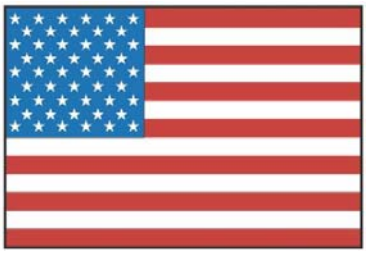
U.S. Department of Transportation
**Federal Aviation Administration**

AFS-600
Regulatory Support Division

# ADVISORY CIRCULAR

43-16A

# AVIATION MAINTENANCE ALERTS



**ALERT NUMBER 371**

**JUNE 2009**

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

# AVIATION MAINTENANCE ALERTS

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

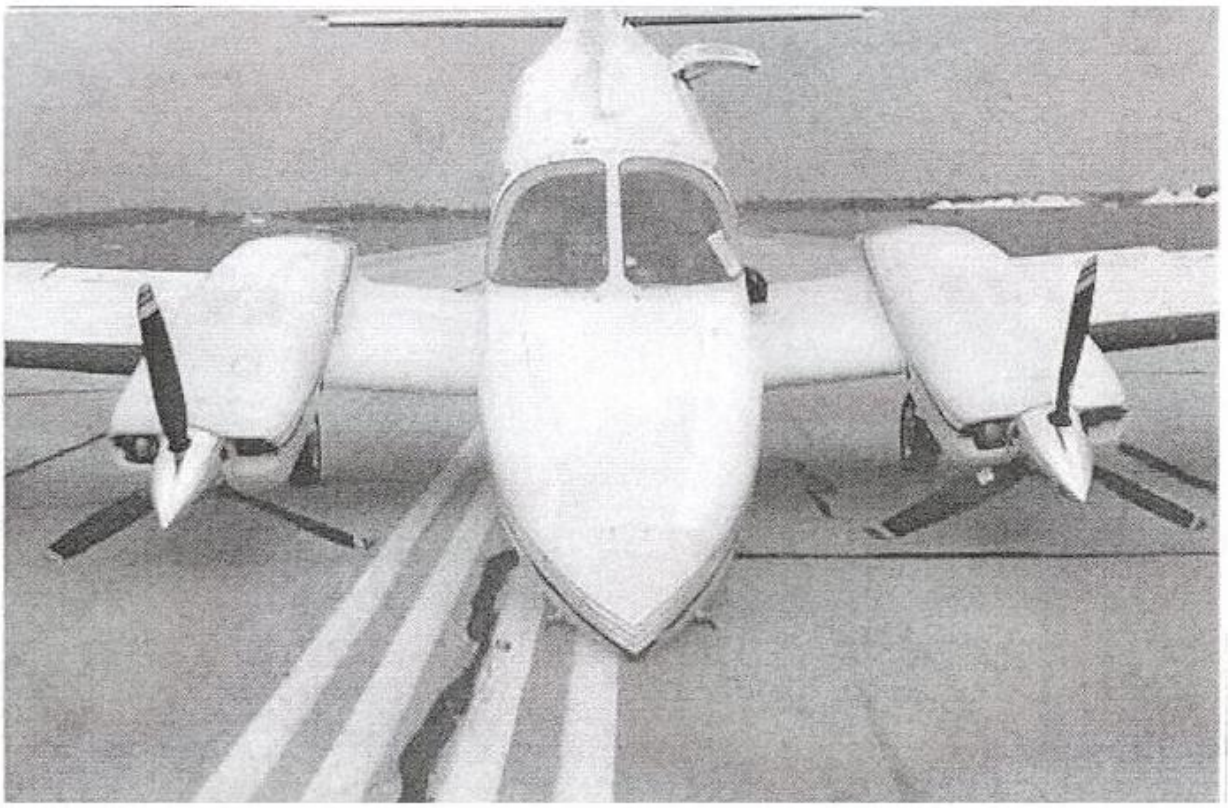
*(Editor's notes are provided for editorial clarification and enhancement within an article. They will always be recognized as italicized words bordered by parentheses.)*

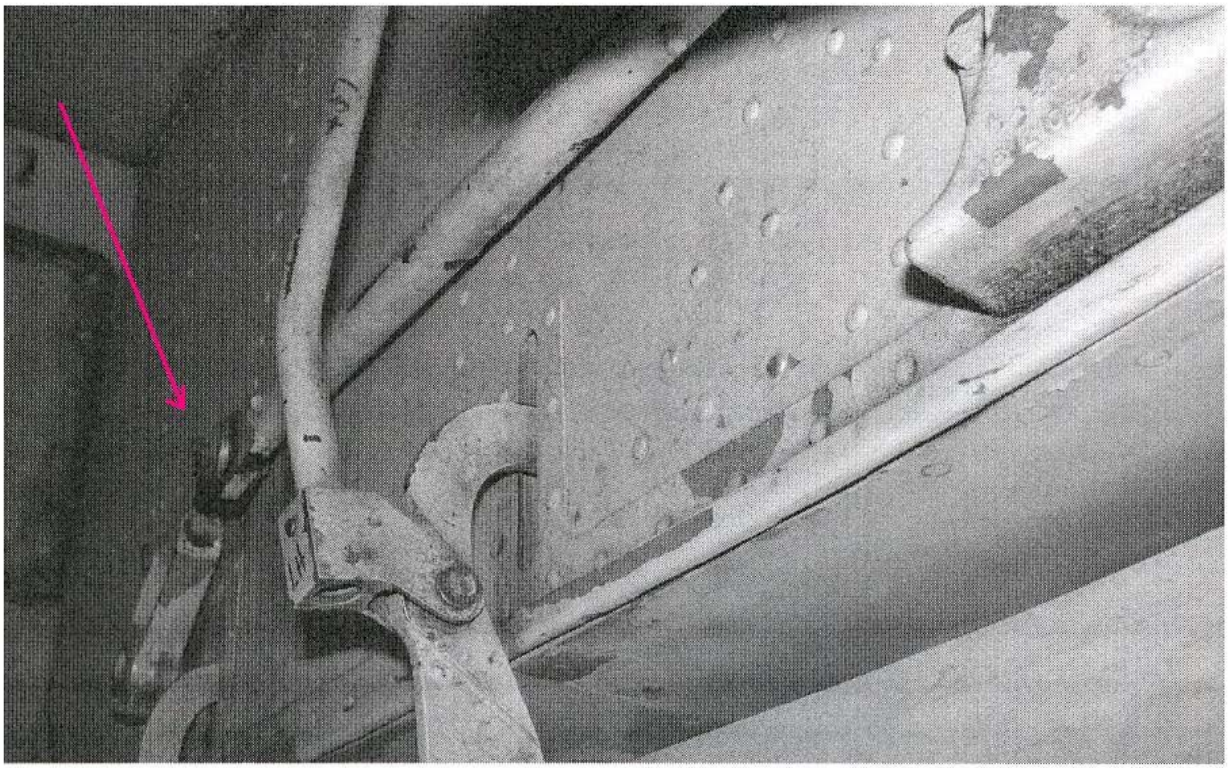
# AIRPLANES

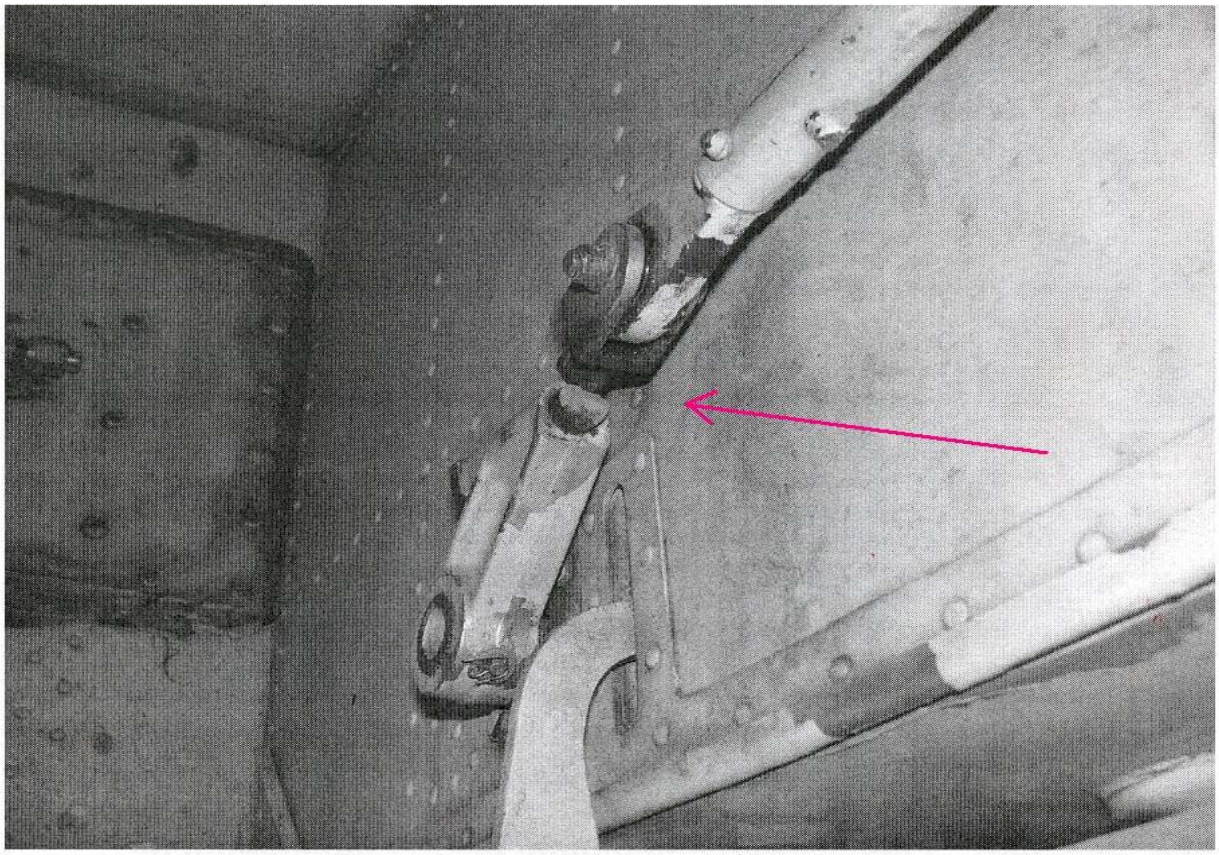
## CESSNA

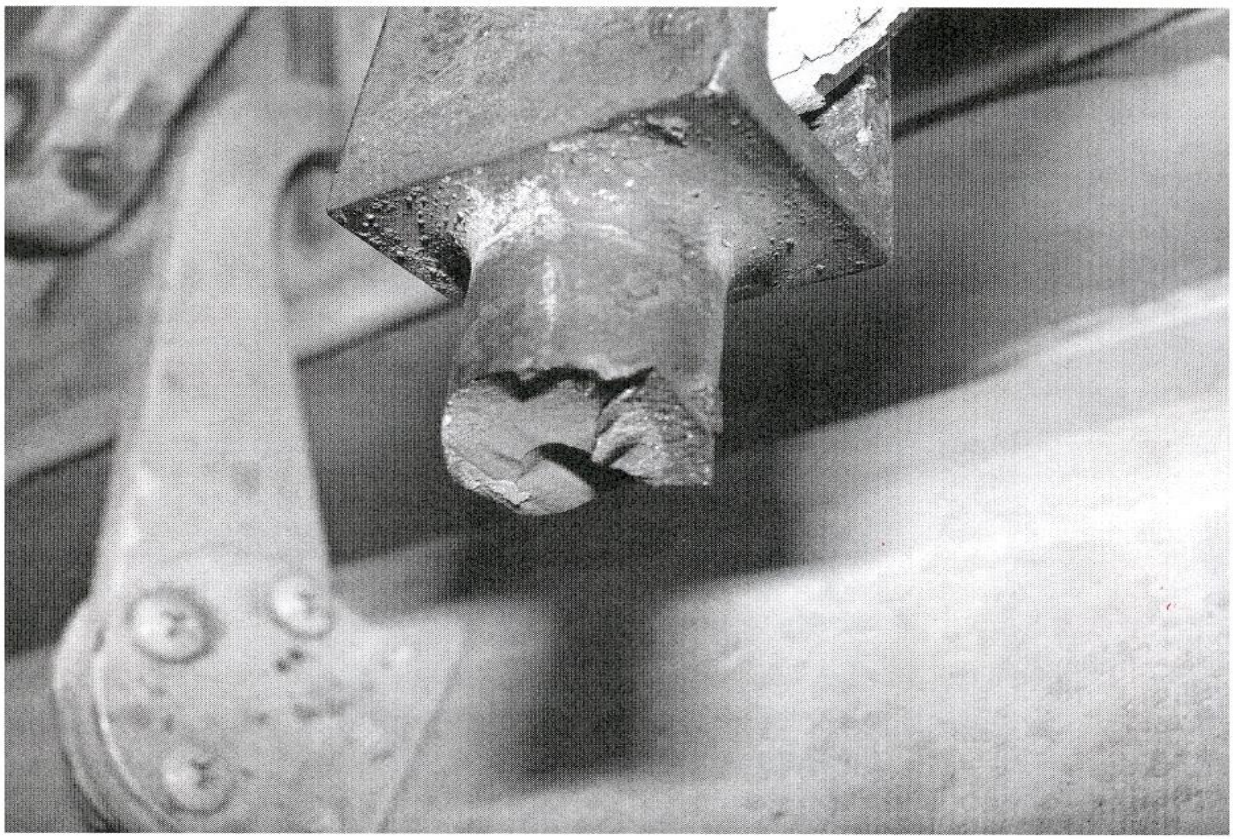
### Cessna: 340A; Failed Nose Gear Linkage; ATA 3230

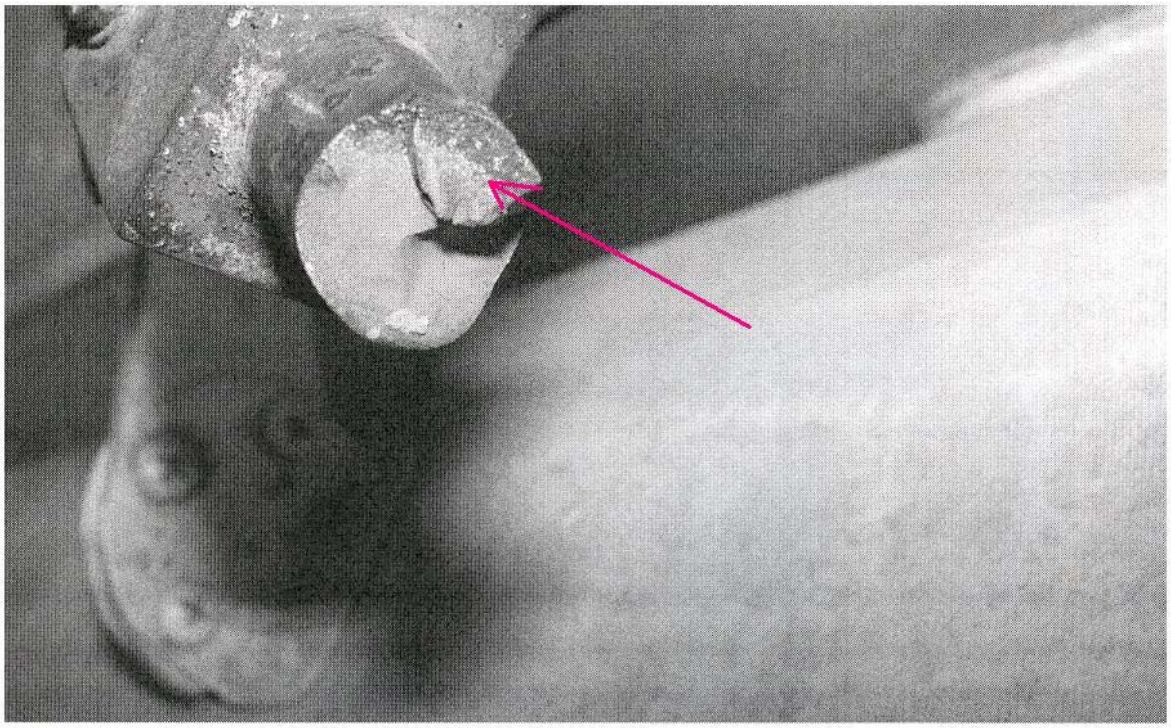
An unidentified submitter writes, "The landing gear 'down' actuation *(in this aircraft)* produced an *unsafe nose gear* indication light. An attempt at manual gear extension proved unsuccessful since the nose landing gear did not extend to a down and locked position. Subsequent damage resulted to the aircraft when the nose landing gear collapsed upon landing. An inspection of the aircraft revealed the nose landing gear linkage adjusting fork *(P/N 5045211-2)* fractured, thereby *(preventing)* the extension of the nose landing gear to a down and locked position. Evidence suggests this fracture was progressive in nature due to indications *(some)* degradation to the component's structure existed prior to failure." *(The following photos will make anyone cringe. The inserted red arrows and slight cropping distortions are artifacts of this editor.)*











*(As indicated by the arrow in the last photo, the "time demarcation" is quite apparent. The submitter did not provide a part time with this report, but research indicates this airplane's age in excess of 32 years! It would be telling to compare the costs of new linkages to those of a damaged fuselage, engines, props—much less the experience of having "the bottom" fall out upon touchdown. Thanks for the detailed photographs. A search of the FAA Service Difficulty Reporting System (SDRS) database finds this part number at least six times, five of which are found on Cessna 402B reports: all are failures—Ed.)*

Part Total Time: (unknown).

---

**Cessna: 208B; Failed Fuel Pump; ATA 7314**

*(This aircraft is powered by a Pratt & Whitney PT6A-114 turbine.)*

"During an operational inspection," states a repair station submitter, "the fuel pump was rejected in accordance with Pratt & Whitney's SB1645. A *(zero time since overhaul)* replacement pump was installed, and during the operational run-checks the fuel pressure 'low' light and the fuel pump 'on' light in the annunciator panel started cycling when the torque went above 1400 foot pounds. This pump was replaced with a second *(zero TSO)* pump. The operational run-check produced the same results as the first replacement pump. The reservoir tank pressure was checked using a gauge plumbed into the system—it was found that at idle the pressure was 6.5 PSI. Power was increased—and at 1200 FT LBS of torque the pressure started dropping off. At 1400 FT LBS the pressure was 3.25 PSI. A third pump was installed and on its performance run all parameters were found to be good.

Further investigation is needed before a determination can be made of this problem."

*(Including the original, Sundstrand manufactured all four pumps P/N 025323-150. A company in California overhauled the first two replacement pumps, and a company in Dallas, Texas overhauled the third functional pump.)*

Part Total Time: (original pump: unknown).

---

**Cessna: 340; Failed C&D Heater Pump; ATA 2140**

The Director of Maintenance for a repair station writes, "This heater assembly *(Model CD45K; P/N CD14077-1)* is of poor quality and the airworthiness of its design needs to be reevaluated. The following documents a pattern of repeated failures, showing problems with reliability.

- "August 2006: new heater installed. January 2007.
- "January 2007: Heater pump failed *(time unknown)*; replaced with new (P/N CD 21586). Operationally checked good.
- "January 2008: Heater pump failed *(time unknown)*; replaced with new (P/N CD 21586). Operationally checked good.
- "February 19, 2008: Heater Assembly Inoperative (time unknown). The unit was removed and sent back to the manufacturer. (Parts replaced include Overheat switch—P/N 21703; Spark plug—P/N 22080; 24V Universal Ignition—P/N 21381; Mixer Nozzle—P/N 21156; and the Lead Assembly—P/N 21249.) The unit was received and reinstalled in the aircraft—it operationally checked good.
- "February 21, 2008: Heater Cycling Switch failed *(time unknown)*. New switch (P/N 21252) was installed. Heater was operationally checked good.

- "April 2009: Heater pump failed *(Hobbs time: 98.1 hours)*. The heater pump was replaced with a new pump (P/N CD 21586) and operationally checked good."

*(Of the eight reported part numbers, only the heater pump can be found in the SDRS database—Ed.)*

Part Total Time: 98.1 hours.

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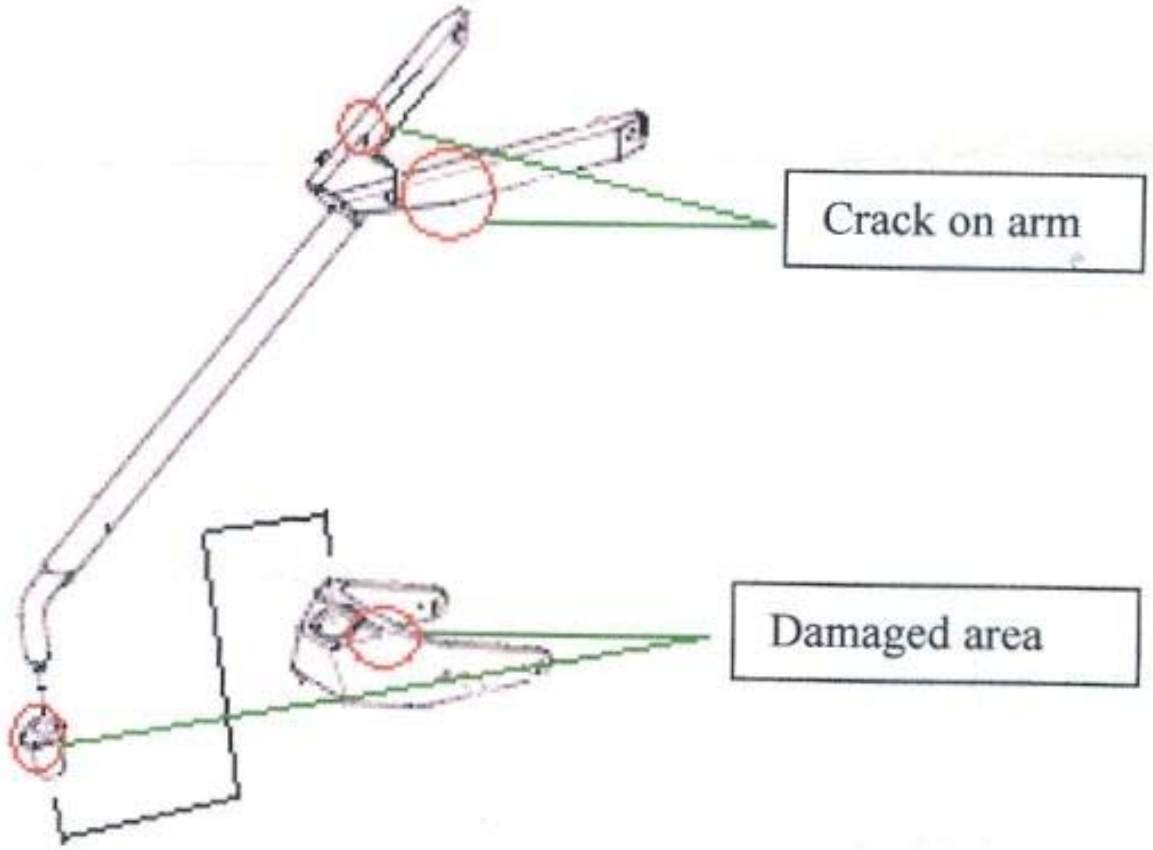
## CIRRUS

**Cirrus: SR20; Cracked Nose Gear Strut; ATA 3222**

"A report of 'nose wheel pant damage after landing' *(caused me)* to inspect this aircraft," writes a mechanic. "I found the upper left arm on the nose strut *(P/N 11907-005)* was seriously cracked. This crack ran from the top of the arm (just forward of the strut data plate) through the entire arm, and stopped at the bottom where a gusset was welded. This *(same)* crack continued to run parallel to the gusset for approximately 0.50 inches. *(I)* also found the nose wheel stop and nose fork were damaged.

"A possible cause *(for these discrepancies)* could be repeated, unreported hard landings. I would recommend all operators to inspect in this area after any hard landing or any excessive stress on the nose gear."




Part Total Time: 515.0 hours.

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**Cirrus: SR22; Failed Roll-trim Actuator; ATA 2797**

An unknown submitter states, "The roll-trim actuator has malfunctioned on three occasions since purchasing the aircraft new in 2002. In each case the wires leading to the electric motor had come loose, causing the trim actuator to hold full left aileron. Without *(pilot action of...)* overpowering the unit, a fatal crash could have resulted."

*(The submitter did not provide part numbers with this report. Aircraft total time listed as 1440.0 hours.)*

Part Total Time (since repair): 300.0 hours.

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## LEARJET

**Learjet: 55; Corroded Entry Door Frame; ATA 5310**

"On preflight the pilot noted the main entry door was hard to close," says an air carrier technician. "Upon close inspection by maintenance personnel, frame 15 (the frame that borders the aft side of the main entry door) was found to have corrosion which had progressed to the point of exfoliation, *(causing)* interference with the door snubber operation. The aircraft was evaluated; photos and reports sent to Learjet.... With Learjet's engineering recommendations, a special flight permit was obtained to relocate the aircraft to BAS-Learjet (Wichita, Kansas) for repairs." *(Frame 15 P/N: 5410600-008.)*

Part Total Time: 11,096.8 hours.

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**Learjet: 60; Failed Teflon Hydraulic Hose; ATA 2910**

A technician states, "The pilot reported a loss of hydraulics during flight at cruise: FL400 *(flight level 40,000 feet)*. Inspection revealed the R/H engine driven hydraulic pump—pressure side hydraulic line was leaking, allowing the aircraft's hydraulic fluid to be depleted. Further inspection revealed the line had failed internally; when pressure was applied the hose would swell and begin to leak. The probable cause of the failure is age.... To prevent possible recurrences of such failures a time interval for replacement of aging Teflon hoses may be needed."

*(Hose P/N: 6057003-11. Five of these hose part numbers reflect in the SDRS database. Engine-driven hydraulic pump P/N: 6607066-1.)*

Part Total Time: 5,025.0 hours.

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## MOONEY

**Mooney: M20C; Seized Fuel Selector Valve; ATA 2823**

A mechanic writes, "The fuel selector valve seized in the 'off' position during a routine fuel tank switch-over. This failure was caused by corrosion on the selector valve shaft where it passes through the upper valve housing. *(This valve...)* is of poor design. No provision is made to prevent spilled liquids or *(carpet saturated)* moisture from entering the upper housing valve shaft bore."

*(The submitter did not include any part numbers or time with this report. H & E Aircraft manufactured the fuel valve. The second entry in the SDRS database for this selector valve records the P/N as 3610021—it seizing at 71.0 hours.)*

Part Total Time: (unknown).

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# ACCESSORIES

## KANNAD

**Kannad: 406S ELT; Failed Electrical Ground; ATA 2562**

An unidentified Canadian report states, "The Fielded Rescue 406S Emergency Locator Transmitter (ELT: P/N's 1151324-1; 1152794-1; 1152890-1; 1152892-1; and 1153046-1) may not be able to transmit a coded signal at 406MHZ frequency (upon activation) as per requirement RTCA/DO-204. This nonconformance is due to improper grounding of the cover to the internal frame of the ELT. The condition was initially identified when two Rescue 406S ELT's did not transmit the signal correctly when activated in a shielded room."

*(There are two SDRS database entries for the ...324-1 ELT; one for the ...046-1 ELT.)*

Part(s) Total Time: (unknown).

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## Kannad: 406 ELT; Cracked Housing Cases; ATA 2562

The same submitter as above says, "We sent in the Kannad ELT for its annual recertification. The removable cover was broken out and the main case was cracked in several locations. This unit had not been dropped or tampered with. It appears that the case has been weakened by UV light (as was told to me)—the avionics shop has experienced several of these *(type failures).* My concern is the reliability of this unit *(with observable cracks in the case).* Will it still work if involved in an accident with the case(s) being in such a weak condition? I have been told all of these yellow cases *(are of low strength).*

*(The ELT P/N is 5182250202. This particular unit lives on a Hughes 369FF with 302.0 hours.)*

Part Total Time: (unknown).

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# AIR NOTES

## INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE

The Federal Aviation Administration (FAA) Internet Service Difficulty Reporting (iSDR) web site is the front-end for the Service Difficulty Reporting System (SDRS) 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, 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/Query.aspx.

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

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

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

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

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

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

The SDRS 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:

Pennie Thompson
Service Difficulty Reporting System, Program Manager
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125
Telephone: (405) 954-5313
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.

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## AVIATION SERVICE DIFFICULTY REPORTS

The following are abbreviated reports processed for the previous month, which have been entered into the FAA Service Difficulty Reporting (SDR) System 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** |
| CA090427002 | | | | CONNECTOR | FAILED |
| 4/27/2009 | | | | MS3459L10SL4S | |

(CAN) IT WAS DISCOVERED THAT SEVERAL NEW CONNECTORS FAILED ON INSTALLATION. THE PN AND DATE CODES OF THE CONNECTORS IN QUESTION ARE AS FOLLOWS: MS3459L10SL-4S (DATE CODE 0845-86), MS3459L12S-3S (DATE CODE 0845-95) AND MS3459L10SL-3S (DATE CODE 0842-35). WHEN THE CONNECTOR NUT WAS TIGHTENED DOWN BY HAND THE CONNECTOR BODY WAS LOOSE AND ABLE TO WIGGLE IN THE RECEPTACLE. THE MECHANIC SECURING THE CONNECTORS TRIED TO CORRECT THIS BY TIGHTENING THE CONNECTOR NUT DOWN A LITTLE FURTHER BY HAND, IN DOING SO A CLICK WAS HEARD AND THE CONNECTOR BODY WAS THEN ABLE TO COME OUT THE BACK OF THE CONNECTOR NUT. UPON INSP OF THE FAILED CONNECTORS, IT APPEARS THE SPLIT RING USED TO HOLD THE ASSEMBLY TOGETHER IS TOO LARGE.

| | | | |
|---|---|---|---|
| CA090422004 | ARTEX | BATTERY PACK | INOPERATIVE |
| 4/21/2009 | 4530006 | 4520133REVN | ELT |

(CAN) THE BATTERY PACK, PN 452-0133, IN THE ELT 110-406ED FAILED BEFORE THE LABELED EXPIRATION DATE. THE ELT WAS CERTIFIED IN THE SUMMER OF 2008 AND IN APRIL OF 2009 WHEN IT WAS TO BE RECERTIFIED IT WAS DISCOVERED THAT THE ELT'S BATTERY WAS UNSERVICEABLE AND THE ELT WAS NO LONGER TRANSMITTING 406 DATA. THE ELT REMOVED FROM THE ACFT, HAD THE BATTERY PACK PN 452-0133 REV P INSTALLED IN IT AND THE BATTERY WAS NOT SET TO EXPIRE UNTIL 2013. THE ELT IN QUESTION HAD NOT BEEN USED OR EVEN INADVERTENTLY TURNED ON DURING THE PERIOD OF TIME BETWEEN CERTIFICATION AND THE ATTEMPTED RECERTIFICATION IN APRIL, WHICH CAUSES A CONCERN THAT THERE IS A POSSIBLE MFG FAULT WITH THE ELT BATTERY PACK.

| | | | |
|---|---|---|---|
| CA090422005 | ARTEX | BATTERY PACK | INOPERATIVE |
| 4/21/2009 | 4530006 | 4520133REVN | ELT |

(CAN) THE BATTERY PACK, PN 452-0133 IN THE ELT 110-406ED FAILED BEFORE THE LABELED EXPIRATION DATE. THE ELT WAS CERTIFIED IN THE SUMMER OF 2008 AND IN APRIL OF 2009 WHEN IT WAS TO BE RECERTIFIED IT WAS DISCOVERED THAT THE ELT'S BATTERY WAS UNSERVICEABLE AND THE ELT WAS NO LONGER TRANSMITTING 406 DATA. THE ELT REMOVED FROM THE ACFT HAD THE BATTERY PACK PN 452-0133 REV N INSTALLED AND THAT BATTERY WAS NOT SET TO EXPIRE UNTIL 2012. THE ELT'S IN QUESTION HAD NOT BEEN USED OR EVEN INADVERTENTLY TURNED ON DURING THE PERIOD OF TIME BETWEEN CERTIFICATION AND THE ATTEMPTED RECERTIFICATION IN APRIL, WHICH CAUSES A CONCERN THAT THERE IS A POSSIBLE MFG FAULT WITH THE ELT BATTERY PACKS.

| | | | |
|---|---|---|---|
| 2009FA0000386 | | CYLINDER | LEAKING |
| 4/30/2009 | | FRCN130 | ENGINE |

CYLINDER HAS TEST CELL TIME ONLY ON IT AND AFTER TEST CELL RUN, WE NOTICED THAT THERE WAS HEAD BARREL LEAKAGE. (K)

| | | | |
|---|---|---|---|
| 2009FA0000387 | | CYLINDER | LEAKING |
| 5/1/2009 | | FRCN130 | ENGINE |

CYLINDER HAS TEST CELL TIME ONLY ON IT AND AFTER TEST CELL RUN WE NOTICED THAT THERE WAS HEAD BARREL LEAKAGE. (K)

| | | | |
|---|---|---|---|
| 2009FA0000388 | | CYLINDER | LEAKING |
| 4/30/2009 | | FRCN130 | ENGINE |

CYLINDER HAS TEST CELL TIME ONLY ON IT AND AFTER TEST CELL RUN WE NOTICED THAT THERE WAS HEAD BARREL LEAKAGE. (K)

| | | | |
|---|---|---|---|
| CA090414001 | | CONNECTOR | SHORTED |
| 4/9/2009 | | | |

(CAN) CIRCUIT BREAKER B250 (HYD 2 INDICATION) POPPED. WIRE DB1F22 AT CONNECTOR PLUG P12DM (NR 2 PRESSURE TRANSMITTER) SHORTED TO BACKSHELL.

| | | | |
|---|---|---|---|
| CA090501002 | GARRTT | MOTOR | SHORTED |
| 4/28/2009 | TFE73140 | 5503D1003 | FLAP DRIVE |

(CAN) ON APPROACH FLAPS WOULD NOT EXTEND PAST 12 INCHES. FLAPS WOULD NOT RETRACT AFTER LANDING. FLAP/SLAT ELECTRONIC CONTROL UNIT HAD LOCKED OUT FLAPS DUE TO POWER DRIVE UNIT OVERHEAT FLAG. POWER DRIVE UNIT MOTOR FOUND SHORTED TO CASE. NEW POWER DRIVE UNIT INSTALLED AND FAULT CLEARED. ACFT RETURNED TO SERVICE.

| | | | |
|---|---|---|---|
| 2009FA0000370 | LYC | CYLINDER HEAD | SEPARATED |
| 3/22/2009 | IO540K1G5 | CL13SA | |

THIS CYLINDER HAS ONE (1) HOUR OF TEST CELL TIME. THE DEFECT WAS DISCOVERED AND BELIEVED TO BE HEAD BARREL SEPARATION. PERFORMED A COMPRESSION TEST WITH SOAP AND WATER TO CONFIRM OUR FINDING. THE CYLINDER WAS PURCHASED AND INSTALLED ON THIS NEWLY OVERHAULED ENGINE. ALL CYLINDER WERE REMOVED FROM THE ENGINE. THIS CYLINDER WAS NOT PLACED IN SERVICE (NO FLIGHT TIME). (K)

| | | | |
|---|---|---|---|
| 2009FA0000372 | LYC | CYLINDER HEAD | SEPARATED |
| 3/22/2009 | IO540K1G5 | CL13SA | |

THIS CYLINDER HAS ONE (1) HOUR OF TEST CELL TIME. THE DEFECT WAS DISCOVERED AND BELIEVED TO BE HEAD BARREL SEPARATION. PERFORMED A COMPRESSION TEST WITH SOAP AND WATER TO CONFIRM OUR FINDING. THE CYLINDER WAS PURCHASED AND INSTALLED ON THIS NEWLY OVERHAULED ENGINE. ALL CYLINDER WERE REMOVED FROM THE ENGINE. THIS CYLINDER WAS NOT PLACED IN SERVICE (NO FLIGHT TIME). (K)

| | | | |
|---|---|---|---|
| 2009FA0000374 | LYC | CYLINDER HEAD | SEPARATED |
| 3/22/2009 | IO540K1G5 | CL13SA | |

THIS CYLINDER HAS ONE (1) HOUR OF TEST CELL TIME. THE DEFECT WAS DISCOVERED AND BELIEVED TO BE HEAD BARREL SEPARATION. PERFORMED A COMPRESSION TEST WITH SOAP AND WATER TO CONFIRM OUR FINDING. THE CYLINDER WAS PURCHASED AND INSTALLED ON THIS NEWLY OVERHAULED ENGINE. ALL CYLINDER WERE REMOVED FROM THE ENGINE. THIS CYLINDER WAS NOT PLACED IN SERVICE (NO FLIGHT TIME). (K)

| | | | |
|---|---|---|---|
| 2009FA0000375 | LYC | CYLINDER HEAD | SEPARATED |
| 3/22/2009 | IO540K1G5 | CL13SA | |

THIS CYLINDER HAS ONE (1) HOUR OF TEST CELL TIME. THE DEFECT WAS DISCOVERED AND BELIEVED TO BE HEAD BARREL SEPARATION. PERFORMED A COMPRESSION TEST WITH SOAP AND WATER TO CONFIRM OUR FINDING. THE CYLINDER WAS PURCHASED AND INSTALLED ON THIS NEWLY OVERHAULED ENGINE. ALL CYLINDER WERE REMOVED FROM THE ENGINE. THIS CYLINDER WAS NOT PLACED IN SERVICE (NO FLIGHT TIME). (K)

| | | | |
|---|---|---|---|
| 2009FA0000371 | LYC | CYLINDER HEAD | SEPARATED |
| 3/22/2009 | IO540K1G5 | CL13SA | |

THIS CYLINDER HAS ONE (1) HOUR OF TEST CELL TIME. THE DEFECT WAS DISCOVERED AND BELIEVED TO BE HEAD BARREL SEPARATION. PERFORMED A COMPRESSION TEST WITH SOAP AND WATER TO CONFIRM OUR

FINDING. THE CYLINDER WAS PURCHASED AND INSTALLED ON THIS NEWLY OVERHAULED ENGINE. ALL CYLINDER WERE REMOVED FROM THE ENGINE. THIS CYLINDER WAS NOT PLACED IN SERVICE (NO FLIGHT TIME). (K)

| | | | | |
|---|---|---|---|---|
| 2009FA0000373 | | LYC | CYLINDER HEAD | SEPARATED |
| 3/22/2009 | | IO540K1G5 | CL13SA | |

THIS CYLINDER HAS ONE (1) HOUR OF TEST CELL TIME. THE DEFECT WAS DISCOVERED AND BELIEVED TO BE HEAD BARREL SEPARATION. PERFORMED A COMPRESSION TEST WITH SOAP AND WATER TO CONFIRM OUR FINDING. THE CYLINDER WAS PURCHASED AND INSTALLED ON THIS NEWLY OVERHAULED ENGINE. ALL CYLINDER WERE REMOVED FROM THE ENGINE. THIS CYLINDER WAS NOT PLACED IN SERVICE (NO FLIGHT TIME). (K)

| | | | | |
|---|---|---|---|---|
| CA090429002 | | PWA | TURBINE BLADES | FAILED |
| 4/29/2009 | | PT6A114 | | ENGINE |

(CAN) EIR PT6A 2009-027 POWER TURBINE BLADE FAILURE.

| | | | | |
|---|---|---|---|---|
| CA090423010 | | PWA | TURBINE BLADES | FAILED |
| 4/21/2009 | | PT6A27 | | ENGINE |

(CAN) EIR PT6A 2009-08 CT BLADE FAILURE.

| | | | | |
|---|---|---|---|---|
| CA090421001 | | PWA | BEARING | SEIZED |
| 4/20/2009 | | PW125B | | HP ROTOR |

(CAN) ETR PW100-490 HP ROTOR LOCK UP.

| | | | | |
|---|---|---|---|---|
| CA090505008 | AEROSP | ALLSN | CHIP DETECTOR | CONTAMINATED |
| 4/15/2009 | AS355* | 250C20R | | M/R TRANSMISSION |

(CAN) AFTER RECEIVING A COMPLETE TRANSMISSION ASSY FROM OVERHAUL FROM THE ORIGINAL EQUIPMENT VENDOR, A RECEIVING INSP WAS CARRIED OUT. THIS INSP INCLUDED VISUAL INSP OF THE GEARBOX ASSY CHIP PLUGS, OF WHICH THERE ARE TWO. THE UPPER CHIP PLUG, WHICH IS IN THE PATH OF SPLASH OIL FROM A PLANETARY GEAR REDUCTION ASSY, WAS FOUND TO BE COATED WITH EITHER AN ABRASIVE SAND-LIKE CLEANING AGENT, OR HAD BEEN DROPPED ONTO A FLOOR SURFACE AND PICKED UP THE FINE PARTICULATE THERE, AND WAS NOT PROPERLY INSPECTED AND CLEANED AFTERWARD.

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| CA090402011 | AEROSP | TMECA | SPAR | CRACKED |
| 3/27/2009 | AS355* | ARRIEL1D1 | | TAIL BOOM |

(CAN) ON INSP OF VERTICAL FIN FOUND ONE SMOKING RIVET ATTACHED TO THE SPAR OF THE LOWER VERTICAL FIN. FROM THERE, FOUND THE CRACK ON THE CENTRAL SPAR. REMOVED FIN AND SENT IT OUT FOR REPAIR. THEY INSTALLED A NEW SPAR PN 350A14-1115-22. THE FIN WAS REINSTALLED AFTER REPAIR.

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| CA090408006 | AEROSP | PWA | EEC | FAILED |
| 3/4/2009 | ATR42* | PW121 | | NR 1 ENGINE |

(CAN) ON FINAL APPROACH, THE CREW NOTICED A WARNING FOR EEC FAILURE WITH ASSOCIATED LOSS OF POWER OF NR 1 ENGINE. AN EEC RESET WAS ATTEMPTED WITHOUT SUCCESS AND THE ENGINE THEN FLAMED OUT. IT WAS SECURED AND A SINGLE ENGINE LANDING WAS PERFORMED. TROUBLESHOOTING LED TO THE REPLACEMENT OF THE EEC BEFORE THE ACFT WAS RELEASED FOR SERVICE. FURTHER TROUBLESHOOTING WILL HOWEVER BE ACCOMPLISHED.

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| CA090416005 | AEROSP | PWA | WARNING LIGHT | ILLUMINATED |
| 4/14/2009 | ATR42300 | PW120 | | MLG |

(CAN) DEPARTING, THE CREW OBSERVED A DUAL LT MAIN GEAR UNLOCK INDICATION AFTER GEAR WAS SELECTED UP. THE ACFT RETURNED AND LANDED AT POINT OF DEPARTURE WITHOUT FURTHER PROBLEM. MX FOUND THE LANDING GEAR CONTAMINATED WITH SIGNIFICANT SLUSH/ICE. THE ACFT WAS THAWED AND MULTIPLE GEAR SWINGS CARRIED OUT WITH NO FAULT INDICATION OBSERVED. THE ACFT WAS RETURNED TO SERVICE.

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| CA090423011 | AEROSP | PWA | DIAPHRAGM | CRACKED |
| 4/20/2009 | ATR42300 | PW120 | S53G71268180 | PAX DOOR |

(CAN) DURING WALKAROUND, PREFLIGHT, MX NOTED A DEFORMATION IN FUSELAGE JUST AFT OF THE CREW/PAX DOOR. DEFORMATION WAS FOUND TO BE CAUSED BY LOAD FROM DOOR COUNTERBALANCE SPRINGS BEING TRANSFERRED TO FUSELAGE AFTER DIAPHRAM FAILED.

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|---|---|---|---|---|
| AC2A2008081677771 | AGUSTA | PWA | BOLT | SCORED |
| 8/16/2008 | AB139 | PT6* | | MAIN ROTOR |

BOLTS ARE SCORED.

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|---|---|---|---|---|
| CA090505003 | AIRBUS | GE | BRACKET | DAMAGED |
| 4/29/2009 | A310304 | CF680C2* | GA595331 | MLG |

(CAN) THE ACFT WAS RELEASED FROM YUL UNDER MEL FOR LT MLG MECHANICAL DOWNLOCK INDICATOR. AFTER LG EXTENSION ON APPROACH, FLIGHT REPORT CREW REPORTED THEY DID NOT HAVE DOWNLOCK INDICATION ON BOTH LT LG POSITION INDICATORS AND DECLARED EMERGENCY LANDING. AFTER LANDING ACFT WAS LEFT ON RUNWAY DUE TO DIFFICULTIES TO INSTALL LT MLG GROUND SAFETY PIN AND PRELIMINARY INVESTIGATION SHOWED THE DOWNLOCK INDICATION LINKAGE AND LOCK LINK ASSY IS DAMAGED. INVESTIGATION ON GOING.

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|---|---|---|---|---|
| CA090407015 | AIRBUS | GE | WIRE | DAMAGED |
| 3/22/2009 | A310304 | CF680C2* | | ELECTRICAL |

(CAN) SPOILER NR5 FAULT AFTER TAKEOFF AND CB S64 POPPED. FOUND WIRES DAMAGED AT ROUTE 4A UNDER PANEL 572CB, WIRES NR 2711-5042, 5043, 5060, 5061, 2842-5011, 2212-5025, 2213-5025. TEMPORARY REPAIR CARRIED OUT. COAX CABLE FOR RT OUTER FUEL TANK INDICATION DAMAGED (NO TEMP REPAIR ALLOWED FOR THIS CABLE). DUE TO THE ELECTRICAL SHORT DURING T/S SMOKE WAS NOTICED COMING OUT OF EFCU NR 2. FOLLOWING ACTIONS WILL BE TAKEN: EO 6-2700-003 FOR ONE TIME INSP OF THIS SPECIFIC AREA WILL BE PERFORMED ON ALL ACFT WITHIN 18 MONTHS. REPEAT INSP EO 6-2700-002, FOR INSP OF WIRING ALONG WING T/E SPAR, WILL BE UPDATED TO HIGHLIGHT THIS SPECIFIC AREA.

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|---|---|---|---|---|
| CA090421011 | AIRBUS | GE | COMPUTER | MALFUNCTIONED |
| 4/14/2009 | A319114 | CFM565A | B397BAM0513 | FLT AUGMENTATION |

(CAN) AT 130 KTS, RUDDER KICK ACFT VEERED LT ON TAKEOFF. ACFT CONTROLLER AND NO PROBLEMS AIRBORNE. REMOVED UNITS: YAW DAMPER ACTUATOR, PN SC4700-3, SN 435, INSTALLED 2007-05-08. IT HAD 53994 FH, 6796 FH TSI. FLT AUGMENTATION COMPUTER, PN B397BAM0513, SN 5628, INSTALLED 2002-01-24. IT HAD 32902 FH TOTAL, AND 22210 FH TSI.

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|---|---|---|---|---|
| CA090504005 | AIRBUS | RROYCE | WIRE HARNESS | MISINSTALLED |
| 2/17/2009 | A330* | RB211* | F9298002800200 | |

(CAN) DURING REMOVAL OF TRIM TANK TRANSFER PUMP , ELECTRICAL CONNECTOR PIN FOUND BENT AND ASSOCIATED CONNECTOR PLUG INSULATOR FOUND DAMAGED WITH SIGNS OF ARCING. IT WAS DETERMINED THAT PIN 2, ON THE PUMP HSG (MALE) CONNECTION POINT, BENT UPON A PREVIOUS INSTALLATION OF THE WIRING HARNESS. THIS APPEARS TO HAVE CAUSED THE PIN TO MISS INSERTION INTO THE CORRESPONDING FEMALE RECEPTACLE ON THE WIRING HARNESS CONNECTOR PLUG. DUE TO THIS MISINSTALLATION, INTERMITTENT CONTACT OCCURRED WHICH IS EVIDENCED BY THE ARCING DAMAGE TO THE PIN 2 AREA ON BOTH MALE AND FEMALE HALVES OF THE CONNECTOR.

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|---|---|---|---|---|
| CA090423004 | AIRBUS | RROYCE | WIRE HARNESS | DAMAGED |
| 4/8/2009 | A330* | RB211* | | |

(CAN) AMCU NR1 J1 PORT SHORTED OUT. DURING POWER UP OF SEATS 1-9 IN SEQUENCE, ONCE ARRIVING AT SEAT 5A THE J1 PORT IN THE AMCU TRIPPED OFF DUE TO A POWER OVERLOAD. CAUSE OF THE POWER OVERLOAD WAS DUE TO A MISWIRED HARNESS BETWEEN SEAT 4A AND 5A. THE HARNESS WAS METERED AND IT WAS FOUND THAT THE NEUTRAL WIRE WAS CARRYING A 115 VOLT LOAD BECAUSE THE HARNESS WAS MISPINNED WHICH IN TURN SHORTED OUT J1 PORT OF THE SECOND AMCU NR1.

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|---|---|---|---|---|
| CA090420003 | AIRBUS | RROYCE | ELECTRICAL BOX | DAMAGED |
| 4/7/2009 | A330300 | RB211* | | SEAT |

DURING THE COURSE OF AN RADIO MODIFICATION, SPECIFIC SNAGS APPEARED DURING THE POST-INSTALLATION AND TESTING PHASE OF THE CHECK WITH THE FOLLOWING DISCREPANCY NOTED: "DURING THE CONTOUR SEAT POWER UPS, MCU NR 1, J2 PORT SHORTED OUT MAKING MCU UNSERVICABLE" MCU NR 1 J2 PORT WAS SHORTED OUT MAKING THE MCU U/S. DURING THE POWER UP OF THE SEATS 1-9 IN SEQUENCE, ARRIVING AT SEAT 5F THE SIB (SEAT INTERFACE BOX) STARTED TO ARC AND TRIPPED OFF MCU NR 1 AND DAMAGED THAT LRU. CAUSE HAS BEEN DETERMINED TO BE A FAULTY SEB FROM CONTOUR UNIT REPLACED. FAULTY UNIT SENT TO MANUFACTURER FOR FURTHER ANALYSIS.

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|---|---|---|---|---|
| CA090501006 | AIRTRC | PWA | WIRE | BURNED |
| 4/28/2009 | AT802 | PT6A67A | | CIRCUIT BREAKER |

(CAN) THE AILERON TRIM TAB POWER WIRE THAT RUNS BEHIND THE CIRCUIT BREAKER PANEL BURNED AND WENT UP IN SMOKE WHILE PERFORMING UNRELATED MX IN THE HANGAR. WIRE WAS REPLACED AND TRIM TAB SYS CHECKS SERVICEABLE.

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|---|---|---|---|---|
| 2009FA0000421 | AMD | GARRTT | CHIP DETECTOR | LOOSE |
| 5/5/2008 | FALCON50MYST | TFE731* | 2775501900X | ENGINE |

CHIP DETECTOR CAME OUT OF ENGINE IN FLIGHT OVER OCEANANIC AIRSPACE, CAUSING OIL PRESSURE FLUCTUATION THEN CAUSING OIL PRESSURE LOSS. ACFT DECLARED AN EMERGENCY. THE ACFT LANDED IN CANADA AND WAS INSPECTED BY A SENIOR DUTY ENGINEER. IN HIS WORK REPORT HE STATED THE CHIP DETECTOR WIRING HARNESS WAS SECURED IN A MANNER THAT IMPOSED A COUNTER-CLOCKWISE ROTATION FORCE TO THE CHIP DETECTOR. ENGINE HAD COME OUT OF CORE INSP APPROX 30 HOURS PRIOR. IF THE CHIP DETECTOR HAD A SAFETY RETAINER THIS WOULD HAVE BEEN AVERTED THE IN-FLIGHT SHUTDOWN AND LOSS OF TRIP.

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|---|---|---|---|---|
| CA090504001 | AMD | GARRTT | PUMP | UNSERVICEABLE |
| 4/29/2009 | FALCON900EX | TFE73160 | 30607016 | ENGINE OIL |

(CAN) POST FLIGHT ON RAMP CREW NOTICED LARGE AMOUNT OF OIL ON INSIDE FACE OF NR 1 ENGINE LOWER COWL. TROUBLESHOOTING DETERMINED ENGINE OIL LEAK FROM OIL LUBE PUMP, SERVICEABLE PUMP INSTALLED, ACFT RETURNED IN SERVICE.

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|---|---|---|---|---|
| 2009FA0000423 | AMTR | | SPAR | SEPARATED |
| 5/9/2009 | BAKENGDUCE | | | LT WING |

THIS IS AN EXPERIMENTAL ACFT. INVESTIGATION REVEALED THAT IT APPEARS THE LT REAR WING SPAR SEPARATED AT THE WING, CAUSING THE LT WING TO FAIL. FURTHER EXAMINATION OF WOOD (DOUGLAS FIR ACCORDING TO THE AIRCRAFT RECORDS)USED IN THE CONSTRUCTION OF THE SPAR RETRIEVED FROM THE ACCIDENT SCENE, REVEALED THAT THE WOOD APPEARED TO EXHIBIT DRY-ROT. THE WOOD HAD DAMAGE TO THE GRAINS THAT COULD HAVE BEEN CONFUSED AS TERMITE DAMAGE ALTHOUGH THERE WAS NO "DUST" PRESENT. THIS ACFT WAS 22 YEARS OLD AND HAD RECEIVED AN "ANNUAL CONDITION INSPECTION" ON 5/3/2009.

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| CA090407005 | AMTR | CONT | AXLE | BROKEN |
| 3/30/2009 | CUBYACROTNER | O200* | | MLG |

(CAN) GEAR USED PA 18 SUPER CUB INSTALLED AT TIME ACFT WAS BUILT. 1,284.00 ON HOMEBUILT 1.2500 AXLE IS FITTED INSIDE 1.5 GEAR TUBE AILED AT WHAT APPEARS LIKE ROSETTE WELDS OPERATING ON WHEEL SKIS GEAR WHEEL APPEARED MISALIGNED INSPECTED (JAKED UP) FOUND BROKEN AXLE GEAR REPLACED WITH HEAVIER AXLE GEAR (RT) LT GEAR AXLE BEEFED UP AS WELL.

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|---|---|---|---|---|---|
| 2009FA0000383 | ARONCA | CONT | ARONCA | SPAR | CORRODED |
| 5/7/2009 | LSA7AC | O200A | | 48631 | HORIZ STAB |

UPON REMOVAL OF FABRIC ON HORIZONTAL STABILIZERS, MANY RUSTED THROUGH PIN HOLES WERE FOUND ON THE BOTTOM OF THE HORIZONTAL STABILIZERS AFT SPAR TUBES, ADJACENT TO THE ELEVATOR MOUNTS.

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|---|---|---|---|---|
| CA090408009 | AYRES | PWA | FUEL CONTROL | INOPERATIVE |

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|---|---|---|---|---|
| 4/2/2009 | S2RT65 | PT6A60A | | ENGINE |

(CAN) AFTER TAKEOFF PILOT REPORTED HE COULD ONLY GET A MAXIMUM OF 1600 TO 1800 POUNDS OF TORQUE WHEREAS 3200 SHOULD HAVE BEEN ACHEIVED. THE LOAD OF FERTILIZER HAD TO BE DUMPED TO BE ABLE TO MAINTAIN FLIGHT. THE PILOT RETURNED TO THE STRIP WHERE HE LANDED SAFELY. SUBSEQUENT GROUND RUNS REPLICATED THE PROBLEM. TROUBLESHOOTING IS ON-GOING AND FOCUSING ON THE FUEL CONTROL. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

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| CA090406009 | BEECH | PWA | ALTIMETER | ERRATIC |
| 4/1/2009 | 100BEECH | PT6A28 | 22702032 | |

(CAN) PILOT REPORTED CAPTAINS ALTIMETER WOULD CHANGE ALTITUDE INDICATIONS INTERMITTENTLY, EG. 20000 FT, THE POINTER WOULD WIND DOWN TO NEGATIVE ALTITUDE READINGS. ALTIMETER WAS REMOVED, INSPECTED, AND RE-CERTIFIED AT A LOCAL INSTRUMENT SHOP (AMO 3-85). THE SHIP`S WIRING WAS INSPECTED AND NO FAULTS FOUND. THE ALTIMETER WAS RE-INSTALLED IN THE ACFT, CHECKED AT VARIOUS ALTITUDES AND COULD NOT BE FAULTED. THE ACFT DID ONE FLIGHT WITHOUT INCIDENT AND THE NEXT FLIGHT THE SAME PROBLEM OCCURRED. THE ALTIMETER WAS REMOVED AGAIN AND TESTED ON THE BENCH, SOME VIBRATIONS WERE ADDED TO THE TEST, AND THE ALTIMETER ALTITUDE POINTER PRECEDED TO SPIN DOWN UNTIL THE INTERNAL STOP WAS HIT, HOWEVER THE DRIVING MOTOR KEPT ON RUNNING. THE ALTIMETER WAS REPLACED WITH A SERVICEABLE UNIT.

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| CA090422003 | BEECH | PWA | GOVERNOR | MALFUNCTIONED |
| 4/19/2009 | 1900C | PT6A65B | 8210212E | PROPELLER |

(CAN) DURING ENGINE START IT WAS NOTED THAT THE RT ENGINE TORQUE WAS SLOW TO INCREASE WHEN THE PROP WAS TAKEN OUT OF FEATHER. MX COFIRMED THE SNAG AND REPLACED THE RT PROPELLOR GOVERNOR. THIS FIXED THE PROBLEM.

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| CA090505005 | BEECH | PWA | | BOLT | MISSING |
| 5/2/2009 | 1900C | PT6A65B | 50060283 | MS2125006030 | MAIN WHEEL ASSY |

(CAN) DURING WHEEL REPLACEMENT A BOLT WAS FOUND TO BE MISSING FROM THE WHEEL. DAMAGE TO THE WHEEL AND BRAKE HAS SHOWN THE BOLT WAS FITTED AT ASSY AND BECAME DETACHED DUE TO A BOLT FAILURE. THE BOLT PARTS WERE NOT RECOVERED AND THE TIME OF FAILURE WAS NOT ESTABLISHED. THE WHEEL HAD DONE 440 CYCLES SINCE THE BOLTS NDT WAS CARRIED OUT.

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| CA090504007 | BEECH | PWA | BEARING | CONTAMINATED |
| 4/10/2009 | 1900D | PT6A67D | | WHEEL BEARING |

(CAN) BEARINGS AND RACES OF MAIN WHEEL ASSY FOUND TO BE GOLD/BROWN IN COLOR. ADEQUATE GREASE WAS PRESENT. EXTREMELY ODD COLOR FOR A BEARING. 2-3 MONTHS PRIOR CMA SWITCHED FROM 28 GREASE TO SHC 100 AVIATION GREASE. SHC 100 IS LISTED IN THE MM FOR APPROVED GREASE, AS WELL CMM. CMA IS USING A MUCH SHORTER LUBE DURATION THAN RECOMMENDED BY THE OEM DUE TO WHEELS SEPARATING FROM THE ACFT INCIDENTS IN RECENT HISTORY. ONE RECENT BEARING SHOWED CHROME LOSS AND GOLD STAINING, WAS DIFFICULT TO ROTATE.

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| CA090504008 | BEECH | PWA | SPAR | CORRODED |
| 4/8/2009 | 1900D | PT6A67D | | WING |

(CAN) CORROSION FOUND, CENTER WING, MAIN SPAR, FWD FLANGE APRROX LBL 16 TO RBL 16. DURING SCHEDULED STRUCTURAL INSP, FOUND CORROSION BUBBLING UP FROM UNDER PRC COATING THAT COVERS THE SPAR CAP CORNER RADIUS. REMOVAL OF THE PRC FOUND PITTED CORROSION ON THE SPAR FWD FLANGE. CORROSION MAYBE CAUSED BY CONTAMINATE. REPAIR REQUIRED BLENDING AND A STRAP INSTALLED IAW HBC. SDR RAISED TO ALERT OTHERS THIS AREA IS SUSCEPTIBLE TO CORROSION, PRC DOES NOT PROTECT IT.

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| CA090423009 | BEECH | PWA | WIRE | BURNED |
| 4/9/2009 | 1900D | PT6A67D | | NAV LIGHTS |

(CAN) TAIL NAVIGATION LIGHT WIRES CHAFED TOGETHER CAUSING BURN HOLE IN EMPENNAGE AFT FARING ASSY. FAIRING ND NAV WIRES REPAIRED IAW WIRING DIAGRAM MANUAL ATA 51-30-06 AND SRM ATA 51-30-06. REFEREANCE T/C T 1673 NP. WIRING SECURED WITH SPIRAL WRAP. SUSPECT CHAFING WAS CAUSED BY

VIBRATION.

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| CA090427003 | BEECH | PWA | | STARTER GEN | INOPERATIVE |
| 4/24/2009 | 1900D | PT6A67D | | 23078019 | ENGINE |

(CAN) RT ENGINE WOULD NOT CRANK, STARTER WAS ENGAGING BUT DID NOT HAVE ENOUGH POWER TO TURN THE ENGINE WITH SMOKE COMING FROM THE STARTER.

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| CA090413002 | BEECH | PWA | | DRIVE SHAFT | CRACKED |
| 4/2/2009 | 200BEECH | PT642A | | 1018100213 | MLG |

(CAN) CRACK FOUND ON LANDING GEAR DRIVE SHAFT AT OTBD TAPER PIN HOLE.

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|---|---|---|---|---|---|
| UE5R051109 | BEECH | PWA | PWC | COVER | DAMAGED |
| 5/11/2009 | 200BEECH | PT6A41 | | | ENGINE |

UPON DISASSEMBLY, THE BLEED VALVE COVER ASSY GUIDE PIN HAD COME OUT OF COVER. THE GUIDE PIN IS A PRESSED FIT INTO THE COVER. THE BORE FOR THE GUIDE PIN HAD BEEN ELONGATED AND THE COTTER PIN THAT HELPS TO SECURE GUIDE PIN WAS BROKEN. THE COVER IS DAMAGED BEYOND REPAIR.

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| 2009FA0000362 | BEECH | | | RADAR | MALFUNCTIONED |
| 4/28/2009 | 300BEECH | | | | WX SYSTEM |

WEATHER RADAR IS INEFFECTIVE FOR DETECTING PRECIPITATION AT DISTANCES GREATER THAN 10 MILES. WEATHER RADAR UNIT HAS BEEN CHANGED 3 TIMES SINCE ACFT WAS NEW (24 OCTOBER 2007). RADOME WAS REMOVED AND TESTED AND SHOWED NO DEFECTS. MFG HAS BEEN MADE AWARE THAT THIS RADAR SYSTEM IS NOT PERFORMING ITS INTENDED FUNCTION. NO SOLUTIONS HAVE BEEN RELAYED TO REPAIR FACILITY OR ACFT MFG. (K)

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| CA090429003 | BEECH | PWA | | FLOAT SWITCH | STUCK |
| 3/26/2009 | 300BEECH | PT6A60A | | 1013890347 | |

(CAN) ENGINE SHUTDOWN INCIDENT. MFG CONSULTED. ENGINE STARTED AND RAN FINE IMMEDIATELY AFTER LANDING. ACFT DISPATCHED FOR NON-REVENUE TRAINING AFTER INSP, COMPLETED 6 HOURS WITH NO ISSUES. FLOAT SWITCH STUCK IN "FULL" POSITION IN AUX TANK AND FUEL PRESSURE SWITCH FOR MOTIVE FLOW VALVE ALSO STUCK OPEN. ALLOWED MOTIVE FLOW VALVE TO REMAIN OPEN, KEPT THE SUPPLY OF MOTIVE FLOW FUEL TO AUX TANK JET PUMP RUNNING, AFTER AUX TANK WAS EMPTY. JET (VENTURI) PUMP CONTINUED TO SUPPLY FUEL UNTIL TANK WAS EMPTY, THEN PUMPED AIR THOUGH JET PUMP INTO NACELLE TANK. NACELLE TANK BECAME PRESSURIZED, WHICH PROHIBITED FUEL FROM GRAVITY FEEDING TANK. EVENTUALLY THE "LOW FUEL" ANNUNCIATOR CAME ON, WHEN ENGINE HAD BURNED ENOUGH FUEL OUT OF THE NACELLE TANK, ENGINE FLAMED OUT. THERE IS NO COCKPIT INDICATION TO CREW THAT AUX TANK IS TRANSFERRING, ONLY AN INDICATION THAT IT IS NOT TRANSFERRING, WHICH IS WHEN FLOAT SWITCH SHUTS OFF. EXPERIENCED NUMEROUS FAILURES OF FLOAT SWITCH IN PAST, THIS 1 HAD BEEN REPLACED WITH ONE REMOVED FROM ANOTHER ACFT APPROX 1 MONTH BEFORE TO TROUBLESHOOT A PROBLEM WITH A NO TRANSFER LIGHT. WHEN SWITCH WAS REMOVED, MX NOTED IT WOULD OCCASIONALLY STICK IN THE "FULL" POSITION.

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| 2009FA0000335 | BEECH | CONT | SLICK | CAM | WORN |
| 4/27/2009 | 36BEECH | IO550B | | | MAGNETO |

IN THE PROCESS OF COMPLYING WITH SB 71-3940/CSB08-9A/SB3-08A, IT WAS DISCOVERED THAT THE MAGNETO ROTOR CAM WAS WORN (.060 INCH COMPARED TO NEW). THE SPRING LOADED FOLLOWER ALSO INDICATED SOME WEAR TO THE EXTENT WHERE THE POINTS WERE BARELY OPENING. PILOT HAD REPORTED A LACK OF PERFORMANCE FROM THE ENGINE WHICH COULD ATTRIBUTED TO A COMBINATION OF WORN ROTOR CAM AND WORN DISTRIBUTOR BRUSH IAW BULLETIN.

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| 2009FA0000344 | BEECH | | BEECH | BRACKET | CRACKED |
| 5/1/2009 | 400A | | | 45A21085003 | HORIZONTAL STAB |

DURING SCHEDULED INSP FOUND HORIZ STAB LT FWD ROLLER ATTACH BRACKETS CRACKED. AREA PREVIOUSLY NOTED AS SUBJECT TO CRACKING IAW MFG COMMUNIQUES AND LATER INCORPORATED INTO MM INSP GUIDE. AREA CAN BE DIFFICULT TO INSPECT; TECHS AND INSP CAUTIONED TO INSPECT AREA CLOSELY

WHEN ACCESS AFFORDED AND AT SCHEDULED INSPS. PROBLEM MAY BE MADE WORSE BY NOT MAINTAINING ROLLER CLEARANCES OR WORN HORIZ STAB MOUNTING COMPONENTS. REPLACED (2) CRACKED BRACKETS WITH IMPROVED ONE-PIECE BRACKET AND IMPROVED RIB IAW MFG COMMUNIQUE NR 83.

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| 2009FA0000425 | BEECH | HONEYWELL | CONNECTOR | BROKEN |
| 1/14/2009 | 58 | KS270C | | PITCH SERVO |

PILOT REPORTED PITCH OSCILLATIONS WITH AUTOPILOT ENGAGED. AUTOPILOT WAS DISENGAGED MANUALLY, AND ACFT WAS HAND FLOWN TO DESTINATION. AUTOPILOT COMPUTER, PITCH SERVO, AND FLIGHT COMMAND INDICATOR REMOVED AND SENT OUT FOR BENCH TEST. PITCH SERVO WAS FOUND TO HAVE BROKEN CONNECTION TO TACH GENERATOR. UNIT WAS REPAIRED REPAIR W/O NR 8089. REINSTALLED IN ACFT. PILOT REPORTS APPROX 200 HOURS AND 175 CYCLES SINCE LAST REPAIR OF THIS COMPONENT. FLIGHT COMMAND INDICATOR LISTED UNDER SEPARATE SDR. AUTOPILOT COMPUTER WAS TESTED WITH NO FAULTS FOUND.

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| 2009FA0000424 | BEECH | CONT | | BEARING | DAMAGED |
| 1/14/2009 | 58 | IO550* | KI256 | | AUTOPILOT SYS |

PILOT REPORTED PITCH OSCILLATIONS WITH AUTOPILOT ENGAGED. AUTOPILOT WAS DISENGAGED MANUALLY, AND ACFT WAS HAND FLOWN TO DESTINATION. AUTOPILOT COMPUTER, PITCH SERVO, AND FLIGHT COMMAND INDICATOR REMOVED AND SENT OUT FOR BENCH TEST. FLIGHT COMMAND INDICATOR WAS FOUND TO HAVE ALL GIMBAL BEARINGS DAMAGED. UNIT OVERHAULED ON REPAIR ORDER NR 94895. REINSTALLED IN ACFT. PILOT REPORTS APPROX 200 HOURS AND 175 CYCLES SINCE LAST REPAIR OF THIS COMPONENT. PITCH SERVO LISTED UNDER SEPARATE SDR. AUTOPILOT COMPUTER WAS TESTED WITH NO FAULTS FOUND.

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| CA090428005 | BEECH | CONT | HUB | UNSERVICEABLE |
| 4/27/2009 | 95C55 | IO520C | D4883C55 | PROPELLER |

(CAN) PROP RECEIVED FOR REPAIR OF RED OIL LEAK. UPON VISUAL INSP CORROSION DAMAGE UNDER THE PAINT WAS OBSERVED. THE AMOUNT OF DAMAGE RENDERS THE HUB UNSERVICEABLE IAW MM NR SPM100-1R4.

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| CA090420004 | BEECH | PWA | CLEVIS | BINDING |
| 4/16/2009 | A100 | PT6A28 | | MLG |

(CAN) PILOTS REPORTED A "CLUNK NOISE" UPON RETRACTION OF THE LANDING GEAR AND THE GEAR IN TRANSIT LIGHT REMAINED ILLUMINATED. ACFT RETURNED TO BASE. AFTER FURTHER INVESTIGATION MX REPRODUCED THE "CLUNK NOISE", IT WAS CAUSED BY THE CLEVIS BINDING INSIDE ACTUATOR NUT IN THE COMPRESSED POSITION WHICH SHORTENS THE ACTUATOR STROKE AND CAUSES THE GEAR TO BE RETRACTED FURTHER THEN NORMAL, CAUSING THE CLUNK. ACTUATOR WAS REPLACED AND RETURNED TO THE OVERHAUL FACILITY FOR REPAIR. THIS ACTUATOR ONLY HAS 29 HOURS AND 34 LANDINGS SINCE OVERHAUL. THE NUT ASSY WAS REPLACED AT THE LAST OVERHAUL, A STRIP REPORT HAS BEEN REQUESTED TO DETERMINE THE CAUSE OF THE BINDING.

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| CA090409002 | BEECH | PWA | BEARING | FAILED |
| 3/10/2009 | B300 | PT6A60A | 03600918 | STARTER GEN |

(CAN)STARTER-GEN PN 23085-001 SN P1307. MOD STATUS B,C,F. 960.4 HRS TSO. AIRCRAFT: NR 2 AT 7903.0 HRS TTAF. DATE: MARCH 10, 2009. GENERATOR FAILED ON TAKEOFF. ACFT RETURNED TO AIRPORT. STARTER-GENERATOR WAS REMOVED. ON TEARDOWN OF ST-GEN, THE BRG AT THE DRIVE END WAS FOUND TO HAVE FAILED, ALLOWING THE ARMATURE TO CONTACT THE STATOR. LAMINATIONS ON ONE SIDE OF THE ARMATURE STACK RUBBED AGAINST THE STATOR POLES. CONTACTING ALL OF THEM. THE ARMATURE SHORTED BETWEEN THE WINDINGS AND THE SHAFT, WITH LESS THAN AN OHM RESISTANCE MEASURED AFTER CLEANING. THE BRG SHIELDS REMAIN INTACT, BUT THERE IS WEAR INSIDE THE BRG BETWEEN THE 2 RACES EXCEEDING THE AIR GAP BETWEEN THE ARMATURE AND STATOR. THERE IS A LINE OF CORROSION ON THE BRG LINER AND BRG OUTER RACE. THE STARTER-GEN WAS MFG JANUARY 2007. IT WAS OVERHAULED ON 08 MAY 2008, AND HAD 960.4 HOURS TSO WHEN THE BRG FAILED. THE ELECTRICAL SHORT IN THE ARMATURE MAY HAVE GROUNDED THROUGH THE SHAFT SPLINES TO THE ENGINE. THERE APPEARS TO BE FINE PITTING ON THE GENERATOR DRIVE FACES OF THE SHAFT TEETH. POSSIBLE EDD TO ENGINE IS BEING MONITORED BY THE OPERATOR. CONSULTATION WITH MFG ENGINEERING INDICATED THAT THE BRG FAILURE MAY HAVE BEEN DUE TO ELECTRICAL DISCHARGE, BUT IT IS DIFFICULT TO KNOW IF A SHORT CAUSED THE BRG FAILURE OR IF THE BRG FAILED, CAUSING THE ARMATURE TO RUB ON THE STATOR AND SHORT OUT. DAMAGE TO BOTH PARTS IS EXTENSIVE. THE BEARING, ARMATURE AND SHAFT ARE QUARANTINED. (OEM) IS INTERESTED IN EXAMINING THE

BRG.

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| 2009FA0000333 | BEECH | CONT | | SUPPORT | ARCED |
| 4/24/2009 | B36TC | TSIO520UB | | 365240353 | INSTRUMENT PANEL |

DURING FLIGHT THE PILOT NOTICED THE INSTRUMENT SUBPANEL LIGHTING FLICKERING. UPON INSP THE WIRE BUNDLE THAT CROSSES OVER THE CENTER SUPPORT FWD OF THE INSTRUMENT PANEL HAD (2) WIRES CHAFED AND ARCING ON THE SUPPORT. DAMAGED SECTION OF THE WIRING WAS REPLACED AND WIRE BUNDLE WAS SUPPORT TO PREVENT FURTHER DAMAGE.

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| CA090424005 | BEECH | LYC | ARTEX | G SWITCH | FAILED |
| 4/23/2009 | B60 | TIO541E1C4 | | | ELT |

(CAN) WHILE PERFORMING 12 MONTH INSP OF ELT IAW CAR 571 APPENDIX G THE G SWITCH FAILED TO OPERATE. G SWITCH REPLACED AND UNIT RETURN TO SERVICE.

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| CA090409004 | BEECH | LYC | | INTAKE VALVE | BROKEN |
| 4/7/2009 | B60 | TIO541E1C4 | | | LT ENGINE |

(CAN) PILOT REPORTED LT ENG RUNNING ROUGH, NO INDICATION ON GRAPHIC ENGINE MONITOR FOR CYL NR 5. OPENED COWLINGS, INSPECTED CYL NR 5, CHECKED SPARK PLUGS, CHECKED COMPRESSION NO FAULTS FOUND. DETERMINED THAT WIRING HARNESS FOR GRAPHIC ENG MONITOR INSTALLED INCORRECTLY, LEAD FOR NR 5 CYL ON GRAPHIC ENGINE MONITOR ROUTED TO CYL NR 6. CYL NR 6 INSPECTED LEAKAGE CHECK CARRIED OUT 6/80. CYL ASSY REMOVED FOR ENGINE, FOUND INTAKE STEM VALVE BROKEN IN AREA OF VALVE SPRING RETAINERS, VALVE IN OPEN POSITION AND SEIZED INTO VALVE GUIDE. INDICATIONS ON TOP OF PISTON SHOW WHERE VALVE STRUCK PISTON. ALL PARTS REMAINED IN PLACE AND NO OTHER DAMAGES TO THE ENGINE OR CYL ASSY WERE SUSTAINED.

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| CA090408011 | BEECH | PWA | | ENGINE | MAKING METAL |
| 4/2/2009 | C90 | PT6A20 | | | |

(CAN) THE PILOT REPORTED THAT APPROX 30 MINUTES INTO THE FLIGHT AT FL170, HEARD A LOUD NOISE. THE CO-PILOT NOTED FLAMES AND DEBRIS COMING FROM THE ENGINE EXHAUST STACK. AN EMERGENCY WAS DECLARED AND AIRCRAFT WAS DIVERTED TO FARMINGDALE, NY FOR A SINGLE ENGINE LANDING. POST EVENT INSPECTION REVEALED METAL IN THE EXHAUST AND A SEIZED PROPELLER. P&WC WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

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| 2009FA0000422 | BEECH | CONT | | PUMP | FAILED |
| 4/23/2009 | D35 | E225* | | RD7790 | FUEL SYSTEM |

WHILE CRUISING AT 6000 FEET IFR FLIGHT PLAN (VFR CONDITIONS) THE FUEL PRESSURE GAUGE DROPPED FROM 14 PSI TO 6 PSI FOR A BRIEF PERIOD (10 SEC) AND THEN DROPPED TO ZERO WITH SUBSEQUENT ENGINE FAILURE (LOSS OF POWER). RESTORED ENGINE POWER BY UTILIZING BACK UP HAND PUMP FOR DURATION OF FLIGHT TO NEAREST APPROPRIATE AIRPORT AND LANDED WITHOUT INCIDENT. FUEL PUMP WAS REMOVED AND SENT FOR REPAIR. CURIOUSLY THIS WAS THE REPAIR STATION THAT OVERHAULED THE PUMP 119 HOURS PRIOR TO FAILURE. THE PUMP WAS RETURNED AFTER REPAIRING BY INSTALLATION OF THE FOLLOWING PARTS: PN'S RA 3791 SEAL DISK AND RA 7766 RELIEF VALVE.

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| T4OR 4995 70 | BEECH | PWA | BEECH | ROLLER | WORN |
| 4/23/2009 | E90 | PT6A60A | | BC22062 | TE FLAPS |

RT OTBD FLAP ATTACH POINT BRACKETS (RIBS) ARE WORN WHERE AFT FLAP TRACK ROLLERS ARE ATTACHED. BRACKETS ARE WORN APPROXIMATELY .015 INCH TO .020 INCH DEEP IN THE BRACKET SIDES FROM THE ROLLER IN THE SHAPE OF THE ROTATING ROLLER ENDS. SUSPECT CAUSE TO BE WORN ROLLER ALLOWING SIDE PLAY FOR ROLLER TO RUB ON BRACKETS. ANOTHER POSSIBLE CAUSE IS AN IMPROPER ATTACH HARDWARE WASHER NR/THICKNESS ALLOWING THE ATTACH NUT TO SHANK-OUT ON THE ATTACH BOLT, ALLOWING FOR A NON-PINCH FIT ON THE ROLLER ASSY. FLAP BRACKETS WORN ARE P/N 35-165050-31 AND P/N 35-165050-35.

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| 2009FA0000393 | BEECH | | | MASTER CYLINDER | UNSERVICEABLE |
| 5/1/2009 | T34C | | | 1043840613 | MLG |

EXCESSIVE PREMATURE FAILURE OF THE MLG WHEEL BRAKE MASTER CYLINDERS, 17 SETS OF MASTER CYLINDERS WITH IDENTICAL SN, SUSPECT CONTAMINATION BEING INDUCED INTO COMPONENTS AT THE MFG SITE, SUSPECT THESE COMPONENTS ARE BEING OVERHAULED AND THEN SOLD AS "NEW". RECEIVES THE MASTER CYLINDERS FROM REPAIR STATION. THE PN FOR THE MASTER CYL IS 104-384061-3. BELIEVE THIS PN IS ONLY USED ON MILITARY ACFT. MFG PROVIDES THE PARTS WITH 8130-3 TAGS. THESES 8130'S INDICATE THESE PARTS ARE "NEW". ACFT MFG BELIEVES THESE PARTS ARE BEING OVERHAULED, WHERE INTERNAL CONTAMINATION IS BEING INDUCED, AND THEN SOLD AS "NEW". DURING THE PAST 4 MONTHS THERE HAS BEEN A DRAMATIC INCREASE OF PREMATURE FAILURES OF THE MASTER CYL. THE FAILURES HAVE BEEN A RESTRICTIVE RATCHETING FEELING FELT DURING THE ACTUATION OF THE MASTER CYL WHEN DEPRESSING THE BRAKE PEDALS OR A COMPLETE LOSS OF BRAKING SYSTEM HYDR PRESSURE RESULTING IN THE TOTAL LOSS OF HYDR PRESSURE FOR THE WHEEL BRAKES. THIS CAN CAUSE AN UNCONTROLLED ACFT CONDITION WHILE SLOW TAXIING. THERE HAVE BEEN 22 FAILURES DISCOVERED DURING INITIAL OPS CHECK OR DURING INITIAL ENGINE RUN PURSUANT TO A POST-MAINTENANCE FUNCTIONAL CHECK FLIGHT.

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| 2009FA0000345 | BEECH | CONT | CONTROL CABLE | BROKEN |
| 4/27/2009 | V35B | IO550* | 355243146 | AILERONS |

AILERON CABLE SWAGE BROKE, CAUSING LOSS OF AILERON CONTROL.

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| CA090424002 | BELL | HNYWL | SUPPORT | CRACKED |
| 4/23/2009 | 205A1 | T5313BHNYWL | | TAIL ROTOR |

(CAN) FOUND BEARING SUPPORT ATTACHEMENT BOLT HOLE CRACKED.

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| CA090126003 | BELL | LYC | O-RING | LEAKING |
| 1/25/2009 | 205A1 | T5317A | | BOOST PUMP |

(CAN) REPORTS OF A LOW FUEL CAUTION LIGHT COMING ON EARLY AND SMALL FUEL DRIP PROMPTED MX TO REMOVE THE LT FUEL CELL SUMP PLATE TO INSPECT THE LOW LEVEL FUEL SWITCH/BOOST PUMP AREA AND FACILITATE AN O-RING REPLACEMENT. UPON REMOVAL OF THE SUMP PLATE A T-SHIRT/SHOP RAG WAS DISCOVERED WRAPPED AROUND THE BOOST PUMP ASSEMBLY OBSTRUCTING FUEL FLOW.

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| CA090213006 | BELL | ALLSN | SHAFT | BENT |
| 2/10/2009 | 206B | 250C20 | | TAIL ROTOR |

(CAN) TAILROTOR WAS UNABLE TO BALANCE, TROUBLESHOOTING REVEALED THE OUTPUT SHAFT WAS BENT.

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| CA090407012 | BELL | ALLSN | BEARING | DAMAGED |
| 4/7/2009 | 206L | 250C20B | | T/R BLADE |

(CAN) DURING A SERVICEABILITY CHECK AT T/R ASSY SECTION (BLADE S/N CS-10215) BEARING MOVING INSIDE THE BLADE, FOUND.

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| CA090407013 | BELL | ALLSN | ALLSN | STATOR VANE | UNSERVICEABLE |
| 3/23/2009 | 206L | 250C20B | | | COMPRESSOR |

(CAN) DURING COMPRESSOR HALVES INSP, ONE STATOR BLADE OF THE LAST AXIAL COMPRESSOR STAGE WAS TORN AND WAS SIDEWAYS CONTACTING THE ONE NEXT TO IT. THE BLADE WAS ONLY HELD IN PLACE BY 5-10 PERCENT OF THE BLADE ROOT. THIS COULD HAVE CAUSED THE BLADE TO GO THRU THE CENTRIFUGAL COMPRESSOR.

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| CA090401009 | BELL | ALLSN | BUSHING | CRACKED |
| 3/31/2009 | 206L | 250C20R | | COLLECTIVE STICK |

ROUTINE INSPECTION DISCOVERED A CRACK BETWEEN THE THROTTLE ARM BUSHING AND ROLL PIN ACCESS HOLE. COLLECTIVE ELBOW FOUND TO BE CORRECTLY INSTALLED AND NO OTHER DEFECTS NOTED. ELBOW ASSY REPLACED AND ACFT RETURNED TO SERVICE.

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| CA090304008 | BELL | ALLSN | | BEARING | DAMAGED |
| 2/27/2009 | 206L | 250C20R2 | 206011100159 | | YOKE |

(CAN) RECEIVED MAIN ROTOR HUB FOR REPLACEMENT OF TIME EXPIRED COMPONENTS. WHEN DISASSEMBLED FOUND THAT BOTH OTBD EXCLUDERS IN GRIP ASSEMBLIES WERE NO LONGER RETAINING THE LUBRICANT AND ALLOWING IT TO PASS INTO THE YOKE SPINDLE BORES. THE INBD BEARING CONTACT AREA WITH THE YOKE DID NOT HAVE SUFFICIENT LUBRICATION AND DETERIORATION OF THE YOKE SPINDLE (DEEP PITTING) OCCURED. THE YOKE WAS SCRAPPED.

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| CA090325008 | BELL | ALLSN | BOLT | FAILED |
| 3/23/2009 | 206L1 | 250C28B | AN412A | |

MEDIUM DENSITY MAGNETOMETER SURVEY ARRAY WAS INSTALLED ON THE SUBJECT AIRCRAFT PER STC SH03-32 FOR A SURVEY BEING PERFORMED. WHILE FLYING ON SURVEY ON MARCH 23, 2009, THE PILOT AND OPERATOR HEARD A BANG AND THE PILOT NOTICED A VIBRATION FROM THE ARRAY BOOM STRUCTURE. THE PILOT LANDED SAFELY ON A SMALL ISLAND AND FOUND THAT ONE OF THE TWO AN4-12A BOLTS SECURING THE RT CLAMP RING OF THE LATERAL (REAR) ARRAY TUBE WAS MISSING, RESULTING IN PARTIAL LOSS OF RESTRAINT OF THE ARRAY TUBE. THE BOLT WAS BROKEN INSIDE THE BARREL NUT AND THE AME REPORTED SEEING A DULL AND A SHINY FRACTURE SURFACE, INDICATIVE OF A FATIGUE FAILURE. IN ORDER TO MOVE THE AIRCRAFT TO THE MAIN LAND, THE CLAMPING RING WAS REMOVED FROM THE AIRCRAFT AND THE BROKEN BOLT AND BARREL NUT WERE EXTRACTED BY MACHINING, DESTROYING THE BOLT IN THE PROCESS. PHOTOGRAPHS OF THE FRACTURE SURFACE ARE APPARENTLY AVAILABLE BUT HAVE NOT BEEN SEEN BY THE SUBMITTER. THE CLAMPING RING ALSO SUFFERED SOME DEFORMATION, AS DID THE OTHER BOLT, AFTER THE FIRST BOLT BROKE. INSPECTION OF THE AIRFRAME REVEALED NO DAMAGE. THE DEFORMED CLAMP RING AND ALL CRITICAL HARDWARE SECURING THE ARRAY WAS REPLACED. REMOVED HARDWARE HAS BEEN SEGREGATED. AFFECTED BOLT IS ONE OF 8 SERVING SIMILAR FUNCTIONS. FAILURE OF ANYONE IS POTENTIALLY CATASTROPHIC. THESE BOLTS ARE SUBJECT TO FREQUENT REMOVAL AND HANDLING DAMAGE IS SUSPECTED. OPERATOR HAS BEEN ADVISED TO VISUALLY INSPECT THESE BOLTS AT EACH INSTALLATION, AND ALL SUCH BOLTS WERE REPLACED WITH NEW IN THE SHORT TERM. SUBMITTER IS THE HOLDER OF STC SH03-32.

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| 2009FA0000339 | BELL | BLADE | DEBONDED |
| 4/22/2009 | 206L3 | 206015001119 | MAIN ROTOR |

THE AERODYNAMIC FILLER THAT IS USED TO MAINTAIN CONTOUR OF MAIN ROTOR BLADE BETWEEN L/E AND BLADE SKIN WAS FOUND TO LIFTING OR DEBONDING DURING A ROUTINE 100 HR INSP IAW MFG INSP PROGRAM. AREA THAT WAS LIFTING WAS AT APPROX 55 INCHES X 57 INCHES FROM ROOT OF BLADE ON UPPER SURFACE ADJACENT TO THE INBD TAB AREA. FILLER THAT IS LOOSE IS IN LINE WITH THE L/E SPAR TO SKIN JOINT APPROX .187 X 2.5 INCHES LONG. THE FILLER AND BLADE PAINT, WERE CRACKED ALONG THE SAME JOINT FOR APPROX 5 FT. THIS FILLER, IF LT IN THIS CONDITION, COULD FALL OUT CAUSING THE L/E OF THE SKIN TO SPAR JOINT TO BE EXPOSED TO THE ELEMENTS AND AIRSTREAM OVER THE BLADE. THIS EXPOSURE COULD HAVE CAUSED A COMPROMISE OF THIS BONDED JOINT ALLOWING CORROSION OR LIFTING OF THE BLADE SKIN. RECOMMEND THAT THIS FILLER BE INSPECTED CLOSELY FOR ANY SIGNS OF LIFTING OR VOIDS IN THE SURFACE PAINT COATING DURING ROUTINE 100 HR INSPECTION IAW MFG RECOMMENDATIONS. (K)

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| CA090505002 | BELL | ALLSN | SUPPORT | CRACKED |
| 5/4/2009 | 206L3 | 250C30P | 206023119063 | HORIZONTAL STAB |

(CAN) WHILE CARRYING OUT A POST LEASE INSP, THE ENGINEER NOTICED A CRACK IN THE PAINT ON THE SUPPORT, UPPER LT FOR THE HORIZONTAL FIN ASSY. HE REMOVED THE SUPPORT TO VERIFY THAT IS WAS A CRACK, ON THE BACK SIDE OF THE SUPPORT THE CRACK SHOWED THROUGH. THE CRACK IS 2.25 INCHES LONG.

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| CA090324006 | BELL | PWA | BLADE | DEBONDED |
| 3/19/2009 | 212 | PT6T3 | 212010750105FM | TAIL ROTOR |

(CAN) DURING A DAILY INSP, THE ENGINEER NOTICED CRACKS IN THE BONDING SUROUNDING THE EFFECTED TAIL ROTOR TIP CAP. FURTHER INVESTIGATION REVEALED DELAMINTAION OF THE SKIN TO THE TIP CAP ON BOTH SIDES OF THE BLADE. NO ABNORMAL VIBRATIONS WERE REPORTED FOLLOWING THE LAST FLIGHT. PSE WAS CONTACTED AND THIS IS A COMMON PROBLEM AND THE RIVETS DID WHAT THEY WERE INTENDED TO DO, RETAIN THE CLOSURE IN THE EVENT OF DEBONDING. THE BLADE MAY BE SENT TO AN APPROVED BLADE REPAIR SHOP TO HAVE THE TIP CLOSURE REPLACED.

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| CA090408010 | BELL | PWA | TURBINE | FAILED |
| 3/26/2009 | 212 | PT6T3 | | ENGINE |

(CAN) SHORTLY AFTER T/O, THE NR 1 ENGINE CHIP LIGHT ILLUMINATED, ACCOMPANIED BY RISING TEMPERATURE IN EXCESS OF 810°C. THE PILOT SHUT THE POWER SECTION DOWN AND LANDED WITHOUT FURTHER INCIDENT. MX DETERMINED THAT THE DISTRESS ORIGINATED IN THE POWER SECTION OF THE ENGINE. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

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| CA090430003 | BELL | LYC | SPINDLE | MISMANUFACTURED |
| 4/17/2009 | 214B1 | T5508D | 214030606005 | TRANSMISSION |

(CAN) ASB 214-08-70 NOW IN REVISION `C` RELATES TO IMPOSING A LIMIT LIFE ON SPINDLE ASSY 214-030-606-005. WHEN THE ORIGINAL ASB 214-08-70 CAME OUT. THE NEW MFG SPINDLES WHERE SUPPLIED AT THE SAME TIME. THE HOLE PATTERN WAS NOT CORRECT AND THE PIECE WOULD NOT FIT. MFG IS NOW IN THE PROCESS OF CORRECTING THE PROBLEM.

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| CA090505006 | BELL | ALLSN | BLADE | SEPARATED |
| 4/30/2009 | 407 | 250C47B | 406016100119 | TAIL ROTOR |

(CAN) PILOT DURING HIS PREFLIGHT NOTICED SEPARATION IN THE TAIL ROTOR BLADE TIP WEIGHT AREA,

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| CA090401001 | BELL | ALLSN | BEARING | MIGRATED |
| 3/26/2009 | 407 | 250C47B | 406310403101 | |

(CAN) THE BEARING (406-310-403-101) MIGRATED OUT OF IT`S PARENT PART (406-010-432-101) ANTI-DRIVE LINK ASSY.

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|---|---|---|---|---|
| CA090406005 | BELL | ALLSN | DRIVE SHAFT | WORN |
| 3/20/2009 | 407 | 250C47B | 407040320101 | TAIL ROTOR |

(CAN) ON DAILY VISUAL INSP OF ACFT, THE NR1 T/R DRIVE BEARING HANGER WAS FOUND TO BE OVERHEATED WITH SIGNS OF BLUE DISCOLORATION. THE ACFT WAS THEN REMOVED FROM SERVICE, ON INSP THE NR1 AND NR2 BEARINGS WERE FOUND TO BE OVERHEATED AND THE ROOT CAUSE WAS FOUND FWD OF THE BEARINGS, WITH THE A/C PULLEY DRIVE RING PN S-3532EC-5 (STC SR00222DE) WHICH HAD WORN NINETY PERCENT OF THE DRIVE RING AND T/R BLOWER SHAFT PN 407-040-320-101 MATING TEETH MATERIAL AWAY, DUE TO THE CONDITION OF THE MATERIAL THE INITIAL PROBLEM WAS NOT FOUND BUT INCORRECT BELT TENSION WAS QUESTIONED SINCE ALL THE OTHER COMPONENTS TO THE SYS WERE SERVICEABLE.

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| CA090407007 | BELL | ALLSN | HMU | LEAKING |
| 2/26/2009 | 407 | 250C47B | | ENGINE |

(CAN) EN-ROUTE, DURING THE LAST FUEL STOP, A FUEL LEAK WAS OBSERVED, LEAK WAS COMING FROM THE HMU.

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| CA090320003 | BELL | ALLSN | CONTROL CABLE | BROKEN |
| 3/19/2009 | 407 | 250C47B | C807382 | THROTTLE |

(CAN) PILOT LANDED AFTER DROPPING PASSENGERS ON SKI RUN. THROTTLE TWIST GRIP DID NOT RESPOND WHEN ROLLED TO IDLE SETTING PRIOR TO ENGINE SHUTDOWN. ACFT WAS FLOWN BACK TO BASE AND ENGINE SHUTDOWN AT HMU INPUT LEVER MANUALLY BY AME. THROTTLE CABLE FOUND BROKEN UNDER FRONT CABIN FLOOR. BREAK FOUND AT LOCATION OF TIGHT RADIUS CURVE IN CABLE ROUTING.

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| CA090408007 | BELL | PWA | O-RING | PINCHED |
| 3/29/2009 | 412 | PT6T3B | | FUEL SYSTEM |

(CAN) DURING CLIMB, THE PILOT NOTED A FUEL SMELL AND THE WING-MAN REPORTED SMOKE. AN EMERGENCY DESCENT WAS INITIATED TO THE POINT OF ORIGIN, APPROX. 3 NM AWAY. AFTER LANDING, THE ENGINE WAS IMMEDIATELLY SHUTDOWN AS FUEL WAS LEAKING ON THE GROUND. GROUND INSP FOUND A PINCHED O-RING ON THE COVER OF METERING VALVE RATIO LEVER ON THE AUTO FUEL CONTROL. THE UNIT WILL BE REPLACED BEFORE THE ACFT IS RETURNED TO SERVICE. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

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| AC2A2009042481568 | BELL | ALLSN | ECU | FAULTY |
| 4/24/2009 | 430 | 250C40B | | NR 2 ENGINE |

IN FLIGHT, YELLOW M/ECU2 LIGHT ILLUMINATED, FOLLOWED BY A WHITE ECU LIGHT ABOVE THE NR2 ENGINE TORQUE. RETARDING THE THROTTLE TO IDLE HAD NO EFFECT ON THE NR2 NP. TO REDUCE THE NR2 NP TO IDLE, THE ECU HAD TO BE PUT INTO MANUAL.

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| CA090324012 | BELL | LYC | LYC | COVER | DAMAGED |
| 3/19/2009 | 47G2 | VO435A1D | 71302 | 71302 | PART VALVES |

A PUNCTURE WAS NOTICED ON THE INTAKE SIDE OF THE ROCKER COVER ON CYLINDER NR 1. UPON REMOVAL OF THE ROCKER COVER, A CAP PN 17C19386 WHICH SITS BETWEEN THE EXHAUST VALVE AND EXHAUST ROCKER ARM, WAS FOUND LODGED BETWEEN THE INTAKE COVER AND INTAKE ROCKER ARM. UPON INVESTIGATION IT WAS INITIALLY FOUND THAT THE INTAKE AND EXHAUST ROCKER ARMS WERE DAMAGED. THE CAP WAS SLIGHTLY DAMAGED. THE ROCKER COVER WAS PUNCTURED AND THE INTAKE PUSHROD WAS BENT. FURTHER INVESTIGATION REVEALED DAMAGE ON THE CAM SHAFT LOBE.

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| CA090429004 | BNORM | LYC | CONNECTING ROD | FRACTURED |
| 3/18/2009 | BN2A21 | IO540K1B5 | LW19332 | ENGINE |

(CAN) CATASTROPHIC ENGINE FAILURE IN CRUISE FLIGHT. PROP FEATHERED. ACFT RETURNED TO BASE ON ONE ENG. ENG CASE FOUND SHATTERED AT ACCY SECTION. CRANKSHAFT FOUND FRACTURED AT NR6 CONNECTING ROD BEARING. CAM SHAFT, ALL ROTATING COMPONENTS, AND ENGINE MOUNT DAMAGED DUE TO SUDDEN STOPPAGE. ORIGIN OF FAILURE SEQUENCE DETERMINED TO BE OLD FLAW IN NR 6 CONNECTING ROD, APPARENTLY NOT DISCOVERED BY NDT DURING LAST ENGINE OVERHAUL.

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| CA090424001 | BOEING | RROYCE | TURBINE BLADES | FAILED |
| 4/6/2009 | 717200 | BR700715A130 | FW45914 | HP1 |

(CAN) ON CLIMB OUT, OSYS RECORDED SURGE AND IFSD EXCEEDENCE MESSAGES. AIR RETURN. REPORT TGT TO 1149 DEGREES AND PIECES OF METAL IN THE TAILPIPE. ENGINE DISASSEMBLY REVEALED HP1 TURBINE BLADE FAILURE ABOVE ROOT. TURBINE CASING CASE IS BULGED AND PUNCTURED. HPT CASE WILL BE RETURNED TO OEM.

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| CA090416004 | BOEING | PWA | MANIFOLD | CHAFED |
| 4/8/2009 | 727231 | JT8D15A | 629141 | FUEL |

(CAN) DURING MX RUN, FOUND SIGNIFIGANT FUEL LEAKING FROM NR 3 ENGINE "COLD STREAM" COWL. MX DETERMINED FUEL NOZZLE MANIFOLD CHAFED THROUGH ON HEAT SHROUD TO PRODUCE A PIN HOLE. MANIFOLD AND HEAT SHROUD REPLACED.

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| CA090420006 | BOEING | GE | PRESSURE SWITCH | FAILED |
| 4/19/2009 | 737* | CFM567B24 | QA07995 | FUEL FILTER |

(CAN) RT ENG FUEL FILTER BYPASS LGT ILLUMINATED IN FLT. ALL OTHER INDICATIONS NORMAL. TROUBLESHOT IAW FIM 73-05 TASK 801 CDU ENG NBR 2 FUEL FILTER STATUS - BYPASSED- REMOVED RT ENG FUEL FILTER IAW AMM TASK 73-11-01-000-801-FOO NO DEBRIS NOTICED UPON INSP INSTALLED RT ENG FUEL FILTER IAW AMM TASK 73-11-02-400-801-FOO. REMOVED RT ENG DIFF PRESS SW IAW AMM TASK 73-34-01-000-801-FOO. INSTALLED REPLACEMENT RT ENG DIFF. PRESS SW IAW AMM TASK 73-34-01-400-801-F00. PERFORMED ENG IDLE LEAK CHKS OK. INDICATIONS OK NO FAULTS. ALL WORK CARRIED OUT IAW CARS 571.11 ACT DIVERTED FROM PLANNED FLIGHT.

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| CA090408004 | BOEING | PWA | WINDOW | FAILED |
| 4/7/2009 | 737248C | JT8D9A | 58935733 | COCKPIT |

(CAN) WHILE IN CRUISE, FIRST AIR FLIGHT FAB 860 ENROUTE, EXPERIENCED MIDDLE PANE FAILURE ON THE NR 4 LT WINDOW (FWD EYEBROW). THE CREW REQUESTED LWR AND THE ACFT RETURNED TO POINT OF DEPARTURE, LANDING WITHOUT FURTHER PROBLEM. NO EMERGENCY WAS DECLARED. MX REPLACED THE WINDOW AND THE ACFT WAS RETURNED TO SERVICE.

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| 2009FA0000411 | BOEING | | ATTACH FITTING | CRACKED |

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| 5/13/2009 | 7378Q8 | 143A750214 | FUSELAGE |

FRAME ATTACH CLIP CRACKED AT BS 500D STRINGER 25 RT.

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|---|---|---|---|
| 2009FA0000412 | BOEING | ATTACH FITTING | CRACKED |
| 5/13/2009 | 7378Q8 | 143A750214 | FUSELAGE |

FRAME ATTACH CLIP CRACKED AT BS 500C STRINGER 25 RT.

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|---|---|---|---|
| 2009FA0000413 | BOEING | BATTERY | DISCHARGED |
| 5/13/2009 | 7378Q8 | P4010021 | FLASHLIGHT |

LT AFT F/A EMERGENCY FLASHLIGHT BATTERY DEAD.

| | | | |
|---|---|---|---|
| 2009FA0000414 | BOEING | POWER SUPPLY | FAILED |
| 5/13/2009 | 7378Q8 | D71702001 | CABIN |

EMERGENCY LIGHT POWER SUPPLY M1671 INOP, WILL NOT TURN LIGHTS ON WHEN SYSTEM IS TURNED ON.

| | | | |
|---|---|---|---|
| 2009FA0000416 | BOEING | ATTACH FITTING | CRACKED |
| 5/14/2009 | 7378Q8 | 143A750214 | FUSELAGE |

FRAME ATTACH CLIP CRACKED AT BS 500E STRINGER 25 RT.

| | | | |
|---|---|---|---|
| 2009FA0000378 | BOEING | FLOORBEAM | CORRODED |
| 5/6/2009 | 7378Q8 | 147A5506 | FUSELAGE |

OUT OF LIMITS CORROSION FOUND ON FLOORBEAM UPPER CHORD SURFACE AT BS 847 LBL4-RBL12 DURING 10 YEAR CHECK. ORIGINAL MATERIAL THICKNESS .150, MATERIAL LOSS .080. BEAM IS LOCATED IN LAV/GALLEY "WET" AREA.

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|---|---|---|---|
| 2009FA0000379 | BOEING | FLOORBEAM | CORRODED |
| 5/6/2009 | 7378Q8 | 147A5506 | FUSELAGE |

OUT OF LIMITS CORROSION FOUND ON FLOORBEAM UPPER CHORD AT BS 986.5 RBL26-30, LOWER SURFACE AROUND CLIPNUT HOLES DURING 10 YEAR CHECK. ORIGINAL MATERIAL THICKNESS .150, MATERIAL LOSS .070, BEAM IS LOCATED IN LAV/GALLEY "WET" AREA.

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|---|---|---|---|
| 2009FA0000351 | BOEING | INTERCOSTAL | CRACKED |
| 5/4/2009 | 7378Q8 | 141A541012 | ZONE 100 |

FLOOR INTERCOSTAL CRACKED BS 312-328 LBL 46. REMOVED AND REPLACED FLOOR INTERCOSTAL BS 312-328 LBL 46 IAW SRM 51-40-02 FIGS 8 AND 12.

| | | | |
|---|---|---|---|
| 2009FA0000352 | BOEING | FLOORBEAM | CORRODED |
| 5/4/2009 | 7378Q8 | 147A5504 | ZONE 100 |

CORROSION ON FLOORBEAM UPPER CHORD UPPER SURFACE BS 947 LBL 4-RBL 12. REPAIRED FLOORBEAM UPPER CHORD UPPER SURFACE BS 947, LBL4-RBL 12 IAW SRM 53-00-51 FIG 203.

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|---|---|---|---|
| 2009FA0000353 | BOEING | INTERCOSTAL | CRACKED |
| 5/4/2009 | 7378Q8 | 141A541012 | ZONE 100 |

FLOOR INTERCOSTAL CRACKED BS 328-334 RBL 34. REMOVED AND REPLACED INTERCOSTAL BS 328-334 RBL 34 IAW SRM 51-40-02 FIGS 8 AND 12.

| | | | |
|---|---|---|---|
| 2009FA0000354 | BOEING | ATTACH FITTING | CRACKED |
| 5/4/2009 | 7378Q8 | 143A7502U13 | BS 500E |

FWD CARGO COMPARTMENT BS 500E FRAME ATTACH CLIP CRACKED JUST BELOW STR 25 LT. REMOVED AND REPLACED FWD CARGO COMPARTMENT BS 500E FRAME ATTACH CLIP JUST BELOW STR 25 LT IAW SRM 51-40-02 FIGS 8 AND 12.

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|---|---|---|---|---|
| 2009FA0000355 | BOEING | | ATTACH FITTING | CRACKED |
| 5/4/2009 | 7378Q8 | | 143A7502U13 | BS 500G |

FWD CARGO COMPARTMENT BS 500G FRAME ATTACH CLIP CRACKED JUST BELOW STR 25 LT. REMOVED AND REPLACED FWD CARGO COMPARTMENT BS 500G FRAME ATTACH CLIP JUST BELOW STR 25 LT IAW SRM 51-40-02 FIGS 8 AND 12.

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|---|---|---|---|---|
| 2009FA0000356 | BOEING | | WEB | CRACKED |
| 5/4/2009 | 7378Q8 | | 147A57123 | BS 986 |

FLOOR LEVEL WEB CRACKED BS 986.5 RBL 44 REMOVED, FABRICATED,AND INSTALLED FLOOR LEVEL WEB BS986.5 RBL44 IAW B737-800 SRM 51-40-02 FIGS 3AND12 BOEING DWG PL 147A5712

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|---|---|---|---|---|
| CA090421009 | BOEING | RROYCE | ALTIMETER | INOPERATIVE |
| 4/17/2009 | 757236 | RB211535E4 | LK359 | STANDBY |

(CAN) ACFT HAD AN IN-FLIGHT TURN-BACK DUE TO CABIN ALT WARNING AND CAB AUTO CAUTION ON EICAS. ACFT ARRIVED BACK ON THE GATE WITH OUTFLOW VALVE CLOSED AND CABIN PARTIALLY PRESSURIZED. MX REPLACED, TESTED OUTFLOW VALVE AND ACFT DEPARTED AGAIN ONLY TO RETURN WITH SAME PROBLEM. PRESSURIZATION SELECTOR PANEL AND CABIN PRESSURE CONTROLLERS WERE REPLACED AND WIRING CHECKED. A MX VERIFICATION FLIGHT WAS CARRIED OUT WITH SAME RESULT. MFG WAS CONTACTED WHO SUGGESTED CHANGING THE STANDBY ALTIMETER. THE STANDBY ALTIMETER INTERFACES WITH CABIN PRESSURE CONTROLLERS AND IF THE AIR DATA SIGNALS FROM THE RECEIVERS TO CONTROLLERS ARE INVALID THE CONTROLLER WILL "AUTO FAIL" AND STORE A CONTROLLER FAULT. THIS FAULT IS INHIBITED ON GROUND AND CAN ONLY BE CONFIRMED IF THE ACFT IS IN FLIGHT MODE. THE STANDBY ALTIMETER HAD BEEN REPLACED AS A SCHEDULED COMPONENT CHANGE PRIOR TO EVENT AND FAILED ON INSTALL.

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|---|---|---|---|---|
| CA090408003 | BOEING | GE | TRANSMISSION | MALFUNCTIONED |
| 4/6/2009 | 777333ER | GE90115B | 256W311010 | TE FLAPS |

(CAN) ACFT DEFECT LOG SNAG RAISED FOR FLAP DRIVE FAILURE WHEN RETRACTING FLAPS FROM 20 UNITS TO 5 UNITS. DURING FAULT ISOLATION, FOUND NR 8 TRANSMISSION WITH (TRIPPED) TORQUE INDICATOR. INDICATOR RESET. HIGH LIFT SYS GROUND TEST CARRIED OUT AND TRIP INDICATOR REMAINED SET. ACFT RETURNED TO SERVICE. APRIL 3RD, 2009 ACFT DEFECT LOG SNAG RAISED FOR FLAP DRIVE FAILURE. ACFT LANDED WITH FLAPS 5, OVERWEIGHT. FOUND NR 8 FLAP TRANSMISSION TORQUE INDICATOR TRIPPED FOR THE SECOND TIME SINCE JANUARY 22ND. REPLACED NR 8 FLAP TRANSMISSION.

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|---|---|---|---|---|
| 2009FA0000376 | BOLKMS | | SOCKET | LOOSE |
| 4/27/2009 | BO105CBS | | 40T16K | COCKPIT |

LIGHT SOCKET WILL NOT STAY IN RECEPTACLE. FOUND CAUSE TO BE WORK CATCH OF ASSEMBLY. AGE COULD BE MAIN FACTOR, 27 YRS OLD. (K)

| | | | | |
|---|---|---|---|---|
| CA090309004 | BOLKMS | ALLSN | FEEDER CABLE | CHAFED |
| 2/17/2009 | BO105S | 250C20B | P26E2 | GENERATOR |

(CAN) DURING A 600 HRS AIRFRAME INSP, THE GENERATOR OUTPUT CABLE OF ENGINE NR 2 WAS FOUND CHAFING ON THE MAIN RELAY BOX 1VE. THE SHEATH OF THE CABLE WAS WORN TO THE POINT WHERE THE CONDUCTOR WAS EXPOSED. A NEW WIRE WAS INSTALLED.

| | | | | |
|---|---|---|---|---|
| CA090407014 | BOLKMS | ALLSN | TUBE | CHAFED |
| 4/7/2009 | BO105S | 250C20B | 112145174 | HYDRAULIC SYS |

(CAN) DURING ANNUAL INSP OF HYDR BOOSTER 2 METAL TAGS OF PRESSURE AND RETURN FLEXIBLE LINE OF THE HYDR PUMP WERE CONTACTING 2 HYDR TUBES CAUSING CHAFING. HYDR TUBES ARE EAR OUT OF LIMIT CAUSING THE PARTS TO BE UNSERVICEABLE.

| | | | | | |
|---|---|---|---|---|---|
| CA090421006 | BOLKMS | ALLSN | AEROFLASH | LENS | SPALLED |
| 4/2/2009 | BO105S | 250C20B | X2B | 1110001 | ANTI COLLISION |

(CAN) SPALLS IN UPPER EDGE OF ATTACHMENT FLANGE.

| | | | | |
|---|---|---|---|---|
| CA090421005 | BOMBDR | PWC | HEATER | INOPERATIVE |
| 4/20/2009 | DHC8400 | PW150A | C14135DA | STATIC PROBE |

(CAN) ON APPROACH, PITOT HEAT CAUTION LIGHT ILLUMINATED FOLLOWED BY AIRSPEED MISMATCH MESSAGE, ALTITUDE FAIL MESSAGE, AUTO PILOT/YAW DAMPER DISCONNECTED, AND SEVERAL OTHER CAUTION LIGHTS. UNEVENTFUL LANDING COMPLETED MX CONFIRMED THE NR1 PITOT/STATIC PROBE HEATER WAS NOT WORKING. REPLACED NR1 PITOT PROBE. FULL FUNCTION TEST OF NR 1 AND NR 2 PITOT STATIC SYS, NO FAULTS NOTED. ACFT RETURNED TO SERVICE.

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|---|---|---|---|---|
| CA090407001 | BOMBDR | PWC | SENSOR | MALFUNCTIONED |
| 4/3/2009 | DHC8400 | PW150A | 312244801 | OIL PRESSURE |

CREW REPORT VIA ACARS THAT THE NR 1 ENGINE WAS FLUCTUATING BETWEEN 77 TO 105 PSID, THEN INCREASED TO 178 PSI. THE OIL TEMP WAS INCREASING RAPIDLY. CREW ELECT TO SHUT DOWN ENGINE. MAIN OIL PRESSURE SENSOR REPLACED, AIRCRAFT RETURN TO SERVICE.

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|---|---|---|---|---|
| CA090417003 | BOMBDR | PWC | ACTUATOR | MALFUNCTIONED |
| 4/3/2009 | DHC8400 | PW150A | 800600M03 | OIL COOLER EXIT |

AT AROUND FL 120, OIL TEMPERATURE NR 2 ENGINE WAS OBSERVED IN THE RED RANGE (AROUND 110 DEGREES). RETURNED TO BASE. ON DESCENT WITH POWER REDUCTION, TEMPERATURE WENT OUT OF RED. AN UNEVENTFUL LANDING COMPLETED. CDS INTERROGATED, NO FAULT CODES FOUND. TROUBLE SHOOTING CARRIED OUT, OIL COOLER AIR OUTLET FLAP FOUND STUCK IN CLOSED POSITION. OIL COOLER AIR OUTLET FLAP ACTUATOR REPLACED AND TESTED SERVICEABLE IAW AMM CH 79-21-31. CDS SHOWED POWERPLANT EXCEEDANCE OF OIL TEMP AT PEAK 111 DEG C FOR 457 SECONDS. AREA B INSPECTION SUBTASK 05-53-00-680-002 CARRIED OUT, NO CHIP DETECTION INDICATIONS. MAIN AND SCAVENGE (RGB) OIL FILTERS REMOVED, INSPECTION CARRIED OUT, NIL CONTAMINATION. ENGINE OIL SYSTEM DRAINED AND REFILLED. ENGINE GROUND RUN CARRIED OUT, LEAK CHECK SATIS. RT ENGINE GROUND RUN AT CLIMB POWER FOR 15-20 MINUTES, ALL INDICATIONS NORMAL. CDS INTERROGATED, NIL FURTHER FAULTS OR EXCEEDANCE NOTED.

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|---|---|---|---|---|
| CA090417001 | CESSNA | CONT | CONTROL CABLE | INTERFERENCE |
| 4/16/2009 | 150F | O200A | | COCKPIT |

DURING DAILY PREFLIGHT INSPECTION RUBBING SOUNDS HEARD UNDER CABIN FLOOR WHEN MOVING CONTROL YOLK LEFT AND RIGHT (ROLL AXIX). INVESTIGATION OF SOUND REVEALED THAT TWO SCREWS (P/N S1021Z8-10) HOLDING STAINLESS STEEL SCUFFBOARD PLATE (P/N 04130264-4) TO CABIN FLOOR PROTRUDED THROUGH CABIN FLOOR, INTERFERED WITH AND RUBBED ON AILERON CONTROL CABLES (P/N 0400107-41). CABLES EXHIBITED RUB MARKS. POTENTIAL EXISTS THAT SCREWS COULD SEVER CONTROL CABLES LEADING TO LOSS OF AILERON CONTROL.

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|---|---|---|---|---|
| CA090406007 | CESSNA | CONT | STIFFENER | CRACKED |
| 5/10/2008 | 150M | O200A | 04102362 | FUSELAGE |

(CAN) SEAT RAIL SUPPORT STIFFENER CRACKED, PART REPLACED WITH NEW.

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|---|---|---|---|---|
| CA090411001 | CESSNA | CONT | BULKHEAD | CRACKED |
| 4/11/2009 | 150M | O200A | 04500465 | PROP SPINNER |

(CAN) PROPELLER BULKHEAD CRACKED.

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|---|---|---|---|---|
| CA090421007 | CESSNA | CONT | FUEL CONTROL | FIRE |
| 4/16/2009 | 150M | O200A | | |

(CAN) ENGINE EXPERIENCED BEFORE FIRE WHICH MELTED INDUCTION FILTER. FIRE EXTINGUISHING PROCEDURE UTILIZED CONTAMINATED INDUCTION SYS, INDUCTION SYS PULLED, CLEANED AND INSPECTED CORRECT. CARBURETOR REPLACED WITH SERVICEABLE UNIT AS A PRECAUTIONARY. ALL REASSEMBLED AND ENGINE GROUND RUN CORRECT. NO PRIME WAS REQUIRED ON START TO GET ENGINE GOING. ENGINE WAS PRIMED PRIOR TO ATTEMPTED START PRIOR TO THE FIRE, SUSPECT OVER PRIMING.

| | | | | |
|---|---|---|---|---|
| CA090421008 | CESSNA | CONT | WIRE | MELTED |
| 4/19/2009 | 150M | O200A | | PITOT HEAT |

(CAN) DURING ROLL AIR SPEED DID NOT BECOME ACTIVE, TAKEOFF ABORTED. CREW NOTICED PITOT HEAT ON WHEN THEY TOOK OVER THE ACFT. INVESTIGATION REVEALED THAT WIRING TO PITOT MAST (PWR FOR PITOT HEAT) HAD MELTED THE PITOT LINE. DAMAGED SECTION REMOVED AND PITOT LINE RE-SECURED AND LEAK TESTED CORRECT. INVESTIGATING CHANGING FIRST 3 INCHES OF LINE TO METAL SO IF HEAT INCREASE TO A LEVEL ON THE PWR LINES THAT THEY DO NOT CAUSE THE LOSS OF AIRSPEED. ACFT WAS FLYING ALL WINTER IN THIS CONFIGURATION, SUSPECT INCREASE OF OUTSIDE TEMP DID NOT ALLOW HEAT TO DISSIPATE. IF PITOT HEAT SWITCH WAS LT IN THE ON POSITION FOR AN EXTENDED PERIOD OF TIME.

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|---|---|---|---|---|---|
| CA090414003 | CESSNA | LYC | | CRANKCASE | CRACKED |
| 4/11/2009 | 152 | O235L2C | | 0235L2C | ENGINE |

(CAN) CATASTROPHIC ENGINE FAILURE, WHEN CRANKCASE CRACKED, CAUSED ENGINE TO SEIZE IN FLIGHT.

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|---|---|---|---|---|---|
| CA090415006 | CESSNA | LYC | | BRACKET | CRACKED |
| 4/10/2009 | 152 | O235L2C | | 04320049 | HORIZONTAL STAB |

(CAN) CRACK ALONG THE MFG WELD AND THROUGHOUT NUT PLATE HOLES.

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|---|---|---|---|---|---|
| CA090415007 | CESSNA | LYC | CESSNA | BRACKET | CRACKED |
| 4/14/2009 | 152 | O235L2C | 04320204 | 04320049 | HORIZONTAL STAB |

(CAN) BRACKET CRACKED ALONG MFG WELD.

| | | | | | |
|---|---|---|---|---|---|
| CA090417004 | CESSNA | LYC | | ENGINE | FAILED |
| 4/13/2009 | 152 | O235L2C | | | |

(CAN) FORCED LANDING AFTER ENGINE FAILURES. MAJOR DAMAGE TO AIRCRAFT RIGHT WING, PROPELLER, RIGHT SIDE FUSELAGE, NOSE LANDING GEAR. LIMITED DAMAGE LEFT WING. ACFT REMAINED UPRIGHT, STRUCK TREES. WHEN REMOVING BATTERY TO SECURE ACFT IT WAS OBSERVED THAT THE ENGINE CRANKCASE IS BROKEN/SPLIT BETWEEN CYLINDERS 2 AND 4 AND THAT THE PROPELLER ROTATES FREELY THROUGH A LIMITED ARC (ABOUT 80° LEST). CRANKSHAFT FAILURE SUSPECTED.

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|---|---|---|---|---|---|
| 2009FA0000337 | CESSNA | LYC | | OIL FILTER | COLLAPSED |
| 4/17/2009 | 172I | O360A4M | | ES481101 | ENGINE |

OIL FILTER INTERNALLY COLLAPSED CAUSING THE EXCESSIVE OIL PRESSURE TO BLOW OUT MATING SURFACE SEAL. OIL WAS THEN EXHAUSTED, SUBSEQUENT ENGINE SEIZURE OCCURRED. (K)

| | | | | | |
|---|---|---|---|---|---|
| 2009FA0000341 | CESSNA | LYC | | CRANKSHAFT | CORRODED |
| 4/23/2009 | 172M | O320E2D | | | ENGINE |

DURING AN ANNUAL INSP, PROPELLER & CRANKSHAFT PLUG REMOVED TO COMPLY WITH AD 98-02-08. CORROSION ON INSIDE OF CRANKSHAFT FROM PLUG SHOULDER .7500 - 1 INCH AFT. ACCORDING TO THE AD, AFTER INSIDE OF CRANKSHAFT HAS BEEN PAINTED IAW SB505 THERE IS NO LONGER ANY NEED TO INSPECT CRANKSHAFT FOR CORROSION SINCE SPECIAL PROCEDURE FOR DOING SO PREVENTS ANY CORROSION FROM OCCURRING. IN THIS CASE, IF FAILED TO DO SO. THERE IS APPROX 1800 HRS ON ENGINE SINCE OVERHAUL BY FACTORY & SUSPECT THAT THIS IS NOT AN ISOLATED CASE. PERFORMED A FLUORESCENT PARTICLE INSP WITH NO EVIDENCE OF CRACKS. RECOMMEND THAT EXAMINATION AT 500 HRS TIME IN SERVICE SINCE "PID" WAS DONE & AT EVERY 100 HRS THEREAFTER UNTIL MFG CAN COME UP WITH A BETTER SOLUTION.

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|---|---|---|---|---|---|
| CA090425001 | CESSNA | LYC | | ENGINE | MAKING METAL |
| 4/17/2009 | 172M | O320E2D | | | |

(CAN) INITIALLY FAXED IN SDR APRIL 22, 2009. LOSS OF OIL PRESSURE INDICATION APPROX 5 MILES AFTER TAKE OFF, PILOT RETURNED TO AIRPORT. WHEN MX GOT THERE AND GROUND RUN ACFT OIL PRESSURE INDICATION NORMAL BUT OIL TEMP NOTICED HIGH. REMOVED AND INSPECTED OIL FILTER AND SUMP SCREEN. METAL CONTAMINATION FOUND ENGINE REMOVED TO BE SENT FOR OVERHAUL.

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|---|---|---|---|---|---|
| CA090416003 | CESSNA | LYC | PRECISIONWND | FLOAT | DAMAGED |
| 4/8/2009 | 172M | O320E2D | MA4SPA | 30804 | CARBURETOR |

(CAN) ENGINE QUIT DURING STALL PRACTICE. ENGINE WAS RESTARTED AFTER LOSING 2000 FT. RETURNED TO

AIRPORT WITH NO FURTHER TROUBLE. ENGINE HAD ROUGH IDLE , AFTER LENGTHY TROUBLESHOOTING IT WAS DECIDED TO REPLACE THE CARBURETOR. UPON INTERNAL INSP OF THE CARB ONE OF THE FLOATS WAS FOUND TO BE AT LEAST HALF FULL OF FUEL.

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|---|---|---|---|---|---|
| CA090407003 | CESSNA | LYC | CESSNA | CONTROL CABLE | BROKEN |
| 4/5/2009 | 172N | O320H2AD | 172N | S123015 | CARB HEAT |

(CAN) DURING PRE-FLIGHT CHECKS OF ACFT ON APRIL 5, 2009 AT 8195.2 TAT, THE PILOT REPORTED THAT THE CARBURETOR HEAT CONTROL KNOB CAN BE PULLED OUT OF THE PANEL. NOT CONNECTED. ACFT REMOVED FROM SERVICE. MX PERSONNEL INSPECTED AND FOUND THAT THE CARBURETOR HEAT CONTROL CABLE HAD BROKEN AT THE AIRBOX ATTACH POINT. THE CONTROL CABLE WAS REPLACED, RIGGED, SAFETIED AND DUALED. ACFT WAS RETURNED TO SERVICE.

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|---|---|---|---|---|
| CA090407004 | CESSNA | LYC | NUT | SEPARATED |
| 3/4/2009 | 172N | O320H2AD | | ACTUATING KNOB |

KNOB JAM NUT BECAME SEPARATED FROM ACTUATING KNOB.

| | | | |
|---|---|---|---|
| 2009FA0000336 | CESSNA | ACTUATOR | CRACKED |
| 4/19/2009 | 172RG | 98820152 | MLG |

THE RADIUS ON THE GEAR ACTUATOR HOUSING THAT HOUSES THE SEGMENTED GEAR CRACKED ALONG THE FWD BOLT HOLE AND ALLOWED THE RACK TO JUMP A TOOTH WHEN RETRACTING THE GEAR. UPON BRINGING THE GEAR DOWN FOR LANDING THE RT GEAR DIDN'T COME INTO PLACE. A PASSENGER WAS ABLE TO PHYSICALLY PULL THE RIGHT LANDING GEAR INTO A DOWN AND LOCKED POSITION AND THEY LANDED NORMALLY.

| | | | | | |
|---|---|---|---|---|---|
| 2009FA0000392 | CESSNA | CONT | CONT | FLANGE | WARPED |
| 5/11/2009 | 175 | GO300A | | 35342 | ENGINE |

WHILE LOOKING FOR THE SOURCE OF AN OIL LEAK FOUND THE TACHOMETER DRIVE ADAPTER HOUSING FLANGE WARPED AND CRACKED.

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|---|---|---|---|---|
| CA090501005 | CESSNA | CONT | BULKHEAD | CRACKED |
| 4/29/2009 | 180C | O470K | D7524 | PROPELLER |

(CAN) BULKHEAD CRACKS NEAR THE PROP BOLT ATTACH POINTS, SPINNER SUPPORT MATERIAL SEEMS TO BE TOO SOFT, IT ROTATES IN THE SPINNER, ALLOWING THE SPINNER TO VIBRATE AND CRACK THE BULKHEAD, ALL THE PROPER SHIMS AND INSTALLATION IS DONE WITH THE INSTRUCTIONS SUPPLIED. THIS IS THE 3RD BULKHEAD REPLACED ON THIS ACFT SINCE AUG/07, THIS ENG WAS OVERHAULED LAST SPRING, NO ENGINE VIBRATION REPORTED.

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|---|---|---|---|---|
| CA090424004 | CESSNA | CONT | CABLE | FRAYED |
| 4/23/2009 | 182A | O470LCI | 051010521 | FLAP CONTROL |

(CAN) FWD FLAP RETURN CABLE INSPECTED IN AREA UNDER PHENOLIC 1 INCH PULLEY AFT OF STN 44. FOUND ONE SHINY WEAR SPOT. ON REMOVAL DISCOVERED APPROX 7 WIRES BROKEN AT SHINY SPOT UNDER PULLEY AND APPROX 10 WIRES BROKEN AT FRAYED SPOT APPROX 2 INCHES FWD WHERE THE CABLE PASSES UNDER A PHENOLIC GUIDE MOUNTED BEHIND THE FUEL VALVE. CABLE IS .0937, 7X19 GALV THERE IS VERY LITTLE ANGULAR DEVIATION AT THE PULLEY AND THIS RESULTS IN LITTLE PRESSURE OF THE CABLE ON THE PULLEY WHICH MEANS THAT IT "BUZZES" AGAINST THE PULLEY WHILE THE SYS IS IN IT`S NORMAL CONFIGURATION (FLAPS UP) BECAUSE OF ACCESS AND MULTIPLE CABLES ETC THIS IS DIFFICULT SPOT TO INSPECT AND THE WEAR MARK IS TYPICALLY ONLY .2500 INCH LONG. THIS WEAR POINT IS TYPICAL OF ALL ACFT USING THIS FLAP CABLE SYS (C-180 AND C-185) AND THIS IS NOT THE FIRST INSTANCE OF WEAR BEING FOUND IN THIS AREA. THE FRAYED SPOT FOUND AFTER REMOVAL COMES AS A RESULT OF WEAR ON THE GUIDE ON THE FUEL VALVE MOUNTING BRACKET. THIS SPOT ON THE CABLE IS VERY DIFFICULT TO SEE. THIS GUIDE IS NOT PRESENT IN LATER MODELS TO MY KNOWLEDGE AND AS A RESULT WAS NOT "LOOKED FOR" DURING THE INSPECTION. FAILURE OF THIS UP CABLE WOULD RESULT IN GRAVITY DEPLOYMENT OF THE FLAPS. BECAUSE THIS IS A "CLOSED" CABLE SYS FAILURE OF THE CABLE WOULD ALLOW A SPLIT FLAP CONDITION (DIFFERENT FLAP ANGLES).

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|---|---|---|---|---|
| 2009FA0000367 | CESSNA | CONT | CABLE | FRAYED |
| 5/5/2009 | 182R | O470U | | PROP GOVERNOR |

UPON APPLYING FULL THROTTLE FOR TAKEOFF, THE PILOT NOTED THAT THE ENGINE ONLY REACHED 2000 RPM. TAKEOFF WAS ABORTED AND A VISUAL CHECK OF THE PROPELLER GOVERNOR WAS MADE. THE MX RATED PILOT DETERMINED THAT THE CONTROL WAS STICKING BEFORE REACHING THE HIGH RPM STOP. DURING FURTHER FUNCTIONAL TESTING THE CABLE FROZE, THEN BROKE AT THE AFT END OF THE CABLE.

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|---|---|---|---|---|
| 2009FA0000366 | CESSNA | PWA | TURBINE | FAILED |
| 5/5/2009 | 208 | PT6A114 | | ENGINE |

ON LANDING THE PILOT SAID HE HEARD A POP AND THE ENGINE STARTED TO SPOOL DOWN. HE PULLED OFF THE RUNWAY AND STOPPED BUT THEN SAW SMOKE COMING FROM THE EXHAUST AND THOUGHT IT WAS RESIDUAL FUEL. HE THEN MOTORED THE ENGINE AND THE SMOKE TURNED BLACK. HE CALLED THE FBO AND THEY EXTINGUISHED THE FIRE. A VISUAL INSPECTION OF THE ENGINE REVEALED THAT IT EXPERIENCED AN OVERTEMP CONDITION AND THE TURBINE BLADES WERE MELTED. PARTS OF TURBINE BLADES WERE FOUND ON THE RUNWAY WHERE THE PILOT HAD JUST LANDED. THE ENGINE HAD ONLY 5 HOURS TIME SINCE A MAJOR OVERHAUL.

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|---|---|---|---|---|
| CA090407016 | CESSNA | PWA | TUBE | SPLIT |
| 4/6/2009 | 208 | PT6A114 | 302120402 | TIRE |

(CAN) ACFT WAS SITTING AT THE HANGER OVERNIGHT. IN THE MORNING THE PILOTS PREPARED THE ACFT FOR THE MORNING FLIGHT. THEY TAXIED TO THE RUNWAY AND ALIGNED THE ACFT ON RUNWAY 28 FOR DEPARTURE WHEN THE LT MAIN TIRE WENT FLAT. MX WAS CALLED AND THE TIRE REPLACED. WHEN WE INVESTIGATED THE DISASSEMBLY OF THE TIRE ASSY THE TUBE INSIDE HAD A LARGE SPLIT THERE WAS NO EVIDENCE OF ANY ROUGH SPOTS OR ANY ANOMALY'S ON THE INSIDE OF THE TIRE. THE TIRE WAS INSTALLED ON THE ACFT 8 WEEKS PRIOR AND HAD A TOTAL OF 89 LANDINGS BEFORE REMOVAL. THE TIRE, PN 301-124-006 AND A TUBE, PN 302-120-402.

| | | | | |
|---|---|---|---|---|
| CA090415008 | CESSNA | PWA | FITTING | CORRODED |
| 4/9/2009 | 208 | PT6A114A | 8A02100003 | FLOAT |

(CAN) THE STRAIGHT FLOATS ARE FITTED TO ACFT. THE FWD FLYING WIRE ATTACH BRACKET WAS FOUND CORRODED. THIS ACFT HAS STAINLESS FLYING WIRES AND CLEVIS ENDS FITTED FROM THE MFG. IT APPEARS NO CORROSION PREVENTATIVE PRODUCTS WERE USED ON ASSEMBLY. THE DISSIMILAR METALS AND HIGH STRESS AREA CONTRIBUTED TO THE ACCELERATED CORROSION. PART REPLACED WITH NEW UNIT.

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|---|---|---|---|---|
| CA090409001 | CESSNA | PWA | TIRE | DEFLATED |
| 4/5/2009 | 208B | PT6A114A | | LT MLG |

(CAN) AFTER LANDING THE CREW WAS UNABLE TO MOVE THE ACFT OFF THE RUNWAY DUE TO A FLAT MAIN LT TIRE. THE TIRE WAS CHANGED AND ACFT REMOVED FROM RUNWAY. THE COMPANY IS AWAITING TEARDOWN OF THE WHEEL TO SEE WHAT THE FAULT WAS IF DETERMINABLE.

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|---|---|---|---|---|
| 2009FA0000342 | CESSNA | PWA | ROD BEARING | DEFECTIVE |
| 4/30/2009 | 208B | PT6A114A | MW3TM12 | TE FLAP ROD |

DEFECT REPORT GENERATED BASED ON A FAILURE THAT THE MX FOUND BY CHANCE WHILE PERFORMING ANOTHER INSP. FWDING FOR YOUR REVIEW AND SUBMITTAL THROUGH THE QC DEPARTMENT.. MX FOUND ONE OF THESE FLAP CONTROL ROD ENDS TO BE DEFECTIVE WHILE PERFORMING OTHER MX AND UPON FURTHER INSPECTION, THEY FOUND 6 MORE THAT HAD FAILED IN THE SAME MANNER. IT APPEARS THAT THE STAKING PROCESS MAY HAVE BEEN INSUFFICIENT DURING THE MFG OF THE ROD ENDS.

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|---|---|---|---|---|
| CA090408008 | CESSNA | PWA | ENGINE | FLAMED OUT |
| 4/1/2009 | 208B | PT6A114A | | |

(CAN) AT FL60, THE CHIP DETECTOR LIGHT CAME ON FOLLOWED BY ENGINE FLAMEOUT. A RE-LIGHT ATTEMPT WAS UNSUCCESSFUL AND A FORCED LANDING WAS ACCOMPLISHED ON A FROZEN LAKE WITH NO DAMAGE TO THE ACFT. THE OPERATOR WILL PROCEED WITH THE ENGINE CHANGE AND DECIDE ON AN ACTION COURSE FOR THE DAMAGED ENGINE AFTERWARDS. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT

CAUSE ONCE ESTABLISHED.

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|---|---|---|---|---|
| CA090430001 | CESSNA | CONT | MOTOR | OVERHEATED |
| 4/16/2009 | 210R | IO520L | 98811411 | MLG |

(CAN) DURING CRUISE ALTERNATOR NR 1 WENT "OFF LINE", IMMEDIATELY NR 2 WENT OFF AS WELL. LARGE ELEC PWR DRAW ON AMMETER NOTICED, STRONG ODOR & SMOKE NOTED FROM LOWER LT SIDE OF CONSOLE. EMERGENCY DECLARED & BATTERY MASTER TURNED OFF. MLG EXTENDED MANUALLY, & LANDED. ACFT INSPECTED & NO BURNED WIRES OR COMPONENTS FOUND IN CONSOLE AREA. SUSPECTED THE GEAR MOTOR AT FAULT. ACFT RETURNED TO BASE WITH MLG MOTOR CIRCUIT BREAKER OUT & MLG IN DOWN POSITION. AT BASE, DETERMINED THE MLG MOTOR HAD OVER-HEATED & NOT WORKING NORMALLY. SYS PRESSURE SWITCH FOUND TO BE STICKING INTERMITTENTLY. SINCE GEAR MOTOR CIRCUIT BREAKER DID NOT POP IN FLT SAFETY HAS A CONCERN & MLG MOTOR, MLG MOTOR CIRCUIT BREAKER, PRESS SWITCH, RELAY & 2 DIOIDES SENT FOR EVALUATION. 2ND REPORT OF INCIDENT. DURING SUBSEQUENT MX, DIODE FROM MOTOR TO RED MLG UNSAFE LIGHT FOUND BURNED OUT. MLG CAN BE UP & LOCKED WITH MLG MOTOR STILL RUNNING & RED UNSAFE LIGHT WOULD GO OUT. MLG MOTOR COULD BE RUNNING WITH NO COCKPIT VISUAL WARNING.

| | | | | |
|---|---|---|---|---|
| 2009FA0000365 | CESSNA | | HEATER PUMP | FAILED |
| 4/27/2009 | 340CESSNA | | CD21586 | CABIN |

THE HEATER ASSY IS OF POOR QUALITY AND THE AIRWORTHINESS OF ITS DESIGN NEEDS TO BE RE-EVALUATED. APRIL 16, 2009 HEATER PUMP FAILED. THE HEATER PUMP WAS REPLACED WITH A NEW PUMP AND OPERATIONALLY CHECKED GOOD. (K)

| | | | | |
|---|---|---|---|---|
| CA090410001 | CESSNA | CONT | FITTING | OBSTRUCTED |
| 4/8/2009 | 402CESSNA | TSIO520E | | T/C OIL PRESS |

(CAN) ENGINE OIL PRESSURE FLUCTUATES AND DOWN TO 0 PSI WHILE REDUCED POWER TO LAND, PILOT SHUTDOWN ENGINE AND LAND SAFELY. FURTHER INVESTIGATION REVEALED OIL PRESSURE LINE REDUCER FITTING ON TURBOCHARGER PRESSURE LINE PLUGGED BY SLUDGE. FITTING CLEANED AND RE-INSTALLED. CALIBRATED GAUGE INSTALLED ON PRESSURE LINE, ENGINE RUN, OIL PRESSURE PARAMETER FOUND IN NORMAL RANGE.

| | | | | |
|---|---|---|---|---|
| 2009FA0000359 | CESSNA | | CRANKCASE | CRACKED |
| 5/1/2009 | 421C | | | ENGINE |

CRANKCASE CRACKED FWD OF THE NR 5 CYLINDER LOWER FRONT HOLD DOWN SFOD. CRANKCASE HAD BEEN REPAIRED AT ANOTHER CYL PREVIOUSLY. (K)

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|---|---|---|---|---|
| 2009FA0000389 | CESSNA | | ATTACH ANGLE | CRACKED |
| 5/8/2009 | 425 | | 595404476 | LT NACELLE |

LT INBD ENGINE NACELLE TO WING STRUCTURAL ATTACH POINT (ANGLE). CRACKED AT MID-POINT IN RADIUS. DISCOVERED DURING SID INSPECTION.

| | | | | |
|---|---|---|---|---|
| 2009FA0000384 | CESSNA | PWA | TRIM SYSTEM | OUT OF RIG |
| 5/7/2009 | 425 | PT6* | | ELEVATOR TAB |

FOUND ELEVATOR TRIM TAB HORN CONTACTING ELEVATOR SKIN AT 15 DEGREES TAB DOWN AND TRIM CABLE CAN NOT BE WRAPPED AT SERVO IAW MM. CALLED TECH SUPPORT, SENT AN E-MAIL STATING THAT THE RIGGING PROCEDURE FOR THE TRIM IS INCORRECT IN THE MM. MFG WILL CHANGE THE M/M. INSTALLED NEW TRIM TAB CONTROL ROD MOUNT HARDWARE: BOLTS 2 EACH P/N NAS464P4-8., BOLTS 2 EACH P/N NAS464P4-9., NUTS 4 EACH P/N MS17825-4. REINSTALLED ALL ITEMS REMOVED FOR CABLE INSPECTION. RIGGED ELEVATOR TRIM SYS IAW TECH SUPPORT INSTRUCTIONS. TAB DOWN STOP CONTACTS AT THE SAME TIME AS HORN CONTACTS ELEVATOR SKIN PRIOR TO FULL DEFLECTION. REFERENCE MM 27-00-00 AND 27-30-02.

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|---|---|---|---|---|
| 2009FA0000346 | CESSNA | | EXHAUST DUCT | CRACKED |
| 5/1/2009 | 441 | | 99103191 | LT ENGINE |

DURING THE SID INSPECTION THE LT ENG EXHAUST EDUCTOR WAS FOUND CRACKED. REMOVED EDUCTOR FOR REPAIR AND REINSTALLED.

| | | | |
|---|---|---|---|
| 2009FA0000348 | CESSNA | DOOR FRAME | CRACKED |
| 5/1/2009 | 441 | 57111454 | PAX DOOR |

DURING THE SID INSP THE LWR CABIN DOOR WAS DISASSEMBLED FOR INSP. THE MAIN DOOR FRAME WAS FOUND CRACKED IN THE RADIUS NEAR THE AFT HINGE LOCATION.

| | | | |
|---|---|---|---|
| 2009FA0000349 | CESSNA | ATTACH FITTING | DAMAGED |
| 5/1/2009 | 441 | | NOSE WHEEL WELL |

DURING THE SID INSP, THE NLG WAS REMOVED FOR INSP. THE DRAG BRACE LT AND RT BRG PLATE HOLES WERE ALL FOUND EXCESSIVELY ELONGATED REQUIRING STRUCTURAL REPAIR. SUSPECT DAMAGE WAS CAUSED BY NORMAL TOWING OVER THE LIFE OF THE ACFT. THIS WOULD NOT BE DETECTED UNLESS THE NOSE GEAR IS REMOVED AS REQUIRED BY THE SID INSP CALLED OUT IN THE LATEST MANUAL REVISION 16.

| | | | |
|---|---|---|---|
| 2009FA0000417 | CESSNA | PIVOT | CORRODED |
| 5/14/2009 | 441 | 5741100204 | MLG |

DURING THE SID INSP OF THE MLG TRAILING LINK, THE PIVOT PIN WAS FOUND TO HAVE EXCESSIVE AMOUNTS OF RUST AND PITS.

| | | | |
|---|---|---|---|
| 2009FA0000418 | CESSNA | BRACKET | DAMAGED |
| 5/14/2009 | 441 | 519152645 | RUDDER |

WITH THE RUDDER REMOVED FOR COMPLIANCE WITH THE SID INSP, THE LWR PIVOT BRACKETS WERE FOUND EXCESSIVELY ELONGATED AND REQUIRED REPLACEMENT.

| | | | |
|---|---|---|---|
| 2009FA0000419 | CESSNA | TORQUE TUBE | CORRODED |
| 5/14/2009 | 441 | 583301110 | RUDDER |

DURING THE SID INSP, FOUND THE RUDDER TORQUE TUBE HAD SOME RUST. THIS CAN ONLY BE FOUND WITH THE RUDDER REMOVED. REMOVING THE RUDDER IS NOT REQUIRED EXCEPT DURING THE SID INSP.

| | | | |
|---|---|---|---|
| 2009FA0000420 | CESSNA | HINGE | CORRODED |
| 5/14/2009 | 441 | 5111515200 | CABIN DOOR |

DURING THE SID INSP, THE UPPER CABIN DOOR WAS REMOVED FOR INSP. THE HINGE PIVOT BOLTS COULD NOT BE REMOVED BECAUSE THE BOLTS, BUSHINGS AND BRGS WERE ALL RUSTED SOLID. THIS CAUSED THE BOLTS TO PIVOT IN THE FUSELAGE STRUCTURE INSTEAD OF THE BRGS CAUSING EXCESSIVE WEAR OF THE FUSELAGE DOOR MOUNT HOLES. THERE IS NO REQUIREMENT TO REMOVE THE UPPER DOOR EXCEPT DURING THE SID INSP CALLED OUT IN THE LATEST MANUAL REVISION NR16. 5111515-200 5210.

| | | | |
|---|---|---|---|
| 2009FA0000399 | CESSNA | SKIN | DEBONDED |
| 5/12/2009 | 441 | | HORIZ STAB |

DURING THE SID INSP OF THE REMOVED HORIZONTAL STABILIZER, AREAS OF DIS-BOND WERE FOUND ON THE BOTTOM NEAR THE CENTER OF THE STABILIZER. IAW MFG, THIS IS A CRITICAL AREA OF THE HORIZONTAL STABILIZER.

| | | | | |
|---|---|---|---|---|
| 2009FA0000400 | CESSNA | CESSNA | BEARING | LOOSE |
| 5/12/2009 | 441 | | MS2123316 | LT MLG |

WITH THE LT MAIN GEAR REMOVED FROM THE WING FOR SID INSP, THE AFT TRUNNION BRG WAS FOUND VERY LOOSE IN THE AFT TRUNNION SUPPORT.

| | | | |
|---|---|---|---|
| 2009FA0000401 | CESSNA | DRAG BRACE | DAMAGED |
| 5/12/2009 | 441 | | NLG |

DURING THE SID INSP THE NLG WAS REMOVED FOR INSP. THE DRAG BRACE LT AND RT BRG PLATE HOLES WERE ALL FOUND EXCESSIVLY ELONGATED REQUIRING STRUCTURAL REPAIR. SUSPECT DAMAGE WAS CAUSED BY NORMAL TOWING OVER THE LIFE OF THE ACFT. THIS WOULD NOT BE DETECTED UNLESS THE NOSE GEAR IS REMOVED AS REQUIRED BY THE SID INSP CALLED OUT IN THE LATEST MANUAL REVISION 16.

| | | | | |
|---|---|---|---|---|
| 2009FA0000403 | CESSNA | | PIVOT ASSY | CORRODED |
| 5/12/2009 | 441 | | 5741100203204 | MLG |

DURING THE SID INSP OF MLG TRAILING LINK THE PIVOT PIN WAS FOUND TO HAVE EXCESSIVE AMOUNTS OF RUST.

| | | | | |
|---|---|---|---|---|
| 2009FA0000404 | CESSNA | | SKIN PANEL | DEBONDED |
| 5/12/2009 | 441 | | | HORIZ STAB |

DURING THE SID INSP, WITH THE HORIZONTAL STABILIZER REMOVED, DEBONDING WAS FOUND USING ULTRASOUND INSP ON THE BOTTOM CENTER WHERE THE LT AND RT PANELS ARE JOINED TOGETHER WITH FINGER DOUBLERS.

| | | | | |
|---|---|---|---|---|
| 2009FA0000405 | CESSNA | | HINGE | CORRODED |
| 5/12/2009 | 441 | | 5111515200 | CABIN DOOR |

DURING THE SID INSP THE UPPER CABIN DOOR WAS REMOVED FOR INSP. THE HINGE PIVOT BOLTS COULD NOT BE REMOVED BECAUSE THE BOLTS, BUSHINGS AND BRGS WERE ALL RUSTED SOLID. THIS CAUSED THE BOLTS TO PIVOT IN THE FUSELAGE STRUCTURE INSTEAD OF THE BRGS CAUSING EXCESSIVE WEAR OF THE FUSELAGE DOOR MOUNT HOLES. THERE IS NO REQUIREMENT TO REMOVE THE UPPER DOOR EXCEPT DURING THE SID INSP CALLED OUT IN THE LATEST MANUAL REVISION NR16.

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|---|---|---|---|---|
| 2009FA0000406 | CESSNA | | HINGE | CORRODED |
| 5/12/2009 | 441 | | 5111515200 | CABIN DOOR |

DURING THE SID INSP THE UPPER CABIN DOOR WAS REMOVED FOR INSP. THE HINGE PIVOT BOLTS COULD NOT BE REMOVED BECAUSE THE BOLTS, BUSHINGS AND BRGS WERE ALL RUSTED SOLID. THIS CAUSED THE BOLTS TO PIVOT IN THE FUSELAGE STRUCTURE INSTEAD OF THE BEARINGS CAUSING EXCESSIVE WEAR OF THE FUSELAGE DOOR MOUNT HOLES. THERE IS NO REQUIREMENT TO REMOVE THE UPPER DOOR EXCEPT DURING THE SID INSP CALLED OUT IN THE LATEST MANUAL REVISION NR 16.

| | | | | |
|---|---|---|---|---|
| 2009FA0000407 | CESSNA | | DRAG BRACE | DAMAGED |
| 5/12/2009 | 441 | | | NLG |

DURING THE SID INSP THE NLG WAS REMOVED FOR INSP. THE DRAG BRACE RT BRG PLATE HOLES WERE ALL FOUND EXCESSIVLY ELONGATED REQUIRING STRUCTURAL REPAIR. SUSPECT DAMAGE WAS CAUSED BY NORMAL TOWING OVER THE LIFE OF THE ACFT. THIS WOULD NOT BE DETECTED UNLESS THE NOSE GEAR IS REMOVED AS REQUIRED BY THE SID INSP CALLED OUT IN THE LATEST MANUAL REVISION 16.

| | | | | |
|---|---|---|---|---|
| 2009FA0000408 | CESSNA | | PIVOT | CORRODED |
| 5/12/2009 | 441 | | 5741100203204 | MLG |

DURING THE SID INSP OF THE MLG TRAILING LINK, THE PIVOT PIN WAS FOUND TO HAVE EXCESSIVE AMOUNTS OF RUST AND PITS.

| | | | | |
|---|---|---|---|---|
| 2009FA0000409 | CESSNA | CESSNA | BEARING | LOOSE |
| 5/12/2009 | 441 | | MS2123316 | L TMLG TRUNNION |

WITH THE LT MAIN GEAR REMOVED FROM THE WING FOR SID INSP, THE AFT TRUNNION BRG WAS FOUND VERY LOOSE IN THE AFT TRUNNION SUPPORT.

| | | | | |
|---|---|---|---|---|
| 2009FA0000410 | CESSNA | | MOUNT BRACKET | CRACKED |
| 5/12/2009 | 441 | | 58130441 | NLG ACTUATOR |

DURING THE SID INSP THE NLG WAS REMOVED FOR INSP. THE RETRACT ACTUATOR UPPER MOUNT WAS FOUND CRACKED WHICH ALLOWED THE DOWNLOCK OVER-CENTER TENSION TO BE REDUCED. THERE IS NO REEQUIREMENT TO REMOVE THE NLG EXCEPT DURING THE SID INSP CALLED OUT IN THE LATEST MANUAL REVISION 16. IT WOULD HAVE BEEN VERY DIFFICULT TO FIND THIS PROBLEM WITHOUT REMOVING THE NLG 5343 MOUNT BRACKET 5813044-1 (2EA.).

| | | | | | |
|---|---|---|---|---|---|
| 2009FA0000350 | CESSNA | GARRTT | | TORQUE TUBE | CORRODED |
| 5/1/2009 | 441 | TPE331* | | 583301110 | RUDDER |

DURING THE SID INSP, FOUND THE RUDDER TORQUE TUBE HAD SOME RUST. THIS CAN ONLY BE FOUND WITH THE RUDDER REMOVED. REMOVING THE RUDDER IS NOT REQUIRED EXCEPT DURING THE SID INSP.

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|---|---|---|---|---|---|
| 2009FA0000347 | CESSNA | GARRTT | | BEARING | CORRODED |
| 5/1/2009 | 441 | TPE331* | | | PAX DOOR |

DURING THE SID INSP THE UPPER CABIN DOOR WAS REMOVED FOR INSP. THE HINGE PIVOT BOLTS COULD NOT BE REMOVED BECAUSE THE BOLTS, BUSHINGS AND BEARINGS WERE ALL RUSTED SOLID. THIS CAUSED THE BOLTS TO PIVOT IN THE FUSELAGE STRUCTURE INSTEAD OF THE BEARINGS CAUSING EXCESSIVE WEAR OF THE FUSELAGE DOOR MOUNT HOLES. THERE IS NO REQUIREMENT TO REMOVE THE UPPER DOOR EXCEPT DURING THE SID INSP CALLED OUT IN THE LATEST MANUAL REVISION NR16.

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|---|---|---|---|---|---|
| 2009FA0000338 | CESSNA | | | SEAT BACK | BROKEN |
| 4/9/2009 | 501 | | | | UNKNOWN |

UPPER SEAT BASE ASSY CRACKED AT CHAIR BACK ATTACH POINTS. STRESS ON CHAIR BACK AND METAL FATIGUE PROBABLE CAUSE. CHAIR WAS REPAIRED IAW PROCEDURE STC ST01043WI. (K)

| | | | | | |
|---|---|---|---|---|---|
| 2009FA0000391 | CESSNA | WILINT | WILINT | BEARING | DAMAGED |
| 5/6/2009 | 525 | FJ441A | | 78321 | LT ENGINE |

38K FEET, AUTO PILOT COMMANDING DECENT RATE - LT ENGINE BEGAN UNCOMMANDED SPOOL DOWN. NO PRIOR INDICATIONS ON PANEL. DURING EMERGENCY SHUTDOWN PROCEDURES N1 AND N2 INDICATIONS CONFIRMED, 36K, 30K FEET SLIGHT VIBRATION FELT. AT 30K FEET VIBRATION STOPPED. IN APPROXIMATELY 15 PERCENT. WHEN BELOW 25K FEET RESTART ATTEMPTED. NO N2 ABORTED START ATTEMPT.DECLARED EMERGENCY, APPROACH AND LANDING UNEVENTFUL. ENGINE DISASSEMBLED 5/6/09 IN REPAIR STATION. DISASSEMBLY REVEALED A TOWER SHAFT AND 2ND REDUCTION BALL FAILURE.

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|---|---|---|---|---|---|
| CA090430004 | CESSNA | LYC | | CONTROL CABLE | FRAYED |
| 3/23/2009 | T206H | TIO540AJ1A | | ICA8PR6 | ELEVATOR |

(CAN) STRAIGHT FLIGHT STC NR SA00515DE RT RUDDER, ELEVATOR UP AND DOWN CONTROL CABLES FOUND TO BE WORN AND FRAYED AT DEFLECTION PULLEY CLUSTER - BETWEEN STA. 100.0 AND 112.0. CONDITION FOUND TO BE DUE TO CONTACT WITH FWD INBD GUIDE PIN. NEW CABLES WERE SUPPLIED AND INSTALLED, GUIDE PIN WAS REMOVED WITH DIRECTION. CURRENT MOD DOES NOT INCORPORATE THE USE OF TWO (2) GUIDE PINS, AS DID THIS INSTALLATION.

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|---|---|---|---|---|---|
| CA090423012 | CESSNA | CONT | SLICK | IMPULSE COUPLING | DAMAGED |
| 4/23/2009 | U206G | IO520F | 6310 | M3050 | MAGNETO |

(CAN) DURING A 500 HOUR INSP OF SLICK MAGNETO PART 6310. THE IMPULSE COUPLING WAS REMOVED FOR INSP. IT WAS DISCOVERED THAT A PIECE WAS MISSING FROM PAWL PLATE. MAGNETO DRIVE GEARS WERE INSPECTED FOR IMPACT DAMAGE, NO DAMAGE WAS EVIDENT. IMPULSE COUPLING WAS REPLACED WITH A NEW IMPULSE COUPLING P/N 6310.

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|---|---|---|---|---|---|
| CA090407008 | CESSNA | CONT | | FITTING | CRACKED |
| 4/3/2009 | U206G | IO520F | | 12116011 | MLG |

(CAN) FITTING CRACKED AT STRUT CUT-OUT. FOUND UPON VISUAL INSP. PART REPLACED WITH NEW.

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|---|---|---|---|---|---|
| CA090302005 | CIRRUS | CONT | | ROD END | SHEARED |
| 2/22/2009 | SR20 | IO360ES | | 14300900 | MASTER CYLINDER |

(CAN) DURING ROLLOUT INSTRUCTOR'S LT MASTER BRAKE CYLINDER PISTON ROD END CLEVIS SHEARED OFF UNDER MODERATE BRAKING. STUDENT COMPLETED TAXI TO PARKING APRON.

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|---|---|---|---|---|---|
| 2009FA0000340 | CIRRUS | CONT | | CYLINDER | CRACKED |

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|---|---|---|---|---|
| 4/21/2009 | SR22 | IO550N | 655932A3 | NR 4 |

DURING ANNUAL INSP, FOUND NR 4 CYLINDER CRACKED BETWEEN TOP SPARK PLUG HOLE AND FUEL INJECTOR PORT. (K)

| | | | | |
|---|---|---|---|---|
| CA090505007 | CNDAIR | PWA | LINE | CRACKED |
| 4/30/2009 | CL2151A10 | CWASP | AE2460701H0170 | HYDRAULIC SYS |

(CAN) WHILE IN CRUISE, THE CREW OBSERVED HYDR PRESSURE AT 0 PSI. THE CREW DECLARED AN EMERGENCY LOWERED THE GEAR, LANDED THE AIRPLANE AND STOPPED . TECH TOWED THE ACFT TO THE COMPANY FACILITIES AND AFTER INVESTIGATION FOUND A HYDR PRESSURE LINE WITH A CRACK IN THE RADIUS OF THE METALLIC ELBOW CONNECTING TO THE PUMP.

| | | | | |
|---|---|---|---|---|
| CA090421010 | CNDAIR | PWA | SKIN | CRACKED |
| 4/20/2009 | CL2156B11215 | PW123 | | FS 584 |

(CAN) THE HULL AT FS 584.50 HAS A CRACK APPROX 1.5 INCHES LONG. WE HAVE FOUND THIS SAME TYPE OF CRACK IN EXACT SAME LOCATION ON 6 MORE OF ACFT, SN ARE A/C 2031,A/C 2032, A/C 2033, A/C 2034, A/C 2037, A/C 2038 AND A/C 2043.

| | | | | |
|---|---|---|---|---|
| CA090407018 | CNDAIR | | WINDSHIELD | FAILED |
| 4/5/2009 | CL6002B19 | | NP13932111 | COCKPIT |

(CAN) AT CRUISE (FL 350), CAPTAINS FRONT WINDSHIELD SHATTERED. THE WINDSHIELD WAS REMOVED AND REPLACED IAW AMM 56-11-01.

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|---|---|---|---|---|
| CA090407022 | CNDAIR | | WINDSHIELD | CRACKED |
| 4/4/2009 | CL6002B19 | | | COCKPIT |

(CAN) CAPTAINS WINDSHIELD CRACKED. REMOVED AND REPLACED THE CAPTAINS WINDSHIELD REFERENCE AMM 56-11-01.

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|---|---|---|---|---|
| CA090428001 | CNDAIR | | AUTOPILOT SYS | MALFUNCTIONED |
| 3/5/2009 | CL6002B19 | | | |

(CAN) PILOT REPORTS THAT THEY GOT AN AUTO PILOT PITCH TRIM CAUTION MSG. FOLLOWED THE QRH AND DISC THE AUTO PILOT AND TRIM THE PLANE MANUALLY. ACFT WOULD NOT TRIM. TRYING TO NOSE THE ACFT OVER TOOK EXCESSIVE FORCE AT WHICH TIME THE ACFT ROLLED TO THE RT. THE CREW THEN PULLED THE AILERON DISC AND GOT THE ACFT TO LEVEL OFF BUT WAS STILL IN A NOSE UP ATTITUDE. DISCONNECTED THE ELEVATOR AND WERE ABLE TO CONTROL THE DESCENT OF ACFT.

| | | | | |
|---|---|---|---|---|
| CA090429001 | CNDAIR | GE | FAN BLADE | BENT |
| 4/24/2009 | CL6002B19 | CF343A1 | 6018T30P14 | ENGINE |

(CAN) ON THE TAKEOFF ROLL,THE ACFT SUSTAINED A BIRD STRIKE FROM A MEDIUM SIZED BIRD. THE BIRD WAS INGESTED INTO THE NR1 ENGINE. AFTER TAKEOFF THERE WAS A CONSTANT BUZZING NOISE WHICH WAS ABNORMAL. THE ENGINE PARAMETERS FOR BOTH ENGINES APPEARED TO BE NORMAL WITH THE EXCEPTION OF THE NR 1 ENGINE VIB READING WHICH THE CREW WAS ABLE TO STABILIZE NEAR ITS UPPER LIMIT. THE FLIGHT CONTINUED TO DESTINATION. UPON INSP OF THE ENGINE, MX FOUND 5 BENT FAN BLADES (P/N 6018T30P14) AND 3 OTHERS THAT WERE SUSPECT. ALL 8 FAN BLADES AND THEIR MATCHING (OPPOSITE) BLADE (16 IN TOTAL) WERE REPLACED. THE ENGINE COMPRESSOR WAS BORESCOPED AND NO DAMAGE NOTED. ENGINE PWR ASSURANCE RUNS WERE CARRIED OUT WITH NFF. THE A/C WAS RETURNED TO SERVICE.

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|---|---|---|---|---|
| CA090423003 | CNDAIR | GE | CONTROL PANEL | CONTAMINATED |
| 4/1/2009 | CL6002B19 | CF343A1 | | AILERON |

(CAN) CREW DECLARED EMERGENCY DUE TO AILERON JAM - LWD CAUTION ON FLIGHT, AP LWD CAUTION MESSAGE. AFTER DISENGAGEMENT OF THE AP, ACFT NEEDED VERY STRONG FORCE TO ROLL. NEARLY IMPOSSIBLE. SUDDENLY THE AILERONS BECAME FREE AND ACFT WAS NORMAL TO CONTROL WITH NORMAL FORCE. AP SWITCHED ON AGAIN AND NO MORE FAULTS OR UNUSUAL CONTROL FEEL NOTICED. ACFT LANDED WITHOUT FURTHER DIFFICULTIES. ON GROUND MECHANICS OPENED THE AILERON PANEL'S 598BB, 599BB, 698BB AND 699BB AND FOUND THE AREA EXTREMELY CONTAMINATED WITH WATER AND DEICING FLUID. ACFT

RETURNED TO SERVICE.

| | | | | |
|---|---|---|---|---|
| CA090423002 | CNDAIR | GE | WINDOW | CRACKED |
| 4/17/2009 | CL6002B19 | CF343B1 | NP1393222 | |

(CAN) F/O SIDE WINDOW CRACKED ON APPROACH AT ABOUT 4542 FT. THE F/OS SIDE WINDOW WAS REMOVED AND REPLACED IAW AMM 56-12-01 AND RII 56-220-1000. SIDE WINDOW- (RT) NP-139322-2 01101H5335.

| | | | | |
|---|---|---|---|---|
| CA090407019 | CNDAIR | GE | WINDOW | CRACKED |
| 4/5/2009 | CL6002B19 | CF343B1 | NP1393222 | COCKPIT |

(CAN) RT SIDE WINDOW CRACKED CLIMBING THROUGH 30,600 FT. THE FLIGHT CREW COMPLIED WITH THE QRH AND RETURNED TO DEPARTURE. REMOVED AND REPLACED F/O RT SIDE WINDOW IAW MM 56-12-01, PRE-SB.

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|---|---|---|---|---|
| CA090407017 | CNDAIR | | WINDSHIELD | FAILED |
| 4/6/2009 | CL6002C10 | | NP1393215 | COCKPIT |

(CAN) AT ABOUT 39,000 FT THE CAPTAINS WINDSHIELD (OUTTER PANE) SHATTERED. WINDSHIELD REPLACED IAW AMM.

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|---|---|---|---|---|
| CA090407021 | CNDAIR | | WINDOW | CRACKED |
| 4/4/2009 | CL6002C10 | | NP1393216 | COCKPIT |

(CAN) F/O WINDSHIELD CRACKED. REMOVED AND REPLACED THE F/O WINDSHIELD IAW AMM 56-11-01.

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|---|---|---|---|---|
| CA090407020 | CNDAIR | GE | WINDOW | CRACKED |
| 4/4/2009 | CL6002C10 | CF348C1 | NP13932112 | COCKPIT |

(CAN) THE F/O WINDSHIELD CRACKED ON TAKEOFF. THE CREW ABORTED TAKEOFF AND RETURNED TO THE GATE. REMOVED AND REPLACE THE F/O WINDSHIELD REFERENCE AMM 56-11-01.

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|---|---|---|---|---|
| CA090413004 | CNDAIR | GE | WINDSHIELD | CRACKED |
| 4/12/2009 | CL6002C10 | CF348C5 | 601R3303318 | COCKPIT |

(CAN) THE FLIGHT CREW NOTICED AT THE GATE THE F/O WINDSHIELD HAS A SMALL CRACK IN THE UPPER LT CORNER. THE F/OS WINDSHIELD WAS REMOVED AND REPLACED IAW AMM 56-11-01. 601R33033-18 0434143807 TSO: 12007.5/CSO: 7645

| | | | | |
|---|---|---|---|---|
| CA090423001 | CNDAIR | GE | WINDOW | CRACKED |
| 4/18/2009 | CL6002C10 | CF348C5 | NP1393222 | COCKPIT |

(CAN)"F/O SIDE WINDOW BROKE ON TAXI- IN" "REMOVED AND REPLACED THE F/OS SIDE WINDOW IAW AMM 56-12-01 AND RII 56-220-1000. PRESURIZED ACFT IAW AMM 56-11-01. NO LEAKS DETECTED. SIDE WINDOW- (RT).

| | | | | |
|---|---|---|---|---|
| CA090501003 | CNDAIR | GE | RADOME | DAMAGED |
| 4/30/2009 | CL6002D24 | CF348C5 | | |

(CAN) THE RADOME AND THE LT HORIZONTAL STABILIZER TIP FAIRING. SUFFERED LIGHTNING STRIKE DAMAGE ISSUED REO 690-51-00-036 (FERRY FLIGHT DISPOSITION FOR LIGHTNING STRIKE DAMAGE ON ACFT STRUCTURE).

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|---|---|---|---|---|
| 2009FA0000368 | COLUMB | CONT | BAFFLE | CHAFED |
| 5/5/2009 | LC42550FG350 | IO550N | 643358 | ENGINE CASE |

ENGINE OIL FILLER / BREATHER ASSY PN 649404-2 WAS CHAFED BEYOND MFG LIMIT OF .010 INCH. OIL FILLER TUBE IS BEING CHAFED BY THE CYLINDER BAFFLE ASSY THAT FITS BETWEEN CYLINDER NR 2 AND CYLINDER NR 4. THE RELIEF CUT-OUT IN THE BAFFLE IS TOO NARROW WHICH CAUSES THE BAFFLE TO START CHAFING THROUGH THE OIL FILLER / BREATHER TUBE ASSY. THIS IS THE FIFTH ACFT THAT WE HAVE DETECTED THIS PROBLEM ON. THIS ISSUE IS OCCURRING ON ALL MODELS OF THE MFG AIRCRAFT WITH INSTALLED ENGINE MODELS. THIS ISSUE HAS BEEN REPORTED BEFORE MFG KNOW ABOUT THIS ISSUE. SHOULD THE OIL FILLER TUBE CHAFE COMPLETELY THROUGH DURING FLIGHT, A SIGNIFICANT OIL LEAK CAN OCCUR BASED ON CASE PRESSURE FORCING OIL OUT THE DAMAGE AREA. OIL LEAKS RESULTING FROM A CHAFED OIL FILLER TUBE CAN BE EXTREMELY DANGEROUS ON THE ENGINES DUE TO THE HOT TURBOCHARGERS LOCATED ON THE LOWER

ENGINE AREA. THIS SITUATION CAN BE FIXED EASILY BY MFG AUTHORIZING A LARGER RELIEF OPENING IN THE BAFFLE TO PREVENT CHAFING WITH THE OIL FILLER TUBE ASSEMBLY.

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|---|---|---|---|---|
| CA090428003 | CVAC | ALLSN | DOWNLOCK SWITCH | UNSERVICEABLE |
| 4/24/2009 | 340CVAC | 501D13D | BZ7RQ67T | LT MAIN GEAR |

(CAN) WHEN ACFT WAS COMING IN FOR LANDING THE LT MLG DID NOT HAVE A DOWN AND LOCKED INDICATION. THE LT DOWNLOCK SWITCH WAS FOUND U/S SWITCH REPLACED.

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|---|---|---|---|---|
| CA090506013 | CVAC | ALLSN | PIN | SHEARED |
| 5/4/2009 | 440 | 501D13D | | RUDDER GUST LOCK |

(CAN) DURING ROUTINE INSP IT WAS NOTED THAT THE RUDDER GUST LOCK WAS INOPERATIVE. THE GUST LOCK PIN WAS FOUND SHEARED.

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|---|---|---|---|---|
| CA090422002 | DHAV | PWA | FRAME | CRACKED |
| 4/20/2009 | DHC2MK3 | PT6A27 | C2FS705706 | VERTICAL STAB |

(CAN) DURING O/H OF ACFT, TECH FOUND SMOKING RIVETS ON THE ACFT FRAME AT VERTICAL FIN ATTACH BRACKET, REMOVED BRACKET AND 6 OF 6 HOLES WERE CRACKED, BRACKET REPAIRED.

| | | | | |
|---|---|---|---|---|
| CA090407010 | DHAV | PWA | BRACKET | CRACKED |
| 4/3/2009 | DHC2MKI | R985* | C2TP159A | HORIZONTAL STAB |

(CAN) HORIZ STABILIZER WAS REMOVED FOR UNASSOCIATED MX. LT PICK-UP BRACKET WAS FOUND TO BE CRACKED ON OTBD FACE. DAMAGE IS SIMILAR TO CRACKS DISCUSSED IN TNS SERIES "B" 55, PARAGRAPH 2.1 WITH THE EXCEPTION THAT THIS ACFT IS ALREADY FITTED WITH MOD/627 - MALE FUSELAGE FITTINGS. THE CRACK APPEARS TO HAVE BEEN CAUSED BY AN UNDERSIZE BUSHING INSTALLED IN MALE FUSELAGE BRACKET.

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|---|---|---|---|---|---|
| CA090416006 | DHAV | PWA | DHAV | TORQUE TUBE | CORRODED |
| 10/17/2008 | DHC2MKI | R985AN14B | C2CF619A | | ELEVATOR |

(CAN) PART WAS DISCOVERED AT ACFT SALAVGE/REBUILD. THE TUBE IN QUESTION ALSO HAD HOLE CORRODED COMPLETLY THROUGH THE TUBE ON ONE END. EXCESSIVE CORROSION DUE TO LACK OF PROPER MX.

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|---|---|---|---|---|
| CA090424006 | DHAV | | STRUT | CRACKED |
| 4/22/2009 | DHC3 | | C3UF1085 | NLG |

(CAN) DURING THE INSP OF FRONT STRUT IAW SB 3/30, THE FRONT STRUT WAS FOUND CRACKED AT AFT FACE UPPER OTBD, CAUSING REJECTION OF STRUT.

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|---|---|---|---|---|
| CA090424007 | DHAV | | STRUT | CRACKED |
| 4/21/2009 | DHC3 | | C3FU1086 | MLG |

(CAN) DURING THE INSP OF FRONT STRUT IAW SB 3/30 FRONT STRUT WAS FOUND CRACKED AT OTBD LOWER AFT FACE AFTER REMOVING CRACKED FAIRING MOUNT LUG, CAUSING REJECTION OF STRUT.

| | | | | |
|---|---|---|---|---|
| CA090421014 | DHAV | PWA | CONTROL COLUMN | CRACKED |
| 3/27/2009 | DHC3 | PT6A34 | C3CF48 | COCKPIT |

(CAN) UPON ROUTINE INSP OF THE AD CF-82-34 FOUND CRACKS ON THE LOWER CONTROL COLUMN ADJACENT TO THE WELDS. CONTROL COLUMN WAS REPLACED PN C3CF48 AND ACFT WAS RETURNED TO SERVICE.

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|---|---|---|---|---|
| CA090422001 | DHAV | PWA | FEEDER CABLE | WRONG PART |
| 4/22/2009 | DHC6300 | PT6A27 | C6NF10385 | I/B END |

(CAN) DURING INSTALLATION, IT WAS NOTED THAT THE NEW CABLE WAS TOO SHORT FOR OEM MM ROUTING PATH. WHEN COMPARED TO REMOVED SERVICEABLE CABLE IT WAS NOTED THAT THE NEW CABLE WAS 14.5 INCHES SHORTER MINIMUM.

| | | | | |
|---|---|---|---|---|
| CA090416002 | DHAV | PWA | PISTON | DAMAGED |
| 4/16/2009 | DHC6300 | PT6A27 | 711419 | NLG STRUT |

(CAN) WHILE CONDUCTING DISASSEMBLY OF NOSE GEAR FOR OVERHAUL, THE PISTON TUBE WAS FOUND TO HAVE SUBSTANTIAL DAMAGE TO THE UPPER THREADED END BY WHAT APPEARS TO BE ELECTRICAL ARCING. THIS HAS RESULTED IN MATERIAL LOSS AND PISTON TUBE DEEMED UNSERVICEABLE. OTHER AREAS OF NOSE GEAR WERE INSPECTED, BUT FURTHER DAMAGE WAS NOT FOUND.

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| CA090408005 | DHAV | PWA | ENGINE | SHUTDOWN |
| 3/25/2009 | DHC8* | PW120A | | LEFT |

(CAN) AT THE TOP OF CLIMB PHASE, A LOUD NOISE WAS HEARD FROM LT ENGINE FOLLOWED BY UNCOMMANDED IN-FLIGHT SHUTDOWN. THE ENGINE WAS SECURED, AND THE ACFT RETURNED TO DEPARTURE AIRPORT, WHERE A SINGLE ENGINE LANDING WAS PERFORMED. NO DETAILS ON ENGINE CONDITION ARE AVAILABLE AT THIS TIME. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

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|---|---|---|---|---|
| CA090428004 | DHAV | PWA | UNKNOWN | UNKNOWN |
| 4/23/2009 | DHC8102 | PW120A | | NR 1 ENGINE |

(CAN) DURING CLIMB, FLT CREW NOTED A FLUCTUATION IN TORQUE & PROP RPM ON NR 1 ENGINE. PROP APPEARED TO BE GOING TO AN UNCOMMANDED FEATHER POSITION. AS A PRECAUTION, SECURED NR 1 ENG IAW SOP. RETURNED FOR LANDING. ACFT & ENG INSPECTED BY MX. ENGINE, PROP & ENGINE CONTROL LINKAGES INSPECTED & CHECKED. ENGINE WIRE HARNESS`S & CONNECTORS INSPECTED & CLEANED. EXTENSIVE GROUND RUNS CARRIED OUT & ALL SYS FUNCTION CHECKS COMPLETED FAULT FREE, NOT ABLE TO DUPLICATE FAULT. ACFT RELEASED FOR A MX CHECK FLT. ALL ENGINE PARAMETERS, SYS & INDICATIONS OPERATED NORMAL. ACFT POSITIONED BACK TO MAIN BASE. AFTER CONSULTATION WITH MFG, INSPECTED THE P3 SYS PLUMBING & LINES. OIL FILTER REMOVED AND INSPECTED, NO CONTAMINATION PRESENT, SEALS ON PROP TRANSFER TUBE WERE REPLACED. WING ROOT WIRING HARNESSES & CONNECTORS FOR NR 1 ENG INSPECTED, CHECKED AND CLEANED. OVERSPEED GOVERNOR REPLACED AS A PRECAUTION & ADDITIONAL GROUND RUNS AND FUNCTION CHECKS CARRIED OUT AND ALL PARAMETERS & INDICATIONS NORMAL.

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|---|---|---|---|---|
| CA090407009 | DHAV | PWA | LINE | CHAFED |
| 4/6/2009 | DHC8102 | PW120A | DSC3461 | HYDRAULIC SYS |

(CAN) AFTER BEING AIRBORNE FOR ABOUT 30 MINUTES, CAPTAIN HAD AN INDICATION OF HYDR ISO VALVE, VERIFICATION REVEALED HE HAD LOST ALL THE HYDR FLUID FROM THE NR 1 SIDE. AN EMERGENCY WAS DECLARED AND THE ACFT RETURNED TO BASE. INVESTIGATION BY MX FOUND HYDR TUBE PN DSC 346-1 HAD CHAFED THROUGH UNDER THE CLAMP P/N DSC 337SS10-3. A FLEET CAMPAIGN DIRECTIVE HAS BEEN LAUNCHED TO VERIFY THE REST OF THE ACFT IN OUR FLEET.

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|---|---|---|---|---|
| CA090420001 | DHAV | PWA | SPRING | LOOSE |
| 4/10/2009 | DHC8102 | PW120A | | AILERON TAB |

UPON CARRYING OUT C-CHECK, INSPECTION 543E, THE LT AILERON SPRING TAB INBD HINGE (ON REAR SPAR OF AILERON) WAS FOUND WORN TO THE POINT THAT IT WAS NO LONGER SUPPORTING THE TAB. ONLY THE OUTBOARD AND CENTER HINGES WERE SUPPORTING THIS SPRING TAB- EXTREMELY LOOSE. WITH THE BUILD UP OF FRETTING DEPOSITS ON THE BOTTOM OF THE AILERON TAB THIS WAS QUITE VISIBLE FROM "GROUND" LEVEL, I E: PERFORMING WALK AROUND FOR A L-CHECK. VERY SURPRISED TO FIND THIS WORN TO THIS POINT WITH AN AIRCRAFT THAT WAS STILL OPERATING IN SERVICE.

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|---|---|---|---|---|
| CA090406006 | DHAV | PWA | CASE | RUPTURED |
| 4/3/2009 | DHC8102 | PW120A | | SPOILER ACT |

DURING TAXI FOR TAKEOFF, THE CREW LOST ALL HYDRAULIC NR 1, THEREBY CAUSING NORMAL BRAKING TO BE INOPERATIVE. THE AIRCRAFT RETURNED TO GATE USING EMERGENCY BRAKES AND REVERSE (PROPELLER) THRUST. UPON ARRIVAL, A FLUID LEAK MIDWAY UNDER THE RT WING WAS NOTICED. MAINTENANCE WAS ADVISED AND A CREW SENT ON AN AOG TRIP TO THE STATION. FURTHER INVESTIGATION REVEALED THAT THE RT INBOARD SPOILER ACTUATOR CASING HAD RUPTURED AND CAUSED THE LEAK. THE ACTUATOR WAS REPLACED, LEAK CHECKED AND TESTED SERVICEABLE.

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|---|---|---|---|---|
| CA090428006 | DHAV | PWA | PCU | OBSTRUCTED |
| 12/16/2008 | DHC8106 | PW121 | 78249050 | NR 2 |

(CAN) ACFT EXPERIENCED NR 2 TORQUE AND PROP FLUCTUATIONS ON TAKEOFF. ACFT RETURNED TO DEPARTURE. LANDED SAFELY. DURING THIS EVENT THE NR 2 ENGINE WAS SHUTDOWN AS A PRECAUTION. (CONSIDERED TO BE A NON BASIC IN FLIGHT SHUTDOWN) FOLLOWING THIS EVENT PCU WAS REPLACED. A TEST FLIGHT WAS CONDUCTED WITH NO FAULT FOUND. A PIECE OF LOCKWIRE WAS FOUND IN THE OIL RETURN PORT OF THE PCU. A TEARDOWN REPORT OF THE AFFECTED PCU WILL BE OBTAINED.

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|---|---|---|---|---|
| CA090428007 | DHAV | PWA | TUBE | MISINSTALLED |
| 12/5/2008 | DHC8106 | PW121 | 3037344 | OIL TANK |

(CAN) ON CLIMBOUT NR1 ENG EXPERIENCED OIL PRESSURE FLUCTUATIONS RESULTING IN AN AIR TURNBACK. THIS ALSO OCCURED ON ANOTHER ONE OF OUR ACFT. SB 20454R3 WAS VISUALLY CONFIRMED TO BE ACCOMPLISHED ON THE AFFECTED ENGINES. WHEN DOING SO ONE ENG OIL TUBE WAS NOT PROPERLY POSITIONED IAW THE SB. THE OIL TUBE WAS REPOSITIONED ON THE SECOND AIRCRAFT ENGINE IT WAS FOUND THE OIL TUBE RUBBER SEAL (BOOT) WAS TORN. TUBE ASSY WAS REPLACED. MX CHANGE HAS TAKEN PLACE TO CARRY OUT AN INSP ON ENGINES FOR ENGINE OIL TANK TUBE ASSY AT AN INTERVAL OF 5000 HRS.

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|---|---|---|---|---|
| CA090501004 | DHAV | PWA | PCU | MALFUNCTIONED |
| 4/30/2009 | DHC8106 | PW121 | 782490A50 | INTERNAL |

(CAN) AFTER REPLACING THE PCU, ENGINE STARTED FOR GROUND RUNS & OPS AND LEAK CHECKS. UPON SELECTING THE PROP CONTROL LEVER TO TAKE THE PROPELLER FROM FEATHER TO FINE PITCH, THE RPM AND TORQUED INCREASED AT AN ABNORMAL RATE WITH TORQUE CLIMBING RAPIDLY. ENGINE WAS IMMEDIATELY SHUTDOWN. THE RIGGING WAS VERIFIED AS BEING CORRECT AND A VISUAL INSPECTION COMPLETED WITH NO DEFICIENCIES NOTED. PCU WAS THEN REMOVED AND REPLACED WITH A SERVICEABLE UNIT AND SUCCESSFUL GROUND RUN AND OPS CHECKS COMPLETED. PCU IS BEING RETURNED TO MFG FOR EVALUATION AND REPAIR AS IT HAD JUST BEEN RECENTLY RETURN FROM THERE FOLLOWING INSP AND REPAIR.

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|---|---|---|---|---|
| CA090416001 | DHAV | PWA | SWITCH | SEIZED |
| 4/5/2009 | DHC8301 | PW123 | 682175 | |

(CAN) ON DESCENT, THE ACFT FELT AS THOUGH IT WERE SLIDING SIDEWAYS. CREW CONFIRMED NO RUDDER TRIM. MANUAL TRIM WAS USED. ACFT LANDED AT DESTINATION AIRPORT UNEVENTFULLY. MX INVESTIGATION DETERMINED THE RUDDER TRIM SWITCH WAS JAMMED IN THE FULL LT POSITION. THE RUDDER/AILERON TRIM CONTROL PANEL ASSEMBLY WAS REMOVED AND REPLACED WITH A SERVICEABLE PANEL ASSY AND GROUND TESTED SERVICEABLE. ACFT RETURNED TO SERVICE.

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|---|---|---|---|---|
| CA090408012 | DIAMON | | SHAFT | DAMAGED |
| 4/3/2009 | DA20C1 | | | ALTERNATOR |

(CAN) REPORTED ON 03 APRIL 2009 THAT ACFT EXPERIENCED AN IN FLIGHT EMERGENCY CAUSED BY FUMES IN THE COCKPIT AND THE ALTERNATOR REGISTERED A FULL DISCHARGE. FURTHER INVESTIGATION REVEALED THE ALTERNATOR OUTPUT POST HAD CHAFED THRU THE RUBBER BOOT AND WAS SHORTING THRU THE ENGINE BAFFLE.

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|---|---|---|---|---|
| 2009FA0000396 | DIAMON | CONT | PLUNGER | DAMAGED |
| 5/11/2009 | DA40 | IO360* | 210332 | GOVERNOR |

PLUNGER P/N 210332 INSPECTED IAW SB 33571C AND FAILED.

| | | | | |
|---|---|---|---|---|
| 2009FA0000358 | DIAMON | THIELT | DOWNLOCK SWITCH | FAILED |
| 3/6/2009 | DA42 | TAE12501 | | RT MLG |

DURING NORMAL OPERATION, PILOT REPORTED THAT THE RT MLG DOWN AND LOCKED INDICATION FAILED. UPON UNEVENTFUL LANDING AND SUBSEQUENT INSP, THE RT MLG DOWN LOCK SWITCH NEEDED TO BE ADJUSTED. GEAR FUNCTIONAL CHECKS WERE PERFORMED IAW MM AND ACFT WAS RETURNED TO SERVICE WITH NO FURTHER INCIDENTS TO DATE. (K)

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|---|---|---|---|---|
| 2009FA0000363 | DIAMON | THIELT | VALVE | MALFUNCTIONED |
| 4/28/2009 | DA42 | TAE1250299 | 057212K021401 | PROPELLER |

THE LT ENGINE BEGAN TO SURGE ON NIGHT CROSS-COUNTRY TRAINING FLIGHT. AFTER CHECKING THE ENGINE, MFG WAS CONTACTED AND SAID THEY HAVE HAD SEVERAL REPORTS OF THIS SAME THING HAPPENING. THERE IS ARCING BETWEEN THE MALE PINS ON THE VALVE AND THE FEMALE CONNECTION ON THE HARNESS, CAUSING A CHANGE IN RESISTANCE THAT CAUSES THE VALVE TO DUMP THE PRESSURE IN THE PROP. THE PROP GOES TO FEATHER. THE PROPORTIONAL PRESSURE REDUCING VALVE WAS REMOVED AND A NEW ONE INSTALLED. ENGINE WAS RUN-UP AND CHECKED, OK. (K)

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|---|---|---|---|---|
| CA090330004 | DORNER | GARRTT | TIRE | DEFLATED |
| 3/29/2009 | DO228202 | TPE3315 | | NLG |

(CAN) UPON LANDING , THE CREW NOTICED THE ACFT "PULLING" SLIGHTLY TO THE LEFT. THE ACFT TAXIIED IN AND UPON INVESTIGATION BY THE FLIGHT CREW NOTICED THAT THE LT NOSEWHEEL HAD DEFLATED.

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|---|---|---|---|---|
| CMRR200905002 | DORNER | | SPAR | MISINSTALLED |
| 5/4/2009 | DO328300 | | | WING TO BODY |

WING/FUSELAGE REAR SPAR CONNECTION HAS IMPROPER BOLTS INSTALLED FROM THE MFG. NOTICED FUEL LEAK FROM AROUND BOLTS AND CONFIRMED FROM THE MFG THAT IMPROPER BOLTS WHERE INSTALLED IAW THE DESIGN DRAWINGS. THE BOLTS INSTALLED WHERE A D23 AND SHOULD HAVE BEEN A D21. AS A RESULT OF THE 3.2MM LONGER BOLTS, THEY WHERE UNABLE TO BE TORQUED DOWN PROPERLY ALLOWING MOVEMENT OF THE BOLTS. CONFIRMED THIS TO BE THE CAUSE OF FUEL LEAKING AROUND THE BOLTS. THIS IS THE SECOND ACFT THIS YEAR WE HAVE DISCOVERED THIS SAME ISSUE ON. REFER TO SDR CONTROL # CMRR200901001 DATED 1/15/2009 FOR PREVIOUS DATA.

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|---|---|---|---|---|
| CA090408001 | DOUG | PWA | GOVERNOR | BYPASSING |
| 4/4/2009 | C54EDC | R20007M2 | 4G8G30M | PROPELLER |

(CAN) UPON REMOVAL OF PROP GOVERNOR, AME FOUND OIL CONTROL PLUG BACKED OUT, THEREFORE BYPASSING OIL. PLUG WAS REINSTALLED AND TIGHTENED, THE GOVERNOR WAS REINSTALLED AND ENGINE RUN PROVED PROPER OPERATION. THE ACFT WAS RELEASED FOR SERVICE.

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|---|---|---|---|---|
| CO1Y200900004 | DOUG | | FITTING | CORRODED |
| 4/30/2009 | MD11 | | ARB7170 | RT WING |

FOUND CORROSION ON 4 EA HOLES AND LUG FACES OF RT FRAME FITTING. REMOVED CORROSION AND INSTALLED REPAIR BUSHINGS IAW ARP-TPR-09-0017-02B. (K)

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|---|---|---|---|---|
| CA090417007 | EMB | GE | BEARING | FAILED |
| 4/15/2009 | ERJ190100IGW | CF3410E5A1 | | MLG WHEEL |

AFTER LANDING, FLIGHT CREW OBSERVED THAT THE NR 1 MW BRAKE TEMP WAS 300 DG WHILE THE OTHERS WERE AT 100 DG. MAINTENANCE FOUND BEARING ROLLERS INSIDE THE WHEEL/BRAKE ASSEMBLY. MAIN WHEEL WAS REMOVED FOR INVESTIGATION, BRAKE WAS SEIZED ON THE AXLE AND HAD TO BE CUT OFF. DAMAGE TO THE AXLE WAS NOTED RESULTED IN A AXLE CHANGE. INNER WHEEL BEARING IS SUSPECTED AND REMAINS HAVE BEEN FORWARDED FOR TESTING. SHOP TEAR DOWN REPORT IS ATTACHED FOR THE MAIN WHEEL.

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|---|---|---|---|---|
| CA090428002 | EMB | GE | BRAKE | DAMAGED |
| 4/27/2009 | ERJ190100IGW | CF3410E5A1 | 90002340PR | MLG |

(CAN) DURING MX INSP FOLLOWING A PIECE OF BRAKE DISK FOUND ON THE APRON, ALL 4 BRAKE ASSEMBLIES ON THE ACFT WERE FOUND FAILED. 3 WERE FOUND WITH ROTORS AND STATORS BROKEN, REMAINING WAS FOUND HAVING THE CLIPS ON THE ROTORS LOOSE DUE TO WORN RIVETS/RIVET HOLES. HERE IS A DESCRIPTION OF THE PARTS INSTALLED

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|---|---|---|---|---|
| CA090331001 | FRCHLD | GARRTT | ACTUATOR | CRACKED |
| 3/16/2009 | SA227DC | TPE33112UHR | 2736053003 | TE FLAPS |

PILOT REPORTED THAT AIRCRAFT HAD A HYDRAULIC LEAK COMING FROM THE LEFT AND LANDING GEAR.

MAINTENANCE WAS CONTACTED AND UPON INSPECTION FOUND THE FLAP ACTUATOR CRACKED 3/4 AROUND THE BACK PART OF THE BODY. PART REPLACED AND AIRCRAFT RETURNED TO SERVICE.

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|---|---|---|---|---|
| CA090225001 | GULSTM | GARRTT | FLEX LINE | BURST |
| 2/20/2009 | G100 | TFE73140 | | DOOR SEAL |

(CAN) DURING CLIMB OUT THROUGH 1000` THE CREW REPORTED A BANG LIKE A BALLOON POPING. THE "DOOR SEAL" ANNUNCIATOR ILLUMINATED AND THEN THERE WAS AN INCREASE IN AIR NOISE. AFTER LANDING INVESTIGATION REVEALED THAT THE INLET FLEX LINE HAD SPLIT CAUSING THE DOOR SEAL TO DEFLATE. DOOR SEAL REPLACED AND SYSTEM OPERATION NORMAL.

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|---|---|---|---|---|
| 2009FA0000377 | GULSTM | | ANGLE | CRACKED |
| 4/23/2009 | GIV | | SE3580790212 | RT WING |

RT VERTICAL BREATHER ANGLE CRACKED AFT OF RT MAIN LANDING GEAR. (K)

| | | | | |
|---|---|---|---|---|
| 2009FA0000332 | HILLER | ALLSN | HUB | CRACKED |
| 4/24/2009 | UH12E | 250C20B | 5143711 | MAIN ROTOR |

MAIN ROTOR HUB PN 51437-11 SN 20074 SHOWED SIGNS OF POSSIBLE CRACK DURING PREFLIGHT, PERFORMED DYE PENETRANT INSP, AS PRECAUTIONARY MEASURE, CRACK INDICATION PRESENT. REMOVED PART FROM FURTHER SERVICE, AND INSTALLED SERVICEABLE PART IN ITS PLACE. CRACK INDICATIONS WERE NOT TYPICAL OF CRACKS THAT HAVE BEEN PRESENT IN HUBS PREVIOUSLY, CRACK ORIGINATED FROM SAME PLACE IN HUB (THROUGH- STUD HOLE), BUT RATHER THAN GOING DOWN TOWARDS THE THINNER THICKNESS AREA, THEY PROTRUDED UPWARD, TOWARD THE THICKER AREA OF THE PART. CYCLE TIMES ARE ESTIMATED, AS THERE IS NO REQUIREMENT FOR THIS AIRCRAFT TO RECORD TOTAL RIN'S.

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|---|---|---|---|---|
| CA090220003 | HILLER | LYC | SPAR | CRACKED |
| 2/20/2009 | UH12E | VO540C2A | | NACELLE |

(CAN) DURING INSP IAW AWD 97-10-16 (A) CONTROL ROTOR PN 36209-3, SN 449. FOUND CRACKED AT LOWER BOLT HOLE .600 FROM END OF SPAR.

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|---|---|---|---|---|
| CA090304017 | HUGHES | LYC | SUPPORT BRACKET | DAMAGED |
| 3/2/2009 | 269C1 | HIO360C1A | | MLG |

(CAN) GROUND HANDLING WHEEL HANDLE DISENGAGED FROM LANDING GEAR STEP SUPPORTS INFLIGHT AND FELL TO THE GROUND. FWD SUPPORT IS A CRADLE-TYPE BRACKET THAT IS DRILLED AT BOTH ENDS AND THROUGH THE STEP THAT IT IS ATTACHED TO. HANDLE IS ALSO DRILLED AT ONE END SO THAT A PIP-PIN CAN BE INSERTED THROUGH THE SUPPORT AND HANDLE AND ANCHOR THROUGH THE STEP. UPON INVESTGATION OF HANDLE AND SUPPORTS, IT WAS DETERMINED THAT THE HOLE IN THE STEP WAS WORN EXCESSIVELY AND COMPROMISED THE LOCKING FEATURE OF THE PIN. REFERENCE SAFETY ACTION REPORT NR 09-06.

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|---|---|---|---|---|
| CA090402007 | HUGHES | ALLSN | BEARING | SEIZED |
| 4/1/2009 | 369D | 250C20B | 369T795111 | PITCH LINK |

(CAN) NEW PMA ROD END FOR M/R PITCH LINK WAS INSTALLED AND BEARING WAS VERY TIGHT. AFTER 2.1 HRS OF OPERATION THE SWAGE LOST IT EFFECTIVENESS AND THE OUTER RACE OF THE BEARING STARTED TO ROTATE IN THE ROD END. THE ACFT WAS UNDERGOING TRACKING AND BALANCING WHEN THIS WAS DISCOVERED.

| | | | | | |
|---|---|---|---|---|---|
| CA090223007 | HUGHES | ALLSN | HUGHES | GRIP | CRACKED |
| 2/19/2009 | 369E | 250C20B | | 369D27133 | CYCLIC STICK |

(CAN) WHILE DOING A FREEDOM OF CONTROLS CHECK PRIOR TO START UP THE PILOT WAS MOVING THE CYCLIC STICK THROUGH THE FULL RANGE OF MOVEMENT. WHILE DOING SO THE CYCLIC GRIP BROKE IN HALF IN HIS HANDS. THE PREFLIGHT CHECKS ENDED AFTER THE OCCURENCE.

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|---|---|---|---|---|
| CA090316002 | KAMOV | KLIMOV | BLADE | FAILED |
| 3/5/2009 | KA32A1 | TB3117BMA | 5002906558001 | MAIN ROTOR |

(CAN) BLADE POCKET ON LWR MAIN ROTOR BLADE FAILED DURING FLIGHT.

| | | | | | |
|---|---|---|---|---|---|
| CA090408013 | KAMOV | KLIMOV | KAMOV | ROTOR HEAD | DAMAGED |
| 1/5/2009 | KA32A1 | TB3117BMA | A2A20200A | | TAIL ROTOR |

(CAN) RECENTLY WE HAVE HAD 2 LOWER SLIDER ASSEMBLIES THAT HAVE HAD THE UMBRELLA MOVING INDEPENDENTLY TO THE SLEEVE. IAW THE INSP CRITERIA OF TASK CARD 201 IN CHAPTER 065.71.06 THERE SHOULD NOT BE ANY PRESENCE OF THE UMBRELLA TURNING SEPARATELY TO THE SLEEVE. THE 2 LOWER SLIDERS THAT HAD THIS DEFECT OCCUR HAD BEEN PREVIOUSLY OVERHAULED/INSPECTED AT DIFFERENT FACILITIES AND ARE BEING INVESTIGATED AS TO THE CAUSE OF THE DEFECT.

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|---|---|---|---|---|
| 2009FA0000385 | LANCAR | CONT | HOUSING | CRACKED |
| 5/1/2009 | LC40550FG | IO550N | ALX9524R | ALTERNATOR |

FOUND A CRACK IN THE ALTERNATOR HOUSING. NOT AIRWORTHY, NEEDED TO BE REPLACED. TIME IN SERVICE 510 HOURS. (K)

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|---|---|---|---|---|
| CA090223017 | LEAR | GARRTT | PUMP | FAILED |
| 2/18/2009 | 45LEAR | TFE7312 | 1314281 | EJECTOR JET |

(CAN) DURING TROUBLESHOOTING, WHITE CAS MESSAGE, L-CAB PRESS FAIL, MX NOTED UN-COMMANDED PRESSURIZATION DURING GROUND RUNS. TROUBLESHOOTING OF SYS, FOUND DEBRIS BLOCKING THE VACUUM EJECTOR PUMP, CAUSING OUTFLOW VALVES TO BE SLOW AND REMAINED CLOSED DURING GROUND RUNS. THIS LINE RECEIVES IT PNEUMATIC SOURCE FORM THE HP LINES OF BOTH LT AND RT ENGINES AND APU. DEBRIS WAS REMOVED FROM THE VACUUM EJECTOR INPUT LINE AND GROUND RUNS PERFORMED SATISFACTORY.

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|---|---|---|---|---|
| CA090223018 | LEAR | GARRTT | DISPLAY | ODOR |
| 2/19/2009 | 45LEAR | TFE7312 | 7014300901 | NR 2 |

(CAN) THE CREW POWERED UP THE ACFT TO GET THEIR PREFLIGHT CHECK DONE. A FEW SECONDS AFTER POWER UP, THE DU NR 2 WENT BLANK AND A STRONG ELECTRICAL ODOR WENT THRU THE COCKPIT. PROBLEM, TROUBLESHOT TO THE DISPLAY UNIT ITSELF. A TECH WAS DISPATCHED TO REPOSITION THE UNIT IN NR 3 POSITION SO THE ACFT COULD BE RETURN TO SERVICE UNDER COMPANY MEL.

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|---|---|---|---|---|
| CA090414002 | LEAR | GARRTT | FLEX DUCT | CRACKED |
| 4/13/2009 | 45LEAR | TFE7312 | 66301000007 | ANTI ICE SYS |

(CAN) AFTER PILOT REPORTED A "WING/STAB LEAK" MASTER CAUTION MESSAGE, INVESTIGATION OF THE PROBLEM ENDED WHEN A TECH FOUND THE LT HORIZ STABILIZER`S ANTI-ICE FLEXIBLE DUCT (LOCATED AT THE VERTICAL STAB TO HORIZONTAL STAB JUNCTION) CRACKED. THE CRACK WAS PROBABLY CAUSED BY THE DUCT CHAFING ON THE STRUCTURE UNDERNEATH THE VERTICAL STABILIZER BULLET FIRING. CLEARANCE BETWEEN THOSE FLEXIBLE DUCTS AND THE STRUCTURE IS REALLY CLOSE IN THIS AREA. IT WAS ALSO FOUND THAT THE VELCRO TYPE TIE STRAP THAT TIES THE LT AND RT FLEXIBLE DUCT WAS NO LONGER INSTALLED BUT WAS INSTEAD LYING IN THE BOTTOM OF THE ACCESS PANEL.

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|---|---|---|---|---|
| CA090414004 | LEAR | GARRTT | FLEX DUCT | CRACKED |
| 4/13/2009 | 45LEAR | TFE7312 | 66301000007007 | ANTI ICE SYS |

(CAN) AFTER PILOT REPORTED A "WING/STAB LEAK" MASTER CAUTION MESSAGE, INVESTIGATION OF THE PROBLEM REVEALED THAT THE LT HORIZ STAB ANTI ICE FLEXIBLE DUCT (LOCATED AT THE VERTICAL STAB TO HORIZ STAB JUNCTION) WAS CRACKED. THE CRACK WAS PROBABLY CAUSED BY THE DUCT CHAFING ON THE STRUCTURE UNDERNEATH THE VERTICAL STABILIZER BULLET FAIRING. CLEARANCE BETWEEN THOSE FLEXIBLE DUCTS AND THE STRUCTURE IS MINIMAL IN THIS AREA. VELCRO STRAPS, THAT TIE THE LT AND RT FLEXIBLE DUCTS WERE NO LONGER INSTALLED AND WERE FOUND LYING IN THE BOTTOM OF THE ACCESS PANEL.

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|---|---|---|---|---|
| CA090306005 | LEAR | GARRTT | DRIVE UNIT | LEAKING |
| 2/28/2009 | 45LEAR | TFE7312 | C1444831 | FLAP POWER |

(CAN) UNIT WAS LEAKING FLUID, THIS IS THE 5TH UNIT WHICH HAS LEAKED AFTER INSTALATION, 0-LEAK RATE GIVEN BY AIRCRAFT MFR.

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|---|---|---|---|---|
| 2009FA0000390 | LEAR | | TIRE | BLOWN |
| 4/30/2009 | 55LEAR | | 178K431 | LT MLG |

ON APRIL 30, 2009, AT APPROXIMATELY 1126 CDT,THE CREW, EXECUTED A TAKEOFF ROLL ON RUNWAY 17R AT AIRPORT. ON OR SHORTLY AFTER V1 SPEED BOTH MAIN TIRES ON THE LT MAIN GEAR RUPTURED, DISINTEGRATED AND DEPARTED FROM THE WHEEL ASSEMBLIES. THE TIRE REMNANTS WERE FOUND BY AIRPORT PERSONNEL ON THE WEST SIDE OF RUNWAY 17R BETWEEN TAXIWAY V AND S. PIECES OF BRAKE ROTATING DISCS, STEEL WHEEL CLIPS AND ALUMINUM WHEEL PIECES WERE FOUND NEAR THE CENTERLINE OF RUNWAY 17R, NORTH OF RUNWAY 8. THE FLIGHT CREW ELECTED TO CONTINUE THEIR FLIGHT AS SCHEDULED. UPON LANDING, THE AIRCRAFT SUSTAINED DAMAGE TO THE LT FLAP, LT FUSELAGE SKIN BETWEEN FRAMES 18 AND 19, BOTH LT MAIN WHEELS AND BRAKES, DAMAGE TO THE LT ENGINE COWLING LOWER SIDE, THE LOWER THRUST REVERSER COWLING ON THE LT ENGINE WAS ALSO DAMAGED.

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|---|---|---|---|---|
| CA090220001 | LEAR | PWA | GASKET | MISSING |
| 2/16/2009 | 60LEAR | PW305A | | SOLENOID VALVE |

(CAN) BLEED LIGHTS LT AND RT ILLUMINATED ON THE ANNUNCIATE PANEL JUST AFTER TAKEOFF. AFTER TROUBLESHOOTING FOUND MAJOR BLEED AIR LEAKAGE WHERE THE ACTIVATION SOLENOID VALVE IS MOUNTED TO THE FLOW CONTROL VALVE. IT APPEARS PART OF A GASKET/SEAL DEPARTED CAUSING THE BLEED AIR LEAK TO HIT THE FIRE LOOP IN THE TAIL SECTION.

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|---|---|---|---|---|
| 2009FA0000395 | LUSCOM | | AXLE | CORRODED |
| 4/22/2009 | 8C | | | RT MLG |

DURING TAXI (AFTER LANDING) THE RT WHEEL ASSY BROKE OFF WHILE APPROACHING TAXI TURNOFF. INVESTIGATION REVEALED SEVERE CORROSION ON INSIDE OF LANDING GEAR TUBE AT POINT WHERE AXLE AND DOWNTUBES ARE WELDED.

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|---|---|---|---|---|
| 2009FA0000357 | MOONEY | | SPINNER | CRACKED |
| 12/29/2008 | M20E | | D57691P | PROPELLER |

A NEW PROPELLER WAS INSTALLED ON 10/23/2008. ON 12/29/2008, AFTER 10 HOURS, 2 DIFFERENT CRACKS WERE FOUND AT MOUNTING SCREW HOLES AT THE BLADE CUTOUT IN SPINNER DOME PN D-5769-1P. A WARRANTY REPLACEMENT WAS SENT PN D-5769-1P. A WARRANTY REPLACEMENT WAS SENT PN D-5769-1P, SN 0810591C AND INSTALLED. ON 3/20.2009, AFTER 22 HOURS THE REPLACEMENT SPINNER WAS REMOVED DUE TO CRACKING AT THE BLADE CUTOUT IN THE SPINNER DOME. A THIRD REPLACEMENT WAS SENT PN: D-5769-1P, SN 0805155C AND INSTALLED IAW MFG SERVICE EVALUATION REQUEST NR HC-SER-61-067. (K)

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|---|---|---|---|---|
| 2009FA0000369 | MOONEY | | SPINNER | CRACKED |
| 3/20/2009 | M20E | | | PROPELLER |

A NEW PROPELLER WAS INSTALLED ON 10/23/08. ON 12/29/08, AFTER 10 HOURS, (2) DIFFERENT CRACKS WERE FOUND AT MOUNTING SCREW HOLES AT THE BLADE CUT OUT IN SPINNER DOME PN: D-5769-1P. A WARRANTY REPLACEMENT WAS SENT PN: 102965P, SN 0810591C AND INSTALLED. ON 3/20.09, AFTER 22 HOURS THE REPLACEMENT SPINNER WAS REMOVED DUE TO CRACKING AT THE BLADE CUTOUT IN THE SPINNER DOME. A THIRD REPLACEMENT WAS SENT PN: D-5769-1P, SN 0805155C AND INSTALLED IAW MFG SERVICE EVALUATION REQUEST NR HC-SER-61-067. (K)

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|---|---|---|---|---|
| CA090424003 | MTSBSI | GARRTT | HINGE | CRACKED |
| 4/17/2009 | MU2B60 | TPE33110 | 030A35508 | MLG DOOR |

(CAN) LT FWD LANDING GEAR DOOR FWD DOOR SIDE HINGE WAS FOUND CRACKED. HINGE WAS REPLACED AND LANDING GEAR SWINGS COMPLETED AND FOUND SERVICEABLE. NOTE THIS SAME CRACK WAS FOUND PREVIOUSLY ON OTHER GEAR DOORS.

| | | | | | |
|---|---|---|---|---|---|
| CA090423006 | PILATS | PWA | PILATS | BALANCE WEIGHT | CORRODED |
| 4/23/2009 | PC1245 | PT6A67B | 557051201 | MS35207XXX | AILERONS |

(CAN) AILERON INSP COMPLETED IAW ANNUAL INSP REQUIREMENTS. CORROSION DISCOVERED ON BALANCE WEIGHTS. BALANCE WEIGHTS REMOVED FOR FURTHER INVESTIGATION REVEALED CORROSION ON EACH

ATTACH SCREW. CORROSION REMOVED FROM EACH BALANCE WEIGHT, NEW SCREWS INSTALLED AND CPC COATING APPLIED TO ALL SURFACES.

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|---|---|---|---|---|---|
| CA090423007 | PILATS | PWA | | TURBINE | SEIZED |
| 4/18/2009 | PC1245 | PT6A67B | | 1677D000002 | ECS |

(CAN) PILOT REPORTED LOUD GRINDING AT CRUISE, SUSPECTED ECS TURBINE. INSP REVEALED ECS TURBINE SEIZED, UNABLE TO TURN. NO VISUAL EXTERNAL INDICATION ON TURBINE OR EXTERIOR OF ASSY. NO FOD FOUND. REFRIGERATION ASSY TO BE REPLACED.

| | | | | | |
|---|---|---|---|---|---|
| CA090402001 | PILATS | PWA | BFGOODRICH | SPACER | MISSING |
| 3/27/2009 | PC1245 | PT6A67B | | | BRUSH BLOCK ASSY |

(CAN) BRUSH BLOCK RECEIVED WAS MISSING THE SPACERS BETWEEN THE BRUSH MODULES. THE BRUSHES WOULD NOT ALIGN WITH THE PROPELLOR DE-ICE RINGS. SPACERS REMOVED FROM WORN DE-ICE BLOCK AND REINSTALLED IN THE NEW.

| | | | | | |
|---|---|---|---|---|---|
| CA090415001 | PILATS | PWA | PILATS | SCREW | CORRODED |
| 4/2/2009 | PC1245 | PT6A67B | 557051201 | MS35207XXX | AILERON |

(CAN) AILERONS REMOVED AT ANNUAL INSP. MASS BALANCE WEIGHT SCREWS MS35207-XXX REMOVED ON BOTH AILERONS AND FOUND CORRODED. AREA INSPECTED FOR CORROSION AND NEW SCREWS INSTALLED.

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|---|---|---|---|---|---|
| CA090415002 | PILATS | PWA | | AUTOPILOT SYS | MALFUNCTIONED |
| 3/4/2009 | PC1245 | PT6A67B | | 0650016401 | |

(CAN) WHILE IN CRUISE, THE AUTO PILOT TRIM AURAL WARNING SOUNDED, AND THE A/P TRIM WARNING INDICATION ON THE CAWS ILLUMINATED. TRIM ADAPTER REPLACED AND ACFT RETURNED TO SERVICE. NO FURTHER PROBLEMS ENCOUNTERED.

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|---|---|---|---|---|---|
| CA090415003 | PILATS | PWA | | INDICATOR | MALFUNCTIONED |
| 3/4/2009 | PC1245 | PT6A67B | | 965121333 | AIRSPEED |

(CAN) DURING DESCENT THE AURAL AIRSPEED WARNING WOULD INTERMITTENLY SOUND WITH 30 DEGREES OF FLAPS. PILOT`S AIRSPEED INDICATOR REPLACED.

| | | | | | |
|---|---|---|---|---|---|
| CA090415004 | PILATS | PWA | | OUTFLOW VALVE | OUT OF LIMITS |
| 4/2/2009 | PC1245 | PT6A67B | | 1037842 | |

(CAN) DURING THE PRESSURIZATION CHECK THE SAFETY VALVE WAS FOUND TO OPEN OUT OF LIMITS (6.4 - 6.45 PSI). THE SAFETY VALVE WAS REPLACED.

| | | | | | |
|---|---|---|---|---|---|
| CA090415005 | PILATS | PWA | | ACTUATOR | FAILED |
| 3/4/2009 | PC1245 | PT6A67B | | 978731813 | AILERON TRIM |

(CAN) WHILE ON THE GROUND THE AILERON TRIM WAS RUN TO THE STOP. IT THEN FAILED AND INSP REVEALED THAT THE ELECTRICAL WIRE HAD SEPARATED AT THE TRIM ACTUATOR WHERE THE WIRE IS FLEXED BACK AND FOURTH AS THE ACTUATOR MOVES. THE ACTUATOR WAS REPLACED.

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|---|---|---|---|---|---|
| CA090305001 | PILATS | PWA | | ELECTRICAL BOX | FAILED |
| 3/3/2009 | PC1247 | PT6A67 | | 9740338136 | ELECTRICAL SYS |

(CAN) DURING CLIMB OUT AT 270 THE CREW WAS ALERTED 3 TIMES ON THE CAS MESSAGE DISPLAY OF A BUSS TIE MALFUNTION.(MASTER CAUTION) 3 TIMES THEY ACTIVATED THE MASTER CAUTION RESET TO DEACTIVATE THE AUDABLLE TONE IN THE HEAD SET. ON THE THIRD RESET OF THE MASTER CAUTION THE BUSS TIE CB POPPED OUT WITH A BUSS TIE WARN MESSAGE AND THE PILOT NOTED A RELAY CHATTER BY HIS LT KNEE THE CREW RETURNED TO DEPARTURE FOR INSP BY MX. THE BUSS TIE CIRCUIT BREAKER WAS RESET BY MX AND A GROUND RUN WAS CONDUCTED TO RECREATE THE BUSS TIE WARNING. MULTIPLE GROUND RUNS WOULD NOT DUPLICATE THE SNAG AS DESCRIBED BY THE FLIGHT CREW. THE NEXT MORNING A LT POWER JUNCTION BOX ADJUSTMENT TEST PROCEDURE WAS CONDUCTED IAW THE ACFT MM . THE TEST PROCEDURE PRODUCED A FAILURE AT STEP 46 AND 50 OF THE PROCEDURE . MFG WAS CONTACTED AND A REPLACEMENT LT PWR JUNCTION BOX HAS BEEN ORDERED.

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|---|---|---|---|---|
| CA090501001 | PILATS | PWA | CONNECTOR | UNSECURE |
| 4/15/2009 | PC1247 | PT6A67 | | POWER SUPPLY |

(CAN) PILOT REPORTED FAILED MFD & PFD ON DESCENT (BLACK FLT SCREENS). UPON LANDING SCREENS RELIT WITH INVALID DATA DISPLAYED. AFTER REACHING FBO, ACFT REBOOTED WITH NORMAL DISPLAYS ON THE PFD & MFD. DURING TROUBLESHOOTING WERE UNABLE TO COMMUNICATE WITH MAU & MX COMPUTER. TROUBLESHOOTING REVEALED CONNECTOR ATTACHED TO POWER SUPPLY MODULE CHANNEL "A", IN MAIN COMPUTER HAD A SOCKET PIN NR 1 HAD SLIPPED BACK INTO CONNECTOR & WAS NOT MAKING CONTACT WITH PWR SUPPLY MODULE. SOCKET PUSHED INTO POSITION IN CONNECTOR & SECURITY ESTABLISHED TO BE SECURE. WHILE DOING MX, SCREENS FAILED AS IN FLT & AFTER SECURING SOCKET INTO CONNECTOR FOR PWR SUPPLY OF PWR MODULE, COULD NOT DUPLICATE SNAG. TEST FLT CONDUCTED WITH ALL SYS FUNCTIONING NORMAL. IT IS THOUGHT SOCKET IN PWR SUPPLY MODULE NOT BEEN SECURED FROM MFG.

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|---|---|---|---|---|
| 2009FA0000381 | PIPER | LYC | RING GEAR | DAMAGED |
| 3/18/2009 | PA18A150 | O360C4P | SL72566 | STARTER |

TEETH WERE BREAKING OUT OF THE STARTER RING GEAR. PROBABLE CAUSE - FLAWED MANUFACTURING.

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|---|---|---|---|---|
| 2009FA0000380 | PIPER | | ALTERNATOR | FAILED |
| 1/14/2009 | PA28181 | | 4111810R | ENGINE |

ALTERNATOR FAILED AFTER 116 HOURS TIME IN SERVICE SINCE OVERHAULED. THESE SHOULD HAVE A LONGER LIFE SPAN.

| | | | | |
|---|---|---|---|---|
| 2009FA0000360 | PIPER | LYC | CAMSHAFT | WORN |
| 5/1/2009 | PA28181 | O360* | LW11754 | ENGINE |

(1) CAMSHAFT LOBE HAS EXCESSIVE WEAR THE NR 2 LIFTER THAT RIDES ON THE WORN LOBE ALSO WORN PUTTING METAL IN THE OIL FILTER. LOBE AND LIFTER ARE PITTED AND WORN EXCESSIVELY. (K)

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|---|---|---|---|---|
| 2009FA0000415 | PIPER | LYC | CRANKCASE | DAMAGED |
| 5/13/2009 | PA28181 | O360A4M | LW13820 | ENGINE |

ENGINE CRANKCASE HAS ABOUT A 1.5 INCH HOLE BLOWN OUT OF IT JUST AFT OF NR4 CYLINDER.

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|---|---|---|---|---|
| 2009FA0000361 | PIPER | LYC | MOUNT | CORRODED |
| 5/1/2009 | PA28R200 | IO360C1C | | ENGINE |

ENGINE MOUNT SHOWED PIN HOLES ON LOWER OUTER TUBE. REMOVED PAINT AND FOUND CORROSION. REPAIRED 13 TUBES. (K)

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|---|---|---|---|---|
| 2009FA0000402 | PIPER | | DRAG LINK | BROKEN |
| 5/12/2009 | PA28R201 | | 76426803 | NLG |

DURING TRAINING FLIGHT NO NOSE GEAR DOWN AND LOCKED INDICATION WHEN GEAR SELECTOR PLACED IN DOWN POSITION. CREW LANDED WITHOUT INCIDENT BUT UPON INSP BY MX THE DOWN LOCK ATTACHMENT TO THE DRAG LINK WAS FOUND BROKEN OFF. THE CRACKS STARTED FROM AN AREA HIDDEN BY THE DOWN LOCK ATTACHMENT. DRAG LINK WAS REPLACED AND ACFT RETURNED TO SERVICE.

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|---|---|---|---|---|
| CA090430006 | PIPER | LYC | DRIVE SHAFT | BROKEN |
| 4/27/2009 | PA31 | TIO540J2BD | | PUMP |

(CAN) PUMP FAILED AT RUN-UP, MECHANICS REPLACED THE PUMP AND FOUND THE DRIVE SHAFT BROKEN.

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|---|---|---|---|---|
| CA090427001 | PIPER | LYC | PULLEY | BROKEN |
| 4/20/2009 | PA31310 | TIO540A2C | 36B19484 | ALTERNATOR |

(CAN) DURING INSP RUN-UP, ALTERNATOR FAIL LIGHT CAME ON, INVESTIGATION REVEAL THAT THE ALTERNATOR BELT WAS BROKEN DUE TO PULLEY FAILURE ON THE ALTERNATOR. THE MISSING PIECE OF PULLEY WAS NOT RECOVERED. NO OTHER DAMAGE.

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|---|---|---|---|---|
| CA090409005 | PIPER | LYC | OIL FILTER | WARPED |

| | | | | |
|---|---|---|---|---|
| 4/7/2009 | PA31350 | LTIO540J2B | 77852 | ENGINE |

(CAN) AFTER TAKEOFF, CREW NOTICED A PITCH CHANGE FROM RT ENGINE AND OBSERVED RT TACHOMETER INDICATING A DROP IN RPM. ENG CONTROLS WERE ADVANCED AND RPM CAME UP TO 2400 RPM BUT CONTINUED TO DROP. PILOT TURNED BACK TOWARDS AIRPORT AND FEATHERED ENGINE. ACFT LANDED WITH NO FURTHER INCIDENT AND TAXIED BACK TO HANGER. IT WAS NOTED THAT A POOL OF OIL WAS ON GROUND WHERE THE RUNUP HAD BEEN DONE AND THAT A TRAIL OF OIL DROPS FOLLOWED ACFTS MOVEMENT FROM INITIAL STARTUP. MX REMOVED COWLS AND CHECKED FOR OBVIOUS SIGNS OF CAUSE OF OIL LOSS. NOTHING WAS OBSERVED AS FAR AS DAMAGE OR RUPTURED LINES. CRANKCASE WAS PRESSURIZED AND LEAKAGE WAS FOUND BETWEEN THE FILTER GASKET AND THE FILTER ADAPTER AND IT WAS NOTED THAT GASKET WAS PROTRUDING OUT THE SIDE. FILTER HAD BEEN INSTALLED AT INSP 37.4 HOURS PREVIOUSLY WITH NO OIL LEAKAGE AT ALL OVER THAT PERIOD AND WAS STILL TIGHT AND IN SAFETY. OIL LEVEL WAS CHECKED AND NOTHING SHOWED ON DIPSTICK SO OIL WAS DRAINED AND APPROX 2 LITRES WERE DRAINED. FILTER WAS REMOVED, CUT OPEN AND INSPECTED FOR METAL AND NOTHING WAS FOUND. SUCTION SCREEN AND THE PROPELLER GOVERNOR GASKET SCREEN WERE CHECKED FOR CONTAMINATION AND NONE WAS FOUND. ENGINE O/H SHOP WAS ALSO CONSULTED AND ONE OF THEIR REPS WAS SENT OUT TO LOOK AT THE FILTER ADAPTER FOR POSSIBLE DAMAGE. VISUALLY IT LOOKED FINE BUT WAS REMOVED TO CHECK FOR TRUENESS OF THE MATING SURFACE. IT WAS FOUND THAT THE BOTTOM FLANGE WAS WARPED WITH AN APPROXIMATE GAP OF .050 BETWEEN THE GASKET AND THE FLANGE. THE ADAPTER WAS REPLACED WITH AN O/H UNIT. A NEW FILTER WAS INSTALLED, OIL REPLENISHED, AND ACFT GROUNDED FOR FUNCTION AND LEAK CHECK. THE FILTER WAS CUT AND INSPECTED AGAIN WITH NO CONTAMINATION FOUND. ACFT WAS TEST FLOWN AND ALL SYS NORMAL. FILTER WAS CUT AND INSPECTED AGAIN WITH NO FAULTS FOUND.

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|---|---|---|---|---|---|
| CA090407002 | PIPER | LYC | LYC | VALVE SEAT | LOOSE |
| 4/4/2009 | PA31350 | LTIO540J2BD | 05K21108 | LW13322 | EXHAUST |

(CAN) PILOT REPORTED RT ENGINE RUNNING ROUGH ON GROUND. MX CARRIED OUT COMPRESSION CHECK AND DETERMINED NR 4 CYLINDER "0" COMPRESSION. CYLINDER REMOVED AND FOUND THE EXHAUST VALVE SEAT LOOSE, TRAPPED UNDER VALVE AND VALVE EDGE BROKEN OFF, CYLINDER HEAD BURNED. VALVE CONTACTED PISTON HEAD.

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|---|---|---|---|---|
| CA090504006 | PIPER | LYC | WIRE | CHAFED |
| 4/29/2009 | PA34200 | IO360C1E6 | | RT MLG |

(CAN) PILOT REPORTED THAT ON APPROACH TO LANDING, THE RT MAIN GEAR "DOWN AND LOCKED" LIGHT WAS UNSERVICEABLE. THE LANDING GEAR WAS CYCLED 3 TIMES BUT THE LIGHT JUST FLICKERED. THE PILOT THEN HAD THE CONTROL TOWER CHECK AND CONFIRM THAT THE GEAR WAS DOWN. A NORMAL LANDING WAS CARRIED OUT, BUT THE LIGHT STAYED OFF. ON INSP LATER, MX FOUND A CHAFED WIRE AT THE RT GEAR LIGHT SOCKET. THE WIRE WAS REPAIRED AND MULTIPLE GEAR SWINGS CARRIED OUT WITHOUT FURTHER FAULT.

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|---|---|---|---|
| 2009FA0000397 | PIPER | THROTTLE CABLE | FROZEN |
| 5/11/2009 | PA44180 | 554546 | LT ENGINE |

DURING TRAINING FLIGHT, LT THROTTLE FROZE. CREW SHUTDOWN ENGINE WITH MIXTURE AND LANDED UNEVENTFULLY. RESEARCH OF FLEET RECORDS SHOW THIS IS BECOMING COMMON ( 1 PRIOR INFLIGHT AND ONE DURING GROUND MX OPERATIONS IN THE PAST 2 MONTHS) TROUBLESHOOTING FINDS THE CABLE IS BINDING ON THE ENGINE END IN THE RIGID SHEATH AREA. REPLACEMENT OF CABLE CURES PROBLEM. MFG HAS BEEN CONTACTED.

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|---|---|---|---|---|
| 2009FA0000398 | PIPER | LYC | STARTER | MALFUNCTIONED |
| 5/4/2009 | PA44180 | O360E1A6D | MZ4222 | LT ENGINE |

AFTER SHUTTING DOWN THE LT ENGINE DURING A TRAINING FLIGHT, THE STARTER GEAR WOULD NOT ENGAGE DURING THE RESTART PROCEDURE.

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|---|---|---|---|---|
| CA090505001 | PIPER | PWA | HINGE BRACKET | LOOSE |
| 5/1/2009 | PA46310P | PT6A34 | 8320302 | LT AILERON |

(CAN) AS PART OF A 500 HR AILERON BEARING INSP, IT WAS NOTICED THAT THE AILERON HINGES WERE LOOSE WHERE THEY ATTACHED TO THE BRACKETS THAT ATTACHED THEM TO THE WING. THE RIVETS HAD LOOSENED

UP OVER TIME AND ALLOWED THE HINGE TO MOVE SLIGHTLY IN ATTACH BRACKETS. THE HINGES WERE REMOVED FROM THE ATTACH BRACKETS, NDT INSP, AND REINSTALLED WITH NEW RIVETS. LOCTITE WAS ALSO USED TO ADD STRENGTH TO THE ASSY.

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|---|---|---|---|---|
| CA090415009 | RAYTHN | PWA | RIB | CRACKED |
| 4/14/2009 | B300RAYTHEON | PT6A60A | 130116000011 | RT WING TE FLAP |

(CAN) RT OTBD FLAP L/E RIB ALSO FOUND CRACKED AT SAME LOCATION. THIS PROBLEM COMMON ON 200 SERIES AIRCRAFT. ON 200 SERIES PLANES THE PROBLEM IS DEALT WITH BY A SB. THE SB DOES NOT APPLY TO 300 SERIES PLANES. IT SHOULD. THE REPAIR KIT CALLED OUT BY THE 200 SERIES SB SHOULD ALSO BE USED TO REPAIR 300 SERIES FLAP RIBS.

| | | | | |
|---|---|---|---|---|
| 2009FA0000382 | RAYTHN | GARRTT | SWITCH | CORRODED |
| 5/7/2009 | HAWKER800XP | TFE731* | 9006EN42 | WARNING SYSTEM |

DURING POSTFLIGHT INSPECTION FOUND THAT THE CABIN ALT WARNING HORN WOULD NOT SILENCE. LEG DOWNLOCK MICROSWITCH (JM)P/N 9006EN42 FOUND TO BE LEAKING 4 VOLTS FROM PIN 4 TO PIN 5 DUE TO CORROSION . 4 VOLTS WAS NOT ENOUGH TO PULL IN THE COIL ON RELAY (AD) BUT IT WAS ENOUGH TO HOLD THE COIL AFTER YOU TESTED THE HORN. RELAY (AD) SERVES THREE SYSTEMS, CABIN ALTITUDE, GEAR WARNING AND CONFIGURATION IN ORDER TO BLOW A WARNING HORN. INSTALLED ONE NEW SWITCH P/N 9006EN42 AND CUT OPEN THE OLD SWITCH AND FOUND A TINY BIT OF CORROSION BETWEEN PIN 4 AND 5. PIN 4 HAS 28 VOLTS ALL THE TIME AND PIN 5 IS ONE OF THREE WIRES THAT SERVES THE COIL ON RELAY (AD)

| | | | |
|---|---|---|---|
| CA090504002 | RKWELL | POWER SUPPLY | ODOR |
| 4/30/2009 | 700 | 7250116006 | VIDEO UNIT |

(CAN) THE UNIT HAS BEEN SHIPPED BY IT APPEARS FROM THE DOCUMENTATION PROVIDED THAT THIS UNIT WAS SENT FROM IN AN "AS IS" CONDITION. THE UNIT WAS RECEIVED AT INFLIGHT AND DURING INCOMING INSP, THE FOLLOWING WAS OBSERVED. MULTITUDE OF LOOSE PARTS WAS FOUND INSIDE SUCH AS DISCONNECTED CABLES. SEVERE TRACES OF BURNING, CARBON CONTAMINAION AND ODORS WERE PRESENT. INFLIGHT HAS INFORMED ARLINE OF THIS CONDITION ON APRIL 30, 2009 VIA EMAIL AND SUPPLIED A COMPLETE SHOP INVESTIGATION REPORT.

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|---|---|---|---|---|---|
| CA090313003 | ROBSIN | LYC | ROBSIN | CONTROL CABLE | BROKEN |
| 11/17/2008 | R22BETAII | O360J2A | A5223 | A641R1 | MIXTURE CONTROL |

(CAN) MIXTURE CONTROL CABLE INNER WIRE FOUND BROKEN.

| | | | | |
|---|---|---|---|---|
| CA090409006 | ROBSIN | LYC | DISTRIBUTOR GEAR | STRIPPED |
| 4/9/2009 | R44 | O540F1B5 | 10357586 | MAGNETO |

(CAN) MAG WAS SENT IN BY CUSTOMER DUE TO STRIPPED DIST GEAR TEETH. UNKNOWN IF THIS HAPPENED IN FLIGHT, DURING START OR ON THE GROUND. WHEN MAG WAS FIRST INSPECTED THE OIL SLINGER WAS FOUND LOOSE AND SPINNING ON THE ROTOR SHAFT. UPON DISASSEMBLY 11 OF THE TEETH WERE FOUND CONTAINED IN THE HOUSINGS. MAG HAD BEEN OVERHAULED BY ANOTHER SHOP AND THE CUSTOMERS RECORDS INDICATE IT HAD A 500 HOUR INSP PERFORMED 329.4 HOURS AGO, BUT NO INFO. AS TO WHO DID THIS INSP. MAG STILL HAS ORIGINAL RED STICKER DATAPLATE ON IT AND EVIDENCE STILL REMAINS OF THE ORIGINAL WHITE TORQUE SEAL ON THE CONTACT COVER AND DISTRIBUTOR HSG. A 500 HOUR INSP WAS CARRIED OUT ON THIS MAG, WITH THE DIST GEAR AND OIL SLINGER REPLACED, IT WAS RETURNED TO THE CUSTOMER.

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|---|---|---|---|---|
| CA090324011 | ROBSIN | LYC | BEARING | FAILED |
| 3/23/2009 | R44 | O540F1B5 | | MAGNETO |

(CAN) HIGH PITCH NOISE SOUND FROM ENGINE COMPARTMENT DURING LOCAL FLIGHT. ALL INSTRUMENT INDICATIONS WERE OK, NO VIBRATIONS. AFTER LANDING ACFT WAS CHECKED AND DURING RUN UPS, ALL INDICATIONS WERE OK, INCLUDING MAGNETO DROPS. RT MAGNETO REMOVED AND MAGNETO SHAFT WAS VERY ROUGH TO TURN. RT MAGNETO REPLACED AND ACFT CHECKED AT RUN UP AND FOUND OK (UNUSAL NOISE DISAPEARED). MAGNETO SENT TO MFG FOR INVESTIGATION AND WARRANTY.

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|---|---|---|---|---|---|
| CA090223002 | ROBSIN | LYC | ROBSIN | SHAFT | WORN |

| | | | | | |
|---|---|---|---|---|---|
| 2/12/2009 | R44 | O540F1B5 | | | CLUTCH ASSY |

(CAN) SPRAG JOURNALS ON SHAFT AND HUB WORN UNDERSIZE/OVERSIZE.

| | | | | | |
|---|---|---|---|---|---|
| CA090306003 | ROBSIN | LYC | | STARTER GEN | MALFUNCTIONED |
| 2/22/2009 | R44 | O540F1B5 | | BC3151002 | ENGINE |

(CAN) DURING INSP, STARTER WAS SLOW TO TURN AND EVENTUALLY FAILED TO FUNCTION. STARTER WAS REMOVED AND NO FURTHER ISSUES WERE NOTED.

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|---|---|---|---|---|---|
| CA090326007 | ROBSIN | LYC | | STARTER GEN | MALFUNCTIONED |
| 3/17/2009 | R44 | O540F1B5 | | BC3151002 | ENGINE |

(CAN) DURING START IT WAS NOTED THAT THE ACFT WAS SLOW TO CRANK. STARTER WAS REMOVED AND NO FURTHER ISSUES WERE NOTED.

| | | | | | |
|---|---|---|---|---|---|
| CA090326006 | ROBSIN | LYC | ROBSIN | BEARING | ROUGH |
| 3/19/2009 | R44 | O540F1B5 | C1581 | C0059 | SPINDLE |

(CAN) DURING A M/R BOOT CHANGE THE SPINDLE BEARING WAS NOTED TO BE ROUGH. BEARING WAS REPLACED AND NO FURTHER ISSUES WERE NOTED.

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|---|---|---|---|---|---|
| CA090303002 | ROBSIN | LYC | | BLADE | CORRODED |
| 3/3/2009 | R44 | O540F1B5 | | C0162 | MAIN ROTOR |

(CAN) INSP CARRIED OUT IAW AD2007-26-12. INSP REVEALED CORROSION ALONG TIP CAP WHICH RESULTED IN BLADE SKIN TO CAP SEPARATION. THE PART IS DEEMED SCRAP.

| | | | | | |
|---|---|---|---|---|---|
| CA090303003 | ROBSIN | LYC | | SKIN | CRACKED |
| 3/3/2009 | R44 | O540F1B5 | | C0441 | STABILIZER |

(CAN) CRACK FOUND IN UPPER SKIN OF THE STABILIZER.

| | | | | | |
|---|---|---|---|---|---|
| CA090422009 | ROBSIN | LYC | | STARTER GEN | FAILED |
| 4/21/2009 | R44 | O540F1B5 | | BC3151002 | |

(CAN) STARTER PURCHASED FROM ON MAY 2008 ON APRIL 21,2009 ACFT WOULDN`T START, (AS YOU TURN THE KEY TO START, STARTER WILL NOT RESPOND). STARTER REMOVED AND SENT FOR BENCH TEST AND DISCOVERED THAT THE STARTER FAILED AND IS BEYOND ECONOMICAL REPAIR.

| | | | | | |
|---|---|---|---|---|---|
| CA090422008 | ROBSIN | LYC | | PILOT VALVE | LEAKING |
| 4/18/2009 | R44RAVENII | IO540AE1A5 | | 5773 | |

(CAN) LEAKING PILOT VALVE.

| | | | | | |
|---|---|---|---|---|---|
| CA090317006 | ROBSIN | LYC | | STARTER GEN | DAMAGED |
| 2/25/2009 | R44RAVENII | IO540AE1A5 | | F4M270709 | ENGINE |

DURING STARTER UP THE STARTER MADE A GRINDING NOISE. STARTER WAS REPLACED AND DAMAGE WAS FOUND ON THE TEETH OF STARTER. STARTER WAS REPLACED AND NO FURTHER ISSUES WERE NOTED.

| | | | | | |
|---|---|---|---|---|---|
| CA090303004 | ROBSIN | LYC | | SPRAG CLUTCH | CRACKED |
| 1/22/2009 | R44RAVENII | IO540AE1A5 | | C1883 | MAIN ROTOR |

(CAN) UPON DISASSEMBLY FOUND SPRAG CRACKED.

| | | | | | |
|---|---|---|---|---|---|
| CA090421012 | ROBSIN | LYC | | PUMP | UNSERVICEABLE |
| 4/8/2009 | R44RAVENII | IO540AE1A5 | | C8187B | AUX FUEL SYS |

(CAN) FUEL PUMP ELECTRICALLY UNSERVICEABLE, C/B POPPING.

| | | | | | |
|---|---|---|---|---|---|
| CA090421013 | ROBSIN | LYC | | MAGNETO | FAILED |
| 4/14/2009 | R44RAVENII | IO540AE1A5 | | 106006169 | ENGINE |

(CAN) MAGNETO DROP FAILURE.

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|---|---|---|---|---|---|
| CA090219004 | ROBSIN | LYC | | STARTER GEN | CRACKED |
| 2/18/2009 | R44RAVENII | IO540AE1A5 | | 14924HTH | ENGINE |

(CAN) CRACK FOUND ON STARTER BENDIX HSG.

| | | | | | |
|---|---|---|---|---|---|
| CA090223003 | ROBSIN | LYC | | SPRAG ASSY | BROKEN |
| 2/12/2009 | R44RAVENII | IO540AE1A5 | | | |

(CAN) SPRAG HAS 3 INNER EARS BROKEN OFF SPRAG HAS EXCESSIVE WINDOW WEAR 70.020 SHAFT PN 166-4, S/N 4170 REV N WORN UNDERSIZE HUB P/N 167-3 WORN OVERSIZE.

| | | | | | |
|---|---|---|---|---|---|
| CA090223004 | ROBSIN | LYC | ROBSIN | SHAFT | WORN |
| 2/12/2009 | R44RAVENII | IO540AE1A5 | | | CLUTCH ASSY |

(CAN) SHAFT AND HUB WORN UNDERSIZE/OVERSIZE ON SPRAG JOURNAL.

| | | | | | |
|---|---|---|---|---|---|
| CA090223005 | ROBSIN | LYC | | SPRAG ASSY | WORN |
| 2/12/2009 | R44RAVENII | IO540AE1A5 | | | |

(CAN) CLUTCH REMOVED FROM SERVICE DUE TO INFLIGHT SLIPPAGE. SHAFT P/N C166-3 WORN OVERSIZE. HUB P/N C167-3 WORN OVERSIZE. SPRAG P/N C188-3 S/N 3961 REV G CAGE BROKEN AT CROSSBAR.

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|---|---|---|---|---|---|
| CA090223006 | ROBSIN | LYC | ROBSIN | SPRAG ASSY | WORN |
| 2/12/2009 | R44RAVENII | IO540AE1A5 | C0183 | C1883REVG | |

(CAN) SPRAG CAGE CRACKED AT 4 CROSSBARS, SPRAG INNER EAR BROKEN, WINDOW WEAR 0.050 SHAFT PN C166-4 REV N WORN UNDERSIZE HUB PN C167-3 WORN OVERSIZE.

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|---|---|---|---|---|---|
| CA090310006 | ROBSIN | LYC | | MOUNT | CRACKED |
| 2/19/2009 | R44RAVENII | IO540AE1A5 | | | STARTER GEN |

(CAN) GRINDING NOISE WAS HEARD DURING START. ONE CORNER OF THE MOUNT FLANGE WAS FOUND BROKEN OFF DURING REMOVAL. STARTER WAS REPLACED AND NO FURTHER ISSUES WERE NOTED.

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|---|---|---|---|---|---|
| CA090310007 | ROBSIN | LYC | | STARTER GEN | FAILED |
| 2/18/2009 | R44RAVENII | IO540AE1A5 | | 14924HTH | |

(CAN) DURING START UP, THE ACFT FAILED TO START. ENGINEER WAS SENT OUT TO INVESTIGATE AND IT WAS FOUND TO BE STARTER ISSUES. STARTER HOUSING WAS FOUND CRACKED. STARTER WAS REPLACED AND NO FURTHER ISSUES WERE NOTED.

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|---|---|---|---|---|---|
| CA090326008 | ROBSIN | LYC | | HOUSING | CRACKED |
| 2/22/2009 | R44RAVENII | IO540AE1A5 | | | STARTER GEN |

(CAN) DURING INSPECTION IS WAS NOTED THAT THE HOUSING WAS FOUND CRACKED. STARTER WAS REPLACED AND NO FURTHER ISSUES WERE NOTED.

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|---|---|---|---|---|---|
| CA090307002 | ROBSIN | LYC | | STARTER GEN | CRACKED |
| 1/26/2009 | R44RAVENII | IO540AE1A5 | | 14924HTH | |

(CAN) DURING A DI CONDUCTED BY MX IT WAS NOTED THAT THE HOUSING WAS FOUND CRACKED. STARTER RING GEAR WAS ALSO REPLACED DUE TO DAMAGED TEETH. STARTER WAS REPLACED AND NO ISSUES ISSUES WERE NOTED.

| | | | | | |
|---|---|---|---|---|---|
| 2009FA0000394 | SCWZER | PWA | | CYLINDER HEAD | CRACKED |
| 5/11/2009 | G164B | R1340AN1 | | 399356 | ENGINE |

AFTER LOADING UP WITH RICE THE ACFT WAS TAKING OFF WHEN THE PILOT REPORTED A LOUD BANG AND THE ENGINE LOST POWER. THE PILOT DUMPED HIS LOAD AND MADE AN EMERGENCY LANDING IN THE FIELD STRAIGHT AHEAD BUT THE RT MLG HIT A BURM AND FLIPPED THE ACFT OVER. THE ACFT THEN CAUGHT ON FIRE

AND THE PILOT TRIED TO PUT IT OUT BUT FAILED. THE ACFT IS DESTROYED. CYLINDER FAILURE SUSPECTED. AN INSP OF THE ENGINE AFTER THE FIRE HAD DIED DOWN REVEALED THE NR 8 CYL HEAD HAD CRACKED IN TWO. BOTH SPARK PLUGS ARE STILL ATTACHED TO THEIR IGNITION HARNESS AND BOTH PLUGS HAVE THEIR PLUG INSERTS STILL ATTACHED TO THE PLUGS.

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|---|---|---|---|
| CA090324010 | SKRSKY | FREEWHEEL UNIT | MISMANUFACTURED |
| 3/24/2009 | S61A | S613520611042 | RIGHT |

(CAN) A RT FREEWHEEL UNIT WAS EVALUATION OF MISMANUFACTURED FREEWHEEL CAM. DURING FREEWHEEL CHANGE IT WAS FOUND THAT SB2158-102 BRG WOULD NOT FIT PAST THE 61350-20878-103 NUT. THREADS ON CAM APPEAR TO BE CUT DEEP ON ONE SIDE AND SHALLOW ON THE OTHER. A VISUAL INSP OF CAM (PN:S6135-20611-042, SN:H120-00647) FOUND THAT UPPER THREADS APPEARED TO BE CUT INCORRECTLY, THEY ARE NOT CONCENTRIC WITH OUTSIDE DIAMETER OF THE CAM. A DIMENSIONAL CHECK OF THREADS WITH THE NUT INSTALLED, USING A DIAL INDICATOR, SHOWS HOW FAR OUT OF CONCENTRIC WITH OUTSIDE DIAMETER THREADS WERE CUT. SETTING DIAL INDICATOR TO 0 ON THE SHALLOW CUT THREADS SIDE OF THE CAM AND ROTATING CAM TO DEEP CUT THREADS SIDE, INDICATOR SHOWS A .012" OFFSET OF THREADS AND NUT. NON CONCENTRIC CUT THREADS CAUSED THE NUT TO BE MISALIGNED WITH THE BRG INNER RACE, MAKING A STEP THAT OUTER RACE (SB2158-102 BRG) COULD NOT FIT PAST.

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|---|---|---|---|
| CA090325007 | SKRSKY | BEARING | CORRODED |
| 3/24/2009 | S61N | SB3208A1 | TAIL ROTOR |

(CAN) NEW BEARING RECIEVED, FOUND TO BE CORRODED AS REMOVED FROM UNOPENED ORIGINAL PACKAGING.

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|---|---|---|---|---|
| CA090324013 | SKRSKY | GE | ARM | CRACKED |
| 3/24/2009 | S61N | CT581402 | S6125501131 | MLG |

(CAN) A CRACK APPEARED ON A TORQUE ARM EMANATING FROM THE LUBRICATION FITTING HOLE. THE CRACK RUNS ALONG THE AXIS OF THE BOLT THAT WOULD GO THROUGH THE PIVOT JOINT.

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|---|---|---|---|---|
| CA090420005 | SKRSKY | ALLSN | GASKET | UNSERVICEABLE |
| 4/16/2009 | S76A | 250C30S | A5F224000 | OIL COOLER |

(CAN) NR 2 ENGINE OIL COOLER GASKET FAILED.

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|---|---|---|---|---|
| CA090318001 | SNIAS | TMECA | ENGINE | FOD |
| 3/17/2009 | AS350B | ARRIEL1B | | |

(CAN) PILOT WAS TAKING OFF FROM BASE, REPORTED HEARING ODD WHINING FROM ENGINE DURING TAKEOFF AND POWER CHANGES, ABORTED TAKEOFF AND RETURNED TO STAGING. OPENED ENGINE COWL, NOTED ALUMINUM SHAVINGS ON ENGINE DECK. VISUAL INSP IDENTIFIED THE COMPRESSOR WASH UNION PN 350A54-1112-20 WELDED BOSS ON INTAKE ASSY 350A54-1080-04 HAD BROKEN OFF AND BECAME INGESTED INTO THE ENGINE. ACFT HAD BEEN SUBJECT TO SCHEDULED INSP LESS THAN 10 HOURS PRIOR, WITH NO DEFECTS NOTED AT THAT TIME. ALUMINUM SHAVINGS FROM WELDED BOSS WERE FOUND EJECTED OUT OF THE BLEED VALVE AND OUT THE EXHAUST, THE STEEL UNION DID NOT GET INGESTED, BUT BOUNCED AROUND IN THE INTAKE PLENUM CAUSING SUBSTANTIAL DAMAGE TO THE AXIAL COMPRESSOR.

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|---|---|---|---|---|
| CA090315001 | SNIAS | TMECA | STRUCTURE | CORRODED |
| 3/2/2009 | AS350B | ARRIEL1B | | RESONATOR |

(CAN) UPON ROUTINE INSP, IT WAS FOUND THAT THE RT CABIN RESONATOR STRUCTURE WAS CORRODED AT THE INNER ATTACHMENT FLANGE TO THE POINT THAT BUCKLING OF THE OUTER ATTACHMENT PLATE HAD OCCURED. THE ASSY WAS REMOVED FROM THE ACFT. IT WAS FOUND THAT THE OUTER ATTACHMENT PLATE HAD SUFFERED EXTENSIVE CORROSION DAMAGE BUT HAD NOT PHYSICALLY FAILED NOR WAS ANY CORROSION DAMAGE DISCOVERED ON THE MATING STRUCTURE.

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|---|---|---|---|---|
| CA090327001 | SNIAS | LYC | TRANSMITTER | LEAKING |
| 3/26/2009 | AS350B2 | LTS101700D2 | 642792002 | FUEL PRESSURE |

(CAN) FUEL TRANSMITTER WAS FOUND PREVIOUSLY DEFECTIVE IN JANUARY 22, 2009 BY THE PILOT AND WAS REPLACED WITH A SERVICEABLE ASSY UPON RECEPTION OF A NEW PART. SINCE THE INSTALLATION OF A NEW TRANSMITTER ON THE ACFT, DID HAVE 3 NEW TRANSMITTER FAILURE AND ONLY THE SERVICEABLE TRANSMITTER PREVIOUSLY REMOVED FROM AN OTHER ACFT DID FUNCTION PROPERLY IN BETWEEN THE REPLACEMENT WITH THE NEW ASSY.

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|---|---|---|---|---|
| CA090218008 | SNIAS | TMECA | DRAIN LINE | DISCONNECTED |
| 2/16/2009 | AS350B2 | ARRIEL1D1 | | FUEL CELL |

(CAN) DURING ROUTINE MX IT WAS DISCOVERED THAT FUEL WOULD DRAIN OUT OF THE FUSELAGE AFTER DOING A WATER CHECK ON THE MFG AIRFRAME FUEL FILTER BOWL. FURTHER INVESTIGATION REVEALED THAT THE PLASTIC SCUPPER UNDER THE FLOOR WHERE THE FUEL FILTER WAS MOUNTED HAD SNAPPED OFF, LIKELY THE LAST TIME THE FUEL TANK WAS RE-INSTALLED. WITH THE SCUPPER (DALOT) AND DRAIN LINE NOT CONNECTED FUEL WOULD SPLASH DOWN INSIDE THE ACFT, MOSTLY COMING OUT AROUND THE FUEL BOOST PUMP WIRING CREATING A FIRE HAZARD.

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|---|---|---|---|---|
| CA090213007 | SNIAS | TMECA | PEDAL | CRACKED |
| 1/22/2009 | AS350B2 | ARRIEL1D1 | 350A27118501 | TAIL ROTOR |

(CAN) WHILE CARRYING OUT A T-INSPECTION THE RT PEDAL PILOT`S SIDE WAS FOUND TO BE CRACKED. THE LOCATION OF THE CRACK IS AFT SIDE OF PEDAL OR PILOT`S FOOT SIDE IN THE CORNER OF THE RT ANGLE BEND OF PEDAL.

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|---|---|---|---|---|
| CA090309008 | SNIAS | TMECA | FILTER | UNSERVICEABLE |
| 2/9/2009 | AS350B2 | ARRIEL1D1 | BFS150A | HYD SYSTEM |

(CAN) DURING LAST FLIGHT INSP, THE 3 M/R HYD ACCUMULATORS WERE FOUND EXPANDED BEYOND THEIR NATURAL SHAPE. AT THIS TIME IT WAS ALSO NOTED THAT NUMBEROUS HYD FITTINGS WERE WEEPING FLUID. FROM EXPERIENCE IT WAS DETERMINED THAT THE HYD REGULATOR/FILTER BLOCK (MANIFOLD) ASSY HAD FAILED, THUS ALLOWING AN OVERPRESSURE OF THE HYD SYS. THIS PARTICULAR PART HAD BEEN REMOVED 86.2 HRS PRIOR AND REPAIRED BY THE MFG DUE TO A SIMILAR INCIDENT WHEN INSTALLED ON ANOTHER ACFT. THE PILOT HAD NOT NOTICED ANY FLIGHT CONTROL ANOMOLIES DURING FLIGHT. PART HAS BEEN SENT BACK TO MFG FOR WARRANTY REPLACEMENT.

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|---|---|---|---|---|
| CA090323001 | SNIAS | TMECA | BUSHING | CRACKED |
| 3/20/2009 | AS350B2 | ARRIEL1D1 | | T/R HEAD |

(CAN) CRACKS FOUND IN BUSHING OF TAIL ROTOR PITCH LINKS, PN 350A33-2145-01 DURING ROUTINE INSPECTION.

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|---|---|---|---|---|
| CA090423005 | SNIAS | TMECA | RELEASE CABLE | DAMAGED |
| 4/21/2009 | AS350B2 | ARRIEL1D1 | AS221826802 | AERIAL TOW |

(CAN) NOTED DURING PAST FLIGHT INSP THAT THE "LOCK" INDICATOR WAS NOT FULLY IN THE INDEX WINDOW. AFTER REMOVING THE MANUAL RELEASE COVER IT WAS POSTED THAT THE SWAGED END OF THE MANUAL RELEASE CABLE WAS BINDING ON THE CARGO HOOK COVER. THIS INTERMITTENTLY PREVENTED THE LOCK MECHANISM FROM RETURNING TO A FULLY LOCKED POSITION. THE MFG P/N AS 22-18 CABLE HAS A LONG, CYLINDER SHAPED SWAGE. IT WAS REPLACED WITH AN ONBOARD SYS CABLE P/N 268-024-00 THAT HAS A BALL SHAPED SWAGE. THE CABLE STRANDS THAT PROTRUDED BEYOND THE SWAGE, INTERFERED WITH THE COVER IN A SIMILAR MANNER. THE END OF THE CABLE WAS DRESSED SMOOTH AND NO FURTHER BINDING HAS BEEN NOTED AFTER SEVERAL MANUAL HOOK CYCLES. THE MFG HAS BEEN NOTIFIED.

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|---|---|---|---|---|
| CA090401014 | SNIAS | TMECA | PUMP | LEAKING |
| 4/1/2009 | AS350B2 | ARRIEL1D1 | 430137702 | FUEL SYSTEM |

(CAN) FUEL LEAK FOUND ON DAILY INSP FROM FUEL PUMP . THAT PUMP AS BEEN INSPECTED FOR 600HRS INSP. TIME SINCE INSPECTION 20.7 HRS . PUMP SENT BACK TO MFG FOR REPAIR .

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|---|---|---|---|---|
| CA090217002 | SNIAS | TMECA | ANGLE | LOOSE |
| 2/16/2009 | AS350B3 | ARRIEL2B | 350A14200320 | TAILBOOM |

(CAN) WHILE PERFORMING DAILY INSP ON ACFT NOTICED THE RIVETS THAT ATTACH THE T/E ANGLE TO UPPER VERTICAL STABILIZER (PN 350A14-0020-1902) WERE "SMOKING" AND ANGLE FELT LOOSE.

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|---|---|---|---|---|
| CA090420002 | SNIAS | TMECA | STOP | BROKEN |
| 4/17/2009 | AS350B3 | ARRIEL2B1 | 350A37116200 | M/R SHAFT |

WHILE PILOT WAS DOING HIS POST FLIGHT INSPECTION, FOUND THAT THE STATIC STOP HAD BROKEN OFF AT THE FORGE LINE. THE PART WAS BEING HELD BY THE BONDING STAP. AIRCRAFT WAS RETURNED TO SERVICE AFTER PART WAS REPLACED.

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|---|---|---|---|---|
| 2009FA0000364 | SNIAS | TMECA | RESISTOR | BLOWN |
| 4/27/2009 | AS350B3 | ARRIEL2B1 | 0500242 | AIR CON SYS |

A/C KIT, WITH TWO SPEED SWITCH FOR PAX COMPARTMENT, BALLAST RESISTOR BLEW, ALLOWING FOR A PRECAUTIONARY LANDING, (DUE TO BURNED ELECTRICAL ODOR) THIS RESISTOR IS THE SECOND ONE INSTALLED IN 164.8 HRS, RECOMMEND COMPLETING A LOAD ANALYSIS ON THE ENTIRE SYSTEM, AS THE CIRCUIT BREAKER DID NOT TRIP PRIOR TO THE RESISTOR (EXPLODING). (K)

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|---|---|---|---|---|
| CA090225002 | SNIAS | TMECA | HOSE | LEAKING |
| 2/19/2009 | AS350B3 | ARRIEL2B1 | 704A34412009 | HYD SYSTEM |

(CAN) HYDRAULIC HOSE REPLACED 89.0 HRS PRIOR TO OTHER HOSE WITH 650.0 HRS. BOTH HOSE ASSEMBLIES HAD PIN HOLE LEAKS.

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|---|---|---|---|---|
| CA090413003 | SNIAS | LYC | PUMP | UNSERVICEABLE |
| 3/21/2009 | AS350BA | LTS101600A3 | 704A34310006 | HYDRAULIC SYS |

(CAN) HYD FEED BACK ON HYD TEST PRIOR TO FLIGHT . CHECK ALL SYS AND FLUID. FOUND METAL INSIDE FILTER. REPLACED HYDR PUMP WITH SERVICEABLE PUMP. HOLD PUMP AS BEEN INSPECTED AND GEAR FOUND TO BE WORN INSIDE THE PUMP. CHIP DETECTOR AS NOT COLLECTED ANY METAL.

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|---|---|---|---|---|
| CA090204006 | SNIAS | TMECA | SERVO | FAULTY |
| 2/4/2009 | AS350BA | ARRIEL1B | SC5084 | HYD SYSTEM |

(CAN) SERVO WAS REMOVED FROM ACFT DURING A 12 YEARS INSP FOR OVERHAUL. SERVO WAS SENT TO FOR O/H. SERVO INSTALLED ON THE ACFT, FOLLOWING FLIGHT CONTROL GROUND CHECK WITHOUT HYD, SERVO DID NOT HOLD IN LOCK POSITION. SERVO WAS SENT BACK AND NO FAULT WAS FOUND. SERVO WAS INSTALLED FOR A SECOND TIME AND WAS FOUND FAULTY AGAIN WITH SAME TROUBLE. A DIFFERENT SERVO INSTALLED AND NO PROBLEM WAS NOTED. MFG MENTIONED THAT A NEW MAINT PROCEDURE FROM THE MFG WAS INCORPORATED TO TEST THE SERVO WHICH SEEM TO BE FAULTY. WAITING FOR MORE DETAILS. IF NOT REPAIRED OR NOTICE THIS PROBLEM COULD LEAD TO AN UNCONTROLLED FLIGHT IF THE ACFT LOST HYD POWER.

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|---|---|---|---|---|
| CA090302008 | SWRNGN | GARRTT | WIRE | DAMAGED |
| 3/2/2009 | SA226TC | TPE33110UA | | NR 3 NACELLE |

(CAN) AD2008-12-16 WAS BEING COMPLETED ON THIS ACFT AND THE RT NACELLE NR 4 BUS WIRING WAS FOUND CHAFED AND OVERHEATED AT THE RT BATTERY BOX RELAY TERMINATIONS AS THEY RUN THROUGH THE LEADING EDGE. THE DAMAGE FOUND IS INDICATIVE OF THE DAMAGE INDICATED BY THE AD. THIS IS THE FIRST AIRCRAFT IN THIS COMPANIES FLEET TO SEE THE DAMAGED WIRING. ACFT IS UNDERGOING REPAIR AND COMPLYING WITH THE INSP AND MODIFICATION REQUIREMENTS OF THE AD BEFORE RETURN TO SERVICE.

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| CA090226006 | SWRNGN | GARRTT | WINDSHIELD | CRACKED |
| 2/24/2009 | SA226TC | TPE33110UA | 2719442004 | COCKIT |

(CAN) DURING CRUISE FLIGHT THE RT COCKPIT HEATED WINDSHIELD OUTER GLASS PANE SHATTERED. CABIN PRESSURE WAS REDUCED AND THE CREW ELECTED TO RETURN TO THE AIRPORT WITHOUT ANY FURTHER INCIDENT. MX INSPECTED THE WINDOW AND FOUND NO CAUSE FOR THE BROKEN GLASS PANE. MX HAS SINCE REPLACED THE WINDSHIELD AND THE FAILURE DATA SENT TO THE MFR AS REQUESTED SO THEY CAN INVESTIGATE THE CAUSE.

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|---|---|---|---|---|---|
| CA090407006 | SWRNGN | GARRTT | VICKERS | O-RING | SPLIT |

| | | | | |
|---|---|---|---|---|
| 3/29/2009 | SA227AC | TPE33111U | MS287786 | HYD PUMP |

(CAN) BOTH HYDR LIGHTS CAME ON IN FLIGHT AND ACFT RETURNED TO BASE. MX FOUND THE LT HYDR PUMP PRESSURE FITTING LEAKING. THE FITTING WAS REMOVED AND AND THE O-RING WAS FOUND DAMAGED. O-RING REPLACED - SYS SERVICED AND RETURNED TO SERVICE.

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|---|---|---|---|---|
| CA090331003 | SWRNGN | GARRTT | ACCUMULATOR | FRACTURED |
| 3/25/2009 | SA227AC | TPE33111U | 223002 | HYD SYSTEM |

(CAN) ACFT DEPARTED AND WHILE IN CLIMB WHEN FLAPS WERE SELECTED UP A LOUD "POP" WAS HEARD AND THEN ALL HYDR PRESSURE WAS LOST AND BOTH LT/RT LIGHTS ILLUMINATED. ACFT TURNED AROUND, CARRIED OUT AN EMERGENCY GEAR EXTENSION AND LANDED WITHOUT INCIDENT. MX INVESTIGATED PROBLEM AND FOUND THE TOP OF THE ACCUMULATOR HAD COMPLETED RUPTURED AND SEPARATED FROM MAIN UNIT. THE PISTON HAD BLOWN OUT OF THE MAIN BODY AND THE AFT MOUNTING BOLT/NUT PLATE HAD PULLED THROUGH THE KEELSON WEB. SEVERAL LINES HAD BEEN DAMAGED DUE TO THE FORCE THAT THE TOP OF THE ACCUMULATOR AND PISTON DEPARTING THE BODY. ALL ITEMS REPAIRED, ACCUMULATOR REPLACED. BOTH ENGINE PUMPS REPLACED AND HYDR FILTER REPLACED. GEAR SWINGS CARRIED OUT AND ACFT RELEASED BACK TO SERVICE. "O" RING ON TOP OF THE POWER PACK WAS ALSO REPLACED DUE TO SEEPING OF FLUID.

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|---|---|---|---|---|
| CA090210002 | UROCOP | TMECA | WINDOW | CRACKED |
| 2/6/2009 | EC120B | ARRIU2F | | COCKPIT |

(CAN) DURING FLIGHT TRAINING, THE FLIGHT CREW NOTICED A LARGE CRACK (4.5 INCHES) LONG IN THE LT WINDSCREEN. FLIGHT CREW LANDED WITHOUT INCIDENT.

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|---|---|---|---|---|
| CA090407011 | UROCOP | TMECA | CHIP DETECTOR | ILLUMINATED |
| 4/3/2009 | EC120B | ARRIU2F | | ENGINE |

(CAN) FLIGHT CREW REPORTED ENGINE CHIP LIGHT `FLICKERING` ON FINAL LEG OF DAY. ENGINE OIL SYS FLUSHED, OIL COOLERS REPLACED, ENGINE OIL FILTER REPLACED, AND OIL SAMPLES SENT FOR ANALYSIS. ACFT RETURNED TO SERVICE IAW MM.

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|---|---|---|---|---|
| CA090417005 | UROCOP | TMECA | RELAY | INTERMITTENT |
| 4/15/2009 | EC120B | ARRIU2F | M610619017 | LANDING LIGHT |

PILOT REPORTED LANDING LIGHT "STUCK ON". GROUND TESTING, CONFIRMED FAULT. CHECKED WIRINGS, LANDING LIGHT SWITCH AND RELAY INSTALLATION. TAPPED RELAY AND LANDING LIGHT STARTED TO WORK, AS NORMAL. RELAY CONTACTS "STICKY". PARTS ORDERED.

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|---|---|---|---|---|
| CA090417006 | UROCOP | TMECA | SWITCH | INTERMITTENT |
| 4/15/2009 | EC120B | ARRIU2F | 045004A102A | |

BATTERY WAS LEFT ON. UPON RETURN TO ACFT 2 HOURS LATER, BATTERY WAS TOO LOW TO START ACFT. PILOT THOUGHT BATTERY/EPU SWITCH WAS TURNED OFF, BUT YOU HAVE TO PUSH THE BUTTON UP TO 4 TIMES BEFORE IT STAYS IN SELECTED POSITION. CONFIRMED PILOT`S SNAG. BATTERY/EPU SWITCH STICKY/STIFF/INTERMITTENT. REPLACEMENT PART ORDERED.

| | | | | |
|---|---|---|---|---|
| CA090402005 | UROCOP | PWA | DAMPER | LEAKING |
| 3/27/2009 | EC135P2 | PW206B2 | L633M2010108 | TRANSMISSION |

(CAN) 3 OF 4 Z-ARIS DAMPERS FOUND LEAKING GLYCOL AND WARNING PIN RECESSED INDICATING FAILURE. ALL 4 Z-ARIS DAMPERS CHANGED.

| | | | | |
|---|---|---|---|---|
| CA090430002 | ZLIN | LYC | MOUNT | CRACKED |
| 4/28/2009 | Z242L | AEIO360A1B6 | L24263100000 | ENGINE |

(CAN) THE ENGINE MOUNT WAS FOUND CRACKED IN THE UPPER RT MOUNT TO ENGINE ATTACH AREA.

| | | | | |
|---|---|---|---|---|
| CA090427004 | ZLIN | LYC | STOP PIN | WORN |
| 4/21/2009 | Z242L | AEIO360A1B6 | 4372 | MAGNETO |

(CAN) THE IMPULSE COUPLING STOP PIN WAS FOUND WORN BEYOND MFG LIMITS. IMPULSE COUPLING TSN 499.9

HOURS.

| | | | | |
|---|---|---|---|---|
| CA090421003 | ZLIN | LYC | CABLE | FRAYED |
| 4/16/2009 | Z242L | AEIO360A1B6 | Z4244120000 | ELEVATOR TRIM |

(CAN) THE AFT ELEVATOR TRIM CABLE WAS DISCOVERED WITH BROKEN STRANDS DURING SCHEDULED MX.

| | | | | |
|---|---|---|---|---|
| CA090421004 | ZLIN | LYC | CABLE | MISINSTALLED |
| 4/16/2009 | Z242L | AEIO360A1B6 | Z4244120000 | ELEVATOR TRIM |

(CAN) THE TRIM STOP WAS OBSERVED TO BE ASSEMBLED INCORRECTLY ON THE CABLE. SUBSEQUENT TIGHTENING OF THE STOP NUT WOULD HAVE SHEARED THE CABLE AND LED TO IMMINENT FAILURE.