM3201	1379049H403	ENGINE

CRACK IN FLANGE DUE TO ENGINE VIBRATION. (K)

CA040930003	BAG	WINDOW	CRAZED
9/29/2004	JETSTM3212	1379628C402	COCKPIT

(CAN) AT 21000 FT IN CRUISING CONFIGURATION, THE RT WINDSHIELD SUDDENLY CRAZED. THE WINDSHIELD RETAINED ITS SHAPE AND THERE WAS NO CHANGE IN CABIN PRESSURE. DESCENT WAS COMMENCED AND THE CABIN ALTITUDE WAS INCREASED TO REDUCE DIFFERENTIAL PRESSURE. QRH WAS CONSULTED AND A NORMAL DESCENT AND LANDING WAS CARRIED OUT AT FORT SMITH AIRPORT WITH NO FURTHER CHANGE IN THE STATUS OF THE WINDSHIELD. A MAINTENANCE INSPECTION CONFIRMED THE OUTER AND INNER PLY TO BE INTACT. THIS WINDSHIELD HAD BEEN REPAIRED JANUARY 2004 AND INSTALLED IN THE AIRCRAFT MARCH 2004.

CA041015006	BAG	GARRTT	COLLINS	BULB	SHORTED
9/23/2004	JETSTM3212	TPE33110UG			CONTROL HEAD

(CAN) UPON COMPLETION OF ENG START & TURNING ON AVIONICS IN PREPARATION FOR DEPARTURE ON A CHARTER TRIP, CREW OBSERVED SMOKE COMING FROM THE RT AVIONICS. CREW SHUTDOWN ENGINES & MASTER SWITCH & DEPLANED ALONG WITH PAX. MX RESPONDED & AFTER LOCATING SOURCE OF SMOKE & ATTENDED FUMES, REPLACED NAV CONTROL HEAD SET WITH A SERVICEABLE SET & CHARTERED DISPATCHED. NAV CONTROL HEAD - FACE PLATE LIGHT BULB BURNED OUT. REPAIRED & PROVIDED A MAINTENANCE RELEASE (DATED 24 SEPT 04). MATCHING UNIT (OTHER 1/2 OF SET)WAS INSPECTED & TESTED & PROVIDED A

MAINTENANCE RELEASE.

CA041214005	BAG	GARRTT	BEARING	LEAKING
11/23/2004	JETSTM3212	TPE33110UG	8657923	ENGINE

(CAN) OIL WAS FOUND LEAKING FROM THE AFT BEARING COVER, ENOUGH OIL WAS LEAKING WHICH ALLOWED A 4 INCH DIAMETER POOL OF OIL IN THE STUB PIPE.ENGINE TEAR DOWN STRIP REPORT WILL BE SENT IN.

CA041209009	BAG	GARRTT	WIRE	CHAFED
9/9/2004	JETSTM3212	TPE33110UG		RT WING ROOT

(CAN) DURING CLIMB, POWER LOSS ON RT ENG AT A FREQ OF 1-2 MINS, A TOTAL OF 4 TIMES. DURING FINAL , LANDING & TAXI TO SHUTDOWN, ENG NORM. CHIP DETECTOR & FILTERS INSPD, NO FAULTS FOUND. FUEL PRESSURE OK. COMPLETE GROUND RUN PERFORMED WITH NO FAULTS. TEST FLT PERFORMED WITH NO FAULTS. PROBLEM REOCCURRED 5 WEEKS LATER. COMPLETE WIRING SYS FOR TORQUE IND SYS INSPD. CHAFED WIRE FOUND BEHIND TERM BLOCK IN RT WING ROOT. DISASSEMBLED TO EXPOSE WIRE FOR INSP. CHAFED WIRES & CHAFED PAINT ON STRUCT COULD NOT BE SEEN WITH A MAGNIFIER. VOID IN INSULATION FOUND. WIRE REINSULATED & REPOSITIONED. TORQUE IND SYS WORKS WITH MILLIVOLTS (PREAMPLIFIED). SUSPECT MOISTURE PROVIDING A GROUND PATH & TORQUE SYS SEEING AN OVRTORQUE.

CA041209010	BAG	GARRTT	SHUTOFF VALVE	FAILED
10/5/2004	JETSTM3212	TPE33110UG	39423091	FUEL

(CAN) DURING START SEQUENCE THE ENGINE APPEARED TO START NORMALLY UNTIL STARTER DIS-ENGAGED THEN SHUT ITSELF DOWN. TESTING FOUND FUEL SHUTOFF VIBRATING LOUDLY WHEN POWER APPLIED WITH ENGINE STOP BUTTON. SUSPECT THE VALVE WAS TRYING TO BE OPEN ANDCLOSED AT THE SAME TIME. REPLACED THE VALVE AND THE ENGINE STARTED AND STOPS NO RMALLY.

CA050131004	BAG	GARRTT	STARTER GEN	FAILED
1/15/2005	JETSTM3212	TPE33110UG	23079009	ENGINE

(CAN) GENERATOR WENT OFF LINE, SMOKE AND OIL VISUAL ON COWLING.

CA050131006	BAG	GARRTT	ENGINE	FAILED
1/19/2005	JETSTM3212	TPE33110UG		

(CAN) ENGINE FAILED IN FLIGHT, AIRCRAFT HAD JUST EXITED ICING CONDITIONS, CONTINUOUS IGNITION WAS TURNED OFF A FEW MINUTES PRIOR TO ENGINE FAILURE. AIRCRAFT RETURNED TO BASE AND ENGINE WAS INSPECTED FOR ANY CAUSE OF THE FAILURE, NOTHING WAS FOUND. GROUND/POWER RUNS WERE CARRIED OUT AND FOUND SERVICEABLE, CONDITIONAL MAINTENANCE RELEASE WAS SIGNED FOR A TEST FLIGHT. TEST FLIGHT WAS CARRIED OUT AND AIRCRAFT RETURNED TO BASE WITH ALL ENGINE PARAMETERS WITHIN LIMITS.

CA050131007	BAG	GARRTT	ENGINE	FAILED
1/11/2005	JETSTM3212	TPE33110UG		

(CAN) SOAP SAMPLE INDICATED MAJOR ALUMINIUM IN THE OIL SYSTEM, 2ND SOAP SAMPLE TAKEN AND FOUND MAGNESIUM AND CARBON STEEL PARTICLES IN THE SAMPLE. ENGINE REMOVED AND SENT FOR EVALUATION, AMO 50-04.

CA041221003	BBAVIA	LYC	MUFFLER	CRACKED
12/10/2004	7GCBC	O320A2D	099001050	ENGINE

(CAN) AD CF90-03R2 REQUIRES PRESSURE TESTING OF MUFFLERS USED FOR CABIN HEAT. CRACK NOTED AT RT END PLATE ABOVE INLET PORT, AT OUTER EDGE OF PREVIOUS WELD REPAIR. CRACK WAS NOT INSIDE CABIN HEAT MUFF AREA.

CA041013002	BBAVIA	LYC	LEAF SPRING	BROKEN
10/13/2004	8GCBC	O360C2E	315434	TAIL WHEEL

(CAN) MAIN LEAF SPRING BROKEN AT TOW BRIDLE CAGING BOLT. APPROX. 4 INCHES AFT OF SPRING ASSYU BAR. THESE ARE RECENTLY PURCHASED, NEW BATCH TYPE, LEAF SPRINGS.

CA041013003	BBAVIA	LYC		LEAF SPRING	BROKEN
10/13/2004	8GCBC	O360C2E		31543456	TAIL WHEEL

(CAN) 4, MAIN LEAF SPRING, BROKEN APPROX 4 INCHES AFT OF U BAR. -5 AND -6 SPRINGS BROKEN AT AFT EDGE OF U BAR AND -6, TOP SPRING, PUSHING UP AGAINST BOTTOM OF RUDDER HORN. THESE ARE RECENTLY PURCHASED NEW BATCH TYPE LEAF SPRINGS.

CA050211001	BBAVIA	LYC	BLANCA	LEG ASSY	DELAMINATED
2/11/2005	8GCBC	O360C2E		71461L	MLG

(CAN) AS INSTRUCTED BY INSPECTION REPORT C-12-B80-00/NF-001, AME 118, OUT OF PHASE TASKING (MAIN LANDING GEAR SPRING): COMPLIANCE BI-ANNUAL OR 700 HOURS WHICH EVER COMES FIRST. THE GEAR LEGS WERE REMOVED AND SENT FOR NDT. AT NDT THE SUBJECT GEAR LEG WAS FOUND TO HAVE INDICATIONS OF DE-LAMINATION LONGITUDINALLY ON BOTH THE LEADING EDGE AND TRAILING EDGE. IT IS ESTIMATED THAT THE SUBJECT GEAR LEG HAS ABOUT 8437.5 TAKE OFFS AND LANDING. SUBJECT GEAR LEG WAS REMOVED FROM SERVICE.

CA050204001	BEECH	PWA		SUPPORT	CRACKED
1/28/2005	100BEECH	PT6A28		1156100181	ELEVATOR

(CAN) ONE SCREW HOLE HAS 2 QUARTER INCH CRACKS RADIATING OUT BUT STOPPING BEFORE REACHING PART EDGE. PROBLEM FOUND FROM NDT TESTING FOR THE 1000 HOUR REQUIREMENT IN MM FOR ELEVATOR TORQUE TUBES. THIS PART IS MADE OUT OF MAGNESIUM, IF MANUFACTURER WOULD CHANGE PART MATERIAL TO ALUMINUM WE BELIEVE THIS WOULD SOLVE THE PROBLEM.

CA041230003	BEECH	PWA	RAYTHN	MOTOR	SEIZED
12/27/2004	100BEECH	PT6A28			BLOWER ASSY

(CAN) PILOTS NOTICED SMOKE COMING FROM UNDER THE LT INSTRUMENT PANEL THAT QUICKLY STARTED TO FILL THE COCKPIT. THEY DESCENDED, DEPRESSURIZED AND DECLARED AN EMERGENCY.MAINTENANCE DISCOVERED THAT THE BLOWER MOTOR HAD SEIZED CAUSING THE SMOKE IN THE AIRCRAFT.

CA050112002	BEECH	PWA		WINDSHIELD	CRACKED
1/10/2005	100BEECH	PT6A28		5042006936	COCKPIT

(CAN) IN CRUISE PILOT HEARD LOUD BANG, NOTICED CO-PILOTS INNER PANE SHATTERED. STARTED DECENT TO 130000 ASL, BROUGHT CABIN PRESSURE DOWN TO 2 PSI. LANDED AT DESIGNATION.

CA050207006	BEECH	PWA		FUEL CONTROL	INOPERATIVE
2/5/2005	100BEECH	PT6A28		252444076	RT ENGINE

(CAN) PILOTS STARTED THE ENGINES AND TAXIED OUT FOR TAKEOFF. WHEN APPLIED POWER, THE RT ENGINE REMAINED AT IDLE. THEN RETURNED TO THE RAMP AND SHUT DOWN. ENGINEER CHANGED THE FCU.

CA041104008	BEECH	PWA	DORNEMARGLN	BATTERY PACK	LEAKING
11/4/2004	1900C	PT6A65B		BS2173	ELT

(CAN) UPON ROUTINE 12 MONTH INSPECTION OF TH SUBJECT ELT, IT WAS OBSERVED THAT THE BATTERY HAD LEAKED, SHORTED OUT THE ELT MAIN BOARD AND HAD PRODUCED MAJOR AMOUNTS OF BURNING. ELT BATTERY WAS MANUFACTURED ON JUNE/03. BATTERY EXPIRY DATE IS JULY/05. THIS UNIT IS NOW DEEMED BEYOND ECONOMICAL REPAIR.PICTURES ARE ATTACHED.

CA050126011	BEECH	PWA		ACTUATOR	LEAKING
1/20/2005	1900C	PT6A65B		11238002223	NLG

(CAN) NOSE LANDING GEAR WOULD NOT EXTEND UPON DESCENT INTO AIRPORT. EMERGENCY GEAR EXTENSION PROCEDURE COMPLETED AND THE AIRCRAFT LANDED SAFELY. NOSE LANDING GEAR ACTUATOR WAS REPLACED, FOLLOWED BY SEVERALGEAR SWINGS IN NORMAL AND EMERGENCY MODES. GEAR GROUND CHECKED SERVICEABLE AND AIRCRAFT WAS RETURNED TO SERVICE.

CA050125012	BEECH	PWA	BFGOODRICH	BEARING	FAILED

1/21/2005	1900C	PT6A65B	1368520629	WHEEL ASSY

(CAN) AIRCRAFT DEPARTED ENROUTE AT TEMPERATURE AT 5 DEG C. AIRCRAFT ARRIVED WITHOUT ANY INCIDENT, WHEN AIRCRAFT WAS AT THE PAX TERMINAL IT WAS NOTICED THAT THE RT OB MAIN WHEEL ASSEMBLY WAS MISSING. INSPECTION REVEALED THAT THE WHEEL BEARINGS HAD DISINTEGRATED AND ALLOWED THE WHEEL ASSEMBLY TO FALL OFF THE WHEEL AXLE. THE WHEEL ASSEMBLY WAS FOUND ON THE RUNWAY AT ORIGINATING AIRPORT.

2005FA0000006	BEECH	PWA	BLADE	BROKEN
12/28/2004	1900C	PT6A65B	31019912	LT ENGINE

AIRCRAFT DEPARTED, AT CRUISE, THE LT ENGINE HAD AN EXPLOSIVE NOISE AND THE LEFT ENGINE SEIZED. PRE INSPECTION OF ENGINE INDICATES LOSS OF CT BLADE. (K)

CA050202003	BEECH	PWA	RELAY	BURNED
2/1/2005	1900D	PT6A67D	MS24171D1	MLG

(CAN) DURING APPROACH, FLIGHT CREW SELECTED GEAR DOWN BUT THE CONTROL CB OPENED AND WOULD NOT RESET. THE LANDING GEAR WAS MANUALLY EXDENDED WITH 3 GREENS. MAINTENANCE FOUND THE LANDING GEAR RELAY WAS BURNED AT THE CONTACTS AREA AND THE RELAY WAS REPLACED. THIS OPERATOR HAS HARDTIME, THE RELAY AT 5000 HOURS PREVIOUSLY TO PREVENT THESE TYPES OF OCCURENCES. TO DATE, THIS NUMBER HAS BEEN SUCCESSFUL BUT THIS FAILURE OCCURRED APPROX 3600 HOURS SINCE INSTALLATION. AS A RESULT, THE COMPANY HARDTIME ON THIS RELAY HAS BEEN LOWERED TO 3000 HOURS.

CA050127003	BEECH	PWA	ELBOW	FRACTURED
1/17/2005	1900D	PT6A67D	310047001	ENG OIL LINE

(CAN) IMMEDIATELY AFTER STARING DESCENT, CREW NOTED OIL PRESSURE DROPPING FOLLOWED BY WARNING ANNUCIATORS ON LT POSITION. ENGINE CONTINUED TO LOSE OIL PRESSURE AND ENGINE WAS SHUTDOWN AND FEATHERED. MAINT FOUND OIL BOSS (ELBOW) FOR REDUCTION GEAR CASE RETURN OIL LINE HAD FRACTURED THROUGH 1 OF 2 ATTACHING BOLT HOLES AND HEAD OF 1 BOLT WAS DETACHED FROM STUD PORTION. HEAD WAS RETAINED BY SAFETY WIRE. IT WAS UNCERTAIN AS TO WHY THE BOSS HAD FRACTURED SO ENGINE WAS REPLACED FOR PRECAUTIONARY REASONS. ENGINE HAS SINCE BEEN CHECKED AND IS IN NORMAL OPERATING CONDITION LEADING TO DETERMINATION THAT BOSS AND/OR ATTACHING BOLTS SIMPLY FAILED AND WAS NOT CAUSED BY OIL PRESSURE SPIKES OR.

CA050201004	BEECH	PWA	ENGINE	FAILED
1/30/2005	1900D	PT6A67D		LEFT

(CAN) AC HAD DEPARTED, LT LOW OIL PRESSURE LIGHT ILLUMINATED, GAUGE ALSO CONFIRMED PRESSURE AT 50-55. ENG WAS SHUTDOWN AND SECURED. EMERGENCY WAS DECLARED, AC DIVERTED TO NEAREST AIRPORT, LANDED UNEVENTFULLY. MAINT FOUND ENGINE LOW BY 3 LITERS. OIL WAS NOTED ON LT LANDING GEAR BUT INSP OF ENG DID NOT REVEAL LOCATION OF LEAK. AC WAS GROUND RUN, INSPECTED WITH ALL PARAMETERS NORMAL, NO LEAKAGE. AC FOUND FIT TO RETURN TO INTENDED DESTINATION. TAKEOFF WAS NORMAL, HALFWAY INTO FLIGHT OIL PRESSURE STARTED TO DROP. ENG WAS SHUTDOWN AND SECURED, LANDING AT DESTINATION WAS UNEVENTFULL. INVEST OF ENG REVEALED INTRNL LEAKAGE OF OIL. IT WILL BE REMOVED AND FOLLOW UP REPORT WILL BE SUPPLIED.

CA050217005	BEECH	PWA	VICKERS	SELECTOR VALVE	INTERMITTENT
2/10/2005	1900D	PT6A67D		847898	LT WING ROOT

(CAN) YAW DAMPER KICKED OFF UNCOMMANDED, GEAR SELECTED DOWN WITH NO FUNCTION, IT WAS NOTICED THAT L/G CNTRL C/B WAS TRIPPED, RESET, LANDING WAS UNEVENTFUL. PILOTS CONTINUED, C/B WAS TRIPPED WITH YAW DAMP ON. YAW DAMPER WAS DISENGAGED, C/B RESET, GEAR SELECTED DOWN. CONTINUED W/O USE OF YAW DAMPER. ON APPROACH C/B WAS NOTED TO BE TRIPPED, WOULD NOT RESET. CONTINUED, GEAR WAS MANUALLY EXTENDED, LANDING WAS NRML. MAINT FOUND WIRING ON LT UP/DOWN LOCK SWITCHES CHAFFED, REPAIRED, REMOVED L/G SEL CONNECTOR PLUG, REINSTALLED. ON APPROACH, L/G C/B TRIPPED AGAIN, IT WAS RESET, GEAR EXTENDED. UNEVENTFULL LANDING. DETERMINED SEL VALVE ON HYDR PWR PACK WAS INTERMITTENT. PWR PACK WAS REPLACED, AC RETURNED TO SERVICE.

CA041221004	BEECH	PWA	WINDSHIELD	CRACKED

12/16/2004	1900D	PT6A67D	PPG1013840257	COCKPIT

(CAN) WHILE IN THE CLIMB, PASSING THROUGH 15000 FT THE CAPTAINS WINDSHIELD CRACKED.THE CREW CARRIED OUT THE APPLICABLE FLIGHT MANUAL PROCEDURES AND RETURNED BACKTO AIRPORT. THE AIRCRAFT WAS LATER FERRIED TO THE MAINTENANCE BASE WHERE THE WINDSHIELD WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE.

CA041220002	BEECH	PWA	SWITCH	NOT CLOSED
12/16/2004	1900D	PT6A67D		ACTUATOR

(CAN) DURING LANDING PROCESS, THE CREW NOTED THAT THE NOSE GEAR DOWN GREEN INDICATION WAS NOT ILLUMINATING. MAINTENANCE FOUND THE INTERNAL SWITCH ON THE ACTUATOR WAS NOT CLOSING PROPERLY AND THE ACTUATOR WAS REPLACED.

CA041220003	BEECH	PWA	RELAY	SHORTED
12/19/2004	1900D	PT6A67D	MS24171D1	MLG

(CAN) DURING LANDING PROCESS, GEAR REQUIRED 2 ATTEMPTS FOR EXTENSION. MAINTENANCE FOUND THE LANDING GEAR RELAY, WAS PITTED INTERNALLY PROVIDING INTERMITTENT CONTACTS.THIS OPERATOR HAS EXPERIENCED NUMEROUS FAILURES AT OR ABOVE 8000 HOURS TSN ON THESE RELAYS. AS A RESULT, THE RELAY WAS HARDTIMED AT 5000 HOURS WITH (TO DATE) GOOD SUCCESS. THIS RELAY FAILED AT APPROX 3700 HOURS TSN. THEREFORE, THE HARDTIME FOR THIS FLEET SHALL BE ESCALATED TO 3000 HOURS.

CA041206006	BEECH	PWA	ENGINE	MALFUNCTIONED
12/3/2004	1900D	PT6A67D		

(CAN) ON APPRAOCH THE ENGINE EXPERIENCED A POWER LOSS ACCOMPANIED BY LOW OIL AND FUEL PRESSURE WARNINGS. THE AIRCRAFT LANDED AT POINT OF DESTINATION. THE EVENT WAS NOT REPRODUCED DURING SUBSEQUENT GROUND AND FLT TESTS. THE FUEL CONTROL UNIT HAS BEEN REPLACED. PWC WILL MONITOR THE INVESTIGATION AND WILL AMEND THIS REPORT TO PROVIDE ROOT CAUSE, ONCE DETERMINED.

CA041208002	BEECH	PWA	TUBE	CRACKED
12/1/2004	1900D	PT6A67D	12991003363	BLEED AIR

(CAN) WHILE INSPECTING ONE OF THE FLEETS 1900D AIRCRAFT BLEED AIR TUBE PN 129-910033-63 FOUND TO BE CRACKED ALONG THE WELD. TIME OF THIS ACRFT 21,691.6 HOURS. A PRECAUTIONARY INSPECTION WAS COMPLETED ON AN OTHER AIRCRAFT TOTAL TIME 6291.9. THE SAME PN TUBE WAS FOUND CRACKED.

CA041214003	BEECH	PWA	WINDSHIELD	CRACKED
11/18/2004	1900D	PT6A67D	10138402524	COCKPIT

(CAN) DURING CRUISE, CREW HEARD A BANG AND NOTICED THE OUTER PANE OF THE RT WINDSHIELD HAD CRACKED. CABIN PRESSURE WAS REDUCED AND THE FLIGHT WASCONTINUED TO DESTINATION.

CA041110013	BEECH	PWA	FUEL CONTROL	BINDING
11/9/2004	1900D	PT6A67D	8063005B	ENGINE

(CAN) PILOTS REPORTED THAT WHEN LT POWER LEVER WAS ADVANCED, THE LT FUEL CONDITION LEVER WOULD MOVE AFT FROM HIGH IDLE TOWARD LOW IDLE. THIS COULD BE REMEDIED BY SETTING THE FRICTION TO A HIGHER VALUE THAN NORMAL. THE LT ENGINE WAS INSPECTED BY MAINTENANCE AND EVEN WITH BOTH COCKPIT LEVERS DISCONNECTED FROM THE UNIT, IF YOU MANUALLY MOVED THE INPUT ARM OF THE FCU, THE FUEL CUTOFF PORTION WOULD ALSO BE AFFECTED. THE BINDING WAS INTERNAL AND INPUTS TOHIGHER POWER LEVER SETTINGS WOULD ALSO MOVE FUEL CUTOFF TOWARDS CUTOFF POSTION. THE FCU WAS REPLACED AND AIRCRAFT GROUND TESTED SERVICABLE.

CA050126008	BEECH	PWA	CONNECTOR	CORRODED
1/22/2005	1900D	PT6A67D	MS3126F1210P	MLG

(CAN) DURING APPROACH CREW SELECTED GEAR DOWN HOWEVER, THE GEAR CONTROL C/B OPENED AND WOULD NOT RESET. MANUAL EXTENSION COMPLETED. MAINTENANCE FOUND THE CONNECTOR BEWTEEN THE NOSE GEAR ACTUATOR AND THE FRAME INTERNALLY CORRODED. THE CONNECTOR WAS REPLACED, GEAR SWUNG AND THE AIRCRAFT RELEASED.

CA050222002	BEECH	PWA	RELAY	BURNED
2/18/2005	1900D	PT6A67D	MS24171D1	MLG

(CAN) LANDING GEAR WAS SELECTED DOWN BUT THERE WAS NO LANDING GEAR EXTENSION. CREW NOTICED THAT THE TWO AMP LANDING GEAR RELAY CIRCUIT BREAKER, ADJACENT TO THE LANDING GEAR SELECTOR, WAS TRIPPED. LANDING GEAR WAS SELECTED DOWN AND THE MANUAL HANDPUMP USED TO GET LANDING GEAR DOWN AND LOCKED. MAINTENANCE CHECKS WERE CARRIED OUT AND THE 60 AMP LANDING GEAR POWER CIRCUIT BREAKER IN THE LT ELECTRICAL EQUIPMENT PANEL WAS TRIPPED. THE LANDING GEAR MOTOR RELAY WAS REPLACED, ALL CIRCUIT BREAKERS RESET AND LANDING GEAR RETRACTIONS/EXTENSIONS CARRIED OUT NORMALLY. ON INSPECTION OF THE MOTOR RELAY THE MAIN CONTACTS (200AMP RATING) WERE BADLY BURNED AND PITTED. SUSPECT THE RELAY WAS ORIGINAL FROM MANUFACTUR IN 1998.

CA050213002	BEECH	PWA	ENGINE	FAILED
1/31/2005	1900D	PT6A67D		

(CAN) DURING CRUISE THE ENGINE LOW OIL PRESSURE INDICATOR ANNUNCIATED. THE ENGINE WAS SHUT DOWN IN FLIGHT. SUBSEQUENT INSPECTION EVIDENSED NOISE FROM THE REDUCTION G EAG THE PROP. MFG WILL INVESTIGATE THE EVENT AND WILL SUPPLIMENT THIS REPORT TO PROVIDE ROOT CAUSE AS AND WHEN ESTABLISHED.

2005FA0000331	BEECH	LYC	SLEEVE	DETERIORATED
9/28/2004	200BEECH	O320*	973800011	LT BLEED AIR

BLEED AIR COUPLING FAILED LT ENGINE NACELLE. THIS PART IS ATHE FIRST COUPLING DOWN STREAM OF THE FLOW PAC. THE HEAT GOT TO IT, AGING AC ISSUE, 1983 MFG DATE.

CA050221004	BEECH	PWA	VALVE	MISSING
2/18/2005	200BEECH	PT6A41	710C4X	RT NACELLE

(CAN) PILOT REPORTED RAPID FUEL LOSS IN FLIGHT. INNER ASSY OF FUEL QUICK DRAIN FOUND TO BE MISSING FROM RT NACELLE FUEL FILTER QUICK DRAIN ASSY. FUEL VALVE IS COMPRIZED OF 2 MAIN PARTS. MAIN HOUSING, AND DRAIN ASSY. MOVEABLE PART OF DRAIN IS INSTALLED IN A HOUSING WHICH IS THEN INSTALLED IN MAIN HOUSING WITH AN O-RING. THIS IS A PRESS FIT WITH MULTIPLE STAKES AROUND CIRCUMFERENCE TO SECURE DRAIN ASSY IN MAIN HOUSING. DRAIN ASSY WAS MISSING FROM MAIN HOUSING, AND O-RING WAS STILL INPLACE. INFLIGHT PILOT NOTICED A RAPID FUEL LOSS FROM RT FUEL SYS. AS FUEL SUPPLY GOT LOW, PILOT ELECTED TO SHUTDOWN ENGINE AND FEATHER PROP. AC WAS ONLY MINUTES FROM DESTINATION, AND HOME BASE, SO NO DIVERSION WAS REQUIRED.

CA041206008	BEECH	PWA	SPAR	CRACKED
11/30/2004	200BEECH	PT6A41	5011002611	LT WING

(CAN) DURING LANDING PHASE AIRCRAFT ROLLED TO LT WHEN APPROACH FLAPS WERE SELECTED. ROLL RESPONSE WAS CORRECTED WITH AILERON TRIM INPUT. FURTHER FLAP DEPLOYMENT DID NOT CREATE ANY FURTHER CONTROL DIFFICULTY. MAINTENANCE INSPECTED AIRCRAFT AND DISCOVERED THAT THE RT OUTER FLAP WAS NOT SYMETRICAL TO OTHER FLAPS. THE IB FLAP HANGAR HAD CHANGED POSITIONS DUE TO A CRACK IN THE REAR SPAR WEB AT THE FLAP HANGAR ATTACH POINT. SEVERAL OTHER ANGLES AND BRACKETS WERE ALSO BROKEN. A REPAIR SCHEME WAS REQUESTED FROM MFG.

CA050112004	BEECH	PWA	TUBE	CHAFED
1/3/2005	200BEECH	PT6A41	1009200423	FUEL SYSTEM

(CAN) UPON INSPECTION OF THE FUEL TRANSFER PRESSURE SWITCH, IT WAS NOTICED THAT ONE OF THE ENGINE CONTROLS WAS RUBBING AGAINST THE MAIN FEED LINE TO THE RT NAC TANK. REPLACED TUBE ASSY AND TIED BACK TELEFLEX CABLES TO PREVENT FURTHER RUBBING.

CA041107001	BEECH	PWA	SWITCH	INTERMITTENT
10/26/2004	200BEECH	PT6A41	V31	PAX DOOR

(CAN) AFTER TAKE-OFF THE CABIN DOOR WARNING LIGHT ILLUMINATED, WITH THE DOOR REMAININGIN THE CLOSED POSITION. THE AIRCRAFT RETURNED TO BASE FOR LANDING WITHOUT INCID ENT. UPON LANDING AND TAXI TO THE RAMP THE CREW CONFIRMED THAT THE DOOR WAS INDEED IN THE CLOSED AND LOCKED POSITION

AS CONFIRMED BY THE OVERCENTER MECHANICAL PLUNGER AND LOCK, AND THE FOUR GREEN VISUAL INDICATORS ON THE DOOR BAYONET LATCHES. MAINTENANCE INSPECTION DETERMINED THAT THE DOOR LATCHING MECHANISM WAS FUNCTIONING NORMAL AND THE FALSE INDICATION WAS CAUSED BY AN INTERMITTENT DOOR WARNING SWITCH.

CA041021005	BEECH	PWA	INDICATOR	FAILED
10/13/2004	200BEECH	PT6A41	7926355001	FLT DIRECTOR

(CAN) AFTER START-UP AND SELECTION OF THE AVIONICS MASTER ON, THE CREW NOTED THAT THE INSIDE OF THE FLIGHT DIRECTOR INDICATOR, BEHIND THE GLASS FACE, APPEARED TO HAVE SMOKE INSIDE OF THE INSTRUMENT. THE AVIONICS MASTER WAS SELECTED TO OFF AND THE ENGINES SHUT DOWN. MAINTENANCE WAS CONTACTED AND INSPECTED THE INDICATOR. AN EL ECTRICAL TYPE SMELL WAS PRESENT AT THE UNIT. THE INDICATOR WAS REPLACED AND THE UNSERVICEABLE UNIT HAS BEEN SENT TO THE VENDOR FOR INSPECTION AND OVERHAUL.

CA041213002	BEECH	PWA	BEECH	MASTER LINK	DISCONNECTED
12/8/2004	200BEECH	PT6A41		131378252CL	NLG CHAIN

(CAN) WHEN THE FLT CREW EXTENDED LANDING GEAR FOR LANDING , THEY HEARD STRANGE SOUNDS AND THEY ONLY RECIEVED TWO MAIN LANDING GEAR LIGHTS. THE NOSE GEAR LIGHT WAS NOT GREEN AND THEY HAD A RED LIGHT ON IN THE HANDLE. THEY LOOKED IN THE NACELLE MIRROR AND WERE ABLE TO TELL THAT THE NOSE GEAR WAS ONLY HALF WAY EXTENDED.THE CREW DID AN EMERGENCY EXTENSION PROCEDURE WITH NO CHANGE. THE AIRCRAFT WAS LANDED IN THIS CONFIGURATION.ON LOOKING AT THE AIRCRAFT IN THE HANGER IT WAS FOUND THAT THE FORWARD NOSE LANDING GEAR CHAIN HAD COME APART AT THE MASTER LINK. THE LINK WAS HALF IN PLACE BUT THE CLIP WAS MISSING. WE DO NOT KNOW IF THE CLIP BROKE OR CAME OFF. THE NOSE GEAR CHAIN AND MASTER LINK WAS NEW 376.1 HOURS AGO.

CA041112004	BEECH	PWA	PUMP	FAILED
11/12/2004	200BEECH	PT6A41	1153800025	HYD SYS

(CAN) ON TAKE OFF, GEAR WOULD NOT RETRACT. NOSE GEAR GREE LIGHT WENT OUT, AND RED INTRANSIT LIGHT REMAINED ON. GEAR WOULD NOT RETRACT OR EXTEND.PRIOR TO LANDING THE BACKUP EXTENSION SYSTEM WAS USED, AND ALLGEAR INDICATIONS WERE THAT THE GEAR WAS DOWN AND LOCKED. SUBSEQUENT INVESTIGATION REVEALED THAT THE HYDRAULIC PUMP MOTOR WAS UNSERVICEABLE.THE PUMP MOTOR IS A TIME TRACKED ITEM WITH A 1200 HOUR TBO.

2005FA0000213	BEECH	PWA	SKIN	MISMANUFACTURED
1/21/2005	200BEECH	PT6A60A	97430000604	FUSELAGE

UPON REMOVAL OF AC TOP SKIN, FOUND 4 RIVETS ON STRINGER NR 4R JUST FWD OF THE EMERGENCY EXIT HATCH TO HAVE NO EDGE DISTANCE. ABOVE THIS AREA AT FS165.25 AND STRINGER NR 2R THERE WAS FOUND ONE FASTENER HOLE WITH SHORT EDGE DISTANCE. FWD OF THIS AREA AT FS 148.90 AND STRINGER NR 3R, FOUND A DOUBLE DRILLED HOLE WITH NO EDGE DISTANCE BETWEEN THEM. PROB CAUSE: DEFECT IN MANUFACTURING. RESOLUTION: MFG ISSUED ENGINEERING REPAIR FOR THE AFFECTED DISCREPANCY. DOCUMENT NR FR-KA-01494, REV 2 DATED 01-13-05.

2005FA0000242	BEECH	PWA	WINDSHIELD	BROKEN
11/15/2004	300BEECH	PT6A60A	10138402522	COCKPIT

INNER PLY OF WINDSHIELD SHATTERED AT 29,000, -38 DEGREES C., RT HAND POSITION. THEN 8-10 SECONDS LATER LT WINDSHIELD SHATTERED. RECOMMEND SUBSEQUENT SCHEDULED WINDSHIELD RETORQUES BEING CAREFULLY PERFORMED TO ENSURE ORIGINAL CONTOUR OF WS INSTALLATION IAW KIT 101-50433 IS NOT ALTERED RESULTING IN STRESS LOCATIONS IN WINDSHELL FRAME. (NM13200500756) (NM13200501246) (K)

2005FA0000446	BEECH	PWA	BRACKET	BROKEN
3/4/2005	400A	JT15*	460337	ACTUATOR

FLIGHT CREW REPORTED LANDING GEAR UNSAFE LIGHT REMAINED ILLUMINATED AFTER LANDING GEAR RETRACTION FOLLOWING DEPARTURE. CREW ELECTED TO RETURN TO AIRPORT. OBTAINED DOWN AND LOCKED INDICATION ON ALL 3 LANDING GEAR AND LANDED UNEVENTFULLY. UPON JACKING AC FOR INVESTIGATION NOTED LT MAIN GEAR ACTUATOR ATTACH BRACKET BROKEN AND DISTORTED AT LT MAIN GEAR ACTUATOR

ATTACH POINT. ACTUATOR ATTACH HARDWARE STILL SECURE AND SAFTIED IN BROKEN PORTION. THIS SN AC WAS NOTED AS BEING AFFECTED BY MFG. CUSTOMER SL BJ-CSL-1004R1 ISSUED 11/01/2002. BJ-CSL-1004R1 REQUIRED REPLACEMENT OF ALL PN 46033-7, LT MAIN GEAR ACTUATOR BRACKETS ON AFFECTED AC DUE TO INCORRECT HEAT TREATMENT AND CHAMFERING.

2005FA0000356	BEECH	PWA	ARTEX	WIRE	BROKEN
2/15/2005	400A	JT15*		4520133L	BATTERY

REMOVED BATTERY FROM ELT 110-406 FOR VISUAL INSPECTION IAW WITH MFG MM. UPON INITIAL INSPECTION FOUND ONE WIRING TERMINAL BROKEN OFF OF ONE BATTERY CELL. BATTERY EXPIRATION DATE 6/2006. (K)

CA041206003	BEECH	PWA	ENGINE	MALFUNCTIONED
12/2/2004	400A	JT15D5		BOTH

(CAN) AT 15,000 FT IN LEVEL FLIGHT BOTH ENGINES EXPERIENCED A SIMULTANEOUS, UNCOMMAMDED, PARTIAL POWER ROLL-BACK. THE AIRCRAFT DIVERTED TO POINT OF DEPARTURE. SUBSEQUENT GROUND RUNS WERE UNABLE TO DUPLICATE THE EVENT. AIRFRAME CONTROL CABLES AND ENGINE BOV ACTUATOR RODS WERE FOUND MISRIGGED AND CORRECTED. PWC WILL IN VESTIGATE TO ESTABLISH ROOT CAUSE AND WILL AMEND THIS REPORT TO REFLECT SAME, ONCE AVAILABLE.

2005FA0000384	BEECH	PRESSURE SWITCH	INTERMITTENT
1/12/2005	58	94E422	HEATER

INVESTIGATED COMPLAINT OF COMBUSTION HEATER NOT OPERATING. DURING TROUBLESHOOTING, FOUND COMBUSTION AIR SWITCH CONTINUITY INTERMITTENTLY CYCLING OPEN AND CLOSED DURING NORMAL OPERATING PRESSURES. SWITCH DATE CODE: 9/02. REPLACED COMBUSTION AIR SWITCH WITH NEW SWITCH, ALSO THERMOSTATIC SWITCH. HEATER OPERATIONS, NORMAL. (K)

2005FA0000442	BEECH	SKIN	CORRODED
11/8/2004	58		FUSLAGE

PERFORMED INCOMING INSPECTION OF AC FOR REPAIR OF CORROSION AT DOORWAY ENTRY. UPON INSPECTION, EXTENSIVE CORROSION WAS FOUND AT VARIOUS LOCATIONS WHERE INSULATION WAS FACTORY INSTALLED. THIS INSULATION WAS FOUND TO BE DAMP AND HAD EXPOSED EDGES. THIS RESULTED IN MAY STRINGERS BEING REPLACED ALONG THE SIDES OF THE FUSELAGE AS WELL AS FUSELAGE SKINS FOR AN AREA OF ABOUT 3 FT X 3 FT ON EACH SIDE OF THE AIRCRAFT. EXTENSIVE CORROSION WAS FOUND AT THE AFT WING SPAR CARRY-THROUGH STRUCTURE AND THE CO-PILOTS ENTRY DOOR FRAME.

CA040825012	BEECH	PWA	ENGINE	SHUTDOWN
8/25/2004	65A90	PT6A20		LEFT

(CAN) THE AIRCRAFT WAS ON THE TAKE OFF ROLE IN LUTSLE KE (SNOWDRIFT) TO FLY TO EKATI (YOA). AT 80 KNOTS A LARGE DROP IN POWER WAS FELT ON THE LEFT SIDE WITH A YAW TOTHE LEFT. THE TAKE OFF WAS REJECTED ANDTHE AIRCRAFT BROUGHT TO A STOP SAFELY ON THE RUNWAY. THE ENGINE WAS SHUT DOWN AT THAT TIME AS THE EGT WAS OBSERVED TO BE CLIMBING TO 1050. PRELIMINARY INVESTIGATIONS INDICATE AN INTERNAL FAILURE. MORE INFORMATION WILL BE ATTACHED AS WE HAVE IT.

2005FA0000184	BEECH	LYC	ADAPTER	LEAKING
2/14/2005	77	O235*	10810001259	FUEL TANK

DOUBLER INSTALLEN IN FUEL TANK HAS NO ACCESS AND MFG CAN NOT TELL US HOW TO STOP FUEL LEAK.

CA041215003	BEECH	CONT	RELAY	MALFUNCTIONED
12/13/2004	95B55	IO470L	6046H39A	BRAKE

(CAN) DURING A MISSED APPROACH PILOT INITIATED A TURN TO RETURN FOR A 2ND APPROACH WHEN MLG EXTENDED UNCOMMANDED WITH NO DOWN OR UP INDICATION LIGHTS. PILOT SLOWED ACRFT & CONTINUED TO DESTINATION WITH MLG SELECTED DOWN & CONFIRMED MLG DOWN WITH EMERGENCY GEAR HANDCRANK. MX INSPECTED ACRFT & FOUND MLG DYNAMIC BRAKING RELAY TO BE MALFUNCTIONING. ON INSPECTION OF RELAY, DETERMINED THAT A SPRING OFF OF ONE OF THE CONTACTS HAD BROKEN IN HALF & BROKEN PIECE HAD SHORTED OUT RELAY CAUSING MLG TO EXTEND. RELAY REPLACED & ACRFT TEST FLOWN WITH NO

REOCCURANCE. INSTALLATION DATE OF THE RELAY COULD NOT BE FOUND BUT MANUFACTURING DATE 6/77.

CA041104007	BEECH	PWA	SUPPORT	CRACKED
11/3/2004	99	PT6A28	1158200557	NLG STEERING

(CAN) DURING ROUTINE INSPECTION THE SUPPORT BRACKET FOR THE STEERING IN THE UPPER LT CORNER WAS FOUND CRACKED.

CA041112001	BEECH	PWA	POWERPACK	FAULTY
11/8/2004	99A	PT6A27		RT MLG

(CAN) A/C WAS SITTING ON RAMP PARKED, RT MAIN LANDING GEAR COLLAPSED. SUSPECT HYDRAULIC POWER PACK AT FAULT.

CA041209014	BEECH	PWA	ACTUATOR	FAILED
12/9/2004	A100	PT6A28	50820208	NLG

(CAN) DURING A ROUTINE ENDPLAY CHECK, THE ACTUATOR S ENDPLAY WAS AT THE MAX ALLOWABLE 0.018 INCH, THESE ACTUATORS HAVE A 7500 CYCLE OVERHAUL REQUIREMENT AND THIS ONE ONLY HAD 1636 CSO.

CA050124011	BEECH	PWA	GOVERNOR	DEFECTIVE
1/9/2005	A100	PT6A28		OVERSPEED

(CAN) DURING DESCENT, ENGINE POWER COULD NOT BE REDUCED BELOW 1000 LBS TORQUE. THE AIRCRAFT DIVERTED TO BASE AND THE PILOT SHUT THE ENGINE DOWN IN FLIGHT AND ACCOMPLISHED A SINGLE ENGINE LANDING. SUBSEQUENT INSPECTION DETERMINED A DEFECTIVE OVERSPEED GOVERNOR AS THE SOURCE OF THE PROBLEM.

CA040915006	BEECH	PWA	ACTUATOR	MALFUNCTIONED
9/10/2004	A100	PT6A28	505212223	TE FLAPS

(CAN) ON APPROACH FOR A MX CHECK, FLAPS WERE EXTENDED IAW CHECKLIST. A RUDDER CORRECTION REQUIRED TO KEEP ACRFT ON APPROPRIATE TRACK. AN UNEVENTFUL LANDING COMPLETED AND ACRFT SNAGGED. UPON INSPECTION IT WAS DETERMINED THAT THE FLAP ACTUATOR FOR THE LT, I/B FLAP HAD FAILED IN THE DRIVE AREA. IT WAS DETERMINED THAT THE 90 DEGREE DRIVE IN THE ACTUATOR HAD FAILED AND INPUT TO THE ACTUATOR WAS TURNING BUT IT WAS NOT DRIVING THE ACTUATOR DOWN. AS A RESULT, THERE WAS AN ASYMETRIC FLAP CONDITION ON LANDING REQUIRING THE RUDDER CORRECTION. IT SHOULD BE NOTED THAT THERE IS NO INDICATION OR OTHER SYSTEM TO SHOW AN ASYMETRIC FLAP SITUATION OR TO STOP THE FLAPS FROM EXTENDING BEYOND A CERTAIN POINT IN THE AIRCRAFT.

CA050111005	BEECH	PWA	GOVERNOR	FAILED
1/9/2005	A100	PT6A28	210631	OVERSPEED

(CAN) ON APPROACH, WHEN THE CREW TRIED TO THROTTLE BACK, THE LT ENGINE WOULD NOT GO BELOW 1000 LB. OF TORQUE. THE CREW MOVED THE THROTTLE FORE AND AFT SEVERAL TIMES BUT NO CHANGE. THE CREW DECLARED AN EMERGENCY AND SHUT DOWN THE LT ENGINE ON FINAL APPROACH. UPON INVESTIGATION BY MAINTENANCE IT WAS FOUND THAT THE OVERSPEED GOVERNOR HAD FAILED INTERNALLY. THE OVERSPEED GOVERNOR WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE.

CA050321006	BEECH	GARRTT	PLENUM	CRACKED
3/4/2005	B100	TPE3316252B	8939735	ENGINE

(CAN) WHILE CONDUCTING AN ENGINE INSPECTION, A 2 INCH CRACK WAS DISCOVERED ON THE PLENUM NEAR THE BLEED AIR OUTLET. THE ENGINE WAS REMOVED AND THE CRACKED PART REPLACED. A FLEET WIDE ENGINE INSPECTION OF THE SAME DEFECT WAS CARRIED OUT. NO OTHER DEFECTS FOUND.

2005FA0000250	BEECH		WINDSHIELD	CRACKED
2/24/2005	B200		10138402515	COCKPIT

PILOT REPORTED WINDSHIELD SHATTERED WHILE CRUISING AT FLIGHT LEVEL 24,000 FT. INNER PANE SHATTERED. (K)

PF212LWAA	BEECH		WINDSHIELD	CRACKED
12/23/2004	B200		10138402518	COCKPIT

IN CRUISE FLIGHT AT FL290 IN VMC ON IFR FLIGHT PLAN WITH OAT OF -45C, INNER PANE OF CO-PILOTS WINDSHIELD SHATTERED WITHOUT WARNING.

CA050110008	BEECH	PWA	ENGINE	FAILED
12/10/2004	B200	PT6A41		NR 1

(CAN) AFTER TAKE-OFF, THE NR 1 ENGINE REPORTEDLY LOST POWER. THE AIRCRAFT SETTLED TO THE GROUND, DEPARTED THE RUNWAY AND WAS CONSUMED BY FIRE. PWC WILL INVESTIGATED THE ENGINE AND WILL SUPPLIMENT THIS REPORT TO PROVIDE ROOT CAUSE, AS AND WHEN DETERMINED.

CA040831021	BEECH	PWA	GPS	OUT OF ADJUST
8/30/2004	B200	PT6A42	066040340204	COCKPIT

(CAN) PILOT REPORTS GPS 60 DEGREES OFF TRACK. T/S INDICATES CALIBRATION OF UNIT 60 DEGREES OUT. RECALIBRATED.

CA050127007	BEECH	PWA	LINE	UNSERVICEABLE
1/25/2005	B200	PT6A42	1015800241	LT WING

(CAN) HYDRAULIC FLUID LEAKING OUT OF THE LT IB L/E. L/E REMOVED AND FOUND RIGID HYDRAULIC BRAKE LINE CHAFFED THROUGH BY ENGINE CONTROL CABLES ABOVE HEAT EXCHANGER. REPLACED LINE. ALL COMPANY AIRCRAFT USING THIS HYDRAULIC LINE VISUALLY INSPECTED AND FOUND DAMAGE ON ALL RANGING FROM MINOR TO MAJOR. BOTH LT P/N 101-580024-1 AND RT P/N 101-580025-1 LINES EFFECTED.

CA050301004	BEECH	PWA	GAS GENERATOR	CRACKED
2/21/2005	B200	PT6A42	01R3028332	ENGINE

(CAN) DURING ENGINE INSPECTION USING A VIDEO BORESCOPE, THE HIGH PRESSURE BLEED VALVE TUBE FROM P3 WAS FOUND CRACKED OFF AND A HORIZONTAL CRACK APPROXIMATELY 3 INCHES LONG BELOW BLEED VALVE ATTACH FLANGE WAS NOTED. SOME STAINING INDICATED CRACK WAS PROBABLY NOT RECENT AND THIS AREA IS NOT READILY VISIBLE WITH THE BLEED VALVE SHROUDS INSTALLED. ALL ENGINE PERFORMANCE RUNS AND TREND MONITORING DATA WERE WITHIN ALLOWABLE PARAMETERS. GAS GENERATOR WAS REMOVED AND SHIPPED FOR REPAIR.

CA041020010	BEECH	PWA	OIL FILTER	CLOGGED
10/11/2004	B200	PT6A42	P1010	ENGINE OIL

(CAN) ON ROUTINE INSPECTION IT WAS DISCOVERED THAT A PIECE OF THE SCREEN SECTION WAS SEPERATING FROM THE EXTERNAL SECTION OF THE FILTER. NOT SURE IF IT IS A MANUFACTURING DEFECT OR IF THE FILTER WAS COMING APART IN USE.

CA050117001	BEECH	PWA	FRAME	CRACKED
1/13/2005	B200C	PT6A42		FUSELAGE

(CAN) DURING A ROUTINE INSPECTION A CRACK WAS FOUND PROPAGATING FROM THE OVAL HOLE IN THE RT FRAME AT STATION 207.125 (HALF WAY BETWEEN THE FLOOR AND THE WINDOW). THE CRACK WAS APPROXIMATELY 1 = INCH LONG AND EXTENDED FROM THE 11 O`CLOCK POSITION OF THE LIGHTNING HOLE TO A RIVET ON THE REINFORCEMENT PLATE.

2005FA0000193	BEECH	PWA	RETAINER	MISINSTALLED
2/4/2005	B300	PT6*	10191011435	INERTIAL VANE

DURING INSP OF ENG INERTIAL VANE CONTROL SYS, IT WAS FOUND THAT RETAINER PLATE, PN 101-910114-35 THAT LOCKS INTO A GROOVE ON SHAFT, PN 101910114129, FOR AFT INTERIAL VANE, WAS NOT INSTALLED CORRECTLY. WHEN RETAINER PLATE IS CORRECTLY INSTALLED IN GROOVE ON SHAFT ASSY, IT WOULD SECURELY HOLD SHAFT ASSY IN ITS MOUNTING PLATES. RETAINER PLATE IS LOCATED ON VANE SHAFT END OPPOSITE ACT. THIS ALLOWS SHAFT ASSY TO MOVE BACK AND FORTH WHEN VANE IS OPERATED THROUGH ITS RANGE. FOUND THAT THIS EXCESS SIDE MOVEMENT WOULD ALSO ALLOW BOLT THAT SECURES SHAFT ASSY TO

ACTUATOR COULD CATCH ON SURROUNDING SUPPORT. CONDITION WAS FOUND ON BOTH ENGINES OF THIS AC. SHAFT ASSYS FOR FWD VANE WERE FOUND CORRECTLY INSTALLED. (K)

2005FA0000181	BEECH	PWA	LUCAS	BEARING	FAILED
2/6/2005	B300	PT6A11			STARTER GEN

SHAFT BEARING AT THE COOLING FAN END OF THE S/G CAME APART. THIS CAUSE THIS END OF THE COMMUTATOR TO MOVE SIDE TO SIDE AND THE COOLING FUN RUBBED INTO THE HOUSING. (K)

CA050210005	BEECH	PWA	BLEED VALVE	INOPERATIVE
2/7/2005	B300B350C	PT6A60A	310317401	ENGINE

(CAN) WHILE CLIMBING OUT AFTER TAKEOFF THE FLIGHT CREW NOTICED A THROTTLE SPLIT TO MAINTAIN THE SAME ENGINE TORQUE. AT ALL TIMES THE ENGINES WOULD MAKE RATED POWER, BUT THE LT ENGINE REQUIRED MORE FORWARD THROTTLE MOVEMENT TO MAKE BOOK TORQUE. MAINTENANCE PERFORMANCE RUNS CONFIRMED LT ENGINE PARAMETERS HIGH (ITT, WF, N1) TO MAKE TARGET TORQUE. ENGINE BLEED VALVES SWAPPED SIDE TO SIDE FOR TROUBLESHOOTING AND SUBSEQUENT RUNS CONFIRMED PROBLEM FOLLOWED THE BLEED VALVE. FAULTY VALVE REPLACED WITH O/H UNIT. GROUND RUNS C/O SATISFACTORY.

2005FA0000211	BEECH	LYC	OIL COOLER	CRACKED
12/29/2004	B60	TIO541*	10046A	RT ENGINE

COOLER SPLIT AT WELD ON END OF COOLER. SPLIT WAS 2+ INCHES LONG RIGHT DOWN THE CENTER OF THE WELD. (GL19200501920) (GL19200502021) (K)

2005FA0000463	BEECH	LYC	GARRTT	
2/11/2005	B60	TIO541E1C4		

WHILE INVESTIGATING OIL LEAK FROM TURBO, FOUND IMPELLER/TURBINE SHAFT HOLD DOWN NUT LOOSE ALLOWING SHAFT TO MOVE LATERALLY. THIS CAUSED SHAFT TO BECOME UNSEATED AT BEARING SEALS. DISCREPANCY WAS DISCOVERED EARLY ENOUGH TO KEEP IMPELLER AND TURBINE WHEELS FROM BEING DAMAGED. NOTE: TURBO WAS REPAIRED 1.9 HRS EARLIER. TURBO WAS REPAIRED AND INSTALLED. (K)

CA040916002	BEECH	PWA	WHEEL	CRACKED
9/15/2004	B99	PT6A28	99800311	MLG

(CAN) R/H OUTBOARD MAIN WHEEL ASSEMBLY. THE INNER HUB HAD A LONG 4 INCHES CRACK. AS WELL 6 OF THE 9 BOLT HOLES HAD CRACKS AROUND THEM. THE LONG CRACK APPEARED TO BE AN OLD CRACK. THE TUBE WAS EVENTUALLY PINCHED WHICH CAUSED A FLAT TIRE.

2005FA0000306	BEECH	LYC	OIL COOLER	CRACKED
1/17/2005	C23	O360A4J	8406E	ENGINE

IN-FLIGHT ENGINE FAILURE DUE TO OIL STARVATION RESULTING IN AN EMERGENCY LANDING IN TREES. POST ACCIDENT INVESTIGATION REVEALED A CRACKED OIL COOLER, WHICH ALLOWED ENGINE OIL SUPPLY TO BE PUMPED OVERBOARD. REFERENCE ACCIDENT (NR ATL05CA047).

CA050207005	BEECH	PWA	WINDSCREEN	CRACKED
1/30/2005	C90	PT6A21	5042006932	COCKPIT

(CAN) PILOTS HEARD A LOUD BANG AND THE CO-PILOTS WINDSCREEN CRACKED. THEY DESCENDED AND BROUGHT CABIN PRESSURE DOWN TO 2 PSI. THEY THEN LANDED AT NEAREST MAINTENANCE BASE.

2005FA0000290	BEECH	PWA	WIRE	BROKEN
11/9/2004	C90A	PT6*		HEATED FUEL VENT

HEAT ELEMENT INOPERATIVE, DUE TO BROKEN WIRE AT TIP OF VENT TUBE WHERE IT IS GROUNDED. IT IS CAULED BY IMPROPER PROTECTIVE COATING ON THE WIRE. THE COATING WEARS OFF AND OPENS THE WIRE FROM GROUND. (K)

2005FA0000289	BEECH	PWA	WIRE	INOPERATIVE
11/9/2004	C90A	PT6*	EE366L	HEAT FUEL VENT

HEAT ELEMENT INOPERATIVE DUE TO BROKEN WIRE AT TIME VENT TUBE WHERE IS IS GROUNDED. IT IS CAUSED BY IMPROPER PROTECTIVE COATING ON WIRES. IT WEAR OFF AND OPENS THE WIRE FROM GROUND. (K)

CA040910001	BEECH	PWA	FIXTURE	MELTED
9/9/2004	C90A	PT6A21	1015307641	CABIN LIGHT

PLASTIC HOUSING OF THE LIGHT SHIELD P/N 101-530764-1 HAS MELTED DUE TO THE HEAT PRODUCED BY THE HIGH WATTAGE RESISTOR MOUNTED ON THE LIGHT ASSY PRINTED CIRCUIT BOARD P/N PW2014. IT HAD MELTED ENOUGH TO DISFIGURE THE SHIELD AND PRODUCE AN ELONGATED HOLE THE LENGTH OF THE RESISTOR. APPROX 2 INCHES. THE PROBLEM WAS DISCOVERED ON THE REPLACEMENT OF THE FLOURESCENT BULB P/N 5108WW. THERE HAD BEEN NO REPORT OF A BURNING SMELL BY ANY OF THE VARIOUS AIRCREWS, WHO HAVE FLOWN THIS AIRCRAFTI NSPECTION OF OTHER LIGHTS IN THE SAME AIRCRAFT AND ANOTHER SIMILAR AIRCRAFT REVEALS THAT THERE EXISTS A FLEETPROBLEM. RAYTHEON BEECH KINGAIR ENGINEERING HAS BEEN ADVISED OF THE PROBLEM. REFERENCES:- IPC 33-20-00-01 PAGES 0 AND 1 ITEMS 105, 110, 115.

CA040917003	BEECH	PWA	CELL	REVERSED
8/30/2004	C90A	PT6A21	32638002	BATTERY

(CAN) AIRCREW REPORTED LOAD METERS NOT INDICATING BATTERY CHARGE FOR NORMAL PERIOD OF TIME OR NORMAL LEVEL OF CHARGE. UPON INSPECTION NR 9 CELL FOUND INSTALLED IN REVERSE POLARITY ORIENTATION.

CA041015004	BEECH	PWA	TORQUE KNEE	CRACKED
10/15/2004	C90A	PT6A21	508100352	RT MLG

(CAN) DURING A 8000 CYCLE TORQUE KNEE NDT INSPECTION IT WAS DETECTED THAT THE RT LOWER TORQUE KNEE ATTACH PIN, PN 50-810035-2 WAS CRACKED IN NUMBER OF PLACES. THE TORQUE KNEE IS POST S/B 32-3116 - IMPROVED STEEL. PRESENTLY THE PIN IS PLACED IN QUARANTINE. THERE IS A FLEET WIDE INSPECTION IN PROGRESS.

CA050120007	BEECH	PWA	WINDSHIELD	BROKEN
1/17/2005	C90A	PT6A21	10138402523	COCKPIT

(CAN) ENROUTE IN CRUISE FLIGHT AT 16000 MSL, OAT -38C THE LT WINDSHEILD SHATTERED. THE WINDSHIELD HEAT WAS OFF AND HAD NOT BEEN USED DURING THE FLIGHT. THE DEFOG AIR WAS ALSO OFF. THE CREW DECLARED AN EMERGENCY AND REQUESTED CLEARENCE AND IMMEDIATE DECENT TO 8000 MSL. THE AIRCRAFT LANDED WITHOUT FURTHER INCIDENT. THE WINDSHIELD INNER PLY WAS FOUND SHATTERED. THE WINDSHIELD WILL BE REPLACED AND THE AIRCRAFT RETURNED TO SERVICE.

CA050127002	BEECH	LYC	CONTROL HORN	CRACKED
1/24/2005	D95A	IO360B1B	956100054	ELEVATOR

(CAN) DURING SHEET METAL REPAIR OF THE RT ELEVATOR ASSY IT WAS NOTED THAT THE ELEVATOR SKIN AT THE CONTROL HORN ATTACH POINT WAS CRACKED. FURTHER INSPECTION OF THE CONTROL HORN ASSY REVEALED A LARGE CRACK PROGRESSSING FROM 1 OF 4 ELEVATOR TO CONTROL HORN MOUNTING BOLTS. CRACK LENGTH WAS APPROXIMATLY 1 INCH. THE ELEVATOR CONTROL FITTING WAS REPLACED. A FLEET INSPECTION WAS CARRIED OUT USING VISUAL AND EDDY CURRENT INSPECTION AND NO FURTHER DEFECTS WERE FOUND ON ANY AIRCRAFT.

2005FA0000349	BEECH	CONT	IGNITION SWITCH	CARBONED
12/20/2004	F33A	IO520*	103572001	COCKPIT

ENGINE STOPPED RUNNING DURING TAXI TO RUNWAY. INVESTIGATION SHOWED A LOT OF CARBON IN SWITCH CONTACTS. (SW05200506081)

2005FA0000465	BEECH	CONT	PUMP	DAMAGED
2/25/2005	F33A	IO520BB	AA3216CW	DRY AIR

DURING FLIGHT, FLIGHT CREW NOTICED THAT AIR PRESSURE WAS READING ZERO. LANDED AIRCRAFT AND MAINTENANCE INSPECTED AND FOUND THE ENGINE DRIVEN DRY AIR PUMP SHAFT WAS SHEARED. PROBABLE CAUSE IS UNKNOWN. (K)

2005FA0000414	BEECH	CONT	RELAY	FAILED
3/8/2005	F33A	IO520BB	SM50D7	DYNAMIC BRAKE

PILOT SELECTED GEAR DOWN AND NOTHING HAPPENED. LANDING GEAR WOULD NOT EXTEND. FLIGHT CREW EXTENDED LANDING GEAR MANUALLY AND LANDED WITHOUT INCIDENT. MAINTENANCE TECH TROUBLESHOT GEAR SYSTEM AND FOUND THAT THE DYNAMIC BRAKE RELAY WAS INTERMITTENT. PROBABLE CAUSE WAS DUE TO INTERNAL FAILURE WITH RELAY. TO PREVENT RECURRENCE IS INSTALL A NEWER MFG DATE RELAY WHICH IS AN IMPROVED UNIT IAW MFG. (K)

2005FA0000362	BEECH	CONT	RELAY	INTERMITTENT
11/17/2004	F33A	IO520BB	SM50D7	MLG

PILOT SELECTED GEAR UP AND NOTHING HAPPENED. LANDING GEAR WOULD NOT RETRACT. MAINTENANCE TECHNICIAN TROUBLESHOOT GEAR SYSTEM AND FOUND THAT THE DYNAMIC RELAY WAS INTERMITTNET. NO RECOMMENDATION AT THIS TIME. (K)

2005FA0000234	BEECH	CONT	ADAPTER	SLIPPED
10/26/2004	F33A	IO520BB	642083A12	STARTER

INSTALLED NEW ENGINE IN AIRCRAFT AND PERFORMING ENGINE SET UP. MAINTENANCE CREW NOTICED STARTER ADAPTOR SLIPPING. NEW PART SO REMOVED FOR WARRANTY. NO RECOMMENDATION AT THIS TIME. (K)

CA050321008	BEECH	PWA	FUEL CONTROL	FAILED
3/11/2005	F90	PT6A135	252444993	ENGINE

(CAN) ENGINE POWER REDUCED TO IDLE ON TAKEOFF. MAINTENANCE INSPECTION REVEALED FUEL CONTROL UNIT FAILURE. REPLACED ENGINE DRIVEN PUMP TO FUEL CONTROL COUPLING AND FUEL CONTROL UNIT. GROUND RUN SERVICEABLE. AIRCRAFT RETURNED TO SERVICE.

2005FA0000347	BEECH		BRACE	CORRODED
2/18/2005	M35		35825110	NOSE STRUT

FIND A HIGH PERCENTAGE OF THESE PARTS CORRODED ABOVE THE LOWER BUSHING IN THE GROVE WHERE THE FELT FITS. THIS PART IS MADE OF MAGNESUM SO THE MOISTURE RETAINED BY THE FLET AND GREASE ALLOWS PART TO CORROD. MFG ALLOWS ONLY 10 PERCENT OF WALL THICKNESS TO BE REMOVED FROM THE AREA OF THE CORROSION. THE PITS IN THIS PART WERE APPROX 50 TO 75 PERCENT OF WALL THICKNESS. (K)

CA040821001	BELL	LYC	SPHERICAL BEARIN	FAILED
8/20/2004	205A1	T5313B	212010783101	T/R PITCH LINK

(CAN) A/C WAS CLIMBING AFTER FILLING THE WATER BUCKET WHEN HE LOST COMPLETE TAIL ROTORAUTHORITY.THE A/C MADE SEVERAL 360 DEGREE TURNS AFTER COMING TO REST IN A CON FINED AREA. SUBSTANTIAL DAMAGE WAS DONE TOTHE MAIN ROTOR BLADES AS THEY STRUCK A TREE UPON LANDING.ONE OF THE TAIL ROTOR PITCH LINKS WAS FOUND TO HAVE AN EXTREMELY WORN OFF SPHERICAL BEARING WHICH LED TO THE PITCH LINK SHIFTING CLOSE TO THE TRUNNION. THE PITCH LINK LEFT SEVERAL MARKS ON THE TRUNNION BEFORE IT WAS JAMMED BETWEEN THE PITCHHORN AND THE TRUNNION DURING T/R PITCH CHANGE WHICH LED TO THE PITCH LINK BREAK ING CLEAN OFF.

CA041214002	BELL		BLADE	CRACKED
7/13/2004	206B		206016201131	TAIL ROTOR

(CAN) THE BLADE HAS A CHORDWISE CRACK AT BLADE STATION 12.64. THE CRACK IS 2.65 IN. (67.3MM) LONG ON THE DATA PLATE SIDE OF THE BLADE AND 0.4 IN. (10MM) LONG ON THE OTHER SIDE.

CA041209008	BELL	ALLSN	LINE	CRACKED
11/19/2004	206B	250C20	6875632	FUEL CONTROL

(CAN) WHILE ON A SLING OPERATION, PILOT NOTICED A FLUID LEAKING FROM THE BELLY IN THE CARGO MIRROR. THE AIRCRAFT WAS LANDED IMMEDIATELY AND IT WAS DISCOVERED THAT FUEL WAS LEAKING FROM A

FUEL LINE FITTING. THE ENGINE WAS SHUT DOWN AND THE LINE WAS CHECKED FOR TIGHTNESS AND WITNESS MARK. AS THE LINE WAS FOUND TORQUED SATISFACTORILY, THE LINE WAS REMOVED AND THE CRACKWAS DISCOVERED. THE LINE HAD BEEN INSTALLED SERVICEABLE.NO LOSS OF POWER OR OTHER OPERATIONAL DISCREPANCIES WERE NOTED WHILE IN FLIGHT.

CA041110003	BELL	ALLSN	BLADE	CRACKED
7/29/2004	206B	250C20	206011016201133	MAIN ROTOR

(CAN) DURING DI, THE TIP BLOCK WAS FOUND CRACKED ADJACENT TO IMPACT MARK.

CA041109006	BELL	ALLSN	DRAG PIN	UNSERVICEABLE
9/15/2004	206B	250C20	206031633105	MAIN ROTOR

(CAN) DURING INSPECTION THE DRAG LINK BEARING WAS FOUND SMOKING. THIS A NEW STYLE IN WHICH BEARING AND NOT WHOLE ASSEMBLY IS REPLACED. NEW BEARING INSTALLEDNOTE: THIS STYLE OF BEARING WAS INTRODUCED THROUGHT B206-00-173 TO ELIMINATE THE PROBLEM WITH THE STAKING COMING LOOSE. SUBJECT BEARING WAS NOT KEPT FOR WARRANTY SUBMISSION.

CA040812007	BELL	ALLSN	BELL	SKIN	CRACKED
7/20/2004	206B	250C20		206031004113	TAILBOOM

(CAN) DURING 100 HOUR INSPECTION, CRACK IN PAINT FORWARD OF NR3 HANGAR SUPPORT BRACKET. BRACKET REMOVED, PAINT REMOVED AND AREA FLUORESCENT PENETRANT INSPECTED. CRACK APPROXIMATELY 1.5 INCH.

CA040901002	BELL	ALLSN	DRIVE ASSY	DAMAGED
8/20/2004	206B	250C20	206040015103	TRANSMISSION

(CAN) TWICE WITHIN A 20 HOUR PERIOD,THE YELLOW TEMP INDICATERS CHANGED COLOUR, AND GREASE WAS LEAKING FROM THE FWD. END OF THE DRIVE SHAFT. THE SHAFT WAS REPLACED AND NO FURTHER PROBLEMS HAVE BEEN REPORTED.THE SPHERICAL COUPLING WAS REPLACED ON THE PROBLEM SHAFT,AND WAS INSTALLED ON ANOTHER HELICOPTER, WITHOUT AND REOCCURENCE.

CA050107004	BELL	ALLSN	HOUSING	LEAKING
1/5/2005	206B	250C20	168459	OIL FILTER

(CAN) DURING A TEST FLIGHT FOLLOWING AN OPS NR4 INSPECTION, THE TRANSMISSION OIL PRESSURE LIGHT ILLUMINATED AND THE OIL PRESSURE DROPPED SLIGHTLY BELOW THE RED LINE. AN IMMEDIATE DECENT WAS CONDUCTED AND UPON LANDING A MAJOR OIL LEAK WAS DISCOVERED. THE SOURCE OF THE LEAK WAS THE MAIN TRANSMISSION FILTER HOUSING. THE FILTER WAS REMOVED AND THE O-RING WAS FOUND NICKED APPROXIMATELY .1250 INCH WIDE. THE AIRCRAFT HAD COMPLETED A 30-MINUTE POST INSPECTION GROUND RUN TWO WEEKS EARLIER WITH NO LEAKS DETECTED.

CA040804005	BELL	ALLSN	CHECK VALVE	OUT OF RIG
5/14/2004	206B	250C20	23074872	TURBINE SECTION

(CAN) WHILE DOING 100 HOUR INSPECTION ITEMS DUE TO ENGINE SWAP TO ALTERNATE A/C, FOUND THAT THE TURBINE CHECK VALVE 23074872 WAS SEIZED WHEN THE CLAMP MS 122911 WAS TIGHTENED. VALVE/CLAMP CONFIGUATION IS CORRECT IAW IPC/CEB1349. CHECK VALVE WOULD FUNCTION WITH CLAMP LOOSE. A NEW CLAMP (P/O 360804) WAS TRIED WITH THE SAME RESULT. THESE CLAMPS ARE FLATTENED IN SHAPE, BY REWORKING CLAMP TO A ROUNDER FORM, THE VALVE WOULD THEN FUNCTION NORMALLY WHEN INSTALLED. THIS WAS VERIFIED BY REMOVAL OF THE OIL SUPPLY LINE TO THE VALVE.

CA050314004	BELL	ALLSN	TURBINE	STIFF
3/9/2005	206B	250C20		ENGINE

(CAN) AFTER A SCHEDULED INSP, WERE GOING TO DO A COMPRESSOR WASH, SINCE THE BLEED VALVE AREA WAS DIRTY. WHEN THE COMPRESSOR WAS NOTED AS BEING STIFF TO TURN, FURTHER INVESTIGATION WAS NEEDED. AFTER REMOVAL OF THE TURBINE ASSY, THE COMPRESSOR AND GEARBOX MOVED FREELY. THE 6 AND 7 BEARING AREA WAS CLEANED AND A HEAVY CARBON DEPOSIT NOTED. THE OIL FLOW AFTER CLEANING WAS GOOD AND SAW NO INDICATION OF MECHANICAL PROBLEM. THE TURBINE WAS INSTALLED AND TEST FLOWN SATISFACTORY. AFTER DISSCUSSION WITH A ENGINE REPAIR FACILITY THE OLD COOL DOWN

PROCEDURE WAS NOTED AS BEING THE CULPRIT.

CA050216010	BELL	ALLSN	BELL	HANGER ASSY	ROTATED
9/11/2004	206B	250C20			COOLER BLOWER

(CAN) PILOT REPORTED A HIGH FREQUENCY VIBRATION. UPON INVESTIGATION, THE BEARING IN THE FORWARD HANGER ASSEMBLY OF THE OIL COOLER BLOWER WAS FOUND TO BE ROTATING. BLOWER ASSEMBLY REPLACED.

CA050130002	BELL	ALLSN	BEARING	SEIZED
1/30/2005	206B	250C20	DW4	TAIL ROTOR

(CAN) UPON INSPECTION OF THE LONG TAIL ROTOR PITCH CHANGE TUBE THE WALKING BEAM WAS OBSERVED TO BE A LITTLE RATCHETY TO ROTATE EVEN THOUGH IT ONLY ROTATES ABOUT 30 DEGREES OF TRAVEL. UPON THIS INSPECTION THE PART WAS REMOVED AND FURTHER INSPECTED. THE BEARING WAS ROTATED IN ORDER TO FREE IT UP AND AS MOVEMENT PROGRESSED IT GOT TIGHTER AND FINALLY SEIZED. TOOK THE WALKING BEAM TO A MFG SERVICE CENTER FOR BEARING REPLACEMENT AND EVEN THOUGH MFG SHOWS THE PART IN THE IPC. THE BEARING IS NOT A REPLACEABLE ITEM. A NEW WALKING BEAM WAS ORDERED AND WILL BE INSTALLED.

CA050125001	BELL	ALLSN	INDICATOR	MALFUNCTIONED
1/21/2005	206B	250C20B	206075739125	TORQUE

(CAN) AFTER THE AIRCRAFT WAS COLD SOAKED FOR OVER AN HOUR, THE GUAGE RESPONSE WAS VERY SLOW WHILE THE ENGINE OIL TEMP WAS ALLOWED TO STABILIZE AT 60 DEG.

CA050308009	BELL	ALLSN	ALLSN	ADAPTER	CORRODED
2/28/2005	206B	250C20B	250C20B	230397911	COMPRESSOR

(CAN) COMPONENT DID NOT MAKE IT THROUGH ITS LIFE EXPECTANCY. FRETTING WEAR FOUND OVER PILOT OUTSIDE DIAMETER.

CA050216008	BELL	ALLSN	CHANNEL	CRACKED
2/8/2005	206B	250C20B	206031302189	RT ENG MOUNT

(CAN) CRACK FOUND IN CHANNEL AT RT FORWARD ENGINE MOUNT ATTACH AREA. CRACK APPROXIMATE 1.55 INCH.

CA041221005	BELL	ALLSN	BELL	BEARING	ROUGH
12/14/2004	206B	250C20B		206040339009	BLOWER ASSY

(CAN) DURING BLOWER ASSEMBLY DISSASSEMBLY FOR CLEANING TAIL ROTOR DRIVESHAFT BEARING WAS FOUND TO FEEL ROUGH WHEN ROTATED.

CA041221006	BELL	ALLSN	BELL	DISC	CORRODED
12/6/2004	206B	250C20B		327211	T/R DRIVE SHAFT

(CAN) ON INSPECTION 4 DISC ASSY WHERE FOUND TO BE CORRODED AND HAD TO BE REPLACED.

CA050121006	BELL	ALLSN	BELL	SPRING	BROKEN
1/18/2005	206L	250C20B		206040106001	M/R DRIVE SHAFT

(CAN) DURING A 600 HRS/ 12 MONTHS INSPECTION AND LUBRICATION, OVERHAUL TECH DISCOVERED THAT IN ONE OF THE DRIVE SHAFT COUPLINGS, A SPRING P/N 206-040-106-001 WAS BROKEN INTO THREE PIECES. BROKEN SPRING PIECES WORE HEAVILY INTO PARENT MATERIAL OF ALUMINIUM PLATE AS WELL AS INNER COUPLING.

CA041224006	BELL	ALLSN	BEARING	MISALIGNED
11/1/2004	206L	250C20B	206016201131	T/R BLADE

(CAN) SUBJECT TAIL ROTOR BLADE ASSY WAS REMOVED FROM A/C DUE TO EXCESSIVE T/R VIBRATIONS AT 1.1 IPS. OPERATOR'S OVERHAUL SHOP PERFORMED AN INSPECTION AND AN ALIGNMENT OF SPHERICAL BEARINGS

CHECK. IT HAS BEEN DETERMINED THAT THE BEARINGS ALIGNMENT WAS OVER LIMITS (.011 INCH VERSUS .008 INCH MAX ALLOWABLE). THE BLADE WAS REPAIRED BY REMOVING BOTH BEARINGS, REPLACING ONE WORN BEARING IAW BHY-206L-CR & OVERHAUL MANUAL. UPON COMPLETION AN ALIGNMENT CHECK WAS PERFORMED WITH A RESULT OF .005 INCH. THE BLADE WAS SUBSEQUENTLY RETURNED TO SERVICE WITH NO FURTHER DISCREPANCIES NOTED.

CA050214001	BELL	ALLSN	BELL	VALVE	OBSTRUCTED
2/11/2005	206L	250C20R		2060739155	EMERGENCY FLOAT

(CAN) FLOAT BAGS WOULD NOT INFLATE DURING 3 YEAR OPERATIONAL CHECK, THE VALVE ASSY WAS ASSEMBLED WITH THE SHEARED PORTION OF THE SHEAR HEAD STILL IN THE VALVE OBSTRUCTING THE AIR FLOW TO THE BAGS.

CA040921007	BELL	ALLSN	BLEED VALVE	FAILED
9/16/2004	206L	250C20R	23053190	COMPRESSOR

(CAN) ENGINE FLAMED OUT TWICE DURING TEST FLIGHT FOR BLEED VALVE CHANGE AND RELIGHT ON BOTH OCCATIONS BY AUTO RELIGHT.

CA041222006	BELL	ALLSN	TURBINE	FAILED
12/9/2004	206L	250C20R2	23038160	ENGINE

(CAN) CHIP LIGHT AND ENGINE VIBRATION. PRECAUTIONARY LANDING. ON SUBSEQUENT INSPECTION, TURBINE FOUND TO HAVE FAILED. EXHAUST STACKS AND COMBUSTION LINER FOUND CRACKED. REMOVED TURBINE AND INSTALLED SERVICEABLE TURBINE, EXHAUST STACKS AND COMBUSTION LINER. AIRCRAFT INSPECTED, TEST RUN, TEST FLOWN AND CHECKED SERVICEABLE. TURBINE TO QUALIFIED OVERHAUL SHOP.

CA050223001	BELL	ALLSN	FILTER	OPEN
2/16/2005	206L1	250C28B		FUEL SYSTEM

(CAN) ENGINE FLAME OUT ON LANDING, 200 POUNDS ON BOARD. SENT AME ON SITE CHECK FUEL SYSTEM. IN-LINE FUEL FILTER STUCK OPEN. CLEAN ALL FUEL SYSTEMS AND GROUND RUN IAW MM PROCEDURE. FLEW THE A/C BACK TO THE HANGAR AND CLEANED FUEL SYSTEMS AGAIN. CHECK FOR LOW LEVEL FUEL LIGHT SYSTEMS, FOUND OK. RESULT OF INVESTIGATION WAS IN LINE FUEL FILTER VERY DIRTY, CHECK VALVE STUCK OPEN, FUEL MAY HAVE BEEN TRANSFERING AS IT SUPPOSE TO AND A/C RAN OUT OF FUEL.

CA050218004	BELL	ALLSN	SPLINE	STRIPPED
1/26/2005	206L1	250C28B	206076373001	TACH GENERATOR

(CAN) PILOT LOST NR INDICATION, THEN HYDRAULICS TO FLIGHT CONTROLS. PILOTS LANDED IMMEDIATELY. TACH GENERATOR AND HYDRAULIC PUMP REPLACED. TACH GENERATOR DRIVE REMOVED AND SPLINE INSIDE TACH GENERATOR FOUND TO BE STRIPPED.

CA041103010	BELL	ALLSN	MOUNT	CRACKED
10/27/2004	206L3	250C30P	206064105102	RT ENGINE

(CAN) DURING A 100 HR INSPECTION AN AME WAS PERFORMING A VISUAL INSPECTION ON THE ENGINE MOUNTS AND FOUND AN AREA ON THE RT MOUNT THAT LOOKED SUSPICIOUS. UPON FUTHER INVESTIGATION (LIGHT SANDING) IT WAS DETERMINED THAT THERE WERE CRACKS & HOLES IN 2 AREAS OF THE TUBE 180 DEGREES APART. THIS IS THE 2ND CRACKED ENGINE MOUNT WE HAVE FOUND ON 206 L-3'S.

CA050125002	BELL		INDICATOR	INOPERATIVE
1/21/2005	206L4		206075739123	TORQUE

(CAN) AFTER THE AIRCRAFT WAS COLD SOAKED FOR OVER AN HOUR, THE GAGE RESPONSE WAS VERY SLOW WHILE THE ENGINE OIL TEMP WAS ALLOWED TO STABALIZE AT 60 DEG.

CA050125017	BELL	PWA	COLLECTIVE STICK	BROKEN
1/25/2005	212	PT6T3	212001181001	THROTTLE GRIPS

(CAN) THE ENGINEER WAS ABOUT TO GREASE THE SWASHPLATE. TO GREASE SOME OF THE ZERK FITTINGS IT IS

EASIER TO LIFT THE COLLECTIVE CONTROL STICK UP. THE ENGINEER WAS MOVING THE COLLECTIVE CONTROL STICK UP WHEN THE RIDGED TUBE BENT AND BROKE IN TWO. THE BREAKAGE OCCURED BETWEEN THE TWO THROTTLE GRIPS WHERE THERE IS A SLOT IN THE TUBE FOR THE THROTTLE CONTROL.

CA040812006	BELL	PWA		ANGLE	CORRODED
7/19/2004	212	PT6T3		205031709052S	FUEL CAP

(CAN) DURING IMPORT INSPECTION, RT FUEL CELL CAVITY AFT CAP ANGLE FOUND BADLY CORRODED (EXFOLIATION). PART REPLACED.

CA050110003	BELL	PWA	BELL	COUPLING	CORRODED
1/5/2005	212	PT6T3		212040687001	INPUT DRIVE

(CAN) DURING SCHEDULED INSPECTION PITTING CORROSION IN EXCESS OF .005 INCH HAS BEEN DISCOVERED. THE PATTERN AND LOCATION OF CORROSION PITTING CONFORMS TO PROCESS STAMP IMPRESSION (186). IT IS LIKELY THAT IMPROPER INK HAS BEEN USED DURING SHAFT OVERHAUL. OVERHAUL SHOP(S) HAVE BEEN ADVISED. THE ORIGIN OF THE STAMP IMPRESSION IS YET TO BE ESTABLISHED.

CA040910002	BELL	PWA		HOSE	BURST
8/24/2004	212	PT6T3		7012J220W234	HYD SYSTEM

BEFORE FIRST FLIGHT DURING HYDRAULIC TESTING, PILOT SWITCHED 'OFF' NR 2 HYDRAULIC SYSTEM. AFTER THE SYSTEM WAS SWITCHED BACK 'ON' PRESSURE INDICATION FELL OFF TOZERO. A/C WAS SHUTDOWN. SUBSEQUENT INSPECTION REVEALED THAT THE BRAIDED NR 2 HYDRAULIC HOSE FROM THE PUMP TO MIXING VALVE WAS BURST AT THE 45 DEGREE FITTING (SEE ATTACHED PHOTO). HOSE REPLACED, A/C RETURNED TO SERVICE.

CA050112006	BELL	PWA		LINE	FRACTURED
1/7/2005	212	PT6T3B		3017393	PNEUMATIC SYS

(CAN) THE ENGINE NO.2 POWER-SECTION EXPERIENCED AN UNCOMMANDED POWER REDUCTION IN CRUISE, FALLING BELOW GROUND IDLE.THE POWER-SECTION WAS SHUTDOWN IN FLIGHT AND THE AIRCRAFT RETURNED TO BASE. SUBSEQUENT INSPECTION REVEALED A FRACTURED P3 PNEUMATIC TUBE LEADING TO THE FUEL CONTROL (AFCU).

CA050209006	BELL	PWA		FITTING	CRACKED
2/9/2005	212	PT6T3B		212030158001	TAILBOOM

(CAN) UPPER RT TAILBOOM ATTACH FITTING ON FUSELAGE FOUND CRACKED FROM LOCK FASTENER HOLE.

CA041228002	BELL	LYC		HOUSING	STRIPPED
12/5/2004	214B1	T5508D		210009021	COMPRESSOR

(CAN) DURING REFUELING BETWEEN HELI-LOGGING CYCLES AME ON SITE ROUTINELY OPENS ENGINE COWLS FOR AN INSPECTION OF ENGINE COMPARTMENT AREA. HE NOTICED AFT ENGINE MOUNT ROD END (BELL PN 214-060-114-001) HAD COMPLETELY PULLED OUT OF ENGINE COMPRESSOR HALF CASTING PN 2-100-090-21. ROD END HAD JAMMED ON AN ANGLE INTO THREADED HOLE PREVENTING FURTHER ENGINE MOVEMENT AND POSSIBLE AIRFRAME DAMAGE. AIRCRAFT IMMEDIATELY SHUTDOWN AND GROUNDED. ENGINE REMOVED FOR REPAIR. IT APPEARS JAM NUT PN 214-060-121-001 WHICH SECURES ROD END INTO ENGINE HAD COME LOOSE SINCE ENGINE INSTALLED 36.6 HOURS PRIOR. THIS ALLOWED MOVEMENT IN THREADS BETWEEN ROD END AND COMPRESSOR HOUSING EVENTUALLY CAUSING THREADS TO FAIL AND THE ROD END TO PULL OUT OF THE ENGINE.

CA050309001	BELL	GE	BELL	TUBE	CHAFED
3/1/2005	214ST	CT72A		214001023101	HYD SYSTEM

(CAN) DURING ROUTINE MAINTENANCE, THE SUBJECT TUBE WAS FOUND WITH A (0.375 INCH X 0.187 INCH) HOLE THAT ORIGINATED FROM CHAFING WITH A HYDRAULIC OIL LINE. THE HOLE WAS LOCATED APPROXIMATELY IN THE CENTER OF THE TUBE. THE TOTAL CHAFING DAMAGE IN THIS AREA, COVERED APPROXIMATELY TWENTY PERCENT OF THE TUBE CIRCUMFERENCE. IN ADDITION, THERE WERE TWO OTHER AREAS DISPLAYING SIGNIFICANT CHAFING DAMAGE NEAR THE TOP END OF THE TUBE, ORIGINATING FROM CONTACT WITH ANOTHER OIL LINE. IT WAS EVIDENT THAT INCORRECT ROUTING OF THE OIL LINES WAS THE CAUSE OF THE DISCREPANCY.

THERE WAS NO DAMAGE TO THE OIL LINES AS THEY WERE COVERED WITH PLASTIC SPIRAL WRAP.

CA041210001	BELL	ALLSN	BELL	STUD	CRACKED
10/25/2004	407	250C47B		407010105101	HUB ASSY

(CAN) ALL EIGHT STUDS (STATIC STOPS) FOUND CRACKED ON INSPECTION. MAINTENANCE CREWS REPORT LOWER STUDS ARE ALWAYS FOUND TO BE CRACKED ANY TIME THEY ARE INSPECTED. PROBLEM IS COMMON THROUGHOUT FLEET OF SEVEN BELL 407 HELICOPTERS.

CA041214010	BELL	ALLSN	COMBUSTION LINER	CRACKED
6/3/2002	407	250C47B	23064570	ENGINE

(CAN) CRACK FOUND DURING REMOVAL FOR UNRELATED TURBINE CEB. NO CRACKS ALLOWED IN SUBJECT AREA.

CA041203003	BELL	PWA	BEARING	FAILED
12/2/2004	412	PT6T3B	35BD219DUM	TRANSMISSION

(CAN) IN FLIGHT NOISE WAS HEARD AND SMALL AIRFRAME VIBRATION. A/C LANDED AS PRECAUTION AT AIRPORT. AIRCRAFT INSPECTED AND PROBLEM NOT DETECTED. COULD NOT DUPLICATE NO ISE OR VIBRATION. A/C FLOWN TO BASE AIRPORT. UPON FURTHER INVESTIGATION BEARING IN SPEED REDUCER FOUND FAILED DAMAGE LIMITED TO BEARING.

CA050215005	BELL	PWC	BLADE	CONTAMINATED
2/12/2005	427	PW207D	427016001109	TAIL ROTOR

(CAN) AFTER AIRCRAFT RECONFIGURATION AT OUR FACILITY, NORMALLY INSTALLED THE RADS EQUIPMENT FOR VIBRATION ANALYSIS ON THE T/R SYSTEM. NOTICED A SLIGHTLY HIGH VIBRATION LEVEL WHICH WERE UNABLE TO BRING TO A STANDARD LEVEL. AFTER INVESTIGATION, FOUND OUT THAT ONE OF THE T/R BLADE WAS WATER CONTAMINATED. REPLACED THE T/R BLADE AND THE T/R WAS BALANCE BEYOND, 1 IPS.

2005FA0000249	BELL	ALLSN	COWLING	CORRODED
2/16/2005	430	250C40B	430061801101	LT

LT HAND TRANSMISSION COWLING FRETTING AGAINST ADJACENT COWLING. DZUS FASTENER DOES NOT HOLD COWLING WITH ENOUGH TENSION, CAUSING FRETTING. MOVEMENT CAUSED CRACK AT BOTTOM DZUS RAIL. (K)

CA050124005	BELL	ALLSN	BLADE	DEBONDED
1/20/2005	430	250C40B	222016001131	TAIL ROTOR

(CAN) TAIL ROTOR BLADE DOUBLER DEBOND ON APPROX. 6.5 IN. FROM THE TIP OF THE DOUBLER.

CA041207004	BELL	ALLSN	BELL	SPLINE	WORN
12/6/2004	430	250C40B		222040111101	TRANSMISSION

(CAN) THE TRANSMISSION WAS IN FOR A HARD LANDING SUDDEN STOPPAGE INSPECTION AND EXCESSIVE WEAR WAS FOUND ON THE INTERNAL SPLINES OF THE GEARSHAFT AS WELL AS ON THE EXTERNAL SPLINES OF THE SUNGEAR.THE WEAR WAS NOT A RESULT OF THE HARD LANDING.THIS IS THE SECOND TRANSMISSION IN THE LAST THREE MONTHS THAT HAS HAD THIS SAME PROBLEM.

CA050303015	BELL	LYC	GRIP	CRACKED
3/3/2005	47G4A	VO540B1B3	47120252011	MAIN ROTOR

(CAN) MAIN ROTOR GRIP WAS REMOVED TO COMPLY WITH AD 2001-17-17 AND WAS REJECTED DUE TO CRACKING INDICATIONS IN THE THREADS OF THE ADAPTER NUT AREA.

CA040813002	BOEING	RROYCE	BLADE	DAMAGED
7/31/2004	717200	BR700715A130		COMPRESSOR

(CAN) ENGINE 11348 HAD A COMMANDED IFSD AT 33,000 FT WHEN LEFT ENGINE SURGE IN FLT. ENGINE WAS SHUT DOWN AS IT CONTINUE TO SURGE. BOROSCOPE REVEALED SEVERE HPC DAM AGE FROM STAGE 2 TO

STAGE 10, WITH BLADES HEAVILY DAMAGED AND MISSING. ENGINE ENROUTE FOR RRC, FURTHER REPORT WILL BE SUBMITTED UPON ENGINE DISASSEMBLY.

CA050203001	BOEING	PWA	PWA	STUD	LOOSE
1/6/2005	727217	JT8D17		547344P3	GEARBOX

(CAN) DURING CLIMBOUT, CREW OBSERVED DECREASING OIL QUANTITY NR 3 ENGINE. PRECAUTIONARY ENGINE SHUTDOWN COMPLETED. LANDED WITHOUT INCIDENT.

CA050203002	BOEING	PWA		PLATE	FAILED
1/28/2005	727217	JT8D17		653120043	HORIZONTAL STAB

(CAN) RT HORIZONTAL STABILIZER TO FIN SEAL SEPARATED FROM AIRCRAFT. UNABLE TO DETERMINE EXACT CAUSE. ALL AFFECTED PARTS REPLACED. REMAINING FLEET CHECKED, SERVICEABLE.

CA050318003	BOEING	PWA	BOEING	BOLT	BROKEN
3/14/2005	727217	JT8D17		69186803	RT MLG STRUT

(CAN) DURING THE WALK-AROUND FOR A SERVICE CHECK, THE MECHANIC DISCOVERED THE HEAD OF THE BOLT BROKEN OFF AND MISSING FROM THE RT MAIN LANDING GEAR SIDE STRUT. THIS BOLT ATTACHES THE SIDE STRUT UPPER AND LOWER SEGMENTS AT THE PIVOT. THE BOLT WAS REMOVED AND REPLACED.

CA041026003	BOEING	PWA		ACTUATOR	CRACKED
9/28/2004	727223	JT8D15A		141169	TAIL SKID

(CAN) DURING CLIMB A SYSTEM HYDRAULIC QUANTITY DROPPED TO 1.5 GALLONS LOW LEVEL LIGHT ILLUMINATED. AIRCRAFT RETURNED TO STATION.TROUBLE SHOOTING REVEALED TAIL SKID ACTUATOR BODY CRACKED.RECTIFICATION: TAIL SKID ACTUATOR REPLACED IN ACCORDANCE WITH M/M.

CA050214003	BOEING	PWA	AEI	SWITCH	FAILED
2/4/2005	727225	JT8D15		21EN96	CARGO DOOR

(CAN) MAIN CARGO DOOR LIGHT AND HOOKS UNLOCKED LIGHT ILLUMINATED AFTER TAKEOFF. AIRCRAFT RETURNED TO AIRPORT AND LANDED OVERWEIGHT. CARGO DOOR VERIFIED CLOSED AND LOCKED. MAIN CARGO DOOR INDICATION MEL RAISED AND OVERWEIGHT LANDING INSPECTION C/O IAW MM 5-51-61. PROBLEM DID NOT REOCCUR DURING NEXT TWO FLIGHT LEGS FOR THE DAY. MAINTENANCE CARRIED OUT A DVI INSPECTION OF ALL SWITCHES, RIG CHECK, CLEAN AND LUGGED WITH NO FAULTS FOUND. MEL CLEARED.

CA040922002	BOEING	PWA		ROD END	SHEARED
9/15/2004	727227	JT8D9A			CARGO DOOR

(CAN) DURING ROUTINE OPENING OF THE CARGO DOOR FOR LOADING OF THE AIRCRAFT, A WIND GUST BLEW THE DOOR FULLY OPEN, AND SHEARED ALL FOUR ACTUATOR LINK RODS. THE DOOR ENDED UP IN A VERTICAL POSITION. THE WIND VELOCITY AND GUSTS WERE CHECKED WITH THE CONTROL TOWER PRIOR TO OPENINGTHE DOOR SO AS NOT TO EXCEED GUST LIMITS. THE GUSTS WERE WITHIN THE MANUFACTURE RS MAXIMUM GUST LIMITS. A THOROUGH INSPECTION OF THE ACTUATORS AND STRUCTURE WAS CARRIED OUT, NO FURTHERDAMAGE FOUND. THE DOOR WAS LOWERED AND WAS FOUND TO OPERATE NORMALLY. THE BROKEN LINK RODS WERE REPLACED.

CA041020002	BOEING	PWA		FITTING	CRACKED
10/16/2004	727227	JT8D9A		65244809	MLG UPLOCK

(CAN) DURING ROUTINE MAINTENANCE A CRACK WAS FOUND IN THE LEFT HAND MLG UPLOCK FITTINGIN THE FORWARD RADIUS. NDT CONFIRMED THE CRACK. FITTING WAS REPLACED AND GEAR RETRACTIONS CARRIED OUT.

CA041018008	BOEING	PWA		LINE	LEAKING
10/4/2004	727233	JT8D15			HYD SYSTEM

(CAN) AFTER START-UP AT PUSH BACK THE PURSER NOTIFIED THE FLT DECK CREW OF FUMES IN THE CABIN. THE PASSENGERS WERE DEPLANED AND THE AIRCRAFT WAS RETURNED MAINTENAN CE TO IDENTIFY AND DETERMINE THE SOURCE OF THE PROBLEM. MAINTENANCE FOUND A PIN HOLE IN THE TAIL SKID ACTUATOR

SUPPLY LINE. THE LINE WAS REPAIRED AND THE AIRCRAFT GROUND CHECKED WITH ENGINES, PACKS AND GASPER OPERATING WITH NO INDICATION PRIOR TO RETURN TO SERVICE

CA040923007	BOEING	PWA	DRAG BRACE	LACK OF LUBE
9/23/2004	727233	JT8D15	B273201201	NLG

(CAN) ON FINAL APPROACH, SELECTED GEAR DOWN. NOSE GEAR DOORS DID NOT OPEN AND THE NOSE GEAR RED LIGHT REMAINED ILLUMINATED WITH THE NOSE GEAR GREEN LIGHT OUT. EXECUTED A MISSED APPROACH AND THE GEAR RETRACTED NORMALLY. RESELECTED GEAR DOWN AND GEAR EXTENDED NORMALLY AND LANDED UNEVENTFULLY. AIRCRAFT WAS GROUNDED UNTIL A NLG INSPECTION AND GEAR SWINGS COULD BE ACCOMPLISHED. THE NLG INSPECTION FOUND THE NLG DRAG BRACE KNUCKLE HAD VERY LITTLE LUBRICANT. NLG DRAG BRACE KNUCKLE LUBRICATED AND NUMEROUS GEAR SWINGS ACCOMPLISHED, NLG SYSTEM COULD NOT BE FAULTED. AIRCRAFT RETURNED TO SERVICE.

CA041216008	BOEING	PWA	BOEING	TRANSMITTER	STICKING
12/15/2004	727233	JT8D15		106131713	LT TE FLAPS

(CAN) DURING INITIAL CLIMBOUT, FLAPS CYCLED FROM 5 DEG. TO 2 DEG. CREW NOTICED THAT LT OUTBOARD FLAPS WERE INDICATING 5 DEG. & RT OUTBOARD FLAPS WERE INDICATING 3 DEG. CAUSING AN ASSYMETRY SPLIT. CREW HAD TO DUMP FUEL TO LAND WITHIN LANDING WEIGHT. CREW ACCOMPLISHED AN ASSYMETRY FAULT LANDING. LANDING ACCOMPLISHED & ACRFT RETURNED TO RAMP. MX CONFIRMED FLAPS WORKING PROPERLY BUT LT OUTBOARD FLAP INDICATING SYS FAULTY. MX INSPECTED LT OUTBOARD FLAP INDICATION SYS (CABLES, CABLE DRUM, TRANSMITTER) ALL CABLES WERE CLEANED & LUBED. FLAPS CYCLED NUMEROUS TIMES & NO FURTHER FAULTS FOUND. MX SUSPECT FLAP INDICATION TRANSMITTER CABLE HUNG-UP AT THE DRUM ASSY. AS A PRECAUTION, LT OUTBOARD FLAP TRANSMITTER REPLACED.

CA050203005	BOEING	PWA	BOEING	CYLINDER	INTERMITTENT
2/2/2005	727233	JT8D15		69141062	NLG

(CAN) NLG FAILED TO EXTEND ON APPROACH, THEN RE-CYCLED AND EXTENDED NORMALLY. NOSE GEAR JACKED, NOSE GEAR TRUNION GREASED AND GEAR RETRACTED AND EXTENDED 4 TIMES WITH NO FAULTS. AC WAS DISPATCHED WITH NO FURTHER FAULTS. QA GROUNDED THE AC DUE TO 2 OTHER EVENTS OF THE SAME NATURE. REF. SDR'S 20041123004 AND 20050119003. MAINTENANCE IN OTHER LOCATION, COMPANY MAINTENANCE OPERATIONS CONTROL, AND MAINTENANCE OPERATIONS CONTROL CENTER ALL CONTACTED TO TROUBLESHOOT THE DISCREPANCY. AFTER CONSULTATION, ALL CONCURRED THAT THE NOSE GEAR TRANSFER CYLINDER WAS AT FAULT. REPLACED THE TRANSFER CYLINDER AND GEAR WAS SWUNG NUMEROUS TIMES, NO FAULTS FOUND. AIRCRAFT WAS RETURNED TO SERVICE. T/C PMI CONTACTED WITH DETAILS.

CA050211005	BOEING	PWA	BEARING	BROKEN
2/6/2005	727243	JT8D9A	414001410	ROD END

(CAN) THE PILOT REPORTED THE RT SPOILERS WERE NOT DEPLOYING PROPERLY AND 50 DEGREES RT AILERON WAS REQUIRED TO KEEP WINGS LEVEL AT FULL SPOILER DEFLECTION. UPON INSPECTION OF THE SPOILER RATIO CHANGER AND MIXER, THE RT AFT LOWER SPOILER CABLE ROD END BEARING (P/N 41400-1410) LOCATED ON THE RIGGING BEAM WAS FOUND WITH THE BARREL SNAPPED OFF AT THE BASE OF THE END BEARING. THE END BEARING HAD SEIZED, CAUSING BENDING OF THE BARREL END DURING THE DEPLOYMENT AND RETRACTION OF THE SPOILERS AND EVENTUAL FAILURE.

CA050322008	BOEING	PWA	WIRE	ARCED
3/18/2005	727247	JT8D15		L2 WINDOW

(CAN) CAPT L2 SLIDING WINDOW POWER CORD ARCING AND FILLING THE COCKPIT WITH SMOKE. WINDOW HEAT SELECTED OFF AND BREAKER PULLED. POWER CORD DISCONNECTED FROM RECEPTICLE. REMOVED AND REPLACED THE CAPT L2 SLIDING WINDOW, SYSTEM TESTED SERVICEABLE, AIRCRAFT RETURNED TO SERVICE.

CA040910005	BOEING	PWA	TURBINE BLADES	DAMAGED
9/10/2004	72725C	JT8D7B		NR 1 ENGINE

(CAN) AFTER TAKEOFF POWER WAS SET A LOUD BANG AND VIBRATION WAS EXPERIENCED FROM THE NR 1 ENGINE. TAKEOFF REJECTED. ENGINE SECURED AND AIRCRAFT RETURNED TO RAMP. VISUALINSPECTION UP TAILPIPE REVEALED ENGINE HAD FAILED INTERNALLY. TURBINE BLADES MISSING.

CA041214007	BOEING	PWA	INDICATOR	UNRELIABLE
12/9/2004	727260	JT8D17	10607225	OIL QTY

(CAN) DURING CLIMB ENGINE NR 2 OIL QUANTITY DECREASED RAPIDLY TO ZERO, FOLLOWED BY A RISE IN OIL TEMP. CREW SHUTDOWN THE ENGINE ANDRETURNED TO AIRPORT. MAINTENANCE CHECKED OIL QTY AND FOUND TANK FULL. MAIN OIL FILTER CHECKED FOR CONTAMINATION, NONE FOUND. BEARING TEMP INDICATORS CHECK ED FOUND NORMAL. HIGH POWER ENGINE RUN CARRIED OUT, NO FAULTS FOUND. AIRCRAFT RE TURNED TO SERVICE. FAULT REOCCURRED ON NEXT FLIGHT LEG, HOWEVER, QTY RAPIDLY FLUCTUATED BETWEEN FULL, ZERO AND QUANTITIES IN BETWEEN. CREW IDENTIFIED THIS AS AN INDICATION PROBLEM AND CONTINUED FLIGHT. MAINTENANCE AT NEXT STATION PLAC ED NR 2 ENGINE OIL QUANTITY SYSTEM ON MEL PART REPLACEMENT SCHEDULED FOR NEXT DAY.

2005FA0000447	BOEING	BOEING	HOUSING	CRACKED
3/15/2005	737*		65695223	ACTUATOR

CRACKED BY EXTEND PORT. FATIGUE, UTILIZE IMPROVED STEEL HOUSING. (MECHANIC ECI, JOB NR 193967) (K)

2005FA0000448	BOEING		HOUSING	CRACKED
3/15/2005	737*		65447821	HYD PUMP

HYD PUMP HOUSING IS CRACKED BEHIND PORT (1), FATIGUE. REDESIGN COVER. (MECHANIC FXS, JOB NR 193727) (K)

2005FA0000337	BOEING	BOEING	HOUSING	CRACKED
2/3/2005	737*		654494710	ACTUATOR

PIN HOLES AND CRACKS IN SIDEWALL OF HOUSING. CYCLING FATIGUE. USE NEW IMPROVED STEEL HOUSING AND REMOVED ALUMINUM HOUSINGS FROM SERVICE. (MECHANIC, BA2, JOB 192740) (K)

CA050317007	BOEING	CFMINT	VIDEO DISPLAY	FAILED
3/16/2005	737*	CFM567B22	5401100003	ENTERTAIN SYS

(CAN) 7F SCREEN SMOKING, SYSTEM INOPERATIVE THE SEB AND VDU WERE REPLACED. THE OPERATOR IS FOLLOWING UP WITH THE OEM TO GET TSN /TSO AND TEARDOWN INFORMATION. NOTE: MFGR IS LIVE TV.

CA030918008	BOEING	PWA	BOLT	IMPROPER PART
9/11/2003	737*	JT8D17	BACB30GE	NLG

(CAN) NOSE LANDING GEAR LOCK ACTUATOR LOWER ATTACH BOLT SHEARED, ALLOWING ACTUATOR TO FAIL. BOLT IDENTIFIED AS AN UNAPPROVED PART. THIS BOLT WAS NOT INSTALLED BY THIS OPERATOR.

CA050119011	BOEING	PWA	WINDOW	CRACKED
1/16/2005	737200	JT8D*	58935734	CABIN

(CAN) RT WINDOW NR 4 PANE CRACKED, APPEARS TO BE OUTER PANE. AIRCRAFT RETURNED TO BASE. WINDOW REPLACED, AIRCRAFT RETURNED TO SERVICE.

CA050211007	BOEING	PWA	APU	FIRE
2/4/2005	737200	JT8D17	38942811	AFT

(CAN) ENCOURTERED AN APU FIRE. FIRE DID NOT INITIATE A FIRE WARNING. FIRE BELIEVED TO BE INITIATED BY CRACK IN APU PLENUM. CRACK IN TURN CAUSED HOT COMPRESSOR DISCHARGE AIR TO AFFECT FUEL HEATER & CHECK VALVE CAUSING AN O-RING TO LEAK. ALLOWING FUEL TO START A FIRE ON TOP OF APU PLENUM. FIRE LOOP DOES NOT RUN IN THIS PARTICULAR AREA. FIRE MAY HAVE ALSO BEEN COMPOUNDED BY APU START HAD BEEN ABORTED POSSIBLY LEAVING FUEL IN COMBUSTION CAN. COLLECTIVELY THE FIRE EXITING TAIL PIPE & BURNED ON TOP OF APU. LOCATION OF FIRE & LOCAL HEATING IN FIREWALL IN VICINITY OF THE TAIL PIPE FIRE LOOP CONNECTOR CAUSED CONNECTOR TO SHORT. OVERHEAT DETECTION LIGHT ON GLARESHIELD 6 PACK ILLUMINATED.

CA041222017	BOEING	PWA	GUSSET	CRACKED
12/20/2004	737201	JT8D9A	654581945	NLG

(CAN) DURING A ROUTINE PHASE 2 CHECK (137.5 HRS.) A 3.5 INCH (THREE AND A HALF INCH) CRACK WAS FOUND ON THE NOSE LANDING GEAR GUSSET WHILE CARRYING OUT SERVICE DIFFICULTY ALERT AL-2002-03. RETRACT ACTUATOR SUPPORT FITTING GUSSET REPLACED IAW SRM 51-30-2 FIG II.TIMES. 64641.30 CYCLES. 61588.

CA050329003	BOEING	PWA	SKIN	CRACKED
3/27/2005	737201	JT8D9A		FUSELAGE

(CAN) DURING ROUTINE MAINTENANCE A CRACK WAS FOUND IN THE FUSELAGE AT STATION 759.5 BELOW STRINGER 18L. HFEC WAS CARRIED OUT TO VERIFY THE CRACK AND DETERMINE THE EXTENT. IT WAS DETERMINED THAT THE CRACK WAS APPROX 1.4 INCHES LONG. THE CRACK WAS REPAIRED IAW SRM 53-30-3 PAGE 284 FIG. 48 SHEET 32 DETAIL X.

CA041012002	BOEING	PWA	HYDRAULIC SYSTEM	INOPERATIVE
10/9/2004	737201	JT8D9A	65448917	A-SYSTEM

(CAN) LOSS OF SYSTEM A-HYDS AT FL270, INDICATED BY SYSTEM A-FLT CONTROL LOW PRESSURE & FEEL DIFF PRESSURE LIGHT AND A-QTY AT .5 GALLONS. ACRFT RETURNED TO AIRPORT. FLT CONTROL MODULE A-SYS REPLACED. ALSO BOTH A & B CASE DRAIN FILTERS & BOTH A-SYS HYD EDPS REPLACED. TIMES- 58129.50 CYCLES- 54334.

CA041108009	BOEING	PWA	ISOLATION VALVE	MALFUNCTIONED
11/4/2004	737201	JT8D9A		MLG

(CAN) ON TAKEOFF, GEAR HANDLE INITIALLY WOULD NOT COME UP AND ASSOCIATED OVERHEAD ISOLATION VALVE ILLUMINATED. AFTER FLAP RETRACTION TOCWS SOUNDED FOR TWO MINUTES, THEN STOPPED AND GEAR CAME UP NORMAL.AIR SAFETY SENSOR REPLACED AND TESTED SERV. GROUND SPOILER INTERLOCK VALVE CABLE ADJUSTMENT TESTED SERV. GEAR SWINGS CARRIED OUT. AIRCRAFT GEAR OPERATED NORMALLY.

CA040825011	BOEING	PWA	BOEING	SKIN	DELAMINATED
8/24/2004	737204	JT8D15			RUDDER

(CAN) DURING A B-CHECK, WALKAROUND FOUND LT SIDE OF THE RUDDER DELAMINATED. FURTHER INSPECTION FOUND DELAMINATION TO BE BEYOND LIMITS OF SRM 55-40-1 FIG 1,K. THE DELAMINATION IS CENTERED AT THE BAYAPPROX. RUDDER STATION 121. FERRY FLIGHT AUTHORIZED FROM XXX TO XXX WITH NO STOPS IAW THE RESTRICTIONS CONTAINED IN THE SPECIAL FLIGHT PERMIT, TO ACCOMPLISH PERMANENT REPAIR PER SRM.

SROM200500004	BOEING	WIRE	BROKEN
2/3/2005	737205	58791	EMERGENCY LIGHT

FWD SECTION EMERGENCY FLOOR LIGHTS INOPERATIVE ROWS 1 - 3. REPLACED BROKEN FLOOR LIGHT STRIP IAW MM 33-51-191. OPS CHECK NORMAL.

SROM200500005	BOEING	BATTERY PACK	INOPERATIVE
2/4/2005	737205	582212	EMERGENCY LIGHT

EMERGENCY ESCAPE FLOOR LIGHTING INOP FROM ROWS 15 TO 18. REPLACED BATTERY PACK, ESCAPE LIGHTING OPS CHECK GOOD IAW CPA AMM SUPPLEMENT 33-51-191.

SROM200500002	BOEING	POWER CABLE	OPEN
1/29/2005	737205	5879-1	EMERGENCY LIGHT

FLOOR PROXIMITY EMERGENCY ESCAPE PATH LIGHTING INOP BETWEEN ROWS 9 TO 15. TROUBLESHOT, REMOVED AND REPLACED FLOOR PROXIMITY ESCAPE PATH LIGHTING CABLE LEAD ASSEMBLY IAW B737 MM 33-51-191, OPS CHECK GOOD.

SROM200500003	BOEING	BATTERY PACK	INOPERATIVE
1/28/2005	737205	582212	EMERGENCY LIGHT

EMERGENCY ESCAPE FLOOR LIGHTING FROM ROWS 16 TO 19 INOP AND L2 DOOR INTERIOR EMERGENCY EXIT LIGHTS INOP. CLEANED CONNECTOR ON EMERGENCY ESCAPE FLOOR LIGHT STRIP AT ROW 18 AND REMOVED

AND REPLACED R2 DOOR EMERGENCY EXIT LIGHTS BATTERY PACK IAW B737MM 33-51-191, OPS CHECK GOOD.

SROM200500001	BOEING	BATTERY PACK	DISCHARGED
1/19/2005	737205	2113-1A	CABIN

AFT GALLEY DOOR EMERGENCY LIGHT INOP. REMOVED AND REPLACED BATTERY PACK IAW B737 NN 3351-71, OPS CHECKED GOOD.

SROM200500006	BOEING	BATTERY PACK	INOPERATIVE
3/10/2005	737205	582212	EMERGENCY LIGHT

EMERGENCY EGRESS AFT FLOOR LIGHTING VERY DIM, THEN WENT INOP ON OPS CHECK. REMOVED AND REPLACED EMERGENCY EGRESS AFT BATTERY PACK IAW B737MM 33-51-93, OPS CHECK GOOD.

CA041214001	BOEING	PWA	FITTING	LOOSE
12/12/2004	737210C	JT8D9A		NR 2 ENGINE

(CAN) AT TRANSITION TO CRUISE FL 350 AFTER DEPARTURE, THE NR 2 ENGINE APPEARED TO SURGE OR COMPRESSOR STALL. AFTER 2 ATTEMPTS TO REDUCE THROTTLE THE ENGINE WAS SHUTDOWN AND THE AIRCRAFT RETURNED TO POINT OF DEPARTURE. MAINTENANCE FOUND A LEAK AT THE PS4 FITTING AT THE PRESSUE RATIO BLEED CONTROL (PRBC). THE O-RING WAS REPLACED AND THE FITTING RESECURED. AIRCRAFT WAS GROUND CHECKED WITH NO FURTHER PROBLEM AND RETURNED TO SERVICE.

CA050204002	BOEING	PWA	MIXER BOX	SEPARATED
1/17/2005	737210C	JT8D9A	65544702	DUCT FLANGE

(CAN) ON DEPARTURE, FORWARD CLOSET SMOKE DETECTOR ACTIVATED AND ACRID SMELL DETECTED IN CABIN. RETURNED WITHOUT FURTHER INCIDENT. FOUND BLEED AIR DUCT AT AIR DISTRIBUTION MANIFOLD LT SIDE A-DRIFT, SECURED DUCT AND LEAK CHECK CARRIED OUT. AS A FURTHER PRECAUTION ON ARRIVAL, AIR DUCT P/N 65-54467-1 AND MIXING CHAMBER P/N 65-54470-2 REPLACED WITH OVERHAULED UNITS.

CA050128004	BOEING	PWA	ENGINE	FAILED
1/24/2005	737210C	JT8D9A		NR 2

(CAN) DEPARTING, THE NR2 ENGINE PERAMETERS BECAME ERRATIC ASSOCIATED WITH A LOUD REPORT, BELIEVED TO BE A COMPRESSOR STALL. THE AIRCRAFT LANDED WITHOUT INCIDENT AT POINT OF DEPARTURE. MAINTENANCE FOUND THE NR2 ENGINE TO HAVE SUFFERED SEVERE INTERNAL DAMAGE TO THE TURBINE SECTION.

CA030321011	BOEING	PWA	CONTROL UNIT	MISOVERHAULED
2/26/2003	737217	JT8D17		RUDDER

(CAN) UNSCHEDULED REMOVAL OF RUDDER PCU, OCCURRED ON FEB 25/26/2003 WAS IN RESPONSE TO A REQUEST FROM MATERIAL SERVICES BASED ON A FAA UNAPPROVED PARTS NOTIFICATION NR 2001-0089 DATED AUG 12,2002. SUSPECT PCU P/N 1U1150-3 S/N 737 WAS LISTED IN THE NOTIFICATION. REMOVAL OF RUDDER PCU P/N 1U1150-3 S/N 0737 DOES CROSS REFERENCE TO FTN ZKMZP8 AND DOES INDICATE THAT IT WAS INSTALLED, BUT HISTORY INDICATES UNIT WAS REPAIRED ON MARCH 13,2000. FTN HISTORY INDICATES THAT UNIT WAS INSTALLED ON AC ON MARCH 21, 2000 UNTIL PRESENT DATE. FAA NOTICE INDICATES THAT SUSPECT UNITS WERE IMPROPERLY O/H JANUARY 3-8 2001. SHOP REPORT ESTABLISHED THAT PART HAD MFG CODES. PRESUMING THAT PART LISTED ON FAA LISTING HAS BE FORGED.

CA050121003	BOEING	PWA	QUICK DISCONNECT	FAILED
1/14/2005	737242C	JT8D9A		PITOT LINE

(CAN) AC ENCOUNTERED AUTOPILOT, STATIC AIR TEMP INDICATION ANOMALIES. AUTOPILOT PITCH, ROLL COMPUTERS ALONG WITH 3 AIR DATA COMPUTERS (ADC). FOUND PITOT LINE QUICK DISCONNECT TO ADC HAD FAILED. INTERNAL BARREL THAT OPENS PITOT LINE TO ADC HAD FAILED. LINE SEALED, WOULD NOT ALLOW PITOT PRESS TO ENTER THE ADC. RESULTS WAS PITOT INFO USED BY ADC FOR AUTOPILOT GAIN CNTRL, SAT CALCULATION WAS NOT AVAILABLE. FIT NOTED THAT AIRSPEED PROBLEMS WERE NOT RECORDED AS MACH AIRSPEED IND WAS STRICTLY PNEUMATIC. NOT INPUT OR SERVO FROM ADC FOR AIRSPEED INFO. SNAG MANIFESTED ITSELF AS AUTOPILOT, SAT RELATED ALONE. PITOT STATIC CKS DID NOT SHOW PRBLM FOR

LEAKAGE OR AIRSPEED INFO. LINE WAS REPLACED, AC OPERATED NORMALLY.

CA041102003	BOEING	PWA		CARRIAGE	CRACKED
11/18/2004	737248C	JT8D9A			TE FLAPS

(CAN) DURING COMPONENT REPLACEMENT AT HEAVY CHECK, A TYPICAL CRACK WAS DETECTED AT THE SPINDLE JOURNAL FORWARD END ON FLAP CARRIAGE NR 7.

CA050120002	BOEING	PWA	BOEING	BALANCE WEIGHT	MISINSTALLED
10/28/2004	737248C	JT8D9A		65C25920	RT AILERON

(CAN) DURING HEAVY MAINTENANCE THE RT AILERON WAS DISCOVERED IN AN IMPROPER CONFIGURATION. THE BALANCE WEIGHT ASSOCIATED WITH A COMPOSITE UNIT WAS FOUND TO BE INSTALLED WHEN THE AILERON WHICH WAS REMOVED FOR REPAINT COULD NOT BE BALANCED AT REINSTALLATION. THE BALANCE WEIGHT IS USED ON 65C25911 COMPOSITE SERIES AILERONS. THE DATE OF INSTALL IS NOT KNOWN.

CA040825010	BOEING	PWA		LINE	RUPTURED
8/21/2004	737281	JT8D17		BACH8B04NN02	HYDRAULIC SYS

(CAN) HYDRAULIC QUANTITY INDICATOR SHOWED RAPID DEPLETION TO 1 GAL AFTER TAKEOFF. FOUND RUPTURED HYDRAULIC LINE P/N BACH8B04NN0214T IN NOSE LANDING GEAR WHEEL WELL.LINE REPLACED IAW 20-10-52. ENGINE HYDRAULIC CASE DRAIN FILTERS CHECKED FOR METAL CONTAMINATION, NO CONTAMINATION FOUND. ENGINE RUN REQUIRED TO LEAK CHECK CASE DRAIN FILTERS AND CONFIRM PROPER HYDRAULIC PUMP OPERATION. HYDRAULIC PUMP OPERATION NORMAL ON BOTH ENGINE DRIVEN PUMPS.

CA050125007	BOEING	PWA		SKIN	CRACKED
1/21/2005	737296	JT8D9A			FUSELAGE

(CAN) AN OUTER FUSELAGE CRACK WAS FOUND DURING A PHASE EIGHT CHECK AT STRINGER 16L, STATION 727+14.5 APPROXIMATELY 1.5 INCHES IN LENGTH. FUSELAGE CRACK REPAIRED IAW REO-L00889 REV 1R TIMES - 59761:05 HOURS AND 54470 CYCLES

CA041203008	BOEING	PWA		WIRE	ARCED
12/1/2004	7372H4	JT8D9A			POT WATER TANK

(CAN) THE POTABLE WATER INDICATION BECAME INOPERATIVE AND WAS DEFERRED. TROUBLESHOOTING FOUND WIRES IN THE AREA NEAR THE WATER TANK ON A BELLY STRINGER AT STN 960 TO BE BURNED BY ARCING. WIRES AFFECTED WERE POTABLE WATER INDICATION, R2 DOOR WARNING LIGHT AND LAV DUMP GASKET HEATER. THE AREA WAS WET FROM CONDENSATION WHICH HELPED TO PROMOTE THE ARCING. THE WIRES WERE REPAIRED PER AMM.

CA040825009	BOEING	PWA	BOEING	CAP	LEAKING
8/18/2004	7372Q8	JT8D15		66227741	ACTUATOR

(CAN) AIRCRAFT TURN BACK DUE TO LOSS OF HYDRAULIC FLUID SYSTEN B IN FLIGHT. ON INSPECTION FOUND PLUG ON NR2 SPOILER ACTUATOR LEAKING. REPLACED PLUG P/N 66-22774-1 IAW CMM OVH 27-60-41. B SYSTEM CASE DRAIN FILTER TO B SYSTEM PRESS FILTERS CHECKED FOR CONTAMINATION. NO CONTAMINATION FOUND. FUNCTION CHECKED SPOILERS AND LEAKED CHECKED. OK FOR SERVICE. CARRIED OUT RII INSPECTION. OK.

CA041203006	BOEING	PWA		SKIN	CRACKED
11/28/2004	7372Q9	JT8D9A			FUSELAGE

(CAN) AN OUTER FUSELAGE CRACK WAS FOUND AT STR 16 LT BETWEEN STA 767 & 787 APPROX 2 INCHES LONG. FUSELAGE CRACK REPAIRED IAW SRM 53-30-1 FIG.48 PROCEDURES I, IV & VII. THIS REPAIR IS TIME LIMITED UNTIL 25 FEB. 04. TIMES- 61761:52 CYCLES- 57769.

CA041108010	BOEING	PWA		SKIN	CRACKED
11/6/2004	7372Q9	JT8D9A			FUSELAGE

(CAN) FUSELAGE CRACK FOUND ON OUTER SKIN AT STN 767 STR 18L, 0.875 INCHES LONG. CRACK REPAIRED IAW SRM 53-30-3 FIG 48 SHEET 32 DETAIL X REV.90. TIMES 61643.42 CYCLES 57682.

CA050125010	BOEING	PWA	SKIN	CRACKED
1/22/2005	7372Q9	JT8D9A		FUSELAGE

(CAN) AN OUTER FUSELAGE CRACK WAS DISCOVERED AT STRINGER S-18R, STATION 750, APPROXIMATELY 1.125 INCHES LONG. THE CRACK WAS REPAIRED IAW SRM 53-30-3 FIGURE 48, DETAIL IX AND DETAIL XIX.

2005FA0000233	BOEING	CFMINT	WHEEL	CRACKED
11/5/2004	7373H4	CFM563B1US		MLG

WHEEL/ TIRE ASSY WENT FLAT. SHOP FINDINGS THROWN TREAD AND 4 BROKEN WHEEL TIE BOLTS. (K)

CA050113001	BOEING	CFMINT	BOLT	LOOSE
1/7/2005	737522	CFM563C		WING SPAR

(CAN) DURING A POST FLT WALKAROUND MX DISCOVERED DAMAGE ON LT OUTBOARD WING LOWER SPAR CAP, AFT OF THE NR 6 LEADING EDGE SLAT. FURTHER INSPECTION REVEALED A LOOSE UNATTACHED BOLT PRESENT IN THE AREA. THIS BOLT CREATED FOD DAMAGE TO THE SPAR WHEN THE NR 6 SLAT ACTUATOR RETRACTED AND EXTENDED. THIS BOLT IS THE SAME PART AS THE ACTUATOR ATTACHMENT BOLT AND IS SUSPECTED TO HAVE BEEN LOST AND LEFT IN THE AREA DURING THE RECENT HEAVY MX CHECK COMPLETED AT TIMCO AVIATION BEFORE ACRFT DELIVERY TO CANADA. THE DAMAGE AND REPAIRS ARE CURRENTLY BEING ASSESSED AND AN INVESTIGATION TO THE CAUSE IS STILL UNDERWAY. THIS SDR WILL BE UPDATED AS MORE INFORMATION BECOMES AVAILABLE.

CA050329002	BOEING	GE	WINDOW	BROKEN
3/28/2005	737522	CFM56*	58935733	COCKPIT

(CAN) ON APPROACH, THE PILOTS NR 4 WINDSHIELD (EYEBROW) APPEARED TO SHATTER. THERE WAS NO LOSS OF PRESSURIZATION. THE LANDING WAS CONTINUED WITHOUT PROBLEM. ON INVESTIGATION, THE GLASS LAYER SEEMS TO HAVE FAILED. THE OUTER LAYERS WERE INTACT BUT THE INNER LAYER APPEARS TO HAVE SHATTERED. THE PILOTS DID NOT SEE ANY IMPACT NOR WAS THERE EVIDENCE OF A BIRD STRIKE. THE WINDOW WAS REPLACED WITH A SERVICEABLE UNIT.

CA041216011	BOEING	CFMINT	B-NUT	LOOSE
12/15/2004	7377CG	CFM567B22		OIL LINE

(CAN) APPROX 30 MINS AFTER TAKE OFF, CREW NOTED LOSS OF OIL QTY IN NR 2 ENG & DID AN AIR TURNBACK. SEVERAL MINS LATER CREW NOTED FLUCTUATING OIL PRESSURE IN NR 2 ENG & CARRIED OUT A PRECAUTIONARY SHUTDOWN. MX ISOLATED LEAK TO AN AREA WHICH HAD BEEN DISTURBED BY MX THE PREVIOUS DAY DURING A B-CHECK. AT THAT TIME, COKING HAD BEEN NOTED ON OIL LINES INTERFACE AT REAR TURBINE FRAME & A GASKET REPLACED IN REAR BEARING HOUSING. INVEST IN THIS AREA FOUND TOP FITTING OF OIL SUPPLY LINE LOOSE BY 1 FLAT (60 DEGREES). B-NUT ON THIS TUBE IS RETAINED BY A PIN WHICH TENDS TO ADD DRAG TO TORQUE.

2005FA0000183	BOEING		PSU	CONTAMINATED
1/31/2005	73783N		417N3011414B	CABIN

CONTAMINATION ON INSIDE OF PSU. WHILE CARRING OUT ROUTINE MAINTENANCE ON PAX PSUS, CONTAMINATION WAS FOUND AT ROWS 8,13, 18, AND 23 LT AND RT. CONTAMINATION APPEARS AS SOME FORM OF CARBON OR GRAPHITE. IT IS LOCATED DIRECTLY BELOW WHERE THE OVERHEAD BINS JOIN AND HAS SETTLED ON THE OXYGEN MASK COVERS INSIDE THE PSUS, AND AT ROW 8 IT IS LOCATED ON THE GASPER COVER. INSPECTIO ALSO CARRIED OUT ON SISTER AC. SAME DEFECT FOUND. CONTAMINATION REMOVED AS DETAILED ON NRC 185261. (K)

2005FA0000450	BOEING	BOEING	HOUSING	CRACKED
3/1/2005	747*		69B802071	ACTUATOR

ACTUATOR HOUSING CRACKED AT THE BASE, FATIGUE OR OVERPRESSURE. REDESIGN HOUSING. (MECHANIC FXS, JOB NR 192820) (K)

2005FA0000338	BOEING	VICKERS	ADAPTER	ERODED
2/3/2005	747*		624022	PUMP

EROSION AROUND STROKING PISTON PORT. PROLINGED FLUID FLOW AGAINST SOFT METAL STRONGER MATERIAL FOR HOUSING. (MECHANIC BS1, JOB 192844) (K)

2005FA0000422	BOEING	PWA	CARBON SEAL	FAILED
8/19/2004	747*	PW4062	51G186	ENGINE

FAILED CARBON SEAL, RESULTING IN LOSS OF OIL, IFSD AND ATB. (NE03200504012)

CA040805001	BOEING	RROYCE	FAIRING	FAILED
7/21/2004	757*	RB211535E4	UL16113	ENGINE

(CAN) ENGINE EXPERIENCED A SPINNER FAIRING FAILURE ON THE T/O ROLL. PILOT ADVISED BY TOWER OF SPARKS AND FLAMES FROM JET PIPE AS REPORTED BY ANOTHER A/C & THE TAKE OFF WAS ABORTED. SPINNER FAIRING IS OF THE OLD FABRICATED SHORT FAIRING STANDARD & FAIRING UNZIPPED ABOUT 40 PERCENT AROUND STITCH WELD DUE TO A CRACK WHICH PROPAGATED REARWARDS FROM ONE OF THE BOLT H OLES. CRACKING OF THE SPINNER FAIRING IS A KNOWN PROBLEM WHICH WAS MANAGED BY ROUTINE INSPECTIONS FOR CRACKING. NMSB 72-C322 CALL FOR REPETITIVE INSPECTION OF THE NOSE CONE FAIRING FOR CRACK. THE ENGINE HAS SUFFERED EXTENSIVE FAN BLADE AND ATTRITION LINER DAMAGE. THE FAILURE WAS FULLY CONTAINED AND THE UNZIPPED MATERIAL SEEMS TO HAVE GONE DOWN THE BY-PASS DUCT AND AVOIDED THE CORE ENGINE. ENGINE WILL BE SENT AT ROLLS-ROYCE CANADA FOR REPAIR.

CA050128005	BOEING	RROYCE	COOLING FAN	BINDING
1/28/2005	757236	RB211535E437	731376	E/E BAY

(CAN) CREW NOTICED A BURNING SMELL THROUGHOUT AIRCRAFT AND THEN HAD AN EICAS MESSAGE (EQUIPMENT OVERHEAT) . MAINTENANCE CONFIRMED FWD EQUIPMENT COOLING FAN BINDING AND A BURNT SMELL COMING FROM UNIT.

CA041021008	BOEING	RROYCE	FIXTURE	BURNED
10/18/2004	757256	RB211535E437	BV031120333	COCKPIT LIGHT

(CAN) BURNING SMELL NOTICED IN FORWARD CABIN AFTER DEPARTURE. CREW ELECTED TO RETURN TO AIRPORT. ON ARRIVAL, MTX NOTICED CEILING LIGHTING NOT WORKING AT ROW 2DEF FOUND CONNECTOR ON LIGHTING FIXTURE HAD ARCED/BURNED AND EMITTED STRONG ODOUR. FIXTURE REMOVED, INCLUDING BALLAST (PN 05939-3, SN 4515

CA041022002	BOEING	RROYCE	CONTROL PANEL	FAILED
10/21/2004	75728A	RB211535E437	6224717004	MODE CONTROL

(CAN) AFTER DEPARTURE YVR ENROUTE LAX, CREW NOTICED NUMBEROUS FAILURES IN AUTOFLIGHT MODE CONTROL PANEL.NOT ABLE TO SELECT SPECIFIC HEADING. HEADING INDICATIONS ON CAPT/FO EHSI DIFFERENT. UNABLE TO SELECT ALTITUDE, ALSO AUTOPILOT WOULD NOT CONTROL AIRCRAFT TO SELECTED HEADING OR ALTITUDE. CREW ELECTED TO RETURN TO YVR.UPON ARRIVAL YVR, MAINTENANCE REPLACED THE MODE CONTROL PANEL, AIRCRAFT DISPATCHED. NO FURTHER INCIDENT.

CA041129009	BOEING	PWA	ENGINE	SURGES
11/29/2004	767233	JT9D7R4D		LEFT

(CAN) LOUD BANG AND YAW FELT AT CLIMB THRUST 7000 FT , RETURNED. ADDED MAINTENANCE INFO, LT ENG SURGE DET. MSG91827. LANDING SMOOTH. 91827.(SIC) ACTION: DFDR CHANGED. REPLACED EVBC IAW MM-75-31-01. ENG. BOROSCOPE CARRIED OUT. NO FAULTS. ENG. TEST 8, 9 AND 10 CARRIED OUT NO FAULTS. CONS. SERVICEABLE.

CA041229001	BOEING	PWA	RING GEAR	CORRODED
12/29/2004	767233	JT9D7R4D	113T12518	FLAP ACTUATOR

(CAN) RING WAS FOUND CORRODED AND GEAR BEARING SURFACES WERE PITTED. NR 6 FLAP ACTUATOR HAD CORROSION EMITTING FROM AFT SIDE OF MOUNT FLANGE. REMOVED ACTUATOR AND INVESTIGATED SOURCE. FOUND RING GEAR CORRODED. REACTION RING INSTALLED AND ACTUATOR REINSTALLED PER AMM 27-51-11 AND BAC 5009.

CA050214006	BOEING	PWA	BALLSCREW	CORRODED

2/14/2005	767233	JT9D7R4D	PNB18834	STAB TRIM ACTUAT

(CAN) FAULT: WHILE CARRYING OUT AN INSPECTION. FOUND RUSTY COLORED LUBRICANT AND REDDISH STAINING ON THE STAB. JACKSCREW GIMBAL. A PURGING OF THE LUBRICANT FROM THE GIMBAL ASSY WAS CARRIED OUT. THE RUST COLORING WAS CONFIRMED TO BE DUE TO IRON IN THE GREASE. FURTHER INSP ALSO REVEALED DAMAGE TO THE THREADS OF THE BALLSCREW.

CA050215002	BOEING	PWA	BALLSCREW	CORRODED
2/15/2005	767233	JT9D7R4D	PN0411	STAB TRIM ACTUAT

(CAN) INSP OF HORIZONTAL STABILIZER SCREWJACK DURING M01 CHECK REVEALED EVIDENCE OF INTERNAL CORROSION AS A RESULT OF DISCOLORATION IN LUBRICANT. TEARDOWN AND SHOP ANALYSIS REQUESTED WITH RESULTS TO BE FORWARDED TO AWC/YUL. NOTE: SDR ISSUED AGAINST (GDSP) REFLECTING SIMILAR CORROSION CONCERNS.

CA041123006	BOEING	GE	PUMP	CONTAMINATED
11/23/2004	767333	CF680C2B6F	1383M68P12	HP FUEL

(CAN) UNABLE TO START NR 2 ENG. DUE FUEL VALVE LT AT PEDESTAL & EICAS MSG FOR 'R FUEL VALVE'. CHECKED 28VDC AT FUEL CUTOFF SW AND PWR AVAILABLE. REPLACED FUEL S/O VALVE SOLENOID, NO FIX. REPLACED HMU, NO FIX. REMOVED FUEL PUMP AND FOUND CONTAMINATED WITH METAL. MPN 9355M33P13 IN (STREAMER CAVITY).

CA040813003	BOEING		WINDSHIELD	CRACKED
6/28/2004	767375		N141T480149	COCKPIT

(CAN) WHILE IN CRUISE CAPT'S WINDSHIELD CRACKED.

CA040812010	BOEING	GE	TRANSMITTER	LEAKING
6/25/2004	767375	CF680C2B6F	41817054	FUEL PRESSURE

(CAN) NR 1 ENGINE FUEL PRESSURE TRANSMITTER FOUND LEAKING TOTAL TIME ON PART 20349.7HRS TOTAL TIME SINCE INSTALL 3445.2 HRS

CA041230002	BOEING	GE	BLEED AIR SYS	LEAKING
12/30/2004	767375	CF680C2B6F	9639	RIGHT

(CAN) R' BLEED DUCT LEAK"EICAS MSG',QRH COMPLETED. LIGHT DUCT LEAK STAYED ON FOR 90 MINUTES, WENT OUT FOR 30 MINUTES, THEN CAME ON AGAIN. NOTICED THAT RT BLEED PRESSURE STAYED AT 5 PSI, NOT ZERO. VISUAL INSPECTION OF PNEUMATIC DUCTS, CLAMPS AND OVERHEAT DETECTION LOOP CARRIED OUT FROM MLG WW TO NR 2 ENG PYLON- NIL FAULTS FOUND. REPLACED DUCT 1 / MLG WW FIRE DETECTION CARD M691- ENGS GROUND RUN. ALL INDICATION AND OPS NORMAL.

CA040928008	BOLKMS	LYC	PUMP	NOISY
9/27/2004	BK117B1	LTS101750B1	40165	HYD SYSTEM

(CAN) DURING DAILY INSPECTION PILOT NOTICED AN UNUSUAL WHINING NOISE COMING FROM THE NR 1 HYDRAULIC PUMP WHILE HE WAS TURNING THE MAIN ROTOR BLADES. THE HYDRAULIC PUMPS ARE DRIVEN BY THE MAIN TRANSMISSION AND WILL BE DRIVEN WHENEVER THE ROTOR SYSTEM IS TURNED. THE PILOT CONTACTED ENGINEERING AND THE AIRCRAFT WAS GROUNDED. RESEARCH SHOWED THAT THIS PUMP WAS ONLY 78.4 HRS, 8 CALENDAR MONTHS TIME SINCE REPAIR BY VENDOR. A REPLACEMENT PUMP WAS ORDERED AND THE FAULTY PUMP SENT BACK FOR INSPECTION/REPAIR. AWAITING EVALUATION.

CA041015002	BOLKMS		BOLT	MISSING
9/28/2004	BO105S		LN9038	BEARING SUPPORT

(CAN) PILOT NOTED THAT IT TOOK A MOMENT FOR THE COLLECTIVE PITCH CHANGES TO BECOME EFFECTIVE. WHEN INVESTIGATING THE ENGINEER FOUND APPROXIMATELY 7/16OF PLAY AT THECOLLECTIVE GRIP. FURTHER INVESTIGATION OF THE COLLECTIVE FLIGHT CONTROL SYSTEM, REVEALED THAT THE COLLECTIVE PITCH SHAFT ASSEMBLY P/N 105-41221, WAS LOOSE IN T HE BEARING ASSEMBLY P/N 105-41210-18. ONE OF THE ATTACHING BOLTS P/N LN9038-05010 HAD FALLEN OUT AND THE THREE REMAINING BOLTS REQUIRED THREE COMPLETE TURNS TO TIGHTEN. THE DRAG TORQUE OF THE NUT PLATES WAS SUFFICIENT. THE MISSING BOLT WAS

REPLACED AND THE AIRCRAFT WAS RETURNED TO SERVICE.QUALITY ASSURANCE DEPARTMENT HAS OPENED AN INVESTIGATION OF THIS OCCURRENCE.

CA041019001	BOLKMS	ALLSN	BOLT	LOOSE
10/10/2004	BO105S	250C20B	RA13212	M/R GEARBOX

(CAN) THE AIRCRAFT WAS OPERATING AWAY FROM BASE WITHOUT A MAINTENANCE CREW ABOARD. THE FOLLOWING OCCURRENCE WAS REPORTED UPON RETURN TO BASE.AFTER THE LAST FLIGHT OF THE DAY THE PILOT NOTICED A TRANSMISSION OIL LEAK ON THE RIGHT SIDE DRAIN AT THE CROSS TUBE. INVESTIGATION DETERMINED THAT THE BANJO FITTING BOLT ON THE TRANSMISSION OIL PUMP HAD LOST TORQUE EVEN THOUGH IT WAS LOCK WIRED. THE BANJO BOLT WAS TIGHTENED A PART OF A TURN AND LOCK WIRED. THE AIRCRAFT WAS GROUND RUN FOR 20 MINUTES WITH NO LEAKS. THE AIRCRAFT WAS RETURNED TO SERVICE. THE TRANSMISSION HAD BEEN REPLACED TWO MONTHS EARLIER AND HAD ACCUMULATED 50 HOURS OF OPERATION BEFORE THE LEAK APPEARED.

CA050126002	BOMBDR		PUMP	FAILED
1/25/2005	BD7001A10		9555805	HYD SYSTEM

(CAN) FOR THE RELIGHT PROCEDURES FOR THE RT ENGINE, THE RT HYD DCMP HAD BEEN TURNED ON PRIOR SHUTDOWN. AFTER 5 MINUTES OF DRIFT DOWN AT 185 KTS, AROUND 40000 FT, AP SYNC WAS PRESSED AND ACCELERATED TO 250. SOMEWHERE AROUND THAT TIME, THE LT GEN DROPPED OFF LINE AND WE WERE LEFT WITH ESSENTIAL POWER ONLY (ALSO LOSS OF YAW DAMPER). THE PNF WENT THRU THE QRH AND RESET THE LT GEN, THEN POWER WAS RESTORED, LEAVING A CYAN ELECTRICAL FAULT MSG. ALSO THE RT HYD DCMP HAD FAILED FOR GOOD. A/C LANDED WITHOUT FURTHER INCIDENT.

CA041206001	BOMBDR	PWC	FIRE LOOP	MALFUNCTIONED
12/4/2004	DHC8400	PW150A	10109601	NR 2 ENGINE

(CAN) AN AIRCRAFT EXPERIENCED A NR 2 ENGINE FIRE WARNING IN FLT. CREW SHUT ENGINE DOWN AND FIRE WARNING CEASED. FIRE BOTTLES NOT DISCHARGED. A/C LANDED ON NR 1 ENGINE SATISFACTORILY. A/C NOT DIVERTED FROM ORIGINAL DESTINATION. FULL EMERGENCY DECLARED.INITIAL INSPECTION REVEALS NO FUEL, OIL OR AIR LEAKS AND THERE IS NO PHYSICAL DAMAGE APPARENT. PEC LOOP REMOVED. BOTH ITEMS HAVE A P/N 10-1096-01 WHICH IAW IPC 26-11-03-01 ITEM 30, IS POST SB 84-26-03. A/C HAS COMPLETED ENGINE RUNS WITH BLEED AIR BOTH OFF AND ON, AFTER PEC LOOP REPLACEMENT. ALL IS OPERATING CORRECTLY. AIRCRAFT HAS BEEN SIGNED UP AS SERVICEABLEAND IS BACK INTO SERVICE.

CA041019002	BOMBDR	PWC	BFGOODRICH	HOSE	RUPTURED
10/12/2004	DHC8400	PW150A		464557	MLG RETRACT

(CAN) RT MLG RETRACT ACTUATOR HOSE RUPTURED IN-FLIGHT, AIRCRAFT LANDED WITH NO INCID ENT. LOST ALL HYD FLUID ON NR 2 SYSTEM HOSE REPLACED. RUPTURED RETRACT ACTUATOR FLEX LINE, P/N 46455-7, REPLACED AND GEAR SWINGS CARRIED OUT. A/C RTSRUPTURED HOSE TO BE RETURNED TO BOMBARDIER FOR INVESTIGATION.

CA041020001	BOMBDR	PWC	VANE	MALFUNCTIONED
7/25/2004	DHC8400	PW150A	C16177AC	ANGLE OF ATTACK

(CAN) SHORTLY AFTER TAKEOFF POWER WAS APPLIED, 'PUSHER SYSTEM FAIL' WAS ANNOUNCED FOR 1-2 SECONDS, AND THEN WENT OFF. TAKEOFF ROLL WAS ABORTED AT APPROXIMATELY 50-60 KNOTS. AOA VANE WAS FOUND HARD TO MOVE WHEN HOT AND IT WAS THEREFORE REPLACED IN ACC. AMM TASK 27-33-26.

CA041014003	BOMBDR	PWC	CONTROL UNIT	MALFUNCTIONED
10/8/2004	DHC8400	PW150A	699018002	PROPELLER

(CAN) DURING CLIMB, AN AIRCRAFT EXPERIENCED AN UNCOMMANDED AUTOFEATHER CAUSED BY NR 1 ENGINE TORQUE FLUCTUATIONS. WITH THE NR 1 PROP FEATHERED AND ENGINE STILL RUNNING AT REDUCED POWER, THE PILOT RETURNED TO BASE. PEC REPLACED. ENGINE RUNS CARRIED OUT. A/C RETURNED TO SERVICE.

CA040923006	BOMBDR	PWC	PROXIMITY SENSOR	SHORTED
7/25/2004	DHC8400	PW150A	401020101	NLG CENTERING

(CAN) UNABLE TO RETRACT LANDING GEAR DURING CLIMB. GEAR DOORS LOCKED. NO TRANSITION, NO YELLOW LIGHTS. THREE GREEN LIGHTS REMAINED CONSTANT ON. RECYCLED WITHOUT SUCCESS. RETURNED TO BASE. NLG CENTERING PROXIMITY SENSOR FOUND SHORTED. SENSOR REPLACED ACC AMM 32-61-03.

CA040922004	BOMBDR	PWC	EXCITER	FAILED
9/22/2004	DHC8400	PW150A	312241307	NR 2 ENGINE

(CAN) DURING A TEST FLT REQUIRED FOR JAPANESE ANNUAL C OF A RENEWAL, AT APPROX 12,500 FT, THE NR 2 ENGINE WAS SHUT DOWN AND A ALTERNATE LANDING GEAR EXTENSION WAS CARRIED OUT. THE CREW THEN ATTEMPTED TO RESTART THE NR 2 ENGINE IN FLT, BUT WERE UNSUCCESSFUL. THE AIRCRAFT MADE A SUCCESSFUL SINGLE ENGINE LANDING. FAULT CODES REPORTED WERE 910 & 969. NR 2 ENGINE IGNITION EXCITER WAS REPLACED, FAULT CODESCLEARED AND ENGINE STARTS NORMALLY.

CA040922006	BOMBDR	PWC	PROXIMITY SENSOR	FAILED
6/29/2004	DHC8400	PW150A	401020101	NLG WHEEL CENTER

(CAN) UNABLE TO SELECT GEAR UP. RECEIVED THREE GREEN INDICATION LIGHTS ALONG WITH THREE RED INDICATION LIGHTS AND AMBER GEAR HANDLE LIGHT. PERFORMED RETURN TO LANDING CHECKLIST. NORMAL LANDING PERFORMED. NLG CENTERING PROXIMITY SENSOR FOUND SHORTED. SENSOR REPLACED AND ADJUSTED TO 8.602 MH IAW AMM 32-61-03.

CA040924003	BOMBDR	PWC	PROXIMITY SENSOR	FAILED
6/17/2004	DHC8400	PW150A	401020101	NLG CENTERING

(CAN) UNABLE TO SELECT MLG GEAR UP DURING CLIMB. AFTER CONSULTING THE TECHNICAL DEPARTMENT WE TRIED RECYCLING BUT WITH NO SUCCESS. RETURNED TO BASE. NOSE GEAR CENTERING PROXIMITY SENSOR REPLACED ACC AMM 32-61-06.

CA041020008	BOMBDR	PWC	PROBE	FAILED
7/7/2004	DHC8400	PW150A	304725201	ENG TORQUE

(CAN) POWER PLANT CAUTION MESSAGE ON ENGINE DISPLAY DURING DESCENT. A/C COMPLETED AN UNEVENTFUL LANDING. AFTER SUCCESSFUL RESET OF THE SYSTEM WITH TCC CONTACT, ENGINES STARTED. JUST AFTER ENGINE SPOOL-UP WEGOT 'POWERPLANT' ONCE AGAIN. FLIGHT WAS THEN CANCELLED. FAULT CODE 166, QB (P12) SPEED INCONSISTENT, WAS FOUND LOGGED IN THE CENTRAL DIAGNOSTIC SYSTEM ON RT ENGINE.TORQUE PROBE QB WAS CONSEQUENTLY REPLACED.

CA041020009	BOMBDR	PWC	ENGINE	FAILED
10/19/2004	DHC8400	PW150A		

(CAN) AT TOP-OF-DESCENT (23K FEET) THE BLUISH SMOKE BECAME EVIDENT ON THE FLIGHT DECK AND IN THE CABIN .PILOTS DONNED OXYGEN MASKS, DECLARED AN EMERGENCY AND DIVERTED TO AN ALTERNATE AIRPORT. DURING THE SUBSEQUENT RAPID DESCENT, THE PILOTS REPORTED HEARING A 'BANG' WITH AN ASSOCIATED YAW ALTHOUGH NO SHIFT IN ENGINE PARAMETERS WAS EVIDENT. THE ENGINE WAS NOT SHUTDOWN DURING THE EVENT.

CA041027003	BOMBDR	PWC	PUMP	CRACKED
10/26/2004	DHC8400	PW150A	6617302	HYD SYSTEM

(CAN) DURING CLIMB, AN AIRCRAFT HAD A HYDRAULIC FAILURE CAUSED BY CRACKED NR 2 ENGINEDRIVEN PUMP. UNSCHEDULED LANDING COMPLETED. AIRCRAFT WAS CHECKED AFTER REPLACEM ENT OF PUMP, A TESTFLIGHT WAS DONE, BEFORE PUT BACK INTO SERVICE.

CA050214005	BOMBDR	PWC	STRUT	CRACKED
2/10/2005	DHC8400	PW150A		COMPRESSOR

(CAN) ON DESCENT, THE AIRCRAFT CABIN AIR WAS CONTAMINATED WITH SMOKE. A SIMILAR PROBLEM HAD BEEN ENCOUNTERED THE PREVIOUS DAY DURING GROUND HANDLING. SUBSEQUENT INSPECTION REVEALED DAMAGE TO THE COMPRESSOR INNER SUPPORT OF ENGINE FA0190 AND CRACKING OF TWO INTER-

COMPRESSOR CASE STRUTS ON ENGINE FA0191. MFG WILL INVESTIGATE TO ESTABLISH ROOT CAUSE.

CA050124012	BOMBDR	PWC	PWC	BLADE	BENT
1/14/2005	DHC8402	PW150A		304865101	COMPRESSOR

(CAN) PILOT NOTICED AN UNUSUAL NOISE SUSPECTING A FWD CARGO DOOR SEAL PROBLEM. ALL A/C AND ENGINE PARAMETER SEEM NORMAL. NOISE THEN DISAPPEARED TO CAME BACK DURING DESCENT, WITH STILL NO AIRCRAFT OR ENGINE PARAMETER VARIATION. PILOT LANDED A/C NORMALLY. AFTER INVESTIGATION RT ENGINE FOUND WITH ONE FIRST STAGE COMPRESSOR ROTOR BLADE BENT. SOFT FOD INSPECTION C/OUT IAW AMM. DAMAGE SUSPECTED CAUSED BY ICE DUE ICE FOUND IN NACELLE LOWER COWL. DAMAGE FOUND WITHIN AMM, UNUSUAL COMPRESSOR NOISE NOT PERMITTED. IAW MFG SL AND SPECIAL FLIGHT PERMIT AUTHORIZATION AC WAS FERRIED BACK TO MAINT BASE FOR RT ENGINE CHANGE.

2005FA0000260	BRAERO	PWA	ALTERNATOR	FAILED
12/9/2004	BAE1251000A	PW305		NR 1

AIRCRAFT WAS SQUAWKED WITH NR 1 ALTERNATOR DROPPING OFF IN FLIGHT. DURING TROUBLESHOOTING THE TECHNICIAN FOUND SMOKE TRAILS ON THE (GG PANEL), LOCATED ON THE AFT SIDE OF THE REAR FACE OF THE PRESSURE BULKHEAD. A MORE CLOSE INSPECTION REVEALED A DESTROYED FUSE HOLDER, WITH ACCOMPANYING WIRE DAMAGE, GCU AND LINE CONTACTOR DAMAGE. THERE WAS A HOLE BURNED THROUGH THE (GG PANEL) ITSELF AT THE FUSE HOLDER LOCATION. THE DAMAGE WAS CENTERED UNDER THE LT SIDE OF THE FUSE BLOCK, WHICH HAD DESINTEGRATED. IT WAS UNDETERMINED AS TO WHICH COMPONENT INITIATED THE DAMAGE. (EA17200504804)

CA050215010	BRAERO	GARRTT	SLEEVE	DISCONNECTED
2/11/2005	BAE125800A	TFE7315R	BAS16346416	A/C PACK

(CAN) UPON REACHING CRUISING ALTITUDE, THE AIRCRAFT STARTED LOSING PRESSURIZATION. THE CREW DONNED THEIR OXYGEN MASKS, AT WHICH TIME THERE WAS A TOTAL LOSS OF PRESSURIZATION. UPON RETURNING TO MAINTENANCE, FOUND THAT THE SLEEVE CONNECTING THE DUCT TO THE WATER SEPARATOR HAD BECOME DISCONNECTED EVEN THOUGH THE CLAMPS WERE TIGHT. SLEEVE SECURED.

CA050131008	BRAERO	GARRTT	NUT	MISSING
1/31/2005	BAE125800A	TFE7315R	FN22A524	MLG WHEEL

(CAN) AFTER ARRIVAL TO BASE OF OPERATIONS DURING A POST FLIGHT INSPECTION NR 2 MAIN WHEEL ASSY. A WHEEL TIE BOLT NUT WAS FOUND MISSING AND ANOTHER 180 DEGREES APART WAS FOUND SPLIT. WHEEL WAS CHANGED. THESE NUTS WERE INSTALLED NEW AS THAT IS OUR POLICY. MFG HAS BEEN NOTIFIED AS THE NUTS WERE PURCHASED FROM THEM.

CA050215011	BRAERO	GARRTT	CONTROL CABLE	MISLOCATED
2/11/2005	BAE125800A	TFE7315R		ELEVATOR

(CAN) ELEVATOR CABLE UNDER CO-PILOT SEAT SLIPPED OFF THE CABLE GUIDE

CA040913006	BRAERO	RROYCE	STARTER UNIT	MALFUNCTIONED
8/30/2004	HS7482A	DART5342	U2801	TE FLAPS

(CAN) AFTER LANDING, THE CREW WAS ABLE TO RETRACT FLAPS BEYOND 22 DEGREES. THE AIRCRAFT WAS MOVED TO XXX FOR FERRY PERMIT. MAINTENANCE REPLACED THE FLAP STARTER UNIT AND THE AIRCRAFT WAS RETURNED TO SERVICE

CA041112002	BRAERO	RROYCE	FIRE LOOP	DAMAGED
11/9/2004	HS7482A	DART5342	D237060	NR 2 ENGINE

(CAN) FIRE BELL AND LIGHT ON NR 2 ENGINE CAME ON IN CRUISE. ENGINE NR 2 SHUTDOWN. LANDED WITHOUT INCIDENT. FOUND FIRE LOOP P/N D2370-60 DAMAGED, REPLACED LOOP WITH NEW PART TESTED SERVICEABLEGROUND RUN. NO FAULTS FOUND RETURNED AIRCRAFT TO SERVICE

CA041203004	BRAERO	RROYCE	CONTROL UNIT	FAILED
12/2/2004	HS7482A	DART5342	U37151	VOLT PROTECTION

(CAN) ON 2/12/04, AT 22:30 THE A/C WAS IN CLIMB OUT OF YYQ. SMOKE AND FUMES WERE NOTED IN THE CABIN, AND SUBSEQUENTLY IN THE COCKPIT. AN UNEVENTFULL LANDING WAS MADE. THERE WERE NO ABNORMAL INSTRUMENT INDICATIONS DURING THIS OCCURRENCE. MAINTENANCE INVESTIGATION REVEALED THE PORT ALTERNATOR VOLTAGE CONTROL PROTECTION UNIT HAD FAILED. THE UNIT WAS REPLACED AND SYSTEM CHECKS SHOWED NORMAL OPERATION. WIRING HARNESSES WERE INSPECTED AND NO DETERIORATION WAS FOUND. THE A/C WAS RELEASED TO SERVICE.

CA041230001	CASA		LINE	FAILED
12/14/2004	C212CC			HYDRAULIC SYS

(CAN) DISCOVERED SMALL RUBBER PIECES IN HYDRAULIC FILTER. PARTICLES APPEARED TO BE FROM MANUFACTURE OF HOSE ASSEMBLIES, RESEMBLING INTERIOR LINING OF TYPICAL HOSE. REPLACED ALL FLEXIBLE HOSES IN HYDRAULIC SYSTEM AS IT WAS IMPOSSIBLE TO DETERMINE WHICH HOSE HAD CONTAMINATED THE SYSTEM. WITH NEW HOSES IN PLACE, THE SYSTEM WAS FLUSHED OUT TO REMOVE ANY FURTHER CONTAMINATION AND FILTER WAS REPLACED. THE HOSES HAD EEN IN SERVICE SINCE 2002.

2005FA0000363	CESSNA	CONT	CESSNA	BOLT	WORN
1/17/2005	150D	O200*		AN37A	RUDDER

TOP RUDDER HINGE BOLT LOOSENED FROM THE SELF LOCKING NUT PLATE AND CAME OUT CAUSING THE RUDDER ASSEMBLY TO DETACH FROM THE AC COMPLETELY DURING FLIGHT AT 2000 AGL. THIS BOLT SHOULD HAVE SOME TYPE OF RETAINING MECHANISM IN ADDITION TO THE SELF LOCKING NUT PLATE. (NM07200502996) (K)

CA050126003	CESSNA	CONT	EXHAUST VALVE	CORRODED
1/25/2005	150L	O200A	654004	ENGINE

(CAN) POOR ACCELERATION AND SLUGGISH PERFORMANCE DURING POWER UP AND DIFFERENT POWER SETTINGS. WHEN APPLYING POWER, ENGINE STUMBLED. INITIALLY SUSPECTED CARB ICING BUT GROUND CHECK RESULTED IN SAME FAILURE TO PRODUCE POWER. PRELIMINARY D/P CHECK SHOWED LOW POWER ON 3 OF 4 CYLINDERS (42-52 PSI) CYLINDERS DISMANTLED AND FOUND EXHAUST VALVES CORRODED AND DETERIORATED REF: SB M90-13. THIS SB SUGGESTS THAT VALVE STEMS, AT TIME OF OVERHAUL, SHOULD REQUIRE 100% REPLACEMENT. THIS IS THE SECOND FIELD EXPERIENCE OF SEVERE CORROSION 400+ HOURS PRIOR TO OVERHAUL.

CA041110004	CESSNA	CONT	RIB	CRACKED
10/29/2004	150L	O200A	042650720	RT WING

(CAN) THE RIB WAS FOUND CRACKED AROUND ONE OF THE STRENGTHENING DIMPLES OF THE RIB, ABOUT 1.5 INCHES IN LENGTH. A NEW PART WAS INSTALLED AS REQUIRED.

CA041110006	CESSNA	CONT	FLAP TRACK	WORN
10/29/2004	150L	O200A	0523113	LT WING

(CAN) ON INSPECTION FLAP TRACK GROOVES FOUND BADLEY WORN,PARTS WERE REPLACED AS REQUIRED.

CA041012004	CESSNA	CONT	WINDSHIELD	FAILED
9/30/2004	150L	O200A	0413419201	COCKPIT

DURING A ROUTINE TRAINING FLT FOR A-CLASS IV INSTRUCTOR RATING, WINDSHIELD CRACKED AND BLEW IN. PRIOR TO WINDSHIELD BREAKING, INSTRUCTOR CANDIDATE HAD BEEN PERFORMING SPIRAL DIVE LESSON DEMONSTRATION WHEN THE WINDSHIELD BROKE, AND HAD JUST COMPLETED A RECOVERY. DURING FLIGHT, AIR SMOOTH & MAXIMUM SPEED ESTIMATED AT 140 MPH (WELL BELOW THE VNE OF 162 MPH) AND AT NO TIME WERE ANY EXCESS G FORCES EXERTED ON THE AIRFRAME. PRIOR TO THE BREAKAGE, THERE WAS NO EVIDENCE OF A CRACK OR DAMAGE TO THE WINDSHIELD. AIRCRAFT WAS INSPECTED FOR OVERSTRESS OF THE AIRFRAME WITH NO FAULT FOUND. PIECES RECOVERED OF THE WINDSHIELD SHOWED NO SIGN OF HEAVY CRAZING OR STRESS. WINDSHIELD REPLACED AND AIRCRAFT RETURNED TO SERVICE.

CA041109004	CESSNA	CONT	CONTROL CABLE	CORRODED
10/3/2004	150M	O200A	040010741	AILERON

(CAN) AILERON CONTROL CABLE FOUND CORRODED AT COPILOT FOOT AREA. THIS PROBLEM HAS BEEN NOTICED ON OTHER CESSNA 150. SUSPECT DIRT FROM SHOES CAUSING CORROSION. TO SEE THE CABLE YOU NEED TO REMOVE COVER (YOKE) AND MOVE AILERON TO TRAVEL LIMITS.

2005FA0000177	CESSNA	CONT	MAGNETO	BROKEN
2/4/2005	150M	O200A	4001	ENGINE

FLANGE BROKEN ON RT SIDE FOR SUPPORT OF MAG. FOUND ON ANNUAL INSP. 4001 MAG TT 394. (K)

CA040825007	CESSNA	LYC	CRANKSHAFT	OUT OF ADJUST
7/12/2004	152	O235L2C		ENGINE

(CAN) ON ENGINE RUNUP, AFTER ENGINE OVERHAUL, THE OIL PRESSURE WAS NOTED TO BE BELOW THE PRESCRIBED LIMIT. ENGINE WAS DISASSEMBLED. THE CRANKSHAFT MAIN JOURNALS WERE NOTED TO HAVE BEEN PREVIOUSLY GROUND TO .010.

CA041021002	CESSNA	LYC	DORNEMARGLN	BATTERY	CORRODED
10/19/2004	152	O235L2C		BS2173	ELT

(CAN) BATTERY LEAK CAUSING CORROSION EATING THE CASING AND DESTROYING THE TRANSMITTER.

CA041123007	CESSNA	LYC	CONTROL CABLE	FRAYED
11/18/2004	152	O235L2C	0400107150	RUDDER

(CAN) RIGHT RUDDER CABLE FOUND SLIGHTLY FRAYED WHERE IT TRAVELS OVER THE REARMOST PULLEY IN THE AFT FUSELAGE. THERE WERE APPROXIMATELY 8 TO 10 WIRES BROKEN. CABLE WAS REPLACED WITH NEW.

CA041215002	CESSNA	LYC	CONTROL UNIT	LOOSE
12/14/2004	152	O235L2C	AN742D3	MIXTURE

(CAN) PILOT WAS IN CRUISE, HE STARTED TO LEAN THE ENGINEWENT PAST LEAN OF PEAK SO HE PUSHED THE MITURE BACK IN BUT THE ENGINE WAS STILL LOSING POWER. HE LANDED IN A FIELD WITHOUT ANY DAMAGE.ENGINEER WENT OUT AND REMOVED THE COWLING AND DISCOVERED THAT THE CLAMP THAT HOLDS THE MIXTURE CABLE TO THE MIXTURE SUPPORT ASSEMBLY WAS LOOSE. CLAMP WAS REPLACED. MIXTURE WAS MOVED WORKS CORRECTLY. AIRCRAFT WAS FLOWN BACK TO BASE WITHOUT INCIDENT.

2005FA0000364	CESSNA	CONT	CLAMP	OVERSIZED
1/21/2005	170B	C145*	STC8645SW	TAILPIPE

BOTH TAILPIPE/MUFFLER CONNECTIONS WERE FOUND TO BE OVERSIZED. THE EXHAUST PIPE CLAMPS WERE NOT OF SUFFICIENT STRENGTH TO SQUEEZE THE OVERSIZED PIPE DOWN ON THE MUFFLER EXHAUST TUBE. THE RESULTING LOOSE FIT WAS ALLOWING EXHAUST FUMES TO SHOOT INTO THE CABIN HEAT AND THE CARBURETOR HEAT SECTIONS OF THE MUFFLERS. ONE THING THAT AGGRAVATED THE CONDITION WAS THE FACT THAT THE TAILPIPES WERE CRAMMED TOO FAR UP ON THE MUFFLER PIPE. THIS MADE IT INEVITABLE THAT ANY LEAKAGE WOULD ENTER THE MUFFLER/HEAT SHROUD SECTION. SUGGEST GIVING THIS AREA CLOSE SCRUTINY.

2005FA0000334	CESSNA	CONT	BATTERY	CORRODED
10/14/2004	172	O300*		ELT

FOUND D (LARGE) SIZE DURACELL BATTERIES USED IN ELT`S EXPELLING AND CORRODED. EXPIRATION DATE 2008

CA050324008	CESSNA	CONT	PISTON	ERODED
3/16/2005	172F	O300C	654853B	ENGINE

(CAN) TOP LAND OF PISTON ERODED AWAY AND HOLE BURNED THROUGH PISTON BELOW 3RD RING FROM HEAD OR TOP OF PISTON. PISTON EXPANDED FROM EXCESSIVE HEAT AND SCUFFED AGAINST CYLINDER BARREL, SMEARING SKIRT AND SCORING BARREL. CAUSE APPEARS TO BE DETONATION. PARTS CORRECT FOR APPLICATION, TIMING SET CORRECT, MAGNETOS INSPECTED. NO MECHANICAL DISCREPANCIES FOUND. FUEL WAS 100CC BUT SAMPLE TAKEN FROM CARB HAS A

2005FA0000366	CESSNA	CONT	SPAR	CRACKED
2/1/2005	172F	O300D	052340051	RT WING

DURING A BORESCOPE INSPECTION, A CRACK WAS FOUND IN THE RT REAR SPAR AT THE IB FLAP TRACK ATTACH POINT. PROBABLE CAUSE IS FATIGUE. THIS IS A VERY HIGH TIME, AC WITH OVER 13, 000 HOURS TT. IT HAS ALSO BEEN USED AS A FLIGHT TRAINER FOR ITS ENTIRE LIFE. (K)

2005FA0000389	CESSNA	CONT	SPAR	CRACKED
1/31/2005	172H	O300D	052340051	RT WING IB

DURING A BORESCOPE INSPECTION, A CRACK WAS FOUND IN THE RT REAR SPAR AT THE IB FLAP TRACK ATTACH POINT. PROBABLE CAUSE IS FATIGUE. THIS IS A VERY HIGH TIME AIRCRAFT WITH OVER 12,000 HOURS TT. IT HAS ALSO BEEN USED AS A FLIGHT TRAINER FOR ITS ENTIRE LIFE. (K)

2005FA0000388	CESSNA	CONT	SPAR	CRACKED
1/31/2005	172H	O300D	052340050	LT WING

WHILE CHANGING THE FLAP TRACKS ON THE LT WING 2 SMALL CRACKS, .2500 INCH LONG, EACH WERE NOTICED ON THE IB AFT WING SPAR AT THE IB FLAP TRACK ATTACH POINT. PROBABLE CAUSE IS FATIGUE. THIS IS A VERY HIGH TIME AIRCRAFT WITH OVER 12,000 HOURS TT. IT HAS ALSO BEEN USED AS A FLIGHT TRAINER FOR ITS ENTIRE LIFE. (K)

2005FA0000385	CESSNA	CONT	FLAP TRACK	WORN
1/31/2005	172H	O300D	052323113	LT WING

WHILE FLAPS WERE BEING RETRACTED, THE LT IB FLAP ATTACH BRACKET CAUGHT ON THE WING COVE PANEL SUPPORT. THIS CAUSED SUBSTANTIAL DAMAGE TO THE COVE PANEL SUPPORT AS WELL AS THE ATTACH BRACKET. CAUSE WAS DETERMINED TO BE WORN FLAP TRACKS. THE FLAP TRACKS AND ROLLERS WERE REPLACED WITH NEW PARTS AND THE LT FLAP WAS REPLACED WITH A SERVICEABLE ASSY DUE TO LACK OF PARTS AT THE MFG FOR REPAIR. SINCE MFG DOES NOT HAVE LIMITATIONS ON THEIR FLAPS TRACKS, WOULD SUGGEST THAT THEY BE REMOVED AND REPLACED AT 5,000 HOUR INTERVALS. (K)

2005FA0000386	CESSNA	CONT	FLAP TRACK	WORN
1/31/2005	172H	O300D	052323113	LT WING

DURING PREFLIGHT, THE LT OB FLAP TRACK WAS NOTICED TO HAVE DAMAGE. AIRCRAFT WAS IMMEDIATELY GROUNDED AND THE FLAP TRACKS AND ROLLERS WERE REPLACED WITH NEW PARTS. NO FURTHER DAMAGE HAD OCCURRED TO THE FLAP ASSY. SINCE MFG DOES NOT HAVE LIMITATIONS ON THEIR FALP TRACKS, WOULD SUGGEST THAT THEY BE REMOVED AND REPLACED AT 5,000 HOUR INTERVALS. (K)

CA041105004	CESSNA	LYC	FRAME	CRACKED
11/4/2004	172M	O320E2D	05120111	FUSELAGE

(CAN) DURING A 200 HR INSPECTION FUSLAGE FRAME PN 0512011-1, STA 108.0 WAS FOUND TO HAVE 4 CRACKS APPROXINATLY 1/2 - 1 INCH IN LENGTH ORIGINATING FROM THE INBOARD FLANGE OF THE FRAME AT EACH OF THE 4 CORNERS.

CA040930004	CESSNA	LYC	ROCKER	SPLIT
9/14/2004	172M	O320E2D	74636	CYLINDER

ON CLIMB-OUT, ENG RUNNING ROUGH, BACKFIRING, SHAKING VIOLENTLY. INSTRUCTOR LEVELED OFF & REDUCED POWER, ENG SMOOTHED OUT BUT STILL RAN ROUGH. A/C RETURNED & LANDED W/O INCIDENT. ENGINEERS IDENTIFIED A PROBLEM WITH NR 2 CYLINDER. INVEST CYLINDER FOUND EXHAUST ROCKER ARM SPLIT & BENT ACROSS UNDERSIDE BY OIL LUBE HOLE. EXHAUST VALVE LEFT IN CLOSED POSITION BY ROCKER FAILURE. INTAKE AIR INLET SCREEN FOUND BULGED OUT BUT NO OTHER DAMAGE FOUND. ENG SHOP INFORMED & NEW PARTS INSTALLED. ENG HAS 2343 HRS SINCE O/H. AFFECTED CYLINDER HAD BEEN REPLACED RECENTLY WITH AN OVERHAULED ONE & HAD ONLY FLOWN 28.0 HRS.

CA041014008	CESSNA	LYC	HUB	CRACKED
9/21/2004	172M	O320E2D	D30256	PROPELLER

(CAN) DISSASSEMBLY FOR CLEANING / CORROSION / REPAINT FOUND 3 CRACKS IN HUB WEB BY FLANGE BOLT THREADS IN CASTING. INSPECTION OF OTHER HUB FOUND SIMILAR DAMAGE.INSPECTION WITHOUT PART BEING VERY CLEAN WOULD MAKE IT VERY DIFFICULT TO SEE THESE CRACKS.

CA041015001	CESSNA	LYC	ALTERNATOR	FAILED
10/13/2004	172M	O320E2D	DOFF10300J	ENGINE

(CAN) HIGH VOLTAGE LIGHT CAME ON DURING FLIGHT. ALTERNATOR INSPECTED AND FOUND THE BRUSHES WORN TO LIMIT. BRUSHES REPLACED. A/C GROUND RUN AND FOUND HIGH VOLTAGE LIGHT REMAINED ON. FUTHER TROUBLESHOOTING FOUND ALTERNATOR WIRE SHORTED TO SHIELD WIRE. BATTERY CONTACTOR AND STARTER CONTACTOR HAD FAILED, VOLTAGE REGULATER FAILED, AND STARTER WAS NO FULLY DISENGAGING. ALL WIRING INSPECTED AND FOUND NO OTHER FAULTS. BATTERY FOUND WITH NO FAULTS. CONTACTORS, REGULATER, AND ALT WIRE REPLACED. A/C GRD RUN SERVICEABLE.

CA050204004	CESSNA	LYC	SUPPORT	WORN
2/1/2005	172M	O320E2D	05239011314	RT TE FALP

(CAN) THE DAMAGE OCCURED AROUND THE AFT IB BEARING. THE BEARING WAS FOUND WORN INTO BOTH THE SUPPORT ARMS 0523901-13 AND -14. MFG OFFERS A SERVICE KIT TO REPLACE THESE BRACKETS. SK180-44-1. THIS KIT WAS ISSUED TO REPAIR A DEFECT OCCURING ON THE FRONT ROLLER BEARING AREAS. NOT THE AFT. BOTH SUPPORT BRACKETS WERE REPLACED WITH NEW DUE TO THE DAMAGE AT THE AFT PORTION (WHICH WAS FOUND TO BE EXCESSIVELY WORN.)

CA041216006	CESSNA	LYC	CONTROL CABLE	FRAYED
12/3/2004	172N	O320D2J	051010545	HORIZONTAL STAB

(CAN) CABLE FRAYING AT REAR PULLEY IN HORIZONTAL STABILIZER.

CA041216007	CESSNA	LYC	BULKHEAD	CRACKED
12/3/2004	172N	O320D2J	05123635	FUSELAGE

(CAN) BULKHEAD FOUND CRACKED AROUND RUDDER TUBE HOLD DOWN CLAMP.

CA040915011	CESSNA	LYC	BLADE	DAMAGED
9/13/2004	172N	O320E2D		PROPELLER

(CAN) PROPELLER RECIEVED FOR INSPECTION IN ACCORDANCE WITH CAR 625, APPENDIX C, PAR. 5. UPON INSPECTION, BOTH BLADES WERE FOUND TO BE BELOW MANUFACTURERS MINIMUM DIMENSION AT THE 36' STATION.

CA050223011	CESSNA	LYC	LIFTER	SPALLED
2/22/2005	172N	O320H2AD	LW16512LW16812	CAMSHAFT

(CAN) DURING PROGRESSIVE CARE OPERATION NR2 ON INSPECTION OF OIL SUMP SCREEN FOUND LARGE METALLIC FERROUS PARTICLES. ENGINE ON FURTHER INVESTIGATION, IT WAS FOUND THAT ALL LIFTERS (INTAKE AND EXHAUST) WERE BADLY SPALLED, ALONG WITH SPALLED AND WORN CAM LOBES. MFG SPECIFY THAT THE EXHAUST VALVE CLEARANCES BE CHECKED, ALONG WITH AN INSPECTION OF THE EXHAUST LIFTERS, FOR THE 76T MODEL ENGINES AT 1000 HRS. THERE WAS NO INDICATION IN ENGINE PERFORMANCE TO INDICATE PROBLEMS. 20W50XC OIL, ALONG WITH LW16702 OIL ADDITIVE IS USED AND CHANGED EVERY 50 HRS. ENGINE-REMANUFACTURED, PURCHASED FROM LYCOMING. LYCOMING HAS BEEN CONTACTED ON THIS SITUATION.

CA041215004	CESSNA	LYC	TACHOMETER	LEAKING
11/16/2004	172N	O320H2AD	D11125025	ENGINE

(CAN) TACHOMETER WAS FULL OF OIL. TACH SHAFT SEAL LW14260 AND TACHOMETER REPLACED. TACHOMETER P/N D1-112-5025S/N 17488

CA050202004	CESSNA	LYC	SPAR	CRACKED
1/25/2005	172N	O360A4A	053200198	HORIZONTAL STAB

(CAN) DURING THE 200 HOUR INSPECTION CRACKS WERE FOUND STARTING FROM THE CENTRAL LIGHTENING HOLE IN THE FORWARD HORIZONTAL STABILIZER SPAR. THE CRACKS WERE STOP DRILLED AND

REINFORCEMENT P/N 0531037-1 AND SKIN P/N 0523001-25 WERE INSTALLED IAW SEB94-8.

CA041222016	CESSNA	LYC	SPARK PLUG	CRACKED
12/22/2004	172R	IO360L2A	REM38E	ENGINE

(CAN) NR 1 TOP SPARK PLUG INSULATOR FOUND BROKEN UNDER ELECTRODES. REPLACED NR 1 TOP SPARK PLUG, REMAINING PLUGS FOR LT MAGNETO CLEANED AND FUNCTION TESTED. GROUND RUN CARRIED OUT, LT MAGNETO OPERATION NORMAL.

CA041220006	CESSNA	LYC	CYLINDER HEAD	SEPARATED
12/12/2004	172RG	O360F1A6		ENGINE

(CAN) HEAD SEPARATION WHILE IN FLIGHT. DISCOVERED WHILE INVESTIGATING A ROUGH RUNNING ENGINE AS REPORTED BY PILOT.

2005FA0000454	CESSNA	LYC	FITTING	CRACKED
2/15/2005	172RG	O360F1A6	24130023	ACTUATOR

DURING EMERGENCY LANDING GEAR OPERATIONAL CHECK, THE MECHANIC FOUND THE CRACK ON BOTH SIDE CORNER OF THE FITTING NOSE GEAR ACTUATOR ATTACHING PART. IT MAY BE SUSPECTED THAT MATERIAL FATIGUE OR AN UNREPORTED LANDING. (K)

2005FA0000548	CESSNA		HOUSING	BROKEN
3/30/2005	172S		PM2401	STARTER

THE FORWARD PART OF THE STARTER HOUSING WAS FOUND TO BE TOTALLY BROKEN OFF FROM THE STARTER HOUSING (THE SECTION HOUSING THE BENDIX DRIVE).

2005FA0000237	CESSNA	LYC	BULKHEAD	CRACKED
10/26/2004	172S	IO360A1A	05522311	SPINNER

DURING 100 HOUR INSPECTION OF THE PROPELLER, CRACKS NOTED AROUND ALL BOLT HOLES OF THE FWD BULKHEAD. (K)

2005FA0000146	CESSNA	LYC	BULKHEAD	CRACKED
12/16/2004	172S	IO360A1A	05522311	PROP SPINNER

DURING 100 HOURS INSPECTION, FOUND PROP SPINNER FWD BULKHEAD CRACKED SEVERAL PLACES. LOWER PROP BOLTS TORQ SETTING OR MAKE BULKHEAD STRONGER.

2005FA0000147	CESSNA	LYC	BULKHEAD	CRACKED
12/22/2004	172S	IO360L2A	05522311	PROP SPINNER

DURING ANNUAL INSPECTION, FOUND PROP SPINNER FWD BULKHEAD CRACKED AROUND 2 BOLT HOLES. RECOMMENDATION: MANUFACTURE BULKHEAD STRONGER OR THICKER. (K)

2005FA0000544	CESSNA	LYC	SERVO	OUT OF ADJUST
3/22/2005	172S	IO360L2A	25765362	FUEL SYSTEM

ENG QUIT AT 3000 FT, RESTARTED AT 2100 FEET. ENG WAS RESTARTED, MIX IN IDLE CUTOFF POSITION. ENG WOULD NOT GAIN MORE THAN 500 RPM, FUEL SMELL IN COCKPIT. ENG FAILED AGAIN WHEN AC WAS ON RUNWAY, WOULD NOT RESTART. MECH UNCOWLED, VISUALLY INSPECT POWER PLANT INSTALL. NO DEFECTS WERE NOTED UNTIL FUEL SYS WAS TESTED. FLOWING FUEL (MIXTURE, THROTTLE CLOSED) FUEL FLOW INDICATOR SHOWED 7/HR. (GAUGE ALMOST PEGGED). ALL FUEL NOZZLES WERE REMOVED FROM CYL HEADS, REATTACHED TO DELIVERY TUBES FOR VISUAL SQUIRT TEST. ALL 4 NOZZLES FLOWED, BUT SQUIRTED APPROX 3 TIMES FARTHER THAN NORMAL (12 FEET). FUEL SERVO WAS REPLACED TO SOLVE OVERALL PROBLEM. POST GROUND RUN UPS WERE NORMAL WITH NO DEFECTS NOTED.

2005FA0000368	CESSNA	LYC	SPRING	MISSING
9/28/2004	172S	IO360L2A	055036125	ALT AIR DOOR

ON RETURN TO BASE, PILOT REPORTED WHEN CLIMING TO 8000 PT ENGINE SURGED/POWER DROP 2 TIMES.

AIRCRAFT WAS DUE A PHASE 1 INSPECTION. WHILE INSPECTING THE ALT AIR DOOR, NOTICED THE DOOR STUCK IN THE OPEN POSITION. FURTHER INSPECTION REVEALED THE SPRING THAT CONTROLS THE DOOR WAS MISSING FROM THE HINGE ASSY. INSPECTED INSIDE OF SERVO. NO DAMAGE BUT DID NOT LOCATE THE SPRING. THE DOOR SHOWS SIGNS OF WEAR ON SEALING EDGES. FEEL THE SYSTEM IS WEAK AND NEEDS TO BE IMPROVED. (K)

CA050121004	CESSNA	LYC	CONTROL CABLE	BROKEN
1/21/2005	172S	IO360L2A	0510105308	ELEVATOR

(CAN) UNDER A ROUTINE INSPECTION, IT WAS FOUND THAT THE FORWARD STAINLESS STEEL LOWER ELEVATOR CABLE PN 0510105-308 WAS WEARING ON THE BULKHEAD FAIRLEAD UNDER THE FLOOR AT FUSELAGE STATION 65.33, WITH A FLAT SPOT ON THE CABLE, AND WEAR THROUGH 4 STRANDS. MM PN 172RMM08, CHAPTER 27-00-01 PAGE 201 STATES THAT FOR THIS ELEVATOR CABLE, THERE SHOULD BE NO MORE THAN 6 BROKEN STRANDS IN A 10 INCH CABLE LENGTH. THOUGH STILL WITHIN LIMITS, THE CABLE WAS REPLACED.

CA050209004	CESSNA	LYC	SPAR	CRACKED
2/3/2005	172S	IO360L2A	053200198	HORIZONTAL STAB

(CAN) FOUND 2 SMALL CRACKS (0.200 INCH LONG) IN THE SPAR CENTER LIGHTNING HOLE FLANGE, ALSO, THE REINFORCEMENT HAS BEEN SLIGHTLY BENT AND A REPLACEMENT IS NECESSARY. SPAR IS THE SAME ONE USED ON THE EARLIER MODEL EXCEPT THAT MFG HAS INCLUDED THE REINFORCEMENT AT THE NEW PRODUCTION AND IT CAN BE BOUGHT SEPARATELY. IAW SEB 94-8, IT WAS POSSIBLE TO REPLACE THAT REINFORCEMENT WHEN THE CRACKS DID NOT EXCEED THE FLANGE RADIUS. UNFORTUNATELY, THAT REPAIR (FOR OUR AIRCRAFT) IS NOT COVERED BY THE SEB 94-8. JUST BLANK OUT THE CRACKS AND PROCEED WITH THE REPLACEMENT OF THE REINFORCEMENT.

2005FA0000551	CESSNA	LYC	SPINNER	CRACKED
3/25/2005	172S	IO360LYC*	05503675	PROPELLER

1.25 INCH CRACK EMANATING FROM PROPELLER BLADE CUTOUT RUNNING PARALLEL WITH THE FORWARD BULKHEAD.

2005FA0000552	CESSNA	LYC	SPINNER	CRACKED
3/25/2005	172S	IO360LYC*	05503675	PROPELLER

1 INCH CRACK EMANATING FROM PROPELLER CUTOUT PARALLEL WITH THE FWD BULKHEAD.

2005FA0000382	CESSNA	LYC	SHIMMY DAMPENER	MISINSTALLED
1/20/2005	177RG	IO360A1B6	204301410	NLG

DURING PRE-INSPECTION RUN UP/ TASK, STEERING WAS RESTRICTED TO RT. FOUND THAT WHOEVER HAD THE SHIMMY DAMPNER OFF LAST, REVERSED THE GIMBAL THAT ATTACHES IT TO THE ENGINE MOUNT. THERE SHOULD BE A WARNING PLACARD OR MODIFICATION THAT MAKES REVERSAL IMPOSSIBLE. (K)

2005FA0000261	CESSNA	LYC	MECHANISM	FAILED
8/5/2004	177RG	IO360A1B6		NLG

NOSE LANDING GEAR FAILED TO EXTEND DURING APPROACH 8/5/04. NOSE GEAR WAS CONFIRMED TO NOT BE EXTENDED BY COCKPIT INDICATION AND WING MOUNTED MIRROR. SEVERAL ATTEMPTS WERE MADE TO EXTEND NOSE GEAR, TO NO AVAIL. MANUAL NOSE GEAR EXTENSION WAS ALSO ATTEMPTED, EMERGENCY CK LIST, TO NO AVAIL. EMERGENCY DECLARED, AC LANDED NOSE GEAR UP. WHEN AC WAS LIFTED, NOSE GEAR DOORS FELL OPEN, NOSE GEAR WAS ABLE TO BE PUMPED DOWN. INSP, NO OBVIOUS CAUSAL FACTOR OF INCIDENT COULD BE DETERMINED. AC TO BE REPAIRED. (1ST OCCURRENCE. JULY, 2000 SAME AS ABOVE, NO SINGLE CAUSE IDENTIFIED. AC REPAIRED, FLOWN APPROX 700 HRS TIL THIS INCIDENT.) (NM05200400085) (K)

CA050316004	CESSNA	CONT	MCAULY	BLADE	CRACKED
3/14/2005	180H	O470R		S90AT2	PROPELLER

(CAN) PROPELLER, W/O T 64571, RECEIVED FOR 10 YEAR OVERHAUL. LAST OVERHAUL MAY 1996. NOW 667.9 HOUR SINCE OVERHAUL. FOUND BLADE S-90AT-2, SN B34101YS, CRACKED IN BLADE THREADS, FOUND WITH

EDDY CURRENT.

2005FA0000191	CESSNA	LYC	FLYWEIGHT	CRACKED
2/23/2005	182	IO540V4A5	D20880	GOVERNOR

FLYWEIGHT BASE CRACKED ALSO ASSOCIATED PART, C20886 SPRING HEAD AND B20882-1, SPRING DRIVE ALSO CRACKED. (K) (REF: 22124)

CA041019005	CESSNA	CONT	HUB	CORRODED
10/19/2004	182P	O470R	D7292203	PROPELLER

(CAN) PROP RECEIVED FOR 10 YR. CALENDAR O/H. AFTER PAINT REMOVAL FROM HUB CORROSION WAS FOUND ON THE EXTERNAL SURFACES. THIS CORROSION CANNOT BE REMOVED WITHIN THE MANF.'S MINIMUM SPEC'S. THIS PROPELLERHAS EXCEDED THE MANF'S RECOMMENDED CALENDAR TBO BY 60 MONTHS.

2005FA0000369	CESSNA	CONT	CABLE	BURNED
1/20/2005	182Q	O470U	DPA13	FUSELAGE

DEFECT WAS FOUND AT ENGINE REMOVAL AND FIREWALL CLEANING. THE ELECTRICAL CABLE BETWEEN AUX POWER RELAY AND STARTER RELAY WAS FOUND TO HAVE BURN MARKS AND OBVIOUS DAMAGE TO INSULATION. ADJACENT TO THE DAMAGED PORTION OF THE CABLE WAS A SHEET METAL SCREW IN THE FIREWALL (INSTALLED WITH THE HEAD OF THE SCREW ON AFT SIDE OF FIREWALL). THE POINTED END OF THE SCREW HAD PIERCED THE INSULATION AND CAUSED SOME ARCING. NEW CABLE INSTALLED ON AIRCRAFT, SCREW REMOVED AND REINSTALLED IN REVERSE POSITION (HEAD OF SCREW ON FORWARD SIDE OF FIREWALL). THE SCREW THAT CAUSED THE DAMAGE IS USED TO ATTACH A PLASTIC SHIELD THAT PROTECTS THE INTERIOR FROM BEING CAUGHT IN THE ELEVATOR CABLE PULLEY THAT IS LOCATED ON AFT SIDE OF FIREWALL.

CA040913003	CESSNA	CONT	BLOCK	WORN
9/11/2004	182Q	O470U	07606331	AILERON CONTROL

(CAN) AILERON SYSTEM CONTROL TUBE ASSEMBLY FORWARD SHAFT P/N 1260141-6/10 WAS WORN 25-30% DUE TO A FAILED CORRODED SUPPORT BEARING P/N 0760633-1. SOME NEEDLES FROM THE BEARING ASSEMBLY WERE MISSING.

18HP	CESSNA	LYC	CONTROL UNIT	DEFECTIVE
3/31/2005	182T	IO540*	S35944	FUEL SENDING

WHILE RUNNING UP AIRCRAFT AFTER MAINTENANCE, IT WAS NOTICED THAT THE FUEL QTY GAGES WERE JUMPING FROM FULL TO EMPTY AND THE LOW FUEL LIGHT WAS FLASHING. BOTH TANKS WERE FULL AT THE TIME. INSTALLED NEW SENDING UNITS IN BOTH WINGS AND IT SEEMED TO REMEDY THE PROBLEM.

CA040830009	CESSNA	CONT	SEAL	LEAKING
6/4/2004	207A	IO520F		PROPELLER HUB

(CAN) IN CRUISE, PRIOR TO DESCENT, AUDIBLE AND INDICATED. PROP SURGE AND RPM DECREASE OF APPROXIMATELY 200 RPM OCCURRED. PROP PITCH WAS ADJUSTED TO FULL FINE POSITION. NO RESPONSE TO BLADE CHANGE WAS NOTED. DURING DESCENT PRIOR TO APPROACH, PROP SLOWLY INCREASED PITCH APPROXIMATELY 100 RPM. APPROACH WAS CONTINUED AND LANDING WAS COMPLETED SUCCESSFULLY. MAINTENANCE INSPECTION REVEALED ENGINE OIL LEAKING FROM PROP GREASE FITTINGS. AN INTERNAL HUB SEAL LEAK WAS DETERMINED AND CONFIRMED BY PROP OVERHAUL FACILITY. PROP REMOVED.

CA041210003	CESSNA	CONT	PUSHROD	BROKEN
11/12/2004	207A	IO520F	538304	EXHAUST

(CAN) AIRCRAFT RETURNED TO XXXX AFTER THE PILOT NOTICED A VIBRATION AND LOSS OF POWER.UPON INSPECTION OF THE ENGINE, FOUND NR 1 CYCLINDER EXHAUST PUSH ROD WAS BROKEN. PUSH ROD, ROD HOUSING ASSEMBLY & LIFTER WERE REPLACED AND ENGINE RUN & LEAK CHECKED SERVICEABLE.

CA041108006	CESSNA	PWA	CESSNA	MOUNT	LOOSE
8/7/2004	208	PT6A114A		C145350	FLAP ACTUATOR

(CAN) MOUNTING STUD NUTS ON FLAP MOTOR BACKED OFF TO THE POINT WHERE THE DRIVE COUPLING DISENGAGED BETWEEN THE FLAP MOTOR AND THE ACTUATOR.

2005FA0000440	CESSNA	PWA	ADC	MALFUNCTIONED
10/28/2004	208B	PT6*	962830A1S8	COCKPIT

NR 2 ADC UNIT REPORTING 350 FEET ERROR. UNIT INSTALLED AS PART OF THE FLIGHT SYSTEMS, INC EFIS-SV SYSTEM UNDER STC NR SA02203AK. (AL05200500174) (K)

2005FA0000550	CESSNA	PWA	RIB	MISINSTALLED
3/25/2005	208B	PT6*	263202125	HORIZONTAL STAB

UPON INSPECTION OF HORIZONTAL STABILIZER, MECHANIC NOTED THAT ALL RIVETS SECURING FORWARD FLANGE OF RIB P/N 2632021-25 TO FORWARD SPAR WERE MISSING. HOLES WERE DRILLED THRU WITH BARE METAL SHOWING (NO PRIMER IN HOLES). ASSUMPTION IS THAT RIVETS WERE OMITTED AT FACTORY. THIS DISCREPANCY CAN ONLY BE VIEWED THRU ACCESS PANEL ON TOP, IB, RT SIDE OF HORIZONTAL STAB.

CA030918005	CESSNA	PWA	ALTERNATOR	MISMANUFACTURED
9/17/2003	208B	PT6A114A	99105922	ENGINE

(CAN) WHILE ATTEMPTING TO REPLACE THE STAND-BY ALTERNATOR IT WAS DISCOVERED THAT THE ELECTRICAL CONNECTION WOULD NOT ENGAGE INTO THE SOCKET PROVIDED IN THE ALTERNATOR BECAUSE THE SOCKET WAS OVERFILLED WITH EPOXY RESIN. ATTEMPTS WERE MADE TO CLEAR THE EXCESS RESIN BUT IT WAS FEARED THAT DAMAGE TO THE ALTERNATOR WOULD RESULT. THE MFG HAS BEEN RECENTLY TAKEN OVER BY A NEW OWNER AND SINCE THIS TAKEOVER THIS IS THE SECOND TIME WE HAVE COME ACROSS THIS PROBLEM. THE UNIT WAS RETURNED TO THE VENDOR FOR REPLACEMENT.

CA050201002	CESSNA	PWA	COLLAR	CRACKED
2/1/2005	208B	PT6A114A	265102215	ENGINE MOUNT

(CAN) DURING ROUTINE MAINTENANCE THE ENGINE MOUNT RING (HORSE COLLAR) WAS FOUND CRACKED AT 2 OF THE 4 CORNERS, INSIDE JOINT. DUE TO THIS BEING A KNOWN PROBLEM, AN ADDITIONAL TASK CARD TO CHECK FOR THIS CONDITION, INITIATED IN 1999, WAS ADDED TO OUR MAINTENANCE SCHEDULE EVERY 100 HOURS. AS A RESULT, WE HAVE DISCOVERED THE CONDITION ON 12 SEPARATE COLLARS. THE COLLAR WAS REPLACED AND THE AIRCRAFT REL EASED.

CA041103006	CESSNA	PWA	FUEL CONTROL	FAILED
10/20/2004	208B	PT6A114A	312267804	ENGINE

(CAN) ON ENGINE START UP PRIOR TO DEPARTURE THE ENGINE NG STOPPED ACCELERATING AT 48 PERCENT AND THERE WAS NO RESPONSE TO POWER LEVER MOVEMENT. THE ENGINE RESPONDED TO THE SELECTION OF HIGH IDLE AND THEN IDLED AT THE CORRECT NG OF 52 PERCENT. POWER LEVER RESPONSE WAS THEN NORMAL. AFTER A SHORT TAXI IT WAS NOTICED THAT IDLE HAD DROPPED TO 48 PERCENT AGAIN AND THERE WAS NO RESPONSE TO POWER LEVER MOVEMENT. THE ENGINE WAS SHUTDOWN. MAINTENANCE COULD NOT REPRODUCE THE DEFECT DURING SEVERAL STARTS BUT THE FUEL CONTROL WAS REPLACED AS A PRECAUTION. DURING REMOVAL IT WAS NOTICED THAT BLUE DYE WAS IN EVIDENCE ON THE DRIVE. THE AIRCRAFT HAS FLOWN SEVERAL TIMES SINCE WITH NO PROBLEMS.

CA041019003	CESSNA	PWA	MOUNT	CHAFED
10/7/2004	208B	PT6A114A	265102319	ENGINE

(CAN) AT ENGINE REPLACEMENT, THE CLAMP WAS FOUND TO BE LOOSE AROUND THE ENGINE MOUNT TUBING. THE CLAMP HAD CHAFFED INTO THE TUBE SIGNIFICANTLY. THE MOUNT WAS REMOVED AND SENT FOR REPAIR IAW THE SRM FOR THE C208B. THE CLAMP AND HARDWARE WAS REPLACED AND SECURED.

CA050120012	CESSNA	PWA	ACTUATOR	WORN
1/18/2005	208B	PT6A114A	C1450046	TE FLAP

(CAN) FLAP ACTUATOR MAKING NOISE DURING FLAP OPERATION. PRIMARY FLAP MOTOR LOADING THROUGH PARTIAL TRAVEL OF FLAPS. SECONARDY FLAP SYSTEM WOULD NOT EXTEND OR RETRACED FLAPS BUT MOTOR STILL RUNNING. FLAP ACTUATOR/MOTOR ASSEMBLY REMOVED AND UPON INSPECTION FOUND DRIVE GEARS

WORN AND SECONARDARY MOTOR DRIVE SHEARED. SUPECT WORN GEARS BINDING AND LOAD STRESS ON FLAP MOTORS. NEW FLAP MOTOR ASSEMBLY INSTALLED, TESTED SERVICABLE AND AIRCRAFT RETURNED TO SERVICE.

2005FA0000564	CESSNA		SKIN PANEL	CRACKED
3/24/2005	210L			SPEEDBRAKE

LT WING, IB AND AFT OF SPEEDBRAKE, INSTALLATION FORMED A CRACK AT THE WING T/E AND AT THE FORWARD STIFFENER ATTACHMENT POINT. WING SKIN EXPERIENCES BUFFETING IN AND OUT OF PLANE WITH SPEEDBRAKES DEPLOYED AS A RESULT OF TURBULENCE. THE WING PANEL SKIN IS LARGE AND OILCANS IN AND OUT OF PLANE GENERATING SIGNIFICANT TENSILE FORCE ON THE RIVETS AT THE PERIMETER OF THE PANEL. THE ADDED WING STIFFENER LIMITS THE OILCAN MOVEMENT AND STRESS. CRACK INITIATED AT FORWARD RIVET HOLE FOR ADDED STIFFENER.

2005FA0000169	CESSNA	CONT	LIFTER	SPALLED
10/25/2004	210N	IO520L	653877	ENGINE

DURING SCHEDULED OIL CHANGE, METAL WAS FOUND IN THE FILTER. FURTHER INVESTIGATION DISCOVERED THE TAPPETS STARTING TO FAIL. THIS CONDITION CAN BE A RESULT OF IMPROPER HEAT-TREATING. WITHOUT BEING FAMILIAR WITH MFG PROCESS, CAN NOT RECOMMEND A PLAN FOR PREVENTIVE ACTION. (K)

2005FA0000379	CESSNA		SPAR	CORRODED
9/28/2004	310R		08322502	STAB

FOUND THE MAIN (REAR) STABILIZER SPAR WITH SEVERE CORROSION AT THE LOCATIONS WHERE THE BONDING SCREWS WERE ATTACHED. (K)

CA040830010	CESSNA	CONT	PUSHROD	BROKEN
8/12/2004	320A	TSIO470B	6524518	RT ENGINE

(CAN) PILOT PARKED THE AIRCRAFT BECAUSE OF OIL LEAKING AND RT ENGINE RUNNING ROUGH. THE RT ENGINE NR4 CYLINDER WAS FOUND TO HAVE A BROKEN INTAKE PUSHROD, BROKEN EXHAUST PUSHROD AND BROKEN PUSHROD TUBE THAT CAUSED OIL TO LEAK FROM ENGINE. IT WAS FOUND THAT BOTH PUSHROAD TUBES WERE SLIGHTLY DENTED CAUSING THE PUSHRODS TO RUB AND OVER TIME WEAKEN AND BREAK. WHEN THE PUSHRODS BROKE THEY PUNCHED HO LES INTO THE PUSHROD TUBES AND OIL LEAKED OUT OF THE ENGINE.THE ENGINES ARE INSTALLED VERY CLOSE TO BOTTOM COWLINGS, BOTTOM COWLINGS ARE NOTREMOVABLE MAKING IT VERY DIFFICULT TO WORK WITH HAND TOOLS.

2005FA0000314	CESSNA	CONT	MCAULY	HUB	CRACKED
2/24/2005	336	IO360A	D2AF34C61	D4885/C61	BLADE SOCKET

PROPELLER SENT FOR REPAIR OF RED DYE OIL LEAK. AT DISASSEMBLY HUB WAS FOUND CRACKED IN BLADE RETENTION SOCKET THREADS.

CA041020011	CESSNA	CONT	CESSNA	BOLT	MISSING
10/19/2004	337A	IO360C		AN36A	LT WHEEL

(CAN) WHILE TAXING TO PARK, THE LEFT WHEEL STARTED TO SMOKE AND THE AIRCRAFT STARTED TO SHAKE. AFTER APPLYING BRAKES EVERYTHING WENT BACK TO NORMAL. UPON INSPECTION THE TIRE HAD WORN ALMOST THROUGH AND ONE OF THE THREE WHEEL BOLTS WAS MISSING. AFTER THE WHEEL WEAS REMOVED IT WAS OBVIOUS WHERE PART OF THE MISSING BOLT HAD TEMPORARILY LODGED ITSELF TO CAUSE THE WHEEL TO LOCK UP. A NEW TIRE AND BOLT WAS INSTALLED AND AIRCRAFT WAS RETURNED TO SERVICE. IF THE BOLT HAD FALLEN OUT BECAUSE THE NUT WENT MISSING THERE WOULD HAVE BEEN DAMAGE TO THE WHEEL HALF, BUT THERE WAS NONE. THEREFORE, IT LOOKS LIKE THE BOLT BROKE. WE COULD NOT FIND THE BOLT.

CA041019004	CESSNA	CONT	HUB	CORRODED
10/19/2004	337G	TSIO360G	D4190305	PROPELLER

(CAN) PROP RECEIVED FOR O/H. UPON INSPECTION CORROSION PITS WERE FOUND IN THE PROP MOUNTING FLANGE. THIS DAMAGE WAS TOO DEEP TO BE REMOVED WITHIN MANUFACTURERS SPECIFICATIONS. PROP HAS EXCEEDED THE MANUFCTURERS RECCOMENDED CALENDAR TBO BY 31 MONTHS.

CA041025001	CESSNA	CONT	CESSNA	BELLCRANK	UNSERVICEABLE
10/20/2004	401B	TSIO520EB		05411066	GEAR DOOR

(CAN) LANDING GEAR IDLER BELCRANK PN 0541106-6 ON NR 2 MAIN LANDING GEAR, GEAR DOOR CONTROL LOBE FOUND SEVERED RESULTING IN GEAR DOOR HANGING DOWN. UPON INSPECTION OF RT LANDING GEAR SYSTEM FOUND A CRACKED WELD ON THE NR 2 TORQUE TUBE ASSEMBLY RESULTING FROM BINDING CONTROL ROD THAT WAS PREVIOUSLY ATTACHED PN 504510-18 AT THE GEAR DOOR CONTROL LOBE

2005FA0000563	CESSNA		TORQUE TUBE	CRACKED
3/18/2005	414		504501025	MLG

LANDING GEAR TORQUE TUBE IS CRACKED.

CA041222004	CESSNA	CONT	CRANKCASE	CRACKED
12/14/2004	414	TSIO520N	643207	ENGINE

(CAN) THE NR 4 CYLINDER HAD LOW COMPRESSION AND WAS REMOVED FOR REPAIR. WHILE THE CYLINDER WAS REMOVED, A CRACK WAS FOUND AROUND THE 4 O'CLOCK POSITION CYLINDER ATTACH STUD. THE CRACK WAS ABOUT 1.5 INCHES LONG RADIATING INWARD. THE ENGINE WAS REMOVED FORREPAIR.

2005FA0000353	CESSNA	CONT	MAGNETO	FAILED
2/24/2005	414A	TSIO520NB	6320	ENGINE

RT MAGNETO, PN 6320, SN 02091774 FAILED AFTER 58.0 HOURS TOTAL TIME IN SERVICE. INVESTIAGATION FOUND BROKEN CONTACT ASSY. VISUAL INSPECTION OF BOTH RT AND LT CONTACT ASSY IF SN IS WITHIN 100 OF FAILED PART. NOTE: LT MAGNETO SAME ENGINE PN 6320, SN 02091734 FAILED AT 54.0 HRS TT IN SERVICE. SAME PROBLEM. (GL11200508228)

2005FA0000354	CESSNA	CONT	MAGNETO	FAILED
2/24/2005	414A	TSIO520NB	6320	LEFT

LT MAGNETO, PN 6320, SN 02091734 FAILED AFTER 54 HOURS TT IN SERVICE. INVESTIGARTION FOUND BROKEN CONTACT ASSY. VISUAL INSPECTION OF BOTH LT AND RT CONTACT ASSY IF SN IS WITHIN 100 HOUR OF FAILED PART. NOTE; RT MAGNETO SAME ENGINE, PN 6320, SN 02091744 FAILED AT 58.0 HOURS TT IN SERVICE. FROM SAME PROBLEM. (GL11200508227) (K)

2005FA0000554	CESSNA		TORQUE TUBE	CRACKED
3/18/2005	421B		504501024	MLG

LANDING GEAR TORQUE TUBE IS CRACKED

CA050125013	CESSNA	CONT	BEARING CAGE	DISINTEGRATED
1/20/2005	421B	GTSIO520H	535539	STARTER ADAPTER

(CAN) ATTEMPT TO START RT ENGINE AT EXTREME COLD TEMP. ENGINE BACKFIRED, STARTER ADAPTER SHAFT BRG CAGE DISINTEGRATED, SHAFT OIL SEAL BLEW.

CA050216005	CESSNA	CONT	PISTON PIN	BROKEN
1/31/2005	421B	GTSIO520H	654724	ENGINE

(CAN) PISTON (NR1) BROKE AT PIN BOSS RESULTING IN LARGE CHUNKS OF ALUMINUM FALLING INTO THE ENGINE, ENDING UP AT THE BOTTOM OF THE SUMP. SMALLER PIECES OF THE METAL WERE SUCKED UP THROUGH THE OIL PICK-UP AND RAN THROUGH THE OIL PUMP.

2005FA0000251	CESSNA		WINDSHIELD	FAILED
2/10/2005	421C		9910491	COCKPIT

PITOT HEATED GLASS WINDSHIELD FAILED DURING TAKEOFF ROLL. CAUSE UNKNOWN. WINDSHIELD WAS INSTALLED ABOUT 8 YEARS AND 2004.5 HOURS AGO AND FAILED FOR NO APPARENT REASON. (GL19200502495) (K)

CA041026009	CESSNA	PWA	SEAL	LEAKING

10/4/2004	425	PT6A112		FUEL PUMP DRIVE

(CAN) PILOT DISCOVERED EXCESSIVE OIL LEAK AFTER FLIGHT. MAINTENANCE WAS DISPATCHED TO INVESTIGATE.FUEL PUMP OIL SEAL WAS FOUND TO BE DISLODGED FROM ITS CARRIER AND HAD MOVED DOWN THE SHAFT INTO THE ENGINE CASE.

CA050127006	CESSNA	PWA	BLADES	FAILED
1/27/2005	425	PT6A112	09040022	BLOWER

(CAN) FAN BLADE FAILURE, BLADE BROKEN OFF FROM SPINNER, OCCURRED 3 TIMES. (TSN 4904 HOURS METAL BLADE) (TSN 657 HOURS PLASTIC BLADE) (TSN 258 HOURS PLASTIC BLADE)

CA050118004	CESSNA		BYPASS VALVE	FAILED
1/13/2005	441		7547512	ACM

(CAN) AFTER DEPARTURE THE DUCT OVERHEAT WARNING CAME ON.EMERGENCY CHECKLIST CARRIED OUT. SMOKE BEGAN TO EMIT FROM FLOOR INTO CABIN AND COCKPIT. AIRCRAFT RETURNED AND SHUTDOWN AS PER FIRE CHECKLIST. AIRCRAFT EVACUATED.UPON INVESTIGATION THE AIR CONDITIONING BYPASS VALVE WAS FOUND FAILED IN THE OPEN POSITION. INSPECTION OF DUCTS AND MANIFOLDS FOUND NO FAULTS. BYPASS VALVE REPLACED AND AIRCRAFT RELEASED.

CA050125006	CESSNA	GARRTT	LINK	WRONG PART
1/14/2005	441	TPE33110	57411405	LT MLG

(CAN) MLG WAS REMOVED FOR MODIFICATION IAW STC. NR SA00487SE. ON RE-INSTALLATION THE MLG TRAILING LINK P/N 5741140-5 - LT WAS INSTALLED ON THE RT MLG, AND P/N 5741140-6 RT WAS INSTALLED ON THE LT MLG. THIS ERROR WAS NOT OBVIOUS DURING LANDING GEAR FUNCTIONAL RETRACTION AND EXTENSION TESTING. THE GEAR RETRACTED AND LOCKED UP NORMALLY, EXTENDED AND LOCKED DOWN NORMALLY. THE AIRCRAFT FLEW WITH NO LOSS OF AIRSPEED OR ANY INDICATION OF AIRFRAME BUFFET DUE TO THE TRAILING LINKS HANGING BELOW THE WHEEL WELLS. THIS CONFIGURATION WAS REVERSED AND THE AIRCRAFT RETURNED TO SERVICE. IT IS VERY EASY TO MAKE THIS ASSEMBLY ERROR, WHICH RESULTS IN A LANDING GEAR CONFIGURATION MOST TECHNICIANS WOULD THINK (COULD NOT HAPPEN).

B30R20050405	CESSNA	ELECTROMECH	MOTOR	INOPERATIVE
2/4/2005	550		302	POWER PACK

AFTER LANDING DURING TAXI BACK TO THE RAMP, PILOT EXPERIENCED POWER BRAKE FAILURE. WAS ABLE TO CONTROL THE AIRCRAFT AND RETURN IT TO THE PARKING RAMP SAFELY. MECHANIC'S TROUBLESHOOTING REVEALED THAT THE POWER PACK PUMP MOTOR HAD FAILED. THE POWER PACK ASSEMBLY WAS REMOVED AND THE MOTOR WAS REPLACED. THE POWER PACK ASSEMBLY WAS REINSTALLED AND THE BRAKE SYSTEM WAS BLED. BRAKE SYSTEM RESUMED NORMAL OPERATION. THE AIRCRAFT WAS RELEASED FROM MAINTENANCE AND RETURNED TO SERVICE.

2005FA0000244	CESSNA	PWA	FRAME	CRACKED
11/3/2004	550	JT15D4	551900921	SEAT

UPPER CHAIR BASE ASSEMBLY CRACKED AT CHAIR BACK ATTACH POINTS. CHAIR WAS REPAIRED IAW STO1042WI STRUCTURAL SEAT REPAIR. (K)

2005FA0000245	CESSNA	PWA	FRAME	CRACKED
11/3/2004	550	JT15D4	551900922	SEAT

UPPER CHAIR BASE ASSEMBLY CRACKED AT CHAIR BACK ATTACH POINTS. CHAIR WAS REPAIRED IAW STO1042WI STRUCTURAL SEAT REPAIR. (K)

2005FA0000246	CESSNA	PWA	FRAME	CRACKED
11/3/2004	550	JT15D4	551900932	SEAT

UPPER CHAIR BASE ASSEMBLY CRACKED AT CHAIR BACK ATTACH POINTS. ALSO, PREVIOUS INAPPROPRIATE REPAIR. CHAIR WAS REPAIRED IAW STO1042WI STRUCTURAL SEAT REPAIR. (K)

CA050121001	CESSNA	PWA	CONNECTOR	BURNED

1/20/2005	550	JT15D4		LANDING LIGHT

(CAN) RT LND LIGHT WOULD NOT EXTING. (RELAY STUCK (ON)). RELAY WAS REPLACED, FAULT STILL PERSISTED, (SHORT) DISCOVERED TO X2. (COIL GROUND) TERM OF RELAY. BETWEEN RT GEAR WHEELWELL CNTR P/J 64 PIN W, RELAY TERM X2. WHEN P/J 62 WAS DISCONTD PIN SMALL (E) AND WIRE L590C16 SHOWED SIGNS OF OVERHEAT. PIN WAS HEAT TO PREVENT EXTRACT FROM CONN, WIRE WAS DISCOLORED ABOUT 8 IN FROM CONN. RELAY CONTACTS REMAINED CLOSED (RELAY ENERGISED)TO PERMIT FLOW OF DC PWR TO LIGHT IS STILL ON-GOING. PIN WAS OVERHEAT COULD BE RELATED TO EXT ILLUMN OF LDNG LIGHT. NOT AN INTERNAL (SHORT) IN CONN. COIL (GROUND SEEKING) WIRE USES PIN H OF THIS CONN , SMALL (E) PWR PIN. RELAY AND LAND LIGHT ON/OFF SWITCH (S2) HAVE BEEN REPLACED.

CA041020006	CESSNA	PWA		SHAFT SEAL	LEAKING
10/20/2004	550	JT15D4		99121661	HYD BRAKE PWRPK

(CAN) AFTER THE FIRST FLIGHT OF THE DAY THE CREW NOTICED FLUID ON NOSE WHEEL. MORE FLUID WAS FOUND IN THE NOSE WHEEL WELL. FLUID LEAKAGE WAS TRACED TO THE HYDRAULIC BRAKE POWER PACK SEALS BETWEEN THE PUMP AND THE MOTOR. THE HYDRAULIC BRAKE POWER PACK ASSEMBLY WAS REPLACED AND THE AIRCRAFT WAS RETURNED TO SERVICE.

CA041015003	CESSNA	PWA		CAP	WORN
10/12/2004	550	JT15D4		55120416	DUCT

(CAN) FRESH AIR DUCT PN 6515317-12 FRETTED ON THE OUTBOARD FLANGE OF THE TEE SECTION CAP.

CA050202005	CESSNA	PWA	LUCAS	BEARING	DESTROYED
2/1/2005	550	JT15D4		03601018	COMMUTATOR

(CAN) WHILE IN CRUISE BACK TO BASE, CREW ENCOUNTERED AIRFRAME VIBRATION FROM THE AFT CABIN, FOLLOWED BY THE RT GENERATOR FAIL LIGHT 10 MINUTES LATER. CREW CONFIRMED LOSS OF RT GENERATOR, AND DECLARED AN EMERGENCY DUE TO THE INTENSITY OF VIBRATION. A/C LANDED WITHOUT INCIDENT. ON DISASSEMBLY OF UNIT, DISCOVERED CUMMUTATOR BEARING DESTROYED. CAUSE OF FAILURE IS UNDER INVESTIGATION. THERE WAS ONLY 406 HRS ON THE BEARING SINCE REPLACEMENT.

CA041103001	CESSNA	PWA	CESSNA	BOLT	SEIZED
11/2/2004	550	PW530A		NAS464P538	UPLOCK HOOK

(CAN) HYDRAULIC PRESSURE LIGHT AND GEAR UNLOCKED LIGHT REMAINED ON AFTER GEAR RETRACTION. RT MAIN GEAR UPLOCK WAS FOUND TO BE STIFF WHEN RETURNING AT IS ORIGINAL POSITION. BOLT AT THE UPLOCK PIVOT WAS FOUND TO BE SEIZED AND CORRODED. BOLT REPLACED WITH NEW.

CA050126004	CESSNA	PWA		FCU	MALFUNCTIONED
1/17/2005	550	PW530A		81850012	ENGINE

(CAN) THE ENGINE EXPERIENCED AN UNCOMMANDED INFLIGHT SHUTDOWN FOLLOWING POWER REDUCTION FOR DESCENT. A RELIGHT ATTEMPT WAS UNSUCCESSFUL. SUBSEQUENT INSPECTION REVEALED A MALFUNCTIONING FUEL CONTROL UNIT. MFG WILL INVESTIGATE THE INCIDENT AND WILL SUPPLIMENT THIS REPORT TO REFLECT ROOT CAUSE, ONCE ESTABLISHED.

CA041209013	CESSNA	PWA		ENGINE	MALFUNCTIONED
12/6/2004	550	PW530A			

(CAN) THE ENGINE EXPERIENCED AN UNCOMMANDED ACCELERATION IN FLIGHT AND WAS SHUTDOWN BY THE PILOT DUE TO AN ASSOCIATED ITT INCREASE TOWARDS RED-LINE. AN INFLT RELIGHT CARRIED OUT AND THE INCIDENT REOCCURRED. THE ENGINE WAS AGAIN SHUT DOWN.A SECOND RELIGHT WAS CARRIED OUT AND THE ENGINE RESPONDED NORMALLY TO THROTTLEINPUTS. PWC WILL INVESTIGATE THE EVENT AND WILL SUPPLIMENT THIS REPORT TO IDENTIFY ROOT CAUSE ONCE DETERMINED.

CA041222003	CESSNA		HONEYWELL	CONTROL UNIT	DAMAGED
12/8/2004	560CESSNA			1835501010001	COCKPIT

(CAN) CLIMBING THROUGH FL300 A LOUD BANG OCCURRED FOLLOWED BY ELECTRICAL SMOKE ORIGINATING FROM THE CENTRE PEDESTAL. PRIMARY NAVIGATION FAILED IMMEDIATELY AS THE GNC-XL FMS FAILED. THE

FMS WAS ISOLATED ELECTRICALLY AND THE CREW PERFORMED A RAPID DESCENT AND REQUESTED PRIORITY HANDLING. THE AIRCRAFT LANDED WITHOUT FURTHER INCIDENCE. INVESTIGATION ON THE GROUND REVEALED DAMAGE CONFINED TO THE FMS BOX AND THE UNIT WILL BE SENT TO HONEYWELL FOR FURTHER ANALYSIS.

2005FA0000535	CESSNA		BOOT	MALFUNCTIONED
3/21/2005	560CESSNA			DEICE SYS

DEICE BOOT MALFUNCTIONED.

CA040830007	CESSNA	PWA	VALVE	FAILED
8/11/2004	560CESSNA	PW535A	471319X	CABIN PRESSURE

(CAN) EMERGENCY PRESSURIZATION VALVE CAME ON UNCOMMANDED ONCE FOR SEVERAL SECONDS IN FLIGHT. VALVE WAS REPLACED.NOTE: MFG REPORTS THIS IS A FLEET WIDE PROBLEM AND A NEW VALVE IS UNDERGOING CERTIFICATION.

CA040830008	CESSNA	PWA	HONEYWELL	DISPLAY	FAILED
7/13/2004	560CESSNA	PW535A			RMU

(CAN) DISPLAY SCREEN WENT INCREASINGLY BRIGHT. BLUE AND THEN DIMMED TO GREEN. REPLACED RADIO MANAGEMENT UNIT. BEFORE COMPLETE FAILURE OF DISPLAY.

CWQR20050003	CESSNA	SENSOR	ARCED
4/6/2005	560XL	9914427-2	LOW FUEL

DURING INSPECTION FOUND LOW LEVEL FUEL SWITCH INOP AND THE APPEARANCE OF MISSING MATERIAL AND ARCING BETWEEN FLOAT AND SWITCH BODY WHEN FLOAT WAS IN THE UP POSITION. THIS SWITCH HAS BEEN SENT TO CESSNA FOR EVALUATION AND SUBMITTED CITATION SERVICE CONDITION REPORT 187403.

CWQR20050001	CESSNA	HEAT SHIELD	CRACKED
1/26/2005	560XL	662128129&30	WINGS

DURING INSPECTION FOUND THE LEADING EDGE HEAT SHIELD FLANGE CRACKED ON BOTH LEFT AND RIGHT WINGS. SUBMITTED CESSNS/CITATION SERVICE CONDITION REPORT 181187 WITH PICTURES.

CWQR20050002	CESSNA	NUT	WRONG PART
1/28/2005	560XL	MS21044N3	ELEVATOR TRIM

PILOT FOUND ELEVATOR TRIM OUT OF RIG. TECHICIAN FOUND EXCESSIVE PLAY IN TRIM WHEEL, ALLOWING TRIM INDICATOR POINTER TO JUMP GROOVE IN TRIM WHEEL. FOUND TRIM WHEEL BOLT (P/N AN3-57) NOT TO HAVE NUT (P/N MS21044N3) INSTALLED. NUT WAS FOUND IN AIRCRAFT BELLY. BOLT IS DRILLED FOR COTTER PIN, AND FIBER LOCK NUT WAS INSTALLED. CHECKED IPC, FOUND PROPER HARDWARE WAS INSTALLED. SUGGEST CASTELLATED NUT BE INSTALLED. SUBMITTED CITATION SERVICE CONDITION REPORT 181391.

CA050120006	CESSNA	PWA	LINE	CRACKED
1/9/2005	560XL	PW545A	661705213	LT HYD SYS

(CAN) AIRCRAFT DEPARTED. AS THE AIRCRAFT ACCELERATED THE CREW BECAME CONCERNED DUE TO A VIBRATION. THE AIRCRAFT WAS DIVERTED TO INTERNATIONAL AIRPORT. INVESTIGATION FOUND A CRACK IN THE HYDRAULIC LINE FROM THE LT ENGINE DRIVEN HYDRAULIC PUMP WHERE IT CONNECTS TO THE INPUT PORT OF THE LT PRESSURE FILTER. A NEW LINE WAS INSTALLED. THE HYDRAULIC SYSTEM WAS SERVICED AND GROUND FUNCTION TESTS WERE COMPLETED. THE AIRCRAFT WAS RELEASED TO SERVICE.

CA050107001	CESSNA	PWA	HMU	FAILED
11/28/2004	560XL	PW545A	8237006	RT ENGINE

(CAN) RT ENGINE WOULD NOT START.

2005FA0000520	CESSNA	GARRTT	CLAMP	BROKEN
3/30/2005	650	TFE731*	NE102668	TAILPIPE

IN FLIGHT, TAILPIPE CLAMP FAILED ALLOWING HOT GASSES TO ENTER NACELLE REGION. PAINT ON HOT AIR

SHIELD/DUCTING WAS BLISTERED. N-1 TACHOMETER BEGAN TO WORK INTERMITTENTLY, ITT IND WENT OUT, FIRE LIGHT CAME ON, HIGH-PRESSURE BLEED AIR DUCT OVERHEAT WARNING CAME ON. LANDING, ENG WAS EXAMINED, NO IND OF DAMAGE TO INTERIOR OF NACELLE. SS SHIELDS, WHICH FORM COOL AIR DUCT AROUND REAR OF ENGINE, FOUND TO HAVE BLISTERED AND BURNED AWAY PAINT. SHROUDS WERE CLOSELY EXAMINED, FOUND TO BE INTACT WITHOUT DEFORMATION OR RUPTURES. CLAMP WAS REPLACED, TEST RUNS SHOWED ALL INDICATIONS RETURNED TO NORMAL OPERATION, INDICATIONS DURING TEST RUNS THAT INCLUDED HIGH POWER. NO MFG REQUIREMENT TO REPLACE THIS PRIOR TO FAILURE.

CA050216001	CESSNA	ALLSN	CESSNA	PIN	CORRODED
2/3/2005	750	AE3007C		67410172	MLG

(CAN) WHEN THE MLG TRAILING LINK WAS REMOVED TO DEAL WITH A MINOR CORROSION ISSUE THE LINK PIN ASSY WAS FOUND CORRODED INSIDE AT THE LOCKING NUT END. THE LINK PIN IN QUESTION IS OPEN AT THE IB END WHEN INSTALLED AND IT HAD ACCUMULATED SAND, OTHER DEBRIS AND WATER THAT COLLECTED AT THE NUT END CAUSING THE CORROSION. THE LINK PIN WAS REPLACED WITH A NEW ONE. THE NEW LINK PIN IS CLOSED AT THE IB END AND HAS A GREASE NIPPLE FITTED. WHEN THE NEW PIN IS INSTALLED IT IS FILLED WITH GREASE TO PREVENT THIS SITUATION FROM DEVELOPING.

CA050216003	CESSNA	ALLSN	CESSNA	PIN	CORRODED
2/3/2005	750	AE3007C		67410172	MLG

(CAN) WHEN MLG TRAILING LINK WAS REMOVED FOR TREATING MINOR CORROSION THE LINK PIN WAS FOUND CORRODED INSIDE AT THE LOCK NUT END. THE LINK PIN IS OPEN AT THE IB END WHEN INSTALLED AND HAD ACCUMULATED SAND AND OTHER DEBRIS AND WATER CAUSING THE CORROSION. THE NEW LINK PIN THAT WAS INSTALLED IS CLOSED AT THE IB END AND FITTED WITH A GREASE NIPPLE. THE LINK PIN IS FILLED WITH GREASE AFTER INSTALLATION TO PREVENT THIS PROBLEM FROM REOCCURRING.

CA041222010	CESSNA	CONT	NUT	CRACKED
12/17/2004	A185F	IO520D	C4902	PROPELLER BLADE

(CAN) RETENTION NUT THREAD CRACKED, 3 INCHES IN LENGTH, . DISCOVERED DURING OVERHAUL L.P.I. INSPECTION.

CA041026008	CESSNA	CONT	CYLINDER HEAD	SEPARATED
10/20/2004	A185F	IO520D	TIST712ACA	NR 3 CYLINDER

(CAN) NR 3 ALUMUNUM HEAD SEPERATED AT 3RD FIN ABOVE BARRIER. ALL 6 CYLINDERS REPLACED. CYLINDERS THAT WERE REMOVED SENT BACK TO MFG FOR MATERIAL EXAMINATION.

CA041017001	CESSNA	CONT	CRANKCASE	CRACKED
10/2/2004	A185F	IO520D		ENGINE

(CAN) THE CESSNA 185 WAS RETURNING TO HOME BASE FROM THE HUNTING CAMP, WHEN IN CRUISE,WITH ALL ENGINE PARAMETERS INDICATING NORMAL,THE ENGINE STOPPED IN FLIGHT AND T HE SEASONED PILOT WAS ABLE TO LAND WITHOUT INCIDENT. THE ENGINE SUFFERD TWO CRACKS TO THE CRANKCASE HALVES IN THE AREA OF NR 1 AND 2 CYLINDERS. ALL CYLINDERS WERE FOUND INTACT AND UNDAMAGED. ALL CYLINDERS WERE REMOVED AND NEW RINGS INSTALLEDAT 902.0 HRS. SUBJECT ENGINE TO BE SENT TO ANOTHER OVERHAULER FOR ANALYSIS.

CA040922003	CESSNA	CONT	PULLEY BRACKET	FAILED
7/24/2004	A185F	IO520D	0512128	TE FLAPS

(CAN) AFTER TAKE-OFF, WHEN RAISING FLAPS FROM 100 TO 00, PILOT FELT A RELEASE OF TENSION AND A/C BANKED LT, UNTIL FLAP HANDLE LOCKED IN AT 00 POSITION. PILOT CHECKED FLT CONTROLS & ALL APPEARED NORMAL, PILOT SUSPECTED SOMETHING WRONG WITH FLAPS. A/C FLOWN TO BASE, & BEFORE LANDING, PILOT DECIDED TO CHECK FLAPS. AS SOON AS FLAP HANDLE MOVED FROM 00 LATCH TOWARDS 100 LATCH A/C WANTED TO BANK LT AGAIN, SO PILOT SET FLAPS BACK TO 00 & DID AN UNEVENTFUL FLAPLESS LANDING. MX NOTIFIED & UPON INSPECTION OF FLAP SYSTEM, FOUND TABS OF A PULLEY BRACKET ON A MAIN BULKHEAD AT STA 65.33, HAD BROKEN AWAY.

CA050203003	CESSNA	CONT	BENDIX	HOUSING	CRACKED

1/27/2005	A185F	IO550D	SGRN1225	MAGNETO

(CAN) DURING ROUTINE 500 HOURS INSPECTION, BOTH MAGNETO HOUSINGS WERE FOUND CRACKED IAW FIGURE 716 OF MFG MASTER SERVICE MANUAL X40000.

2005FA0000365	CESSNA	CONT	SPAR	CRACKED
12/15/2004	R172E	IO360D	052340050	LT WING

WHILE REPLACING THE FLAP TRACK ASSY, A CRACK APPROXIMATELY 2 INCHES IN LENGTH AND RUNNING THROUGH THE LOWER RIVET HOLES WAS FOUND UNDER THE LT IB FLAP TRACK. PROBABLE CAUSE WAS A FLAP OVERSPEED DURING FLIGHT. (SO09200502861)

2005FA0000367	CESSNA	CONT	FLAP TRACK	WORN
11/29/2004	R172E	IO360D	052323113	LT WING

WHILE FLAPS WERE BEING RETRACTED, THE LT IB FLAP ATTACH BRACKET CAUGHT ON THE WING COVE PANEL SUPPORT. THIS CAUSED SUBSTANTIAL DAMAGE TO THE COVE PANEL SUPPORT AS WELL AS THE ATTACH BRACKET. CAUSE WAS DETERMINED TO BE WORN FLAP TRACKS. THE FLAP TRACKS AND ROLLERS WERE REPLACED WITH NEW PARTS AND THE LT FLAP WAS REPLACED WITH A SERVICEABLE ASSY DUE TO LACK OF PART AT THE MFG FOR REPAIR. SINCE MFG DOES NOT HAVE LIMITATIONS ON THEIR FLAP TRACKS, SUGGEST THAT THEY BE REMOVED AND REPLACED AT 5,000 HOUR INTERVALS. (K)

2005FA0000558	CESSNA		ACTUATOR	BINDING
3/25/2005	R182		128054115	NLG

PISTON NUT P/N 9880506-1, DRAGGING ON BEARING END PINS P/N 129009-2. PINS WERE PREVIOUSLY INSTALLED IAW SEB95-20 AND SK210-155. PIN CLEARANCE WAS CHECKED ON INSTALLATION, CLEARANCE WAS .020 AND.024. PINS ARE NOW DRAGGING ON PISTON NUT MAKING IT DIFFICULT TO MOVE GEAR INTO THE LOCK POSITION.

2005FA0000132	CESSNA	LYC	SUPPORT	DAMAGED
1/28/2005	R182	O540*	07136285,6	RUDDER PEDAL

WHILE COMPLETING GROUND RUN, PRIOR TO 100 HOUR INSPECTION, NOTICED RUDDER PEDALS DID NOT FEEL RIGHT. FURTHER INVESTIGATION REVEALED THAT THE NUT-PLATES HAD RIPPED THROUGH THE RUDDER PEDAL SUPPORT PIECES. (K)

CA040804010	CESSNA	LYC	HINGE	CRACKED
7/15/2004	R182	O540J3C5	071103720	PAX DOOR

DOOR HINGE WAS NOTED AS CRACKED. UPON REMOVAL OF DOOR TO REPLACE HINGE, CRACKS WERE ALSO FOUND IN THE MATING PART OF THE HINGE (0711037-11) AND IN THE UPPER AFT HINGE (0711037-16). THE DOOR RIGGING IS SUCH THAT THE EDGES OF THE DOOR AND AIR FRAME SKINS COME INTO CONTACT WHEN CLOSING, AND PLACE UNDUE FORCES ON THE HINGES.

2005FA0000309	CESSNA	LYC	SWITCH	INOPERATIVE
3/7/2005	T182T	TIO540*		STALL WARNING

STALL WARNING INOP FOUND STALL WARNING SWITCH TERMINAL SCREW LAYING INSIDE WING, SCREW BACKED OUT IN FLIGHT.

CA041216010	CESSNA	LYC	WASTEGATE VALVE	SEIZED
12/14/2004	T182T	TIO540AK1A	470954001	TURBOCHARGER

(CAN) WASTEGATE BUTTERFLY VALVE FOUND SEIZED ON INSPECTION. THIS IS THE SECOND VALVE FOUND SEIZED ON TWO DIFFERENT AIRCRAFT WITH LOW TTSN.

2005FA0000452	CESSNA	LYC	PUMP	LEAKING
3/17/2005	T206H	TIO540*	A10055B	FUEL BOOST

BOOST PUMP WAS LEAKING AT SEAM BETWEEN ELECTRIC MOTOR AND VANE PUMP. FUEL HAD A CHANCE TO LEAK INTO ELECTRIC MOTOR BRUSHES. BELIEVE THIS TO A MAJOR FIRE HAZZARD. BOTH PUMP AND AIRCRAFT

WERE NEW. THIS COULD HAVE BEEN PREVENTED BY BETTER QUALITY CONTROL AT THE FACTORY. (K)

2005FA0000240	CESSNA	LYC		PEDAL	MISALIGNED
11/9/2004	T206H	TIO540*			BRAKE

RT SIDE BRAKE PEDALS: DURING A FLT CHECK, THE INSTRUCTOR FOUND HE RARELY HAD BRAKES DUE TO TOE PEDALS GOING OVER TOO FAR, HIS FOOT COULD NOT GO OVER ANYMORE TO STOP THE AIRCRAFT. DURING OK OUT, SEEMS THE LINKAGE ON PEDALS IS MISALIGNED ALLOWING THE PDEALS TO GO OVER TOO FAR, JUST ABOUT TO FIREWALL. (K)

CA050302004	CESSNA	CONT	CESSNA	DOUBLER	CRACKED
3/21/2005	T210K	TSIO520H	12124026	12120031	BULKHEAD

(CAN) THE BULKHEAD DOUBLER REINFORCES THE HOLE WHERE THE HORIZONTAL STAB ATTCHES. DOUBLER SPLIT IN TWO THROUGH THE ANCHOR NUT RIVIT HOLE. THIS DOUBLER IS ONLY FOUND ON EARLY MODELS.

2005FA0000444	CESSNA	CONT	CONT	EXHAUST VALVE	BROKEN
12/23/2004	T210M	TSIO520R		637781	NR 1 CYLINDER

PILOT REPORTED HEARING A BANG AND NOTICED AN ENGINE VIBRATION AND REDUCTION IN TEMPERATURE ON HIS ENGINE MONITOR. PILOT REPORTED AN EMERGENCY TO ATC AND MADE A SAFE LANDING AT AIRPORT. MAINTENANCE PERFORMED AN ENGINE COMPRESSION TEST AND FOUND CYLINDER NR 1 HAD -0-(ZERO) COMPRESSION. REMOVED CYLINDER NR1 AND FOUND EXHAUST VALVE HEAD MISSING APPROX 40 PERCENT. THE MISSING PIECE OF THE EXHAUST VALVE WAS FOUND IN THE INTAKE TUBE AND HAD CONTACTED THE TOP OF THE PISTON AND TOP OF THE CYLINDER HEAD. PROBABLE CAUSE OF FAILURE IS UNDETERMINED.

2005FA0000580	CESSNA			ENCODER	ERRATIC
3/11/2005	T210N			A30	ALTIMETER

ALTITUDE OUTPUT BECAME ERRATIC, VARYING SEVERAL HUNDRED FT BOTH ABOVE AND BELOW THE ACTUAL ALTITUDE OVER A PERIOD OF 30 MINUTES. PROBABLY CAUSED BY INTERMITTENT HEATER THERMOSTAT.

2005FA0000216	CESSNA	CONT		CONNECTING ROD	FAILED
2/9/2005	T210N	TSIO520R			ENGINE

NR 2 CONNECTING ROD FAILED BREAKING CRANKCASE, KNOCKING LT MAG FROM MOUNT. ROD SHOWED FRICTION WELDING TO CRANK PRIOR TO FAIURE. COUNTERWEIGHT DAMAGED BY IMPACT WITH ROD. APPEARS ENG CONTINUED TO OPERATE BRIEFLY FOLLOWING ROD SEIZURE. PILOT ACCOMPLISHED SUCCESSFUL LANDING IN FIELD, NO APPARENT DAMAGE TO AIRFRAME. ENG HAS HISTORY OF CYL BEING REMOVED FOR TOP O/H WITH 4 BEING CHANGED TWICE. HAD BEEN EXPERIENCING PERSISTENT OVERBOOSTING, PROBLEM HAD BEEN ADDRESSED AT DIFFERENT TIMES. TURBO CONTROLLER HAD BEEN REPLACED AND WASTEGATE HAD BEEN REMOVED, SERVICED AND REINSTALLED. AFTER COMPLETION, APPEARED OVERBOOST PROBLEM MITIGATED. ENGINE FAILED. (GL11200507447)

CA050125015	CESSNA	CONT		PISTON	DISINTEGRATED
7/16/2004	T210N	TSIO520R			ENGINE

(CAN) ENGINE HAD 450 HOURS SINCE TOTAL O/H, WAS PERFORMING NORMAL. CYL LEAK TEST WERE MIN. 60/80 AND OIL CONSUMPTION WAS 1 LT-13 HRS. AC WAS IN BASE LEG WITH POWER REDUCED GRADUALLY BACK TO 20 IN., PROP NEAR FINE, MIXTURE NEAR RICH. VIBRATION STARTED IN ENGINE, IT WAS LOOSING RPM AND POWER. TANKS WERE SWITCHED AND BOOST PUMP ACTIVATED BUT WITH NO RESULTS. GEAR WAS RETRACTED, MORE FLAP ADDED. A CRASH INTO TREES CARRIED OUT ABOUT A MILE SHORT OF RUNWAY. DISCOVERED THAT THERE WAS A HOLE IN THE CASE NEAR NR 5 CYL. NTSB FINDINGS CONCLUDED THAT NR 5 PISTON DISINTEGRATED, OTHER 5 PISTONS HAD NORMAL WEAR FOR 450 HRS. NO INDICATION OF ANY PROBLEMS FROM VIBRATION START UNTIL STOPPED IN TREES IS 25 SECONDS.

2005FA0000235	CESSNA	CONT		EXHAUST RISER	CRACKED
11/12/2004	T310R	TSIO520*		LW12126	LT ENGINE

FOUND LT ENGINE OB EXHAUST RISER CRACKED WHILE PERFORMING A 50 HOUR EXHAUST INSPECTION IAW AD

00-01-16. (GL21200500869) (K)

CA041108007	CESSNA	CONT		CABLE	FRAYED
11/5/2004	T337G	TSIO360CB		15600088	AUTOPILOT SYS

(CAN) AT INSPECTION THE AUTOPILOT ROLL SERVO BRIDLE CABLE WAS FOUND TO BE FRAYED WHERE IT RUNS OVER IT'S PULLEYS.

MAFALT1	CESSNA	CONT		ALTERNATOR	OPEN
4/4/2005	TU206G	TSIO520M		DOFF10300B(R)	ENGINE

OPEN FIELD WINDING.

MAFALT2	CESSNA	CONT		ALTERNATOR	OPEN
4/4/2005	TU206G	TSIO520M		DOFF10300B(R)	ENGINE

OPEN FIELD WINDING AT SLIP RING (WIRE BROKEN AT SOLDER JOINT).

MAFALT3	CESSNA	CONT		WIRE	OPEN
4/4/2005	TU206G	TSIO520M			ENGINE

OPEN FIELD WINDING AT SLIP RING (WIRE BROKEN AT SOLDER JOINT).

DUKESPUMPPKMP	CESSNA	CONT		PUMP	LEAKING
4/5/2005	TU206G	TSIO520M		41400015RX	FUEL SYSTEM

PUMP IS LEAKING AT THE SEAL AT THE BASE OF THE PUMP-NEAR/AT DRAIN PIPE.

DUKESPUMPMPG	CESSNA	CONT		PUMP	LEAKING
4/5/2005	TU206G	TSIO520M		41400015RX	FUEL SYSTEM

PUMP IS LEAKING AT THE SEAL AT THE BASE OF THE PUMP, NEAR DRAIN PIPE.

CA050324006	CESSNA	CONT	CONT	COUNTERWEIGHT	FAILED
3/15/2005	TU206G	TSIO520M		639196	CRANKSHAFT

(CAN) ROLLER RETAINER AND SNAP RING CAME OUT OF CLUT, RELEASING ROLLER IN 5TH ORDER CWT. (NO DAMAGE TO PARTS, POSSIBILITY WAS NOT INSTALLED CORRECTLY.) ROLLER MIGRATED TO REAR OF ENGINE AND JAMMED BETWEEN 6TH ORDER CWT AND ENGINE CASE STOPPING ENGINE. CRANKSHAFT NRPLE AT NR2 ,AOM KPIRMA, FRP, SUDDEN STOPPAGE.

CA040920002	CESSNA	CONT		SPARK PLUG	BROKEN
9/13/2004	U206A	IO520F		URHB32E	NR 4 CYLINDER

(CAN) WHEN REMOVING NR 4 CYLINDER LOWER SPARK PLUG, BROKE COMPLETELY OFF, JUST ABOVE BASE AND BELOW HEX DRIVE PORTION.

CA041110012	CESSNA	CONT	CESSNA	BOLT	SHEARED
10/25/2004	U206C	IO520F		NAS464P5A42	NLG STRUT

(CAN) BOLT SHEARD ON LANDING CAUSING NOSE GEAR TO PIVOT FORWARD.NOTE - THIS BOLT WAS LAST CHANGED SEPT.9/94 AT 2875.1 T.T. (AIRCRAFT PRESENT T.T. IS 6238.7 HRS) THIS AIRCRAFT HAS OPERATED ON SKIS (SUSPECT THAT BOLT WAS OVERSTRESSED IN THIS CONFIGURATION) THIS BOLT WAS CRACKED PRIOR TO FAILURE AS HALF OF FRACTURE IS BLACK & TOTAL FAILURE IS WHITE. SOME DAMAGE TO AIRFRAME WAS ENCOUNTERED. BOLT WILL BE DELIVERED TOT.C. IN WHITEHORSE. IT SHOULD BE NOTED THAT INSPECTION OF THIS BOLT IS NOT REFE RENCE IN INSPECTION SCHEDULE.

CA041014006	CESSNA	CONT		RESERVOIR	CRACKED
10/7/2004	U206E	IO520F		121640719	FUEL CELL

(CAN) COULD SMELL STRONG FUEL ODOR IN COCKPIT AND ALSO NOTED FUEL STAIN ON BELLY OF AIRCRAFT DURING INSPECTION. SUSPECTED RESEVOIR QUICK DRAIN LEAKY BUT FURTHER INVESTIGATION REVEALED A 1 INCH CRACK ON FORWARD LOWER WELD SEAM ON RESEVOIR. RESEVOIR REMOVED, REPAIRED AND

REINSTALLED.

CA041014007	CESSNA	CONT	RESERVOIR	DAMAGED
10/7/2004	U206E	IO520F	121640720	FUEL CELL

(CAN) UPON 1000 HR FUEL SYSTEM INSPECTION AS REQUIRED BY CESSNA, THE FUEL WAS COMPLETELY DRAINED FROM THE AIRCRAFT.UPON REMOVING THE LOWER R/H RESEVOIR QUICK DRAIN,IT WAS REVEALED IT WAS QUITE LOOSE BUT NOT LEAKING. UPON REINSTALLATION OF QUI CK DRAIN VALVE IT COULD NOT BE TORQUED AS THE THREADS WERE COMPLETELY STRIPPED. SUSPECTED QUICK DRAIN WAS OVERTORQUED ON PREVIOUS REMOVAL/INSTALLATION. RESEVOIR WAS REMOVED, REPAIRED AND REINSTALLED.

2005FA0000439	CESSNA	CONT	ADC	MALFUNCTIONED
11/10/2004	U206E	IO520F	962830A1S8	COCKPIT

ALTITUDE WAS 100 FEET OFF. UNIT INSTALLED AS PRAT OF THE FLIGHT SYSTEM, INC EFIS-SV IAW STC NR SA02203AK. (AL05200500175) (K)

CA041014005	CESSNA	CONT	CONNECTING ROD	BROKEN
10/11/2004	U206F	IO520F		NR 2 CYLINDER

(CAN) NR 2 CYLINDER REMOVED DUE TO LOW COMPRESSION. NOTED WRIST PIN BEARING BROKEN AND CONNECTING ROD TIGHTER THAN NORMAL ON CRANKSHAFT. AFTER FURTHER INVESTIGATING, FOUND NR 2 MAIN BEARING LOOSE IN BEARING SADDLE AND WAS ABLE TO MOVE FORE AND AFT INTHE CRANKCASE. ENGINE REMOVED AND SENT TO OVERHAUL FACILITY.

CA041102004	CESSNA	CONT	SEAT BELT	FAILED
11/23/2004	U206F	IO520F	S21994	CABIN

(CAN) DURING AN ACCEPTANCE INSPECTION, SEAT BELTS WERE REMOVED FOR 10 YEAR REWEBBING. BELTS WERE REINSTALLED & TESTED. ACRT RETURNED TO SERVICE & WENT ON ITS FIRST CHARTER, FRONT RT PAX WENT TO PLACE HIS SEAT BELT ON AND BELT HAD COME OUT OF REEL ASSY. PILOTS REEL TESTED FURTHER & IT WAS DETERMINED THE POSSIBILITY OF SAME DEFECT HAPPENING EXISTED. AIRCRAFT REMOVED FROM SERVICE. BELTS WERE SENT BACK TO THE VENDER TO INVESTIGATE. DURING THE INVESTIGATION STAGE IT ALSO FOUNDTHAT SOME PILOTS COULD NOT REACH FUEL SELECTOR DEPENDING ON PILOTS SEAT LOCATION.THE VENDER WILL VERIFY BELT LENGTH. ONE MUST REMEMBER TO TEST ALL SEAT LOCATION FOR APPROPERIATE BELT LENGTH TO ENSURE PILOTS ARE ABLE TO REACH FUEL SELECTOR.

2005FA0000464	CESSNA	CONT	ADAPTER	DEFECTIVE
3/17/2005	U206F	IO520F	643259	STARTER

STARTER ADAPTER WAS REMOVED DUE TO DAMAGE CAUSED DURING A (KICK-BACK). INSPECTION FOUND BEARING RETAINING HOLES THAT HAD BEEN KNURLED AT THE FACTORY, MISALIGNED, AND COATED WITH A GREENISH BEARING RETAINING COMPOUND. THE STARTER ADAPTER WORM DRIVE SHAFT SHOWED SIGNS OF A HEAVY SIDE LOAD. THIS CAUSED THE STARTER ADAPTER TO BIND AND NOT RELEASE. THIS HOUSING HAS AN INSPECTION STAMP OF (TA33) AND A DATE STAMP OF (SEPT 15 2003). (K)

CA040819007	CESSNA	CONT	CRANKCASE	FAILED
8/12/2004	U206G	IO520F	654101A7R	ENGINE

A/C ENG CRANKCASE FAILURE AS A RESULT OF A RECENT FAILURE DESCRIBED IN SDR CA040806006 SUBMITTED 08/6/2004, A VOLUNTARY INSPECTION CARRIED OUT BY OPERATOR AT REQUEST OF OVERHAUL FACILITY. CYLINDERS NR 1 & 3 REMOVED SO THAT NR 2 & 3 INTERMEDIATE BEARING SADDLE COULD BE VIEWED. INSPECTION CONCLUDED THAT MOVEMENT OF BEARINGS HAD OCCURRED & TEAR DOWN OF ENG WOULD BE REQUIRED FOR FURTHER INVESTIGATION. UPON TEAR DOWN, FOUND FRETTING OF CRANKCASE ON NR 2 & NR 3 INTERMEDIATE MAIN BEARING THRU-BOLT PADS.

CA041220005	CESSNA	CONT	METERING VALVE	LEAKING
12/7/2004	U206G	IO520F	629390A8	FUEL INJECT SYS

(CAN) FUEL METERING UNIT ON TCM I0-520 ENGINE HAD FUEL STAINING LINES AND SCREEN INSPECTED ON FAULTS FOUND. COOLING SHROUD REMOVED AND SYSTEM WAS PRESSURIZED. SOURCE OF LEAK WAS

DETERMINEDTO BE FROM A FILLESTER HEAD SCREW IN THE CENTER OF THE DATA PLATE. SCREW WAS LOCKWIRED AND SEALED WITH TCM LEAD SEAL ON THE LOCKWIRE. LOCKWIRE WAS CUT IT WAS FURTHER DETERMINED THAT THE SCREW WAS SHEARED OFF. BROKEN SCREW WAS REMOVED, NEW SCREW INSTALLED WITH EXISTING SEAL WASHERS. SYSTEM WAS AGAIN PRESSURE TESTED NO FURTHER FAULTS FOUND.

CA050318004	CESSNA	CONT	CYLINDER HEAD	CRACKED
3/17/2005	U206G	IO520F	TIST712ACA	ENGINE

(CAN) DURING A 100 HR INSPECTION, CYLINDER NR 4 WAS FOUND TO HAVE A LARGE CRACK FROM THE EXHAUST VALVE TO THE UPPER SPARK PLUG HOLE. CYLINDER ASSY REMOVED AND REPLACED WITH NEW ECI CYLINDER ASSY OF SAME PART NR.

CA041018004	CESSNA	CONT	CYLINDER	CRACKED
9/30/2004	U206G	IO550F	ACE631397	NR 4

(CAN) DURING A 50 HOUR INSPECTION, NR 4 CYLINDER WAS FOUND TO HAVE ZERO COMPRESSION.CLOSER EXAMINATION FOUND CRACKS EXTENDING FROM BOTH SPARK PLUG HOSE INTO THE EXHAUST PORT AND CYLINDER HEAD.A FOLLOW-UP ISPECTION INCLUDING COMPRESSON TEST AND SOAP LEAK TEST WILL BE CONDUCTED TO INSURE CONTINUED AIRWORTHINESS.

CA041018005	CESSNA	CONT	CYLINDER	LEAKING
10/4/2004	U206G	IO550F	ACE631397	NR 5

(CAN) DURING THE FOLLOW-UP INSPECTION, COMPRESSION WAS FOUND WITHIN LIMITS BUT A SOAP LEAK TEST FOUND NR 5 CYLINDER LEAKING.THE CYLINDER ASSY WAS REMOVED WITH NO DEFECTS VISIBLE. THE LEAK SEAMS TO BE FROMBETWEEN THE CYLINDER BARREL AND HEAD WHERE THEY SCREW TOGETHER. THERE IS ANOTHER FOLLOW-UP INSPECTION BOOKED. 6 NEW CYLINDERS TO BE INSTALLED IF ANY PROBLEMS FOUND.

CA041019007	CESSNA	CONT	ROD	WRONG PART
10/8/2004	U206G	IO550F	6320622	OIL GAUGE

(CAN) IMPROPER INSTALLATION OF THE OIL GAUGE ROD TUBE ADAPTER SPIGOT INTO THE CRANKCASE SUCH THAT IT EXTENDS TOO FAR INTO THE CASE ALLOWING THE OIL GAUGE ROD TO PROTRUDE TOO FAR INTO THE OIL SUMP AND CAUSING IT TO MAKE CONTACT WITH THE OIL SUMP. THE CONTACT CAN LEAD TO WEAR, WITH ENGINE VIBRAITON, AND IF PROLONGED COULD EVENTUALLY WEAR COMPLETELY THROUGH THE OIL SUMP RESULTING IN LOSS OF ENGINE OIL WHICH COULD LEAD TO OIL STARVATION AND ENGINE FAILURE.RECOMMENDATION: THE OIL GAUGE ROD, P/N 632062-2, COULD BE DESIGNED SO THAT IT ISONE INCH SHORTER IN OVERALL LENGTH. NOTE: SEVERAL OTHER ENGINE MODELS COULD BE AFFECTED BY THIS IMPROPER INSTALLATION.

2005FA0000423	CESSNA	CONT	CONTACTOR	FAILED
12/17/2004	U206G	TSIO520M	S24432	STARTER

STARTER CONTACTOR DID NOT DISENGAGE AFTER ENGINE START. THIS RESULTED IN FAILURE OF THE STARTER AS WELL. SITUATION DID NOT BECOME APPARENT UNTIL AFTER TAKEOFF. PERHAPS BECAUSE AT HIGH POWER SETTINGS THE ALTERNATOR PRODUCED MAXIMUM POWER AND AT HIGH SPEED THE STARTER MOTOR WOULD DRAW FEWER AMPS THAN AT LOW SPEED, ALLOWING THE BUS VOLTAGE TO RISE AND ILLUMINATE THE LAMP BRIGHTER. MFG HAS BEGUN SUPPLYING A COMPACT, LIGHTWEIGHT STARTER ON NEW ENGINE. THIS AC HAD FACTORY NEW ENGINE INSTALLED 21.7 HOURS PRIOR TO FAILURE. INVESTIGATION INDICATES LIGHTWEIGHT STARTERS HAVE HIGHER CURRENT DRAW THAN LARGER STARTER USED PREVIOUSLY. MFG CONTACTOR CAN NOT HANDLE LOAD. REMOVED AND REPLACED STARTER CONTACTORS. (K)

2005FA0000424	CESSNA	CONT	CONTACTOR	FAILED
12/17/2004	U206G	TSIO520M	S24432	STARTER

STARTER CONTACTOR DID NOT DISENGAGE AFTER ENGINE START. RESULTED IN STARTER FAILURE. SITUATION DID NOT BECOME APPARENT UNTIL AFTER TAKEOFF. STARTER ENGAGED WARNING LIGHT INSTALLED BUT DID NOT INDICATE CLEARLY UNTIL AFTER TAKEOFF. BECAUSE AT HIGH POWER SETTINGS ALTERNATOR PRODUCED MAXIMUM PWR & AT HIGH SPEED STARTER MOTOR WOULD DRAW FEWER AMPS THAN AT LOW SPEED, ALLOWING BUSS VOLTAGE TO RISE AND ILLUMINATE THE LAMP BRIGHTER. MFG HAS BEGUN SUPPLYING COMPACT, LIGHTWEIGHT STARTER ON NEW ENGINES. ENGINE INSTALLED 23.7 HOUR PRIOR. INVESTIGATION

INDICATES LIGHTWEIGHT STARTERS HAVE A HIGH CURRENT DRAW THAN LARGER STARTER. SUSPECT MFG CONTACTOR CANNOT HANDLE LOAD. REMOVED AND REPLACED STARTER CONTACTORS. (K)

2005FA0000483	CHRIS		ATTACH BRACKET	CRACKED
1/19/2005	A1			LT WING

DURING A ROUTINE ANNUAL INSPECTION DISCOVERED THE LEFT LOWER WING REAR SPAR ATTACHMENT AFT FITTING CRACKED. THIS INSPECTION IS REQUIRED EA 50 HOURS BY AD 96-12-03R2 AND MANUFACTURES SERVICE BULLETIN 25. SERVICE BULLETIN 25 INDICATES THE REPAIR PROCEDURE FOR PITTS S2 & S1 SERIES AIRCRAFT. THIS SERVICE BULLETIN AND THE REPAIR PROCEDURES WILL NOT WORK ON THE S1 AIRCRAFT. THE PARTS INDICATED IN SERVICE BULLETIN 25 WILL NOT WORK ON THE S1 AIRCRAFT. CONTACTED AVIAT AIRCRAFT, THAT HAVE NOT BEEN RESPONSIVE TO THE PROBLEM, NEED APPROVED REPAIR PROCEDURE FOR THIS PROBLEM. PHONE 740.494.2554

2005FA0000164	CIRRUS	CONT	LIFTER	CORRODED
11/5/2004	SR22	IO550N	6533877,88	ENGINE

DURING A RECENT MFG SYMPOSIUM, THE PROBLEM OF UNAIRWORTHY LIFTERS IN MFG ENGINES DISCUSSED. MFG ENGINE HAVE BEEN NOT HOLDING UP WELL IN THESE AREAS AND MANY SC`S ARE RECOMMENDING AN INSPECTION OF THE LIFERS DURING SCHEDULED MAINTENANCE. THIS AC WAS UNDERGOING AN ANNUAL INSPECTION AND THE OWNERS AGREED TO HAVE THE LIFTERS CHECKED AS THE WARRANTY PERIOD ENDS THIS MONTH. WITH 308.5 HOURS TSN, WE FOUND 3 LIFTERS SPALLED AND PITTED. IT IS MY EXPERIENCE THAT THE CAUSE FOR THIS IS THE USE OF A MULTI-VISCOSITY OIL SINCE NEW. RECOMMEND STRAIGHT WEIGHT OILS ALWAYS ESPECIALLY IN THESE ENGINES. ALSO RECOMMEND 25 HOUR OIL CHANGES REGARDLESS OF THE USAGE OF THE AIRCRAFT. (EA07200501466)

2005FA0000332	CIRRUS	CONT	EXHAUST PIPE	CRACKED
12/21/2004	SR22	IO550N		ENGINE

AIRCRAFT OWNER SQUAWKED MANIFOLD PRESSURE AT 11 PERCENT. FOUND EXHAUST CRACKED AT NR 5 CYLINDER EXHAUST PORT. CRACK EMINATES FROM REAR OF MOUNTING FLANGE AND SPIRALS DOWN COUNTER CLOCKWISE SEVERAL INCHES FROM THERE.

CA050202006	CIRRUS	CONT	CONTROL UNIT	RESTRICTED
1/31/2005	SR22	IO550N	10146005	ELEVATOR

(CAN) PILOT NOTICED ELEVATOR CONTROL WAS STIFFER THAN USUAL ON APPROACH. UPON LANDING, FOUND THE LT ELEVATOR BALANCE WEIGHT HORN IS RUBBING AGAINST THE HORZIONTAL STABILIZER. FOUND THE ELEVATOR WILL NOT RUB ONCE THE AIRCRAFT IS WARMED UP. THE ELEVATOR TIP FAIRING MOUNTING SCREWS WERE LOOSENED AND THE ELEVATOR HORN WAS REPOSITIONED TO PROVIDE THE NECESSARY CLEARANCE.

CA041018003	CNDAIR	PWA	FRAME	CRACKED
10/15/2004	CL2151A10	CA3	21531036212	FUSELAGE

(CAN) ACRFT IN FOR ITS ANNUAL B-CHECK WHEN A VISUAL INSPECTION OF THE REAR SKI SLOPEAREA REVEALED A CRACK IN THE LT REAR OUTBOARD WING-TO-FUSELAGE FRAME ANGLE AT BL 51.00 FS 434.00.AD CF-1997-07R2 WAS NOT REQUIRED AT THIS TIME BUT THE MX PERSONAL DECIDED TO DO A QUICK VISUAL INSPECTION ANYWAY. CRACK ORIGINATED AT THE TOP OF BRACKET & CONTINUED PASS THE FIRST FASTENER AND MAKING ITS WAY TO THE SECOND. THE REPEAT INSPECTION REQUIREMENTS OF THE AD WERE CARRIED OUT ON NOV. 5, 2002 AT A/F HRS 2163.6 AND WATER DROPS 7516. THE SUBSEQUENT INSPECTION WAS NOT DUE UNTIL A/F HRS 2578.6 OR 9016 WATER DROPS. THE AIRCRAFT NOW HAS AN A/F TIME OF 2331.1 AND WATER DROPS 8147.REPAIRS TO THE AREA WERE CARRIED OUT AS PER THE SRM.

CA050216004	CNDAIR	FUEL TANK	LEAKING
2/16/2005	CL2156B11415	21564075	

(CAN) RECEIVED A COUPLE OF FUEL RUBBER TANKS REPAIRED FROM MFG THAT WE HAVE PROBLEM WITH. EACH TIME THAT WE DO RECEIVE NOW, WE TEST THEM BEFORE THE INSTALLATION ON THE A/C TO MAKE SURE THEY DON'T LEAK. SOMETIMES THEY LEAK FROM THE REPAIR PATCH OR THE JOINT. THIS TIME IS FROM WHAT WE CALL THE (CENT).

CA050125011	CNDAIR	LYC	DOOR	DEFORMED
1/19/2005	CL600*	ALF502*	6003303913	E/E BAY

(CAN) THIS AIRCRAFT WAS INSPECTED, TESTED AND FOUND TO EXHIBIT UNACCEPTABLE NOSE AVIONICS ACCESS DOOR DEFORMATION IN EXTREME COLD CONDITIONS. THE DEGREE OF DOOR CORNER CURLING EXCEEDS THE MFG LIMIT FOR SKIN WAVINESS FOR RVSM CERTIFICATION. THIS CONDITION WAS PREVIOUSLY IDENTIFIED ON AIRCRAFT 144614, (SDR 20050119002).

CA041029002	CNDAIR	LYC	BEARING	FAILED
10/18/2004	CL600*	ALF502L2	SM141038	THURST REVERSER

(CAN) DURING 600 HRS INSPECTION OF NR 1 ENGINE AME NOTICED THAT THE LT THRUST REVERSER STRUT LOWER ATTACHEMENT WAS CHAFING AGAINST BRACE UPPER, AFTER CARRYING OUT AN INVESTIGATION WE NOTICED THAT THE BRACE UPPER BEARING HAD MIGRATED .110 PART SENT FOR REPAIR TO BAS.

CA040804009	CNDAIR	GE	REGULATOR	DEFECTIVE
6/25/2004	CL6002B16	CF343A1	4020T35G04	BLEED AIR SYSTEM

APPROX 1 - 2 MINUTES AFTER ENGINE START, CREW NOTED SMOKE IN THE CABIN. ENGINES AND APU WERE SHUTDOWN AND A/C EVACUATED. SMOKE WAS TRACED TO THE BLEED AIR OF THE RT ENGINE. MX FOUND A DEFECTIVE CARBON SEAL PRESSURE REGULATING VALVE. THE VALVE WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE.

2005FA0000182	CNDAIR	GE	BOMBDR	TRACK	LOOSE
2/22/2005	CL6002B16	CF343B1		600380091	PAX DOOR

TRACK/CHANNELS, 600-380091, ARE U CHANNELS THAT FACE EACH OTHER ALLOWING STRUT, 600-38008-17 AND CAMS, TO MOVE UP AND DOWN INSIDE OF THESE TRACKS. THE TRACKS ARE MANUFACTURED WITH SMALLER SIDES AND POOR ENGAGEMENT/ LOOSE FIT OF THE STRUT/CAMS ALLOW THE CAMS TO LIFT OUT OF THE CHANNELS AND JAMMING THE STRUT. THE END RESULT IS ROD, 600-38003-3 BREAKING RESULTING IN THE PASSENGER DOOR GROUND SUPPORT PAD NOT EXTENDING AND THE DOOR TOUCHING THE GROUND. HAVE BROUGHT THIS TO THE ATTENTION OF MFG 8 YEARS AGO WHEN I HAD THE SAME PROBLEM WITH OUT CL-601, SN 5134. THEY FAILED TO CORRECT THE PROBLEM AND IT IS NOW AN ISSUE ON OUR CL-604.

CA050112007	CNDAIR		SENSOR	SEPARATED
1/12/2005	CL6002B19		7546911	CABIN AIR

(CAN) DURING ROUTINE PERIODIC INSPECTION, DUCT WAS DISSASEMBLED AND TEMP PROBE SCREEN WAS FOUND TRAPPED IN DUCT CHECK VALVE, HOLDING IT OPEN. LOOSE SCREEN REMOVED. VALVE INSPECTED AND FOUND SERVICEABLE. UPSTREAM INVESTIGATION OF MOST LIKELY SOURCE SHOWS PART CORRECTLY INSTALLED. SUSPECT PRIOR FAILURE AND SUBSEQUENT PART REPLACEMENT. NO FURTHER ACTION TAKEN.

CA050110002	CNDAIR	GE	LANDING GEAR	COLLAPSED
1/6/2005	CL6002B19	CF343A1	17002110	RIGHT

(CAN) FOLLOWING A REPOSITIONING FLIGHT (FERRY FLIGHT WITH NO PAX), THE RT MLG COLLAPSED ON LANDING. NOBODY WAS INJURED DURING THE INCIDENT. THE INVESTIGATION IS STILL IN PROGRESS

CA041224001	CNDAIR	GE	WINDSHIELD	CRACKED
12/21/2004	CL6002B19	CF343A1	NP1393226	COCKPIT

(CAN) RECEIVED A REPORT WHICH WE FEEL IS A REPORTABLE EVENT. FLIGHTDECK RT SIDE WINDOW CRACKED DURING APPROACH. WINDOW REPLACED IN MUNICH, AND THEN RETURNED TO SERVICE.

CA041224003	CNDAIR	GE	BULKHEAD	CRACKED
11/4/2004	CL6002B19	CF343A1		FUSELAGE

(CAN) MAINTENANCE FOUND TWO CRACKS ON THE 'SEMI-PRESSURE BULKHEAD' (FS559) NEAR THE AFT AILERON QUADRANT. REPAIR WAS PERFORMED IN ACCORDANCE WITH REPAIR ENGINEERING ORDER (REO) 601R-53-41-256. SUBSEQUENTLY CRACKS HAVE BEEN FOUND ON TWO ADDITIONAL A/C: 06-DEC-04. A/C 7025 (25185FH, 20290FC) REO 601R-53-41-263 20-DEC-04. A/C 7004 (27332FH, 21860FC) REO 601R-53-41-267.

CA041010001	CNDAIR	GE	WINDSHIELD	CRACKED
10/7/2004	CL6002B19	CF343A1	NP1393211	COCKPIT

(CAN) IN CRUISE AT FL360 AND 0.74 MACH, THE PILOT'S WINDSHIELD CRACKED. DIVERTED FOR MAINTENANCE. WINDSHIELD REPLACED, AIRCRAFT RETURNED TO SERVICE.

CA041217001	CNDAIR	GE	PROXIMITY SENSOR	MALFUNCTIONED
12/16/2004	CL6002B19	CF343A1	864808	MLG

(CAN) AFTER GEAR UP SELECTION PROX SYS FAULT STATUS MESSAGE APPEARED. THE GEAR WAS RE-CYCLED AND THE MESSAGE PERSISTED. MAINTENANCE CARRIED OUT PSEU BITE CHECK AND FOUND A06 FAIL AND NVRAM FAIL .THE PSEU WAS REPLACED AND THE SYSTEM TESTED SERVICEABLE.

CA041217002	CNDAIR	GE	SELECTOR VALVE	MALFUNCTIONED
12/13/2004	CL6002B19	CF343B1	555406	MLG

(CAN) DURING LANDING GEAR EXTENSION, NOSE GEAR TOOK 3-4 TIMES LONGER THAN NORMAL TO EXTEND AND LOCK. MAINTENANCE REPLACED THE NOSE LANDING GEAR SELECTOR VALVE AND THE SYSTEM TESTED SERVICEABLE.

CA041018001	CNDAIR	GE	WINDSHIELD	CRACKED
10/17/2004	CL6002B19	CF343B1	601R3303310	COCKPIT

(CAN) THE CREW REPORTED ELECTRICAL ARCING FROM THE RT WINDSHIELD DURING APPROACH WHILE THE WINDSHIELD HEAT WAS SELECTED TO LOW . UPON INSPECTION THE WINDSHIELD WAS FOUND CRACKED AND CONSEQUENTLY REPLACED .PLEASE NOTE THE AIRWORTHINESS DIRECTIVE CF-2001-35R1 WAS COMPLIED WITH ON 26 OCTOBER 2002 AND SB601R-56-004 WAS COMPLIED WITH ON APRIL 10 2004 .

CA041103002	CNDAIR	GE	STATOR	OPEN
11/1/2004	CL6002B19	CF343B1		ALTERNATOR

(CAN) WHILE IN THE CLIMB, CREW REPORTED AN UNCOMMANDED RT ENGINE OVERSPEED. AIRCRAFT RETURNED TO DEPARTURE STATION. TROUBLESHOOTING TRACED FAULT TO AN OPEN CIRCUIT IN THE RT ENGINE STATOR-ALTERNATOR. STATOR-ALTERNATOR REPLACED. ENGINE OVERSPEED INSPECTIONS COMPLETED SATISFACTORY. IPC REF 73-21-07-01-040A.

CA041031001	CNDAIR	GE	PUMP	LEAKING
10/26/2004	CL6002B19	CF343B1	6078TP04	ENGINE FUEL

(CAN) DURING SCHEDULED CHECKS ON ENGINE, WE FOUND FUEL LEAK COMING FROM 'MAIN FUEL PUMP INLET PORT BODY' OF RT ENGINE. LEAK WAS DETECTED ACTIVATING THE FUEL BOSST PUMP. LEAK CAN BE DESCRIBED AS FOLLOW: CAPILLARY LEAK, LEAK JET ABOUT 3 INCHES LONG VAPOURIZING AT THE END. PART WAS REPLACED A/C IS BACK IN SERVICE.

CA040803010	CNDAIR	GE	FRAME	CRACKED
7/23/2004	CL6002B19	CF343B1		FUSELAGE

DURING INSPECTION AS PER AD CF-2003-12, MAINTENANCE FOUND CRACKS IN THE LT AND RT FRAME AND REINFORCING ANGLE AT STATION FS 640 BETWEEN STRINGER 9 AND STRINGER 12. REPAIR WORK IS CURRENTLY IN PROGRESS, AND SDR WILL BE UPDATED UPON COMPLETION OF REPAIR. AIRCRAFT HOURS WERE 11985 AIRCRAFT CYCLES WERE 9553

CA050215008	CNDAIR	GE	BOLT	SEIZED
2/9/2005	CL6002B19	CF343B1	NAS620754D	PAX DOOR

(CAN) ON CLIMB OUT, CREW RECEIVED A (PAX DOOR LATCH) MESSAGE, AND THEN A (PASSENGER DOOR WARNING MESSAGE). CREW FOLLOWED QRH PROCEDURES AND COMPLETED AN UNEVENTFUL OVERWEIGHT LANDING. TROUBLESHOOTING FOUND BOLT P/N NAS6207-54D SEIZED IN BUSHING P/N NAS74A7E302P AS PART OF PASSENGER DOOR MID PIVOT ASSY. ALSO FOUND UPPER PIVOT ASSY 601R38383-1 VERY STIFF. IPC 52-11-02 FIG 2. BOTH FITTINGS AND ASSOCIATED HARDWARE REPLACED. DOOR RIGGED, FUNCTION TESTED AND

RETURNED TO SERVICE.

CA041226002	CNDAIR	GE	SWITCH	DEFECTIVE
12/21/2004	CL6002B19	CF343B1	1EN2893	THRUST REVERSER

(CAN) RT THRUST REVERSER UNLOCKED MESSAGE IN CLIMB. PROCEDURE ACCORDING QRH PERFORMED. RT ENGINE SHUTDOWN DUE TO THRUST LEVER/THRUST SPLIT UP TO 9 PERCENT IN LEVEL FLT AT 4000 FT. RT REVERSER FOUND STOWED. DEACTIVATED ACCORDING TO MEL PROCEDURES. RESISTANCE CHECK OF THE FOLLOWING SWITCHES PERFORMED: S33EZ, S34EZ, S32EZ, PDU FLEX SHAFT LOCK SWITCH AND PDU BRAKE SWITCH. RESISTANCE CHECK PERFORMED. FOUND AT THROTTLE LOCK OUT SWITCH, ONE INTERNAL SWITCH STICKS FROM TIME TO TIME. FOUND AT DEPLOYED SWITCH, WIRING CHAFED AT CARRIER TUBE. THROTTLE LOCKOUT SWITCH (S33EZ) PN 1EN289-3 AND DEPLOYED SWITCH (S32EZ) PN 1EN61-6 REPLACED.

CA041223006	CNDAIR	GE	WINDSHIELD	CRACKED
12/21/2004	CL6002B19	CF343B1	NP13932110	COCKPIT

(CAN) RT WINDSHIELD CRACKED DURING CRUISE AT FL330. A/C DIVERTED WHERE THE WINDSHIELD WAS REPLACED.

CA050114001	CNDAIR	GE	BALLAST	BURNED
1/6/2005	CL6002B19	CF343B1	BR900022	LIGHT

(CAN) BURNING SMELL PRESENT IN CABIN DURING TURNAROUND. FOUND TOILET LIGHTS NOT WORKING AND SMELL CAUSED BY TOILET BALLAST UNIT. BALLAST UNIT REPLACED AND THE AIRCRAFT RETURNED TO SERVICE.

CA050114002	CNDAIR	GE	ENGINE	MALFUNCTIONED
1/9/2005	CL6002B19	CF343B1		RIGHT

(CAN) ON INITIAL CLIMB, HEARD A SUDDEN AND LOUD NOISE BETWEEN 4000 AND 4500 FT AND THE RT ENGINE SHUTDOWN ITSELF IN FLT. AFTER ASSESSING THE SITUATION AND FOLLOWING QRH AND MEMORY ITEMS, THE CREW NOTIFIED THE FLT ATTENDANT, PAX AND MX OF THE SITUATION. AN EMERGENCY WAS DECLARED AND THE CREW PROCEEDED TO DIVERT BACK TO PLACE OF DEPARTURE. AN UNEVENTFUL LANDING FOLLOWED. MX REPLACED THE RT ENGINE.

CA050209001	CNDAIR	GE	CROSSBEAM	CORRODED
2/2/2005	CL6002C10	CF348C1	CC670341757	FUSELAGE

(CAN) CORROSION FOUND AT FS280 (MAINLY RT SECTION) AND CRACKS AT LBL/RBL 9.0 AT FLOORBEAM ATTACHMENT FITTING. REPAIR TO BE PERFORMED USING GENERIC REPAIR ENGINEERING ORDERS (GEN REOS) 670-53-11-045, -046,-047, -052 AND IS MODSUM IS670531100026.

CA050209002	CNDAIR	GE	CROSSBEAM	CORRODED
1/5/2005	CL6002C10	CF348C1	CC670341757	FUSELAGE

(CAN) DURING ONGOING C-CHECK OF A/C 5 CRACKS AND SLIGHT CORROSION WERE FOUND ON FS 280.0 CROSSBEAM P/N CC670-34175-7 AND ANGLE P/N CC670-33292-9 AT LBL 9.0 AND RBL 9.0. NOTE: REPAIR TO BE PERFORMED WITH ACOMBINATION OF GEN REOS 670-53-11-045, -046, -047, -052 AND IS MODSUM IS670531100026.

CA041224004	CNDAIR	GE	DOOR	SEPARATED
12/3/2004	CL6002C10	CF348C1	CC67010520	RT MLG

(CAN) WHILE CLIMBING THRU 16,000 FT, THE FLT CREW HEARD A STRANGE NOISE. ALL COCKPIT INDICATIONS WERE NORMAL. UPON POST FLT INSPECTION, MAINTENANCE FOUND THE RT MAIN GEAR DOOR MISSING.

CA041224005	CNDAIR	GE	DOOR	SEPARATED
11/20/2004	CL6002C10	CF348C1	CC67010520	RT MLG

(CAN) FOLLOWING DEPARTURE, FLIGHT CREW HEARD A BUMP. POST FLT INSPECTION REVEALED THAT THE RT INBOARD MLG DOOR WAS MISSING. IN ADDITION IT WAS FOUND THAT THE RT IB FLAP SUFFERED SEVERAL DEEP GOUGES, THE RT PROXIMITY HARNESS CONDUIT WAS DENTED, THE RT OB MLG DOOR WAS DAMAGED, AND THERE WAS A SCRATCH IN THE BOTTOM OF THE WING ABOVE THE INBOARD MLG DOOR. A NEW DOOR WAS

INSTALLED, THE AIRCRAFT WAS REPAIRED AND RETURNED TO SERVICE.

CA041224002	CNDAIR	GE	EJECTOR	CRACKED
12/20/2004	CL6002C10	CF348C1	T99A38603	ENGINE

(CAN) OVERNIGHT, APPROX 1200 LBS OF FUEL TRANSFERED INTO THE CENTER TANK. THE FLT HAD REPORTED AN INCREASE OF 120 LBS IN 10 MINUTES, HOWEVER IT WAS NOT DETERMINED IF THE FUEL TRANSFER WAS NOTED ON GROUND OR IN FLT BY THE CREW. MAINTENANCE FOUND THE LT MAIN EJECTOR CRACKED.

CA050202001	CNDAIR	GE	ACM	SEIZED
2/1/2005	CL6002C10	CF348C1	GG67095009	RT A/C PACK

(CAN) RT PACK AUTOFAIL MESSAGE ON EICAS WITH RT PACK FAILING AFTER START OF ENGINE NR1. MANUAL TEMP SELECTED WHICH RESULTED WITH THE LAV SMOKE DETECTOR ACTIVATING AND SMOKE ENTERING THE AFT CABIN. PACK TEMP OBSERVED AT 98 DEGREES JUST BEFORE AUTOFAIL. THE AIR CYCLE MACHINE (ACM) WAS REPLACED.

CA050215014	CNDAIR	GE	WINDOW	CRACKED
2/12/2005	CL6002C10	CF348C1	NP1393226	COCKPIT

(CAN) COPILOT SIDE WINDOW CRACKED. WINDOW REPLACED IAW AMM.

CA031127012	CNDAIR	GE	TORQUE SHAFT	DISCONNECTED
11/19/2003	CL6002C10	CF348C1	5912577	TE FLAPS

(CAN) THIS AIRCRAFT WAS ON ITS FIRST FLIGHT AFTER A C-CHECK HAD BEEN CARRIED OUT. THE FLAP SYSTEM HAD EXPERIENCED SEVERAL PROBLEMS AFTER THE CHECK AND PRIOR TO THIS FLIGHT. TORQUE SHAFTS AND BPSUS HAD BEEN REPLACED DURING THE C-CHECK AND THERE HAD BEEN MECHANICAL MIS-RIG PROBLEMS WHEN RETURNING TO SERVICEABILITY. SUBSEQUENT TO THE FAILURE INBOUND AIRPORT, IT WAS DISCOVERED THAT THE LT WING TORQUE SHAFT HAD BECOME DISCONNECTED FROM THE ADJACENT SPLINE DRIVE. WHEN THE SHAFT HAD BEEN INSTALLED, THE BOLT HAD NOT BEEN SECURED THROUGH THE SPLINE DRIVE. THE SHAFT WAS SECURED PROPERLY, SYSTEM CHECKED AND THE AIRCRAFT RETURNED TO SERVICE.

CA041010002	CNDAIR	GE	COMPRESSOR	STALLED
10/6/2004	CL6002C10	CF348C1		RT ENGINE

(CAN) DURING TAKE-OFF, THE RT ENGINE EXPERIENCED COMPRESSOR STALLS. MAINTENANCE BORESCOPED THE RT ENGINE AND FOUND FOD DAMAGE IN THE COMPRESSOR SECTION. ENGINE WAS THEN REPLACED AND THE AIRCRAFT RETURNED TO SERVICE.

CA041010003	CNDAIR	GE	VALVE	LEAKING
10/6/2004	CL6002C10	CF348C1	533415	DOWNLOCK

(CAN) CREW REPORTED HYD 2 LOW PRESS, NR 2 EDP FAIL, IB AND OB SPOILERS FAIL, NR 2 HYD QUANTITY READING ZERO. AIRCRAFT DIVERTED, DUE TO WEATHER. MAINTENANCE FOUND THE MLG DOWNLOCK ASSIST VALVE LEAKING. MAINTENANCE REPLACED THE DOWNLOCK ASSIST VALVE, THE SYSTEM WAS TESTED AND THE AIRCRAFT WAS DECLARED SERVICEABLE. NOTE: THE BYPASS VALVE (P/N 53342-3) WAS ALSO REPLACED AS A PRECAUTION DUE A MINOR LEAK.

CA041210004	CNDAIR	GE	ADAPTER	FAILED
12/10/2004	CL6002C10	CF348C1	MS276125	BRAKE

(CAN) AFTER INSTALLING ALL FOUR BRAKES, WE BLED THE SYSTEM. WHILE DOING THE NR 2 BRAKE BLEEDING, THE NR 1 BRAKE BLEED PORT ADAPTER SHEARED AND BECAUSE OF THE HYDRAULIC PRESSURE THE ADAPTER HIT OUTBOARD MLG DOOR. HYDRAULIC SYSTEM PRESSURE WAS IMMEDIATLY STOPPED.

CA050125009	CNDAIR		ACCESS DOOR	DISTORTED
1/19/2005	CL6012A12		6003303913	E/E BAY

(CAN) THIS AIRCRAFT WAS INSPECTED AND TESTED AND FOUND TO EXHIBIT UNACCEPTABLE NOSE AVIONICS ACCESS DOOR DEFORMATION IN EXTREME COLD CONDITIONS. THE DEGREE OF DOOR CORNER CURLING EXCEEDS THE MANUFACTURERS LIMIT FOR SKIN WAVINESS FOR RVSM CERTIFICATION. THIS CONDITION WAS

PREVIOUSLY IDENTIFIED (SDR 20050119002).

CA050125008	CNDAIR	GE	ACCESS DOOR	DISTORTED
1/19/2005	CL6012A12	CF341A	6003303913	E/E BAY

(CAN) THIS AIRCRAFT WAS INSPECTED AND TESTED AND FOUND TO EXHIBIT UNACCEPTABLE NOSE AVIONICS ACCESS DOOR DEFORMATION IN EXTREME COLD CONDITIONS. THE DEGREE OF DOOR CORNER CURLING EXCEEDS THE MANUFACTURERS LIMITS FOR SKIN WAVINESS FOR RVSM CERTIFICATION. (THIS CONDITION WAS PREVIOUSLY IDENTIFIED SDR 20050119002)

CA050215012	CNDAIR	GE	VICKERS	CONNECTOR	LOOSE
2/10/2005	CL6012A12	CF341A			SELECTOR VALVE

(CAN) ON APPROACH, NLG WOULD NOT DEPLOY UPON NORMAL SELECTION OF LANDING GEAR DOWN. EMER EXTENSION WAS COMPLETED, AC LANDED WITHOUT FURTHER INCIDENT, FOUND THAT (NLG) SELECTOR VALVE WAS AT FAULT. PINS IN CONNECTION TO EXTEND SOLENOID WHICH CONTROLS DOWN SELECTOR VALVE WAS CHANGED OUT, AC WAS RETURNED TO SERVICE. CHANGING NLG SELECTOR VALVE ALSO RECTIFIED PROBLEM WITH NOSE WHEEL STEERING SYS. AC HAD BEEN OPERATING ON A MEL FOR STEERING SYS. NLG SELECTOR VALVE FEEDS HYD PRESSURE TO ARMING VALVE OF STEERING SYSTEM ONLY WHEN DOWN POSITION. TO APPLY THIS MEL THERE IS MAINT PROCEDURE WHICH SHOULD IDENTIFY FAULTY NLG SELECTOR VALVE, NOT ALLOW THE MEL. DUE TO INTERMITTENT NATURE OF FAULT PROCEDURE WAS CARRIED OUT.

CA041115005	CNDAIR		WIRE HARNESS	DAMAGED
11/11/2004	CL6013A			INSTRUMENT PANEL

(CAN) PILOT'S EFIS EADI WIRE BUNDLE CHAFING 12 INCHES FROM CONNECTOR 1P3FH. WIRE BUNDLE CONSISTS OF SEVERAL SHIELDED TWISTED PAIR. SOME WIRE FOUND TO HAVE ABRADED INTO CENTER CONDUCTOR. WIRES FH215D24, FH216D24, 1FH108A24, 1FH109A24, FH230D24, FH231D24, 1FH116A24, FH117A24, 1FH275A24, AND 1FH276A24 REPAIRED BY SPLICING IAW WM. THERE WERE NO PREVIOUS FAULT INDICATION, BUT WIRING COMPROMISED TO THE EXTENT THAT FAILURE WAS FORTHCOMING. IT WAS DETERMINED THAT WIRING WAS RUBBING ON EHSI CONNECTOR WHICH IS INSTALLED DIRECTLY BELOW EADI. THERE WAS NO WIRE PROCTION SLEEVE INSTALLED AT THE DAMAGED AREA. CO-PILOTS EADI AND EHSI WIRING INSPECTED AND FOUND ONLY MINOR CHAFING, WITH THE POTENTIAL TO DEGRADE OVER TIME.

CA041223003	CNDAIR	GE	ENGINE	MALFUNCTIONED
12/23/2004	CL6013A	CF343A		LEFT

(CAN) UNCOMMANDDED ACCELERATION ON THE LT ENGINE ON TAKE OFF AROUND + 7 PERCENT ABOVE RETURN TO NORMAL 40 SECONDS LATER.

CA050127004	CNDAIR	GE	LAMP	BURNED
1/26/2005	CL604	CF343B1	AL1235T490	GALLEY LIGHT

(CAN) UPON LANDING THE CREW WHILE WORKING IN THE GALLEY AREA CLEANING UP NOTICED A BURNING ODOR. AFTER OPENING A SLIDING DOOR IN THE GALLEY THE FUMES BECAME STRONGER. MAINTENANCE REMOVED THE LIGHT COVER AND FOUND THE END OF THE BULB HAD BECOME HOT AND DISCOLORED. NO SMOKE WAS SEEN DURING THE PROBLEM. THE BULB DOES HAVE A MELT SPOT ON THE GLASS THAT MAY BE FROM MANUFACTURING BUT AM UNSURE. CHECKED POWER SUPPLY AND INSTALLED NEW LAMP, AND SYSTEM OPERATED NORMALY WITH NO FURTHER PROBLEMS.

CA050322004	CNDAIR	GE		ANTI-ICE VALVE	CLOSED
3/12/2005	CL604	CF343B1	601970977	601970977	NR 2 ENGINE

(CAN) IN CRUISE ENGINE ANTI-ICE WAS SELECTED ON THE NR 2 ENGINE BUT VALVE WOULD NOT OPEN. UPON RETURNING TO BASE VALVE WAS REPLACED AND TESTED FUNCTIONAL.

CA050121005	CONAER	LYC	FITTING	CRACKED
11/25/2004	LA4	O360A1A	2220021	HORIZONTAL STAB

(CAN) DURING ANNUAL INSP, IT WAS NOTICED THAT AC DID NOT COMPLY WITH REQUIREMENTS OF AD98-10-12 WITH REF TO SB78 HORIZONTAL STABILIZER INSP AND REWORK. AD98-10-12 WAS SIGNED OUT IN THE TECH RECORDS ON SEPT 1,1998 AT 1683.22 TT. REMOVAL OF FITTINGS REVEALED P/N 2-2200-21 LT FITTING TO BE

CRACKED. HAVE HAD SEVERAL INSTANCES WHERE AD98-10-12 HAD BEEN SIGNED OUT WHILE NOT MEETING THE REQUIREMENTS OF THE AD AND SB. FAILURE OF THE HORIZONTAL STABILIZER FITTINGS IS IMMINENT IF THESE CRACKS ARE LEFT UNDETECTED. RECOMMEND MAINTAINERS OF LAKE AC REEVALUATE THE REQUIREMENTS OF AD98-10-12 AND SB78 AND MAKE SURE THEIR AC MEETS THESE REQUIREMENTS BY ENSURING THAT SB78 WAS CARRIED OUT CORRECTLY.

CA050117006	CVAC	ALLSN		AXLE	FAILED
1/15/2005	340CVAC	501D13D		528039	NR 1 MLG

(CAN) UPON TAXI TO PARKING, GROUND CREWS NOTICED THE NR 1 MAIN WHEEL WAS MISSING. UPON FURTHER INVESTIGATION, IT WAS DISCOVERED THAT THE NR 1 AXLE HAD SHEARED OFF, ALLOWING THE WHEEL TO DEPART THE A/C. THE WHEEL WAS FOUND JUST OFF OF THE TAXIWAY STILL ATTACHED TO THE BROKEN PIECE OF AXLE. THE CREW WAS UNAWARE OF A PROBLEM UNTIL THEY SHUTDOWN THE AIRCRAFT AND DEPLANED. THE LOWER SHOCK STRUT ASSEMBLY WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE.

CA041222020	CVAC	ALLSN		HEATER	MALFUNCTIONED
12/18/2004	340CVAC	501D13D			CABIN/COCKPIT

(CAN) ON CLIMB OUT, THE CREW EXPERIENCED MULTIPLE AVIONICS FAILIERS, INCLUDING BOTH COMMS, BOTH NAVS, BOTH TRANSPONDERS, AN ADF, AND AN RMI. THE A/C RETURNED TO BASE WITHOUT INCIDENT. THE CREW HAD COMMENTED THAT THE COCKPIT WAS VERY WARM PRIOR TO DEPARTURE. MAINTENANCE DISCOVERED THAT SOME ANTENNA CABLES LEADING FROM THE COCKPIT APPEARED TO HAVE BEEN DAMAGED DUE TO OVERHEATING. IT WAS FURTHER FOUND THAT THE HERMAN NELSON USED IN THE PRE-HEATING OF THE A/C HAD A DEFECTIVE THERMOSTAT THAT RESULTED IN UNCONTROLLED FULL HEAT OUTPUT. THE HEATER WAS SENT FOR REPAIR. MAINTENANCE REPLACED 5 ANTENNA COAX CABLES, THE NR 2 COMM TRANSCEIVER, AND THE ADF RECEIVER. THE A/C WAS RETURNED TO SERVICE.

2005FA0000344	CVAC	ALLSN		WINDOW	BLEW OUT
2/22/2005	340CVAC	501D22		3403110307	COCKPIT

DURING CRUISE FLIGHT AT FL230, THE FO SIDE WINDOW BLEW OUT; AT WHICH TIME, AN EMERGENCY DESCENT WAS EXECUTED TO AN UNEVENT LANDING. (K)

CA040830011	DHAV	PWA		GENERATOR	FAILED
8/6/2004	DHC2*	R985AN14B		1381	

(CAN) AFTER LANDING PILOT NOTICED VOLTAGE READING WAS AT 0. GENERATOR WAS REPLACED ANDAIRCRAFT WAS RETURNED TO SERVICE.

CA040830012	DHAV	PWA		PISTON	CRACKED
8/15/2004	DHC2*	R985AN14B		27056	ENGINE

(CAN) WHEN CARRYING OUT COMPRESSION TEST #3 CYLINDER WAS FOUND TO HAVE LOW COMPRESSION. #3 CYLINDER WAS REMOVED AND PISTON WAS FOUND CRACKED. SERVICEABLE PISTON AND CYLINDER WERE INSTALLED AND AIRCRAFT RETURNED TO SERVICE.

CA040915007	DHAV	PWA	DHAV	EXHAUST STACK	BULGED
8/6/2004	DHC2*	R985AN14B		576	CABIN HEATER

(CAN) UNIT IS CALLED A COFFEE CAN TYPE CABIN HEATER, CRACK ONLY VISIBLE WHEN THE UNIT WAS REMOVED FROM THE AIRCRAFT EXHAUST SYSTEM (C2EE249). THE DEFECT WAS NOTED DIRECTLY BEHIND THE TRIANGULAR AIR DEFLECTOR AT THE AIR INLET TO THE CABIN HEATER. THE CRACK WAS NOT VISIBLE WHILE THE EXTERNAL HEAT SHROUD WAS REMOVED FOR INSPECTION(CF-90-03-R2).I RECOMMEND A DETAILED INTERNAL INSPECTION OF THE EXHAUST STACK FOR FUTURE INSPECTIONS OF THIS STYLE OF DHC2 CABIN HEATER.

CA050228005	DHAV	PWA	EDOXXXXXXXXX	STRUT	CORRODED
2/18/2005	DHC2*	R985AN14B		58S923	RT FLOAT

(CAN) DURING ANNUAL INSPECTION AND FLOAT REMOVAL, THE FWD RT FLOAT STRUT WAS FOUND TO HAVE LEVEL 2-3 CORROSION ON THE INSIDE OF THE STRUT. DUE TO THE FACT THAT ALL OTHER STRUTS WERE IN EXCELLENT CONDITION LEADS US TO BELIEVE THAT THIS STRUT WAS INSTALLED WITHOUT ANY CORROSION

PROOFING BEING APPLIED. TIME IN SERVICE 1352.8 HRS. AIRCRAFT OPERATED IN A CORROSIVE ENVIRONMENT.

CA041221007	DHAV			WINDOW POST	CORRODED
12/10/2004	DHC3				COCKPIT

(CAN) DURING AN UNSCHEDULED INSPECTION OF WINDSHIELD POST AT BOTH LT AND RT SIDES SEVERE CORROSION WAS FOUND. THE LT POST WAS CORRODED THROUGH IN AREAS WITH SEVERE CORROSION ALTHOUGH IT HAD NOT GONE THROUGH.THIS FINDING IS ALSO DESCRIBED IN DEHAVILLAND SB 3/29.

CA041210002	DHAV	PWA		LATCH	INOPERATIVE
12/9/2004	DHC3	PT6A34		6000	CABIN

(CAN) NEW PART, DISCOVERED AT INSTALLATION. DOES NOT LATCH. THE SPRING WHICH POSITIVELY PUSHES THE LATCH TO THE LOCK POSITION IS MISSING.

CA040813005	DHAV	PWA		ARM	MISSING
8/13/2004	DHC3	PT6A34			RUDDER TRIM

(CAN) THE AIRCRAFT WAS UNDERGOING A GENERAL INSPECTION MAINTANCE OBSERVED THE VIKING AIR FLUTTER PREVENTION MODIFICATION RUDDER TRIM TAB ARM WAS MISSING THE AIRCRAFT HAD BEEN INSPECETED SOME 50.0 HOURS EARLER WITH NO DEFECTS NOTED

CA050321009	DHAV	PWA		COMBUSTION LINER	CRACKED
3/19/2005	DHC3	PT6A34		310926302	ENGINE

(CAN) 3 INCH BURN THROUGH INNER LINER IN COMBUSTION AREA. ONE SMALL PINHOLE THROUGH PRIMARY SHROUD OR CAP. THE CAP ON THE AFT FACE OF THE UNIT HAD CRACKED ABOUT 120 DEGREES AROUND THE CIRCUMFERENCE. THE BURN THROUGH WAS VISIBLE WITH THE BOROSCOPE INSPECTION HOWEVER THE CRACK ON THE AFT FACE WAS ONLY VISIBLE WITH THE LED REMOVED. SUSPECT THAT A BAD FUEL NOZZLE WAS THE CAUSE OF THE BURN THROUGH. HOT GASES ENTERING THE VOID BETWEEN THE PRIMARY SHROUD/CAP THROUGH THE BURN HOLE IN THE INNER LINER MAY HAVE BEEN RESPONSIBLE FOR THE CRACKING.

CA050208004	DHAV	PWA		CABLE	BROKEN
2/4/2005	DHC3	PT6A34		C3UF609	WATER RUDDER

(CAN) CABLE BROKE IN THE FORWARD BAY WHERE IT CHANGES DIRECTION. ADDITIONAL NOTE, INSPECTION IN THIS AREA IS ONLY POSSIBLE WITH MIRROR.

CA040915005	DHAV	PWA		CYLINDER	CRACKED
9/15/2004	DHC3	R1340AN1		399359	ENGINE

(CAN) CYLINDER EXHAUST VALVE EAR BROKEN OFF. CRACK INITIATED FROM THE ROCKER SHAFT BUSHING AREA AND CRACKED AROUND TO OPPOSITE SIDE. COMPLETE TOP CAME OFF FROM BUSHING TO BUSHING.

CA040916005	DHAV	PWA	PWA	EXHAUST VALVE	DESTROYED
9/2/2004	DHC3	S3H1G		71167	CYLINDER

(CAN) ENGINE RAN ROUGH AND SMOKING IN FLIGHT - LANDED ON LAKE - INSPECTION REVEALED EXHAUST VALVE FAILURE AND RESULTED IN SEVERE PISTON DAMAGE. CYLIDER REPLACED AND AIRCRAFT RETURNED TO MAIN BASE.

CA040916006	DHAV	PWA		ENGINE	FAILED
9/4/2004	DHC3	S3H1G			

(CAN) FOLLOWING INSPECTION AND REPAIRS AS A RESULT OF EXHAUST VALVE FAILURE AIRCRAFT TAXIED ON WATER FOR TAKEOFF AND OIL PRESSURE DROPPED BELOW LIMITS. TAKEOFF ABORTED AND ENGINE REMOVED.

CA041222002	DHAV		DHAV	FITTING	CRACKED
12/14/2004	DHC4			C4BM13583	HINGE ARM

(CAN) CARGO DOOR PN C4B1024-5. CRACKS FOUND ON AFT LT AND RT HINGE ARM FITTING ASSEMBLY PN

C4BM1358-3. THESE CRACKS WERE ON OUTBOARD FLANGE AROUNG TOP AND BOTTOM ATTACH HOLES.

CA041104009	DHAV	PWA	SWITCH	FAILED
10/26/2004	DHC6100	PT6A20	MS3505923	GENERATOR

(CAN) WHILE TROUBLESHOOTING A RECURRENT DC GENERATION SNAG, THE GENERATOR BUSS-TIE SWITCH WAS FOUND TO BE FAILING INTERMITTENTLY. THE SWITCH WAS REPLACED AND THE SNAG CLEARED. THIS SWITCH IS NOT A TRACKABLE ITEM AND THERE ARE NO EXISTING RECORDS OF IT EVER HAVING BEEN CHANGED. TTAF29,120.9TCAF50,033

CA050207001	DHAV	PWA	TUBE	CORRODED
2/5/2005	DHC6100	PT6A20	C6PF10761	FUEL SYSTEM

(CAN) INVESTIGATION OF A (FUEL SMELL IN THE CABIN) AND A MINOR EXTERNAL FUEL LEAK REVEALED THAT WELDED FUEL TUBE ASSY BETWEEN FUEL TANK AND FLEX HOSE TO THE WING STRUT WAS LEAKING. REMOVAL OF ADEL CLAMP REVEALED CORROSION PITS UNDERNEATH WITH ASSOCIATED FUEL SEEPAGE. INVESTIGATION INTO OPPOSITE SIDE TUBE REVEALED SIMILAR CONDITION, BUT CORROSION WAS NOT ADVANCED ENOUGH TO CAUSE A LEAK. BOTH TUBE ASSYS WERE REPLACED AND AC RETURNED TO SERVICE. TIMES AND CYCLES ARE NOT MAINTAINED ON THESE ITEMS. AC HAS FLOWN 3 YEARS SINCE A COMPLETE CORROSION CHECK, AND OPERATES EXCLUSIVELY IN A CORROSIVE ENVIRONMENT.

CA050323010	DHAV	PWA	BRACKET	CORRODED
3/21/2005	DHC6100	PT6A20	C6CF10221	RUDDER

(CAN) DURING THE FIVE YEAR CORROSION CHECK, BOTH RUDDER TORQUE TUBE ATTACH BRACKETS WERE FOUND TO BE HEAVILY RUSTED FROM THE INSIDE. THERE WAS NO EVIDENCE OF CORROSION PROOFING HAVING BEEN INSTALLED ON THE INSIDE OF THE BRACKETS. AIRCRAFT IS OPERATED IN A CORROSIVE ENVIRONMENT.

CA050128007	DHAV	PWA	HINGE BRACKET	DAMAGED
11/20/2004	DHC6200	PT6A20		TE FLAP

(CAN) LOOSE RIVETS ATTACHING CENTER FLAP HINGE BRACKET TO IB AND OB PORTIONS OF FORE FLAP ASSY. HIDDEN PROBLEM DOES NOT REALLY SHOW UP UNTILL YOU TAKE THE FLAP OFF. FORE FLAP DISASSEMBLED AND RIVETS REPLACED WITH NEW.

CA040928014	DHAV	PWA	ENGINE	FAILED
9/27/2004	DHC6200	PT6A20		LEFT

(CAN) ON DESCENT TO LAND, THE PILOT HEARD A LOUD BANG AND LOSS OF TQ IN THE LT ENGINE. ALL OTHER INDICATIONS WERE NORMAL. THEY SECURED THE LEFT ENGINE AND MADE A NORMAL LANDING.

CA040804011	DHAV	PWA	FUEL CONTROL	FAILED
8/3/2004	DHC6200	PT6A20	25244394	ENGINE

(CAN) WHEN THE FLIGHT CREW REDUCED POWER ON FINAL APPROACH, NR 1 ENGINE FAILED TO RESPOND TO POWER LEVEL INPUT, AND REMAINED AT 15 LBS TORQUE. THE TORQUE THEN SLOWLY DROPPED TO IDLE WITHOUT ANY POWER LEVER INPUT AND A LANDING WAS COMPLETED WITHOUTFURTHER INCIDENT. INVESTIGATION REVEALED THAT THE F.C.U. HAD FAILED INTERNALLY.

CA050309013	DHAV	PWA	CSU	FAILED
3/6/2005	DHC6200	PT6A20	210574AB	PROPELLER

(CAN) ON RUNUP AFTER INSTALLATION, IT WAS FOUND THAT THE OVERHAULED PROPELLER CONTROL UNIT WOULD NOT FUNCTION PROPERLY. THE PROPELLER REMAINED IN THE BETA MODE AND THERE WAS NO CONTROL OTHER THAN FEATHER/UNFEATHER. ANY ADDITION OF POWER RESULTED IN THE PROPELLER MOVING INTO THE REVERSE RANGE. THE UNIT WAS AN EXCHANGE.

CA041206005	DHAV		PLATE	MISDRILLED
12/6/2004	DHC6300		C6FSM225627	FUSELAGE

(CAN) MAIN BOLT AND SPIGOT HOLES ARE DRILLED APPROXIMATELY 0.250 INCHES TOO FAR AFT WHICH DOES

NOT ALLOW MINIMUM EDGE DISTANCE FOR THE AFT ROW OF RIVETS TO BE MAINTAINED. ONLY PROVIDES 7/32' (0.21875') EDGE DISTANCE FOR A MS20470AD6 RIVET WHEREMINIMUM EDGE IS 3/8' (0.375').

CA050328003	DHAV			FAIRLEAD	CHAFED
3/23/2005	DHC6300			CSP1352	RT WING ROOT

(CAN) PRESUMED THAT RH AILERON CABLE BROKE DUE TO CHAFFING ON A THE FAIRLEAD. MORE DETAILS WILL FOLLOW ON REVISION 1 OF THE INCIDENT REPORT FILED BY AIR GUYANE SP WITH THEIR LOCAL AVIATION AUTHORITY.

CA050221002	DHAV			SEAL	CRACKED
9/20/2004	DHC6300			C38214	FUEL CAP

(CAN) DURING FLIGHT FUEL FUMES ENTERED IN THE AIRCRAFT CABIN. AFTER LANDING 3 PAX WERE TAKEN TO THE HOSPITAL DUE TO FEELING SICK FROM THE FUMES. FUEL CAP WAS SUSPECTED TO BE LEAKING WHICH CAUSED THE FUEL TO ENTER THE CABIN THRU THE PAX DOOR SEAL. FUEL CAP WAS REPLACED. PROBLEM HAS NOT REOCCURED.

CA050224007	DHAV	PWA	DHAV	HINGE BRACKET	CORRODED
2/24/2005	DHC6300	PT6A27		C6TPM10215	HORIZONTAL STAB

(CAN) CORROSION FOUND UNDER BLOCK. WHILE INSPECTING CENTER HINGE BRACKET IAW SB 6/512. CORROSION VISIBLE ON SURFACE SURROUNDING BLOCK. BLOCKS REMOVED FOR FURTHER INSPECTION AND EXFOLIATION/CORROSION FOUND UNDER BOTH SIDES.

CA041216001	DHAV	PWA		CABLE	MISINSTALLED
12/16/2004	DHC6300	PT6A27		C6CF12425	NLG STEERING

(CAN) NOSE WHEEL STEERING CABLE ROUTED INCORRECTLY RESULTING IN ALMOST SAWING THROUGH THE HYDRAULIC HAND PUMP SUCTION LINE P/N C6H1001-294.

CA050213007	DHAV	PWA		ENGINE	POWER LOSS
2/3/2005	DHC7*	PT6A50			

(CAN) DURING CRUISE, THE ENGINE LOW OIL PRESSURE INDICATOR ANNUNCIATED ACCOMPANIED BY AN UNCOMMANDED POWER REDUCTION. THE ENGINE WAS SHUT DOWN IN FLIGHT AND THE AIRCRAFT DIVERTED. SUBSEQUENT INSPECTION REVEALED DAMAGED POWER TURBINE VANES AND BLADES AND A PUNCTURED EXHAUST EJECTOR AND NACELLE. MFG WILL MONITOR INVESTIGATION OF THE EVENT AND WILL SUPPLEMENT THIS REPORT TO REFLECT ROOT CAUSE ONCE DETERMINED.

CA050107006	DHAV	PWA		ENGINE	FAILED
12/29/2004	DHC7103	PT6A50			NR 2

(CAN) APPOX 20 MINS INTO FLT, & AT FLT LEVEL 120 ENROUTE TO DIKO FROM DIBK WITH 19 PAX, MASTER CAUTION LIGHT ILLUMINATED ACCOMPANIED WITH NR 2 ENG LOW OIL PRESSURE LIGHT. NR 2 OIL PRESSURE GAUGE CONFIRMED ACTIVE WARNING LIGHT WITH PRESSURE INDICATION OF BELOW 75 PSI & DECREASING. ENG SHUTDOWN CARRIED OUT IAW QRH CHKLST. ENG SECURED & FLT DIVERTED TO ABIDJAN. UNITED NATIONS FLT FOLLOWING CENTRE 'AMIGO BASE' INFORMED ON HF FREQUENCY OF SIT & ASKED TO INFORM ALL FORCE NOUVELLE MILITARY GROUND TO AIR SECURITY SURVEILLANCE & DEFENSE SITES INCLUDING FRENCH AIR FORCE OF OUR NEW ROUTING & ALTITUDE & CANCEL OF PREVIOUSLY SCHEDULED AIR TASKING ORDERS. FLT TERMINATED WITHOUT ANY FURTHER INCIDENTS BACK IN ABIDJAN.

CA050330003	DHAV	PWA		COMPUTER	FAILED
3/20/2005	DHC8102	PW120		7003974730	FLT MANAGE

(CAN) FLIGHT GUIDANCE COMPUTER FAILED DUE TO HARDWARE INTERNAL FAILURE. WHEN AIRCRAFT POWER WAS ATTACHED AND SELECTED ON: TO TROUBLE SHOOT YAW/DAMPER FAIL SNAG, MECHANICS NOTICED RED GLOW FROM INSIDE BOX AND FAINT SMOKE/MICARTA SMELL INDICATING OVERHEAT CONDITION - FLIGHT GUIDANCE COMPUTER REPLACED WITH NO FURTHER INCIDENT.

CA050212001	DHAV	PWA		ACTUATOR	FAILED

2/6/2005	DHC8102	PW120A		7901803	PROPELLER

(CAN) IN FLIGHT, CREW NOTICED NR1 OIL PRESSURE DROPPING, VISUALLY NOTICED OIL LEAK ON NR1 FORWARD COWLING, OIL PRESSURE DROPPED TO 45 PSI. CREW SHUT NR 1 ENGINE DOWN AS PRECAUTIONARY MEASURE, LANDED AIRCRAFT AT UNSCHEDULED AIRPORT. MAINTENANCE REPLACED NR1 PROPELLER ACTUATOR. GROUND RUNS AND LEAK CHECKS CARRIED OUT AND CHECKED SERVICEABLE. AIRCRAFT DISPATCHED THE FOLLOWING MORNING. NO REPORT FROM OVERHAUL FACILITY AS OF YET.

CA050215007	DHAV	PWA	GRIMES	CELL	BURNED
2/11/2005	DHC8102	PW120A		5521981	EMERGENCY LIGHT

(CAN) EMERGENCY LIGHT BATTERY PACK WAS REMOVED FROM AIRCRAFT FOR A SCHEDULED MAINTENANCE RESTORATION TASK 3350/05 AND SENT TO AVIONICS SHOP. DURING INSPECTION OF THE CELLS, BURN MARKS ON STRAPS BETWEEN CELLS WERE NOTED. DURING DEEP CYCLE PROCESS, UNIT DISCHARGED AND DURING DISCHARGE UNDER A 4 AMP LOAD, CELLS BECAME EXCESSIVELY HOT.

CA040911001	DHAV	PWA	ELECTRICAL SYS	DAMAGED
9/10/2004	DHC8102	PW120A		

(CAN) WHILE AIRCRAFT PARKED ON APRON , UPON CREW ARRIVAL TO GET READY FOR DEPARTURE , THE CREW NOTICED SEVERAL CIRCUT BREAKERS WERE POPPED AND THE ATTEMPT TO RESET WAS NOT SUCCESFUL . MAINTENANCE SUSPECT THE FAULT TO BE WITH THE GROUND POWER UNIT WHICH WAS ATTACHED TO AIRCRAFT , HOWEVER THE FOLLOWING PARTS NEEDED TO BE REPLACED PIROR TO RETURN AIRCRAFT TO SERVICE 1- BOTH FUEL FLOW INDICATORS P/N SEL-OC8J 2- CABIN PRESSURE CONTROLLER P/N SET LOCH20F 3- FLIGHT. GUIDANCE CONTROLLER P/N 7003975-901

CA050121009	DHAV	PWA	ECU	CORRODED
1/16/2005	DHC8102	PW120A	7898426009	ENGINE

(CAN) NR1 ENGINE, ENGINE CONTROL UNIT WOULD NOT INDICATE (ON). MAINTENANCE FOUND CORROSION INSIDE AND OUTSIDE CONNECTOR J1. ECU REPLACED. (NOTE: TIMES ARE AIRCRAFT TOTAL TIME NOT ACTUAL PART TIME)

CA041018011	DHAV	PWA	TUBE	CRACKED
8/13/2001	DHC8102	PW120A	01R311159601	GAS GENERATOR

(CAN) DURING TAXI OUT TO RUNWAY CREW NOTICED AN ODOR WHICH ALSO SET OFF THE LAVATORY SMOKE DETECTOR. AIRCRAFT RETURNED TO GATE. TROUBLESHOOTING BY MAINTENANCE REVEALED SMOKE WAS ENTERING INTO CABIN WHEN BLEED AIR SELECTED ON, NR 1 ENGINE. ENGINE WAS REPLACED. ENGINEERING REPORT BY FROM ENGINE TEARDOWN INDICATED THAT THE OIL PRESSURE SUPPLY TUBE FOR THE NR 5 BEARING AREA WAS CRACKED AT A WELD SEAM IN THE GASGENERATOR CASE. ENGINE WAS REPAIRED. REPORT AVAILABLE IF REQUIRED.

CA041103008	DHAV	PWA	INDICATOR	READS LOW
11/3/2004	DHC8102	PW120A	523281	NR 1 ENGINE

(CAN) DURING CRUISE NR 1 OIL PRESSURE DROPPED, PRECAUTIONARY SHUTDOWN OF & FEATHER OF NR 1 ENGINE , AIRCRAFT RETURNED TO ORIGINATING AIRPORT. MAINTENANCE INSPECTION FOUND OIL PRESSURE, TEMP INDICATOR AT FAULT . INDICATOR REPLACED.

CA041029010	DHAV	PWA	SMOKE DETECTOR	MALFUNCTIONED
10/25/2004	DHC8102	PW120A	3023143	CARGO BAY

(CAN) DURING DESCENT , INTERMITTANT BAGGAGE SMOKE WARNING. CREW ELECTED TO DON OXYGEN MASKS AND ADVISE AIRPORT EMERGENCY RESPONSE. UPON ARRIVAL NO EVIDENCE OF SMOKE OR FIRE FOUND. BAGGAGE SMOKE DETECTOR REPLACED. REMOVED UNIT TESTED AS NO FAULT FOUND. AIRCRAFT RETURNED TO SERVICE WITH REPLACEMENT SMOKE DETECTOR.

CA041026006	DHAV	PWA	TUBE	CRACKED
10/25/2004	DHC8102	PW120A	1B11071	SEAT

(CAN) BOTH WELDED TUBE ASSEMBLIES P/N 1B1107-1FOUND CRACKED IN ROLLER RADIUS AT THE BASE OF THE CAPTAIN'S SEAT ASSY . DEFECTS WERE NOTED DURING ROUTINE INSPECTION PROCESS IN THE SEAT SHOP , WHEN THIS SEAT WAS REMOVED OFF THE AIRCRAFT DURING AHEAVY MAINTENANCE CHECK.

CA041025003	DHAV	PWA		SKIN	CORRODED
10/25/2004	DHC8102	PW120A		DHC8102	LT WING

(CAN) DURING A ROUTINE HEAVY MAINTENANCE INSPECTION WIDESPREAD LEVEL ONE CORROSION WASFOUND ON THE UPPER WING SKIN AT THE MATIN SURFACES OF THE FORWARD AND REAR SPARS. INITIALLY LEVEL ONE CORROSION WAS FOUND JUST AHEAD OF THE REAR SPAR AND JUST AFT OF THE FORWARD SPAR. FURTHER INVESTIGATION THROUGH CUTTING SAMPLES OUT OF THE SKIN, AT BOTH THE FORWARD AND REAR SPARS, REVEALED THAT LEVEL ONE CORROSION WAS ALSO PRESENT AT THE SPAR TO SKIN MATING SURFACE. THE CORROSION THAT WAS FOUND WAS ISOLATED TO THE DRY BAY PORTIONS OF THE WING (STN. YW171.200 PORT TO STA YW171.200 STARBOARD AND OUTBOARD OF STA. YW405.00 ON BOTH WINGS). CORROSION WAS LIMITEDTO THE SKIN ONLY AND WAS NOT EVIDENT ON THE SPARS.

CA050107007	DHAV	PWA	EATON	SHAFT	SHEARED
12/11/2004	DHC8102	PW120A		570717	HYD PUMP

(CAN) NR 1 ENG HYD PUMP CAUTION LIGHT ILLUMINATED WITH FLAP RETRACTION ON TAKEOFF. NR 1 SPU TURNED OFF, MAIN PRESSURE DEPLETED TO 0 PSI. FLUID QTY REMAINED STEADY. A/C RETURNED TO YYZ. INPUT SHAFT SHEARED FROM AN INTERNAL FAILURE. PUMP DISMANTLED. INTERNAL DAMAGE FROM 2 BROKEN PISTONS (PN 404783), CAUSING DAMAGE TO OTHER PARTS. (PISTON SHOE PLATE PN 396386 & RETAINER PN 405892) ALSO HARDWARE DAMAGE NOTED.

CA050201003	DHAV	PWA	LUCAS	BEARING	FAILED
1/8/2005	DHC8102	PW120A		03600923	STARTER GEN

(CAN) GENERATOR CAUTION LIGHT ILLUMINATED AND ELECTRICAL LOAD WENT TO (0) SUSPECT STARTER BEARING FAILURE DUE TO HEAVY VIBRATION IN THROTTLE HANDLE. STARTER GEN INSPECTED IN SHOP, WO NR182352, BEARING FAILURE NOTED ON DRIVE END (03-6009-23).

CA050107005	DHAV	PWA		RCCB	ARCED
1/6/2005	DHC8102	PW120A		SM601BA20A1	RT NACELLE

(CAN) WHILE INSPECTING NR 2 AC CONTACTOR BOX IN THE RT NACELLE DURING A HEAVY MX CHECK, DISCOVERED THAT HARDWARE THAT HOLDS WIRES ONTO THE REMOTE CONTROL CIRCUIT BREAKER (RCCB) HAD COME OFF AT 3 OF 6 ATTACH STUDS. RCCB IS FOR NR 1 ENG STANDBY HYD PUMP. HARDWARE FOR LOAD A2 & LOAD B2 WERE LAYING ON INSIDE BOTTOM OF CONTACTOR BOX AND HARDWARE FOR LOAD C2 HAD BACKED OFF APPROX HALF WAY ON STUD. ALL 3 STUDS SHOWED SIGNS OF ARCING DAMAGE WITH GROOVES BURNED INTO STUDS FROM CURRENT. TERMINAL ENDS ON WIRE 10006A18C-1 AT LOAD C2 ALL SHOWED SIGNS OF ARCING AND WERE BURNED AT THE POINT OF CONTACT WITH THE STUDS.

CA050211008	DHAV	PWA		COMPUTER	MALFUNCTIONED
12/19/2004	DHC8102	PW120A		21178041	CABIN PRESSURE

(CAN) ON CLIMB OUT WITH CABIN PRESSURIZATION SET TO AUTO IN BOTH NORMAL AND CAB SET MODE THE RATE OF PRESSURIZATION WAS UNCONTROLLABLE UP TO MAX DIFF.A/C RETURNED TO DEPT AIRPORT. SYSTEM OPERATED SERV IN MANUAL MODE. COMPUTER REPLACED AND FUNCTION CHECKS CARRIED OUT SERV.NO STRIP REPORT FROM REPAIR FACILITY AS OF YET.

CA050215003	DHAV	PWA	GRIMES	BATTERY PACK	BURNED
2/11/2005	DHC8102	PW120A		552198	EMERGENCY LIGHT

(CAN) WHILE CARRYING OUT A FUNCTION TEST OF THE EMERGENCY LIGHTING SYSTEM DURING A LINE CHECK, THE LT EGRESS LIGHT WAS FOUND UNSERVICEABLE. THE EMERGENCY LIGHT BATTERY PACK FOR THAT LIGHT WAS REPLACED AND THE U/S UNIT WAS SENT TO THE AVIONICS SHOP. WHEN THE BATTERY PACK WAS DISASSEMBLED IN THE SHOP, THE BURN DAMAGE TO THE CELLS WAS NOTED.

CA050321001	DHAV	PWA		LINK	BROKEN
3/13/2005	DHC8102	PW120A		89891	NLG STEERING

(CAN) ON ARRIVAL CREW REPORTED A SHIMMY IN THE NOSE WHEEL DURING LANDING. MAINTENANCE INSPECTED THE NOSE WHEELS AND TIRES WITH NO DEFECTS. INSPECTION OF THE NOSE GEAR STEERING SYSTEM FOUND A BROKEN NOSE WHEEL STEERING LINK. THERE WAS NO OTHER DAMAGE OR EVIDENCE OF WORN PARTS. THE LINK ASSEMBLY WAS REPLACED AND STEERING TESTED.

CA040928011	DHAV	PWA	SHAFT	CRACKED
9/27/2004	DHC8103	PW121	310703601	PROPELLER

(CAN) THE PROP SHAFT FOUND TO HAVE CRACKED ADJACENT TO A PREVIOUSLY REPAIRED DIAMETER (OVERHAUL, NOV 2001). PWC WILL INVESTIGATE TO ESTABLISH ROOT CAUSE.

CA050126006	DHAV	PWA	SPRING STRUT	BROKEN
1/19/2005	DHC8201	PW123	87620130101	NR 1 ENGINE

(CAN) NR 1 ENGINE SHUTDOWN ON GROUND RUN DUE TO BROKEN CONTROL SPRING STRUT. UNABLE TO CONTROL THE ENGINE, SHUTDOWN BY THE TEE HANDLE. MFG IS INVESTIGATING THE EVENT.

CA041026001	DHAV	PWA	ENGINE	MALFUNCTIONED
10/22/2004	DHC8201	PW123D		NR 1

(CAN) FROM A PILOT REPORT RECTIFICATION, A GROUND RUN OF THE NR 1 ENGINE WAS REQUIRED FOLLOWING A COMPONENT CHANGE. DURING THE START CYCLE OF THE GROUND RUN. THE LAME CONDUCTING THE GROUND RUN IDENTIFIED AN ENGINE VIBRATION THROUGH THE FLIGHT DECK CONTROL CONDITION LEVER. NO FLIGHT CREW HAD WRITTEN UP AN ENGINE VIBRATION DEFECT PRIOR TO THIS GROUND RUN. FURTHERMORE WITH THE ENGINE AT IDLE SPEED THE VIBRATION COULD BE INCREASED/DECREASED WITH SOME MANIPULATION OF THE CONDITION LEVER. FOLLOWING EXTENSIVE COLLABORATION WITH THE ENGINE MANUFACTURER AND FOLLOWING SUGGESTED TROUBLESHOOTING, ON ADVISE FROM THE MANUFACTURER THE ENGINE WAS REMOVED.

CA050128002	DHAV	PWA	CONTROL UNIT	MALFUNCTIONED
1/28/2005	DHC8202	PW123D	2401	PULSE LIGHT

(CAN) THE TECH WAS WORKING ON A DEICE PROBLEM AND WHILE STANDING OUTSIDE THE AC SUDDENLY SAW THE PULSELITE START WORKING ON THERE OWN. HE WENT IN THE AC AND SAW THAT THE PULSELITE SWITCH WAS NOT TO THE ON POSITION. HE CLOSED THE POWER TO THE AC. HE WENT TO THE PULSELITE CONTROL UNIT AND NOTICED A BURNED ODOR. HE WENT TO TOUCH THE PULSELITE CONTROL BOX BUT IT WAS VERY HOT AND COULD NOT TOUCH IT. NOTE: THE TECHNICIAN HAD REMOVED THE GROUND WIRE AND THE PULSELITE CONTROL BOX TO GAIN ACCESS TO ANOTHER BOX ON A SYSTEM THAT HE WAS WORKING ON.

CA041221008	DHAV	PWA	LINE	DAMAGED
12/9/2004	DHC8301	PW123	DSC252A40272	BRAKE ASSY

(CAN) AN OPERATOR EXPERIENCED A HYDRAULIC FLUID LOSS FROM NR 2 SYSTEM ON THEIR A/C DURING TAXI. THE FLUID LOSS WAS DUE TO A LEAK ON THE FLEXIBLE LINE FOR NR 3 BRAKE UNIT. THE LINE PN DSC252A4-0272 (IPC 32-42-00 FIG 17 ITEM 20) WAS FOUND DAMAGE CLOSE TO ONE OF THE END FITTINGS.

CA041207001	DHAV	PWA	CONNECTOR	BURNED
12/7/2004	DHC8301	PW123	2067081	LIGHT

(CAN) AN OPERATOR HAS FOUND BURNED PINS ON THE LT SIDEWALL LIGHTING CONNECTOR 3320-P39/J39. DUE TO THE PLUG DAMAGE THEY WILL REPLACE THE CONNECTOR AND THE BURNED PIN OR PINS SHOWING SIGNS OF OVERHEATING.

CA041208001	DHAV	PWA	BATTERY PACK	INOPERATIVE
12/1/2004	DHC8301	PW123	6104781	EMERGENCY LIGHT

(CAN) EMERGENCY LIGHT BATTERY PACK AT POSITION 3352-P2 WAS REMOVED DUE TO INOPERATIVE E-LIGHTS AT CEILING FIRST THREE POSITIONS. DURING OVERHAUL OF THE BATTERY PACK IT WAS FOUND THAT THE PACK HAD SHORTED OUT. IT APPEARS THAT DURING THE LAST CELL REPLACEMENT THE CONNECTION LEADS WERE CUT TO SHORT WHICH PREVENTED THE CORRECT ROUTING OF THE WIRES. WHEN THE PACK WAS INSTALLED ON THE AIRCRAFT THE WIRES BE CAME PINCHED AND THE PACK SHORTED OUT. THE PACK WAS INSTALLED ON

NOVEMBER 08/04 & REMOVED FROM THE AIRCRAFT ON DECEMBER 01/04. ALTHOUGH THE LAST DEEP CY CLE OCCURRED 140 HOURS PREVIOUS, IT IS UNKNOWN WHEN THE LAST PACK OVERHAUL WITH CELL REPLACEMENT OCCURRED.

CA041026007	DHAV	PWA	TUBE	CRACKED
10/25/2004	DHC8301	PW123	1B11071	SEAT

(CAN) BOTH WELDED TUBE ASSY P/N 1B1107-1 OFF THE PILOT'S SEAT ASSY FOUND CRACKED DURING AN INSPECTION OF THE SEAT IN THE SEAT SHOP DURING A SHOP VISIT WHILE THE AIRCRAFT WAS UNDERGOING A HEAVY MAINTENANCE CHECK.

CA041026004	DHAV	PWA	TUBE	CRACKED
10/25/2004	DHC8301	PW123	1B11071	SEAT

(CAN) CRACKS FOUND ON BOTH TUBE-WELDED BASE OF CO-PILOT'S SEAT ASSY P/N 1108-3AA. TUBE P/N 1B1107-1 AS PER AMI SEATING SYSTEMS COMPONENT MAINTENANCE MANUAL CHAP 25-11-08 , FIGURE 5 , ITEM 540 ON PAGE 1062.

CA041103007	DHAV	PWA	SELECTOR VALVE	FAILED
10/19/2004	DHC8301	PW123	574295	MLG

(CAN) DURING APPROACH, LANDING GEAR WOULD NOT EXTEND, ALTERNATE MLG EXTENSION USED. TROUBLE SHOOTING REVEALED THAT LDG SELECTOR VALVE EXTENSION SOLENOID COIL WAS OPENED. LDG SELECTOR VALVE WAS REPLACED.

CA041112003	DHAV	PWA	SELECTOR	MALFUNCTIONED
8/16/2004	DHC8301	PW123	574205A	MLG

(CAN) UNABLE TO EXTEND GEAR DURING APPROACH. THE THREE INDICATIONS LIGHTS REMAINS IN RED AND THE LG SELECTOR HANDLE WAS AMBER. EMERGENCY LANDING GEAR EXTENSION CARRIED OUT.LANDING GEAR SELECTOR VALVE, STRIPREPORT FOUND CORE ASSY. HAD MUSHROOMED & WAS OUT OF ROUND AT THE TOP. UNIT OVERHAULED.

CA041012001	DHAV	PWA	INVERTER	FAILED
10/11/2004	DHC8301	PW123	DH103024600C	PRIMARY

APPROXIMATELY 150 NM FROM BASE, CRUISING AT FL 230, WHEN CO-PILOT NOTICED A SUDDEN PUFF OF SMOKE FROM BEHIND CAPTAIN'S SEAT. A LOUD BANG & PRIMARY & AUXILIARY INVERTER LIGHTS ILLUMINATED. ADDITIONAL WARNING LIGHTS ASSOCIATED WITH THESE FAILURES ALSO ILLUMINATED. OXYGEN DRILL CARRIED OUT FOLLOWED BY FUSELAGE FIRE OR SMOKE DRILL. IDENTIFIED PROBLEM AS PRIMARY INVERTER & AFTER COMPLETING THAT DRILL FROM QRH, AUX INVERTER RE-INSTATED. UNSCHEDULED LANDING CARRIED OUT. MX PERSONNEL INSPECTION A/C & PERFORMED TROUBLESHOOTING ON INVERTER SYS. FROM THIS, PRIMARY INVERTER CONFIRMED AT FAULT. PRIMARY INVERTER THEN REPLACED. AIRCRAFT HAS RETURNED TO SERVICE WITHOUT FUTHER INCIDENT.

CA040915004	DHAV	PWA	COUPLER	WORN
9/11/2004	DHC8301	PW123	570717570729	HYD PUMP

(CAN) THE CREW OF OVERSHOT RUNWAY DUE TO AN UNSPECIFIED PROBLEM. THE CREW ADVISED THATERS WAS NOT REQUIRED AND LANDED 20 MINUTES LATER WITHOUT INCIDENT. NO OPERATION AL IMPACT. ENTRY FROM MAINTENANCE OPS SUMMARY DURING GEAR EXTENSION CREW REPORTED THEY HAD A YELLOW GEAR DOOR LIGHT AND PRESSURE DROPPED TO ZERO. CREW ELECTED TO CARRY OUT ALTERNATE GEAR EXTENSION AND NOTICED NR 2 EDP CAUTION LIGHT ILLUMINATED J/L NR 2 DEFECT 414058 LANDING GEAR WOULD NOT EXTEND NORMALLY AMBER DOOR LIGHTS AND A LOUD GRINDING NOISE. NO NR 2 STANDBY OR MAIN PRESS. COMPLETED EMERG. CHKLIST & ALT GEAR EXT.RECTIFICATION REPLACED NR 2 ENGINE DRIVEN HYD PUMP DUETO SHAFT SPLINE WEAR. A/C GRD RAN, HYDRAULICS FUNCTIONED & LEAK CHECKED.

CA040823001	DHAV	PWA	LINE	CRACKED
8/20/2004	DHC8301	PW123	82910009123	HYD SYSTEM

(CAN) DURING FINAL APPROACH, PILOT REPORTED SMOKE IN COCKPIT AND PERFORMED AN UNEVENTFUL EMERGENCY LANDING. THE 'SMOKE' REVEALED TO BE HYDRAULIC FLUID MIST, WHICH SPREAD ALL OVER IN THE

COCKPIT. ON GROUND WE FOUND A HYDRAULIC LINE BELOW THE COCKPIT CRACKED NEAR THE BEND RADIUS. BOMBARDIER AEROSPACE IS INVESTIGATING THIS EVENT.

CA050221007	DHAV	PWA		STARTER GEN	OPEN
2/2/2005	DHC8301	PW123		23088008	LT ENGINE

(CAN) DURING CRUISE AT 16,000 FT, AC DEPRESSURIZED W/ILLUMINATION OF MSTR WARN LIGHT, MSTR CAUTION LIGHT, GPWS WARN LIGHT. SYS THAT REPORTED TO STOP WORKING: FMS, NAV, TRANSPONDER SYS. NR2 ADF WAS REPORTED TO BE WORKING, WAS USED TO LAND. ON APPROACH, LG WAS SELECTED DOWN, FLAPS EXTENDED, CAUTION LIGHT WAS REPORTED TO EXTINGUISH: AUX INV, RUD FULL, NR2 RYD HYD. WHEN AC WAS ON GROUND, BUS TIE SWITCH WAS SELECTED, AC STARTED TO PRESSURIZE. LT STARTER/GEN FAILED TO GENERATE PWR AND TO START ENGINE. NEXT START, NR1 GCU AND STARTER/GEN REPLACED, GROUND CHECKED IAW 24-31-03, 24-31-01 NO DEFECTS EVIDENT. START/GEN WAS CONFIRMED THAT UNIT HAD FAILED DUE TO NO GENERATION, SHUNT FIELD OF STATOR WAS OPEN CIRCUIT.

CA050121007	DHAV	PWA	BOMBDR	BEARING	WORN
1/7/2005	DHC8301	PW123			LT AIL PULLEY

(CAN) DURING MAINTENANCE INSPECTION, LT AILERON CABLE PULLEY BEARING FOUND WORN AT WINGSPAR CENTER SECTION. PULLEYS REPLACED , CABLES RE-RIGGED.

CA050209005	DHAV	PWA		TURBINE BLADES	DAMAGED
1/23/2005	DHC8301	PW123			NR 2 ENGINE

(CAN) CREW NOTED THAT THEY HAD NO NP INDICATION AFTER START OF THE NR 2 ENGINE, AND OBSERVED THAT THERE WAS NO PROPELLER ROTATION THE ENGINE WAS THEN SHUTDOWN. CREW REPORTED ALL OTHER ENGINE INDICATIONS WERE NORMAL DURING THE START. INITIAL INVESTIGATION NOTED THAT THE PROPELLER WAS UNABLE TO BE TURNED BY HAND AND THE AIRCRAFT WAS REMOVED FROM SERVICE FOR FURTHER INVESTIGATION. BOROSCOPE INSPECTION WAS CARRIED OUT THROUGH T6 PROBE AND THERE APPEARED TO BE NO TIP CLEARANCE ON THE 1ST STAGE POWER TURBINE WITH BLADE SHROUD DAMAGE EVIDENT. THERE WAS ALSO MINOR IMPACT DAMAGE NOTED TO THE 2ND STAGE NOZZLE AND POWER TURBINE. ENGINE WAS THEN REMOVED FROM THE AIRCRAFT. MFG INVESTIGATING ISSUE.

CA050110005	DHAV	PWA		SPRING	OUT OF ADJUST
1/3/2005	DHC8301	PW123		82760050005	RUDDER

(CAN) AIRCRAFT VIBRATION REPORTED WHEN LEVEL AT 12,000 FT. SHAKING STOPPED AT POWER SETTING LESS THAN 40 PERCENT AND SPEED BELOW 150KTS. AIRCRAFT INSPECTED ON ARRIVAL AND NOFAULTS FOUND. AIRCRAFT RELEASED SUBJECT TO SATISFACTORY TEST FLIGHT, VIBRATION STILL PRESENT. RUDDER ACTUATORS, BEARINGS AND LINKAGE INSPECTED, NO FAULTS FOU ND. WHEN RUN ON EITHER NR 1 OR 2 HYDRAULIC SYSTEM RUDDER HAD 4 PERCENT SPLIT. SPRING STRUTS ADJUSTED AS PER MM27-20-00. AIRCRAFT RELEASED FOR TEST FLIGHT, TEST FLIGHTSTISFACTORY. AIRCRAFT RETURNED TO SERVICE.

CA050211004	DHAV	PWA		HOSE	RUPTURED
1/26/2005	DHC8301	PW123		DSC252B40124	HYD SYSTEM

(CAN) AFTER TAKE-OFF AND ON GEAR UP SELECTION, THE NOSE GEAR FAILED TO RETRACT AND IT WAS OBSERVED BY THE CREW THAT THE NR 2 HYDRAULIC SYSTEM WAS ALMOST DEPLETED OF OIL. AIRCRAFT WAS MAINTAINED VISUALLY IN THE CIRCUIT WHILE ALL RELEVANT QRH PROCEDURES WERE COMPLETED. FOLLOWING COMPLETION OF DRILLS A NORMAL APPROACH AND LANDING WAS CARRIED OUT. ENGINEERING INVESTIGATION REVEALED A RUPTURE FAILURE OF A FLEXIBLE HOSE IN THE NLG RETRACTION HYDRAULIC SYSTEM. THE HOSE WAS REPLACED AND FOLLOWING SATISFACTORY COMPLETION OF MM REQUIREMENTS THE AIRCRAFT WAS RELEASED TO SERVICE WITHOUT FURTHER INCIDENT.

CA041102006	DHAV			PITOT LINE	OBSTRUCTED
11/1/2004	DHC8311				PITOT/STATIC SYS

(CAN) DURING ACCOMPLISHMENT OF DEHAVILLAND SB 8-34-221,WHICH PROVIDES INSTRUCTIONS TO MODIFY THE ROUTING OF THE STATIC LINES CONNECTION, IT WAS NOTICED DURING THE LEAK CHECK THAT THE MAIN STATIC SOURCE LINE WAS INVERTED WITH THE ALTERNATE STATIC SOURCE. THIS SB GIVES INTRUCTION TO CONNECT THE NR 3 STATIC SOURCEDIRECTLY TO THE STANDBY ALTIMETER, BYPASSING A SELECTOR VALVE

AND A MANIFOLD. AS A CORRECTIVE ACTION, THE LINE WERE RECONNECTED PROPERLY AND THE SYSTEM WAS CHECKED SERVICEABLE.

CA041029009	DHAV	PWA	ENGINE	FAILED
10/26/2004	DHC8311	PW123	3038300	NR 2

(CAN) DURING CLIMB AT 11,000 FT FLIGHT CREW HEARD A 'BANG' FOLLOWED BY AIRCRAFT YAW. NR 2 ENGINE FAILED AND WAS SHUT DOWN AND FEATHERED USING ALTERNATE FEATHER. AIRCRAFT RETURNED FOR NORMAL SINGLE ENGINE LANDING AT DEPARTURE AIRPORT. NR 2 ENGINE ASSEMBLY REPLACED. AIRCRAFT RETURNED TO SERVICE. ENGINE RETURNED TO OVERHAUL FACILITY. TEARDOWN REPORT WILL BE FORWARDED TO TSB WHEN AVAILABLE.

CA050125016	DHAV	PWA	PANEL	LOOSE
1/22/2005	DHC8311	PW123	8711802005	WING

(CAN) DURING ROUTINE MAINTENANCE INSPECTION VISUALLY NOTICED SCREW HEADS PROTRUDING ABOVE WING SURFACE ON WING STRESS PANEL (DRYBAY ACCESS). APPROXIMATELY 50 PERCENT OF THE ATTACH SCREWS (CSP318-5) WERE FOUND LOOSE ON ACESS PANEL NR 522AT, ALSO SOME LOOSE SCREWS FOUND ON DRYBAY/WING CENTER BOX ACESS PANELS 521AT AND 622AT. AIRCRAFT HAS APPROX. 1980-2372 CYCLES SINCE PREVIOUS RE-TORQUE OF THESE SCREWS AFTER MAINTENANCE ACCESS. ALL SCREWS ON THESE PANELS RE-TORQUED.

CA050121010	DHAV	PWA	WIRE HARNESS	SHORTED
1/17/2005	DHC8311	PW123	324612CC225	MLG

(CAN) DURING APPROACH, WHEN GEAR SELECTED DOWN, OB ANTISKID CAUTION LIGHT ILLUMINATED. MAINTENANCE FOUND WIRE 32-46-12CC22-5 SHORTED TO SHIELD BETWEEEN 9811-P59 AND 9811-1J177 (PIN K). WIRING REPAIRED.

CA050222001	DHAV	PWA	SKIN	CRACKED
2/11/2005	DHC8311	PW123	85540063101	RUDDER

(CAN) DURING AN INSPECTION OF THE EMPENNAGE OF DASH 8-311 THE RUDDERS WERE MANUALLY MOVED FROM SIDE TO SIDE. WHEN IT WAS PUSHED FULL RT, TRAVEL A LARGE CRACK APPROXIMATELY TWO INCHES LONG WAS EXPOSED. THIS CRACK BEGAN AT THE LOWER EDGE OF THE L/E SKIN AND CONTINUED FOR APPROXIMATELY TWO INCHES IN AND UPWARD DIRECTION. UPON A CLOSER INSPECTION THE ROW OF RIVETS SECURING THE LOWER EDGE OF THIS L/E SKINS TO THE BOTTOM FRAME HAD BEEN SHEARED ON BOTH LT AND RT FORWARD SKINS.

CA050211006	DHAV	PWA	BRAKE ASSY	SEIZED
2/1/2005	DHC8311	PW123	21517	MLG

(CAN) DURING GROUND HANDLING FLIGHT CREW REPORTED RT BRAKES CHATTERING WITH BRAKE APPLICATION. MAINTENANCE INSPECTION FOUND NR 3 BRAKE ASSEMBLY WITH SEIZED ADJUSTERS. BRAKE ASSEMBLY REPLACED. AIRCRAFT RETURNED TO SERVICE.

CA050110009	DHAV	PWA	SENSOR	OUT OF ADJUST
1/9/2005	DHC8311	PW123	864202	EMERGENCY EXIT

(CAN) AT 20,000 FT AT MAX DIFFERENTIAL , FORWARD EMERGENCY EXIT DOOR WARNING LIGHT FLICKERED ON/ OFF , THEN CAME ON STEADY. WHEN CABIN DIFFERENTIAL BELOW 4.5 PSI WARNING LIGHT EXTINGUISHED. AIRCRAFT RETURNED TOORIGINATING AIRPORT. MAINTENANCE INSPECTION FOUND FORWARD EMERG EXIT DOOR SENSOR RIGGING EXCEDED MAX ALLOWABLE , GAP ADJUSTED AS PER MM. AIRCRAFT RETURNED TO SERVICE.

CA050208006	DHAV	PWA	TUBE	LEAKING
2/6/2005	DHC8311	PW123	82910009175	HYD SYSTEM

(CAN) DURING CLIMB THROUGH 10,000 FEET, THE NR 2 HYD QUANTITY GAUGE DECREASED, NR 2 HYD ISO VALVE CAUTION LIGHTS ILLUMINATED. AIRCRAFT ELECTED TO RETURN TO DEPARTURE AIRPORT, ALTERNATE GEAR EXTENSION SYSTEM USED. NORMAL LANDING. MAINTENANCE INSPECTION FOUND TUBE ASSEMBLY (ELBOW TO SOLENOID VALVE DOOR SEQUENCE OPEN) LEAKING. LINE REPLACED, HYDRAULIC FLUID REPLENISHED, GEAR

SWINGS CARRIED OUT , AIRCRAFT RETURNED TO SERVICE.

CA050131009	DHAV	PWA	ENGINE	SHUTDOWN
1/22/2005	DHC8311	PW123		

(CAN) THE ENGINE EXPERIENCED AN UNCOMMANDED POWER ROLL-BACK IN CRUISE (ZERO TORQUE INDICATED).THE PILOT DECLARED AN EMERGENCY AND SHUT THE ENGINE DOWN IN FLIGHT. MFG WILL MONITOR INVESTIGATION OF THE EVENT AND WILL SUPPLEMENT THIS REPORT TO PROVIDE ROOT CAUSE, ONCE ESTABLISHED.

CA041209004	DHAV	PWA	WINDSHIELD	CRACKED
12/7/2004	DHC8315	PW123	8SC0043014	COCKPIT

(CAN) SHORTLY FOLLOWING TAKE-OFF, IN THE CLIMB, AT 9000FT THE CO-PILOT'S WINDSHIELD CRACKED. THE CREW CARRIED OUT APPLICABLE PROCEDURES AND LANDED SHORTLY AFTER. THE CO-PILOT'S WINDSHIELD WAS REPLACED AND THE AIRCRAFT WAS RETURNED BACK INTO SERVICE.

CA041130008	DIAMON	CONT	DIAMON	SEAL	LOOSE
11/26/2004	DA20C1	IO240B			FLAP ACTUATOR

WITH FLAPS STUCK AT LANDING POSITION DURING WALK AROUND. INSPECTION REVEALED ANOTHER FLAP ACTUATOR SEAL SEPARATION. A/C HAD JUST UNDERGONE A 200 HR INSPECTION AT WHICH TIME SEAL INSPECTED & FOUND TO BE IN PLACE. SEAL AREA IS COVED BY A COMPOSITE COVER WHICH IS SOMEWHAT SEE THROUGH BUT DOES NOT ALLOW FOR A PHYSICAL CHECK OF SEAL POSITION ONLY A VISUAL.

CA041217003	DIAMON	CONT	DIAMON	SEAL	LOOSE
12/14/2004	DA20C1	IO240B			SPINE SHAFT

(CAN) IT WAS NOTICED DURING SCHEDULED INSPECTION THAT THE FLAP ACTUATOR SEAL HAD COME LOOSE ON THE SHAFT. ASSY WAS REMOVED AND SEAL RE-GLUED IN PLACE AS PER DIAMOND INSTRUCTION, RE-INSTALLED.

2005FA0000487	DORNER	ANTI-ICE SYSTEM	MALFUNCTIONED
1/20/2005	DO328100	5E2546	

DURING REPLACEMENT OF THE 17VE, ELEVATOR HORN DEICE INDICATION PROBLEM DISCOVERED THAT TEMP SENSOR FOR HORN ASSY HAD FAILED IN HIGH OHM AREA 288-300 OHM RANGE. PROBLEM WOULD NOT ALLOW FAIL LIGHT ON ASSOCIATED SWITCH ON 17VE PANEL TO ILLUMINATE DURING TEST DESCRIBED IN 31-12-13-550-801-A01 ICE, FUEL, & HYD. PANEL 17VE - RETURN TO SERVICE. WITH A FAILURE OF THIS TYPE THERE IS NO WAY FOR CREW TO EVER NOTICE A FAILURE OF ELEVATOR HORN HEAT OR GET FAIL ANNUNCIATION IN SWITCH LIGHT.

CA040923005	DORNER	PWA	TRANSMITTER	CRACKED
9/17/2004	DO328300	PW306B	30B350604	FUEL FLOW

(CAN) FUEL FLOW TRANSMITTER END CAP CRACKED WITH RESULTANT FUEL LEAKAGE INTO NACELLE.

CA041104010	DOUG	ALLSN	BLADE	CRACKED
10/25/2004	600N	250C47B	369D21102523	MAIN ROTOR

(CAN) M/R BLADE FOUND WITH CHORDWISE CRACK AT STA 90.0 DURING ROUTINE 100 HOUR INSPECTION.PILOT THOUGHT HE FELT A SLIGHT CHANGE IN AIRCRAFT VIBRATION LEVELS DURING FLIGHT TO MAINTENANCE FACILITY. THE CRACKEXTENDED 4 INCHES FROM THE TRAILING EDGE OFTHE BLADE SKIN TOWARD THE CENTER OF THE BLADE.WE HAVE PICTURES OF THE BLADE THAT CAN BE EMAILED IF REQUIRED.YOU NEED TO CHANGE THE SIZE OF THE MODEL/PN BOX TO ACCOMODATE LARGER PART NUMBERS. THE RIN COUNT ON THIS BLADE WAS 515,664 AT THE TIME OF REMOVAL.

CA040820005	DOUG	PWA	CYLINDER	CRACKED
8/18/2004	A26CSHIELDS	R280079		ENGINE

(CAN) DURING A FOREST FIRE ACTION, THE PILOT NOTICED AN OIL LEAK COMING FROM THE TOP OF THE LT ENGINE. SHUT THE ENGINE DOWN AND RETURNED TO THE FIELD MAINTENANCE BASE WITH OUT INCIDENT.

MAINTENANCE FOUND TWO CRACKED CYLINDERS. THEY CHANGED THE CYLINDERS AND GROUND CHECKED THE ENGINE AND FOUND IT TO BE SERVICEABLE.

CA040825008	DOUG	PWA	ENGINE	FAILED
8/12/2004	B26C	R280079	R280079	RIGHT

(CAN) ON TAKEOFF ROLL THE RT ENGINE STARTED TO BACKFIRE AND LOOSE POWER, AT 90 KTS THE TAKEOFF WAS ABORTED MIXTURES TO IDLE CUT OFF,THE LOAD WAS DUMPED. THE A/C WENT OFF THE END OF THE RUNWAY, AT 1000 FEET BEYOND THE RUNWAY THE A/C IMPACTED A DITCH. THE PILOT GOT OUT OF THE A/C AND WAITED FOR ASSISTANCE. THE A/C HAS BEEN DISMANTLED AND TRANSPORTED TO RED DEER,THE ENGINES ARE SCHEDULED FOR INVESTIGATION.

2005FA0000383	DOUG		NOSE COWL	CORRODED
3/22/2005	DC10*		NSL6051513	ENGINE

NOSE COWL SENT TO US FOR REPAIR. DURING EVALUATION SEVERE INTERGRANULAR CORROSION WAS DISCOVERED ON THE OUTER SKIN OF THE ACOUSTIC BARREL. SUSPECT IMPROPER HEAT TREATMENT AT MFG. PART IS CONSIDERED BEYOND ECONOMICAL REPAIR AND WILL BE SCRAPPED AT THIS LOCATION. (K)

COOSDR040048	DOUG	GE	FITTING	CORRODED
10/15/2004	DC871F	CFM562C	45976431	MAIN CABIN

MAIN CARGO CABIN, SUPPORT FITTING, PN 4597643-1, CORRODED AT Y-STA 60-X65, Z 0 INCH. (K)

COOSDR040045	DOUG	GE	FITTING	CRACKED
10/15/2004	DC871F	CFM562C	37502571	FUSELAGE

FWD CARGO COMPARTMENT FROM Y-STA 440 TO Y-STA 460, LONGERON 31R SPLICE FITTING, PN 3750257-1, CRACKED. (K)

COOSDR040052	DOUG	GE	SKIN	CORRODED
10/26/2004	DC871F	CFM562C	57799293	FUSELAGE

FUSELAGE AFT CENTER SECTION, LOWER PLATING (PN 57799293) CORRODED FROM STA 980 TO STA 1040 BETWEEN LONGERON 35L AND 35R. (K)

COOSDR040053	DOUG	GE	SKIN	DELAMINATED
10/27/2004	DC871F	CFM562C	56551671	SPOILER

RT WING, SPOILER PN 56551671, SN 2740 UPPER SKIN DELAMINATED AT STA XRS 218. (K)

COOSDR040049	DOUG	GE	FITTING	CRACKED
10/15/2004	DC871F	CFM562C		FUSELAGE

MAIN CARGO CABIN, FROM Y STA 650 TO Y-STA 680, LONGERON 1 FITTING WITH CRACK. (K)

COOSDR040041	DOUG	PWA	FITTING	CRACKED
9/24/2004	DC914	JT8D5	49568801	NLG

FUSELAGE NOSE LANDING GEAR WHEEL WELL RT SIDE AT Y STA 69.55-X 24 INCH -Z16 INCH FITTING (PN 49568801) WITH CRACK. (K)

LCQ20050120	DOUG		FLOOR PANEL	CRACKED
1/20/2005	DC932			FUSELAGE

MAIN CABIN FLOOR PANEL NR 85 HAS HALF SECTION CRACKED OUT. S/O 152051, OPS 29532, ZONE 6C-127.

LCQ20050120A	DOUG		CHANNEL	CRACKED
1/20/2005	DC932			FUSELAGE

LT CENTER FS 606 TO 680 HAS SURFACE CORROSION ON CHANNELS, CRACKED OUT ON ENDS AND CENTER AREAS. S/O 152051, OPS 29568, ZONE 6C-145.

CA050218008	DOUG	PWA	INTERCOSTAL	CRACKED
2/16/2005	DC983	JT8D219	99118755	AFT FUSELAGE

(CAN) WHILE PERFORMING TROUBLESHOOTING ON A POSSIBLE RUDDER PCU HYDRAULIC LEAK, FOUND RUDDER SUPPORT BRACKET, ALL FASTENERS LOOSE (SIX OFF) AND INTERCOSTAL BETWEEN TWO FRAMES SUPPORTING PCU BRACKET, CRACKED.

CA050210004	DOUG	PWA	PUMP	FAILED
2/9/2005	DC983	JT8D219	AS664116S666	LT HYD SYSTEM

(CAN) DURING CLIMB, THE CREW OBSERVED LT HYDRAULIC PRESSURE LOW WITH LIGHT ILLUMINATING. HYDRAULIC PRESSURE INDICATED ZERO. QRH PROCEDURES INITIATED AND AIRCRAFT RETURNED TO BASE WITHOUT INCIDENT. MAINTENANCE REPLACED THE LT EDP. OPERATIONAL CHECK CARRIED OUT IAW MM 29-10-05. NO FURTHER INCIDENT DURING SUBSEQUENT FLIGHT.

CA050228004	DOUG	PWA	TRANSDUCER	INOPERATIVE
2/26/2005	DC983	JT8D219	406256	WHEEL SPEED

(CAN) DURING TAKE-OFF, WHEEL NOT TURNING LIGHT ILLUMINATED AT 80 KNOTS. REJECTED TAKE-OFF CARRIED OUT WITHOUT INCIDENT. WHEEL NOT TURNING LIGHT EXTINGUISHED. SUSPECTED DE-ICING FLUID AND WET RUNWAY WAS THE CAUSE. CREW REQUESTED SECOND TAKE-OFF ATTEMPTED. UNABLE TO TAKE-OFF DUE TO SAME SNAG. REJECTED TAKE-OFF CARRIED OUT SERVICEABLE. MAINTENANCE REPLACED THE WHEEL SPEED TRANSDUCER IAW MM 32-40-00 AND CHECKED SERVICEABLE. NO FURTHER FAULT DURING SUBSEQUENT FLIGHT.

CA050210002	DOUG	PWA	SWITCH	INTERMITTENT
2/9/2005	DC983	JT8D219	H141016	NLG

(CAN) DURING FLIGHT, THE CREW OBSERVED THE NLG UNSAFE LIGHT ILLUMINATE BRIEFLY. THE FLIGHT CONTINUED AND LANDED WITHOUT INCIDENT. THE NLG LT GROUND INTERLOCK SWITCH WAS SUSPECTED AND REPLACED IAW MM 32-60-05. NO FURTHER PROBLEM DURING SUBSEQUENT FLIGHT.

CA040820006	DOUG	PWA	GENERATOR	OVERHEATED
7/26/2004	DC983	JT8D219		RIGHT

(CAN) RT GEN FAILED DURING TAXI TO GATE. GEN DISCONNECTED & QRH PROCEDURE COMPLETED BY CREW. FOR FOLLOWING FLT, A/C DISPATCHED IAW MEL 24-1. 4 HOUR FLT CONDUCTED TO NEXT STA & ON ARRIVAL, MX NOTICED SMOKE COMING FROM NR 2 ENG. INVEST REVEALED PAINT BLISTERING ON LOWER COWL IN VICINITY OF GEN. A/C GEN FOUND SMOLDERING & EMITTING HIGH LEVELS OF HEAT & GEN HOUSING FOUND DISCOLORED. CSD NOT DISCONNECTED & IS NOT REQUIRED TO BE DISCONN IAW QRH & MEL PROCEDURES. WITHOUT DISCONNECTING DRIVE, GEN WILL CONTINUE TO SPIN. TO AVOID SUCH THIS, OPS WILL REVISED QRH & MEL PROCEDURES IN ORDER TO DISCONNECT CSD FOLLOWING GEN DISCONNECT.

CA040820007	DOUG	PWA	FILTER	CLOGGED
7/29/2004	DC983	JT8D219		ENGINE OIL

(CAN) DURING TAKE OFF ROLL, RT ENG OIL FILTER CLOG LIGHT ILLUMINATED. TAKE OFF WAS REJECTED. ENGINE RUN UP CONDUCTED WITH NO LIGHT REILLUMINATED. AIRCRAFT TOOK OFF AND THEN FLOWN TO THE SCHEDULED STATION (MAIN BASE) WITHOUT LIGHT REILLUMINATING. AT THE MAIN BASE, THE OIL FILTER WAS REMOVED AND FOUND WITH CARBON DEPOSIT. NEW OIL FILTER INSTALLED. THE ENGINE HAS BEEN SCHEDULED TO BE REPLACED AS PRECAUTIONARY BECAUSE THIS PROBLEM IS RECURRENT.

CA040917001	DOUG	PWA	GENERATOR	FAILED
9/14/2004	DC983	JT8D219		AC SYSTEM

(CAN) FLT CREW DECIDED TO LAND BACK TO DEPARTURE AIRPORT FOLLOWING 3 DISCREPANCIES: TAIL COMPARTMENT OVERTEMP LIGHT CAME ON AFTER ROTATION.THE LT PACK WAS SELECTED OFF TO CONTINUE FLIGHT. LATER ON THE LT CSD OIL OUTLET TEMP WENT HIGH.THE CSD WAS DISCONNECTED AND THE APU WAS STARTED AS REQUESTED BY PROCEDURES AND SHUT DOWN DUE TO GENERATOR OUT OF FREQUENCY.ALL 3 DISCREPANCIES WERE RECTIFIEDAS FOLLOW:SOME DUCT CLAMPS WERE FOUND LOOSE IN TAIL COMPARTMENT LT PACK ANDSECURED.THE CSD OIL LEVEL WAS FOUND OVER SERVICED AND OIL LEVEL WAS RE SERVICED AS

PER MM.APU GENERATOR FREQUENCY ADJUSTED AS REQUIRED.

ASAA0580104	DOUG	PWA	FLOOR PANEL	DAMAGED
2/15/2005	DC983	JT8D219	98391951	CABIN

OKC C-CHECK- PAX CABIN FLOOR PANEL PEELED. FIBERGLASS BOND REPAIRED. (K)

CA041102011	DOUG	PWA	PIN	WRONG PART
10/29/2004	DC983	JT8D219		CONNECTOR

(CAN) THE PIN 'K' ON THE RECEPTACLE OF THE INDICATOR IS TOO BIG. WHEN THE INDICATOR WAS REMOVED FOR INSPECTION, THE SOCKET IN THE PLUG (ACFT SIDE)BROKE IN HALF, LEAVING A PORTION OF THE SOCKET ON THE INDICATOR. AFTER INVESTIGATION WE FOUND THE PIN 'K' ON THE INDICATOR WAS TOO BIG, IN A TAPER SHAPE, LIKE A CONE. THE SOCKET INTHE PLUG HAS BEEN REPLACED AND A NEW INDICATOR INSTALLED. NOTE: PART TSN AND TSOARE UNKNOWN

CA041026005	DOUG	PWA	TARGET	BENT
10/22/2004	DC983	JT8D219		DOOR WARNING SYS

(CAN) AIRCRAFT ABORTED TAKE OFF DUE TO FWD CARGO DOOR ANNUNCIATION CAME ON. MAINTENANCE FOUND THE CARGO DOOR PROXIMITY TARGET BENT. PROX TARGET ADJUSTED AS PER AMM AND AIRCRAFT RELEASED SERVICEABLE.

CA041020007	DOUG	PWA	SYMBOL GENERATOR	FAILED
10/18/2004	DC983	JT8D219	4055900905	NR 1 PFD

(CAN) AIRCRAFT HAS BEEN DIVERTED TO AN ALTERNATE AIRPORT DUE TO A COMPLETE LOST OF NR 1 PRIMARY FLIGHT DISPLAY AND NAV DISPLAY. MAINTENANCE FOUND NR 1 SYMBOL GENERATOR AT FAULT, AIRCRAFT DISPATCHED SERVICEABLE FOLLOWING THE REPLACEMENT.

CA040928004	DOUG	PWA	ENGINE	FAILED
9/25/2004	DC983	JT8D219		NR 2

(CAN) A LOUD BANG WAS HEARD DURING CLIMB AT 100 AGL. NR 2 ENGINE FAILED AND RELIT AUTOMATICALLY. AIRCRAFT RETURNED BACK FOR LANDING WITH ENGINE NR 2 AT IDLE WITH ALL PARAMETERS AT NORMAL EXCEPT THAT EGT REACH LIMITS WHILE THROTTLE WAS ADVANCED. THE TURBINE WAS FOUND DAMAGED. THE ENGINE ASSY WILL BE REPLACED. AN ENGINE INVESTIGATION WILL FOLLOW.

CA040928006	DOUG	PWA	TIRE	FAILED
9/24/2004	DC983	JT8D219		NLG

(CAN) HIGH VIBRATION REPORTED FROM NOSE WHEEL DURING TAKE OFF ROLL. THE TAKE OFF WAS ABORTED. BOTH NOSE WHEELS FOUND OUT OF ROUND. BOTH WHEELS REPLACED AND AIRCRAFT DISPATCHED SERVICEABLE.

CA041217005	DOUG	PWA	TRANSMITTER	MALFUNCTIONED
12/15/2004	DC983	JT8D219	LG80EI	LT ENGINE

(CAN) DURING CRUISE, LT ENGINE EPR DROPPED TO 1.35 FOLLOWED BY AUTO THROTTLE DISCONNECT AND AIRCRAFT DECELERATION. EPR LINE INSPECTED, NO FAULTS FOUND. ENGINE RUN-UP CARRIED OUT AS PER AMM AND ENGINE PARAMETERS FOUND WITHIN LIMIT. THE PRESSURE TRANSMITTER WAS REPLACED FOR PRECAUTIONARY. NO MALFUNCTION WAS REPORTED ON FOLLOWING FLIGHTS.

CA050124009	DOUG	PWA	WARNING LIGHT	ILLUMINATED
1/22/2005	DC983	JT8D219		NLG

(CAN) CREW OBSERVED NOSE GEAR LIGHT ILLUMINATED WITH THE GEAR HANDLE IN THE UP POSITION. HEARD A GRINDING NOISE WITH VIBRATION FELT. THE AIRCRAFT CONTINUED AND LANDING WITHOUT INCIDENT. NUMEROUS NOSE WHEEL RETRACTIONS/EXTENSIONS WERE CARRIED SUCCESSFULLY. THE NOSE GEAR TRUNNION WAS LUBRICATED AND THE NOSE GEAR WAS FOUND SERVICEABLE IAW MM 32-30-00. NO FURTHER INCIDENT DURING SUBSEQUENT FLIGHT.

CA050121002	DOUG	PWA	DISPLAY	INOPERATIVE
1/19/2005	DC983	JT8D219		FLIGHT SCREEN

(CAN) DURING TAXI, IT WAS OBSERVED THAT THE PRIMARY FLIGHT DISPLAY SCREEN WENT BLANK. A BURNING SMELL WAS SENSED. THE AIRCRAFT RETURNED TO THE GATE WITHOUT INCIDENT . THE PFD UNIT WAS REPLACED AND THE AIRCRAFT WAS RELEASED. DURING TAXI, THE PFD SCREEN WENT BLANK AGAIN. THE AIRCRAFT RETURNED TO THE GATE. UPON FURTHER INVESTIGATION, WATER AND MOISTURE WAS FOUND WHICH CAUSED THE UNIT TO BECOME UNSERVICEABLE. A LEAK WAS FOUND COMING FROM THE WIPER MOTOR AREA AND THE SEALANT HAD DETERIORATED. THE AREA WAS CLEANED OF ALL THE OLD SEALANT AND REPLACED. A SERVICEABLE PFD WAS INSTALLED. THE AIRCRAFT WAS RELEASED WITH NO FURTHER INCIDENT DURING SUBSQUENT FLIGHT.

CA050128001	DOUG	PWA	ENGINE	MALFUNCTIONED
1/27/2005	DC983	JT8D219		NR 2

(CAN) DURING TAKE-OFF, THE CREW OBSERVED NR 2 ENGINE EPR GAUGE NOT WORKING. TAKE-OFF WAS REJECTED AND AIRCRAFT RETURNED TO THE GATE. NR 2 ENGINE EPR DEFERRED IAW MEL 77-1 AND DMI NR 10956 RAISED. ALL OTHER ENGINES PARAMETERS NORMAL. AIRCRAFT RELEASED AND NO FURTHER INCIDENT DURING SUBSEQUENT FLIGHT.

CA041214004	DOUG	PWA	LINE	CRACKED
12/11/2004	DC983	JT8D219	7938314506	ENGINE OIL

(CAN) DURING CLIMB, LT ENGINE OIL PRESSURE DROPPED TO 39 PSI. AIRCRAFT LANDED BACK TO DEPARTURE AIRPORT. ON APPROACH, OIL QTY DROPPED TO 5 QTS AND OIL PRESSURE TO35 PSI. MAINTENANCE FOUNDTHE PRESSURE LINE LEAKING BETWEEN THE OIL PRESSURE TRANSMITTER AND THE REDUCER. OIL PRESSURE LINE REPLACED, TESTED AND AIRCRAFT DISPATCHED SERVICEABLE.THE OIL LINE WAS FOUND CRACKED AT THE TUBE FLARE AT THE REDUCER CONNECTION. THE TECHNICIAN FOUND THE FITTING OVER TIGHTENED AND LINE STRESSED DURING THE REMOVAL.IT IS CONCLUDED THAT THE LINE WAS NOT PROPERLY INSTALLED.

CA050215004	DOUG	PWA	TRANSDUCER	DAMAGED
2/14/2005	DC983	JT8D219	4062515	ANTI-SKID SPEED

(CAN) DURING TAKE-OFF, THE CREW OBSERVED THE (WHEEL NOT TURNING LIGHT) WAS ON. THE TAKE-OFF WAS REJECTED SUCCESSFULLY AND RETURNED TO THE GATE. MAIN FOUND THE NR 1 ANTI-SKID SPEED TRANSDUCER DAMAGED DUE TO HEAT. THE ASSY WAS REPLACED AND CHECKED SERVICEABLE IAW MM 32-43-02. NO FURTHER PROBLEM DURING SUBSEQUENT FLIGHT.

CA050104003	DOUG	PWA	INDICATOR	INOPERATIVE
12/30/2004	DC983	JT8D219		NR 2 ENGINE EPR

(CAN) AIRCRAFT REJECTED TAKE OFF AT 65 KNOTS, DUE TO NR 2 ENGINE EPR GAUGE BEING INOPERATIVE. MAINTENANCE REMOVED EPR LINES AND FOUND WATER INU PIPE OF PT7. THE WATER WAS BLOWN OUT AND DRIED. ENGINE RUN CARRIED OUT, SYSTEM FOUND SERVICEABLE.

CA050104004	DOUG	PWA	LINE	CONTAMINATED
12/30/2004	DC983	JT8D219		NR 2 ENGINE EPR

(CAN) AIRCRAFT REJECTED TAKE OFF AT LESS THEN 40 KNOTS, DUE TO NR 2 ENGINE EPR DID NOT RESPOND TO THROTTLE MOVEMENT. MAINTENANCE FOUND WATER IN EPR LINE. MAINTENANCE BLEW AIR AND CLEANEDTHE EPR LINES PT7, PT2 IAW AMM 77-1 1-03, 77-11-04. ENGINE RUN CARRIED OUT, SYSTEM FOUND SERVICEABLE.

CA050103002	DOUG	PWA	START VALVE	MALFUNCTIONED
1/2/2005	DC983	JT8D219	39279621	NR 1 ENGINE

(CAN) NR 1 ENGINE, THE LT START VALVEOPEN LIGHT CAME ON IN CLIMB. THE AIRCRAFT LEVELED OFF, WHEN THE POWER REDUCED, THE LIGHT WENT OUT. WHEN CLIMB POWER INITIATED AGAIN, THE LIGHT CAME BACK ON. THE AIRCRAFT CAME BACK TO PLACE OF DEPARTURE. THE AIRCRAFT WAS RELEASED UNDER MEL 80-1.2. THE STARTER VALVE (PN ON OFF, 392796-2-1, SN OFF 3938, SN ON 3624) WAS LATER REPLACED IAW AMM 80-10-02. OPERATIONAL CHECK C/OUT PER AMM 71-00-00.

CA041223001	DOUG	PWA	COMPRESSOR	DAMAGED
12/21/2004	DC983	JT8D219		NR 2 ENGINE

(CAN) A LOUD BANG HEARD ON ROTATION FROM NR 2 ENGINE. POWER WAS REDUCED TO IDLE AND AIRCRAFT LANDED BACK. ENGINE FAN BLADES FOUND DAMAGED. ENGINE REPLACED. THE CAUSE HAS NOT BEEN IDENTIFIED. AWAITING FOR SHOP REPORT.

CA050201005	DOUG	PWA	WARNING HORN	ACTIVATED
1/29/2005	DC983	JT8D219		COCKPIT

(CAN) DURING TAKEOFF, AN AUDIBLE WARNING WAS HEARD FROM THE TAKEOFF WARNING COMPUTER. THE TAKEOFF WAS ABORTED SUCCESSFULLY WITHOUT INCIDENT. THE AIRCRAFT RETURNED TO THE GATE WHERE THE FLIGHT CREW ADJUSTED THEIR SETTINGS. THE AIRCRAFT DEPARTED WITHOUT INCIDENT AND NO FURTHER PROBLEM DURING SUBSEQUENT FLIGHT.

CA050125014	DOUG	PWA	LATCH	BROKEN
1/11/2005	DC983	JT8D219	AM767BA	LAVATORY DOOR

(CAN) WHILE IN FLT, A PERSON WENT TO THE FWD LAVATORY, ONCE INSIDE, WAS UNABLE TO OPEN DOOR. DOOR HANDLE WOULD TURN, BUT DOOR REMAINED CLOSED. PERSON WAS BASICALLY STUCK INSIDE. CAPTAIN AUTHORIZED CABIN CREW TO USE CRASH AXE IN ORDER OPEN THE DOOR. FORWARD LAVATORY WAS PUT ON MEL. LATER, MAINTENANCE REMOVED THE DOOR AND REMOVED THE DOOR HANDLE MECHANISM. IT WAS FOUND THAT THE DOOR LOCK SLIDER PLATE WAS BROKEN, MAKING IT POSSIBLE FOR THE DOOR LOCK SLIDER LEVER TO COME OUT OF THE SLIDER LOCK PLATE, THE DOOR BEING IN THE CLOSED POSITION (SLIDER LOCK PLATE ENGAGED IN THE DOOR FRAME RECEPTACLE) MAKING IT IMPOSSIBLE TO OPEN THE DOOR BY ROTATING THE DOOR HANDLE. MX REPLACED THE DOOR ASSY.

CA050124004	DOUG	PWA	DOOR	SEPARATED
1/21/2005	DC983	JT8D219		MLG

(CAN) UPON ARRIVAL AT GATE, THE AIRCRAFT WAS BEING INSPECTED DURING THE TURN. IT WAS OBSERVED THAT THE LT OUTER GEAR DOOR WAS MISSING. NR2 BRAKE LINE LEAKING. LOWER SIDE OF TRAILING EDGE FLAPS (F/H) DAMAGED. BROKEN HOSE SUPPORT LINK LT GEAR. BUNGEE EXTENSION SPRINGS AND BRACKETS DAMAGED. FUSELAGE SCRATCHED BELOW L2 DOOR. TSB WERE INVOLVED WITH THIS INCIDENT. PRELIMINARY FINDINGS ARE THE AIRCRAFT DID NOT LINE UP PROPERLY WITH THE RUNWAY. PMI INFORMED ON INCIDENT. THE INVESTIGATION IS STILL UNDERWAY.

CA041221002	EMB	PWA	COMBUST CHAMBER	CRACKED
12/13/2004	EMB110*	PT6A34	3029248	ENGINE

(CAN) DURING CLIMB THE ENG EXPERIENCED AN UNCOMMANDED POWER REDUCTION ACCOMPANIED BY AUTO-FEATHER. THE AIRCRAFT DIVERTED TO POINT OF DEPARTURE. SUBSEQUENT INSPECTION REVEALED A FRACTURED COMBUSTOR SMALL EXIT DUCT AND ASSOCIATED CT BLADE AND VANE DAMAGE.

CA041215001	EMB	PWA	EXHAUST DUCT	CRACKED
12/14/2004	EMB110P1	PT6A34		ENGINE

(CAN) DURING ROUTINE MAINTENANCE 2 CRACKS WERE FOUND ON THE STARBOARD ENGINE EXHAUSTDUCT. THE CRACKS WERE LOCATED APPROXIMATELY 1.250 INCHES AFT OF THE REDUCTION GEARBOX MOUNTING FLANGE BETWEEN THE 10 AND 11:30 CLOCK POSITIONS. THE ORIGIN APPEARED TO BE FROM THE PORT EXHAUST STUB FORWARD ATTACHMENT AREA. THE CRACK LENGTHS WERE .350 AND .613 INCHES WITH A SEPARATION OF 2.250 INCHES. THE EXHAUST DUCT WASREMOVED AND SENT OUT FOR REPAIR.

CA050207002	EMB	PWA	GOVERNOR	UNCONTROLLABLE
2/2/2005	EMB110P1	PT6A34	8210002	PROPELLER

(CAN) THE AIRCRAFT WAS IN ENROUTE, WHEN THE RT ENGINE PROPELLER RPM DROPPED, UNCOMMANDED, TO 80 PERCENT. THE PROPELLER RPM COULD NOT BE CONTROLLED, NOR COULD THE PROPELLER BE FEATHERED, AND THE RT ENGINE WAS SHUTDOWN AS A PRECAUTION. THE AIRCRAFT RETURNED TO AIRPORT WHERE MAINTENANCE FOUND THE RT PROPELLER GOVERNOR TO BE FAULTY. THE PROPELLER GOVERNOR WAS

REPLACED AND THE AIRCRAFT WAS RETURNED TO SERVICE.

2005FA0000360	EMB	PWA	HEATER	LEAKING
2/24/2005	EMB110P1	PT6A34		FUEL/OIL

PILOT OBSERVED FLUCTUATING OIL PSI (100-70PSI) BROUGHT POWER BACK TO 200 LBS. TQ AND OIL PSI DROPPED TO 50 PSI. PILOT FEATHERED AND SHUTDOWN EFFECTED ENGINE. AFTER MECH INVESTIGATED THE PROBLEM, FOUND THAT FUEL HAD MIXED WITH THE OIL SUPPLY AND DILUTED IT TO A WATER LIKE CONSISTENCY. BELIEVE THAT THE FUEL OIL HEATER CORE HAS HOLE IN IT WHICH WOULD ALLOW FUEL TO MIX WITH THE ENGINE OIL SUPPLY. (K)

CA050131005	EMB	PWA	PACKING	DAMAGED
1/22/2005	EMB120	PW118A		FUEL NOZZLE

(CAN) DURING CRUISE, THE ENGINE EXPERIENCED AN UNCOMMANDED REDUCTION IN POWER. THE PILOT SHUT THE ENGINE DOWN IN FLIGHT. SUBSEQUENT INVESTIGATION REVEALED A DAMAGED FUEL NOZZLE TUBE PACKING.

CA050107003	EMB	ALLSN	COMPRESSOR	SEIZED
1/29/2005	EMB135ER	AE3007A		RT ENGINE

(CAN) UNCOMMANDED IN FLIGHT SHUTDOWN DURING CLIMBOUT AT APPROXIMATELY 25,000 FT. PILOT HEARD A LOUD BANG FOLLOWED BY A UNCOMMANDED SPOOL DOWN TO THE RT ENGINE. AN EMERGENCY WAS DECLARED AND A/C RETURNED TO FIELD ACCOMPLISHING A UNEVENTFUL SINGLE ENGINE LANDING. GROUND CHECK REVEALED THAT COMPRESSOR ROTOR COULD NOT BE ROTATED. ENGINE ENROUTE TO ROLLS-ROYCE CANADA FOR INVESTIGATION. RRC HAS BEEN ADVISED THAT THE FAA WILL BE ON SITE FOR THE INVESTIGATION.

EAHR200500001	ENSTRM	LYC	ENSTRM	SPACER	CRACKED
3/8/2005	280FX	HIO360F1AD		28135079	T/R GEARBOX

CRACK ON ID OF SPACER OF TAIL ROTOR GEARBOX.

CA050213008	FOKKER	PWA	FUEL HEATER	LEAKING
2/8/2005	F27FOKKER*	PW125B	10839	ENGINE

(CAN) FUEL WAS FOUND LEAKING FROM THE FUEL HEATER DURING MAINTENANCE OPERATIONS. THE LEAK WAS FOUND TO BE ASSOCIATED WITH CORROSION PITTING.

CA041021003	FOKKER	PWA	PUMP	LEAKING
8/26/2004	F27MK50	PW125B		PROP FEATHERING

(CAN) DURING CRUISE, THE LOW OIL PRESSURE WARNING WAS ACTIVATED AND THE PILOT ELECTED TO SHUT DOWN THE ENGINE BEFORE PERFORMING AN UNEVENTFUL SINGLE ENGINE LANDING. GROUND MAINTENANCE FOUND AN OIL LEAK AT THE FEATHERING PUMP FROM A DAMAGED O'RING.

CA041021004	FOKKER	PWA	PUMP	LEAKING
9/15/2004	F27MK50	PW125B		PROP FEATHERING

(CAN) FOLLOWING AN IFSD AND RESULTING EMERGENCY LANDING, GROUND MAINTENANCE FOUND AN OIL LEAK AT THE FEATHERING PUMP ACCOMPANIED BY THE SEIZURE OF THE LOW AND HIGH PRESSURE COMPRESSOR ROTORS.

CA041216002	FOKKER	RROYCE	CONNECTOR	BURNED
12/13/2004	F28MK0100	TAY65015		STATIC VENT HEAT

(CAN) FOLLOWING A DISCREPANCY WITH THE LAVATORY DRAINING, MAINTENANCE FOUND THE HEATER ASSY FOR STATIC VENTILATION (REAR DRAIN MAST) NOT WORKING. ONE OF THE 2 CONNECTORS AT THE HEATER WAS FOUND BURNED. THE INSULATION BLANKET AROUND THE HEATER WAS FOUND CARBONIZED. THERE WAS NO SMOKE REPORTED. THE AREA WAS FOUND DRY. THE CAUSE OF THE BURNED CONNECTOR STILL UNKNOWN. THE AIRCRAFT MANUFACTURER IS INFORMED. THE RESULT OF INSPECTION ON 2 OTHER AIRCRAFT WAS FOUND SATISFACTORY. MORE DETAILS WILL FOLLOW.

CA041207005	FOKKER	RROYCE	LINE	LEAKING
12/2/2004	F28MK0100	TAY65015		POTABLE WATER

(CAN) DURING CLIMB, CANNOT PRESSURIZE ACRFT. ACRFT RETURNED TO DEPARTURE AIRPORT. MX FOUND CABIN AIR FILTER FOR OUTFLOW VALVES FULLY ICE COVERED DUE TO POTABLE WATER TANK LINE LEAKING AND DRIPPING OVER FILTER. FILL WATER LINE FITTING AT THE TANK CONNECTION TIGHTENED & FILTER CLEANED. SYSTEM TESTED AND ACRFT DISPATCHED SERVICEABLE. SAME PROBLEM OCCURRED 2 DAYS LATER (UNABLE TO PRESSURIZE THE AIRCRAFT). THE DRAIN WATER LINE FROM POTABLE WATER TANK FOUND LEAKING & WATER DID CONTAMINATE RT OUTFLOW VALVE, LT SECONDARY OUTFLOW VALVE & OUTLET VALVE FOR AVIONICS COOLING. WATER LINE TIGHTENED & WATER TANK PRESSURIZED & CHECKED FOR LEAK. ALL LISTED VALVES REPLACED & AIRCRAFT DISPATCHED SERVICEABLE.

CA050125004	FOKKER	RROYCE	LINE	BURST
1/23/2005	F28MK0100	TAY65015		GALLEY

(CAN) IT WAS OBSERVED BY THE FLIGHT ATTENDANTS THAT A WATER LEAK WAS FOUND COMING FROM THE FWD GALLEY AREA. THE MANUAL SHUT-OFF VALVE WAS CLOSED BUT THE LEAK WAS STILL OBSERVED. THE AIRCRAFT RETURNED TO THE GATE AND A WATER LINE UNDER THE FWD GALLEY HAD BURST. THE LINE WAS REPLACED AND NO FURTHER INCIDENT DURING SUBSEQUENT FLIGHT.

CA050125005	FOKKER	RROYCE	APU	SMOKE
1/24/2005	F28MK0100	TAY65015		APU BAY

(CAN) AFTER START SEQUENCE AND COMMENCE TAXI, THE CABIN CREW OBSERVED A LIGHT SMOKE COMING THROUGH THE AIR VENT. THE APU WAS SHUTDOWN WHICH SEEMED TO DISSAPATE THE SMOKE. AS A PRECAUTION THE AIRCRAFT RETURNED TO THE GATE AND PASSENGERS DISEMBARKED. MAINTENANCE STARTED THE AIRCRAFT USING A GROUND START UNIT. NO SMOKE WAS OBSERVED AFTER START UP. THE AIRCRAFT WAS RELEASED AND NO FURTHER INCIDENT DURING SUBSEQUENT FLIGHT.

CA040917002	FOKKER	RROYCE	AUTOTHROTTLE SYS	MALFUNCTIONED
9/15/2004	F28MK0100	TAY65015		NR 2

(CAN) DURING CLIMB, AIRCRAFT HAD NR 2 AUTO THROTTLE (A/T) AFCAS FAULT, FOLLOWED BY NR 1 AND 2 STAB TRIM DOUBLE CHANNEL IN FAULT. AIRCRAFT LANDED BACK TO DEPARTUREAIRPORT. THE A/T DEFECT WAS DISPATCHED AS PER MEL AND RECTIFIED THE DAY AFTER B Y ADJUSTING THE NR 2 POWER LEVER ANGLE SWITCH LOCATED IN PEDESTAL. THE STAB TRIM WAS FUNCTIONAL TESTED AS PER MM AND FOUND SATISFACTORY

CA050201006	FOKKER	RROYCE	WINDSHIELD	CRACKED
1/30/2005	F28MK0100	TAY65015	D20543406	COCKPIT

(CAN) DURING FLIGHT IT WAS OBSERVED THE RT WINDSHIELD OUTER PANE WAS CRACKED. CREW INITIATED QRH PROCEDURES AND FLIGHT WAS CONTINUED. AIRCRAFT LANDED WITHOUT INCIDENT. RT WINDSHIELD WAS REPLACED IAW MM 56-11-00. NO FURTHER INCIDENT DURING SUBSEQUENT FLIGHT.

CA050218007	FOKKER	RROYCE	SWITCH	INOPERATIVE
2/16/2005	F28MK0100	TAY65015	D48366403	SHROUD OVERHT

(CAN) DURING CLIMB, NR1 ENGINE BLEED FAULT ILLUMINATED. AT CRUISE, THE BLEED WAS RESET RESULTING IN THE SAME BLEED DUCT LEAK ALERT. THE AIRCRAFT RETURNED TO BASE WITHOUT INCIDENT. MAINTENANCE REPLACED THE LT SHROUD OVERHEAT SWITCH IAW MM 36-11-11 AND TESTED SERVICEABLE IAW MM 36-11-11-720-855. THE AIRCRAFT WAS DISPATCHED WITH NO FURTHER PROBLEM DURING SUBSEQUENT FLIGHT.

CA050214004	FOKKER	RROYCE	ENGINE	SMOKE
2/11/2005	F28MK0100	TAY65015		

(CAN) DURING PUSH BACK, SMOKE WAS OBSERVED IN THE CABIN AREA WHILE ENGINES WERE BEING STARTED. THE AIRCRAFT RETURNED TO THE GATE. ENGINE STARTS WERE CARRIED OUT AT THE GATE AND THE SMOKE WAS NO LONGER OBSERVED IN THE CABIN. DE-ICING FLUID WAS SUSPECTED. NO FURTHER INCIDENT DURING SUBSEQUENT START.

CA041231002	FOKKER	RROYCE	LINE	BURST
12/30/2004	F28MK0100	TAY65015		POTABLE WATER SY

(CAN) AFTER TAKE OFF, COULD NOT GET AIRCRAFT TO PRESSURIZE. AIRCRAFT LANDED BACK TO DEPARTURE AIRPORT. MAINTENANCE FOUND BOTH PRIMARY AND SECONDARY OUTFLOW VALVES AND OUTFLOW VALVE DRAIN LINE CONTAMINATED WITH ICE. WATER CAME FROM POTABLE WATER SYSTEM. A WATER LINE BUSTED DUE TO COLD WEATHER AND WATER RESIDUAL WAS THE CAUSE OF CONTAMINATION. BOTH VALVES AND DRAIN LINE REPLACED

CA050104001	FOKKER	RROYCE	PACKING	FAILED
1/3/2005	F28MK0100	TAY65015 RV99199		THERMAL RELIEF

(CAN) HYDRAULIC SYSTEM NR 1 FAILED IN FLT (AFTER TAKE OFF), LOW QUANTITY. THE FLIGHT CREW DECLARED AN EMERGENCY AND RETURNED TO PLACE OF DEPARTURE. MAINTENANCE FOUND THAT THE HYDRAULIC SYSTEM FAILURE WAS CAUSED BY A PACKING FAILURE OF THE THERMAL RELIEF VALVE ON THE PRESSURE MANIFOLD ASSY, THE VALVE WAS REPLACED (PN OFF ON: RV99-199, SN OFF 1011927, SN ON 04-0916528) IAW AMM 32-44-13. THE SYSTEM WAS REPLENISHED AND TESTED SERVICEABLE.

CA041224009	FOKKER	RROYCE	FUEL SYS	MALFUNCTIONED
12/23/2004	F28MK0100	TAY65015		NR 1 ENGINE

(CAN) AFTER DEPARTURE DURING CRUISE, A FUEL UNBALANCE WAS NOTICED AND LEAK SUSPECTED FROM NR 1 ENGINE. ENGINE NR 1 WAS SECURED AND AIRCRAFT LANDED BACK TO DEPARTURE AIRPORT. BOTH ENGINES WERE RAN AND NO LEAK WAS FOUND. THE AUTO FEED SYSTEM WAS PUT INOPERATIVE AS PRECAUTION AND AIRCRAFT DISPATCHED AS PER MEL. SAME OCCURRENCE ON THE FOLLOWING FLIGHT.AIRCRAFT STILL UNDER INVESTIGATION. DETAILS WILL FOLLOW.

CA050208005	FOKKER	RROYCE	CONTROL UNIT	FAILED
2/6/2005	F28MK0100	TAY65015	234007	ELEVATOR BOOST

(CAN) DURING TAKE-OFF, THE CREW OBSERVED NR2 ELEVATOR FAULT, LEVEL 3 ALERT ON THE MFDS. THE CREW INITIATED A REJECTED TAKE-OFF SUCCESSFULLY AND RETURNED TO THE GATE. MAINTENANCE CONFIRMED THE ELEVATOR BOOSTER CONTROL UNIT WAS SUSPECT. THE UNIT WAS REPLACED AND CHECKED SERVICEABLE IAW MM 27-32-01. THE AIRCRAFT WAS RETURNED TO SERVICE. NO FURTHER INCIDENT DURING SUBSEQUENT FLIGHT.

CA050209003	FOKKER	RROYCE	INDICATOR	FAILED
2/7/2005	F28MK0100	TAY65015		BLEED AIR

(CAN) DURING TAXI, THE CREW OBSERVED THE WING ANTI-ICE FAIL LIGHT CAME ON WITH THE ENGINE ANTI-ICE SELECTED ON. THE AIRCRAFT RETURNED TO THE GATE. MAINT PERFORMED THE CONTROL UNIT BITE TEST. THE OPERATIONAL TEST WAS CARRIED OUT IAW MM 30-11-00 WITH NO FAULT FOUND. THE AIRCRAFT WAS DISPATCHED AND FURTHER PROBLEM DURING SUBSEQUENT FLIGHT.

CA050124003	FOKKER	RROYCE	MOTOR	CONTAMINATED
1/20/2005	F28MK0100	TAY65015		ELEVATOR

(CAN) DURING CLIMB, IT WAS REPORTED BY THE CREW THAT ELEVATOR PITCH CONTROL WAS VERY HARD TO OPERATE. THE AUTO PILOT WAS DISENGAGED AND IN MANUAL OPERATION IT WAS STILL VERY HARD TO OPERATE. AN EMERGENCY WAS DECLARED AND THE AIRCRAFT LANDED WITHOUT INCIDENT. FURTHER INVESTIGATION FOUND THAT THE SERVO MOTOR AND THE CONTROL CABLES HAD EXCESSIVE BUILD UP OF GREASE AND MOISTURE. THE AFFECTED AREA WAS CLEANED AND RELUBRICATED IAW SL 273 AND MM 22-11-00. THE AIRCRAFT WAS DISPATCHED AND NO FURTHER PROBLEM DURING SUBSEQUENT FLIGHT.

2005FA0000151	GROB	SWIVEL	CRACKED
11/24/2004	G120A	120A5211	NOSE GEAR

INSPECTION OF NOSE GEAR UPPER TRUNNION BOLTS FOUND CRACKS AROUND WELDS AND ON THE EARS FOR THE SWIVEL TUBE. PROBABLE CAUSE EXCESSIVE STRESSES IN THIS AREA. AT THIS TIME NO RECOMMENDATION UNTIL MFG MAKES DETERMINATION OF CAUSES. (K)

2005FA0000153	GROB		SWIVEL	CRACKED
11/24/2004	G120A		120A5211	NLG

INSPECTION OF NOSE GEAR UPPER TRUNNION BOLTS, FOUND CRACKS AROUND WELDS AND ON THE EARS FOR THE SWIVEL TUBE. PROBABLE CAUSE EXCESSIVE STRESSES IN THIS AREA. AT THIS TIME NO RECOMMENDATION UNTIL MFG MAKES DETERMINATION OF CAUSES. (K)

2005FA0000152	GROB		BOLT	CRACKED
11/24/2004	G120A			NLG TRUNNION

INSPECTION OF NOSE GEAR UPPER TRUNNION BOLTS FOUND CRACKS AROUND WELDS AND ON THE EARS FOR THE SWIVEL TUBE. PROBABLE CAUSE EXCESSIVE STRESSES IN THIS AREA. AT THIS TIME NO RECOMMENDATION UNTIL MFG MAKES DETERMINATION OF CAUSES. (K)

2005FA0000371	GULSTM		B-NUT	SPLIT
10/19/2004	200		4AS7118102503	LT HYD SYS

LT HYDRAULIC PRESSURE LINE IN AFT EQUIPMENT BAY SPLIT AT AFT B-NUT FITTING. INSTALLATION WAS POST SB. PROBABLE CAUSE WAS STRESSED INSTALLATION AND VIBRATION. (K)

2005FA0000248	GULSTM		HEATER	INOPERATIVE
2/19/2005	200			LT PITOT HEAD

LT PITOT HEAT INOPERATIVE. FOUND PITOT PROBE HEATING ELEMENT ARCED. REMOVED AND REPLACED LT PITOT PROBE. (K)

CA040820003	GULSTM	GARRTT	SHAFT	SEIZED
8/18/2004	690	TPE3315251K		PROPELLER

(CAN) RETURNING FROM A FIRE ACTION, IN CRUISE AT 9500 FEET ASL, THERE WAS A LOSS OF POWER FROM THE RT ENGINE ACOMPANIED BY VIBRATION AND NOISE. THE RT ENGINE SHUT DOWN, THE PILOT COMPLETED THE EMERGENCY CHECK LIST AND ACCOMPLISHED AN UNEVENTFUL LANDING. MAINTENANCE FOUND THE PROP SHAFT SEIZED AND A HOLE IN THE PROP REDUCTION GEARBOX.

CA041209006	GULSTM	GARRTT	STRAP	CORRODED
11/24/2004	690A	TPE33110T	1701971	WING

(CAN) DURING REPLACEMENT OF LOWER SPAR CAP, WE WERE ADVISED THAT AN NEW AD IS PENDING AND WILL BE ISSUED IN JANUARY 2005 TO ADDRESS A CORROSION PROBLEM WITH THE PART NUMBERS. THE STRAPS WERE REMOVED AND EXTENSIVE CORROSION WAS FOUND UNDER THE STEEL STRAPS ON THE UPPER WING SKIN. THIS IS BEING REPAIRED AS PER TWIN COMMANDER'SINSTRUCTIONS AT A TWIN COMMANDER SERVICE CENTRE.

CA041013011	GULSTM	GARRTT	ARM	CRACKED
10/13/2004	690A	TPE3315251K	ES12404	MLG

DURING ACCOMPLISHEMENT OF TWIN COMMANDER SL376 INSPECTION OF MLG CLEVIS AND DRAGBRACE, 2 CRACKS WERE NOTED DURING COMPLETION OF EDDY CURRENT INSPECTION OF THE LEFT HAND MLG. THE CRACKS ARE LOCATED AT THE MOUNTING HOLE FOR THE EYE BOLT P/N 330085-43. ATTACHED 3 PHOTOS FOR REVIEW. THE AIRCRAFT HAS ACCUMULATED 165.5 HRS AND 146 CYCLES SINCE THE LAST COMPLIANCE WITH THE SERVICE LETTER.

2005FA0000376	GULSTM	GARRTT	SHAFT	BROKEN
1/21/2005	690D	TPE331*	ED124061	RT MLG

SHAFT SECURING TORQUE LINK TO RT MLG STRUT FOUND BROKEN DURING INSPECTION. THIS TORQUE LINK IS AT TOP OF STRUT AND ROTATES LOWER STRUT 90 DEGREES DURING RETRACT/ EXTEND CYCLE. INSTALLED NEW SHAFT. (K)

2005FA0000390	GULSTM		DUCT	DAMAGED
3/22/2005	G1159		1159AC2005563	APU BLEED SYS

WITH APU RUNNING AND AIR SELECTED ON APU BLEED AIR OPENED HOLE IN INSULATION BY CUTTING BACK INSULATION. FOUND HOLE IN WELDED SEAM BETWEEN TO DUCTS (Y) DUCT NOMINCLATURE IS; DUCT ASSY, APU AND GROUND START.

2005FA0000268	GULSTM	RROYCE	PANEL	CORRODED
9/2/2004	G1159	SPEY5118	1159W200059	LT WING

DURING WIG (LT) NDT INSPECTION EXFOLIATION CORROSION NOTED ON WING UPPER PLANK AND FRONT BEAM BETWEEN RBS 284 THRU 375. REMOVED EXFOLIATION CORROSION IAW SRM. REPAIRS COMPLETED.

2005FA0000489	GULSTM		RIVET	LOOSE
12/15/2004	G1159B			FUSELAGE

UPON X-RAY INSPECTION OF AIRCRAFT FOR A 4000 LANDING INSPECTION, FOUND SEVERAL WORKING RIVETS AROUND CABIN WINDOWS AS INDICATED. LT NR 3 WINDOW; ONE (1) WORKING RIVET, LT NR 4 WINDOW; FOUR (4) WORKING RIVETS, LT NR 5 WINDOW, ONE (1) WORKING RIVET, RT NR 3 WINDOW, TWO (2) WORKING RIVETS; RT NR 4 WINDOW, ONE (1) WORKING RIVET; RT NR 5 WINDOW, TWO (2) WORKING RIVETS. ALL DISCREPANT RIVETS WERE EITHER REPLACED OR REBUCKED FOR SATISFACTORY SECURITY. (K)

2005FA0000378	GULSTM	RROYCE	WIRE	PINCHED
11/24/2004	GIV	SPEY51114		CABIN CB PANEL

UPON REPLACEMENT/ UPGRADE OF A CIRCUIT BREAKER IN THE CABIN SERVICES CIRCUIT BREAKER PANEL, IN THE RT RADIO RACK AT FS 110, A 20 GA WIRE WAS FOUND PINCHED AND HAD PREVIOUSLY SHORTED TO THE FACE PLATE LEAVING A SCORCH MARK ABOUT THE SIZE OF A DIME. THE WIRE WAS SUBSEQUENTLY REPAIRED, PROPERLY STOWED AND UNIT APPROVED FOR RETURN TO SERVICE. REF GAC DWG NR LC41 390035-01 - L MAIN UNSEITCHED WIRE NR 1XX102D12 FROM TB1. SUGGEST TECH TAKE EXTRA CARE IN THE RE-MOUNTING OF THIS SERVICE PANEL TO AVOID CATCHING WIRES ON THE AFT SUPPORT BRACKETS. (K)

AMCR200500001	GULSTM		PANEL	DAMAGED
3/15/2005	GULFSTREAMGV		1159CS55403102	SPOILER

DURING MAINTENANCE WITH HYDRAULIC MULE RUNNING, MAINTENANCE PERSONNEL NOTICED THE RIGHT WING FLIGHT SPOILERS EXCESSIVELY SUCKED DOWN, CAUSING OIL CANNING WHICH CAUSED THE AFT TIPS OF THE BOARDS TO CURL UP. MANUFACTURER WAS CALLED AND CREW WAS SENT TO INVESTIGATE. AILERON SYSTEM WAS IN RIG, HOWEVER DURING FLIGHT SPOILER RIGGING CHECK, THE INPUT SHAFT RIG PINS WOULD NOT INSERT. FOUND INPUT SHAFT OUT OF RIG AND SPOILER CONNECTING RODS OUT OF ADJUSTMENT. NO DAMAGE TO BOARDS OCCURRED. INVESTIGATION REVEALED SYSTEM WAS RECENTLY RIGGED BY MANUFACTURER'S SERVICE CENTER AFTER FLIGHT SPOILER ACTUATOR WAS REMOVED AND REPLACED.

CA050208007	HUGHES	LYC	PUMP	LOOSE
2/8/2005	269C1	HO360C1A	LW15473	ENGINE FUEL

(CAN) DURING INSPECTION, FUEL WETNESS WAS DISCOVERED ON THE BOTTOM OF THE FUEL PUMP. UPON FURTHER INSP ALL OF THE DIAPHRAGM RETENTION BOLTS WERE FOUND TO BE LOOSE. A MINIMUM OF THREE QUARTERS TO TWO TURNS WAS OBSERVED ON ALL OF THE BOLTS IN ORDER TO ACHIEVE PROPER TORQUE. THE AIRCRAFT WAS GROUND RUN AND LEAK CHECKED WITH NO FURTHER PROBLEMS.

CA050215006	HUGHES	ALLSN	COUPLING	UNDERSIZE
2/15/2005	369D	250C20B	369H5660	TRANSMISSION

(CAN) UPON INSPECTION BEFORE BEING ENTERED INTO STORES IT WAS NOTED THAT THE BOLT HOLES WERE UNDERSIZE. THE COUPLING HAS BEEN RETURNED TO THE PARTS SUPPLIER.

2005FA0000460	ISRAEL		WIRE HARNESS	ARCED
5/17/2004	1124			COCKPIT ENTRY

FOUND WIRE HARNESS CHAFFING AND ARCING IN THE AREA OF THE COCKPIT ENTRANCE OVERHEAD. THIS PROBLEM HAS BEEN ADDRESSED BY SB 1124-24A-154. CONSIDERATION SHOULD BE GIVEN TO MAKE THIS AD. DUE TO POTENTIAL OF IN-FLIGHT SMOKE AND FIRE HAZZARD. (K)

2005FA0000229	ISRAEL	GARRTT	TUBE	LEAKING
6/24/2004	1124A	TFE731*	723088325	NOSE WHEEL WELL

TUBE LEAKING THRU SEVERAL PIN HOLES, SUSPECT INTERNAL CORROSION. SLOW EVACUATION OF HYDRAULIC FLUID PREVENTED ACTUATION OF HYDRAULIC FUSE. TAKEOFF WITH GEAR (UP) SELECTION REVEALED SLOW ACTUATION AND A RETURN TO BASE. GEAR (DOWN) SLOW BUT CAME DOWN AND LOCKED. LAND WITHOUT INCIDENT. (EA03200405351)

LEGR200500001	ISRAEL		DOOR	CRACKED
2/18/2005	ASTRASPX		25W261201452	ZONE 700

DURING ACCOMPLISHMENT OF AD 2004-13-18 FOUND RT MLG DOOR TO BE CRACKED AFTER REMOVAL OF DOOR HINGE. DOOR HINGE IS NOT REQUIRED TO BE REMOVED UNLESS THE AFT DOOR GAP IS LESS THAN 0.25 INCH PER AD AND REFERENCED SERVICE BULLETIN.

CA050321007	ISRAEL	GARRTT	ENGINE	MAKING METAL
3/14/2005	ASTRASPX	TFE73140		NR 2

(CAN) AFTER TAKEOFF, CREW NOTICED NR2 ENG CHIP DETECTOR WARNING LITE ON, FOLLOWED SHORTLY BY NR 2 ENGINE OIL FILTER LITE (WARNING). PILOT REDUCED THRUST ON NR2 ENGINE AND RETURNED TO AIRPORT. MAINTENANCE INSPECTION DISCOVERED METAL ON CHIP DETECTOR AND IN FILTER. ENGINE REPLACED. DAMAGED ENGINE SENT FOR REPAIR. STRIP REPORT TO FOLLOW .

CA031125003	ISRAEL	GARRTT	BRACKET	MISINSTALLED
11/24/2003	ASTRASPX	TFE73140	25W26110200	LT WHEEL WELL

(CAN) PROBLEM WAS FOUND ON LT SIDE GEAR DOOR STOP. BRACKET WAS INSTALLED BY AIRCRAFT MFG IN THE WRONG POSITION AND WRONG PN IAW MFG IPC BRACKET WAS CHANGED AND DOOR RIGGED IAW MM AND WORKED OK.

2005FA0000486	LEAR		FLOORBEAM	CRACKED
2/24/2005	25B		241139526256	FUSELAGE

RIGHT DIVAN FLOOR ATTACH ANGLE P/N 2411395-26-526 CRACKED IN RADIOUS OF BEND 14 INCHES LONG. DISCOVERED WHILE PERFORMING CABIN PRESURE LEAK TEST.

2005FA0000421	LEAR	GARRTT	ENGINE	FAILED
1/25/2005	35A	TFE73122B	TFE73122B	RIGHT

WHILE AT FL300, EXPERIENCED AN INFLIGHT FAILURE OF THE RT ENGINE AS FOLLOWS, RT ENGINE INSTRUMENTS, ITT, N1, N2 AND FUEL FLOW ALL BEGAN INCREASING. RT FUEL COMPUTER WAS TURNED OFF, POWER WAS REDUCED TO IDLE. THE ENGINE INSTRUMENTS CONTINUED TO INCREASE AND JUST PRIOR TO ENGINE SHUTDOWN, A LOUD BANG WAS HEARD FROM THE RT SIDE, FOLLOWED BY A BRIGHT FLASH AND SMELL OF SMOKE IN THE COCKPIT. AC LANDED SAFELY WITHOUT FURTHER INCIDENT. ENGINE WAS REMOVED FROM AIRCRAFT AND SENT TO AN OVERHAUL FACILITY DETAILS OF THE ENGINE DISASSEMBLY FINDINGS ARE CONTAINED IN REPORT NR GR2-703 ATTACHED. IT WAS RECOMMENDED THAT HP TURBINE BE FWD FOR FURTHER INSPECTION TO DETERMINE MODE FAILURE. (K)

CA041222014	LEAR	GARRTT	FUEL CONTROL	FAILED
12/9/2004	35A	TFE73122B	307080022	LT ENGINE

(CAN) WHILE ON APPROACH TO DESTINATION AIRPORT, THE LT ENGINE FLAMED OUT. POWER LEVER WAS AT FLIGHT IDLE POSITION. FLAME OUT OCCURRED AS POWER LEVER WAS ADVANCED FROM FLIGHT IDLE. LT ENGINE MAIN FUEL CONTROL REPLACED IAW MANUFACTURERS RECOMMENDATIONS.

CA050124001	LEAR	GARRTT	ACTUATOR	INOPERATIVE
1/17/2005	35LEAR	TFE73122B	23271004	MLG

(CAN) DURING APPROACH CREW SELECTED GEAR DOWN. THE LT MLG WOULD NOT EXTENDED. LT MLG RED GEAR UNSAFE LIGHT CAME ON. GEAR EMERGENCY AIR SYSTEM ACTIVATED, RED LIGHT STAYS ON. ALTERNATE MEANS USED TO CONFIRM GEAR WERE DOWN AND LOCK. AIRCRAFT LANDED AND MAINTENANCE REPLACED THE

LT MLG ACTUATOR.

CA041222001	LEAR	GARRTT	LANDING GEAR	MALFUNCTIONED
12/21/2004	35LEAR	TFE73122B		LEFT

(CAN) LT MLG WOULD NOT INDICATE DOWN AND LOCK, ACCOMPANIED BY TWO RED UNSAFE LIGHTS. ALTERNATE GEAR EXTENSION DID NOT SOLVE THE PROBLEM. AIRCRAFT PLACE INSIDE HANGAR FOR A 3 HOURS PERIOD. HYDRAULIC SYSTEM BLED AND GEAR RETRACTIONS CARRIED OUT. UNABLE TO DUPLICATE DEFECT ON GROUND.

2005FA0000217	LEAR	GARRTT	CONTROL CABLE	FAILED
1/13/2005	45LEAR	TFE731*		AILERONS

PRIMARY FLIGHT CONTROL CABLES ARE FAILING INSP, DUE TO WEAR ON CONTROL CABLE FAIRLEADS IN FUSELAGE AND EMPANNAGE. DETAILED INSP IS PERFORMED AT 4800 HRS. FOLLOWING CABLES FAILE AT 1780.3 HRS. FUSELAGE AILERON CABLES, RUDDER CABLES, ELEVATOR CABLES. CAUSE IS DUE TO CABLE FAIRLEADS BEING MADE FROM TOO HARD OF MATERIAL CAUSING CONTROL CABLES TO WEAR INSTEAD OF FAIRLEADS. RECOMM: TO PERFORM SB, (FUSELAGE REPLACEMENT OF THE CABIN FLIGHT CONTROL FAIRLEADS) THIS SB INSTALLS DIFFERENT PN FAIRLEAD IN THE AC, WHICH IS MADE OF A SOFTER MATERIAL. (CE09200502297) (K)

2005FA0000222	LEAR	GARRTT	CONTROL CABLE	WORN
1/10/2005	45LEAR	TFE731*		RUDDER

AILERON, ELEVATOR, AND RUDDER SYSTEMS PRIMARY CONTROL CABLES ARE DUE INSPECTION AT 600 HOURS IAW MM, AS A PORTION OF PHASE B REQUIREMENTS. ALIERON, ELEVATOR AND RUDDER SYSTEMS PRIMARY CONTROL CABLES ARE DUE REMOVAL AND DETAILED INSPECTION AT 4,800 HOURS IAW MM. PRIMARY FLIGHT CONTROL CABLES ARE NOT LISTED MM (REPLACEMENT SCHEDULE). INSTALLED NEW RUDDER CONTROL CABLES, (PN7627202004-001, 7627202003-001). WORK PERFORMED AFTER INSPECTION IAW PHASE B REQUIREMENTS. (K) (CE09200502303)

2005FA0000197	LEAR	GARRTT	THROTTLE CABLE	DAMAGED
2/11/2005	45LEAR	TFE731*	7184510	RT FWD

AFTER TAKEOFF, THROTTLE WOULD NOT COME BACK. THROTTLE HAD TO BE FORCEABLY PULLED BACK OUT OF TAKEOFF SETTING. CABLE WAS FOUND BAD. (GL11200507568) (K)

CA050210001	LEAR	GARRTT	CONTROL UNIT	FAILED
2/7/2005	45LEAR	TFE731*	429333	BRAKES

(CAN) WHILE TAXIING THE AIRCRAFT. (NORM BRAKE FAIL) MESSAGE CAME ON. EMERGENCY BRAKE USED ON THE WAY BACK TO THE MAINTENANCE FACILITY. BRAKE CONTOL UNIT REPLACED, AIRCRAFT RETURN TO SERVICE.

2005FA0000228	LEAR	GARRTT	WIRE HARNESS	CHAFED
10/22/2004	45LEAR	TFE731*	P133	RT FIRE DETECT

RT ENGINE FAIL CAS AMBER LIGHT ILLUMINATED AND RT ENGINE FIRE RED WARNING LIGHT ILLUMINATED IN FLIGHT ON FINAL APPROACH TO PNE. PROBLEM: SEVERAL WIRES WERE CHAFED THOUGH ON THE P133 WIRING HARNESS. FOUND CHAFED ON FRAME NEAR THE TAIL CONE RELAY PANEL. REPAIRED WIRES IAW MM. OPERATIONAL CHECKED OK. PROBABLE CAUSE: IMPROPER WIRE ROUTING/PROTECTION. (EA09200500610) (K)

2005FA0000209	LEAR	GARRTT	STATOR	ERODED
10/26/2004	45LEAR	TFE7312		ENGINE

DURING 600/1200 HOUR INSPECTION, FOUND (9) NINE BY PASS STATOR BLADES WITH EROSION DAMAGE ON THE LEADING EDGE. BLADES WERE REMOVED AND REPALCED IAW MM. PROBABLE CAUSE: DESIGN ENGINEERING EVALUATE. (EA09200500613) (K)

CA050217002	LEAR	GARRTT	SWIVEL	LEAKING
2/8/2005	45LEAR	TFE7312	42302200	PYLON DUCT

(CAN) ON CLIMB OUT THE RT ENG PYLON OVHT CAS WARNING ILLUMINATED. EMERGENCY PROCEDURES

CARRIED OUT AND POWER REDUCED ON RT ENGINE. ANNUNCIATOR LIGHT EXTINGUISHED 60 TO 90 SECONDS AFTER POWER WAS REDUCED. AN UNSCHEDULED LANDING WAS CARRIED OUT. UPON INSPECTION AND GROUNDS RUNS PERFORMED, THE RT PYLON HIGH PRESSURE DUCT ASSEMBLY, P/N LJ01317-002 WAS FOUND TO BE LEAKING FROM A SWIVEL JOINT. THE JOINT WAS FOUND TO BE NOT AS TIGHT AS THE OPPOSITE END AND IT APPEARED THAT SOMEONE HAD ATTEMPTED A LEAK REPAIR OF THE SWIVEL JOINT WITH 763 HIGH TEMP RTV. DUCT ASSEMBLY P/N LJ01317-002 WAS REPLACED AND LEAK CHECKS COMPLETED. AN OVERWEIGHT LANDING CHECK WAS ALSO CARRIED OUT AND THE AIRCRAFT RELEASED FOR SERVICE.

2005FA0000208	LEAR	PANEL	DAMAGED
10/6/2004	60LEAR	2422510	LT WING SPOILER

AIRCRAFT ARRIVE WITH LT SPOILER PANEL DAMAGE AT THE IB FWD EDGE CORNER. AN INSPECTION WAS ACCOMPLISHED WITH NEGATIVE RESULTS. THIS SPOILER PANEL WAS PREVIOUSLY INSTALLED AT THIS STATION ON 9/16/2004 FOR A SIMULAR DEFECT AT TT: 4277.5 AND TC: 2923. SB 60-27-2 WAS USED TO INSTALL AND TRIM THE PANEL AT INSTALLATION. THE SB TRIM CLEARANCE FOR THIS PANEL IS .030 INCH TO .060 INCH, MFG MM 27-60-01 TRIM CLEARANCE IS .050 INCH TO .080 INCH. THE PANEL CLEARANCE WAS FOUND TO BE AT .040 INCH WHICH WAS TOO TIGHT WHEN USED AS SPOILERONS IN FLIGHT. INCORRECT TRIM GAP IN SB 27-60-2. MFG TO EVALUATE AND MAKE CHANGE. (EA09200500525) (K)

2005FA0000207	LEAR	PANEL	DAMAGED
10/17/2004	60LEAR	24920016 (KIT)	RT WING SPOILER

WHILE PERFORMING SCHEDULED INSPECTION THE RT SPOILER PANEL WAS FOUND TO BE DAMAGED AT THE FORWARD IB CORNER. THIS SPOILER PANEL WAS PREVIOUSLY INSTALLED AT THIS STATION ON 9/29/2002 AT TT:3939.5 & TC:2774. SB 60-27-2 WAS USED TO INSTALL AND TRIM THE PANEL AT INSTALLATION. THE SB TRIM CLEARANCE FOR THIS PANEL IS .030 INCH TO .060 INCH, MFG MM 27-60-01 TRIM CLEARANCE IS .050 INCH TO .080 INCH. THE PANEL CLEARANCE WAS FOUND TO BE AT .040 INCH WHICH WAS TOO TIGHT WHEN USED AS SPOILERONS IN FLIGHT. INCORRECT TRIM GAP IN SB 27-60-2. MFG EVALUATE AND MAKE CHANGE. (EA09200500519) (K)

CA050126009	LEAR	PWA	ENGINE	LEAKING
1/24/2005	60LEAR	PW305A		

(CAN) IN CRUISE, THE ENGINE OIL PRESSURE REDUCED ACCOMPANIED BY A LOW OIL PRESSURE INDICATION. THE PILOT SHUT THE ENGINE DOWN, DECLARED AN EMERGENCY AND DIVERTED THE FLIGHT. SUBSEQUENT INSPECTION REVEALED EXTERNAL OIL LEAKAGE. MFG WILL INVESTIGATE THE EVENT AND WILL SUPPLEMENT THIS REPORT TO PROVIDE ROOT CAUSE, ONCE ESTABLISHED.

CA041110014	LEAR	PWA	WIRE	MISUSED
11/1/2004	60LEAR	PW305A	F23B22	COMPUTER

(CAN) DURING A FLT, PILOT REPORTED AILERON AUGMENTATION MODE SYS INOPERATIVE. A LEARJET GPWS/WINDSHEAR SYS INSTALL COMPLETED ON 09/30/94 REMOVED & A NEW TAWS 8000 SYS UPGRADE INSTALLED ON 05/29/04. FURTHER INVESTIGATION REVEALED THAT DURING GPWS/WINDSHIELD UPGRADE TO TAWS 8000, GPWS AUX BOX (E374) HAD BEEN REMOVED AS REQUIRED BY DRAWING WHILE REMAINING WIRES CAPPED & STOWED & DID NOT TAKE INTO CONSIDERATION USEFULNESS OF WIRES F23B22, TW89A22, F25B22, TW91A22 TO SPOILERON COMPUTER. A REQUEST FOR ENGINEERING SUPPORT WAS FORWARDED & A REVISED DRAWING 1003421 REV B PROVIDED TO CORRECT ORIGINAL DRAWING AND WIRE OVERSIGHT INCLUDING DATA APPROVAL DOCUMENTED ON 10/22/04.

CA041105005	LKHEED	ALLSN	FUEL CONTROL	FAILED
11/5/2004	188C	501D13		NR 3 ENGINE

(CAN) ON TEST FLIGHT A/C WAS WEST OF OF THE AIRFIELD IN THE PRACTICE AREA. NR 3 ENGINE WAS SHUTDOWN AND SECURED DUE TO LACK OF RESPONSE WITH THE POWER LEVER. THE A/C RETURNED TO BASE WITHOUT INCIDENT. FCU IS SUSPECTED.

CA041018007	LKHEED	ALLSN	HOUSING	DAMAGED
9/9/2004	382G	501D22A	582855	PROP VALVE

(CAN) INBOUND, NR 4 PROP RPM DROPPED BELOW LIMIT ACOMPANIED BY RPM FLUCTUATION AND TORQUE

ROLL.THE ENGINE WAS SHUTDOWN AS A PRECAUTION. THE AIRCRAFT LANDED WITHOUT INCIDENT. MAINTENANCE REPLACED THE NR 4 VALVE HOUSING AND AIRCRAFT WAS RETURNED TO SERVICE.

CA050214007	LKHEED	ALLSN	DRAG ANGLE	CRACKED
2/2/2005	382G	501D22A		WING

(CAN) APPLICATION OF SB 382-53-61 RESULTED IN FINDING A 8-10 INCH CRACK, BEING LOCATED IN THE TARGET AREA ON THE RT SIDE IN THE RADIUS OF THE DRAG ANGLE BETWEEN STATION 477 AND 517.

2005FA0000357	LKHEED	ALLSN	SUPPORT	INCORRECT
3/21/2005	382G	501D22A	6843949	NR 2 ENGINE

DURING NR 2 ENGINE REPLACEMENT AND INSTALLATION OF THERMOCOUPLES THE FOLLOWING OBSERVATIONS WERE MADE: 2 COMBUSTION LINER SUPPORTS HAD BEEN GROUND TO FIT INTO LINER. LOOSE LOCKWIRE ON REAR SCAVANGE PUMP RETAINING NUTS. INLET/ OUTLET OIL TRANSFER TUBE RETAINING SCREWS LOOSE NOT SAFETY WIRED. (K)

CA041222005	MOONEY	LYC	MOUNT	BROKEN
12/17/2004	M20C	O360A1D	590000	ENGINE

(CAN) DURING ENGINE OIL AND FILTER CHANGE, VISUAL INSPECTION FOUND THE ENGINE MOUNT P/N 590000, STRUT FORK CRACKED. THE FORK ATTACHES TO THE ENGINE MOUNT BLOCK P/N 590002, AFFIXED TO THE FIREWALL.

CA041015008	MOONEY	CONT	HUB	CORRODED
10/15/2004	M20K	IO360CONT	D4530	PROPELLER

(CAN) PROPELLER RECEIVED FOR 10 YR. O/H. UPON INSPECTION IT WAS FOUND THAT THE HUB, BLADE BEARINGS (C3411),PISTON ROD (B2345), SPLIT RETAINERS (C3903) AND PISTON (C3418) WERE UNSERVICEABLE DUE TO WEAR AND/OR CORROSION. MANUFACTURERS RECCOMENDED TBO AS PER S/B 137Y IS 2000 HRS OR 72 MONTHS. THIS PROPELLER HAS EXCEEDED THE CALENDAR TIME BY 48 MONTHS.

2005FA0000203	MOONEY	CONT	MUFFLER	CRACKED
1/20/2005	M20R	IO550*	630112501	ENGINE

VERY SIMILAR TO THE CRACKS REFERENCED IN AD NR 95-12-16 BUT ITS OUTSIDE OF THE SN RANGE LISTED. (K)

2005FA0000176	MOONEY	CONT	OIL COOLER	CRACKED
2/1/2005	M20R	IO550G	654585	ENGINE

DURING ROUTINE OIL CHANGE, AN EXAMINATION OF THE OIL COOLER FLANGE AREA WHERE IT BOLTS ONTO THE ENGINE STUDS WAS FOUND TO BE CRACKED. THE CRACK WAS LOCATED BETWEEN THE STUDS MOUNTING AREA IN THE OIL COLLER SURFACE WELD. THIS IS THE FOURTH INSTANCE OF AN OIL COOLER CRACK FOUND AT THE OIL COOLER BY THIS STA WITHIN THE LAST YEAR. ALL PREVIOUS CRACKED COOLER HAD AT LEAST 500 HOURS TIME IN SERVICE. CLOSE EXAMINATION OF THIS AREA IS RECOMMENDED AT EACH OIL CHANGE OR COWLING REMOVAL.

2005FA0000346	PIAGIO	PWA	SEAL	LEAKING
2/21/2005	P180	PT6A66	3026652	PROP SHAFT

PROPELLER SHAFT SEAL WAS LEAKING, CAUSING HIGH OIL CONSUMPTION. (K)

CA041019006	PIAGIO	PWA	MOUNT	CORRODED
10/18/2004	P180	PT6A66	17472	STATIC WICK

(CAN) RUDDER AND AILERON STATIC WICK BASE FOUND LOOSE. PARTS REMOVED CORROSION WAS FOUND ON MATING SURFACE WHICH WAS CLEANED AND BASES ATTACHED SEALED AND PAINTED.

CA041220004	PIAGIO	PWA	WHEEL	CRACKED
12/14/2004	P180	PT6A66	314611	MLG

(CAN) THE LEFT MAIN TIRE WAS LOOSING AIR. UPON INSPECTION, A CRACK WAS DISCOVERED IN THE LEFT

INBOARD WHEEL HALF, AT THE TIRE BEAD AREA. NO INDICATIONS OF HARD LANDING WERE FOUND. THE WHEEL WAS REPLACED WITH AN OVERHAULED UNIT AND THE OLD WHEEL WAS SENT OUT FOR WARRANTY CONSIDERATION.

CA041215007	PILATS	PWA	ENGINE	FAILED
12/14/2004	PC12	PT6A67B		

(CAN) DURING CLIMB (6000 FT) THE ENGINE EXPERIENCED AN UNCOMMANDED POWER ROLL-BACK ACCOMPANIED BY ITT INCREASE, A LOUD BANG AND FLAMES EVIDENT FROM THE EXHAUST. THE PILOT SHUT THE ENGINE DOWN IN FLT, DECLARED AN EMERGENCY AND SUBSEQUENTLY LANDED ON A ROAD. PWC WILL INVESTIGATE THE INCIDENT AND WILL SUPPLEMENT THIS REPORT TO PROVIDE ROOT CAUSE, ONCE DETERMINED.

CA041020004	PILATS	PWA	FUEL CONTROL	OUT OF RIG
10/18/2004	PC1245	PT6A67B	8063041	ENGINE

(CAN) WHILE CRUISING AT 25000 THE FLIGHT CREW NOTICED A SMALL SURGE IN POWER, THEN THE ENGINE RETURNED TO THE POWER SETTING. THIS OCCURRED ONCE MORE ON DESCENT, BUT O NCE AGAIN CLEARED UP. AFTER LANDING AIRCRAFT WAS GROUND RUN AND SURGES IN NG AND TORQUE WERE NOTICED . AIRCRAFT WAS GROUNDED AND FUEL CONTROL WAS REPLACED, THIS CORRECTED THE NG PROBLEM BUT WE STILL HAD TORQUE SURGES WE THEN REPLACED THE PR OP GOV P/N 8210-137 AND ENGINE WAS RIGGED AND GROUND RUN. PROBLEM WAS CORRECTED.

CA041020005	PILATS	PWA	PUMP	MAKING METAL
10/19/2004	PC1245	PT6A67B	8256015	ENGINE FUEL

(CAN) WHILE AIRCRAFT WAS AT MAINTENCE BASE IT WAS DECIDED TO DO THE FUEL PUMP INLET SCREEN INSPECTION. WHEN THE OUTLET FILTER WAS REMOVED TO GAIN ACCESS TO THE SCREEN WE FOUND METAL IN THE FILTER AND ALSO LOT OF METAL FILLINGS IN THE FILTER HOUS ING. OVERHAUL SHOP WAS NOTIFIDED AND NEW PUMP IS BEING SHIPPED. NO METAL WAS FOUND IN AIRFRAME FILTER, INLET SCREEN ON PUMP OR INLET SCREEN IN FCU.

2005FA0000180	PILATS	PWA	VALVE	LEAKING
2/10/2005	PC1245	PT6A67B	9571222212	OXYGEN OUTLET

PIOTS OXYGEN OUTLET VALVE LEAKS WHEN MASK PLUGGED IN. SUSPECT INTERNAL SEAL FAILURE. (K)

CA040910004	PILATS	PWA	CONTROL SYSTEM	MALFUNCTIONED
9/7/2004	PC1245	PT6A67B		TE FLAPS

(CAN) WHILE RETRACTING FLAPS AFTER TAKEOFF , 'FLAPS' CAUTION ILLUMINATED , FLAP OPERATION STOPPED.AIRCRAFT RETURNED FOR LANDING , FLAP ASSYS INSPECTED FOR OBVIOUS DEFECTS , FLAPSMEASURED FOR POSSIBLE ASSYMETRY , SATISFACTORY. GROUND RESET FUNCTIONED NORMAL . AFTER RETURNING TO BASE , FLAP SYSTEM WAS FUNCTION TESTED , A ZERO SET WAS ALSO PERFORMED. NO ADDITIONAL FAULTS DETECTED.

CA040915003	PILATS	PWA	SENSOR	FAILED
9/14/2004	PC1245	PT6A67B	9754421421	AOA VANE

(CAN) VANE/WING HEATING SECTION HAD FAILED, AOA VANE ASSEMBLY REPLACED WITH NEW

CA050215013	PILATS	PWA	ACTUATOR	MALFUNCTIONED
2/14/2005	PC1245	PT6A67B	9787320309	TE FLAPS

(CAN) FLAPS WERE SELECTED TO 40, PRIOR TO REACHING 15, FLAPS LABORED AND STOPPED FOR A FEW SECONDS, THEN RESUMED IN TRANSIT. THIS HAD HAPPENED AT LEAST TWICE IN THE HANGAR BEFORE. AT NO TIME WAS THE (FLAP) ANNUNCIATOR ILLUMINATED. WHEN THIS OCCURRED AS PREVIOUSLY STATED, THE LT OB ACTUATOR WAS ONCE FOUND TO BE VERY WARM TO THE TOUCH WHILE THE OTHER 3 WERE COLD. THIS CONDITION WAS NOT ALWAYS PRESENT. FLAP CODE E208 WAS LOGGED. ONCE THE ACTUATOR WAS ON THE BENCH IT WAS ALSO NOTED THAT A (ROUGH) SPOT COULD BE FELT WHILE ROTATING THE JACKSCREW.

SUSPECTED ACTUATOR REPLACED. FUNCTION CHECKS NORMAL.

CA050216002	PILATS	PWA	WIRE	BROKEN
2/15/2005	PC1245	PT6A67B		PITOT HEAT

(CAN) P-S NR 1 FAIL ANNUCIATOR ILLUMINATED. PITOT HEAT FOUND INOPERATIVE. FURTHER INVESTIGATION REVEALED A BROKEN/SEPERATED WIRE H126D16 AT PLUG P101 OF THE RH (NR 1) PITOT TUBE CONNECTOR. REPAIRED, FUNCTION CHECKS NORMAL.

20050209	PIPER	LYC	SHAFT	BROKEN
2/9/2005	PA23250	IO540C4B5	70384	IDLER GEAR

AT ENGINE DISASSEMBLY FOR OVERHAUL AFTER RUNNING FULL LIFE (1985.4 HRS) GOVERNOR IDLER GEAR SHAFT WAS FOUND BROKEN INSIDE THE GEAR. ENGINE RAN NORMALLY, NO OTHER DAMAGE NOTED.

2005FA0000375	PIPER	LYC	SPAR	CRACKED
10/15/2004	PA24260	TIO540*	2072910	RUDDER

DURING SERVICE OF THE AIRCRAFT THE RUDDER WAS REMOVED. NOTHING WAS FOUND ABNORMAL. REMOVAL OF THE UPPER RUDDER HINGE (PN 2018300). CRACKS WERE FOUND AT THE HINGE ATTACH POINT OF THE RUDDER SPAR (2072910). (K)

2005FA0000373	PIPER	LYC	RIB	CORRODED
10/15/2004	PA24260	TIO540*	2072904	RUDDER

DURING AN ANNUAL INSPECTION, MORE THAN NORMAL SURFACE CORROSION WAS FOUND ON THE RUDDER TAIL POST. UPON DISASSEMBLY OF THE RUDDER, DISSIMILAR METAL CORROSION WAS PRESENT WHERE THE STEEL STIFFENER ATTACHES TO THE LOWER RIB (PN 2072904). (WP07200505592) (K)

2005FA0000352	PIPER	LYC	BOLT	MISSING
3/7/2005	PA28140	O320*		RT TORQUE LINK

EXAMINATION OF THE AC REVEALED THAT THE LOWER STRUT, BRAKE AND TIRE ASSY WERE MISSING FROM THE RT MAIN GEAR. UPPER MAIN GEAR TORQUE LINK WAS ATTACHED TO THE UPPER STRUT HOUSING. BRAKE LINE WAS BROKEN OFF AT THE BRAKE CYLINDER FITTING AND LOWER STRUT ASSY WAS MISSING. IT APPEARS THAT TORQUE LINK BOLT FAILED ALLOWING LOWER STRUT ASSY TO EXTEND OUT OF THE STRUT HOUSING AND FALL FREE OF THE AC. UNABLE TO CONFIRM BASED ON AVAILABLE MAINTENANCE RECORES, BUT AC APPEARS TO HAVE GREASE BOLT REPLACMENT KIT (PN 760-910) INSTALLED. REPETITIVE NDT INSPECTION BE PERFORMED ON LANDING GEAR TORQUE LINK BOLT. (SO13200503296) (K)

CA040804006	PIPER	LYC	PRECISION	FLOAT	FAILED
7/27/2004	PA28140	O320E2A	MA4SPA	30804	CARBURETOR

(CAN) A FLOAT FOUND IN A PRECISION FACTORY REMAN CARB WAS FOUND TO BE FLOODED WITH FUEL IN ONE OF THE PANTOONS. THIS CAUSED THE ENGINE TO RUN RICH BECAUSE OF THE FLOAT SINKING. THE FLOAT IS MFG NEW STYLE THAT IS AVAILABLE ON MA CARBURETOR. THIS DEFECTIVE ONE HAS A CODE OF (5346) ON IT.

2005FA0000412	PIPER	LYC	PISTON RING	BROKEN
12/26/2004	PA28151	O320D3G	SL3601SC	ENGINE

CROSS COUNTRY FLT, HEADED TO 2ND FUEL STOP, HEARD A SLIGHT RPM CHANGE IN ENGINE THAT WAS INTERMITTENT. UPON LANDING, PERFORMED MAG CHECK AND ONE MAG WAS A LITTLE ROUGH, HAD THE PLUGS PULLED AND FOUND THAT THE PLUG ON NR 4 CYLINDER WAS FOULED WITH TRACES OF OIL AND LEAD. PLUGS WERE CLEANED AND REINSTALLED. TO BE ON SAFE SIDE, JUST IN CASE HAD A 2ND OIL RING FAILURE, CHANGED FLIGHT TO CHECK OIL CONSUMPTION. UPON LANDING, FOUND IT HAD CONSUMED OVER 3 QUARTS OF OIL. HAD CYLINDER PULLED AND FOUND THE OIL CONTROL RING BROKEN. THIS WAS 2ND RING TO FAIL IN LESS THAN 220 HOURS. RING WAS THE SAME MANDATE AS THE PREVIOUS RING THAT FAILED. BELIEVE BAD BATCH OF RINGS LUCKY IT WAS CAUGHT BEFORE ENG FAILURE. (K)

2005FA0000425	PIPER	LYC	PISTON RING	FAILED
2/14/2005	PA28151	O320D3G	SL3601SC	ENGINE

OUT OF CONCERN FROM HAVING 2 PREVIOUS OIL RING FAILURES THAT COULD HAVE BROUGHT ME DOWN. PULLED CYLINDER NR 1 AND NR 2 TO REPLACE RING WITH SAME PRODUCTION DATE AS ONE THAT FAILED. PULLING AND INSPECTING NR 1, FOUND THE RING GAP TO BE EXCESSIVE, MFG CALLS FOR .0015 TO .0030. , SEEMS LIKE A LOT OF WEAR IN TOO SHORT OF PERIOD. HAD RINGS FROM CYLINDERS NR 1, 2, 4 SENT TO REPAIR STATION TO CHECK FOR HARDNESS OF RINGS. RING NR 1 CYLINDER WAS 1.5 ON C SCALE ROCKWELL MACHINE, NR2 WAS A 2.0 ON SAME SCALE. CYL NR 4 (RING IN 3 PIECES) LARGE PART OF RING WAS BETWEEN 1.5 AND 2, 2ND PIECE WAS A 5.5, 3RD PIECE WAS 3.5. MAN DATE 10-1-2002. SENT MFG BAD RINGS, SENT NEW RINGS AND OLD RINGS BACK WITH COMMENT. (K)

2005FA0000199	PIPER	LYC	CONTROL CABLE	FRAYED
1/18/2005	PA28161	O320*	62701099	AILERON

FOUND BOTH FORWARD AILERON CONTROL CABLES FRAYED. (K)

2005FA0000330	PIPER	LYC	WHEEL	BROKEN
8/6/2004	PA28161	O320D3G	551792	NLG

NOSE WHEEL FLANGE BROKE OFF DURING TAXI. CLOSE INSPECTION SHOW CRACK MIGHT HAVE STARTED FROM CORROSION UNDER THE FLANGE WHICH IS THE THINNEST PART OF THE WHEEL ASSY. RECOMMEND INSPECTION ON HIGH TIME WHEELS. ESPECIALLY ON AIRCRAFT WHICH DO NOT FLY FREQUENTLY. (EA25200408022)

2005FA0000254	PIPER	LYC	GASCOLATOR	INOPERATIVE
12/25/2004	PA28180	O360*	6230103	BOWL CONTACT

SURFACE AREA WHERE BOWL ASSEMBLY (63479-00) CONTACTS THE FRAME (COVER 14428-00) OF THE FUEL FILTER BENDS AS WIRE ASSEMBLY (BAIL 494-644) IS TIGHTENED. OVER THE YEAR THE FORCE OF THE BAIL ACTUALLY BENDS THE FRAME TO WHERE THE GASKET WILL NO LONGER SEAL AND FUEL WILL SEEP BY THE GASKET WHEN THE BOWL IS CROCKED FORWARD AND AFT. 90 DEGREES TO THE LOCATIO OF THE BAIL ASSEMBLY. THE ONLY OPTION TO REMEDY THE SITUATION IS TO REPLACE WITH FACTORY NEW OR STC REPLACEMENT. (SO15200514114)

2005FA0000241	PIPER	LYC	MAGNETO	LOOSE
9/15/2004	PA28180	O360A4A	S4LN20105136029	RIGHT

OVERHAUL DATE, MFG, 5-2001 - GEAR FAILURE (PN AB-357584) ELECTRODE BRASS FINGRE ON NYLON GEAR WAS LOOSE AND CONTRACTED BRASS ELECTRODES. ON PN 10-357424 DISTRIBUTOR BLOCK FILLING BLOCK WITH CONDUCTIVE PARTICLES WHICH ENDED UP SHORTING OUT ONE IGNITION LEAD CAUSING ROUGH RUNNING ENGINE. (K)

4253620	PIPER		CABLE	CUT
3/23/2005	PA28181		554204	SEAT BELT

TWO OF THE REAR SEAT BELT ATTACH CABLES HAD BEEN CUT AT MANUFACTURE.

2005FA0000256	PIPER	LYC	OIL FILTER	MISMANUFACTURED
12/25/2004	PA28181	O360*	CH48110	ENGINE

WHEN OIL FILTER WAS CUT OPEN FOR INSPECTION, A PIECE OF STRING WAS DISCOVERED WRAPPED AROUND THE FILTER MEDIUM. NO OTHER PROBLEM WAS DISCOVERED AT THIS TIME. BETTER Q.C. IN MFG WILL CORRECT SITUATION. (SO15200514115)

2005FA0000461	PIPER	LYC	STOP PIN	WORN
3/18/2005	PA28181	O360A4M	62F1	THROTTLE BODY

STUDENT PILOT REPORTED THROTTLE WOULD NOT ADVANCE BEYOND IDLE. FOUND CARBURETOR BINDKING INTERNALLY. DISASSEMBLED CARBURETOR AND FOUND AIR METERING PIN STOP PIN WORN WHICH ALLOWED AIR METERING PIN TO EXTEND BEYOND NORMAL RANGE AND JAM BETWEEN STOP PIN AND ACTUATING ARM ON PUMP LEVER ASSEMBLY. (K)

2005FA0000381	PIPER	LYC	SPRING	MISSING

12/15/2004	PA28R200	IO360A1A	487483	NLG

SPRINGS (PN487-484 AND PN487-483) ON THE NOSE GEAR RETRACTION LINK ASSY FAILED, LETTING THE ARM ASSY SWING AROUND AND JAM BETWEEN THE DOWNLOCK PIN AND THE MUFFLER. (NM07200502447) (K)

2005FA0000380	PIPER	LYC	SPRING	MISSING
12/15/2004	PA28R200	IO360A1A	487484	NLG

SPRINGS (PN487-484 AND PN 487-483) ON THE NOSE GEAR RETRACTION LINK ASSY FAILED, LETTING THE ARM ASSY SWING AROUND AND JAM BETWEEN THE DOWNLOCK PIN AND THE MUFFLER. (NM07200502447)

2005FA0000202	PIPER	LYC	HARTZL	SPOOL	MISINSTALLED
1/27/2005	PA28R200	IO360C1C		54696	GOVERNOR

GOVERNOR SENT FOR REPAIR DUE TO RPM CONTROL ISSUES AND A HISTORY OF LEAKING. DURING DISASSEMBLY, THE PILOT SPOOL SHAFT THREADS WERE FOUND DAMAGED. IT WAS DISCOVERED THAT AT THE PREVIOUS ASSY OF THIS PART, A FINE THREADED B3808-4 NUT WAS USED IN PLACE OF THE REQUIRED B3808 (COARSE THREAD) NUT. THE B3808-4 WAS FORCED ONTO THE PILOT SPOOL DISTORTING AND CROSSTHREADED IT. UNIT WAS REPORTED TO HAVE BEEN OVERHAULED 3/1/94 AND HAD APPROX 200 HOURS TSO.

2005FA0000579	PIPER	LYC	RIB	CRACKED
3/20/2005	PA28R201	IO360C1C	78475009	RT WING

DURING A 100HR. INSPECTION, A SMALL CRACK WAS FOUND IN THE RT. NOSE RIB PN-62021-005 AND -004. A MORE THOROUGH INSPECTION REVEALED THAT AN ADDITIONAL CRACK, MUCH LARGER (ABOUT 4 INCES LONG), WAS FOUND ON THE RIB PN-78475-009 AND -008. THESE RIBS ARE INCLUDED IN THE MOUNTING ASSEMBLY FOR THE PN-95643-007 AND -006 AND BRACKET (MLG TRUSS). THE OPERATOR OF THIS AIRCRAFT OPERATES A FLEET OF 6 AIRCRAFT, AND ALL THE OTHER AIRCRAFT HAD SIMILAR CRACKS, ON BOTH LT AND RT WINGS. THE FLEET IS GROUNDED AND THE AFFECTED PARTS ARE BEING REPLACED.

2005FA0000555	PIPER	LYC	RIB	CRACKED
3/21/2005	PA28R201	IO360C1C6	78475009	RT WING

DURING A VISUAL INSP, A SMALL CRACK WAS FOUND IN THE RT NOSE RIB P/N-62021-005 AND -004. A MORE THOROUGH INSPECTION REVEALED THAT AN ADDITIONAL CRACK, MUCH LARGER (ABOUT 4 INCH LONG), WAS FOUND ON THE RIB P/N-78475-009 AND -008. THESE RIBS ARE INCLUDED IN THE MOUNTING ASSEMBLY FOR THE P/N-95643-007 AND -006 AND BRACKET(MAIN GEAR TRUSS). THE OPERATOR OF THIS AIRCRAFT HAD SIMILAR CRACKS, ON BOTH LT AND RT WINGS. THE AC IS GROUNDED AND THE AFFECTED PARTS ARE BEING REPLACED.

2005FA0000557	PIPER	LYC	RIB	CRACKED
3/21/2005	PA28R201	IO360C1C6	78475009	WING

DURING VISUAL INSPECTION, A SMALL CRACK WAS FOUND IN THE RT NOSE RIB P/N-62021-005 AND -004. A MORE THOROUGH INSPECTION REVEALED THAT AN ADDITIONAL CRACK, MUCH LARGER (ABOUT 4 INCHES LONG), WAS FOUND ON THE RIB P/N-78475-009 AND -008. THESE RIBS ARE INCLUDED IN THE MOUNTING ASSY FOR THE P/N-95643-007 AND -006 AND BRACKET (MAIN GEAR TRUSS). THE OPERATOR OF THIS AIRCRAFT HAD SIMILAR CRACKS, ON BOTH LT AND RT WINGS. AC IS GROUNDED AND THE AFFECTED PARTS ARE BEING REPLACED.

2005FA0000581	PIPER	LYC	RIB	CRACKED
3/22/2005	PA28R201	IO360C1C6	78475009	RT WING

DURING A VISUAL INSPECTION, A SMALL CRACK WAS FOUND IN THE RT NOSE RIB. A MORE THOROUGH INSPECTION REVEALED THAT AN ADDITIONAL CRACK, MUCH LARGER (ABOUT 4 INCHES LONG), WAS FOUND ON THE RIB. THESE RIBS ARE INCLUDED IN THE MOUNTING ASSEMBLY FOR THE BRACKET(MAIN GEAR TRUSS). THE OPERATOR OF THIS AIRCRAFT OPERATES A FLEET OF 6 OF THESE AIRCRAFT, AND ALL THE OTHER AIRCRAFT HAD SIMILAR CRACKS, ON BOTH LT AND RT WINGS. THE FLEET IS GROUNDED AND THE AFFECTED PARTS ARE BEING REPLACED.

2005FA0000556	PIPER	LYC	RIB	CRACKED
3/22/2005	PA28R201	IO360C1C6	78475009	RT WING

DURING A VISUAL INSPECTION, A SMALL CRACK WAS FOUND IN THE RT NOSE RIB P/N-62021-005 AND -004. A

MORE THOROUGH INSPECTION REVEALED THAT AN ADDITIONAL CRACK, MUCH LARGER (ABOUT 4 IN LONG), WAS FOUND ON THE RIB P/N-78475-009 AND -008. THESE RIBS ARE INCLUDED IN THE MOUNTING ASSY FOR THE P/N-95643-007 AND -006 AND BRACKET (MAIN GEAR TRUSS). THE OPERATOR OF THIS AIRCRAFT HAD SIMILAR CRACKS, ON BOTH LT AND RT WINGS. THE FLEET IS GROUNDED AND THE AFFECTED PARTS ARE BEING REPLACED.

2005FA0000358	PIPER	LYC	CAMSHAFT	BROKEN
3/7/2005	PA30	IO320C1A	AEL18840	ENGINE

WHILE CLIMBING OUT OF 4,000 FT, RT ENGINE (2-23-05) SHUTTERED AND BEGAN VIBRATING EXCESSIVELY. RETURNED TO AIRPORT. INSPECTION REVEALED THE CAMSHAFT HAD BROKEN COMPLETELY INTO 2 PIECES, ENGINE REMOVED AND SENT TO REPAIR FACILITY FOR FURTHER EVALUATION. ENGINE TT SINCE O/H 100 HOURS. AUTHORISED RELEASE FORM SHOWED NEW PART RELEASED ON APRIL 25, 2002. (K)

CA041222012	PIPER	LYC	BOLT	MISMANUFACTURED
12/15/2004	PA31	IO540M1A5	AN511A	STABILIZER

(CAN) WHEN REINSTALLING THE HORIZONTAL STAB, (AT THE AFT SPAR ATTACH POINT) USING NEW HARDWARE, IT WAS DISCOVERED THAT THE REQUIRED BOLTS WERE LONGER IN TOTAL LENGTH BY 0.1875 AND SHANK LENGTH BY 0.1875, THAN THE ORIGIONAL BOLTS REMOVED. THIS CAUSED THE NUTS TO SHANK OUT WHEN TORQUED. IT IS APPARENT THAT THE ENGINEERING SPECIFICATIONS FOR AN AN5-11A BOLT HAVE CHANGED SINCE 1970. THE PARTS LISTING PAGE WAS LAST REVISED MAY 1981. THIS SITUATION IS NOT EASILY NOTICED AS THE NUT END IS ONLY VISIBLE USING A MIRROR SO THE ONLY INDICATION IS BY 'FEEL' OF THE WRENCHES WHEN AT FINAL TORQUE VALUE. IT IS ADVISABLE NOT TO ASSUME THAT A STANDARD PART WILL ALWAYS BE PHYSICALLY THE SAME SIZE AFTER 35 YEARS OF PRODUCT IMPROVEMENT.

CA050121008	PIPER	LYC	ALTERNATOR	SHORTED
1/20/2005	PA31	IO540M1A5	ALU8421R	ENGINE

(CAN) AN INTERNAL SHORT IN THE ALTERNATOR CAUSED THE VOLTAGE REGULATER CIRCUIT BREAKER TO POP. DUE TO THE DESIGN OF THE SYSTEM, THE FAILURE WAS NOT ISOLATED TO THE FAILED SIDE. THE PILOT TURNED OFF ALL ELECTRIC DEVICES AND LANDED AT THE NEAREST AIRPORT. THE AIRCRAFT WAS FERRIED TO ANOTHER AIRPORT WERE THE ALTERNATOR WAS REPLACED.

CA050110004	PIPER	LYC	CIRCUIT BREAKER	DAMAGED
12/8/2004	PA31	TIO540A2C	5AMP	ELECTRICAL

(CAN) AC WAS RETURNING WHEN RT ALT WENT OFF-LINE, 5 MIN LATER LT ALT SYS WENT OFF-LINE. BATTERY, LT ALT, BOTH VOLT REG, LT OVER-VOLT RELAY, LT VOLT REG CB WERE REPLACED. NO TEST FOR OVER-VOLT RELAY SPECIFIED IN MM, IN ELEC SYS OF MM A 500 HOUR OVER-VOLT RELAY OPS CHECK IS RECOMMENDED, HAS BEEN ADDED TO AC`S TBO SHEET. LT 5 AMP FIELD (VOLTAGE REG) CB. WHEN IT WAS MEASURED AFTERWARDS A VOLTAGE DROP/RESISTANCE WAS NOTED ACROSS IT. WOULD CAUSE VOLT REG TO THINK BUSS VOLTAGE WAS LWR THAN IT ACTUALLY WAS. IN THIS CASE 28.2V WAS MEASURED AT FIELD TERMINAL ON VOLT REG WHILE 30.5V WAS MEASURED AT BUSS. THIS WOULD CAUSE RT ALT SYS TO GO OFF-LINE DUE TO IMBALANCE. LT ALT SYS WOULD CONTINUE IN THIS MANNER.

CA050106003	PIPER	LYC	PUMP	CRACKED
12/20/2004	PA31	TIO540A2C	1213HBG310	HYD SYSTEM

(CAN) TOOK OFF, ENROUTE, AIRCRAFT WAS ON A BASE RELOCATION FLIGHT. PILOT HAD GEAR IN-TRANSIT LIGHT FOR LONGER THAN NORMAL AFTER GEAR WAS SELECTED UP. RE-SELECTED GEAR DOWN AND LOCKED 3 GREEN. RE-SELECTED GEAR UP AND STILL HAD IN-TRANSIT LIGHT. CONTINUED WITH GEAR HANDLE SELECTED UP AND IN-TRANSIT LIGHT ON. AC LANDED WITHOUT INCIDENT, MAINT DISCOVERED HYDRAULIC OIL UNDER COWL. FURTHER INVESTIGATION REVEALED A CRACKED RT HYDRAULIC PUMP HOUSING. PUMP HAS BEEN CHANGED AND HYDRAULIC SYSTEM INSPECTED, SERVICED AND OPERATED ON THE GROUND, NO ABNORMALITIES NOTED. NOTE: HYDRAULIC PUMP REMOVED DID NOT HAVE A DATA PLATE ALTHOUGH RECORDS DID INDICATE THAT IT WAS A ZERO TIMED UNIT AT ENGINE CHANGE IN 1998.

CA050130001	PIPER	LYC	BOLT	FAILED
1/25/2005	PA31	TIO540A2C	AN17413	NLG

(CAN) WHEN THE NOSE WAS LOWERED DURING LANDING, A SEVERE VIBRATION DEVELOPED WHEN THE NOSE TIRE TOUCHED THE RUNWAY. STEERING WAS NOT AVAILABLE BUT DIRECTIONAL CONTROL WAS MAINTAINED WITH RUDDER. AS THE AIRCRAFT SLOWED, THE VIBRATION EASED UP. TURNING TO EXIT THE RUNWAY WAS ACCOMPLISHED BY DIFFERENTIAL ENGINE POWER. WHEN THE AIRCRAFT WAS SHUTDOWN IT WAS DISCOVERED THE BOLT HOLDING THE UPPER AND LOWER NOSE SCISSOR LINKS TOGETHER WAS MISSING AND THE LINKS WERE OPEN. SINCE THE PARTS WERE NOT FOUND IT COULD NOT BE DETERMINED WHICH PART FAILED, THE BOLT, THE NUT OR THE LOCKING PIN. DAMAGE WAS LIMITED TO THE TIRE. NEW HARDWARE WAS INSTALLED.

CA050124008	PIPER	LYC	HSI	STUCK
1/18/2005	PA31325	TIO540F2BD	40001728513	COCKPIT

(CAN) NR1 HSI NEEDLE STUCK ON NORTHERN HEADING. NR1 ENGINE STARTED TO SURGE. ENGINE DROPPED TO 20 INCHES OF MANIFOLD PRESSURE. AIRCRAFT RETURNED TO BASE SAFELY.

2005FA0000310	PIPER	LYC	ENGINE	FAILED
2/4/2005	PA31325	TIO540F2BD		RIGHT

THE PILOT ATTEMPTED TO START THE RT ENGINE, WHILE DOING SO, HE HEARD A LOUD BANG THE ENGINE STARTED, AFTERWARDS, SHUTDOWN THE ENGINE AND EXITED THE AIRCRAFT. UPON INVESTIGATION, OBSERVED SKIN DAMAGE BETWEEN THE INSIDE NACELLE AND FUSELAGE, THE WING LOCKER SUFFERED SKIN DAMAGE ALONG WITH THE WHEEL WELL WHERE OBSERVED DAMAGE TO THE INSPECTION PANEL. THE FLAP ALSO SUSTAINED DAMAGE.

2005FA0000185	PIPER	PRESSURE SWITCH	CLOSED
8/6/2004	PA31350	94E421	HEATER

CUSTOMER BOUGHT EXCHANGE HEATER. CORE RETURNED TO US HAD A DISTORTED COMBUSTION TUBE. FOUND COMBUSTION AIR PRESSURE SWITCH 94E42-1 CLOSED AT ALL TIMES. THIS PARTICULAR SWITCH IS A NORMALLY OPEN SWITCH. SWITCH CLOSES WHEN COMBUSTION AIR PRESSURE INCREASES AND TELLS THE HEATER IT HAS COMBUSTION AIR. THE COMBUSTION AIR BLOWER QUIT (FAILED) AND THIS SWITCH DID NOT SENSE THIS LACK OF COMBUSTION AIR PRESSURE AND CONTINUED TO SUPPLY FUEL TO THE HEATER. BAD, BAD, BAD. THIS SWITCH DOES NOT GET TESTED IAW AD 96-20-07. THIS FR65D79-3EL HEATER WAS BUILT IN OCTOBER 1997. (K)

CA040910000	PIPER	LYC	PUMP	LEAKING
9/8/2004	PA31350	TIO540J2BD	RG9080J4AM	ENGINE FUEL

(CAN) PILOT FOUND THAT FUEL PRESSURE IN CRUISE WAS FLUCTUATING AND AT IDLE THE FUEL PUMP DID NOT MAINTAIN RATED PRESSURE. DURING INSPECTION OF THE PUMP FOUND FUEL STAINS ON PRESSURE RELIEF VALVE, THE VALVE WAS LEAKING AT ITS FLANGE.

CA040831022	PIPER	LYC	LINE	UNSERVICEABLE
8/25/2004	PA31350	TIO540J2BD		NR 1 ENGINE

(CAN) CLIMB AFTER TAKE-OFF, CREW NOTED THAT THE NR 1 ENGINE LOST TURBO BOOST ABD THE AIRCRAFT YAWED TO THE LT. PILOT RETURNED TO AIRPORT. FOUND MANIFOLD PRESSURE SENSE LINE FROM ENGINE INDUCTION TO DIFFERENTIAL PRESSURE CONTROLLER SHEARED OFF ANDTHE SENSE LINE SENSING AMBIANT AIR PRESSURE AND NOT BOOSTED PRESSURE. LINE DAMA GED DUE TO HEAT STRESS NEAR EXHAUST SYSTEM. LINE REPLACED. NO FURTHER FAULTS.

CA040813001	PIPER	LYC	LINE	CRACKED
8/13/2004	PA31350	TIO540J2BD	4085400	HYD HAND PUMP

(CAN) A/C WAS UNABLE TO EXTEND GEAR. FOUND HYDRAULIC HAND PUMP PRESSURE LINE WAS CRACKED JUST ABOVE FIRST CHECK VALVE. ALL HYDRAULIC FUEL LEAKED OUT.

CA050218010	PIPER	LYC	CRANKCASE	CRACKED
2/17/2005	PA31350	TIO540J2BD		ENGINE

(CAN) LT ENGINE LEAK, ENGINE RUN TO CONFIRM LEAK, HARD TO FIND, ENGINE PRESSURIZED, FOUND CRACK

OF 1.5 INCH LONG FORWARD OF CYLINDER NR2 IN THE CASE.

CA050221005	PIPER	LYC	LINK	CRACKED
2/5/2005	PA31350	TIO540J2BD	40336000	NLG

(CAN) IN DOING MFG SL NR1088, FOUND THE LINK ASSEMBLY CRACKED. ON DOING THE INSPECTION ON THE REST OF OUR FLEET, FOUND FOUR MORE CRACKED. WE WILL CONTINUE TO DO THE INSPECTION EVERY 500 HOURS IAW COMPLIANCE TIME OF SERVICE LETTER. DOING THE INSPECTION, ALSO NOTICED IN THE AREA OF THE CRACK THE ATTACHMENT LUGS HAD BEEN MADE WITH SHARP CORNERS AND NOT A SMOOTH FINISH.

CA050114004	PIPER	LYC	REGULATOR	LEAKING
1/6/2005	PA31350	TIO540J2BD	A23D047	FUEL SYSTEM

(CAN) DURING AN INSPECTION NECESSARY BY AD 2004-25-16 THE FUEL REGULATOR WAS FOUND TO BE LEAKING AROUND THE SEAM. IT WAS NOT LEAKING ENOUGH TO RUN OUT THE DRAIN FOR THE PROTECTIVE COVER.

CA041216009	PIPER	LYC	ENGINE	MALFUNCTIONED
12/14/2004	PA31350	TIO540J2BD		RIGHT

(CAN) ON DEPARTURE, THE CREW HAD A POWER LOSS ON THE RT ENGINE, FEATHERED ENGINE AND RETURNED FOR A LANDING. THE ENGINE WAS REPLACED WITH A SERVICEABLE ONE AND THE AIRCRAFT RETURNED TO SERVICE. THE ENGINE SHALL BE OPENED IN OUR ENGINE SHOP IN THE NEAR FUTURE TO DETERMINE THE EXACT CAUSE, SUSPECTED TO BE A PROBLEM IN THE ACCESSORY GEARTRAIN, AT WHICH POINT A CLOSED SDR WILL BE FILED.

CA050128003	PIPER	LYC	PIPER	CHANNEL	CRACKED
1/18/2005	PA31350	TIO540J2BD		4070200	FUSELAGE

(CAN) CHANNEL FOUND CRACKED AT FWD DOOR HINGE ATTACH POINT. A 2.5 INCH CRACK RUNNING PARALELL WITH THE CHANNEL UPPER RADIUS ABOVE HINGE PLATE AIRFRAME PORTION. CHANNEL REPLACED.

CA041206004	PIPER	LYC	ALTERNATOR	SEIZED
12/3/2004	PA31350	TIO540J2BD	ALT8421R	RT ENGINE

(CAN) ON A FLIGHT, PILOT NOTIED RH ALT OUT LIGHT CAME ON. PILOT CONTINUED FLIGHT AIRPORT. MAINTENANCE THE NEXT MORNING NOTICED THAT THE RT ALTERNATOR BELT HAD BROKEN AND THAT THE ALTERNATOR WAS SEIZED. ALTERNATOR WAS REMOVED AND DISSASSEMBLED FRONT AND REAR BEARINGS WERE DESTROYED AND BRUSH HOLDER WAS DAMAGED.

CA041015005	PIPER	LYC	MAGNETO	CRACKED
9/27/2004	PA31350	TIO540J2BD	1068291218	RT ENGINE

(CAN) RT ENGINE DEVELOPED 'MISSING OR SURGING' IN POWER AT HIGH POWER SETTINGS. RAN FINE AT LOW POWER. AIRCRAFT RETURNED FOR MAINTENANCE. AMO REMOVED MAGNETO AND FOUND DISTRIBUTOR BLOCK CRACKED AND BEARINGROUGH. MAGNETO REPLACED AND GROUND RUN, SERVICEABLE. MAGNETO PN 10-682912-18, SN H259310.

CA040930001	PIPER	LYC	TURBOCHARGER	LEAKING
9/22/2004	PA31350	TIO540J2BD	4091709001	ENGINE

(CAN) AFTER A SCHEDULED LANDING THE PILOTS FOUND A POOL OF OIL UNDER THE RIGHT HAND ENGINE. MAINTENANCE FOUND THE NEWLY INSTALLED TURBOCHARGER HAD THE OIL SEAL FAIL IN THE INTAKE SIDE PUMPING EXCESSIVE OILINTO THE ENGINE.

CA040921001	PIPER	LYC	TORQUE TUBE	CORRODED
4/8/2004	PA31350	TIO540J2BD	40040009	RUDDER

(CAN) INTERNAL INSPECTION OF RUDDER REVEALED SURFACE CORROSION AND SURFACE PITTING. TORQUE TUBE REPLACED WITH NEW P/N 40040-009.

CA040921002	PIPER	LYC	MOTOR	BURNED OUT
5/4/2004	PA31350	TIO540J2BD	475212	TE FLAP CONTROL

(CAN) DURING ROUTINE MAINTENANCE THE FLAP OPERATION WAS OBSERVED TO BE NOISY. MOTOR WAS FOUND TO BE INTERNALLY BURNED. MOTOR WAS REPLACED.

CA050131002	PIPER	LYC	UPLOCK HOOK	SEIZED
1/27/2005	PA31350	TIO540J2BD	4179702	MLG

(CAN) FLIGHT CREW INDICATED LANDING GEAR INTRANSIT LIGHT. THE GEAR WAS CYCLED ONE MORE TIME WITH FAILED ATTEMPT. FLIGHT CREW RETURNED AND LANDED. MAINTENANCE WAS DISPATCHED AND FOUND THE NOSE GEAR UPLOCK HOOK STUCK IN DOWN POSITION. WHEN NOSE GEAR RETRACTED, THE UPLOCK ROLLER BENT THE UPLOCK HOOK AND TUBE ASSY, UNABLING IT TO LOCK UP AND SECURE. NEW TUBE IDLER ASSY WITH UPLOCK HOOK ASSY REPLACED. NUMEROUS GEAR SWING C/W. ALL CHECKED SERVICEABLE.

CA050131003	PIPER	LYC	UPLOCK HOOK	SEIZED
1/27/2005	PA31350	TIO540J2BD	4179703	LT MLG

(CAN) FLIGHT CREW WAS UNABLE TO SECURE LANDING GEAR IN UP POSITION. THE FLIGHT RETURNED FOR SAFE LANDING. MAINTENANCE WAS DISPATCHED AND FOUND THE LT GEAR UP LOCK HOOK STUCK AND FROZEN IN THE UP POSITION. ASSY WAS DISASSEMBLED, MOISTURE REMOVED, CLEANED AND LUBED AND REASSEMBLED. NUMEROUS GEAR SWINGS PERFORMED, ALL CHECK SVC.

CA050119010	PIPER	LYC	VENT LINE	LEAKING
1/17/2005	PA31350	TIO540J2BD	461713	FUEL CELL

(CAN) DURING INSPECTION, FUEL WAS NOTICED LEAKING FROM THE LT WING. THERE WAS A FUEL STAIN AROUND THE VENT TUBE. WHEN THE TUBE WAS MOVED IT BROKE OFF AT THE TANK END OF THE TUBE. BOTH IB AND OB TANKS WERE REMOVED FOR INSPECTION. THEY BOTH SHOWED SIGNS OF DETERIORATION OF THE FUEL TANK MATERIAL. IT WAS STILL HOWEVER, PLIABLE AND NOT SHOWING ANY LEAKING ELSEWHERE. THE MFG 2 YEAR INSPECTION OF THE FUEL CELLS WAS CARRIED OUT IN AUGUST OF 2003 WITH NO FAULTS FOUND. THE TANKS WERE SHOWING A BUILD DATE OF 1974.

CA050105014	PIPER	LYC	ADAPTER	INCORRECT
1/5/2005	PA31350	TIO540J2BD	5379700	FUEL CAP

(CAN) THE INNER RING ON THE FUEL CAP HOUSING IS HELD IN PLACE BY LOCKING TABS. THE FUEL CAP LOCKS ONTO THIS RING. THE LOCKING TABS THAT HOLD THE RING IN PLACE SLOWLY, OVER TIME OF CONSTANT USE RELEASED THE RING TO LET THE CAP COME OUT OF THE HOUSING. CHECKING OUR OTHER A/C AND THE PILOTS HAVE ALL BEEN INFORMED ON HOW TO DETERMINE IF THERE IS A PROBLEM WITH THE CAP. MAINTENANCE ALSO IS PAINTING LINES ON THE CAP AND HOLDER TO SHOW A VISIBLE INDICATION OF THE CAP NOT BEING IN THE PROPER PLACE.

CA041220001	PIPER	PWA	DOOR	CRACKED
12/20/2004	PA31T	PT6A28	5452810	LANDING GEAR

(CAN) INFLIGHT, THE CREW NOTICED THAT THE RED GEAR IN TRANSIT LIGHT ILLUMINATED AT SPEEDS ABOVE 210 KNOTS. THE AIRCRAFT LANDED SAFELY AT ITS DESTINATION. UPON INSPECTION, THE INNER SKIN OF THE RIGHT OUTBOARD GEAR DOOR WAS FOUND CRACKED AND BENT INWARDS BY THE AIRFLOW. THE DOOR WAS REPLACED AND SATISFACTORY GEAR SWINGS WERE CARRIED OUT.

2005FA0000441	PIPER	LYC	DISPLAY	INOPERATIVE
9/15/2004	PA32300	IO540K1G5	401405000101	INTRUMENT PANEL

THE INSTRUMENT DISPLAY UNIT (IDU) PRIMARY FLIGHT DISPLAY INSTALLED AS PART OF FLIGHT SYSTEM, INC EFIS-SV SYSTEM FAILED. DURING BOOT-UP, THE DISPLAY SHOWED VERTICAL LINES ACROSS THE SCREEN. (K)

2005FA0000445	PIPER	LYC	RACK	DISLODGED
3/7/2005	PA32301	IO540K1G5	ELT10	ELT

DURING ANNUAL INSPECTION, FOUND ELT LAYING ON THE CONTROL CABLES IN AFT FUSELAGE. LATCH AHD FAILED ON ELT RACK. (EA21200505230) (K)

2005FA0000459	PIPER	LYC	MAGNETO	INOPERATIVE

3/21/2005	PA32R301T	TIO540*	BL68256013	ENGINE

AIRCRAFT ARRIVED AT HANGAR WITH ROUGH RUNNING ENGINE. FOUND DUEL MAG DEAD AND ON SIDE. REMOVED MAG FROM ENGINE. FOUND TEETH MISSING ON MAG GEAR. WAS TOLD BY OWNER THAT MAG WAS NOT THAT OLD.

2005FA0000432	PIPER	LYC	PISTON ROD	MISINSTALLED
3/25/2005	PA32RT300T	TIO540*	A24182	PROP HUB

NEW PROP WAS INSTALLED. ENGINE DEVELOPED METAL. PROP WAS BROUGHT TO SHOP TO BE FLUSHED OUT. AFTER CYL REMOVAL, PITCH CHANGE TUBE (PISTON ROD) WAS FOUND TO BE TORQUED AT 75 FT LBS INSTEAD OF 40 FT LBS. PROP WAS DISASSEMBLED AND REASSEMBLED TO MAKE SURE FORK WAS NOT UPSIDE DOWN. (K)

2005FA0000186	PIPER		PRESSURE SWITCH	CLOSED
8/13/2004	PA34200T		94E423	HEATER

CUSTOMER WAS CHECKING HEATER IAW AD96-20-07 EVEN THOUGH HE WASN'T REQUIRED TO DO SO, AND FOUND THE COMBUSTION AIR PRESSURE SWITCH CLOSED AT ALL TIMES. THIS IS A NORMALLY OPEN SWITCH. CUSTOMER INFORMED US THAT THE HEATER HAS 76 HRS. TT. THIS WAS A WARRANTY CLAIM. UPON RECEIPT OF THE DEFECTIVE SWITCH, CONCLUDED THAT THE SWITCH WAS CLOSED AT ALL TIMES. THIS SWITCH (AND HEATER) IS NOT REQUIRED TO BE TESTED IAW AD 96-20-07. THE HEATER, THIS SWITCH IS INSTALLED ON IS PN FR90D38-1EL AND WAS BUILT IN FEBRUARY 2002. TO PREVENT RECURRENCE, HAVE OPERATORS CHECK HEATERS AND SWITCHES WITH A SB OR AD. (K)

CA040921006	PIPER	CONT	WOODWARD	BEARING	DESTROYED
8/27/2004	PA34200T	LTSIO360EB			GOVERNOR

(CAN) PILOT REPORTED MINOR DIFFICULTY IN MAINTAINING A CONSTANT: RPM SELECTION, RPM WOULD WANDER +/- 50 RPM (RT SIDE. PROPS NEW. CONTROL LINKAGE AND GOVERNORS INSPECTED, NIL DEFECTS FOUND. GOVERNOR SENT TO O/H SHOP FOR REPAIR. O/H SHOP STATES BEARING DESTROYED. HOUSING, BODY, BASE IDLER AND DRIVE GEARS ALL DAMAGED DUE TO FAILED BEARING. PARTS AVAILABLE AT THE FACILITY. GOVERNOR REPLACED WITH O/H UNIT.

2005FA0000355	PIPER	CONT	TORQUE TUBE	ELONGATED
3/4/2005	PA34200T	TSIO360*	96319802	RUDDER

DURING INSPECTION, TECH DISCOVERED PLAY IN RUDDER TORQUE TUBE FITTING. TECH INSTALLED SERVICE KIT 764-100V. AD AND SB ADDRESSES INSP AN REPLACEMENT OF THE STEEL TORQUE TUBE FITTING WITH A STEEL REPLACEMENT PART. THIS AC HAD THE STEEL TORQUE TUBE FITTING INSTALLED PREVIOUSLY. WITH THE STEEL TORQUE TUBE FITTINGS, SEEING THE HOLES ELONGATED. IT IS DIFFICULT TO NOTICE HOLES ARE ELONGATED DURING INSP SINCE THE RUDDER IS NOT REMOVED FROM THE TORQUE TUBE FITTING DURING TYPICAL SCOPE OF INSP. IF TECH MOVES RUDDER TO THE FULL STOP IN ONE DIRECTION AND THEN SLOWLY MOVES TO OPPOSITE STOP AND GENTLY PUSHES ON THE RUDDER YOU CAN NOTICE SLIP OF TORQUE TUBE WITHIN FITTING.

2005FA0000178	PIPER	CONT	COMBUSTION LINER	CRACKED
1/31/2005	PA34200T	TSIO360*		HEATER

WHILE PERFORMING AD 04-21-05, THE HEATER FAILED THE PRESSURE DECAY TEST. REMOVED UNIT AND FOUND CRACKS IN END OF COMBUSTION LINER. UNIT WAS REMOVED AND REPLACED WITH OVERHAULED UNIT. UNIT INSTALLED MAY 1998, AND CONTAINED NEW STYLE CERAMIC LINER.

2005FA0000342	PIPER	CONT	POWERPACK	FAILED
2/9/2005	PA34200T	TSIO360*	HYC5005	HYD SYSTEM

AC DEPARTED, DIVERTED, PILOT THOUGHT THAT HIS LANDING GEAR WAS NOT FULLY IN THE UP AND LOCK POSITION (UNKNOWN IF GEAR UNSAFE LIGHT WAS ON). PILOT SELECTED GEAR DOWN, NOTHING HAPPENED, PULLED EMERGENCY GEAR EXTENSION AND LANDED WITH NO FURTHER INCIDENT. MAINTENANCE INSPECTED SYSTEM AND FOUND THE HYDRAULIC POWER PACK TO HAVE FAILED. REPLACED POWER PACK. (SO05200506731)

2005FA0000484	PIPER	CONT	SHAFT	OUT OF ROUND
1/30/2005	PA34200T	TSIO360E	SA631991REV.C	ENGINE

UPON INSTALLING A SHAFT INTO A ROCKER WITH INADEQUATE TOLERANCE LIMITS, NOTED BINDING IN 3 O`CLOCK POSITIONS. WITH PRUSSION BLUE FOUND SHAFT IS FORMED IN ELIPTICAL OR, MODIFIED TRIANGULAR SHAPE WITH REDUCED WEAR SURFACE AREA DUE TO INCONSISTANT DIA OF SHAFT. ALL 24 NEW SHAFTS DISPLAYED SAME MACHINING RESULTS. HIGHEST PRESSURE POINT WAS NARROWEST CONTACT POINT. GALLING OF THESE SHAFTS APPEARS TO BE CONSISTANT WITH REDUCED WEAR SURFACE & CROWNING OF SHAFT. WHILE OTHER FACTORS MAY BE ATTRIBUTED TO CAUSE OF PREMATURE SHAFT FAILURE, REDUCTUION IN SURFACE AREA IS CONSISTANT WITH ACCELERATED DECOMPOSITION OF BEARING SURFACE. AIRWEST AIRCRAFT ENGINES SUPPLIED PARTS. RETURNED PARTS.

CA040901001	PIPER	CONT	TUBE	OUT OF TOLERANCE
8/18/2004	PA34200T	TSIO360E	9572000	NLG

(CAN) TUBE PURCHASED NEW. INSTALLED NEW. TEE SHOOTING AT VARIOUS REPAIR STATIONS DISCOVER CIRCLIP GROOVE TOO SMALL TO ACCOMODATE FULL CLIP SEATING. (GROOVE UNDERSIZED)NEW TUBE PURCHASED AND REPLACED. NO FAULT TO DATE. INITIAL RECURRING FAULTS INC LUDED, LOSS OF FLUID, PRESSURE AND TOTAL COLLAPSE OF NOSE OLEO DURING DIFFERENT PHASES OF OPERATIONS. REPAIRS INCLUDED REPLACEMENT OF CIRCLIP, N2 SERVICING, O-RING INSPECTION ETC.

CA041213001	PIPER	CONT	SKIN	MISMARKED
1/11/2002	PA34200T	TSIO360KB	7861901	WING

(CAN) SKIN ASSY P/N 7861901 MATERIAL AND SKIN THICKNESS IDENTIFIED IN PIPER SENECA SERVICE MANUAL STRUCTURES SECTION FIG.4-9 NR 5 AS 2024-T3 0.032

2005FA0000451	PIPER		RIB	CRACKED
3/28/2005	PA44180		78475-007	RT WING

SINCE FLEET OF SIX PIPER ARROWS WERE ALL FOUND TO HAVE CRACKED RIBS IN THE SAME LOCATION, FOUND DURING ROUTINE INSPECTION. SDRS WERE SENT. DETERMINED TO INSPECT FLEET OF TEN SEMINOLES. THE BASIC WING STRUCTURE IS DESIGNED THE SAME. FOUND SIMILAR CRACKS IN SEVEN OF THE SEMINOLES. THE CRACKS ARE FOUND IN THE RIB, ADJACENT TO THE FORWARD TRUNNION PLATE (WHICH MUST BE REMOVED TO PROPERLY SEE THE CRACK). IN THIS PARTICULAR AIRCRAFT THE RIB, P/N 78475-007, LOCATED AT AFT STATION 49.25 ON THE RIGHT SIDE, WAS CRACKED. THE LEFT RIB, CRACKED IN OTHER SEMINOLES IS P/N 78475-006 AND LOCATED AT AFT STATION 49.25.

2005FA0000291	PIPER		STARTER	STICKING
3/1/2005	PA44180			RT ENGINE

THIS STARTER SHOWED NO SIGNS OF FAILURE. DURING MAINTENANCE, THE STARTER WOULD NOT ENGAGE THE RING GEAR. THE STARTER DID HAVE A LONG SERVICE LIFE, BUT IS SIMILAR IN FAILURE TO MANY, MANY OF THESE STARTERS ON THIS FLEET THAT LASTS ONLY SEVERAL HOURS, SOMETIMES UNDER 5 HOURS OR NEVER CRANK THE ENGINE THE FIRST TIME AFTER INSTALLATION.

CA040916004	PIPER		TRIM TAB	CRACKED
9/4/2004	PA44180		3839903	RIGHT

(CAN) DURING ROUTINE INSPECTION THE LOWER INBOARD SIDE OF THE RIGHT TRIM TAB WAS FOUNDCRACKED ABOUT 0.750 INCHES LONG. UPON REMOVAL THE TAB WAS FOUND TO BE CRACKED ALSO IN T HE RIB AS WELL AS THE SKIN.

2005FA0000532	PIPER		RIB	CRACKED
3/31/2005	PA44180		78475007	WING

SINCE OUR FLEET WERE ALL FOUND TO HAVE CRACKED RIBS IN THE SAME LOCATION (FOUND DURING ROUTINE INSPECTION / SDRS WERE SENT IN). THE CRACKS ARE FOUND IN THE RIB, ADJACENT TO THE LANDING GEAR TRUSS BRACKET (WHICH MUST BE REMOVED TO PROPERLY SEE THE CRACK). IN THIS PARTICULAR AIRCRAFT THE RIB, P/N 78475-007, LOCATED AT AFT STATION 49.25 ON THE RT SIDE, WAS CRACKED. THE RIB, P/N 78475-006, LOCATED AT AFT STATION 49.25 ON THE LT SIDE WAS ALSO CRACKED.

2005FA0000562	PIPER			RIB	CRACKED
3/31/2005	PA44180			78475006	WING

SINCE OUR FLEET OF SIX PIPER ARROWS WERE ALL FOUND TO HAVE CRACKED RIBS IN THE SAME LOCATION (FOUND DURING ROUTINE INSPECTION / SDRS WERE SENT IN) WE DETERMINED TO INSPECT OUR FLEET OF TEN SEMINOLES. THE BASIC WING STRUCTURE IS DESIGNED THE SAME. WE FOUND SIMILAR CRACKS IN SEVEN OF THE SEMINOLES. THE CRACKS ARE FOUND IN THE RIB, ADJACENT TO THE LANDING GEAR TRUSS BRACKET(WHICH MUST BE REMOVED TO PROPERLY SEE THE CRACK). IN THIS PARTICULAR AIRCRAFT THE RIB, PN 78475-006, LOCATED AT AFT STATION 49.25 ON THE RIGHT SIDE, WAS CRACKED.

2005FA0000547	PIPER			RIB	CRACKED
3/31/2005	PA44180			78475007	WINGS

SINCE OUR FLEET OF SIX PIPER ARROWS WERE ALL FOUND TO HAVE CRACKED RIBS IN THE SAME LOCATION (FOUND DURING ROUTINE INSPECTION / SDRS WERE SENT IN) WE DETERMINED TO INSPECT OUR FLEET OF TEN SEMINOLES. THE BASIC WING STRUCTURE IS DESIGNED THE SAME. WE FOUND SIMILAR CRACKS IN SEVEN OF THE SEMINOLES. THE CRACKS ARE FOUND IN THE RIB, ADJACENT TO THE LANDING GEAR TRUSS BRACKET(WHICH MUST BE REMOVED TO PROPERLY SEE THE CRACK). IN THIS PARTICULAR AIRCRAFT THE RIB, P/N 78475-007, LOCATED AT AFT STATION 49.25 ON THE RIGHT SIDE, WAS CRACKED.

2005FA0000549	PIPER			RIB	CRACKED
3/31/2005	PA44180			78475006	WINGS

SINCE OUR FLEET OF SIX PIPER ARROWS WERE ALL FOUND TO HAVE CRACKED RIBS IN THE SAME LOCATION (FOUND DURING ROUTINE INSPECTION / SDRS WERE SENT IN) WE DETERMINED TO INSPECT OUR FLEET OF TEN SEMINOLES. THE BASIC WING STRUCTURE IS DESIGNED THE SAME. WE FOUND SIMILAR CRACKS IN SEVEN OF THE SEMINOLES. THE CRACKS ARE FOUND IN THE RIB, ADJACENT TO THE LANDING GEAR TRUSS BRACKET(WHICH MUST BE REMOVED TO PROPERLY SEE THE CRACK). IN THIS PARTICULAR AIRCRAFT THE RIB, P/N 78475-006, LOCATED AT AFT STATION 49.25 ON THE LEFT SIDE, WAS CRACKED.

CA041222011	PIPER			CONTROL CABLE	CHAFED
12/1/2004	PA44180			62701154	RUDDER

(CAN) AFTER REMOVAL OF RUDDER, FOUND MANY STRANDS BROKEN ON LT AFT RUDDER CABLE. THE CABLE CHAFING AT AFT BULKHEAD.THE CABLE WAS REPLACED BY NEW P/N 62701-154.

2005FA0000393	PIPER	LYC	PIPER	SKIN	CRACKED
12/21/2004	PA44180	O320*		8644606	NOSE CONE

DURING AN ANNUAL INSPECTION OF THE AIRCRAFT THE NOSE CONE ASSY WAS FOUND TO HAVE A CRACK IN THE TOP SKIN. PROBABLE CAUSE OF CRACKING OF THE NOSE CONE ASSY IS UNKNOWN. THE NOSE CONE WAS REPAIRED AND AIRCRAFT RETURNED TO SERVICE. (SO09200503395) (K)

2005FA0000391	PIPER	LYC	PIPER	SKIN	CRACKED
12/21/2004	PA44180	O360*		8644606	NOSE CONE

DURING AN ANNUAL INSPECTION OF THE AIRCRAFT THE NOSE CONE ASSY WAS FOUND TO HAVE A CRACK IN THE TOP SKIN. PROBABLE CAUSE OF CRACKING OF THE NOSE CONE ASSY IS UNKNOWN. THE NOSE CONE WAS REPAIRED AND AIRCRAFT RETURNED TO SERVICE. OF 3 AIRCRAFT INSPECTED, ALL 3 HAD CRACKS IN THE SAME SKIN IN THE SAME LOCATION. (SO09200503396) (K)

2005FA0000313	PIPER	LYC		HEATER	SMOKE
3/7/2005	PA44180	O360*		90D382EL	CABIN

NOTICED HEATER SMOKING FROM THE EXHAUST. HAD PILOT TURN TEMP CONTROL TO LOW AND SHUT DOWN THE HEATER. OPENED NOSE CONE AND NOTICED SMOKE AND STRONG BURNING SMELL. THE HEATER INLET AIR CONTROL CABLE HAD MELTED ALONG WITH A GROUND WIRE TERMINAL LOCATED ON THE TOP OF THE HEATER. ALSO THE HEATER ITSELF HAD A BURNED/DISCOLORED AREA ON THE TOP SIDE. THERMAL HEAT BREAKER WAS POPPED. FOUND THE HEATER CABIN BLOWER WAS INOPERATIVE, SO THERE WAS NO AIR CIRCULATION THRU THE HEATER OUTER CAN. REPLACED HEATER ASSEMBLY. THIS IS THE SECOND OCCURRENCE WITHIN THE LAST FOUR DAYS ON THE SAME TYPE OF AIRCRAFT . HAVE CONTACTED THE MFG CONCERNING PROBLEM.

2005FA0000308	PIPER	LYC	PIPER	RELAY	SHORTED
3/1/2005	PA44180	O360*		39570002	

CREW NOTED VARIOUS ROCKER SWITCHES, LOCATED ON INSTR PANEL, FAILED TO ILLUMINATE. IT WAS DISCOVERED THAT FUEL PUMP SWITCHES, LOCATED ON LWR PILOT'S PNL, JUST TO LT OF EMER GEAR EXT, WERE CONTACTING GEAR MUTE RELAY (SMALL METAL BOX) LOCATED DIRECTLY BEHIND THEM. CONTACT WAS MADE THROUGH LWR TRMNLS ON EACH SWITCH, WHICH WAS NOT INSULATED AS WERE SOME OF OTHER TRMNLS ON SAME SWITCH. TERMINALS ARE WHERE LIGHTING WIRES FOR INTERNAL SWITCH LIGHTS ARE CONNECTED TO SWITCH. THIS CAUSED ALL OF LIGHTS IN ALL OF PNL MOUNTED ROCKER SWITCHES TO NOT ILLUMINATE. EVIDENCE OF ABNORMAL HEAT BEING GENERATED BY LIGHT DIMMER ASSEMBLIES (P/N 39570-002), SO THAT ASSY WAS REPLACED WITH SERVICEABLE ASSY, RELAY WAS ALSO REPOSITIONED.

2005FA0000392	PIPER	LYC		SKIN	CRACKED
12/21/2004	PA44180	O360*		8644606	NOSE CONE

DURING AN ANNUAL INSPECTION OF THE AIRCRAFT, THE NOSE CONE ASSY WAS FOUND TO HAVE A CRAK IN THE TOP SKIN. PROBABLE CAUSE OF CRACKING OF THE NOSE CONE ASSY IS UNKNOWN. THE NOSE CONE WAS REPAIRED AND AIRCAFT RETURNED TO SERVICE. (SO09200503394) (K)

2005FA0000359	PIPER	LYC	JANITROL	GASKET	LEAKING
3/3/2005	PA44180	O360*			REGULATOR

PILOT REPORTED SMELLING FUEL WHEN THE COMBUSTION HEATER WAS RUNNING. MAINTENANCE FOUND FUEL SPRAYING FROM A GASKET JOINT ON THE REGULATOR SIDE OF THE HEATER FUEL SHUTOFF AND REGULATOR VALVE. THIS VALVE WAS REPLACED FOR LEAKING IAW AD. THIS VALVE WAS INSPECTED FOR LEAKS DURING THE OPS CHECK OF THE HEATER AS PART OF THE ANNUAL INSPECTION ON 11-9-2004, 93.7 AIRCRAFT HOURS PRIOR TO THIS FAILURE. (K)

CA041224010	PIPER	LYC		MOUNT	CRACKED
12/22/2004	PA44180	O360A1H		8936102	LT ENGINE

(CAN) DURING AN EVENT NR 3 INSPECTION THE LT ENGINE MOUNT WAS FOUND TO BE CRACKED AT THE UPPER RT SUPPORT TUBE AT THE WELDING POINT WHERE IT MEETS THE RUBBER MOUNT ISCOLATOR WEB. THIS MOUNT HAD PIPER SB 1033 CARRIED OUT AT THE UPPER LT SUPPORT TUBE.

2005FA0000179	PIPER	LYC		BLOWER	SEIZED
2/10/2005	PA46350P	TIO540*		EM608	DEFOGGER

VENT DEFOG BLOWER TRIPPING VENT DEFOG BLOWER CIRCUIT BREAKER. BLOWER ASSY SEIZED. REMOVED AND REPLACED BLOWER ASSY. (K)

CA041216012	PIPER	LYC		TANK	CRACKED
12/16/2004	PA46350P	TIO540AE2A		8402917	FUEL COLLECTOR

(CAN) RIGHT FUEL COLLECTOR TANK WAS LEAKING INSIDE THE WHEEL WELL.FOUND TANK WAS CRACKED ON THE UPPER INBOARD WELD FLANGE.

2120003	RAYTHN		DUNLOP	NUT	BACKED OUT
1/14/2005	HAWKER800XP				WHEEL

DURING TAXI FOR TAKEOFF, BOTH RIGHT MAIN GEAR TIRES CAME OFF OF THE WHEELS AND THE AIRCRAFT SETTLED ON THE WHEELS. BOTH WHEELS WERE DESTROYED. ALL WHEEL HALF BOLTS WERE LOOSE, NONE HAD NUTS INSTALLED, AND ONLY TWO NUTS COULD BE LOCATED. WHILE THE WHEELS ROTATED, THE LOOSE BOLTS DRAGGED ON THE BRAKE BACKING PLATES DAMAGING THEM. THE INBOARD WHEEL, INBOARD WHEEL HALF, DEPARTED UNDER PRESSURE STRIKING THE KEELBEAM FAIRING JUST AFT OF THE ROTATING BEACON AND CONTINUED, STRIKING THE LEFT GEAR INBOARD WHEEL HUBCAP. THE HUBCAP AND ANTI SKID ADAPTER SLEEVE WERE BOTH DAMAGED. ONLY ONE TIRE WAS RECOVERED.

CA041209007	RKWELL	LYC		TIRE	BLOWN
11/25/2004	700	TIO540R2AD		AB3L6	MLG

(CAN) LT MAIN TIRE WAS REPORTED TO ME AS THE D.M. TO BE FLAT. THE CREW WERE ON TAKEOFF WHEN THERE WAS SHAKING AND AIRCRAFT VEERING TO THE LT. THEY CONTINUED THE TAKEOFF AND MADE A LOW PASS BY THE FSS STATION FOR A VISUAL. IT WAS DETERMINED TO LAND WITH NO PROBLEMS. THE TIRE WAS INSTALLED ON THE ACRFT OCTOBER 13/04 AND HAS ACCUMULATED 162 HOURS. TIRE PRESSUES ARE CHECKED REGULARLY AND ON THAT PARTICULAR DAY. THE TIRES WERE CHECKED BY ME AND NO NICKS OR DAMAGE WAS NOTED. THIS TIRE PLY LOOKS AS IFIT WAS PULLED AWAY FROM THE STEEL BEAD.

CA041209015	ROBSIN	LYC	WARNING SYSTEM	INOPERATIVE
12/6/2004	R44	O540F1B5	A5696	LOW RPM

(CAN) DURING PILOT DAILY INSPECTION, THE LOW RPM WARNING UNIT WAS INOP. TECHNICIAN CONFIRMED THAT SYSTEM WAS DEFECTIVE AFTER TROUBLESHOOTING AND PART HAS BEEN REPLACED AND FOUND SERVICEABLE.

CA040910003	ROBSIN	LYC	ENGINE	MAKING METAL
9/8/2004	R44	O540F1B5		

(CAN) DURING AN SCHEDULED INSPECTION, THE OIL FILTER WAS LITTERED WITH METAL CONTAMINATION. THERE WAS EVIDENCE OF BRASS, ALUMINUM AND FERRIOUS METAL. THE ENGINE WAS REMOVED AND WILL BE SENT TO THE OVERHAUL SHOP FOR FURTHER INVESTIGATION. THE PISTON PIN PLUGS ARE A DEFINITE SUSPECT IN REGARDS TO THE BRASS FLAKES. ONCE THE ENGINE IS DISASSEMBLED, FURTHER REASONS FOR THE CONTAMINATION WILL BE AVAILABLE.

CA040831020	ROBSIN	LYC	ENGINE	MAKING METAL
8/30/2004	R44	O540F1B5		

MAINTENANCE WAS CONDUCTING A 50 HR INSPECTION AND EXCESSIVE METAL IN FILTER. THE ENGINE WAS REMOVED FROM THE AIRCRAFT AND SENT TO AN OVERHAUL FACILITY. THE ENGINE WAS TORN DOWN AND INTERNAL COMPONENTS REVEALED THAT THE MAIN BEARING HAD FAILED DUE A OVERSPEED CONDITION. THE ENGINE DRIVETRAIN SHOWED HEAVY DAMAGE TO THE CRANKSHAFT. THE A/C WILL NOW GO THROUGH A SUSPECT OVERSPEED CONDITION.

CA040820004	ROBSIN	LYC	TRANSMISSION	NOISY
8/17/2004	R44	O540F1B5	C0066	MAIN ROTOR

(CAN) DURING LANDING THE HEARD GRINDING NOISE. FURTHER INVESTIGATION REVEALED NOISE WAS COMING FROM MAIN ROTOR TRANSMISSION. TRANSMISSION WAS REPLACED AND NO FURTHER OCCURRENCES AND WILL SUBMIT FURTHER INFORMATION WHEN TEAR DOWN OF TRANSMISSION REPORT BECOMES AVAILABLE.

CA041228001	ROBSIN	LYC	CONTROL SYSTEM	MALFUNCTIONED
12/28/2004	R44	O540F1B5	D2781	GOVERNOR

(CAN) DURING CRUISE THE GOVERNOR WHICH CONTROLS THE ENGINE FROM AN OVERSPEED, MALFUNCTIONED WHICH CAUSED THE ENGINE AND MAIN ROTOR SYSTEMS TO OVERSPEED. DURING THE ENGINE TEARDOWN THE CRANKSHAFT GEAR WAS FOUND DAMAGED. THE CONNECTING ROD BEARINGS WERE ALSO FOUND DAMAGED WITH SLIGHT SPALLING OF THE BEARINGS. THE GOVENOR SYSTEM IS SUSPECTED AND WE ARE IN CONTACT WITH ROBINSON HELICOPTERS TO DETERMINE WHY THE GOVERNOR DID NOT CONTROL THE OVERSPEED. ROBINSON HELICOPTERS HAVE RELAYED TO US THEY HAVE HAD FURTHER PROBLEMS WITH THE SYSTEM BUT ARE REQUIRING FURTHER INVESTIGATION. WE WILL UPDATE WHEN FURTHER INFORMATION IS AVAILABLE TO US.

CA041231001	ROBSIN	LYC	ENGINE	OVERSPEED
12/17/2004	R44	O540F1B5		

(CAN) DURING A TRAINING FLIGHT, THE ENGINE HAD A UNCOMMAMDED OVERSPEED AND A FULL THROTTLE TO IDLE SPEED CONDITION. THE PILOTS RETURNED TO THE AIRPORT WHERE FURTHER INVESTIGATION COULD NOT DUPLICATE THE PROBLEM. THE PILOTS COULD NOT EXPLAIN TO THE REASON WHY THE AIRCRAFT HAD THESE DEFECTS. THEY SAY THEY WERE COMPLETELY UNCOMMANDED. THE AIRCRAFT OVERSPEED WAS ABOVE 109 PERCENT. WE HAVE CONDUCTED AN OVERSPEED INSPECTION IAW LYCOMING SB 369J. NO DAMAGE WAS FOUND

AND FURTHER INVESTIGATION TO THE GOVERNOR SYSTEM IS STILL ON GOING. WE HAVE INSTALLED A NEW GOVERNOR FOR SAFTEY REASONS. WE WILL UPDATE AS SOON AS WE HAVE MORE INFORMATION.

CA041021001	SAAB	GE	POWERPLANT	FAILED
10/18/2004	340B	CT75A2		

(CAN) ENG FLAMED OUT AT 13,000 FT DURING DESCENT WHEN THEY TRIED TO REAPPLY HIGHER POWER & RESTARTED SUCCESSFULLY AFTER FOLLOWING PROCEDURES. ACRFT LANDED. MX DISPATCHED, EVALUATION CARRIED OUT IAW GE MM. INTERNAL ENG INSPECTED NO FAULT FOUND, EXTERNAL INSPECT CARRIED OUT NO FAULT FOUND. RUNS CARRIED OUT AT HIGH POWER, AIR VALVE LITE COMING ON MEANING NOT ENOUGH AIRFLOW TO THE ANTI-ICING SYSTEM. AFTER TROUBLESHOOTING FOR THE BLEED AIR VALVE TO BE DEFECTIVE. VALVE REPLACED, DEFECT REPAIRED. THIS ALONE COULD HAVE NOT CAUSED THE FLAME OUT. AFTER DISCUSSION WITH CREW THEY USED QRH PROCEDURE FOR AIR VALVE LIGHT ON, BUT AUTOCOARSEN SWITCH ON AT ALL TIMES

CA041021006	SAAB	GE	HMU	FAILED
9/19/2004	SF340A	CT75A2	6055T19P14	ENGINE

(CAN) FOLLOWING A SCHEDULED ENGINE CHANGE AND DURING COMPLETION OF THE GROUND RUN OPERATIONAL CHECKS, THE BOTTOM GOVERNING FUNCTION OF THE ENGINE COULD NOT BE ENABLED. THE HMU WAS REPLACED AND RETURNED TO THE MANUFACTURER FOR INSPECTION AND REPAIR. THE SHOP REPORT CONCLUDED THAT A DEFECTIVE LINEAR TRANSDUCER IN THE HMU WAS AT FAULT.

CA041021007	SAAB	GE	HMU	FAILED
9/14/2004	SF340A	CT75A2	6055T19P14	ENGINE

(CAN) DURING COMPLETION OF ENGINE GROUND RUNS AFTER AN ENGINE CHANGE, THE ENGINE BOTTOM GOVERNING FUNCTION COULD NOT BE CONSISTENTLY ENABLED AS REQUIRED BY THE CHECK. IT WOULD INTERMITTENTLY FAULT TO A LOWER THAN SELECTED RPM. THE HMU WAS REPLACED AND SENT TO THE MANUFACTURER FOR INSPECTION AND REPAIR.

CA031113013	SAAB	GE	BEARING RACE	BROKEN
11/6/2003	SF340A	CT75A2	1388920629	NLG WHEEL

(CAN) AIRCRAFT ON LANDING FELT A VERY STRONG SHIMMY AT THE NOSE, THE PILOTS DID THEIR INVESTIGATION AND ONE OF THE NOSE WHEEL BEARINGS WAS COMPLETELY BROKEN AND THE WHEEL WAS LOOSE ON THE AXLE. TECHNICIAN WAS SENT TO REPLACE BOTH NWA'S. AFTER INVESTIGATION, LOOSE HUB BOLTS WERE FOUND AND AT BUILD UP PROCEDURE THE OPTIONAL SB340-32-34 IS NOW IMPLEMENTED MANDATORY. THE BEARING CLEANING PROCEDURE WAS REVIEWED AND A NOTICE OF NO PRESSURE WASHING OF WHEEL AREAS WAS ALSO GIVEN AND THE SB 50 06227-32-01 (IB SEAL IMPROVEMENT WILL BE PROGRESSIVELY IMPLEMENTED.

2005FA0000341	SKRSKY	PWA	SPAR	CRACKED
1/31/2005	S64E	JFTD12A4A	151520604000	M/R BLADE

(MDR05-074) THE SPAR IS CRACKED ON THE BOTTOM SIDE OF THE BLADE BETWEEN POCKET LOCATIONS NR 5 AND NR 6. CRACK IS APPROXIMATELY .300 INCH IN LENGTH .650 INCH FROM THE BACKWALL RUNNING CHORDWISE TO .950 INCH FROM THE BACKWALL. BLADE HAD A BIM INDICATION AND WAS REMOVED FROM AIRCRAFT. CAUSE IS UNKNOWN AND NO RECOMMENDATIONS TO PREVENT RECURRENCE AT THIS TIME.(K)

2005FA0000339	SKRSKY	PWA	AXLE	CRACKED
1/31/2005	S64E	JFTD12A4A	642550120101	MLG

(MDR05-073) FOUND CRACKED DURING NDT INSPECTION. CRACK IS APPROXIMATELY 1 INCH IN LENGTH AND IS IN THE KEY GROOVE. THIS IS FIRST KNOW DEFECT OF THIS TYPE FOR THIS PART. CAUSE IS UNKNOWN AND NO RECOMMENDATIONS TO PREVENT RECURRENCE AT THIS TIME. (K)

2005FA0000340	SKRSKY	PWA	SKRSKY	BEARING RACE	CRACKED
1/10/2005	S64F	JFTD12A5A		6595211522102	M/R HEAD

(MDR05-072) THE MRH SLEEVE AND SPINDLE ASSY DEVELOPED AN OIL LEAK WHILE ON AIRCRAFT AND WAS NOTED DURING ROUTE INSPECTION. UPON REMOVAL AND REPLACEMENT WITH A SERVICEABLE ASSY, A CRAK

WAS FOUND ON THE INNER RACE. VISUAL INSPECTION SHOWS WEAR AND CORROSION TYPICAL FOR THIS PART THAT HAS BEEN IN SERVICE. NO OTHER ABNOMALITIES WITH THE EXCEPTION OF THE CRACK. CRACK IS APPROXIMATELY 3 INCHES IN LENGTH AND RUNS IN AXIAL DIRECTION. THIS IS A FIRST TIME OCCURANCE. CAUSE IS UNKNOWN AND NO RECOMMENDATIONS TO PREVENT RECURRENCE AT THIS TIME. (K)

CA030204016	SKRSKY	ALLSN	FLOAT	DEPLOYED
1/28/2003	S76A	250C30S	7625101104011	MLG

(CAN) PRE-TAKE OFF CHECKS WERE COMPLETED FOR FLIGHT. AC WAS TURNED INTO WIND AND TAXIED FORWARD TO STRAIGHTEN OUT NOSE WHEEL. ONCE DONE THE TOE BRAKES WERE APPLIED BY THE COPILOT AND THE PILOT BECAUSE THE AC WAS ROLLING FORWARD. IMMEDIATELY, FLOATS WERE ACTIVATED. NEITHER PILOT RECALLS PRESSING FLOAT ACTIVATION BUTTON ON EITHER CYCLIC. AC WAS THEN FLOWN WITH THE FLOATS (ALL FOUR) DEPLOYED. THE FLOATS WERE DEFLATED AND REMOVED FROM THE AIRCRAFT. THE FLOAT SYSTEM (4 FLOAT BAGS, 4 FLOAT BOTTLES AND 4 SQUIBS) WERE REMOVED FROM ANOTHER AIRCRAFT AND INSTALLED ONTO THIS AIRCRAFT IAW THE MM. A WIRING CONTINUITY CHECK OF ENTIRE FLOAT SYS WAS PERFORMED AN NO FAULT WAS FOUND. THE AIRCRAFT WAS RETURNED TO SERVICE.

CA041223004	SKRSKY	ALLSN	SUPPORT	CORRODED
12/15/2004	S76A	250C30S	7610708001104	MAIN ROTOR

(CAN) DURING INSPECTION MANDATED BY ASB 76-65-62 SEVERE FRETTING WAS DISCOVERED ON LOWER FAYING SURFACE. SUPPORT ARM HAS BEEN REPLACED AND A/C RETURNED TO SERVICE.

CA050213004	SKRSKY	PWA	TUBE	WORN
2/5/2005	S76B	PT6B36	3020030	FUEL MANIFOLD

(CAN) PRIOR TO TAKEOFF, ENGINE POWER REDUCED ACCOMPANIED BY AN INCREASE IN FUEL FLOW. THE TAKEOFF WAS ABORTED. SUBSEQUENT INSPECTION REVEALED A DISLODGED FUEL MANIFOLD TUBE WITH A WORN RETAINING PLATE COLLAR.

CA050215009	SNIAS	TMECA	SWITCH	DEFECTIVE
1/13/2005	AS350B	ARRIEL1B	NE15FBATFI1T	HYD SYSTEM

(CAN) PILOT COULD NOT TURN HYD OFF DURING FLIGHT BY PRESSING BUTTON ON COLLECTIVE STICK. TROUBLESHOOTING DETERMINE THE SWITCH WAS DEFECTIVE AND NOT SUPPLYING VOLTAGE TO SOLENOIDS. NEW SWITCH INSTALLED.

CA041022003	SNIAS	TMECA	TURBINE WHEEL	UNSERVICEABLE
8/1/2004	AS350B	ARRIEL1B		ENGINE

(CAN) DURING A SCHEDULED CHECK OF THE SECOND STAGE TURBINE BLADES (T2) IAW TURBOMECA ASB 292-72-0807 AND AD2004-047 IT WAS DETERMINE THE BLADE SHIFT HAD FAILED THE CHECK. THE GAS GENERATOR WAS REPLACED

CA041105006	SNIAS	TMECA	FUEL CONTROL	FAILED
10/29/2004	AS350B	ARRIEL1B	164448620	ENGINE

(CAN) ON P2 CHAMBER INSPECTION AND CLEANING OF FCU. WHEN BELLOWS WERE REMOVED WE FOUNDTHAT THE PIN THAT HOLDS THE METERING VALVE IN PLACE WAS BROKEN OFF AND HALF OFTHE PIN WAS FOUND IN THE CHAMBER.

CA041209005	SNIAS	TMECA	SERVO	MALFUNCTIONED
12/8/2004	AS350B	ARRIEL1B	AC67244	HYDRAULIC SYS

(CAN) PILOT REPORTED THAT CYCLIC WAS STIFF WHEN MOVED TO LEFT AND IT WANTED TO MOVE RIGHT WHEN COLLECTIVE LOWERED (NO PROBLEMS WHEN COLLECTIVE WAS RAISED). LEFT MAIN SERVO WAS CHANGED AND DEFECT WAS CURED.

CA041203007	SNIAS	TMECA	LINE	LEAKING
12/3/2004	AS350B2	ARRIEL1D1		SERVO

(CAN) FLUID LEAK AT UPPER HOUSING SPLIT LINE.

CA041213005	SNIAS	TMECA	BUSHING	CRACKED
12/4/2004	AS350B2	ARRIEL1D1	350A33214501	T/R PITCH LINK

(CAN) DURING ROUTINE HYDS OFF TRAINING, TAIL ROTOR INPUTS MADE THROUGH TAIL ROTOR PEDALS WERE NOT BEING TRANSFERRED TO TAIL ROTOR. PILOTS RESELECTED HYDS ON & TAIL ROTOR RESPONDED NORMALLY TO TAIL ROTOR INPUTS. AIRCRAFT RETURNED TO HANGAR FOR INSPECTION. WHEN PITCH LINKS BOLTS WERE LOOSENED ON TAIL ROTOR SPIDER, NOTICED DEFLECTION ON ATTACHMENT FLANGES. WITH BOLTS LOOSENED, TAIL ROTOR MOVED FREELY WHEN PEDALS ACTUATED (HYDS OFF & ACRFT NOT RUNNING). INSPECTION OF 1 TAIL ROTOR PITCH LINK REVEALED 2 CRACKS THAT WENT COMPLETELY THROUGH BUSHING IN ELASTIMERIC BEARING. WHEN 2 PITCH LINKS REPLACED & TEST PERFORMED, CONCLUDED THAT UNBOOSTED TAIL ROTOR INPUTS RESPONDED NORMALLY. ACRFT RETURNED TO SERVICE.

CA050114005	SNIAS	TMECA	CROSSBEAM	CRACKED
1/14/2005	AS350B2	ARRIEL1D1	350A38101891	FUSELAGE

(CAN) AN ENGINEER WAS DOING A 30 HOUR INSPECTION IAW AWD 96-156-071(B) R1 PART 1.1.THE ENGINEER DISCOVERED A BLACK LINE IN THE REGION THAT IS TO BE INSPECTED, A CLOSER LOOK, IT WAS DETERMINED THAT IT WAS CRACKED. THE TSO IS ACTUALLY TSI SINCE THE LAST (NDT LIQUID DYE PENETRENT) INSPECTION IAW AWD.

CA050113008	SNIAS	TMECA	WINDOW	CRACKED
1/12/2005	AS350B2	ARRIEL1D1	SP350110	COCKPIT

(CAN) DURING THE BLF THE MAIN WINDOW WAS FOUND TO BE CRACKED. THE OAT WAS -34 DEGREES. IT APPEARS TO HAVE BEEN INSTALLED WITH IMPROPER TORQUE AS THE CRACK ORIGINATED FROM THE TOP SCREW OF THE SLIP INDICATOR.

2005FA0000030	SNIAS	TMECA	BEARING	BROKEN
1/19/2005	AS350B2	ARRIEL1D1	704A33652036	REDUCTION G/B

BEVEL REDUCTION MODULE (PN 350A32-0300-05, SN M1899) WAS REMOVED AT TSO: 2367.5 FOR METAL CONTAMINATION. UPON TEARDOWN ANALYSIS IT WAS DISCOVERED THAT THE BEARING CAGE FOR BEARING (P/N 704A33-652-036) TSN: 2367.5, WAS BROKEN. SUBSEQUENT DETERIORATION OF BEARING WAS CAUSE FOR METAL CONTAMINATION.

CA050323002	SNIAS	TMECA	ENGINE	OUT OF LIMITS
3/17/2005	AS350B2	ARRIEL1D1		

(CAN) THE ENGINE HAS BEEN INSTALLED AFTER OVERHAUL, AND ON GROUND RUN HIGH VIBRATION ON THE FORWARD POINT WITHIN LIMIT BUT ABNORMALLY HIGH. AFTER CONTACTING THE OVERHAUL FACILITIES, WE DID SOME TESTS FOR RESULT. THE VIBRATION WENT UP CLOSER TO THE LIMIT. AFTER THE VISIT BY A OVERHAUL FACILITIES TECH, IT WAS DETERMINED THAT THE ENGINE WAS OUT OF LIMIT AND WAS REMOVED AND SENT BACK TO THE OVERHAUL SHOP.

CA050207004	SNIAS	TMECA	HYDRAULIC SYSTEM	FAILED
2/6/2005	AS350B2	ARRIEL1D1		RIGHT

(CAN) THE HELICOPTER WAS ON A INTERNATIONAL JOB. THE INITIAL REPORT FROM FLIGHT OPERATIONS IS HYDRAULIC FAILURE. THE AIRCRAFT WAS IN A HOVER WHEN IT YAWED TO THE RT. THE AIRCRAFT LANDED HARD ENOUGH TO DAMAGE ONE ARM OF THE MAIN ROTOR STAR AND THE TAILBOOM HAS BEEN DAMAGED. CREW OK. THIS IS AN INITIAL REPORT MORE INFORMATION WILL FOLLOW.

CA041226001	SNIAS	TMECA	UROCOP	MAGNETIC SEAL	CRACKED
12/24/2004	AS350B3	ARRIEL2B		770441	T/R GEARBOX

(CAN) UPON LANDING AT DESTINATION AFTER A 40 MINUTE FLIGHT. PILOT CARRIED OUT A WALKAROUND AND NOTICED AN UNUSUAL AMOUNT OF OIL ON TAILBOOM FROM BELOW TAIL ROTOR GEARBOX. OIL LEVEL WAS CHECKED AND WAS FOUND TO BE DOWN A LITTLE BUT STILL IN ACCEPTABLE RANGE LEVEL. UPON EXAMINATION BY AME INPUT SEAL TO GEARBOX WAS COVERED IN OIL. OIL LEVEL WAS DOWN 1/2 OUNCE FOR 4 HOURS OF FLYING. MAGNETIC SEAL WAS REMOVED AND EXAMINED AND IT WAS DETERMINED THAT THE CARBON RING OF

THE MAGNETIC SEAL HAD A DEFECT. WHEN EXAMINED WITH A MAGNIFYING GLASS A TINY DIAGONAL CRACK WAS FOUND ON THE FACE OF THE RING. A NEW MAGNETIC SEAL WAS INSTALLED AND GROUND RUN AND FLIGHT TEST FOLLOWED. NO OIL LEAK EVIDENT AFTER FLIGHT.

CA050322002	SNIAS	TMECA	TMECA	SEAL	LEAKING
3/21/2005	AS350B3	ARRIEL2B		TPZA10063T251V	BOOST PUMP

(CAN) WHILE PERFORMING POST FLIGHT DAILY INSPECTION , TURNED ON BOOSTER PUMP AND NOTICED FUEL LEAKING FROM ENGINE DRAIN. FOLLOWED LEAK TO SEAL DRAIN OF HIGH PRESSURE ENGINE FUEL PUMP. WHEN BOOST PUMP TURNED (OFF) LEAK STOPPED. LEAK WAS PRODUCING 6 ML PER MINUTE. DID NOT SUSPECT HP PUMP WAS LEAKING FUEL IN FLIGHT AS NO FUEL DISCOVERED ON TARMAC AFTER AIRCRAFT LANDED AND NO FUEL RESIDUE ON SIDE OF FUSELAGE OR TAILBOOM. PUMP SEAL WILL BE REPLACED ONCE PARTS ARE RECEIVED.

CA040913002	SNIAS	TMECA	TORQUEMETER	LOOSE
9/1/2004	AS350B3	ARRIEL2B		COCKPIT

(CAN) THE RESULTS FROM A ROUTINE POWER CHECK ON ENGINE SHOWED A BAD TORQUE MARGIN. OTHER PARAMETERS WERE CONSISTENT WITH PREVIOUS POWER CHECKS. TROUBLESHOOTING REVEALED A MISPLACED OR MISSING PIN ON TORQUEMETER REFERENCE SHAFT. DURING TROUBLESHOOTING, WASHER WAS FOUND IN MODULE 01 SCAVANGE OIL STRAINER. ENGINE WAS REMOVED FROM AIRFRAME AND POWER SHAFT ASSY REPLACED. UPON REMOVAL, ALTHOUGH NOT MISSING ANY PINS, IT WAS CONFIRMED THAT TORQUEMETER REFERENCE SHAFT HAD PLAY, THUS GIVING ERRATIC TORQUE READING. WASHER FOUND IN SCAVANGE OIL STRAINER WILL BE ANALYZED BY ENGINE MFR LABORATORY TO DETERMINE ITS ORIGIN. ENGINE WAS REINSTALLED AND A POWER CHECK PERFORMED. ALL PARAMETERS WERE NORMAL.

CA050119004	SNIAS	TMECA	UROCOP	SKIN	CRACKED
12/13/2004	AS350B3	ARRIEL2B		350A1402000901	VERTICAL FIN

(CAN) CRACK WAS FOUND AT VERTICAL FIN. THIS FIN WAS SENT TO MFG FOR REPAIR.

CA041109005	SNIAS	TMECA	WARNING SYSTEM	MALFUNCTIONED
11/9/2004	AS350B3	ARRIEL2B		LOW ROTOR RPM

(CAN) WHEN PILOT OR COPILOT TRANSMIT, THE LOW ROTOR RPM AUDIO WARNING & GONG ARE MUTED. THESE INPUTS SHOULD BE UNMUTED WHEN TRANSMITTING.

CA050216009	SNIAS	LYC	SKIN	CRACKED
2/16/2005	AS350BA	LTS101600A3	1400200201	TAILBOOM

(CAN) CRACK FOUND ON VERTICAL UPPER FIN.

CA050202002	SNIAS	TMECA	SCREEN	CRACKED
2/1/2005	AS350BA	ARRIEL1B	0301007860	BLEED VALVE

(CAN) WIRE BROKEN ON SCREEN THAT IS ATTACHED TO BLEED VALVE.

CA041110002	SNIAS	TMECA	COMPRESSOR WHEEL	DAMAGED
9/11/2004	AS350BA	ARRIEL1B		ENGINE

(CAN) MO 2/3 FIRST STAGE WHEEL RUBBING ON THE PLASMA SPRAY IN LINER.. (PLASMA LIFTINGOFF IN TO THE BLADE PATH.)

CA041110011	SNIAS	TMECA	BELLCRANK	UNSERVICEABLE
7/22/2004	AS350BA	ARRIEL1B	350A33105803	TAIL ROTOR

(CAN) THE BELL CRANK WAS REMOVED TO DETERMINE THE SOURCE OF RADIAL PLAY. UPON REMOVAL OF THE BELLCRANK FROM THE GEARBOX TWO BUSHINGS FELL OUT OF THE BELLCRANK.

CA041022005	SNIAS	TMECA	SERVO	FAILED

10/4/2004	AS350BA	ARRIEL1B	AC67244	HYD SYSTEM

(CAN) PILOT WAS DOING HIS PREFLT HYD TESTS AND THEY FAILED. AFTER TROUBLESHOOTING HYDRAULIC SYSTEM FOUND THAT ONE LATERAL SERVO WAS THE CAUSE OF THIS MOVEMENT EVEN THOUGH DURING OUR TROUBLESHOOTING THE LATERAL SERVOS WERE SWAPPED OVER BUT THE PROBLEM STAYED GOING TO THE RIGHT. REMOVED FAULTY SERVO AND INSTALLED FRESHLY OVERHAULED SERVO.

CA050120013	SNIAS	TMECA	SWASHPLATE	WORN
1/12/2005	AS350BA	ARRIEL1B	350A37118101	MAIN ROTOR

(CAN) DURING A DAILY INSPECTION, WITH THE COLLECTIVE CONTROL RAISED, AME NOTICED THAT PROTECTIVE TEFLON TAPE WAS MISSING ON THE SWASHPLATE GUIDE (SEVERAL SQUARE INCHES IN AREA, FROM 7:30 O'CLOCK TO 2:00 O'CLOCK). CORRESPONDING WEAR STEP OF APPROXIMATELY .040 INCH HAS BEEN FOUND ON GUIDE'S SURFACE. THE WEAR HAS BEEN CAUSED BY THE BALL RING (UNIBALL) RUBBING ON BEAR SURFACE OF THE GUIDE. THE SWASHPLATE GUIDE HAS BEEN REPLACED AND A/C RETURNED TO SERVICE.

CA040804007	SNIAS	TMECA	BLEED VALVE	FAILED
7/17/2004	AS350BA	ARRIEL1B	9550158260	ENGINE

(CAN) BLEED VALVE NOT CLOSING. REPLACED BLEED VALVE.

CA040804008	SNIAS	TMECA	TACH GENERATOR	FAILED
7/17/2004	AS350BA	ARRIEL1B	0177555150	ENGINE

TACH BOX INTERNAL MALFUNCTION. REPLACED TACH BOX. CAUSE PROBLEM: DUE TO BLEED VALVE UNSERVICEABLE SHORTED THE TACH BOX.

CA040806002	SNIAS	TMECA	SERVO	FAILED
7/3/2004	AS350BA	ARRIEL1B	F1688	FLIGHT CONTROL

DURING HYD TESTS PRIOR TO FLTS IAW CF-2003-15R1, CYCLIC CONTROL FOUND COMPROMISED. AT 100 PERCENT NR, 'HYD TEST' SELECTED, CYCLIC TESTED FOR PROPER CNTRL MOVEMENTS ON ACCUMULATOR PRESS PRIOR TO HYD ASSIST DEPLETION. LATERAL ACCUMULATORS DEPLETED AFTER APPROX 8 CYCLES, CYCLIC ENCOUNTERED A VIOLENT UNCOMMANDED RT MOVEMENT. SUBSTANTIAL FORCE REQUIRED TO KEEP CYCLIC IN PLACE & GREATER FORCE REQUIRED TO CENTER CONTROL. AFTER FORCING CONTROL THRU CENTER POSITION, INTO LT AREA & RE-CENTERING CONTROL, PHENOMENON DISAPPEARED. DURING RE-CHARGING OF ACCUMULATORS, CYCLIC VIOLENTLY MOVED LT UNTIL HYD ASSIST SUPPLIED. RT INPUT PHENOMENON WOULD ONLY SHOW UP WHEN 'HYD TEST' USED. COLLECTIVE DUMP YIELDED NO DISCREPANCIES.

CA041115006	SNIAS	LYC	HOUSING	DAMAGED
11/11/2004	AS350D	LTS101600A	704A34310006	HYD PUMP

(CAN) DURING A ROUTINE 100 HRS INSPECTION, IT WAS NOTICED THAT THE HYDRAULIC FILTER WAS CONTAMINATED WITH NON-FERROUS METAL SHAVINGS. THE PUMP HOUSING IS MADE OF ALUMINIUM THEREFORE WE SUSPECT THE GEAR ROTORS STARTED TO WEAR THROUGH THE SOFTER HOUSING.THE PUMP WAS REPLACED WITH A NEW ONE AND THE SYSTEM FLUSHED. THE A/C WAS RETURNED TO SERVICE.

1050326	SOCATA	LYC	BLADE	CRACKED
3/30/2005	TB20TRINIDAD	IO360A1B6	F7666A2	PROPELLER

BLADE 1, S/NR H20755R WAS FOUND WITH A 1 INCH CRACK, STARTING FROM LEADING EDGE, ABOUT 4 INCHES FROM BLADE TIP. THE BLADE WAS ALREADY REWORKED AT THIS AREA BECAUSE OF A EARLIER STONE NICK. PROPELLER WAS OVERHAULED IN MARCH 2003 AND HAS 387 TSO UNTIL CRACK WAS FOUND.

2005FA0000163	SOCATA	LYC	LYC	TAPPET	MISSING
10/20/2004	TB20TRINIDAD	IO540C4D5		72877	ENGINE

ON ANNUAL 100 HR INSP, OIL STRAINER CLEANED, METAL PIECE FOUND IN STRAINER, METAL PIECE SENT TO MFG FOR ANALYSIS, REPORT INDICATED. PIECE FROM TAPPET BODY. CYCLE REDUCED, INSP OF TAPPPET BODIES, FOUND NIS INLET, BODY WITH PIECE MISSING FROM SURFACE, PROBABLE CAUSE MFG DEFECT. ALSO

NOTICED, ON CYLINDER REMOVAL, SEVERE CORRODION OF 4 CYLS, WHICH RESULTED IN CYLS, WHICH RESULTED IN CYL BEING SCRAP. (K)

2005FA0000287	SOCATA		CARRIAGE	FAILED
8/9/2004	TBM700		T700A5755000000	TE FLAP

BONDED INSERTS WHICH PROVIDE THE ATTACH POINTS FOR METAL CARRIAGE ASSY (PN TO THE HONEYCOMB FLAP END-RIB HAVE FAILED. INSPECTION OF THE INSERTS REVEALS THAT THE SEAL BETWEEN THE BONDED INSERT AND THE HONEYCOMB STRUCTURE BECOMES COMPROMISED. WATER IS INTRODUCED INTO THE HONEYCOMB END-RIB AND THE HONEYCOMB STRUCTURE FAILS. IMMEDIATELY INSPECT THE INTEGRITY OF THE IB AND OB FLAP ATTACH POINTS. ANY MOVEMENT NOTED BETWEEN THE FLAP CARRIAGE ASSY AND THE FLAP EN-RIB (IB AND OB) SHOULD REQUIRE REMOVAL OF THE FLAP FOR FURTHER INSPECTION OF THE BONDED INSERTS. MFG HAS BEEN CONTACTED. (K)

2005FA0000345	SOCATA	PWA	ACTUATOR	FROZEN
2/22/2005	TBM700	PT6A64	Z00N6071017251	ELEVATOR TRIM

AFTER THE AIRCRAFT HAD BEEN LEFT OUT IN THE RAIN, THE PREVIOUS DAY, THE AC WAS FLOWN. UPON HAND FLYING THE AIRCRAFT TO ALTITUDE, THE PILOT REPORTED THA THE TRIM WHEEL BECAME INCREASINGLY MORE DIFFICULT TO MOVE AS HE ENTERED FREEZING LEVELS. AT OAT -8 THE TRIM WHEEL HAD BECOME COMPLETELY FROZEN. AFTER THE AC HAD TO BE FORCED NOSE OVER, AT OAT +2, THE TRIM WHEEL UNFROZE AND WAS ABLE TO BE TRIMED NORMALLY. (K)

CA041108008	STBROS	PWA	BRACKET	CRACKED
11/1/2004	SD360	PT6A65AR	SD3076011XA	TRIM TAB BALANCE

(CAN) BOTH ELEVATOR TRIM TAB MASS BALANCE BRACKETS WERE FOUND CRACKED DURING 9600 HOUR STRUCTURAL INSPECTION. THESE BRACKETS WERE RECENTLY REPLACED TO COMPLY WITH MAN DATORY S/B SD360-55-20. (REFERENCE AD 009-06-2003)

CA050117007	SWRNGN	GARRTT	ADAPTER	CRACKED
1/15/2005	SA226TC	TPE33110UA	8941172	OIL FILTER

(CAN) DURING ROUTINE ENGINE MAINTENANCE AN AME NOTICED THE LT ENGINE OIL FILTER ADAPTER WAS CRACKED AT THE MOUNTING FLANGE. THE OIL FILTER ADAPTER WAS REPLACED. THIS OIL FILTER ADAPTER CRACKED IN THE SAME AREA AS THE ADAPTER DISCUSSED IN SDR20050105015 AND SDR20050117005.

CA050117005	SWRNGN	GARRTT	ADAPTER	CRACKED
1/13/2005	SA226TC	TPE33110UA	8941172	OIL FILTER

(CAN) A SPECIAL INSPECTION WAS CARRIED OUT TO FLEET AIRCRAFT OF SUSPECTED CRACKING OIL FILTER ADAPTERS. EDDY CURRENT METHOD WAS USED TO DISCOVER THIS CRACKED ADAPTER . ALTHOUGH VISIBLE WITH THE NAKED EYE, INITIAL DETECTION MAY BE DIFFICULT DUE TO THE ADAPTER LOCATION. FLEET INSPECTION IS STILL UNDERWAY.THIS ADAPTER SHOWS THE SAME PATTERN OF CRACKING AS THE ADAPTER DISCUSSED IN SDR20050105015.

CA040920004	SWRNGN	GARRTT	INDICATOR	INOPERATIVE
9/16/2004	SA227*	TPE33111U	2719157005	LT RPM

(CAN) DURING TAKE OFF THE LH RPM INDICATION WENT TO ZERO. THE RPM INDICATOR WAS JUST INSTALLED AND HAD TESTED SERVICIBLE DURING THE GROUND RUNS.

CA041206007	SWRNGN	GARRTT	FUEL CONTROL	MALFUNCTIONED
12/1/2004	SA227*	TPE33111U	8978015	LT ENGINE

(CAN) UPON DESCENT FORM 25,000 FT THROUGH MODERATE TURBULENCE, THE LT ENGINE POWER WOULD NOT RETARD. THE POWER LEVER WAS MOVED FROM FULL POWER TO FLIGHT IDLE AND NO REPSONSE. UPON REACHING 20,000 FT THE ENGINE BECAME RESPONSIVE AGAIN TO POWER LEVER MOVEMENT. THE AIRCRAFT WAS RUN ON THE GROUND BY MAINTENANCE PERSONNEL AND NO FAULTS COULD BE FOUND. IN DISCUSSION WITH THE MANUFACTURER, MAINTENANCE ELECTED TO REPLACE THE THE P2T2 SENSOR. GROUND RUNS CARRIED OUT ALL WITHIN MANUFACTURERS PARAMETERS AND AIRCRAFT RETURNED TO SERVICE. SNAG AHS

NOT DUPLICATED ITSELF AGAIN.

CA041019009	SWRNGN	GARRTT	SHAFT SEAL	SEIZED
10/4/2004	SA227AC	TPE3311151A	31025751	PROP BLADE

(CAN) PROP SHAFT SEAL WAS FOUND LEAKING.DURING DISASSEMBLY THE SHAFT SEAL WAS FOUND WITH ABNORMAL WEAR AND DETERIATION IN THE SLOTS OF THE CARBON PORTION OF THE SEAL.THE SLOTS WERE WORN HEAVILY AND THE METAL TABS APPEARED TO BE JAMBED INTO THE SIDES OF THE SLOTS. THESE WOULD NORMALLY BE CENTERED WITHIN THE SLOTS. THIS CAUSED THE SEAL TO SEIZE WHICH RESTRICTED THE FREEDOM OF THE SEAL TO TRAVEL AGAINST THE ROTOR SEAL WHICH CAUSED A MAJOR OIL LEAK. NORMALLY THESE SEALS WILL RUN 7000 HOURS WITHOUT A PROBLEM.

CA040920003	SWRNGN	GARRTT	DRIVE SHAFT	SHEARED
9/6/2004	SA227AC	TPE33111U		STARTER GEN

(CAN) PILOT ATTEMPTED TO START LT ENGINE, PROP STARTED TO ROTATE THEN STOPPED. UPON OPENING THE ENGINE COWL, IT WAS FOUND THAT THE FRICTION DISC WAS IN PIECES IN THE BOTTOM OF THE COWL. WHEN THE STARTER WAS REMOVED, THE DRIVE SHAFT WAS FOUND SHEARED. THE TORLON INSERT WAS ALSO FOUND DAMAGED EXTENSIVELY ALONG WITH THE DRIVE GEAR IN THE ENGINE. THE DRIVE HAD TO BE REPLACED DUE TO THE STARTER DRIVE SHAFT CAUSING DAMAGE WHEN THE TORLON INSERT WAS NOT LONGER DOING IT'S JOB. STARTER TURNED OVER BY HAND AND IT WAS NOT SEIZED. STARTER SENT TO OVERHAUL FACILITY FOR FURTHER INVESTIGATION.

CA050124013	SWRNGN	GARRTT	TIRE	DISINTEGRATED
1/17/2005	SA227AC	TPE33111U		MLG

(CAN) UPON ROTATION IN APPROXIMATELY -35 DEGREE CELSIUS THE RT GEAR TIRES BLEW UP CAUSING VIBRATION AND A PULL OF THE RT. PILOT ABORTED TAKE OFF AND AIRCRAFT WAS TOWED OFF RUNWAY. THE CAUSE IS LEANING TO THE BELIEF THAT THE MFG (RETREAD) TIRES HAVE A STIFFER SIDEWALL AND THAT AIR PRESSURES WERE NOT MAINTAINED FOR THE ENVIRONMENT THAT THEY WERE FLYING TO INSTEAD OF THE ENVIRONMENT THAT THEY WERE LEAVING FROM.

CA050113007	SWRNGN	GARRTT	WINDSHIELD	FAILED
1/9/2005	SA227AC	TPE33111U	2419441004	COCKPIT

(CAN) OUTER PANE SHATTERED IN FLIGHT ON ITS WAY TO FINAL DESTINATION.

CA050128008	SWRNGN	GARRTT	FIRE DETECTOR	INTERMITTENT
1/25/2005	SA227AC	TPE33111U	17343450F	LT NACELLE

(CAN) PILOT CALLED AND NOTIFIED MAINTENANCE THAT ON APPROACH THE LT FIRE WARNING LIGHT CAME ON. LIGHT WENT OUT WHEN INLET HEAT WAS TURNED OFF. MAINTENACE INSPECTED AIRCRAFT AND FOUND NO SIGNS OF HEAT DISTRESS. TOP FIRE DETECTOR WAS REPLACED AND GROUND CHECKED SERVICIBLE. NO OTHER REPORTED INCIDENTS SINCE THEN.

2005FA0000323	SWRNGN	GARRTT	CLAMP	LOOSE
9/27/2004	SA227AC	TPE33111U	44C13	P3 BLEED AIR

AFTER TAKEOFF, AT ABOUT 400 FT, NR 2 ENG FIRE WARNING LIGHT CAME ON. ENG PARAMETERS CHECKED NORMAL. CREW FOLLOWED EMERGENCY PROCEDURES, RETURNED TO FIELD. AFTER LANDING, ENGINE WAS SHUTDOWN BY USING THE STOP AND FEATHER BUTTON. CREW DISCHARGED ENGINE FIRE EXTING BOTTLE. AFTER DEPLANING PASSENGERS, CREW PERFORMING WALKAROUND, OBSERVED FLAMES COMING OUT OF ENG INTAKE AND TAILPIPE, DISCHARGED CABIN FIRE EXTING DOWN ENG INLET. FOUND BROKEN BLEED AIR CLAMP IN COWLING WHEN COWLING WAS OPENED. BROKEN CLAMP ALLOWED BLEED AIR TO TURN ON THE FIRE WARNING LIGHT, INTERNAL ENG FIRE WAS CAUSED BY MALFUNCTION IN FUEL SHUTOFF. (NM05200500912) (K)

CA050131001	SWRNGN	GARRTT	FIRE DETECTOR	FAULTY
1/28/2005	SA227AC	TPE3311U	1734361450	LT ENGINE

(CAN) PILOT HAD A LT FIRE LIGHT COME ON SHORTLY AFTER TAKEOFF. LT ENGINE WAS SHUTDOWN AND FIRE BOTTLE WAS ACTIVATED. AIRCRAFT THEN RETURNED TO AIRPORT. MAINTENANCE INSPECTED FIRE DETECTION SYSTEM AND FOUND THE FIREWALL FIRE DETECTOR FAULTY. FIRE DETECTOR WAS REPLACED AND AIRCRAFT

RETURNED TO SERVICE.

CA041014001	UROCOP	TMECA	UROCOP	MAGNETIC PLUG	CRACKED
10/13/2004	EC120B	ARRIU2F		7052A3632279	T/R GEARBOX

PILOT REPORTED INTERMITTENT INDICATION OF GEARBOX CHIP DETECTOR. ON INSPECTION NO CHIP FOUND. A LOOSE CONNECTION BETWEEN ELECTRICAL PORTION OF CHIP PLUG & MAGNETIC PART ALLOWED FOR A FALSE INDICATION. THE SWAGGED CONNECTION BETWEEN THE TWO PARTS CRACKED & BROKEN. IN 2002 A SIMILAR PROBLEM HAD OCCURRED, BUT THIS PARTICULAR PLUG MANUFACTURED IN 2003. NEW PLUG ORDERED & UPON RECEIVING NEW PART IT TOO WAS CRACKED. EUROCOPTER CANADA CONTACTED AND A THIRD PLUG SENT. AGAIN UPON INSPECTION IT TOO WAS CRACKED IN SAME SWAGED LOCATION. A CONTINUED LACK OF Q/A BETWEEN MANUFACTURER & EUROCOPTER HAS ALLOWED THIS KNOWN PROBLEM TO PERSIST FOR OVER TWO YEARS. CURRENTLY WE ARE WAITING FOR YET ANOTHER CHIPPLUG.

CA050216007	UROCOP	TMECA	UROCOP	RIVET	LOOSE
2/7/2005	EC120B	ARRIU2F		C551S1101052	HORIZONTAL STAB

(CAN) DURING AME DAILY INSPECTION LT HORIZONTAL STABILIZER FOUND TO HAVE APPROXIMATE 1 INCH VERTICAL DISPLACEMENT AT TIP. RIVETS THAT SECURE THE OUTER SHIM HAD SHEARED ALLOWING BUSHING MOVEMENT. SB 55-001 TO BE INCORPORATED , NOT PREVIOUSLY COMPLIED WITH. TO BE CARRIED OUT.

CA040914005	UROCOP	TMECA		WINDSHIELD	DEBONDED
9/8/2004	EC120B	ARRIU2F		C561S1101202	COCKPIT

(CAN) WINDOW LT UPPER PN C561S3101202, DEBONDING 11.

CA040812008	UROCOP	TMECA		MANIFOLD	CHAFED
8/5/2004	EC120B	ARRIU2F		0319738340	FUEL INLET

(CAN) DURING RECEIVING INSPECTION A 0.010 (DAMAGE TO FUEL MANIFOLD),

CA050112003	UROCOP	TMECA	UROCOP	WINDOW	CRACKED
1/6/2005	EC130B4	ARRIEL2B		SPSEC130811	SLIDING DOOR

(CAN) THE HELICOPTER PARKED OVERNIGHT OUTSIDE, WAS BEING PREPARED FOR FLIGHT, COVERS REMOVED AND DI COMPLETED. ALL WINDOWS WERE INSPECTED FOR CRACKS BECAUSE THE DAY BEFORE THE CO PILOTS WINDOW HAD CRACKED. PASSENGERS WERE LOADED AND HELICOPTER WAS STARTED. AFTER START, PASSENGER NOTICED A 16CM LONG CRACK IN THE UPPER LT CORNER OF THE SLIDING DOOR WINDOW. AC WAS SHUT DOWN AND MFG WAS CONTACTED. THIS CRACK WAS BEYOND THE ALLOWABLE LIMIT FOR OPERATION SO THE CRACK WAS STOP DRILLED, TAPED AND THE HELICOPTER WAS RETURNED TO BASE. DOOR HAS BEEN SENT TO MFG FOR WINDOW REPLACEMENT. TEMPERATURE WAS -22C AT TIME OF THE CRACK.(THE DAY BEFORE WHEN THE CO PILOTS WINDSCREEN CRACKED THE TEMP WAS -30C.)

CA050112001	UROCOP	TMECA		WINDSCREEN	CRACKED
1/5/2005	EC130B4	ARRIEL2B		350A25900000	COCKPIT

(CAN) AFTER LANDING THE PILOT NOTICED A CRACK IN THE UPPER RT CORNER OF THE COPILOTS WINDSCREEN. THE CRACK WAS WITHIN ALLOWABLE LIMITS TO STOP DRILL AND TAPE IAW ECC MANUALS. (12CM LONG) AIRCRAFT WAS RETURNED TO SERVICE. TEMPERATURE AT TIME OF THE CRACK WAS -30C.

CA041022004	UROCOP	PWA		INDICATOR	FAILED
9/9/2004	EC135P1	PW206B			EGT/TIT

(CAN) DURING NORMAL FLIGHT CONDITIONS, ENGINE ITT APPROACHED 900C ACCOMPANIED BY A REDUCTION IN TORQUE ANDN1 AND N2 SPEEDS. THE PILOT REDUCED POWER SETTING TO IDLE AND SUBSEQUENTLY SECURED THE ENGINE IN FLIGHT. AN SINGLE ENGINE LANDING WAS ACCOMPLISHED. SUBSEQUENT ENGINE RUNS AND ASSOCIATED TROUBLESHOOTING WERE UNABLE TO REPRODUCE THE CONDITION. DURING INVESTIGATION, THE EEC GROUND STRAP WAS FOUND LOOSE.

CA041215006	ZLIN	LYC		SHAFT	SHEARED
12/15/2004	Z242L	AEIO360A1B6		Z4244100011	ELEVATOR TRIM

(CAN) DURING A 100 HR INSPECTION, THE ELEVATOR TRIM CONTROL CABLE DRUM WAS NOTICED TO BE OFFSET ON AN ANGLE. FURTHER INSPECTION REVEALED THE SHAFT THAT THE DRUM IS ATTACHED TO HAD THE LT END SHEARED OFF.THE LT AND RT ENDS ARE SUPPORTED BY THE LT AND RT INBOARD SEAT RAILS. THE SHAFT IS A HOLLOW STEEL TUBE AND THE SUPPORT IS ALSO STEEL. THE HIGH AMOUNT OFTRIMMING OF THE AIRCRAFT OVER TIME CAUSED THE LT END OF THE TUBE TO BE CUT THROUGH. THIS COULD LEAD TO A STUCK TRIM CONTROLWHICH WOULD MAKE THE AIRCRAFT DIFFICULT TO CONTROL. WE INITIATED AN IMMEDIATE INSPECTION OF ALL OUR Z242L AIRCRAFT TRIM CONTROL SHAFTS. AT THIS TIME WE ARE LUBRICATING THIS AREA OF ROTATION. DURING INSPECTIONS WE WILL BE PAYING CLOSER ATTENTION TO THIS AREA.

END OF REPORTS