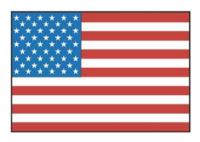




ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



ALERT NUMBER 356



MARCH 2008

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

AVIATION MAINTENANCE ALERTS

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

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

AIRPLANES

BOEING

Boeing: 727-2Q6; Burned Hyd. Pump Cannon Plug; ATA 5297

A principle maintenance inspector submitted the following defect description. "On climb-out from the (airport) the flight engineer smelled smoke and tried to identify the source. He accomplished a (trouble shooting) procedure and removed power from the cargo door control. The smoke stopped and the aircraft returned to the (airport).... Inspection of the cargo door control area revealed the hydraulic pump Cannon plug connected to the control box was shorted and the contacts burned. (Maintenance) removed and replaced these connectors (P/N's MS3102R24-10P and MS3106F24-10S). Operational checks were good in accordance with the aircraft's electrical maintenance manual." (Further reference to the part's location includes the "9G Bulkhead.")

Part Total Time: (unknown).

BOMBARDIER

Bombardier: CL6002B19; APU Fuel Leak; ATA 4930

An unidentified technician for this air carrier provides a brief but important description for this defect. "(*I*) found a fuel leak (*stream*) running down the belly surface under the tail (*on this aircraft*). (*Troubleshooting*) found the Auxiliary Power Unit's fuel solenoid draining from the belly drain (*while unit was operating*). I deactivated the APU—(*the leaking fuel*) stopped. I removed and replaced the APU fuel solenoid (*P*/*N* 692545-17) and O-ring at the lower fitting in accordance with maintenance manual 49-31. No (*further*) leaks were noted."

(As of 1999 the FAA Service Difficulty Reporting System data base reflects seven such reports for CL600 Aircraft, and two for the Falcon 2000. Truncate 1 digit and the part number listing jumps to 17 since 1995.)

Part Total Time: 5,481.0 hours.

CESSNA

Cessna: 421C; Corroded Oxygen Line; ATA 3520

(The following mechanic's narrative provides a greater range of supportive detail than is typically offered in defect reports. How a particular mechanic wends his or her way through myriads of details has to be an unappreciated art form making real contributions to safety every day.)

"While in process of checking the individual O2 (oxygen) masks during an Annual/5 year O2 bottle re-certification, I heard a very faint sound of a gas leak in the overhead (interior paneling) of the aircraft. It was nearly inaudible, almost disappearing when you turned your head from side to side. I began the search for the leak by pulling the O2 outlets in the suspect area, and checking the B-nuts—all were secure. The only course left to me was pulling the headliner for a closer inspection. By plumbing in low pressure nitrogen (using for troubleshooting) I was able to narrow down the 'hiss' to a line in the overhead—just forward of the cabin door which carries the O2 from the L/H side of the aircraft to the R/H side. This line is P/N 5100107-46; item 30; figure 06-40; page 1 of the Cessna 421C IPC (internal parts catalog). I have included a picture of the line. (At this stage of disassembly, all I could see was the B-nut on the L/H side, but by wiggling it I could (effect and detect...) a change in the sound of the hissing. To access this line (which passes through a structural beam in the overhead) it was necessary to drill out approximately 40 CherryMax Rivets securing a thin honeycomb panel to the overhead (structure). This panel is about 9 feet long by 18 inches wide, running the length of the aircraft cabin. Above this panel are the Scat ducts (P/N F229900) that supply the cabin Wemacs (duct/vents). (These ducts are made like Scat but have an oval cross section.) With the honeycomb panel and insulation bats removed I was able to extract this O2 line (P/N 5100107-46). This line as pictured has been cleaned up, and the products of corrosion removed for clarity. The corrosion on the 'humps' of the line occurred where the ducting passed under it. The ducting was removed to facilitate line removal, and was found to be totally deteriorated. The picture I included is a typical example. It pretty much exploded in a cloud of fibers and rusted wire when removal was attempted. The spiral wound wire supporting the duct was completely rusted to fragments. It came out in small chunks—(I estimate 30 feet of ducting). Everywhere this ducting touched an O2 line there was products of corrosion. Some very light—some like the line (pictured). These lines were replaced by new parts from Cessna where required, and all the Wemac flex ducting was replaced with new.

"As bad as this line was, I just barely heard it hissing—(given it was positioned) above all the insulation and headliner material—and the fact the O2 is regulated down to a low pressure in these lines. This could have been a bad deal had O2 been really needed, as this aircraft has the small, 11 cubic foot bottle. I can't (envision) how it would last very long, not to mention the danger of leaking O2 in a confined area near an ignition source (reading light switches and lamps). I (suspect) moisture condenses in the overhead due to body respiration, and at altitude it condenses, (yielding numerous points of droplet formation, enhancing...) corrosion everywhere the ducts touch the line. I would think this problem exists in every pressurized Cessna twin (in the field), including the 425 and the 441. (Might they suffer even greater line deterioration defects...) since they fly at higher altitudes?

"The area this discrepancy was found in is extremely time consuming and invasive to access. Even with the headliner removed (like during an interior refurbishment) you can't see the ducts or all the O2 lines. That long honeycomb panel must come down, as does a shorter section in the aft cabin.

"This aircraft is 30 years old now, and a total aircraft time of 5,341.0 is probably a low time for its age."

(Truncating two digits off the part number allows the FAA Service Difficulty Reporting System data base to find at least five such oxygen/corrosion defects—all on Cessna 400 series aircraft.)



This is how the LINE LAYS ON The ducting. It is inside a beam & can't be seen. The LINE AS AN ASSY LOOKS LIKE This.

B. Nut A Duct



corroded O2 line

Looking at the Lower portion of the "Hump"

underside

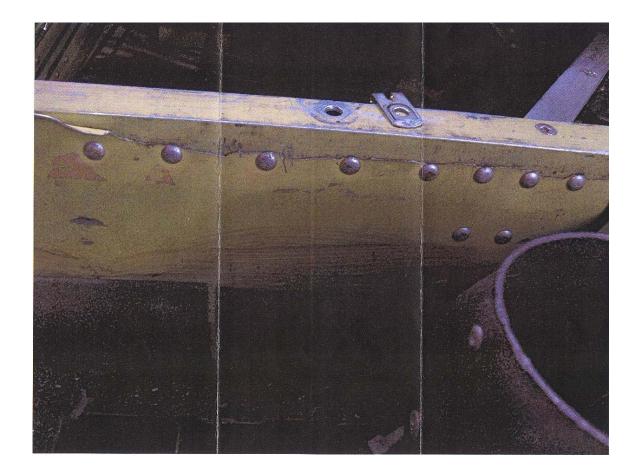


(Bravo! Sir Steve. Not only did you directly impact safety for that aircraft and all who may fly in it—but how many more lives and aircraft might your efforts effect from this submission? If you only collect one "atta-boy" locally, have another from me: thank-you for your detailed effort—Ed.)

Part Total Time: 5,341.0 hours.

Cessna: 550; Cracked Floor Support; ATA 5315

A repair station technician writes, "The cabin floor support web is cracked and broken at fuselage station 151...found during a phase inspection." (The submission includes a note indicating he was having trouble finding the part number for this item in the parts catalog. That's okay—look at the crack he found!)



Part Total Time: 9,359.0 hours.

IAI

IAI: 1124-407; Microscopic Holes in Hydraulic Line; ATA 2910

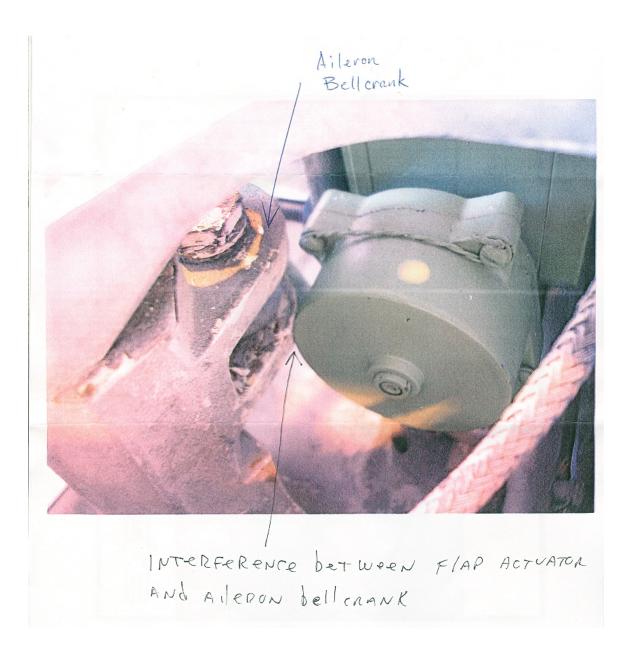
"Approximately 2 minutes after landing gear deployment," states a mechanic, "and a few seconds before landing, the flight crew reported an 'unusual smell' on the flight deck. No warning or indicator was noted. Landing proceeded as normal. On post flight inspection the hydraulic reservoir was found to be abnormally low. The flight deck was removed and the belly (of this airplane) was (discovered) wet with hydraulic fluid. Visual inspection could not discern the leak area. With pressure applied to the system, a seepage was found in a gear down pressure line, though no visual mechanical defect was noted. After many pressure cycles microscopic perforations in the (hydraulic, gear down) tube at station 96.00 became evident (P/N 723088-171). A repair was made and the aircraft was returned to service."

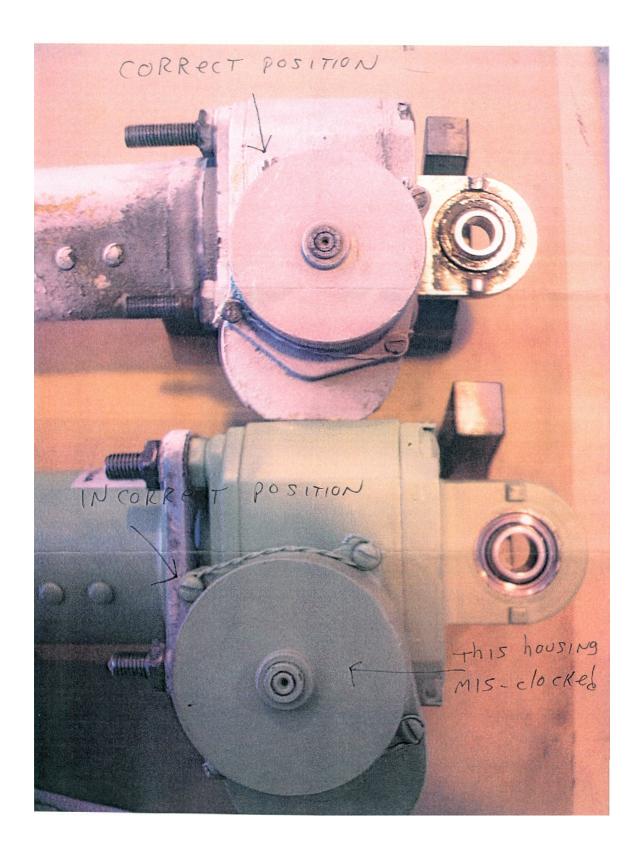
(Truncating up to five digits off the P/N brings up at least four such leaks in the FAA Service Difficulty Reporting System data base from the same kind of line on IAI aircraft since 1997.)

Part Total Time: 10,619.0 hours.

IAI: 1124; Misaligned Flap Actuator; ATA 2752

A technician for a repair station writes, "(*I*) installed a rebuilt flap actuator in the R/H outboard position (P/N 1391T100-8). Flap operation (*subsequently*) was normal. While checking aileron travel it was discovered the aileron (*movements*) were limited by the rebuilt flap actuator. A cover plate on the flap actuator had been indexed incorrectly and was interfering with the aileron bell crank. Probable cause: incorrect assembly of the flap actuator."





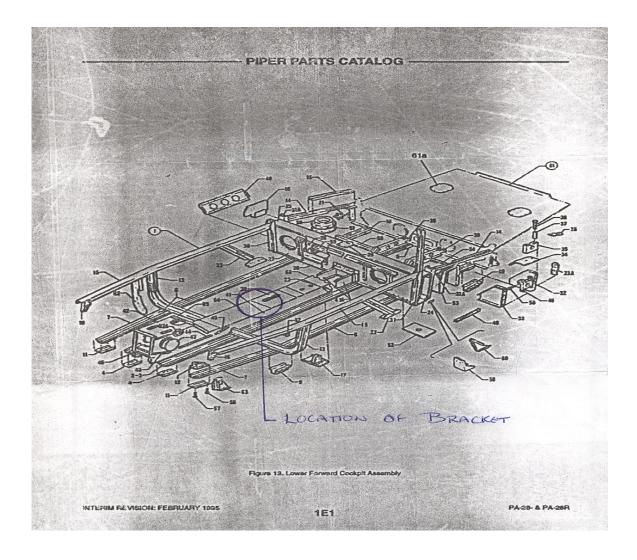
(The FAA Service Difficulty Reporting System data base returns four such entries with one digit clipped from the P/N.)

Part Total Time: (unknown).

PIPER

Piper: PA28; Cracked Flap Handle Support Mount; ATA 5320

An A&P mechanic cautions operators and technicians not to miss the possibility of a cracked flap handle support mount bracket (P/N 62679-000) on this aircraft. "This bracket is riveted in the center tunnel and accepts two bolts at the forward side of the flap handle support mount. This is a difficult area to see, even with a mirror. We have found six cracked brackets to date. (*I*) suspect fatigue and air loads are causing the cracks."



Part Total Time: 4,500.0 hours.

HELICOPTERS

ROBINSON

Robinson: R22-A; Cracked Oil Cooler, ATA 7921

This submission is provided by a helicopter pilot who holds an A&P with an IA. He states, "(*During*) a 100 hour inspection on a Robinson R22-A helicopter, I installed a new oil cooler (*P/N 20006A*)—replacing the old oil cooler. While flying (*after the installation*) I noticed the oil temperature rising and the oil pressure dropping. I made an unscheduled landing and discovered the tail boom covered with engine oil. I traced the oil back to the oil cooler. I removed (*this new unit*) and pressure tested it—I found a ¾ inch crack in the cooler core."

(A Lycoming O-320-B2C powers this aircraft. After truncating the P/N's zeros, the FAA Service Difficulty Reporting System data base shows two Piper PA32 aircraft with the same kinds of cracks.)



Part Total Time: 16.8 hours.

POWERPLANTS

CONTINENTAL

Continental: IO-520-C; Broken-Through Bolt; ATA 8520

A repair station technician says, "(*I*) was installing all new through-bolts in this engine (Superior Air Parts: SA641931-10.75; lot number K070059179 rev. E). Within a few hours after torque, the through-bolt snapped at the oil ring groove. This is the third through-bolt that has snapped after setting for awhile (*after the final torque application*). Attached are pictures of the (*broken*) bolt. Probable cause: (*suspect*) improper heat treatment during or after plating."







Part Total Time: 00.0 hours.

PRATT & WHITNEY

Pratt & Whitney: JT15D-4B; Failed Fuel Control; ATA 7321

"While climbing through 13,000 feet," states a mechanic, "the number 2 engine (on this Cessna S550) unexpectedly over-sped and the ITT (turbine temperature) exceeded the limit of the indicator. The pilot tried pulling the throttle back to idle but (this action) had no effect. The pilots were forced to shut the engine down in flight." (Subsequent investigation and the attached picture show this defect to be caused by a failed fuel control drive shaft (P/N 2525472).



Part Total Time: (unknown).

AIR NOTES

INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE

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

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

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

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

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

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

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

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

The SDRS and iSDR web site point of contact is:

Pennie Thompson Service Difficulty Reporting System, Program Manager Aviation Data Systems Branch, AFS-620 P.O. Box 25082

Oklahoma City, OK 73125 Telephone: (405) 954-1150

SDRS Program Manager e-mail address: 9-AMC-SDR-ProgMgr@faa.gov

IF YOU WANT TO CONTACT US

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

Editor: Daniel Roller (405) 954-3646 FAX: (405) 954-4570 or (405) 954-4655 E-mail address: Daniel.Roller@faa.gov

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

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

AVIATION SERVICE DIFFICULTY REPORTS

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

FAA

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

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

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

Federal Aviation Administration

Service Difficulty Report Data

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

| submitted by the | e aviation commu | nity without FAA | A review for accurac | cy. | |
|---|---|---|---|--|-----------------------------|
| Control Number | Aircraft Make | Engine Make | Component Make | Part Name | Part Condition |
| Difficulty Date | Aircraft Model | Engine Model | Component Model | Part Number | Part Location |
| 2008FA0000068 | | | | SHAFT | CRACKED |
| 1/30/2008 | | | | 538715 | TAIL ROTOR |
| | POSSIBLY RELAT | | | HAD LONGITUDINAL I), OTHER 4 PIECES ON | |
| 2008FA0000045 | | | ROTOL | BLADE | CRACKED |
| 8/23/2007 | | | | 6607132886 | NR 1 |
| | | | | I 689 WAS FOUND TO F REMOVED FROM FURT | |
| CA071115003 | | ALLSN | ALLSN | BOLT | CRACKED |
| 11/15/2007 | | 250C20J | | 6871259 | COMPRESSOR |
| OF SILVER PLAT MOST LIKELY BI INDICATED A DE INDICATED THA MANUFACTURIN COMPRESSOR | TING ON EXTERIC ECAUSE OF THE S EPTH OF APPROX T THE CRACK WA IG DEFECT. NO A | OR OF PART. PAR SILVER PLATE BI IMATELY 600 MIC AS FULL TO EXTR SSOCIATED DAM DNESS OF MATER | T SCRAPPED. CRACE RIDGING THE CRACE CRO METERS RADIA EMITIES WITH IRON IAGE OR SERVICE IS | CK WAS NOT DISCOVE K SURFACE. SEM EVAI LLY . EDS EVALUATIO I OXIDE. THIS APPEAR SSUES NOTED ON REI | N OF THE CRACK S TO BE A |
| CA080124013 | | CONT | CONT | GUIDE | WORN |
| 1/9/2008 | | IO550D | | 636242 | EXHAUST |
| FOUND INSIDE | THE EXHAUST GL | JIDES. WEAR PAT | TTERNS ON THE EXI | PRESSION. ABNORMA HAUST VALVES AND S TO WEAR AGAINST TH | EATS INDICATED THAT |
| CA080124016 | | CONT | CONT | GUIDE | WORN |
| 1/23/2008 | | IO550D | 655471A4 | 636242 | CYLINDER |
| (CAN) RECEIVED CYLINDER FOR REPAIR DUE TO LOW COMPRESSION. WHEN RESURFACING THE VALVE SEATS IT WAS NOTED THAT THE INTAKE GUIDE AND SEAT DID NOT PROPERLY LINE UP. THIS COULD HAVE CAUSED THE LEAK THAT RESULTED IN LOW COMPRESSION. (TC NR 20080124016) | | | | | |
| CA080124014 | | CONT | CONT | GUIDE | UNDERSIZE |
| 1/11/2008 | | O200A | 655483A11 | 628309 | CYLINDER |
| (CAN) EXHAUST VALVE GUIDES FOUND TO BE 0.002 INCH SMALLER THAN THEY SHOULD BE AFTER 2 CYLINDERS WERE SENT IN FOR REPAIR DUE TO STUCK EXHAUST VALVES. (TC NR 20080124014) | | | | | |
| CA071130014 | | GE | | SEAL | DEBONDED |
| 11/26/2007 | | CT581401 | | 3001T60P03 | |

(CAN) STATIC DISCHARGE SEAL DEBONDED WHILE ENGINE (SN 295-291) WAS BEING RUN. OUR INTERNAL SQID REPORT NR 07-06724 REFERS. (TC NR 20071130014)

<u>CA071221012</u> PWA TURBINE BLADES CLOGGED 8/20/2007 PW127 ENGINE

(CAN) THIS SDR IS BEING RAISED TO ADVISE OF A QUALITY ESCAPE REPORTED. DUE TO THE USE IMPROPER MATERIALS AND PROCEDURES, THE COOLING PASSAGES OF SOME HP TURBINE BLADES WERE INADVERTANTLY BLOCKED BY BLASTING MEDIA DURING THE CLEANING PROCESS AT SHOP VISIT. THESE BLADES WERE THEN INSTALLED ON A NR OF ENGINES AND RELEASED TO THE FIELD FOR SERVICE. THERE HAVE BEEN (2) CASES OF THESE BLADES SUBSEQUENTLY FRACTURING IN SERVICE DUE TO OVERHEATING, ENGINES AV0063 AND 120308. HAVE ACKNOWLEGED THE QUALITY ESCAPE AND TAKING REMEDIAL ACTION TO ADDRESS OTHER AFFECTED ENGINES. WILL BE ADVISED OF FURTHER OCCURANCES IN THE FIELD. (TC NR 20071221012)

CA071228001 AEROSP PWA ECU FAILED

12/24/2007 ATR42300 PW120 7898435010 POWER LEVER

(CAN) POWER LEVER SPLIT AT HIGH POWER SETTINGS. FAULT ISOLATED TO FAULTY LT ENGINE ECU. ECU REPLACED. TESTED SERVICEABLE. (TC NR 20071228001)

CA071128003 AEROSP PWA HMU MALFUNCTIONED

11/8/2007 ATR42300 PW120 ENGINE

(CAN) OPERATOR REPORTED UNCOMMANDED ENGINE SHUTDOWN AND EEC REVERSION DURING CLIMB. EEC WAS LATER REPLACED ON GROUND AND OPERATION WAS NORMAL. HMU WAS ALSO REPLACED AS A PRECAUTION. BOTH UNITS WILL BE RETURNED TO MFG FOR INVESTIGATION AND FOLLOW UP. (TC NR 20071128003)

<u>CA070911002</u> AEROSP PWA BRAKE ASSY LOCKED

9/6/2007 ATR42300 PW120 MLG

(CAN) DURING TOUCH DOWN THE RT MLG IB TIRE WENT FLAT. THE FAILURE WAS ATTRIBUTED TO BRAKE LOCKUP. THE AC WAS TOWED FROM THE RUNWAY. MAINT CHECKED THE NR 3 AND NR 4 POSITION BRAKE AND ANTISKID SYSTEMS WITH NO FAULT FOUND. THE NR 3 AND NR 4 WHEEL TIRE ASSEMBLIES WERE REPLACED AND THE AIRCRAFT WAS RETURNED TO SERVICE. (TC NR 20070911002)

CA071130004 AEROSP PWA WIRE HARNESS SHORTED

11/28/2007 ATR42300 PW121 CONTROL PANEL

(CAN) STANDBY HORIZON CB POPPED. MODERATED ELECTRICAL SMELL/SMOKE. WIRE BUNDLE UNDER COPILOTS SIDE PANEL ASSY (PNS2511049800300) FOUND CHAFED AND SHORTING TO PANEL. (PANEL IS BELIEVED TO BE MADE OF CARBON FIBER WHICH WILL CONDUCT ELECTRICITY). PANEL ASSY INSPECTED WITH BURNED SPOTS AT WIRE BUNDLE LOCATION AS WELL AS AFT EDGE WHICH WAS CHAFING ON (2) SCREWS. DAMAGED WIRING BUNDLE REPAIRED. PANEL REPAIRED AND REINSTALLED. (TC NR 20071130004)

CA071109005 AEROSP PWA ECU FAILED

11/8/2007 ATR42300 PW121 7898435010 NR 2 ENGINE

(CAN) AC EXPERIENCED AN IN FLIGHT ENGINE SHUTDOWN OF THE NR 2 ENG ON DESCENT ABOUT 20 MILES FROM DESTINATION. CREW REPORTED NO DISCREPANCIES PRIOR TO THE INCIDENT. THE CREW DID NOT ATTEMPT A RESTART BUT DECIDED TO LAND AS CONFIGURED. THE ECU FAULT LIGHT DID NOT ILLUMINATE AFTER ENGINE SHUTDOWN. THE RT UP-TRIM LIGHT ILLUMINATED AFTER THE ENGINE QUIT IN FLIGHT AS REPORTED BY THE PILOTS. MAINT VISUALLY INSPECTED THE ENGINE FOR OBVIOUS DEFECTS, NONE NOTED. THE ENGINE DRIVEN FUEL PUMP AND HMU WERE REMOVED TO CHECK FOR FUEL PUMP CONDITION. NO FAULTS NOTED. FUEL FILTERS AND ENGINE OIL FILTERS WERE INSPECTED OK. NO BYPASS OR FUEL CLOG ANNUNCIATIONS NOTED. THE ENGINE WAS DRY MOTORED TO LISTEN FOR UNUSUAL NOISES (TOWER SHAFT FAILURE) AS RECOMMENDED BY MFG TECH SUPPORT. NO UNUSUAL NOISES HEARD. RT SIDE GREEN FUEL UPTRIM INDICATOR REMAINED ILLUMINATED FOLLOWING THE DRY MOTOR. THE ONLY WAY TO BRING ON THE ECU FAULT LIGHT WAS TO PULL ECU EMERGENCY POWER CIRCUIT BREAKER. A NEW ECU WAS INSTALLED FOR TESTING PURPOSES. THE ECU FAULT LIGHT ILLUMINATED. HMU IS ON ORDER AND OPERATOR IS STILL INVESTIGATING CAUSES FOR THE INCIDENT.

CA071115001 AEROSP PWA FITTING FAILED

11/10/2007 ATR42320 PW121 S53578400000 MLG ACTUATOR

(CAN) DURING THE APPROACH, THE CREW HEARD A LOUD BANG WHEN THE LANDING GEAR WAS SELECTED DOWN. THE CREW DID NOT OBSERVE ANY OTHER WARNING INDICATIONS AND A NORMAL LANDING WAS COMPLETED. THE CREW CONDUCTED A POST LANDING CHECK AND FOUND THE LT MLG EXTENTION/RETRACTION ACTUATOR SEPARATED FROM THE AIRCRAFT. THE FUSELAGE MOUNTING FITTING HAD FAILED. THE AIRCRAFT MOVED FOR MAINTENANCE ACTION. THE COMPANY HAS INITIATED A FLEET CAMPAIGN TO INSPECT ALL ACTUATOR FITTINGS. (TC NR 20071115001)

CA071221008 AEROSP PWA ENGINE LEAKING

12/16/2007 ATR42320 PW121

(CAN) DURING CLIMB, THE OIL PRESSURE STARTED TO FLUCTUATE AND THE LOW OIL PRESSURE WARNING WAS ACTIVATED. THE CREW SHUT THE ENGINE DOWN AND RETURNED TO THE POINT OF ORIGIN. 5 MIN PRIOR TO LANDING, THE ENGINE WAS RE-STARTED AND ALL PARAMETERS WERE NORMAL EXCEPT THAT THERE WAS NO OIL PRESSURE INDICATION AND THE LOW OIL PRESSURE WARNING. THEY KEPT THE ENGINE RUNNING TILL LANDING. POST FLIGHT INSP REVEALED THAT THE OIL TANK WAS EMPTY AND A SIGNIFICANT OIL LEAK WAS OBSERVED AT THE STARTER GENERATOR PAD. THE ENGINE WILL BE REMOVED AND SENT FOR REPAIRS. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071221008)

<u>CA071212011</u> AEROSP PWA TUBE FRACTURED 10/21/2007 ATR42320 PW121 ENGINE OIL

(CAN) FIRE WARNING DURING CRUISE. CREW ACTIVATED THE FIRE SUPPRESSION SYSTEM AND SECURED THE ENGINE. POST FLIGHT INITIAL INSPECTION REVEALED A FRACTURED NR 6 AND NR 7 BEARING OIL TRANSFER TUBE. SOME FIRE DAMAGE WAS OBSERVED ON THE AFT PORTION OF THE ENGINE. THE ENGINE HAS BEEN REMOVED AND FORWARDED FOR FUTHER INVESTIGATION. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071212011)

<u>CA071218005</u> AEROSP PWA SEAL FAILED

12/16/2007 ATR42320 PW121 NR 1 ENGINE

(CAN) AFTER DEPARTURE AND ENROUTE TO DESTINATION, THE CREW OBSERVED A LOW OIL PRESSURE WARNING LIGHT AND NOTED FLUCTUATING OIL PRESSURE ON THE NR 1 ENGINE. THE ENGINE WAS SHUTDOWN AND RESTARTED IAW THE OPERATING PROCEDURES MANUAL, THE OIL PRESSURE WAS NOTED TO BE NEAR ZERO. THE AIRCRAFT RETURNED TO POINT OF DEPARTURE AND LANDED WITHOUT INCIDENT. NO EMERGENCY WAS DECLARED. MAINTENANCE DETERMINED THAT THE NR 1 GENERATOR SEAL FAILED RESULTING IN THE LOSS OF OIL FROM THE NR 1 ENGINE. (TC NR 20071218005)

CA071221004 AEROSP PWA OIL SYSTEM LOW PRESSURE

12/12/2007 ATR72 PW127 ENGINE

(CAN) DURING CRUISE, THE CREW OBSERVED FLUCTUATIONS IN THE OIL PRESSURE, FOLLOWED BY A DROP TO ZERO. THE ENGINE WAS SHUTDOWN ACCORDINGLY. TROUBLESHOOTING IS ONGOING, MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071221004)

<u>CA071128001</u> AEROSP PWA PROP BRAKE DAMAGED 11/6/2007 ATR72 PW127 PROPELLER

(CAN) SHORTLY AFTER ENGINE START, CREW OBSERVED A PROP BRAKE WARNING LIGHT FOLLOWED BY A FIRE WARNING. ENGINE WAS SECURED AND THE AIRCRAFT EVACUATED. INITIAL INVESTIGATION REVEALED A SEVERELY DAMAGED PROPELLER BRAKE ASSY. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071128001)

CA071205008 AEROSP PWA PUMP MALFUNCTIONED

11/28/2007 ATR72 PW127 FUEL SYSTEM

(CAN) DURING CRUISE, THE CREW REPORTED THAT ENGINE TORQUE WAS (UNSTABLE). POST FLIGHT INVESTIGATION REVEALED THAT ENGINE POWER WAS LIMITED TO 86 PERCENT VS. 90 PERCENT TARGET. FUEL

PUMP AND FUEL CONTROL WERE REPLACED. FUEL PUMP IS SUSPECT AND WILL BE SENT FOR INVESTIGATION. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071205008)

| CA071212010 | AEROSP | PWA | TURBINE | DAMAGED |
|-------------|----------|--------|---------|---------|
| 6/13/2007 | ATR72201 | PW124B | | ENGINE |

(CAN) REPORTED TO MFG ON DEC 07 2007. ENGINE REPORTED TO HAVE SUFFERED AN INFLIGHT SHUTDOWN DURING TAKEOFF/CLIMB. NO OTHER DETAILS PROVIDED. POST FLIGHT INSPECTION INDICATES SEVERE DAMAGE TO THE TURBINE SECTION. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20071212010)

| CA071127002 | AIRBUS | GE | COFFEEMAKER | SPARKS |
|-------------|---------|-----------|-------------|--------|
| 11/21/2007 | A310300 | CF680C2A5 | HE62190 | GALLEY |

(CAN) DURING FLIGHT, THE F/A REPORTED THE FWD COFFEE MAKER/WATER BOILER OVERHEATING AND NOTICED SOME SPARK COMING FROM THE UNIT. THE UNIT WAS DEACTIVATED. THE UNIT WAS REPLACED BY MAINTENANCE AND ROUTED TO THE REPAIR SHOP FOR INVESTIGATION. (TC NR 20071127002)

| CA071127001 | AIRBUS | GE | PUMP | CRACKED |
|-------------|---------|-----------|---------|------------|
| 11/20/2007 | A310304 | CF680C2A5 | 3508806 | HYD SYSTEM |

(CAN) DURING CRUISE, THE YELLOW HYD SYS OVERHEAT ECAM MESSAGE CAME ON. LATER THE HYD RESERVOIR (LO LEVEL) WARNING CAME ON THE ECAM. NORMAL QRH PROCEDURE WAS PERFORMED. DURING INVESTIGATION, MAINT FOUND YELLOW HYD PUMP LEAKING. HYD PUMP CASING WAS CRACKED. PUMP AND FILTERS WERE REPLACED AND AC RETURN TO SERVICE. UNSERVICEABLE PUMP WAS ROUTED TO REPAIR SHOP FOR INVESTIGATION. (TC NR 20071127001)

| CA071130001 | AIRBUS | CFMINT | POWER SUPPLY | FAILED |
|-------------|---------|----------|--------------|------------------|
| 11/10/2007 | A319114 | CFM565A3 | 32145410 | EMERGENCY LIGHTS |

(CAN) IN PROCESS OF DOING AB EMERGENCY LIGHTING TEST, AFTER THE COMPLETION OF THE IN-FLIGHT ENTERTAINMENT MAKEOVER, IT WAS DISCOVERED THAT THE AFT EMERGENCY LIGHTING WAS NOT TESTING. A STRONG BURNING SMELL WAS DETECTED AFTER OPENING A PANEL TO ACCESS THE AFT EMERGENCY POWER SUPPLY UNIT. ONE CORNER OF THE BATTERY UNIT WAS MELTED THROUGH THE CASE AND THE POSITIVE TERMINAL CONNECTION AND CIRCUIT BOARD ON THE ESPU HAD SIGNS OF SEVERE OVERHEATING. THE ESPU AND BATTERY WERE SENT TO THE SHOP FOR EVALUATION. THE SUSPECTED CAUSE WAS LIQUID INGESTION BUT COULD NOT BE SUBSTANTIATED. (TC NR 20071130001)

| 2008FA0000072 | AIRBUS | CFMINT | CFMINT | SUPPORT | ERODED |
|---------------|--------|------------|--------|------------|------------|
| 1/11/2008 | A320* | CFM565B42P | | 1808M15G03 | HPT NOZZLE |

DURING DISASSEMBLY OF THE CORE MAJOR MODULE, REMOVED FROM ESN 779408, REMOVAL OF THE COMBUSTION LINER MODULE EXPOSED THE FWD INNER NOZZLE MODULE EXPOSED THE FORWARD INNER NOZZLE SUPPORT (FINS). IT WAS NOTED THAT THE FINS HAD 1-OFF AREA OF LOCALIZED EROSION WHICH HAD RESULTED IN PENETRATION OF THE COMPONENT. THE EROSION WAS LOCATED ON THE SUPPORT BODY SECTION OF THE COMPONENT, JUST AFT OF THE FWD FLANGE AND ADJACENT TO THE NR 22 AND 23 BOLT HOLES (CLOCKWISE FROM TDC, ALF) THE CAUSE OF THE EROSION IS UNKNOWN. CIRCUMFERENTIAL EROSION TO THE SUPPORT BODY OF THE FINS IS COMMON BUT LOCALIZED EROSION, AS SEEN IN THIS INSTANCE HAS NOT BEEN SEEN PREVIOUSLY. ALL AFFECTED PARTS ARE SCHEDULED FOR RETURN TO MFG FOR FAILURE ANALYSIS.

| CA071205010 | AIRBUS | CFMINT | THERMOSTAT | FAILED |
|-------------|---------|----------|-----------------|--------------|
| 11/26/2007 | A320211 | CFM565A1 | 342B030000AMDTA | TEMP CONTROL |

(CAN) WHILE IN CRUISE AT FL 390, THE CREW HAD A BLEED AIR SUPPLY NR 2 FAILURE, AND DURING A DESCENT WHILE REFERING TO THE QRH, ALSO HAD NR 1 BLEED FAIL. CREW LOST BOTH PACKS, AND INITIATED EMERGENCY DESCENT TO 10,000 FT. FLT DIVERTED TO NEARBY AIRPORT. TEMP CONTROL THERMOSTAT (TCT) AND FAN AIR VALVE WERE CHANGED. IT IS TO BE NOTED THAT THE TCT IS POST MOD TO ENABLE IT TO OPERATE UNDER SINGLE BLEED CONDITIONS. (TC NR 20071205010)

| CA070313009 | AIRTRC | PWA | FRAME | CRACKED |
|-------------|--------|----------|--------|----------|
| 3/13/2007 | AT802A | PT6A65AG | 804501 | FIREGATE |

(CAN) DURING ANNUAL INSPECTION, THE LOWER LONGITUDINAL FRAME OF THE STAINLESS STEEL FIREGATE P/N 80450-1 WAS NOTED TO BE CRACKED AT THE FWD END AND BULGED AT THE AFT END. (2) OTHER AC HAVE SIMILAR DAMAGE. WATER WAS FOUND IN THE TUBE AND THE DAMAGE APPEARS TO BE CAUSED BY WATER FREEZING. (TC NR 20070313009)

| CA071203004 | AIRTRC | PWA | SPRING | CRACKED |
|-------------|--------|---------|--------|---------|
| 11/1/2007 | AT802A | PT6A67A | 400928 | TAIL |

(CAN) CRACK FOUND ON TAIL SPRING BEGINNING FROM FWD ATTACH HOLE EXTENDING ALONG SIDE OF SPRING. CRACK THEN EXTENDS TO TOP OF SPRING. LENGTH OF CRACK TOTALS APPROX 6 INCHES. (TC NR 20071203004)

| CA071204002 | AIRTRC | PWA | CIRCUIT BREAKER | CRACKED |
|-------------|--------|---------|-----------------|---------|
| 11/1/2007 | AT802A | PT6A67A | PDLM120 | CB BODY |

(CAN) CB CRACKED. (TC NR 20071204002)

<u>CA071204003</u> AIRTRC PWA NUT BROKEN

11/1/2007 AT802A PT6A67A EISRVAC VACUUM SWITCH

(CAN) THE VACUUM SWITCH WAS SUPPLIED BY MFG. PLASTIC ADJUSTING NUT SPLIT, PREVENTING THE VACUUM SWITCH FROM INDICATING A LOW FUEL PRESSURE WARNING. (TC NR 20071204003)

| CA070830001 | AIRTRC | PWA | BOLT | BROKEN |
|-------------|--------|-----|------|--------|
| | | | | |

8/27/2007 AT802A PT6A67A NAS50134A DISPERSAL GATE

(CAN) RETARDANT WAS DISCOVERED LEAKING FROM AROUND THE TANK DOORS. UPON INVESTIGATION, IT WAS NOTED THAT THE BOLT SECURING THE ANGLE INSIDE THE RT DISPERSAL GATE ASSY WAS BROKEN. THE BOLT WAS REPLACED AND THE AIRCRAFT WAS RETURNED TO SERVICE. (TC NR 20070830001)

| CA071122001 | AMD | GARRTT | CONTROL HANDLE | INOPERATIVE | |
|-------------|-----|--------|----------------|-------------|--|
| | | | | | |

11/16/2007 FALCON10 TFE7312 F10A793 MLG EMER EXTEND

(CAN) DURING THE CLIMB, THE LT MAIN LANDING GEAR INTRANSIT STAYED ON DURING GEAR RETRACTION. THE CREW FLEW BACK TO DEPARTURE WITH THE GEAR DOWN. AFTER THEY LANDED AT DEPARTURE AIRPORT. WE INSPECTED THE GEAR IAW THE MM AND CAR 605.88. IT WAS FOUND THAT THE MANUAL EMERGENCY HANDLE WAS OFF SET SLIGHTLY CAUSING THE GEAR NOT TO FULLY LOCK IN THE UP POSITION. THE EMERGENCY CONTROL SYS WAS RESET IAW THE MM. SATISFACTORY GEAR SWINGS WERE CARRIED OUT. CALLED FOR A TEST FLIGHT, THE TEST FLIGHT WAS CARRIED OUT WITH NO FAULTS. (TC NR 20071122001)

| 2008FA0000071 | AMD | CFE | LANYARD | MISSING |
|---------------|------------|-----------|---------|---------------------|
| 2/4/2008 | FALCON2000 | CFE73811B | | EMERGENCY WINDOW |

ACCESS COVER FOR THE EMERGENCY WINDOW HANDLE DOES NOT HAVE A LANYARD WHEN IT IS REMOVED. THE COVER HANGS BY THE WIRING THAT ILLUMINATES IT PUTTING STRESS ON THE SOLDERED CONNECTIONS TO BREAK CAUSING EITHER AN INOPERATIVE EMERGENCY LIGHT OR A SHORT CAUSING MORE THAN ONE EMERGENCY LIGHT TO NOT ILLUMINATE. THIS COVER IS REMOVED ROUTINELY FOR SECURITY PINNING OF THE EXIT HANDLE AND FOR EMERGENCY WINDOW HANDLE INSPECTION. THERE SHOULD BE A LANYARD TO PROVIDE STRESS RELIEF FOR THE ASSOCIATED WIRING MOUNTED ON THE COVER AND IN THE WINDOW ASSY. (K)

| CA071212001 | AMD | GARRTT | ENGINE | MAKING METAL |
|-------------|--------------|----------|--------|--------------|
| 12/27/2006 | FALCON50MYST | TFE73140 | | NR 2 |

(CAN) ON DESERT TO BASE CREW NOTICED NR 2 ENGINE OIL PRESSURE AND TEMPERATURE CLIMBING, POWER REDUCED TO IDLE. OIL PRESSURE DROPPED TO BELOW MINIMUMS (IN YELLOW ARC). CREW PERFORMED PRECAUTIONARY SHUTDOWN AND LANDED NORMALLY. SUBSEQUENT INVESTIGATION REVEALED OIL HAD VENTED OUT THROUGH BREATHER. CHIP DETECTOR AND GEARBOXES CONTAMINATED WITH METAL PARTICLES. ENGINE RETURNED FOR REPAIR AND INVESTIGATION OF CAUSE. (TC NR 20071212001)

CA071205003 AMTR LYC STOP PIN MISSING

12/5/2007 ELITE532 O360A2F 62226 AIR METERING

(CAN) AN INTERMITTENT, MINOR ROUGHNESS IN THE ENGINE WAS OBSERVED TO TAKE PLACE JUST BEFORE LANDING. NOTHING OUT OF THE ORDINARY WAS OBSERVED DURING LANDING, TAXI AND SHUTDOWN (I.E. NO ABNORMAL CHT, EGT OR RPM). INSP OF ENGINE REVEALED NOTHING, EXTERNALLY. CARB WAS REMOVED FROM ENGINE AND SENT IN TO INSTALL AN OPTIONAL ENRICHMENT KIT TO CONVERT THE P/N 10-3878 CARB TO A P/N 10-3878M FOR IMPROVED PERFORMANCE AND BETTER COLD WEATHER OPS. WHEN DISASSEMBLED, IT WAS DISCOVERED THAT THE CARB AIR METERING STOP PIN HAD VIBRATED LOOSE AND HAD FALLEN OUT. ALLOWING SPRING LOADED AIRBLEED NEEDLE TO POP OUT AND FALL INSIDE CARB, JAMMING THE THROTTLE. PILOT DID NOT DETECT ANY JAMMING OF THROTTLE OR MALFUNCTION OF MECHANICAL CARB ENRICHMENT SYS WHILE FLYING, WHICH IMPLIES PROGRESSIVE FAILURE SEQUENCE COMPLETED SHORTLY AFTER LANDING OR JUST BEFORE SHUTDOWN. AD 89-04-02 PARTIALLY ADDRESSES THIS PROBLEM, THE SN FOR THE FAILED CARB IS OUTSIDE OF THE SN RANGE SPECIFIED IN THE AD.

2008FA0000076 AMTR CONT ACTUATOR MALFUNCTIONED

12/21/2007 QUESTAIRVENT IO550N MLG

NOSE GEAR LINEAR ACTUATOR TRIPPED CIRCUIT BREAKER INFLIGHT AND WAS NOT DETECTED PRIOR TO LANDING. THE AIRCRAFT WAS INADVERTENTLY LANDED WITH THE NOSE GEAR NOT EXTENDED. WHEN THE AIRCRAFT WAS RECOVERED, THE AIRCRAFT WAS LIFTED SO THE GEAR COULD BE EXTENDED. WHEN POWER WAS APPLIED TO THE AIRCRAFT AND THE CIRCUIT BREAKER WAS RESET THE NOSE GEAR EXTENDED NORMALLY AND LOCKED IN THE DOWN POSITION, THE CIRCUIT BREAKER DID NOT TRIP. OTHER AIRCRAFT IN THE FLEET HAVE HAD PROBLEMS WITH THE GEAR ACTUATOR BREAKERS BEING TO LOW OF A RATING BUT THIS AIRCRAFT HAS THE HIGHER RATED BREAKER INSTALLED.

<u>CA070917013</u> AVIAT LYC SEAL DISLODGED
9/14/2007 A1B O360A1P INDUCTION SYS

(CAN) ON FINAL APPROACH THE ENGINE SUDDENLY EXPERIENCED A SEVERE LOSS OF POWER WHEN CARB HEAT WAS SELECTED. DURING INSPECTION, AFTER LANDING, A (3) INCH PIECE OF FOAM SEAL WAS FOUND LODGED IN THE CARB VENTURI. ON FURTHER INSPECTION, A CORRESPONDING GAP WAS FOUND IN THE SEAL BETWEEN THE COWL INTAKE SCOOP AND THE INDUCTION AIR FILTER. THE REMAINING PIECES OF FOAM SEAL WERE REMOVED AND A SATISFACTORY GROUND RUN WAS CARRIED OUT. THE AC WAS RETURNED TO SERVICE. INSP OF A SECOND AC OF THE SAME MODEL DISCOVERED SIMILAR PIECES MISSING FROM THE SEAL BETWEEN THE COWL AND THE INDUCTION AIR FILTER. (TC NR 20070917013)

<u>CA071123005</u> BAG GARRTT REDUCTION GB FAILED
11/22/2007 JETSTM3212 TPE33110 LT ENGINE

(CAN) WHILE IN CRUISE AT 16000 FT, A THUMP WAS FELT AND HEARD FROM THE LT ENGINE. A LARGE POWER DROP WAS NOTICED THEN A SECOND THUMP FROM THE LT ENGINE WHICH WAS FOLLOWED BY THE OIL CAP ANNUNCIATION ILLUMINATION. IMMEDIATELY TURNED BACK AND SHUT THE ENG DOWN. ATC, COMPANY, AND PASSENGERS WERE ADVISED AND REQUESTED THE EMERGENCY VEHICLES BE ON STANDBY, THE REMAINDER OF THE FLIGHT AND LANDING WERE UNEVENTFUL. MAINT INSP OF LT ENGINE REVEALED LIMITED ENGINE ROTATION WHEN TURNING THE PROP, INDICATING RGB INTERNAL COMPONENT/S FAILURE. LT ENGINE CHIP DETECTOR AND OIL FILTER WERE REMOVED AND METAL CONTAMINATION WAS OBSERVED IN BOTH AREAS. THE ENGINE WAS REMOVED FOR SHIPMENT TO A REPAIR FACILITY FOR TEAR DOWN DAMAGE AND POSSIBLE CAUSE ASSESSMENT. (TC NR 20071123005)

CA071026008 BAG GARRTT LINE LEAKING

10/23/2007 JETSTM3212 TPE33110UG 137311D1233 HYD SYSTEM

(CAN) DURING A ROUTINE 200 HOUR AIRFRAME INSP, HYD FLUID WAS FOUND TO BE LEAKING FROM ABOVE THE BAGGAGE POD ON THE BELLY OF THE AC. THE AIRCRAFT'S IMPENDING DEPARTURE WAS CANCELLED, AND THE POD REMOVED TO INVESTIGATE. IT WAS FOUND THAT THERE WAS A CLAMP MISSING ON THE MAIN HYD RETURN LINE, WHICH ALLOWED THE BACKSIDE OF AN ADELL CLAMP ON A HYD PRESS LINE TO CHAFF ON THE MAIN RETURN LINE. THIS CHAFFING ACTION WAS FOUND TO HAVE BREACHED THE RETURN LINE, P/N 137311D1233. THE RETURN LINE WAS REMOVED AND REPLACED WITH A SERVICEABLE LINE, ALL CLAMPS AND LINES IN THE AREA WERE INSPECTED FOR PROPER ASSEMBLY AND CHAFFING AND NO OTHER DEFECTS WERE NOTED. THE

AIRCRAFT HYDRAULIC SYSTEM WAS SERVICED AND BLED AND THE AIRCRAFT RETURNED TO SERVICE. (TC NR 20071026008)

| CA071217006 | BAG | GARRTT | WOODWARD | BOLT | BACKED OUT |
|-------------|------------|------------|----------|--------------|--------------|
| 12/14/2007 | JETSTM3212 | TPE33110UG | | NAS1351C3LL6 | FUEL CONTROL |

(CAN) ON CLIMB OUT, THE PILOT REPORTS NR 1 ENG RPM DROPPED TO 97 PERCENT AND HE WAS NOT ABLE TO RESTORE THE ENG TO 100 PERCENT RPM. PROCEEDED TO MAKE AN UNSCHEDULED LANDING AT DEPARTURE AIRFIELD. UPON INVESTIGATION IT WAS FOUND THAT THE BOLT ATTACHING THE SPEED LEVER TELEFLEX CABLE TO SPEED INPUT SHAFT OF THE FCU HAD BACKED OUT COMPLETELY AND THE CABLE HAD SEPARATED FROM THE INPUT ROD. THE BOLT IN QUESTION WAS RE-USED ON AN ENGINE CHANGE THAT TOOK PLACE 33.6 HOURS PRIOR TO THIS EVENT, ON 11/28/2007. AT THAT TIME THE BOLT MET THE RUN-DOWN TORQUE REQUIREMENTS FOR SELF LOCKING HARDWARE IAW MM STANDARD PRACTICES. THE BOLT WAS REPLACED, THE ENGINE RE-RIGGED WITH NO FAULTS FOUND AND THE AC RETURNED TO SERVICE. (TC NR 20071217006)

| CA071219010 | BAG | GARRTT | TUBE | CHAFED |
|-------------|------------|------------|----------|------------|
| 12/14/2007 | JETSTM3212 | TPE33110UG | 31081331 | ENGINE OIL |

(CAN) DURING A SCHEDULED FLIGHT BETWEEN, A WARNING INDICATION OF OIL PRESSURE LOSS ON THE NR 1 ENGINE APPEARED ON THE ANNUNCIATOR PANEL. THE CREW VERIFIED THE WARNING BY OBSERVING THE OIL PRESSURE GAUGE. THE ENGINE WAS SHUTDOWN AND AN EMERGENCY WAS DECLARED. THE CREW LANDED THE AC WITHOUT INCIDENT. UPON INSPECTION IT WAS FOUND THAT THE STEEL TUBE BETWEEN THE PROPELLER GOVERNOR AND A T-FITTING WAS LEAKING FROM THE FLARED END WHERE IT ATTACHED TO THE T-FITTING. THE TUBE WAS REPLACED WITH A NEW ONE AND HIGH POWER GROUND RUNS WERE PERFORMED. NO LEAKS WERE PRESENT. THE OIL WAS CLEANED FROM THE ENGINE COMPARTMENT AND THE AC RETURNED TO BASE. DURING REPLACEMENT OF THE TUBE IT WAS NOTED THAT IT HAD BEEN CHAFFING ON AN ADJACENT TUBE AND LEFT SOME MARKS ON THE TUBE. THIS CHAFED AREA ON THE TUBE WAS NOT SUSPECTED TO BE THE CAUSE OF OIL LOSS. (TC NR 20071219010)

| CA071212015 | BAG | GARRTT | PUMP | FAILED | | | | |
|---------------|--|-------------|---------|------------|--|--|--|--|
| 11/23/2006 | JETSTM3212 | TPE33112UHR | 2260961 | FUEL BOOST | | | | |
| (CAN) RT FUEL | (CAN) RT FUEL BOOST PUMP FAILED. (TC NR 20071212015) | | | | | | | |
| CA070516001 | BBAVIA | LYC | TUBE | BROKEN | | | | |
| 5/15/2007 | 7ECA | O235K2C | 712551 | FUSELAGE | | | | |

(CAN) WHILE PREFLIGHTING THE AC, THE PILOT NOTED WRINKLED FABRIC AT THE LOWER AFT END OF THE FUSELAGE. OPENING THE FABRIC REVEALED THAT THE VERTICAL TUBE THAT FORMS THE FIN SPAR AND IS THE ATTACH POINT FOR THE RUDDER HINGES AND TAILWHEEL SPRING AFT ATTACH WAS BROKEN THROUGH ABOUT AN INCH AND A HALF UP FROM ITS LOWER END, JUST ABOVE THE WELDED SKID ATTACHMENT. THERE IS NO EVIDENCE THAT THIS WAS CAUSED BY ANY FLIGHT LOADS OR HARD LANDINGS. SUSPECT THAT TAILWHEEL SHIMMY FLEXED THE SKID PLATE ATTACHMENT IN A TORSIONAL MANNER AND CAUSED A FATIGUING OF THE TUBE AT THIS POINT, EVENTUALLY RESULTING IN ITS FAILURE. (TC NR 20070516001)

| CA080123007 | BBAVIA | LYC | FUEL TANK | CRACKED |
|-------------|--------|---------|-----------|----------|
| 1/15/2008 | 8GCBC | O360C2E | 71494R | OUTBOARD |

(CAN) GAS FUMES WERE DETECTED AROUND AC. WHEN RT OB FUEL TANK WAS REMOVED A CRACK WAS FOUND ON A REPAIRED RADIUS OF THE LATERAL RE-ENFORCEMENT INDENT OF THE TANK. 720 HOURS SINCE THE TANK WAS REPAIRED. (TC NR 20080123007)

| CA080123008 | BBAVIA | LYC | FUEL TANK | CRACKED |
|-------------|--------|---------|-----------|---------|
| 1/15/2008 | 8GCBC | O360C2E | 71493R | INBOARD |

(CAN) GAS FUMES WERE DETECTED AROUND AC. WHEN THE RT IB FUEL TANK WAS REMOVED A CRACK WAS FOUND AROUND THE FUEL VENT INTERCONNECT WELD. (TC NR 20080123008)

| CA061201004 | BBAVIA | LYC | TANK | CRACKED |
|-------------|--------|---------|---------|---------|
| 11/24/2006 | 8GCBC | O360C2E | 714931L | WING |

(CAN) AIRCRAFT HAD RETURNED TO MAINTENANCE FACILITY FOR WINTER STORAGE. FUEL STAINS WERE NOTICED ON THE BOTTOM OF THE WING NEAR THE TRAILING EDGE. LT IB TANK WAS REMOVED AND A 1.5 INCH CRACKED WAS FOUND ON THE RADIUS OF THE LATERAL RE-ENFORCEMENT INDENT OF TANK. (TC NR20061201004)

| CA071122004 | BBAVIA | LYC | TANK | CRACKED |
|-------------|--------|---------|--------|----------|
| 11/23/2007 | 8GCBC | O360C2E | 71494R | FUEL SYS |

(CAN) AIRCRAFT WAS IN FOR A 50 HR INSPECTION. AFTER ENGINE RUN UP, MECHANIC DETECTED GAS FUMES AND LOOKED ON THE RT SIDE ON THE AC WINGS NEAR TRAILING EDGE NOTICE FUEL STAINING. RT OB TANK WAS REMOVED AND 1 INCH CRACK WAS FOUND ON THE RADIUS OF THE LATERAL RE-ENFORCEMENT INDENT OF TANK. (TC NR 20071122004)

| <u>C</u> | A080111002 | BBAVIA | LYC | | HINGE | CRACKED | |
|----------|--|----------|-------------|------------|--------------|---------|--|
| 1/ | 7/2008 | 8GCBC | O360C2E | | 21993 | AILERON | |
| (C | (CAN) ON INSPECTION, 4 CRACKS FOUND IN CORNERS (TC NR 20080111002) | | | | | | |
| C | A080103005 | BEECH | GARRTT | GARRTT | WIRE HARNESS | FAILED | |
| 12 | 2/28/2007 | 100BEECH | TPE3316252B | TPE3316252 | 8975294 | ENGINE | |

(CAN) AFTER A STOPOVER THE AIRCREW WENT TO START THE NR 2 ENGINE, AT THIS TIME IT WAS NOTED THAT THE ITT GAUGE WAS NOT WORKING. MAINTENANCE PERSONNEL FLEW TO THE AIRCRAFT LOCATION AND THROUGH TROUBLESHOOTING DETERMINED THAT THE ITT HARNESS HAD FAILED. A FERRY PERMIT WAS USED TO RETURN THE AIRCRAFT BACK TO THE MAIN BASE. ENGINE WAS REMOVED AND A NEW HARNESS INSTALLED. (TC NR 20080103005)

| CA070910005 | BEECH | PWA | WASHER | DAMAGED |
|-------------|----------|--------|------------|---------|
| 8/22/2007 | 100BEECH | PT6A28 | 6147514435 | WING |

(CAN) WHILE DOING CF-1981-25R6 LOWER FWD WING ATTACH FITTINGS YOU MUST REPLACE THE LOWER FWD. WING BOLT WASHER ASSY UPON RE-INSTALL OF BOLTS. NEW WASHER KITS WERE INSTALLED, BUT WERE UNABLE TO TORQUE IAW THE MFG SIRM., THE TORQUE WAS TOO GREAT TO GET THE REQUIRED READING OF THE SPRING SCALE, THE THREADS ON THE NUTS WERE DAMAGED AND SO WERE THE THREADS ON THE BOLTS. THE BOLTS AND NUTS WERE REPLACED WITH NEW, AND THE WASHER KITS WERE ALSO REPLACED, AND NORMAL TORQUE WAS ATTAINED. (TC NR 20070910005)

| CA071114009 | BEECH | PWA | BRACE | CRACKED |
|-------------|----------|--------|-----------|-----------------|
| 9/13/2007 | 100BEECH | PT6A28 | 998100287 | MLG TORQUE LINK |

(CAN) FLIGHT CREW CONDUCTED A CROSSWIND LANDING, SHUTDOWN, AND PASSENGERS DEPLANED ON REMOTE RAMP LOCATION. UPON TAXIING TO THE TERMINAL FOR THE NEXT FLIGHT, CREW NOTICED THE AIRCRAFT FELT DIFFERENT. MAINTENANCE WAS CALLED, AND A VISUAL INSPECTION FOUND THAT THE LT MLG TRUNNION BOSS ASSY HAD BROKEN AWAY. FURTHER INVESTIGATION REVEALED THE RT MLG WAS CRACKED IN THE SAME AREA. A HARD-LANDING INSPECTION WAS COMPLETED IAW CARS 625 APP G, AND AMM 5-50-00 AS A PRECAUTIONARY MEASURE. MAIN LANDING GEAR ASSEMBLIES WERE REPLACED, SERVICED, AND GEAR SWINGS CONDUCTED IAW AMM. (TC NR 20071114009)

| CA071130003 | BEECH | PWA | WINDSHIELD | CRACKED |
|-------------|-------|---------|-------------|---------|
| 11/28/2007 | 1900C | PT6A65B | 10138402522 | COCKPIT |
| | | | | |

(CAN) COPILOTS WINDSHIELD INNER PANE SHATTERED DURING NORMAL CRUISE FLIGHT. WINDSHIELD REPLACED UPON RETURN TO MAINTENANCE BASE. (TC NR 20071130003)

| CA071206003 | BEECH | PWA | CONTROL CABLE | STIFF | |
|-------------|-------|-----|---------------|-------|--|
| | | | | | |

PT6A67D

12/3/2007

1900D

(CAN) WHILE PERFORMING AN INTERIOR PREFLIGHT CHECK THE F/O PULLED THE CONTROL KNOB FOR THE OXYGEN SYS. THE KNOB WAS DIFFICULT TO PULL BUT THE PILOT CONFIRMED THAT THERE WAS FLOW AT THE MASKS. DURING THE FLIGHT THE PILOT AND CO-PILOT DONNED THE OXYGEN MASKS AND FOUND THERE WAS

NO OXYGEN FLOW. UPON RETURN TO BASE MAINT CHECKED THE SYS AND FOUND IT SERVICEABLE. DURING THE

1183840093

OXYGEN MASK

NEXT FLIGHT THE PILOTS FOUND THE SAME PROBLEM WITH THE CONTROL KNOB. DURING TROUBLESHOOTING THE AC WAS COLD-SOAKED AND THE KNOB FOUND DIFFICULT TO PULL. THE CONTROL CABLE ASSY WAS REMOVED AND REPLACED. (TC NR 20071206003)

| CA070510003 | BEECH | PWA | SQUAT SWITCH | FAILED |
|-------------|-------|---------|--------------|--------|
| 4/28/2007 | 1900D | PT6A67D | | RT MLG |

(CAN) OUR 1900D WAS ON APPROACH, PILOT SELECTED THE LANDING GEAR DOWN. NOTHING HAPPENED, AC RETURNED TO IT'S MAIN BASE. WHEN MAINT RECEIVED THE AC THE FAULT COULDN'T BE DUPLICATED. DURING TROUBLESHOOTING ON THE GROUND THE MAINT WAS ABLE TO FIND A CONSTANT FAULT ON THE GROUND, IT WAS FOUND THAT THERE WAS A CONSTANT 28 VOLTS APPLIED TO THE (UP) SOLENOID OF THE HYDR POWERPACK, PREVENTING THE (DOWN) SOLENOID FROM MOVING THE SELECTOR VALVE TO THE DOWN POSITION WHEN THE LANDING GEAR HANDLE IS PLACED IN THE (DOWN) SELECTION. THE VOLTAGE SOURCE ORIGINATED FROM THE PROP GOVERNOR TEST CIRCUIT THROUGH THE RT MLG SQUAT SWITCH. THE SQUAT SWITCH WAS REPLACED AND THE AIRCRAFT WAS RETURNED TO SERVICE. (TC NR 20070510003)

| CA070523002 | BEECH | PWA | BLOWER | SEIZED |
|-------------|-------|---------|--------|--------|
| 5/18/2007 | 1900D | PT6A67D | EM6303 | CABIN |

(CAN) WHILE ENROUTE, THE AC CABIN AND COCKPIT FILLED UP WITH SMOKE FROM WHAT SMELLED ELECTRICAL IN NATURE. OXYGEN WAS USED AND THE AC FINISHED ITS TRIP AND LANDED (DESTINATION WAS CLOSER THAN TO TURN AROUND). MAINT WAS CALLED AND AN AC WAS DISPATCHED TO CONTINUE THE DAY. SYSTEMS WERE CHECKED, NO FAULTS WERE FOUND. THE AC WAS RETURNED TO BASE WITH NO PASSENGERS ON BOARD. UPON FURTHER INSP AT THE BASE, IT WAS FOUND THAT ONE OF THE CABIN VENT BLOWERS WAS SEIZED AND THE (2) SPEED ADJUSTING RESISTORS INSTALLED ON THE BLOWER WERE WARPED AND MELTED FROM HEAT. THE VENT BLOWER WAS REPLACED AND THE AC WAS RETURNED TO SERVICE. (TC NR 20070523002)

| CA071221005 | BEECH | PWA | ENGINE | MAKING METAL |
|-------------|-------|---------|--------|--------------|
| 12/14/2007 | 19000 | PT6467D | | |

(CAN) DURING FINAL APPROACH, THE LOW OIL PRESSURE WARNING ACTIVATED. THE CREW SHUTDOWN THE ENGINE. POST FLIGHT INVESTIGATION REVEALED THAT THE ENGINE ROTORS WERE DIFFICULT TO TURN AND THAT METAL SHAVINGS WERE DEPOSITED ON THE OIL FILTER. THE ENGINE IS BEING SENT FOR INVESTIGATION. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071221005)

| CA071214001 | BEECH | PWA | HANDLE | JAMMED |
|--|----------|--------|--------|----------------|
| 12/4/2007 | 200BEECH | PT642A | | EMERGENCY EXIT |
| (CAN) DUDING THE INITIAL DHASE ONE INSPECTION THE EMEDICANCY EVIT COLUD NOT BE OBENED FROM THE | | | | |

(CAN) DURING THE INITIAL PHASE ONE INSPECTION THE EMERGENCY EXIT COULD NOT BE OPENED FROM THE OUTSIDE AND THE EXIT COULD NOT BE LOCKED FROM THE INSIDE. (TC NR 20071214001)

| CA080102002 | BEECH | PWA | BRACKET | WORN |
|-------------|----------|--------|------------|----------|
| 1/1/2008 | 200BEECH | PT642A | 3516505035 | TE FLAPS |

(CAN) FLAPS REMOVED TO INSPECT FLAP BRACKETS (HINGES) TO PREVENT A POSSIBLE FAILURE (REFERENCE SDR 20071025007). BOTH OB FLAPS WERE WORN IN THE SAME LOCATION THAT FAILED OTHER AC. ON BOTH OB FLAPS, THE OB HINGE, IB BRACKETS P/N: 35165050-35 (LT) AND 35-165050-34 (RT), AND THE IB HINGE, OB BRACKET P/N: 35-165050-30 (LT) AND 35-165050-31 (RT). (TC NR 20080102002)

| CA080107002 | BEECH | PWA | BUSS BAR | LOOSE |
|-------------|----------|--------|----------|------------|
| 1/3/2008 | 200BEECH | PT642A | | ELECTRICAL |

(CAN) WHILE PERFORMING SB 24-3871, AN EXTRANEOUS BUSS BAR WAS OBSERVED IN THE RT CB PANEL BETWEEN CB 140 AND CB 255. THIS BUSS BAR WAS ATTACHED ONLY AT ONE END AND WAS LOOSE. NOTE, THE SB ONLY REQUIRES INSPECTION FOR AN EXTRA BUSS BAR BETWEEN CB 327 AND 166. INSPECTION OF BB-1974 SHOWED NO EXTRANEOUS BUSS BARS INSTALLED. (TC NR 20080107002)

| CA080110005 | BEECH | PWA | COWLING | CRACKED |
|-------------|----------|--------|-------------|---------|
| 1/8/2007 | 200BEECH | PT642A | 10191001651 | |

(CAN) BACK WALL OF HEATED LIP ASSY FOUND CRACKED. DEFECT INTRODUCES HOT EXHAUST GASES INTO COWL ASSY, CONTAMINATING ENGINE INTAKE, CABIN PRESSURIZATION, ENGINE CONTROL, AIR. DEFECT CAUSES INCREASED CORROSION OF COWL ASSY. DEFECT IS DIFFICULT TO SEE UPON INSP DUE TO LOCATION. (TC NR 20080110005)

CA071129002 BEECH PWA BEECH BRACKET WORN

11/22/2007 200BEECH PT642A 3516505030 FLAP BRACKET

(CAN) DURING PHASE 1 INSPECTION, LT FLAPS WERE REMOVED TO INSPECT SUPECTED AREA AS RT OB FLAP HAD FAILED IN THE SAME AREA A FEW HOURS PRIOR AND WAS REPORTED UNDER A SEPARATE SDR. WHEN RT OB FLAP BRACKET FAILED, THE FLIGHT CONTROLS WERE AFFECTED. THE CAUSE OF THE WEAR ON THE BRACKET IS FROM BEARING PN BC56985 WEARING OUT CHAFING INTO BRACKET. (TC NR 20071129002)

CA071128004 BEECH PWA ENGINE SEIZED

11/12/2007 200BEECH PT642A

(CAN) CREW REPORT FLASH OF LIGHT FOLLOWED BY SPARKS FROM ENGINE, AND ELECTED TO PERFORM AN INFLIGHT SHUTDOWN. AFTER LANDING AND DURING INITIAL INVESTIGATION, THE PROPELLER COULD NOT BE ROTATED. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR20071128004)

<u>CA070819001</u> BEECH PWA VERTICAL GYRO FAILED 8/17/2007 200BEECH PT642A 6224565001 EFIS

(CAN) PILOT`S EFIS DISPLAYED ATT AND FD FLAGS, CO-PILOT FINISHED FLIGHT. REPLACED GYRO, PROBLEM SOLVED. (TC NR 20070819001)

<u>CA080131003</u> BEECH PWA LATCH INOPERATIVE 1/16/2008 200BEECH PT642A B140048 COWLING

(CAN) THE LOWER FWD COWLING HOOK AND CAM ASSY FAILING TO LATCH WITH THE UPPER COWL ASSY WHEN INSTALLING THE COWLS ON THE ENGINE. IT IS POSSIBLE TO HAVE THE ALIGNMENT MARKS INDICATE A SUCCESSFUL LATCH WHEN IN FACT THE HOOK MAY HAVE MISSED THE CAM DURING ROTATION OF THE HOOK. A THOROUGH VERIFICATION OF A SUCCESSFUL LATCH, IN ADDITION TO THE VISUAL ALIGNMENT MARKS INDICATION, IS REQUIRED WHEN INSTALLING ENGINE COWLS. (TC NR 20080131003)

<u>CA070509002</u> BEECH PWA CONTROL VALVE INOPERATIVE 5/9/2007 200BEECH PT6A41 10138001313 CABIN PRESSURE

(CAN) WORK WAS DONE TO THE AC THAT OPENED THE PRESSURE VESSEL. WHEN THIS WORK WAS STARTED THE AC WOULD HOLD MAX DIFF. THE WORK DONE LED TO A PRESSURIZATION PROBLEM, WHICH, WHILE TROUBLESHOOTING, LED TO THE DISCOVERY OF FLOW CONTROL VALVE THAT WAS WORKING INCORRECTLY. THE CABIN LEAK CAUSED BY THE WORK DONE WAS CORRECTED AND AN O/H FLOW PACK INSTALLED. THE AC STILL WOULD NOT HOLD MAX DIFF, MORE CABIN LEAKS WERE DISCOVERED AND REPAIRED. OUTFLOW AND SAFETY VALVES WERE CHANGED. PROBLEM STILL REMAINED. A SERVICEABLE CONTROL VALVE FROM AN IN SERVICE AC WAS INSTALLED FOR TROUBLESHOOTING, AND THE AIRCRAFT WOULD PRESSURIZE TO MAX DIFF. A SECOND O/H FLOW CONTROL VALVE WAS INSTALLED ON THE LT SIDE AS WELL AS AN O/H UNIT ON THE RT SIDE. THE PROBLEM REMAINED. THE LT FLOW CONTROL VALVE WAS SENT FOR BENCH CHECK AND REPAIR. IT WAS REINSTALLED. THE PROBLEM REMAINED. THE VALVE WAS THEN SENT TO DIFFERENT REPAIR STATION FOR BENCH CHECK AND REPAIRED AND REINSTALLED. THE AIRCRAFT NOW MAINTAIN S MAX. DIFF. (TC NR 20070509002)

<u>CA070409006</u> BEECH PWA DRAG BRACE FAILED 4/5/2007 200BEECH PT6A41 508103385 LT MLG

(CAN) AC WAS DISCOVERD OUTSIDE HANGER WITH THE LT MLG COLLAPSED. THE FAULT OF THE PROBLEM WAS THE LT MLG DRAG BRACE. IT WAS REPLACED RECENTLY WHEN A SIMILIAR INCIDENT OCCURED TO THE RT MLG DRAG BRACE CAUSING THE LT MLG TO COLLAPSE WHILE BEING TOWED. DAMAGE CAUSED FROM THIS INCIDENT WAS AS FOLLOWS, DAMAGE TO LT WING TIP, LT MLG DOORS, LT MLG ACTUATOR, VHF ANTENNA. THE AIRCRAFT WAS LIFTED AND JACKED AND A LOCALLY MFG DOWNLOCK WAS INSTALLED. THE AIRCRAFT IS IN THE PROCESS OF BEING INSPECTED FOR OTHER DAMAGE. THIS IS ONLY A PRELIMINARY REPORT, A MORE CONCLUSIVE

REPORT WILL BE ADDED WHEN FINDINGS ARE COMPLETE. (TC NR 20070409006)

| CA070918001 | BEECH | PWA | CIRCUIT BOARD | SHORTED |
|--|----------|--------|---------------|----------------|
| 9/14/2007 | 200BEECH | PT6A41 | 476284 | FUEL COLLECTOR |
| (CAN) A CHORT ON THE NR O ENGINE FUEL COLLECTOR RRAIN RUMP CIRCUIT (TO NR 20072040004) | | | | |

(CAN) A SHORT ON THE NR 2 ENGINE FUEL COLLECTOR DRAIN PUMP CIRCUIT (TC NR 20070918001)

<u>CA071206005</u> BEECH PWA UNKNOWN ODOR 12/3/2007 200BEECH PT6A67D COCKPIT

(CAN) UPON REACHING LEVEL FLIGHT BOTH THE CAPT AND F/O SMELLED SMOKE IN THE COCKPIT, WHICH SHORTLY AFTER COULD ALSO BE SEEN IN THE COCKPIT. AFTER LESS THAN A MINUTE THE SMOKE DISSIPATED AND THE CAPTAIN MADE THE DECISION TO RETURN TO THE DEPARTURE POINT. AFTER CONTACT WITH ATC THE SMOKE AND SMELL HAD COMPLETELY DISAPPEARED. MAINT PERFORMED GROUND RUNS AND COULD NOT DUPLICATE THE DEFECT. SYS TESTED AND INSPECTED, FWD NOSE AVIONICS, INSTRUMENT PANEL WIRING, COOLING FANS, CABIN AND COCKPIT LIGHTING, CIRCUIT BREAKERS, PC BOARDS, INVERTER AND DC BUS CHECKS, ENVIRONMENTAL SYSTEM, ACM, LT AND RT ENGINES, AND WINDSHIELD HEAT ALL CHECKED SERVICEABLE WITH NO FAULT FOUND. (TC NR 20071206005)

CA080122011 BEECH PWA WIRE CHAFED

12/25/2007 300BEECH PT6A60A DC GENERATOR

(CAN) MAINT HAD TROUBLESHOT A GENERATOR PROBLEM. THE GENERATOR WOULD GO OFF LINE OCCASIONALLY. REPLACED PC CARD, REPLACED THE GENERATOR. THE PROBLEM WAS GONE FOR 3 WEEKS. IT RETURNED, MAINT REPLACED THE PC CARD, WITH A HARD FAULT. TESTED SERVICEABLE. NEXT MORNING ON TAXI THE GENERATOR FAILED AGAIN. DISCOVERED A WIRE FROM THE PC CARD TO THE GENERATOR BUS TIE RELAY CHAFED IN THE NACELLE. THE BUNDLE WAS PROPERLY SECURED AND PROTECTED, HOWEVER, THE ONE WIRE WAS ON THE EDGE OF THE BUNDLE AND CHAFED ON A RIVET HEAD. REROUTED THE BUNDLE, SPLICED THE WIRE AND RETURNED THE AC TO SERVICE. (TC NR 20080122011)

<u>CA080122012</u> BEECH PWA TUBE LEAKING 11/28/2007 300BEECH PT6A60A 13182E40600 BLEED AIR

(CAN) CREW REPORTED A BLEED AIR FAIL ANNUCIATOR IN FLIGHT. TROUBLESHOOT AND FOUND A PIN HOLE IN THE BLEED AIR WARNING LINE. HOLE WAS NOT CAUSED BY A BLEED AIR LEAK, NOR BY MECHANICAL DAMAGE. LINE WAS ADEQUATELY SUPPORTED AND NO CHAFING WAS EVIDENT. SPLICED IN REPAIR SECTION IAW MFG SIRM AND TESTED SERVICEABLE. SECOND AC TO HAVE A FALSE FAILURE RECENTLY. (TC NR 20080122012)

<u>CA071218002</u> BEECH PWA VANE DEBONDED

12/14/2007 300BEECH PT6A60A 10191011947 RT INTAKE DUCT

(CAN) ON THE RT ENGINE COWLING INTAKE DUCT THERE IS A VANE ASSY TO REDIRECT INTAKE AIRFOW. THE VANE ASSY WAS FOUND TO HAVE DEBONDED ITSELF FROM THE ATTACH BRACKETS. THE VANE WAS ALSO CRACKED COMPLETELY ALONG THE TRAILING EDGE AND A 4 INCH CRACK LOCATED ON THE LT SIDE LEADING EDGE OF THE VANE. IT LOOKS LIKE POOR WELDING AND BONDING WERE THE CAUSE OF FAILURE. (TC NR 20071218002)

<u>CA071128011</u> BEECH PWA FUEL CONTROL INOPERATIVE

10/31/2007 400BEECH JT15D5 ENGINE

(CAN) DURING CRUISE, ENGINE POWER GRADUALLY REDUCED FROM 102 PERCENT N1 INDICATION TO 74 PERCENT. NO RESPONSE TO THROTTLE LEVER MOVEMENT. FLIGHT WAS DIVERTED AND AIRCRAFT LANDED WITH BOTH ENGINES RUNNING. THE ENGINE FUEL CONTROL WAS REPLACED AND AIRCRAFT RETURNED TO SERVICE. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20071128011)

 2008FA0000077
 BEECH
 CONT
 CAM
 WORN

 2/7/2008
 58
 IO550C
 6310
 MAGNETO

100 RPM MAGNETO DROP ON PRE-FLIGHT RUN-UP. INSPECTED ALL (4) MAGNETOS ON BOTH ENGINES. FOUND ALL MAGNETO CAMS WORN. NO LUBRICATION WAS FOUND ON THE CAMS. THESE MAGNETOS HAD 444.0 HRS

TIME SINCE NEW, AND HAD COME INSTALLED ON NEW ENGINES. THEY HAD NOT HAD THEIR FIRST 500 HR INSPECTION, SO HAD NEVER BEEN INSPECTED/OPENED SINCE NEW. MAGNETOS, SN'S: 06121306, 06121346, 06120367, AND 06121304.

| CA070522006 | BEECH | LYC | CONTROL CABLE | FRAYED |
|-------------|-------|-----------|---------------|---------------|
| 5/20/2007 | 76 | O360A1G6D | 10552002221 | ELEVATOR TRIM |

(CAN) AIRCRAFT WAS IN THE HANGER FOR INSPECTION. AN INSPECTION WAS BEING STARTED IN THE AFT TAIL AREA. THE AME APPRENTICE NOTICED THE ELEVATOR TRIM CABLE SEVERELY FRAYED WHERE IT WRAPPED AROUND THE TRIM SERVO. THE CABLE WAS REMOVED AND REPLACED WITH A NEW PART (TC NR 20070522006)

| CA071214011 | BEECH | LYC | BEECH | BOLT | MISSING |
|-------------|-------|-----------|-------|-------------|----------|
| 12/14/2007 | 76 | O360A1G6D | | 16911003421 | MLG DOOR |

(CAN) PILOT NOTICED ON PRE-FLIGHT, ABNORMAL ANGLE OF GEAR DOOR. IT WAS DISCOVERED THAT THE BOLT SECURING THE DOOR WAS MISSING. THIS STRESSED THE AFT BRACKET TO THE POINT OF CRACKING WHICH ALSO CAUSED THE DOOR TO CRACK ALONG THE BOLT HOLES. (TC NR 20071214011)

| CA071212002 | BEECH | CONT | SPAR | CRACKED |
|-------------|-------|--------|-------|---------|
| 9/21/2007 | 95B55 | IO470L | 95B55 | WING |

(CAN) DURING ANNUAL INSPECTION, VISUAL INSPECTION OF AREA REVEALED A SUSPECTED CRACK. NOT OF DYE PENETRANT AND EDDY CURRENT CONFIRMED. MFG SERVICE KIT TO INSTALLED. PART LAST NDT INSPECTED 22.1 HRS PREVIOUS AND NO INDICATIONS. (TC NR 20071212002)

| CA070424008 | BEECH | PWA | HYDRAULIC LINE | RUPTURED |
|-------------|-------|--------|----------------|------------------|
| 4/22/2007 | 99 | PT6A28 | 124F0016CR0164 | HYDRAULIC SYSTEM |

(CAN) DURING APPROACH TO LAND THE CREW EXTENDED THE LANDING GEAR AND NOTICED THE NOSE GEAR WAS NOT DOWN AND LOCKED. THE EMERGENCY GEAR EXTENSION WAS ACTIVATED AND THE NOSE GEAR WAS LOCKED IN THE DOWN POSITION. THE AC LANDED WITHOUT INCEDENT. UPON INSP BY MAINT IT WAS DETERMINED THE HYDR SYS ACCUMULATOR LINE HAD RUPTURED PURGING THE HYDRAULIC FLUID FROM THE SYS OVERBOARD. NO DEFINITIVE CAUSE FOR THE RUPTURE OF THE LINE COULD BE DETERMINED. THE AGE OF THE LINE IS UNKNOWN. IT IS SUSPECTED CYCLIC FATIGUE IS THE CAUSE OF THE RUPTURE. NO LIFE LIMIT OR REPLACEMENT INTERVAL IS MANDATED BY THE AC MFG. (TC NR 20070424008)

| CA070312006 | BEECH | PWA | | PRESSURE SWITCH | MALFUNCTIONED |
|-------------|-------|--------|------------|-----------------|---------------|
| 2/22/2007 | A100 | PT6A28 | ADI7999001 | 1225P363 | LANDING GEAR |

(CAN) DURING LANDING GEAR SWINGS IT WAS NOTICED THAT THE LANDING GEAR PUMP WAS HESITATING. PROBLEM WAS TRACED BACK TO THE PRESSURE SWITCH. SWITCH WAS REPLACED AND GEAR SWUNG, FAULT FEE. (TC NR 20070312006)

| CA071206001 | BEECH | PWA | TORQUE LINK | CRACKED |
|-------------|-------|--------|-------------|---------|
| 12/5/2007 | A100 | PT6A28 | 508103237 | MLG |

(CAN) DURING A SPECIAL LPI INSPECTION OF THE MLG TORQUE LINKS DUE TO THE FAILURE OF A LINK ON ANOTHER AIRCRAFT (SDR 20071024010 AND 20071122002), 3 OF THE 4 LINKS WERE FOUND CRACKED. THE LINKS FROM 3 ADDITIONAL AIRCRAFT WERE REPLACED IN ORDER TO COMPLETE THE LPI OFF AIRCRAFT, THE LPI WAS COMPLETED AND 4 OF THE 12 LINKS WERE FOUND TO HAVE VERY SMALL CRACKS, ALL THE CRACKS ARE IN THE SAME RADIUS AREA, (TC# 20071206001)

| CA071122002 | BEECH | PWA | TORQUE LINK | CRACKED |
|-------------|-------|--------|-------------|---------|
| 11/21/2007 | A100 | PT6A28 | 508103237 | MLG |

(CAN) DURING A SPECIAL LPI INSP (SELF IMPOSED INSPECTION DUE TO BROKEN LINK SEE SDR NR 2007024010) OF THE UPPER AND LOWER TORQUE LINKS ON (2) OF OUR AC, (3) TORQUE LINKS WERE FOUND CRACKED IN THE RADIUS AREA. ONE LINK HAS 2 CRACKS SIDE BY SIDE THE OTHER HAD ONE SMALLER CRACK. THE CRACK IN THE THIRD LINK WAS VERY SMALL AND DID NOT SHOW IN THE PHOTOS. (TC NR 20071122002)

| 2008FA0000063 | BEECH | LVC | BOOT | DEBONDED |
|---------------|-------|-----|------|----------|
| ZUUOFAUUUUUU | DEECH | LIC | BOOT | DEBUNDED |

1/16/2008 A60 TIO541* 4E11883 PROPELLER

PROP WAS SENT FOR REPAIRS CONSISTING OF FLUSH AND RESEAL OF PROP, PAINTING OF BLADES AND INSTALLATION OF NEW DEICE BOOTS. AC HAS FLOWN 3.5 HRS AND THREW A DEICE BOOT, DENTED THE RT NOSE SECTION OF THE AC. SPEAKING WITH SERVICE REP, HE STATED THAT THE GLUE USED TO ADHERE THE BOOT HAD FAILED AFTER REVIEWING PHOTOS SENT TO HIM. IF THIS IS THE CASE, A RECOMMENDATION OF FINDING OUT LOT NUMBER OF ADHESIVE, AND RECALLING ANY WORK DONE USING THIS LOT NUMBER. (K)

<u>CA061128008</u> BEECH PWA BATTERY THERMAL RUNAWAY 11/20/2006 B200 PT642A 40576 MAIN

(CAN) WHILE CONNECTED TO A GPU, DURING ROUTINE MAINTENANCE, THE TECHNICIANS NOTED SMOKE IN THE AREA OF THE BATTERY BOX COMPARTMENT. THE GPU WAS IMMEDIATELY DISCONNECTED, BATTERY POWER TURNED OFF AND THE BATTERY DISCONNECTED FROM THE AIRCRAFT BY REMOVAL OF THE ALCON CONNECTOR AT THE BATTERY. THE BATTERY HAD OVERHEATED AND WENT INTO A THERMAL RUNAWAY CONDITION. THE BATTERY WAS REPLACED AS WELL AND THE BATTERY CHARGE MONITORING PRINTED CIRCUIT CARD. (TC NR 20061128008)

<u>CA070424004</u> BEECH PWA POWERPACK FAILED
4/19/2007 B200 PT642A 10138800517 HYDRAULIC SYSTEM

(CAN) DURING A ROUTINE MEDEVAC AND TEN MINUTES AFTER DEPARTURE THE RED LIGHT IN THE IN THE LANDING GEAR HANDLE ILLUMINATED. VISUAL CONFIRMATION OUT CAPT SIDE WINDOW OF LANDING GEAR PARTIALLY DOWN. A MANUAL GEAR EXTENSION WAS INITIATED AND A UNEVENTFUL LANDING WAS COMPLETED. TELCOM WITH MTCE. AND FLIGHT CREW CONFIRMED, LANDING GEAR MOTOR WAS NON FUNCTIONING. VISUAL INSP WAS C/O BY CREW FOR DAMAGE OR EXCESSIVE FLUID LOSS, WITH NONE OBSERVED. AC WAS RETURNED WITH LANDING GEAR IN THE DOWN/ LOCKED POSITION, ESSENTIAL CREW ONLY ON BOARD. MAINT INSPECTION REVEALED, THE L/G HYD POWERPACK HAD INTERNALLY FAILED TO MAINTAIN SYS PRESSURE, CAUSING THE PUMP TO RUN AND EXCEEDED OPERATIONAL TOLERANCE WHICH POPPED THE C/B. REPLACEMENT OF THE HYD POWER PACK ASSY WAS CARRIED OUT, AND SYS FUNCTIONS WERE RESTORED. (TC NR 20070424004)

<u>CA080107003</u> BEECH PWA TORQUE KNEE CRACKED 1/7/2008 B200 PT642A 1018100327 LT MLG

(CAN) WHILE PERFORMING AN INSPECTION ON THE GEAR IT WAS NOTICED THAT GREASE WAS COMING FROM THE HORIZOTAL CRACK IN THE BOTTOM OF THE TORQUE KNEE. A NEW KNEE WAS ORDERED AND REPLACED. (TC NR 20080107003)

<u>CA070316003</u> BEECH PWA TACH GENERATOR FAILED

3/13/2007 B200 PT642A MS250384

(CAN) N1 TACH GENERATOR FAILED IN FLIGHT. (TC NR 20070316003)

CA071128008 BEECH PWA BRUSHES FAILED

11/28/2007 B200 PT642A STARTER GEN

(CAN) WHILE ON FINAL THE PILOT NOTICED THAT THE LT GENERATOR HAD FAILED. UPON LANDING, AN INSPECTION WAS CARRIED OUT ON THE GENERATOR. IT WAS NOTICED THAT THE BRUSHES WERE ALL BROKEN WHICH WOULD INDICATE AN INTERNAL FAILURE. (TC NR 20071128008)

<u>CA071210004</u> BEECH PWA HINGE WORN 12/9/2007 B200 PT642A 351650503031 TE FLAP

(CAN) LT AND RT OB FLAPS IB HINGES WORN DUE TO ROLLER DIGGING INTO OB BRACKETS P/N 35-165050-30 AND 35-165050-31. THE AFT BEARINGS/ROLLERS HAVE TO BE REMOVED TO GET A GOOD INSPECTION OF THIS AREA. IT SHOULD NOT BE DONE (IN-SITU). THIS IS THE 3RD AIRCRAFT IN THIS COMPANY FLEET THAT HAS HAD WEAR IN THIS AREA. IF LET GO TOO FAR, A FLIGHT CONTROL ISSUE MAY BE ENCOUNTERED. (TC NR 20071210004)

CA080102005BEECHPWACOVERCRACKED12/31/2007B200PT642A10191001641NACELLE(CAN) FOUND EXHAUST SOOT IN COWLS. CLOSER INSPECTION FOUND THE BUTTERFIELD STC COVER PLATE

LEAKING AND THE HEATED INLET CRACKED IN MULTIPLE LOCATIONS ON BOTH COWLS. (TC NR 20080102005)

| CA070711002 | BEECH | PWA | BOOT | DAMAGED |
|-------------|-------|---------|------------|------------|
| 7/8/2007 | B300 | PT6A60A | 1013800019 | HORIZ STAB |

(CAN) THE AIRCRAFT DEPARTED AND BEGAN TO CLIMB TO CLEARED ALTITUDE. AS THE AIRCRAFT PASSED 5500 FEET THERE WAS A VIBRATION OR BUFFETING FELT THROUGH THE CONTROL COLUMN. THE AIRCRAFT RETURNED TO BASE WITHOUT INCIDENT. A THROUGH INSPECTION WAS CARRIED OUT WHICH REVEALED A DAMAGED LT HORIZONTAL DE-ICE BOOT. SEVERAL HOLES WERE FOUND AND REPAIRED IAW APPROVED PROCEDURES. THE AIRCRAFT WAS RETURNED TO SERVICE AND OPERATED WITHOUT ANY FURTHER PROBLEMS. (TC NR 20070711002)

| CA071130015 | BEECH | PWA | WIRE | BURNED |
|-------------|-------|-----|------|--------|
|-------------|-------|-----|------|--------|

11/30/2007 B300 PT6A60A

(CAN) AFTER STARTING ENGINE FOR GROUND RUN, AVIONICS SWITCH WAS SELECTED ON. IMMEDIATELY SMOKE STARTED COMING FROM RT CB PANEL. ENGINES WERE IMMEDIATELY SHUTDOWN AND POWER WAS REMOVED FROM A/C. INVESTIGATION REVEALED THAT A FACE PLATE MOUNTING SCREW HAD SHORTED TO AN AVIONICS FEEDER WIRE P72A10 DUE TO POOR ROUTING OF THE WIRE AT MFG. (2) 10GAUGE WIRES ARE ATTACHED TO ONE TERMINAL OF CB120 (TCAS), ONE COMING FROM CB92 (AVIONICS POWER LT GEN BUS) WHICH IS A 30AMP BREAKER. ONE OF THE WIRES WAS MOUNTED ALONG THE BACK OF THE PANEL AND HAD BEEN IN HARD CONTACT WITH THE AFT MIDDLE FACE PLATE MOUNTING SCREW. WIRE REPLACED IAW AC43.13-1B PARA 11-98, ROUTED TO AVIOD CONTACT WITH MOUNTING HARDWARE. (TC NR 20071130015)

| CA080122009 | BEECH | PWA | ANTENNA | CORRODED |
|-------------|-------|---------|---------|----------|
| 1/20/2008 | B300 | PT6A60A | 10706 | GPS |

(CAN) GPS ANTENNA WAS REPLACED DUE TO NO SIGNAL TO UNS-1K FMS. UPON REMOVING ANTENNA FROM FUSELAGE (UPPER COCKPIT ROOF), FOUND HEAVY CORROSION ON ANTENNA AND SOME CORROSION ON FUSELAGE SKIN. A QUICK REVIEW OF THE RECORDS SHOWS THAT THIS ANTENNA WAS LIKELY INSTALLED AT THE FACTORY (2001) THERE WAS NO SEALANT UNDER THE ANTENNA AND NO GASKET MATERIAL EITHER. THERE WAS SOME SEALANT AROUND THE EDGE. THE CO-AX CONNECTER WAS ALSO CORRODED. REPLACED ANTENNA, CLEANED, ETCHED, ALODINED AND PRIMED THE SKIN AND RETURNED A/C TO SERVICE. (TC NR 20080122009)

| 20080101 | BEECH | PWA | ACTUATOR | CRACKED |
|-----------|-------|--------|-----------|----------|
| 1/18/2008 | C90 | PT6A21 | 505212234 | T/E FLAP |

RT OB FLAP ACTUATOR ASSY, PISTON TUBE CRACKED 100 PERCENT IN DEPTH, 100 PERCENT ENTIRE LENGTH OF TUBE. CRACK RUNS PARALLEL TO TUBE.

| CA070706001 | BEECH | PWA | RELAY | CORRODED |
|-------------|-------|--------|---------|--------------|
| 7/6/2007 | C90 | PT6A21 | AN33701 | LANDING GEAR |

(CAN) DURING ANNUAL INSPECTION OF THE HYD LANDING GEAR INSTALLATION THE LANDING GEAR RELAY EXHIBITED SIGNS OF HEAVY PITTING AND METAL TRANSFER. THE LANDING GEAR RELAY WAS REPLACED. (TC NR 20070706001)

| CA071213002 | BEECH | PWA | BRUSHES | BURNED |
|-------------|-------|--------|---------|--------------|
| 12/12/2007 | C90A | PT6A21 | | BLOWER MOTOR |

(CAN) CREW DECLARED EMERGENCY DUE TO SMOKE IN COCKPIT AND LANDED SAFELY. REPAIR PARTY LT FROM ANOTHER BASE. FOUND CAUSE WAS CABIN VENT BLOWER. DISABLED SYSTEM. AIRCRAFT FERRIED TO AIRPORT. MAINTENANCE WILL REPLACE VENT BLOWER. (TC NR 20071213002)

| CA071221010 | BEECH | PWA | TURBINE BLADES | DAMAGED | |
|-------------|-------|--------|----------------|---------|--|
| 11/29/2007 | C99 | PT6A36 | | ENGINE | |

(CAN) DURING CRUISE A LOUD BANG WAS HEARD AND ENGINE OPERATION CEASED WITHOUT CREW INVOLVEMENT. POST FLIGHT INPECTION DISPLAYED COMPRESSOR AND POWER TURBINE BLADE DAMAGE. THE COMPRESSOR ROTOR IS SEIZED THE ENGINE WILL BE REMOVED AND FORWARDED TO MFG FOR INVESTIGATION. UPDATES WILL BE PROVIDED WHEN AVAILABLE. (TC NR 20071221010)

| TIMR20080001 | BEECH | PWA | | ACTUATOR | LEAKING | |
|---|---|--|--|--|--|--|
| 2/13/2008 | C99 | PT6A36 | | 993880081 | MLG | |
| | T RETRACT AFTER T FLUID WAS PAS | | | ME BASE WITH GEAR [| DOWN. INVESTIGATION | |
| CA070523001 | BEECH | CONT | | LINE | FRACTURED | |
| 5/22/2007 | F33A | IO520BB | | 3391000015 | OIL SYSTEM | |
| | | | | OIL LEAK ON THE INSID IT ANY FURTHER PROI | DE OF THE FIREWALL. BLEMS. (TC NR | |
| CA071203006 | BELL | LYC | | MOUNT | CRACKED | |
| 12/3/2007 | 205A1 | T5313B | | 205060105001 | ENGINE | |
| ÈNGINE MOUN | | UBE JUNCTION. | | RING 100 HRS INSPEC WAS MODIFIED IAW S | | |
| CA071127011 | BELL | LYC | BELL | FITTING | CRACKED | |
| 11/5/2007 | 205A1 | T5317A | | 2120400545 | M/R GEARBOX | |
| AND SENT FOR | REPAIR. THE TSC | FOR THE COM | | ON WAS AT 785.1 AND | MISSION WAS REMOVED TT 19803.1. NO | |
| CA080124003 | BELL | LYC | | CROSSTUBE | CRACKED | |
| 1/17/2008 | 205A1 | T5317A | | D212664201 | LG | |
| (CAN) WHILE THE ENGINEER WAS CONDUCTING THE DI, A CRACK IN THE AFT DART CROSSTUBE WAS DISCOVERED. THE DART CROSSTUBE FOLLOWS 300/600 HR INSP CYCLE. CROSSTUBE WAS 60.7 FROM 300 HR INSP, AND 360.7 FROM THE 600 HR. CROSSTUBE WAS CHECKED FOR EXCESSIVE DEFLECTION, TOTAL SPREAD WAS 107 INCHES AND SYMMETRICAL TO THE MIDPOINT OF THE CROSSTUBE. THESE MEASUREMENTS ARE ACCEPTABLE WITH THE ICA-D212-664 MANUAL. THE CRACK WAS ON THE LOWER PART OF THE UPPER PORTION OF TUBE AND 4.5 INCHES FROM MIDPOINT. AT THE TIME OF DISCOVERY THE HELICOPTER WAS BEING USED FOR HELI-SKIING. NO HARD LANDING HAD OCCURED DURING ITS INSTALLATION LIFE. MEMOS TO INSPECT THE OTHER AC LANDING GEAR HAS BEEN SENT TO THE ENGINEERS. (TC NR 20080124003) | | | | | | |
| WAS 107 INCHE ACCEPTABLE V OF TUBE AND 4 HELI-SKIING. NO | S AND SYMMETRI VITH THE ICA-D212 .5 INCHES FROM I D HARD LANDING | CAL TO THE MIL 2-664 MANUAL. T MIDPOINT. AT TI HAD OCCURED | DPOINT OF THE CRO THE CRACK WAS ON HE TIME OF DISCOV DURING ITS INSTAL | DSSTUBE. THESE MEA I THE LOWER PART OF ERY THE HELICOPTEF LATION LIFE. MEMOS | SUREMENTS ARE THE UPPER PORTION R WAS BEING USED FOR | |
| WAS 107 INCHE ACCEPTABLE V OF TUBE AND 4 HELI-SKIING. NO | S AND SYMMETRI VITH THE ICA-D212 .5 INCHES FROM I D HARD LANDING | CAL TO THE MIL 2-664 MANUAL. T MIDPOINT. AT TI HAD OCCURED | DPOINT OF THE CRO THE CRACK WAS ON HE TIME OF DISCOV DURING ITS INSTAL | DSSTUBE. THESE MEA I THE LOWER PART OF ERY THE HELICOPTEF LATION LIFE. MEMOS | SUREMENTS ARE THE UPPER PORTION R WAS BEING USED FOR | |
| WAS 107 INCHE ACCEPTABLE V OF TUBE AND 4 HELI-SKIING. NO AC LANDING GI | S AND SYMMETRI VITH THE ICA-D212 .5 INCHES FROM I D HARD LANDING EAR HAS BEEN SE | CAL TO THE MID 2-664 MANUAL. T MIDPOINT. AT TH HAD OCCURED NT TO THE ENG | DPOINT OF THE CRO THE CRACK WAS ON HE TIME OF DISCOV DURING ITS INSTAL | DSSTUBE. THESE MEA I THE LOWER PART OF ERY THE HELICOPTEF LATION LIFE. MEMOS 080124003) | SURÉMENTS ARE THE UPPER PORTION R WAS BEING USED FOR TO INSPECT THE OTHER | |
| WAS 107 INCHE ACCEPTABLE V OF TUBE AND 4 HELI-SKIING. NO AC LANDING GI CA071214009 12/10/2007 (CAN) RT ENGIN | ES AND SYMMETRI WITH THE ICA-D212 5 INCHES FROM I D HARD LANDING EAR HAS BEEN SE BELL 205A1 | CAL TO THE MID 2-664 MANUAL. TO MIDPOINT. AT THE HAD OCCURED NT TO THE ENG LYC T5317A TED FOR SUSPING TWELDED JOIN | DPOINT OF THE CRO THE CRACK WAS ON HE TIME OF DISCOV DURING ITS INSTAL SINEERS. (TC NR 200 | DSSTUBE. THESE MEA I THE LOWER PART OF ERY THE HELICOPTEF LATION LIFE. MEMOS 080124003) MOUNT 205060106001 | SURÉMENTS ARE THE UPPER PORTION R WAS BEING USED FOR TO INSPECT THE OTHER CRACKED RT ENGINE 100 HRS INSPECTION. | |
| WAS 107 INCHE ACCEPTABLE V OF TUBE AND 4 HELI-SKIING. NO AC LANDING GI CA071214009 12/10/2007 (CAN) RT ENGIN | ES AND SYMMETRI VITH THE ICA-D212 5 INCHES FROM I D HARD LANDING EAR HAS BEEN SE BELL 205A1 NE BIPOD INSPECTO CRACK MOUNT A | CAL TO THE MID 2-664 MANUAL. TO MIDPOINT. AT THE HAD OCCURED NT TO THE ENG LYC T5317A TED FOR SUSPING TWELDED JOIN | DPOINT OF THE CRO THE CRACK WAS ON HE TIME OF DISCOV DURING ITS INSTAL SINEERS. (TC NR 200 | DSSTUBE. THESE MEA I THE LOWER PART OF ERY THE HELICOPTEF LATION LIFE. MEMOS 080124003) MOUNT 205060106001 ONT TUBING DURING | SURÉMENTS ARE THE UPPER PORTION R WAS BEING USED FOR TO INSPECT THE OTHER CRACKED RT ENGINE 100 HRS INSPECTION. | |
| WAS 107 INCHE ACCEPTABLE V OF TUBE AND 4 HELI-SKIING. NO AC LANDING GE CA071214009 12/10/2007 (CAN) RT ENGIN NDT REVEALED ADJUSTABLE N | ES AND SYMMETRI WITH THE ICA-D212 .5 INCHES FROM I D HARD LANDING EAR HAS BEEN SE BELL 205A1 NE BIPOD INSPECTO D CRACK MOUNT A IOUNT. (TC NR 200 | CAL TO THE MIDPOINT. AT THE MIDPOINT. AT THE HAD OCCURED NT TO THE ENGINE TEST TO THE ENGINE TEST FOR SUSPICAT WELDED JOIN 171214009) | DPOINT OF THE CROTHE CRACK WAS ON HE TIME OF DISCOV DURING ITS INSTALSINEERS. (TC NR 200 | DSSTUBE. THESE MEA I THE LOWER PART OF ERY THE HELICOPTEF LATION LIFE. MEMOS 080124003) MOUNT 205060106001 ONT TUBING DURING INT WAS MODIFIED IAV | SURÉMENTS ARE THE UPPER PORTION R WAS BEING USED FOR TO INSPECT THE OTHER CRACKED RT ENGINE 100 HRS INSPECTION. W STC SH99-11, DART | |
| WAS 107 INCHE ACCEPTABLE V OF TUBE AND 4 HELI-SKIING. NO AC LANDING GE CA071214009 12/10/2007 (CAN) RT ENGIN NDT REVEALED ADJUSTABLE N CA080128006 12/15/2007 (CAN) TSO OF T TRANSMISSION ENGINEER TO I TRANSMISSION BEARING, P/N 2 | ES AND SYMMETRI WITH THE ICA-D212 1.5 INCHES FROM I D HARD LANDING EAR HAS BEEN SE BELL 205A1 NE BIPOD INSPECT O CRACK MOUNT A HOUNT. (TC NR 200 BELL 205A1 THE TRANSMISSION I METAL DETECTO NVESTIGATE THE I ASSY WERE REM | CAL TO THE MID 2-664 MANUAL. TO MIDPOINT. AT THE HAD OCCURED NT TO THE ENGINE TO THE ENGINE TO THE ENGINE TO THE ENGINE TO THE STATE TO THE BUSINESS TO THE BUSINESS THE FERROLL TO THE STATE TO THE BUSINESS THE FERROLL TO THE STATE THE STATE TO THE STAT | DPOINT OF THE CROTHE CRACK WAS ON HE TIME OF DISCOVED DURING ITS INSTALISMEERS. (TC NR 200 PM) CIOUS CRACK IN FROM THE NOTE: THIS MOUNTS. THE AC HAIR NATED. THE PILOT INTERING IS AN ON COMPONENT SHOP FOUS METAL MAKER. THE CRACK IN COMPONENT SHOP FOUS METAL MAKER. | DSSTUBE. THESE MEA I THE LOWER PART OF ERY THE HELICOPTEF LATION LIFE. MEMOS 080124003) MOUNT 205060106001 ONT TUBING DURING INT WAS MODIFIED IAV BEARING 214040118001 TAKEN OFF AND WAS LANDED AC BACK AT CONDITION BEARING. T | SURÉMENTS ARE THE UPPER PORTION R WAS BEING USED FOR TO INSPECT THE OTHER CRACKED RT ENGINE 100 HRS INSPECTION. W STC SH99-11, DART MAKING METAL TRANSMISSION S IN CRUISE WHEN A CAMP FOR THE THE MAST ASSY AND SMISSION INPUT TRIPLEX | |
| WAS 107 INCHE ACCEPTABLE V OF TUBE AND 4 HELI-SKIING. NO AC LANDING GE CA071214009 12/10/2007 (CAN) RT ENGIN NDT REVEALED ADJUSTABLE N CA080128006 12/15/2007 (CAN) TSO OF T TRANSMISSION ENGINEER TO I TRANSMISSION BEARING, P/N 2 | ES AND SYMMETRICATOR INTH THE ICA-D212 1.5 INCHES FROM IOUNG FAR HAS BEEN SE BELL 205A1 NE BIPOD INSPECTOR OF THE TRANSMISSION IMETAL DETECTOR IMETAL DETECTOR IMETAL DETECTOR I METAL DETECTOR I METAL DETECTOR I METAL DETECTOR I METAL DETECTOR I ASSY WERE REMETAL-040-118-001, W | CAL TO THE MID 2-664 MANUAL. TO MIDPOINT. AT THE HAD OCCURED NT TO THE ENGINE TO THE ENGINE TO THE ENGINE TO THE ENGINE TO THE STATE TO THE BUSINESS TO THE BUSINESS THE FERROLL TO THE STATE TO THE BUSINESS THE FERROLL TO THE STATE THE STATE TO THE STAT | DPOINT OF THE CROTHE CRACK WAS ON HE TIME OF DISCOVED DURING ITS INSTALISMEERS. (TC NR 200 PM) CIOUS CRACK IN FROM THE NOTE: THIS MOUNTS. THE AC HAIR NATED. THE PILOT INTERING IS AN ON COMPONENT SHOP FOUS METAL MAKER. THE CRACK IN COMPONENT SHOP FOUS METAL MAKER. | DSSTUBE. THESE MEA I THE LOWER PART OF ERY THE HELICOPTEF LATION LIFE. MEMOS 080124003) MOUNT 205060106001 ONT TUBING DURING INT WAS MODIFIED IAV BEARING 214040118001 TAKEN OFF AND WAS LANDED AC BACK AT CONDITION BEARING. T UND THAT THE TRANS | SURÉMENTS ARE THE UPPER PORTION R WAS BEING USED FOR TO INSPECT THE OTHER CRACKED RT ENGINE 100 HRS INSPECTION. W STC SH99-11, DART MAKING METAL TRANSMISSION S IN CRUISE WHEN A CAMP FOR THE THE MAST ASSY AND SMISSION INPUT TRIPLEX | |

(CAN) DURING THE INSPECTION OF THE LIFT LINK AREA, A CRACK WAS NOTED ON THE LIFT LINK FITTING. UPON FURTHER INVESTIGATION THE AFT EAR WAS COMPLETLY BROKEN FROM THE FITTING. THE BOLT SECURING THE

LIFT LINK TO THE FITTING WAS INCORRECT FOR THAT PN OF FITTING. THE BOLT DID FIT THE AFT EAR HOWEVER THERE WAS A .030 INCH GAP BETWEEN THE BOLT AND BUSHING IN THE FWD EAR ALLOWING THE BOLT TO ROCK UP AND DOWN IN THE FITTING. THIS ROCKING MOTION OCCURRED EVERY TIME IT WAS UNDER LOAD, AND STRESSED THE AFT EAR SUBSEQUENTLY CAUSING IT TO CRACK. THE TRANSMISSION WAS INSTALLED IN 2001. ALL ENGINEERS MUST BE CERTAIN WHEN INSTALLING FASTERNERS OR COMPONENTS THAT CORRECT PARTS ARE BEING USED ESPECIALLY WHEN DISASSEMBLY WHEN OFTEN PARTS ARE JUST REINSTALLED. IF THEY WERE REMOVED THEY MUST BE CORRECT, STATEMENT DOESN'T MEAN THAT THEY ARE! (TC NR 20071126011)

| CA071210002 | BELL | LYC | MOUNT | SHEARED |
|-------------|-------|-----------|--------------|--------------|
| 12/27/2006 | 205A1 | T5317BLYC | 204031927005 | TRANSMISSION |

(CAN) DURING ROUTINE POST FLIGHT DAILY INSP, (3) OF THE (4) AN4H6A BOLTS THAT ATTACH THE TRANSMISSION AFT (5TH) MOUNT TO THE AIRFRAME FITTING ASSY WERE FOUND SHEARED OFF. FLIGHT OPERATION WERE NOT AFFECTED AND CONSIDERED TO BE NORMAL AT THE TIME. THE MOUNT AND FITTING WERE REMOVED, INSPECTED AND THE AIRCRAFT RETURNED TO SERVICE. (TC NR 20071210002)

| 11/21/2007 | 206B | 250C20 | | 206030446001 | TAILBOOM |
|-----------------|-----------------|---------------|----------------|---------------------|--------------|
| (CAN) LT AFT MC | DUNTING HOLE FO | R T/R GEARBOX | FOUND CRACKED. | (TC NR 20071126012) | |
| CA074420004 | DELL | ALLON | DELL | CLIM | INODED ATIVE |

| CA071120004 | BELL | ALLSN | BELL | SHIM | INOPERATIVE |
|-------------|------|--------|------|-----------|-------------|
| 11/16/2007 | 206B | 250C20 | | 476411731 | T/R HUB |

(CAN) T/R VIBRATION DISCOVERED AND SUBSEQUENT STROBING WAS NOT EFFECTIVE AT REMOVING THE VIBRATION. DURING INSPECTION OF THE T/R HUB ASSEMBLY WAS FOUND TO HAVE BOTH PRE AND POST (TB: 206-91-139) METHODS OF TRUNNION CENTERING PERFORMED. SHIM 120-006C15-0 AND THRUST PLUG 47-641-173-1 USED ON ONE SIDE AND SHIM 206-011-861-101 AND THRUST PLUG 206-011-862-101 USED ON THE OTHER. TAIL ROTOR HUB ASSEMBLY WAS REPAIRED. (TC NR 20071120004)

| CA071204001 | BELL | ALLSN | GOVERNOR | INOPERATIVE |
|-------------|------|--------|----------|-------------|
| 11/29/2007 | 206B | 250C20 | 23076061 | ENGINE |

(CAN) WHILE CARRYING OUT A START, THE ENGINE WAS SLOW TO REACH IDLE, WITH THE N2 INDICATOR STICKING ON START. ONCE DESNAGGED IT WAS DISCOVERED THE GOVENOR WAS THE CAUSE.

| CA061128004 | BELL | ALLSN | BELL | SUPPORT | CRACKED |
|-------------|------|--------|-----------|--------------|----------|
| 11/17/2006 | 206B | 250C20 | 206031200 | 206031202015 | FUSELAGE |

(CAN) STRAP PN 206-031-200-076 WAS FOUND CRACKED AT INSPECTION. WHEN IT WAS REMOVED, SUPPORT PN 206-031-202-015 WAS ALSO FOUND CRACKED. BOTH WERE REPLACED IAW MFG INSTRUCTIONS. (TC NR 20061128004)

| CA071127006 | BELL | ALLSN | BULKHEAD | CRACKED | |
|-------------|------|---------|----------|-----------|--|
| 11/22/2007 | 206B | 250C20B | | TAIL BOOM | |

(CAN) AFT BULKHEAD P/N 206-030-446-001F CRACKED AT RT GEARBOX MOUNTING HOLE. (TC NR 20071127006)

| CA061128001 | BELL | ALLSN | LINE | LEAKING |
|-------------|------|---------|--------------|-------------|
| 11/24/2006 | 206L | 250C20R | 206063688001 | FUEL SYSTEM |

(CAN) DURING A SCHEDULED FLIGHT, FUEL FUMES WERE DETECTED IN REAR CABIN AREA. A/C RETURNED TO BASE WITH NO PROBLEMS NOTED. A/C INSPECTED AND FWD FUEL TANK VENT LINE FOUND WEEPING WHEN REAR TANK WAS FILLED TO CAPACITY. LINE REMOVED AND REPLACED. LINE INPECTED AND FOUND TO BE ORIGINAL FROM DATE OF A/C MFG 1975. RECOMMEND REPLACEMENT DATE OF FLEX HOSE BE ADDED TO MM. (TC NR 20061128001)

| CA080103007 | BELL | ALLSN | BELL | BOLT | BROKEN |
|-------------|------|----------|-----------|-----------|-----------|
| 1/3/2008 | 206L | 250C20R2 | 206001044 | NAS130410 | T/R PEDAL |

(CAN) ON INSPECTION OF THE AIRCRAFT IT WAS NOTED THAT THE (1) OF THE (3) BOLTS WAS BROKEN AND THE OTHERS SHOWED SIGNS OF CORROSION ALL (3) BOLTS WHERE REPLACED WITH NEW. (TC NR 20080103007)

| CA070601003 | BELL | ALLSN | FUEL CELL | LEAKING | | | | |
|---|---|--|----------------------|-----------------------|--|--|--|--|
| 5/28/2007 | 206L1 | 250C28 | 2060636321 | | | | | |
| | (CAN) FUEL SMELL NOTED. INSPECTION FOUND SMALL FUEL LEAK. FUEL CELL REMOVED SENT OUT FOR REPAIR, REINSTALLED. (TC NR 20070601003) | | | | | | | |
| CA080104005 | BELL | ALLSN | YOKE | INCORRECT | | | | |
| 1/4/2008 | 206L1 | 250C30P 206L1 | 206011101109 | M/R HUB | | | | |
| | | KE M/R HUB ASSY, WITH THE INCOI RECT PN OF YOKE SHOULD BE 206-0 | | | | | | |
| CA080122010 | BELL | | BEARING | CHAFED | | | | |
| 1/11/2008 | 206L4 | | 206010447109 | SWASHPLATE ASSY | | | | |
| (CAN) DURING A PHASE INSP, MECHANIC FOUND A CHAFED AREA ON TOP OF THE COLLECTIVE LEVER BEARING EAR P/N 206-010-447-109. FURTHER INSP REVEALED CHAFING AT BOTTOM OF BOTH SWASHPLATE ROTATING RING BEARING EARS. CHAFED AREAS APPROX 0.020-0.040 INCH DEPTH. MECHANIC POSITIONED THE COLLECTIVE STICK FULL DOWN AND CYCLIC FULL FWD WHILE CAUTIOUSLY LINING UP EACH ROTATING RING WITH THE COLLECTIVE LEVEL FOR A CLEARANCE CHECK. BOTH WERE CONTACTING. REPLACED SWASHPLATE, DRIVE LINK AND M/R PITCH CHANGE LINK ASSY'S. COLLECTIVE AN CYCLIC CONTROLS WERE RE-RIGGED. (TC NR 20080122010) | | | | | | | | |
| CA061109006 | BELL | ALLSN | SKIN | CRACKED | | | | |
| 11/9/2006 | 206L4 | 250C20R | | FUSELAGE | | | | |
| | OUND IN SKIN UNI -206-SRM-4-2 (TC 1 | DER FWD BEARING OIL COOLER SU NR 20061109006) | IPPORT RT STA 192.00 | BUTT 4.0. REPAIR WAS | | | | |
| CA061208004 | BELL | ALLSN | PUMP | LACK OF LUBE | | | | |
| 12/5/2006 | 206L4 | 250C30P | 206076030111 | HYDRAULIC SYSTEM | | | | |
| | | OUT CAUSING PREMATURE WEAR (CE PREVIOUS LUBRICATION. (TC NI | | ADING TO HYDRAULIC | | | | |
| CA070227001 | BELL | | GRIP | CRACKED | | | | |
| 2/22/2007 | 212 | | 204011121121 | MAIN ROTOR | | | | |
| (CAN) M/R GRIF (TC NR 2007022 | | ACK. COMPONENT ACCUMULATE 1 | 11 HRS SINCE LAST 15 | 50HRS NDT INSPECTION. | | | | |
| CA070717003 | BELL | PWA | BRACKET | BROKEN | | | | |
| 6/29/2007 | 212 | PT6T3 | 2050314352 | PAX DOOR | | | | |
| (CAN) ON APPROACH TO THE LANDING AREA, THE (DOOR LOCK) LIGHT ON CAUTION PANEL ILLUMINATED. AIRCRAFT LANDED SAFELY WITHOUT ANY FURTHER INCIDENT. UPON LANDING THE ENGINEER EXITED THE AIRCRAFT AND PHYSICALY CHECKED ALL DOORS AND PANELS TO ENSURE THAT THEY WERE CORRECTLY SECURED. NO DOORS OR PANELS WERE FOUND OPEN. UPON INVESTIGATION OF THE RT PASSENGER/CARGO DOOR, IT WAS FOUND TO BE LOOSE IN THE DOOR TRACK. FURTHER INVESTIGATION REVEALED THAT THE UPPER FWD ROLLER BRACKET HAD FAILED. THIS ALLOWING THE MICRO-SWITCH TO BE DEACTIVATED, AND THE LIGHT COMING ON. THE BRACKET WAS REPLACED AND NO FURTHER PROBLEMS EXISTED. (TC NR 20070717003) | | | | | | | | |
| CA071204007 | BELL | PWA | BALANCE WEIGHT | INCORRECT | | | | |
| 12/4/2007 | 212 | PT6T3 | 212010710001 | T/R BLADE | | | | |
| | ECT WEIGHT FOR F CE LIMITS. (TC NR | PN CAUSED IMBALANCE IN TAIL RO 20071204007) | TOR WHICH COULD NO | OT BE CORRECTED | | | | |
| CA080128007 | BELL | ALLSN | SERVO | NOISY | | | | |
| 1/18/2008 | 407 | 250C47B | 206076062 | MAIN ROTOR | | | | |
| (CAN) WORN LI | NKAGE AND PILOT | VALVE CAUSED SERVO TO MAKE | LOUD GROWLING NOIS | SE. THIS WAS AN | | | | |

INTERMITTENT PROBLEM THAT COULD BE INDUCED BY CERTAIN CONTOL INPUTS. THE SOUND WAS FINALLY DETERMINED TO BE COMING FROM THE RT SERVO AND IT WAS REPLACED. THERE WERE NO CONTROL PROBLEMS ENCOUNTERED AND THE SERVO HAS SINCE BEEN OVERHAULED. (TC NR 20080128007)

| CA080129003 | BELL | ALLSN | NUT | UNDERTORQUED |
|-------------|------|---------|----------|-----------------|
| 1/16/2008 | 407 | 250C47B | MS172244 | OIL COOLER BLOW |

(CAN) DURING 100 HR, LUBRICATION OF T/R HANGER BEARINGS, IT WAS NOTED THAT THE AFT HEAT SHIELD WAS FREE TO ROTATE, UP ON FURTHER INSPECTION IT WAS FOUND THAT THE AFT SPANNER NUT WAS LOOSE, BUT THE LOCK WASHER WAS STILL IN THE LOCK POSITION. RECORDS SHOW THAT THIS PART WAS NEVER TAKEN APART OR WORK ON SINCE THE AC LEFT THE FACTORY. (TC NR 20080129003)

| CA070522004 | BELL | ALLSN | BELL | BEARING | SEPARATED |
|-------------|------|---------|-----------|--------------|------------|
| 5/22/2007 | 407 | 250C47B | 407010100 | 407310101101 | MAIN ROTOR |

(CAN) COMPLETE FAILURE/SEPARATION OF SHEAR BEARING ELASTOMERIC LAMINATIONS (4 OF 4). FOUND AT INSPECTION. SHEAR BEARING P/N 407-310-100-115. S/N 8345, 8325, 8109, 8113. (TC NR 20070522004)

| CA071205007 | BELL | PWA | ENGINE | MAKING METAL |
|-------------|------|-----|--------|--------------|
|-------------|------|-----|--------|--------------|

11/30/2007 412 PT6T6

(CAN) CREW HEARD A METALLIC BANG FROM THE ENGINE AREA, FOLLOWED BY CAUTION LIGHTS. ENGINE WAS SHUTDOWN AND AIRCRAFT LANDED. SUBSEQUENT INITIAL INSPECTION REVEALED DEBRIS ON THE OIL FILTER. ENGINE IS BEING REMOVED FOR INVESTIGATION. P&WC WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071205007)

| CA070502006 | BELL | BELL | CASE | CRACKED |
|-------------|------|--------------|------|--------------|
| 4/26/2007 | 427 | 427040006107 | | TRANSMISSION |

(CAN) ON INVESTIGATING AN OIL LEAKAGE, A CRACK WAS FOUND ON THE TRANSMISSION LOWER CASE (SIMILAR LOCATION AS SDR 20070216006) (TC NR 20070502006)

| CA071219002 | BOEING | RROYCE | RROYCE | BLADE | FAILED |
|-------------|--------|--------------|--------|----------|---------------|
| 12/18/2007 | 717200 | BR700715A130 |) | BRH20419 | HP COMPRESSOR |

(CAN) ENGINE SURGE ON LANDING. ENGINE RETURNED TO SHOP FOR SUSPECTED HPC STG 1 BLADES DAMAGE. DURING ENGINE DISSASEMBLY HPC ROTOR WAS FOUND WITH HEAVY DAMAGE, SUSPECT DAMAGE CAUSED BY A BLADE FAILURE AT PLATFORM. ALL FAILED PARTS WILL BE RETURNED TO THE OEM FOR INVESTIGATION. (TC NR 20071219002)

| CA071219003 | BOEING | RROYCE | TURBINE BLADES | FAILED |
|-------------|--------|--------------|----------------|--------|
| 12/19/2007 | 717200 | BR700715A130 | FW35594 | ENGINE |

(CAN) ENGINE WILL BE INDUCTED IN JANUARY, 2008 FOR INVESTIGATION FOR HPT STG 1 BLADE FAILURE. BLADES WERE FITTED NEW AT LAST SHOP VISIT AT 14773 CYCLES. SUSPECT FAILURE SIMILAR TO PREVIOUS SDR SUBMITTED 20070911004, 20071001001. FURTHER DETAILS WILL BE SUBMITTED AT ENGINE DISASSEMBLY. (TC NR 20071219003)

| CA071219004 | BOEING | RROYCE | TURBINE BLADES | FAILED |
|-------------|--------|--------------|----------------|--------|
| 12/19/2007 | 717200 | BR700715A130 | FW35544 | FNGINE |

(CAN) ENGINE CURRENTLY IN SHOP FOR REPAIR DUE TO HP 1 TURBINE BLADE FAILURE, ENGINE DISASSEMBLY REVEALED FAILURE OF BLADE AT PLATFORM. FAILED PART WILL RETURNED TO THE OEM FOR INVESTIGATION. PREVIOUS SDR RAISED FOR SAME EVENT 2007091104, 20071001001,20071219003. ENGINES SHOP VISITS DOCUMENTATIONS HAS BEEN REQUESTED BY THE OEM FOR ALL SIMILAR EVENT FOR THE INVESTIGATION (TC NR 20071219004)

| CA071122006 | BOEING | PWA | ACCESSORY UNIT | INOPERATIVE |
|-------------|--------|---------|----------------|-------------|
| 11/9/2007 | 727223 | .IT8D15 | 656021132 | MIG |

(CAN) THE CREW DISCOVERED THAT THE LANDING GEAR HANDLE WOULD NOT MOVE PAST THE (OFF) POSITION WITHOUT THE USE OF THE OVERRIDE TRIGGER. AT THE TERMINATING STATION, MAINTENANCE REPLACED THE

LANDING GEAR ACCY UNIT AND RETURNED THE AIRCRAFT TO SERVICE. (TC NR 20071122006)

<u>CA080121007</u> BOEING PWA VOLT REGULATOR ODOR

1/16/2008 727225 JT8D15

(CAN) DURING FLIGHT CREW SHUTDOWN CHECKLIST, ON APU POWER, SMOKE ALARM SOUNDED IN THE AC LAVATORY. LAVATORY INSP REVEALED SOME SMOKE. ALARM SILENCED WHILE INSPECTING THE LAVATORY AREA. AFTER APPROXIMATELY 30 SECONDS, THE ALARM SOUNDED AGAIN, AND THE AC POWERED DOWN. MAINT INSPECTED THE LWR E/E COMPARTMENT AND FOUND SUBSTANTIAL AMOUNT OF SMOKE WITH AN ELECTRICAL BURNING ODOR. FIRE DEPARTMENT WAS CALLED BY THE FLIGHT CREW. MAINT DISCONNECTED THE MAIN AC BATTERY AND DISCONNECTED THE BATTERY CHARGER. NO OBVIOUS FAULTS WERE NOTED WITH THE BATTERY OR CHARGER AND BOTH UNITS DID NOT APPEAR TO BE OVERHEATED. THE AC WAS THEN REPOWERED USING ONLY EXTERNAL POWER WITH NO FURTHER SMOKE EVIDENT. INSP OF ALL ELECTRICAL RACKS AND COMPONENTS WAS CARRIED OUT. THE ONLY FAULT NOTED WAS A BURNED ODOR FROM THE APU VOLTAGE REGULATOR AND GCU. THE VOLTAGE REGULATOR AND GCU WERE REPLACED. THE LAVATORY PUMP WAS PLACED UNDER AN MEL DEFERRAL AND WILL BE REPLACED ONCE THE PART BECOMES AVAILABLE. THE APU HAS BEEN RUN AND ALL SYS CHECKED SERVICEABLE, WITH NO FURTHER BURNED ODOR OR SMOKE.

<u>CA080124002</u> BOEING PWA SWIVEL LEAKING 1/24/2008 727247 JT8D15 NR 6 SLAT

(CAN) AC WAS DISPATCHED AND DURING CRUISE FLIGHT, THE FLIGHT ENGINEER NOTICED THAT THE (A) SYS HYDRAULICS INDICATED .1250 OF A TANK REMAINING. THE CREW DECIDED TO DECLARE AN EMERGENCY AND THE LANDING GEAR NEEDED TO BE CRANKED DOWN. THE AC LANDED SAFELY AND WAS TOWED OFF THE RUNWAY TO THE RAMP. MAINT TROUBLESHOT THE SNAG AND FOUND THAT THE NR 6 LEADING EDGE SLAT WAS LEAKING HYD FLUID FROM A LEAK IN THE SWIVAL ASSY OF THE SLAT. THE ACTUATOR WAS REMOVED AND REPLACED AND THE HYD SYS WAS REPLENISHED. THE AC WAS FUNCTION TESTED SERVICEABLE AND RETURNED TO SERVICE. (TC NR 20080124002)

<u>CA080109004</u> BOEING PWA UPLOCK SWITCH FAULTED 1/8/2008 727247 JT8D15 H1010153 NLG

(CAN) FLIGHT WAS DEPARTING AND THEN DURING THE TAKEOFF ROLL, THE CREW SELECTED THE LANDING GEAR UP. WHEN THE GEAR HAD CYCLED UP THERE REMAINED A RED NOSE GEAR UNSAFE LIGHT. THE CREW CYCLED THE LANDING GEAR 3 TIMES BEFORE THE UNSAFE LIGHT EVENTUALLY WENT OUT. THE AIRCRAFT RETURNED TO THE RAMP AND THE SYSTEM IS BEING TROUBLESHOT. THIS SDR WILL BE UPDATED WHEN A RECTIFICATION IS ESTABLISHED. (TC NR 20080109004)

<u>CA071204004</u> BOEING PWA ACCESSORY UNIT UNSERVICEABLE 12/4/2007 727247 JT8D15 656021132 LANDING GEAR

(CAN) SHORTLY AFTER TAKEOFF WHEN GEAR WAS BEING RETRACTED, CREW NOTICED THAT THE RT MAIN GEAR RED LIGHT WAS STILL ILLUMINATED. CREW CYCLED THE LANDING GEAR (3) TIMES WITH THE SAME RESULTS. THE CREW ADVISED THAT AIR NOISE COULD BE HEARD. GEAR WAS SELECTED DOWN WITH (3) GREEN AND RETURNED TO THE RAMP. EXTENSIVE TROUBLESHOOTING AND GEAR SWINGS REVEALED LANDING GEAR ASSY UNIT IS AT FAULT. SERVICEABLE UNIT INSTALLED AND GEAR FUNCTION TESTED SERVICEABLE. THE AC HAS FLOWN 4 LEGS SINCE THE REPAIR WITH NO FURTHER PROBLEMS.

<u>CA071130007</u> BOEING FLOORBEAM CORRODED 11/30/2007 737790 146A75031 CARGO BAY

(CAN) AFT CARGO PIT FLOOR SUPPORT RAIL AT BS 767+6 LBL 3 CORRODED AND REPAIRED IAW CUSTOMER EA, LEVEL 2 CORROSION. (TC NR 20071130007)

<u>CA071222001</u> BOEING FLOORBEAM CORRODED 12/22/2007 737790 146A75032 BS 767

(CAN) AFT CARGO PIT FLOOR SUPPORT RAIL AT BS 767+5 RBL 3 FOUND CORRODED DURING CPCP INSPECTION. LEVEL 2 CORROSION. REPAIRED IAW CUSTOMER E.A. (TC NR 20071222001)

CA071222002 BOEING FLOORBEAM CORRODED

12/22/2007 737790 146A75031 BS767

(CAN) AFT CARGO PIT FLOOR SUPPORT RAIL AT BS 767+14, LBL 3 FOUND CORRODED DURING CPCP INSPECTION. LEVEL 2 CORROSION. REPAIRED IAW CUSTOMER EA. (TC NR 20071222002)

CA071222003 BOEING FLOOR SUPPORT CORRODED

12/22/2007 737790 146A75035 BS767

(CAN) AFT CARGO PIT FLOOR SUPPORT RAIL AT BS 767+5, LBL8 FOUND CORRODED DURING CPCP INSPECTION. LEVEL 2 CORROSION. REPAIRED IAW CUSTOMER EA. (TC NR 20071222003)

<u>CA071222004</u> BOEING FLOORBEAM CORRODED

12/22/2007 737790 141A550519 BS 344

(CAN) PASSENGER CABIN FLOORBEAM AT BS 344, RBL4 TO LBL56 FOUND CORRODED DURING CPCP INSPECTION. LEVEL 2 CORROSION. REPAIRED IAW CUSTOMER EA. (TC NR 20071222004)

CA071222005 BOEING FLOORBEAM CORRODED

12/22/2007 737790 147A55048 BS 947

(CAN) AFT CABIN FLOORBEAM AT BS 947, LBL53 FOUND CORRODED DURING CPCP INSPECTION. LEVEL 2 CORROSION FOUND. REPAIRED IAW CUSTOMER EA. (TC NR 20071222005)

CA071202004 BOEING SKIN PANEL CHAFED

12/1/2007 737990 112A4101209 WS 260

(CAN) A/C UNDERGOING C-CHECK HEAVY MAINT. LT WING LOWER SKIN PANEL CHAFING DAMAGE FOUND DUE TO CONTACT WITH NACELLE STRUT AFT FAIRING OB BLADE SEAL AT APPROX WS 260. REPAIRED IAW EA 5720-01346. (TC NR 20071202004)

CA071210001 BOEING GE ACTUATOR MALFUNCTIONED

12/6/2007 7673Y0 CF680C2B6F 20224806 OUTFLOW VALVE (CAN) ON DEPARTURE FLIGHT, LOST BOTH AUTO PRESSURIZATION SYS. FLIGHT CLIMBED TO FL190, AND

RETURNED TO AIRPORT. CABIN PRESS WAS APPROX 2000 FT. THE STATUS MESSAGES RECEIVED: CABIN ALT AUTO 1 AND CABIN ALT AUTO 2. QRH CARRIED OUT, AND FLIGHT RETURNED TO DEPARTURE. NO FAULT FOUND, SYSTEM RESET, BUT THE VALVE ACTUATOR IS SUSPECTED, (TC NR 20071210001)

<u>CA071203005</u> BOLKMS LYC PITCH LINK MISMARKED 12/3/2007 BK117B2 LTS101750B1 11731822A TAIL ROTOR

(CAN) TAIL ROTOR PITCH LINKS P/N 117.31822A. REPLACED ON 31 OCT/2007, DUE TO BEARING WEAR. ON DEC 3/2007 THE LINKS WERE INSPECTED PRIOR TO BEARING REPLACEMENT AND WERE FOUND TO HAVE AN INCORRECT P/N STAMPED ON THEM. THE NR WAS MISSING THE NR 1. THE STAMP INDICATED P/N 117.3822A. THIS NUMBER IS NOT IN THE IPC MANUAL. THE LINKS ARE THEREFORE SUSPECT. (TC NR 20071203005)

CA080130002 BOLKMS ALLSN AIRCRUISERS HEAD LEAKING

1/15/2008 BO105S 250C20B 29022979 EMERGENCY FLOAT

(CAN) DURING AN INSPECTION THE EMERGENCY FLOAT SYS WERE DEPLOYED ACCIDENTALLY. (2) REFURBISHED KITS (PN:28022969) WERE ORDERED. BOTH VALVE ASSY (PN: 105-E-0031) WERE REBUILDED INCLUDING SHEARHEAD ASSY. (PN:29022979) NITROGEN PRESSURE WAS BROUGHT UP TO 3200PSI AND CHECK FOR LEAK. AFTER 2 DAYS PRESSURE STARTED TO DROP SLOWLY. BOTTLE WERE REFILLED WITH NITROGEN TO 3200 PSI AND PRESSURE CONTINUE TO DROP SLOWLY ON LT SIDE. BOTTLE WAS REMOVED FROM FLOAT AND CHECK FOR LEAK. LEAK WAS FOUND COMING FROM SHEARHEAD ASSY. SHEARHEAD WAS REPLACED AND FLOAT RETURNED TO SERVICE. (TC NR 20080130002)

CA071130002 BOMBDR RROYCE INVERTER OVERHEATED

11/29/2007 BD1001A10 BR700710A220 GC53100043

(CAN) DURING MAINT AND AFTER THE AC HAD BEEN POWERED WITH EXTERNAL GROUND POWER FOR APPROX 4 HOURS, THE CREW NOTICED A BURNING SMELL AROUND THE AC. NO ABNORMAL INDICATIONS WERE DISPLAYED

ON THE CREW ALERTING SYS (CAS) MESSAGE AND THE ELECTRICAL MGMT SYS CONTROL AND DISPLAY UNITS (EMSCDU). THE POWER WAS REMOVED FROM THE AC. THE INVESTIGATION INDICATES THAT THE INTEGRAL LIGHTING INVERTER A179 SHOWN SIGN OF INTERNAL OVERHEATING. THIS RESULTED IN DEPOSITING SOOT TO THE ADJACENT INTEGRAL LIGHTING POWER SUPPLY A176 AND WIRES. BOTH UNITS WERE REMOVED, REPLACE AND SENT TO THE VENDOR TO IDENTIFY THE ROOT CAUSE OF THE FAILURE. THE AC IS BACK IN SERVICE. (TC NR 20071130002)

CA071122003 BOMBDR BEARING FAILED

11/22/2007 DHC8400 296852629 NR 4 WHEEL

(CAN) WHILE SERVICING THE MAINT OBSERVED SWARF AND GREASE AROUND THE HUBCAP OF NR 4 MAIN WHEEL ASSY. IB BEARING HAD FAILED. (TC NR 20071122003)

CA071213003 BOMBDR FLOOR PANEL DELAMINATED

12/13/2007 DHC8400 CMKD8400FP540 CABIN

(CAN) FORWARD CABIN FLOOR PANEL WHERE PURSER STANDS TO GIVE PRE-FLIGHT BRIEFING STARTING TO DELAMINATE. MATERIAL IS COMP 28 WHICH IS BUILT TO STAND STRESS OF 75 LB/FT SQUARED. (TC NR 20071213003)

CA080110004 BOMBDR PUMP LEAKING

8/31/2007 DHC8400 6617303 HYD SYSTEM

(CAN) MFG HAD ISSUED SB 84-29-15A/ SB 66173-29-349 DUE TO LEAKING OF THE ENGINE DRIVEN HYD PUMP. THE SB WAS CARRIED OUT ON THE ABOVE MENTIONED COMPONENT AT TSN: 834.0 AND CSN OF 874. COMPONENT REMOVED DUE TO LEAKAGE IN THE FLANGE AREA THAT HAD BEEN RETORQUED IAW THE SB. HAVE ADDED THE RETORQUING OF THIS COMPONENT IAW THE ABOVE MENTIONED SB INTO THE AC MAINT PROGRAM. (TC NR 20080110004)

<u>CA080111001</u> BOMBDR PWC WINDSHIELD BROKEN
1/10/2008 DHC8400 PW150A 80260008 COCKPIT

(CAN) CO-PILOTS FORWARD WINDSHIELD SHATTERED IN FLIGHT AT 25,000 FEET. EMERGENCY DESCENT AND DIVERSION PERFORMED. MAINT REPLACED THE WINDSHIELD AND AIRCRAFT RETURNED TO SERVICE. (TC NR 20080111001)

CA071224004 BOMBDR PWC ADAPTER LOOSE

12/19/2007 DHC8400 PW150A 305726501 LP COMPRESSOR

(CAN) WHILE INVESTIGATING AN OIL LEAK, DISCOVERED THAT WHEN REMOVING THE OIL COOLER LINE FROM THE LP COMPRESSOR CASE, AFTER CUTTING THE LOCKWIRE FROM 1 OF THE 3 BOLTS, THE REMAINING 2 BOLTS CAME OUT WITH THE LOCKWIRE STILL ATTACHED. BOLTS SECURE THE OIL COOLER LINE AND ADAPTOR OIL TUBE TO THE LP COMPRESSOR. (TC NR 20071224004)

<u>CA071207003</u> BOMBDR PWC SOLENOID VALVE INOPERATIVE

11/4/2007 DHC8400 PW150A 483023 RT MLG

(CAN) UPON TAKEOFF AND GEAR RETRACTION RT MLG DOOR REMAINED OPEN WITH RT GEAR DOOR UNSAFE INDICATION. MAINT REPLACED RT MLG SOLENOID SEQUENCE VALVE. (TC NR 20071207003)

<u>CA071219001</u> BOMBDR PWC SELECTOR VALVE FAILED 12/16/2007 DHC8400 PW150A 6131001001 MLG

(CAN) AFTER TAKEOFF, LANDING GEAR SELECTOR LEVER SELECTED UP, BOTH LT AND RT MAIN GEAR DOOR CAUTION LIGHTS ILLUMINATED, BOTH MAIN GEARS FAILED TO RETRACT BUT NOSE GEAR HAD RETRACTED. AC RETURNED TO BASE FOR FURTHER INVESTIGATION. FLIGHT SNAG COULD BE DUPLICATED ON GROUND. DURING TROUBLESHOOTING AND REMOVAL OF THE MLG SELECTOR VALVE, IT WAS NOTICED THAT FILTER HAD SEPARATED IN VALVE CAUSING BLOCKAGE. (TC NR 20071219001)

<u>CA071205009</u> BOMBDR PWC ENGINE FOD

11/30/2007 DHC8400 PW150A

(CAN) ENGINE (FLAMED OUT) AND AUTO RECOVERED WITHIN TEN SECONDS TIME FRAME WITH NO CREW INTERVENTION. FADEC DATA INDICATES POSSIBLE WATER/ICE INGESTION. (TC NR 20071205009)

<u>CA080124001</u> BOMBDR PWC WIRE HARNESS FAULTY
1/23/2008 DHC8400 PW150A 471515 NR 2 WOW

(CAN) GEAR WOULD NOT RETRACT AFTER TAKEOFF, RETURN TO FIELD. CREW ELECTED TO RETURN BASE. MAINTENANCE FOUND THE NLG NR 2 WOW HARNESS TO BE AT FAULT. NEW HARNESS INSTALLED, AIRCRAFT RETURNED TO SERVICE. (TC NR 20080124001)

CA071128009 BRAERO PWA O-RING LEAKING

11/16/2007 BAE1251000A PW305B AS3209014 NR 4 BEARING

(CAN) CREW REPORTED OIL PRESSURE FLUCTUATIONS AND ILLUMINATION OF THE LOW OIL PRESSURE WARNING INDICATOR. THE ENGINE WAS SHUTDOWN AND THE FLIGHT DIVERTED. INVESTIGATION REVEALED DEFECTIVE O-RINGS ON THE NR4 BEARING TRANSFER TUBES (TC NR 20071128009)

<u>CA071126007</u> BRAERO GARRTT COMPUTER INOPERATIVE

11/8/2007 BAE125800A TFE7315R 21190108000 DEEC

(CAN) ENGINES FRESH, NEW INSTALLATION OF DEECS ON AC. DEEC PROBLEMS OCCURRED. THE PROBLEM ENCOUNTERED WITH DIGITAL ENGINE COMPUTERS (DEEC). (TC NR 20071126007)

<u>CA071214007</u> BRAERO GARRTT PITOT TUBE CORRODED

12/10/2007 HS125700A TFE7313R1H 257SF2099

(CAN) FOLLOWING A FAILED PITOT STATIC TEST, AN INSPECTION OF THE PITOT STATIC TUBING WAS CARRIED OUT AND MAINT FOUND THAT ONE OF THE TUBES (P/N 25-7SF209-9) HAD A PIN HOLE, WHICH APPEARS TO HAVE BEEN CAUSED BY INTERGRANULAR CORROSION. THE LINE WAS REPAIRED AND THE PITOT STATIC SYSTEM TESTED SERVICEABLE. REFERENCE: PARTS CATALOG 34-10-00-22 ITEM 24 (P/N 25-7SF209-9), PIPE ASSY-STATIC 5 FEED, TEE-PIECE TO TEE-PIECE, 3/8 INS O/D, L56, 22 SWG (MOD252870) (TC NR 20071214007)

<u>CA071224002</u> BRAERO GARRTT AILERON ICED

12/13/2007 HS125700A TFE7313R1H

(CAN) PILOT'S REPORTED ON APPROACH INTO AIRPORT, COULD NOT GET ANY ROLL ON AC CONTROLS. IT APPEARED THAT AILERONS WERE FROZEN. SHORTLY BEFORE TOUCHDOWN THEY WERE ABLE TO GAIN CONTROL OF THE AILERON MOVEMENT. THE AC LANDED WITHOUT INCIDENT. MAINT WAS CALLED AND ON INSPECTION OF THE AC FOUND ICE BUILD UP ON LT AND RT AILERON HORNS, LT AND RT WINGS AND WING TIPS. SOME AREAS OF THE LEADING EDGE HAD SOME ICE BUILD UP. CHECKED AC CONTROLS AND VERIFIED CORRECT MOVEMENT. AILERON CONTROLS OPERATED WITHOUT ANY BINDING. CONTACTED MFG AND REPORTED INCIDENT. FURTHER TROUBLESHOOTING WILL BE CARRIED OUT ON THE AC AILERONS TO AS CERTAIN THE CAUSE OF THE AILERON FREEZING UP. (TC NR 20071224002)

<u>2008FA0000086</u> CESSNA CONT SPAR CORRODED 2/15/2008 150G O200* 0411129 WING

WINGS WERE PREVIOUSLY REMOVED TO FACILITATE TRANSPORTATION. INSP OF THE LT AND RT FWD SPAR BEARING BLOCKS IN THE FUSELAGE (P/N 0411129) FOUND SEVERE CORROSION DAMAGE. IT APPEARS TO BE DISSIMILAR METAL CORROSION BETWEEN THE SPAR BLOCKS AND THE AN3-21A ATTACHMENT BOLTS. THIS AREA WOULD BE VERY DIFFICULT TO INSPECT WITH THE WINGS ATTACHED. THE SAME P/N AND WING ATTACHMENT SYS IS USED ON MOST OF THE AC SERIES HIGH WING AIRCRAFT.

CA080123001 CESSNA CONT CYLINDER LEAKING

1/19/2008 150H O200A NR 4

(CAN) WHILE CARRYING OUT MAINT, CYLINDER NR 4 WAS FOUND LOW ON COMPRESSION 45/80. AIR WAS LEAKING THROUGH THE EXHAUST. (TC NR 20080123001)

<u>CA071126006</u> CESSNA CONT GEAR BROKEN
11/6/2007 150L O200A 35016R STARTER

(CAN) STARTER DRIVE ENGAGES ON TEETH ON GEAR. STARTER WAS SLIPPING, TOOK APART TO EXAMINE AND FOUND 3 BROKEN TEETH. STARTER IS LIGHT WEIGHT. REPLACE STARTER SOLENOID 19 HOURS EARLIER AND BELIEVE FAULTY SOLENOID CAUSE OF PROBLEM. (TC NR 20071126006)

CA070405007 CESSNA LYC THROTTLE CONTROL BROKEN

3/21/2007 152 O235L2C 565549012

(CAN) PILOT REPORTED STRANGE, SPRINGY FEELING TO THROTTLE CONTROL. IT WAS DISCOVERED THAT THE OUTER PART OF THE CONTROL HAD SEPARATED WHERE IT WAS SWAGED TO THE FLEXIBLE, SPIRAL ROUND PART OF THE CONTROL. (TC NR 20070405007)

<u>CA071212026</u> CESSNA LYC MCAULY FLANGE CRACKED
12/11/2007 152 O235L2C PROPELLER

(CAN) PROPELLER RECEIVED FOR CORROSION INSPECTION IAW AD 2003-12-05. A SMALL CRACK WAS LOCATED RADIALLY AT THE EDGE OF ONE MOUNTING BOLT HOLE. TIME SINCE LAST INSPECTED FOR AD 2003-12-05 WAS 409.2 HOURS. (TC NR 20071212026)

<u>CA071128010</u> CESSNA LYC BULKHEAD CRACKED
11/16/2007 172M O320E2D 051218712 DOOR FRAME

(CAN) WHILE CARRYING OUT THE SEB 97-1 AFT DOORPOST INSPECTION, CRACKS WERE NOTED AT THE SUBJECT AREAS ON BOTH DOORPOSTS (IPC "CHANNEL-BULKHEAD"). SUBMITTER SUSPECTS THAT TAXIING OVER ROUGH SURFACES, OR POSSIBLY HARD OR CRABBED LANDINGS, CONTRIBUTES TO THE FLEXING OF THE BULKHEAD THAT RESULTS IN THE CRACKING. CRACKS ARE FOUND BY LOOKING WITH LIGHT AND MIRROR FORWARD NEAR THE AILERON CABLE PULLEY AT THE BOTTOM OF THE AFT DOORPOSTS. THE CRACK RADIATES FROM THE RELIEF CUTOUT WHERE THE INSIDE FLANGE OF THE BULKHEAD CHANGES FROM VERTICAL TO HORIZONTAL. (TC NR 20071128010)

<u>CA071128018</u> CESSNA LYC AMSAFE CABLE BROKEN 11/28/2007 172P O320D2J 505590401 505590401 SEAT

(CAN) COMPLIED WITH SB07-5 PILOT SECONDARY SEAT STOP INSTALLATION. THE AIRCRAFT LEFT OUR SHOP SERVICABLE AND IN COMPLIANCE WITH THE SB. BROUGHT IT IN THE NEXT DAY TO DO UNSCHEDULED MAINT. LOOKING OVER THE JOB FOR A SECOND TIME FOUND THE THREADED PLASTIC END OF THE CABLE BROKEN IN HALF AND THE PRODUCT NO LONGER FUNCTIONING CORRECTLY. BELIEVE A POSSIBILITY OF THE PART BRAKING TO BE COOL WEATHER AND THE FACT THAT THE PART IS PLASTIC. (TC NR 20071128018)

<u>CA071212005</u> CESSNA LYC HINGE PIN CORRODED
11/27/2007 172S IO360L2A 051701912 DOOR HINGE

(CAN) DOOR HINGE PINS APPEAR TO BE WELDING RODS OR STEEL PINS CUT LONG AND BENT OVER TO SERVE FROM FALLING OUT. REPLACED WITH PROPER PARTS. CAUSED DISSIMILAR METAL CORROSION TO HINGE MATERIAL AS BOGUS PINS RUSTED. THE ENTIRE FLEET HAS THESE SAME BOGUS PINS (10 AIRCRAFT IN TOTAL). INSTALLED BY PREVIOUS MAINTAINER, AMO 73-03. (TC NR 20071212005)

 CA071212025
 CESSNA
 CONT
 MCAULY
 HUB
 CORRODED

 12/12/2007
 180J
 O470R
 87292
 PROPELLER

(CAN) AT OVERHAUL PROPELLER HUB WAS STRIPPED OF PAINT FINISH. ENTIRE OUTER SURFACE OF HUB AND BLADE O-RING GROOVES WERE CORRODED BEYOND LIMITS. HUB WAS RETURNED TO MFG FOR EVALUATION. (TC NR 20071212025)

 2008FA0000074
 CESSNA
 CONT
 CYLINDER
 DAMAGED

 1/15/2008
 182H
 O470R
 AEC642068
 NR 1

WHILE PERFORMING A COMPRESSION CHECK TO FIND AN OIL LEAK, FOUND NR 1 CYLINDER WITH O COMPRESSION. PULLED CYLINDER OFF AND FOUND THE PLATING ON THE CYLINDER LOOSE AND FLAKING OFF. (K)

<u>CA080122007</u> CESSNA PWA PROPELLER LEAKING

1/22/2008 208B PT6A114A 3GFR34C703

(CAN) AFTER START UP AND REPOSITION OF AC FOR FUEL, A HYD LEAK WAS NOTED FROM THE PROPELLER, RUNNING FROM THE BLADE ROOT TO THE BLADE TIP. THE PROPELLER WAS REMOVED AND ROUTED TO A OVERHAUL SHOP FOR REPAIR. (TC NR 20080122007)

CA071128013 CESSNA PWA FUEL CONTROL FAILED

11/9/2007 208B PT6A114A ENGINE

(CAN) ENGINE POWER LOSS AND SUBSEQUENT INFLIGHT SHUTDOWN REPORTED. MFG IS ATTEMPTING TO RECOVER THE FUEL CONTROL UNIT FOR INVESTIGATION AND WILL ADVISE. (TC NR 20071128013)

CA071121001 CESSNA PWA BUSHING WORN

11/18/2007 208B PT6A114A PROP HUB

(CAN) THE PILOTS FELT A VIBRATION ON CLIMB. THEY REDUCED THE POWER BUT THE VIBRATION REMAINED. THEY RETURNED TO THE AIRPORT WHERE THE AME INSPECTED THE ENGINE AND PROPELLER. NO DISCREPANCIES WERE NOTED ON THE ENGINE. ONE BLADE OF THE PROP WAS ABLE TO BE TWISTED BY HAND APPOX 3-5 DEGS. WE SUSPECT A FAILURE OF A BUSHING IN THE HUB AND HAVE SENT A REPLACEMENT PROP BEFORE FURTHER FLIGHT. (TC NR20071121001)

CA071221002 CESSNA PWA ENGINE SEIZED

12/9/2007 208B PT6A114A

(CAN) SHORTLY AFTER TAKEOFF, CREW FELT VIBRATION FOLLOWED BY AN INDICATION OF LOW OIL PRESSURE. AC LANDED IN A FIELD AWAY FROM THE DEPARTURE POINT AND CREW SHUTDOWN ENGINE. POST FLIGHT INSP REVEALED THAT NEITHER ENGINE ROTOR COULD BE TURNED AND THE OIL FILTER AND CHIP DETECTORS WERE CONTAMINATED BY DEBRIS. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20071221002)

<u>CA071212027</u> CESSNA PWA TIRE FLAT 12/7/2007 208B PT6A114A TU29110010 MLG

(CAN) TIRE WENT FLAT. (TC NR 20071212027)

<u>CA071212028</u> CESSNA PWA TIRE FLAT 11/28/2007 208B PT6A114A TU29110010 MLG

(CAN) TIRE WENT FLAT. (TC NR 20071212028)

<u>CA071221007</u> CESSNA PWA TURBINE BLADES DISTRESSED

12/2/2007 208B PT6A114A ENGINE

(CAN) OPERATOR REPORTED (TECHNICAL PROBLEMS) WHICH RESULTED IN A FORCED LANDING ON A PUBLIC MOTORWAY. INITIAL INVESTIGATION REVEALED COMPRESSOR TURBINE BLADE DISTRESS. THE ENGINE IN BEING RETURNED TO MFG FOR INVESTIGATION. UPDATES WILL BE PROVIDED WHEN AVAILABLE. (TC NR 20071221007)

<u>CA071123003</u> CESSNA PWA MOUNT CRACKED 11/22/2007 425 PT6A112 595104814 ENGINE

(CAN) WHILE PERFORMING MFG 100 HR ENGINE INSPECTION ON THE RT ENGINE, THE OB ENGINE MOUNT WAS FOUND CRACKED. THE MOUNT WAS REPLACED WITH A NEW UNIT. (TC NR 20071123003)

CA071114008 CESSNA WIRE HARNESS SHORTED

11/2/2007 525 BRAKES

(CAN) THE EMERGENCY BRAKE HAD TO BE USED UPON LANDING AS IT WAS DISCOVERED THAT THE ANTI-SKID WIRING HARNESS HAD A SMALL AMOUNT OF SLACK BETWEEN THE TRAILING LINK AND THE TRUNNION. THIS ALLOWED IT TO RUB AGAINST THE TIRE, WEARING OFF THE COATING AND UPON LANDING ON A WET SURFACE CAUSED SHORTING. (TC NR 20071114008)

<u>CA071101001</u> CESSNA PWA SQUAT SWITCH LOOSE 10/19/2007 550 JT15D4 MS21090348 MLG

(CAN) ON FINAL APPROACH APPROXIMATELY 3 MILES FROM TOUCH DOWN, THE LT THRUST REVERSER (T/R) ARM AND UNLOCK LIGHTS ILLUMINATED BRIEFLY. AT APPROXIMATELY 1.5 FROM TOUCH DOWN THE LT T/R ARM, UNLOCK AND DEPLOY LIGHTS ILLUMINATED AND THE LT POWER LEVER AUTOMATICALLY MOVED TO IDLE. ALL (3) LIGHTS EXTINGUISHED BEFORE EITHER OF THE PILOTS COULD TAKE ACTION TO EMERGENCY STOW THE T/R. THE FACT THAT THE MECHANICAL T/R POWER LEVER INTERCONNECT CAUSED THE POWER LEVER TO RETARD TO IDLE INDICATES THAT THE T/R DID ACTUALLY DEPLOY AND THAT THIS WAS NOT AN ERRONEOUS ANUNNCIATOR. THE LANDING GEAR SQUAT SWITCHES SHOULD HAVE PREVENTED INADVERTENT T/R DEPLOYMENT, WITH ONLY THE T/R ARM LIGHT ILLUMINATING EVEN IN THE EVENT OF A COMMANDED T/R DEPLOYMENT IN THE AIR. UPON INVESTIGATION A NUMBER OF CONTRIBUTING FAULTS WERE FOUND. BOTH SQUAT SWITCHES WERE RIGGED INCORRECTLY, THE RT ONE RIGGED SUCH THAT IT REMAINED IN THE GROUND POSITION ALL THE TIME. ONLY ONE OF THE (2) SWITCHES HAS TO BE IN THE GROUND POSITION FOR EITHER OR BOTH OF THE T/RS TO DEPLOY NORMALLY. SECONDLY A WIRE HAD BROKEN OFF FROM THE LT STOW/DEPLOY MICROSWITCH IN THE POWER LEVER QUADRANT. IN THE STOW POSITION THE WIRE IN QUESTION PROVIDES A CONTINUOUS GROUND PATH TO POWER SIDE OF THE DEPLOY HYDRAULIC SOLENOID. IN EVENT OF AN ELECTRICAL MALFUNCTION THIS GROUND PATH WOULD CAUSE THE T/R CONTROL CIRCUIT BREAKER TO POP RATHER THAN DEPLOY THE T/R. THIRDLY THE ACTUAL CAUSE OF THE DEPLOYMENT WAS A LOOSE ADJUSTMENT SCREW THAT SECURES THE STOW/DEPLOY SWITCH CAM TO THE POWER LEVER. NORMAL MOVEMENT OR VIBRATION OF THE POWER LEVER INITIATED THE UNWANTED DEPLOY COMMAND. (TC NR 20071101001)

| CA071206004 | CESSNA | PWA | BULB | BURNED OUT |
|-------------|--------|--------|------------|-----------------|
| 12/5/2007 | 550 | JT15D4 | MS25237327 | MLG ANNUNCIATOR |

(CAN) PILOTS REPORT, ON FINAL TO LANDING RUNWAY, SELECTED THE GEAR DOWN HOWEVER THE RT MAIN GEAR GREEN LIGHT FAILED TO ILLUMINATE. THE RED (GEAR UNLOCKED) LIGHT WAS EXTINGUISHED. ADVISED TOWER AND CONDUCTED A MISSED APPROACH WITH REQUEST FOR VECTORS TO REMAIN IN AREA. WE COULD VISUALLY SEE THE WHEEL DOWN, AND THE GEAR HORN WOULD NOT SOUND WITH FULL FLAPS HOWEVER EXECUTED THE MANUAL EXTENSION PROCEDURE REGARDLESS, ASKED FOR THE EMERGENCY VEHICLES TO BE STANDING BY ON LANDING AS A PRECAUTION. BRIEFED OURONLY PASSENGERS AND LANDED WITH OUT FURTHER INCIDENT. CLEARED THE RUNWAY, ASKED FOR EMERGENCY CREWS TO VIEW OUR RT WHEEL FOR ANY OBVIOUS DAMAGED. THEY REPORT NOTHING APPARENT TO THEM AND SINCE THE AC LANDED, ROLLED OUT AND CLEARED THE RUNWAY WITHOUT ANY TROUBLES (FELT NORMAL) TAXIED BACK TO OUR FACILITIES TO DEPLANE OUR PASSENGER AND CONSULT WITH MAINTENANCE. MAINTENANCE FINDINGS, THE AC WAS MET ON THE RAMP AND WE CONFIRMED THAT THE VISUAL DOWN AND LOCKED INDICATOR ON THE RT MAIN GEAR ACTUATOR WAS PROTUDING (LOCKED). THE AC WAS PUT IN THE HANGAR WHERE WE FOUND THE RT GEAR DOWN AND LOCKED ANNUNCIATOR BULB WAS UNSERVICEABLE. THE BULB WAS REPLACED, BLOW DOWN BOTTLE RESET AND SERVICED AND SEVERAL GEAR SWINGS CARRIED OUT WITH NO FAULTS INDICATION WAS NORMAL. AIRCRAFT RETURNED TO SERVICE. (TC NR 20071206004)

| CA071212012 | CESSNA | PWA | SCREW | MISSING |
|-------------|--------|--------|------------|--------------|
| 12/11/2007 | 550 | JT15D4 | MS35206228 | RUDDER PEDAL |

(CAN) SL 550-27-14 FOUND 2 SCREWS, P/N MS350206-228, MISSING FROM PILOTS LT RUDDER SUPPORT BRACKET AND 2 LOOSE SCREWS P/N MS 350206-228 ON THE CO-PILOTS RT RUDDER SUPPORT BRACKET.CARRY OUT ACCOMPLISHMENT INSTRUCTIONS PARAGRAPH 1THRU 4. (TC NR 20071212012)

| CA071218004 | CESSNA | PWA | WHEEL | DAMAGED |
|-------------|--------|--------|-------|---------|
| 12/17/2007 | 550 | JT15D4 | | MLG |

(CAN) ON PILOTS WALK AROUND THEY FOUND METAL AROUND NOSE WHEEL TIRE. AIRCRAFT WAS TOWED INTO A HEATED HANGER AND PILOT PHONED MAINTENANCE. ENGINEER JACKED NOSE WHEEL AND INSPECTED NOSE WHEEL SPIN-UP KIT AND FOUND LT TURBINE AND LT SPIN-UP COVER WERE DAMAGED. REMOVED NOSE WHEEL SPIN-UP KIT AND INSTALLED ANOTHER TIRE/WHEEL ASSY AND RETURNED AIRCRAFT TO SERVICE (TC NR 20071218004)

| CA071114006 | CESSNA | PWA | STARTER GEN | FAILED |
|-------------|-----------|--------|-------------|--------|
| 9/28/2007 | 560CESSNA | PW535A | 300SGL129Q2 | |

(CAN) AC INFLIGHT HAD RT GENERATOR OUTPUT FLUCTUATING. CHECKED ON GENERATOR IAW MM WAS FOUND OK. BUT INFLIGHT FLUCTUATING, REPLACED GENERATOR AND PROBLEM WENT AWAY. (TC NR 20071114006)

CA071114003 CESSNA PWA WHEEL CORRODED

9/24/2007 560CESSNA PW535A 31607 MLG

(CAN) RIM WAS EDDY CURRENT INSPECTED FOR CRACKS IAW MM AND CORROSION PITS WERE FOUND ON RIMS (IB AND OB) WHERE TIRE MAKES AIR SEAL. THE CORROSION PITS WERE MORE THAN 0.010 INCH ALLOWED AND WHEEL WAS SCRAPPED. (TC NR 20071114003)

 CWQR200801
 CESSNA
 PWA
 SKIN
 CRACKED

 1/29/2008
 560CESSNA
 PW535A
 651201026
 FUSELAGE

DURING A PHASE 1-4 INSPECTION THE TECHNICIAN NOTICED A SMALL CRACK IN THE PAINT UNDER THE RT ENGINE PYLON. REMOVED THE PAINT AND FOUND A 1.5 INCH CRACK. STARTING AT THE FWD BOTTOM CUT OUT FOR THE FWD SUPPORT BEAM. APPEARS THAT THERE WAS NOT ENOUGH CLEARANCE IN THE TAILCONE SKIN FOR THE MOVEMENT OF THE ENGINE BEAM WHEN THE AIRCRAFT WAS MANUFACTURED. SUBMITTED TO MFG ENGINEERING FOR REPAIR.

<u>CA071128002</u> CESSNA PWA TORQUE MOTOR DEFECTIVE
11/8/2007 560XL PW545A 31J285704 BLEED VALVE

(CAN) DURING DESCENT, CREW NOTED ENGINE NOISE, FOLLOWED BY A REVERSION OF THE EEC TO MANUAL. ENGINE POWER LEVEL REMAINED AT FLIGHT IDLE. INVESTIGATION REVEALED A DEFECTIVE BLEED VALVE TORQUE MOTOR. (TC NR 20071128002)

CA071205004 CESSNA PWC UNKNOWN UNKNOWN

11/28/2007 560XL PW545B

(CAN) DURING CLIMB, THE EEC REVERTED TO MANUAL WITH LOSS OF THRUST LEVER, RESPONSE NOTED. THRUST DECREASED INITIALLY TO 54 PERCENT AND LATER TO 25 PERCENT. FLIGHT WAS DIVERTED AND AN UNSCHEDULED LANDING PERFORMED. AFTER TROUBLESHOOTING, AC WAS CLEARED TO RETURN TO BASE. ADDITIONAL TROUBLESHOOTING FOCUSED ON FUEL SYS COMPONENTS. AC HAS RETURNED TO SERVICE AFTER REPLACEMENT OF SUSPECT COMPONENTS. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071205004)

<u>CA080125001</u> CESSNA PWC OIL SYSTEM UNKNOWN 1/22/2008 560XL PW545B PRESSURE

(CAN) APPROXIMATELY 5 -7 MINUTES AFTER TAKEOFF, THE WARNING LIGHT (LOW OIL PRESS R) WAS OBSERVED ON THE M.A.P. AND (0) ON THE OIL PRESSURE INDICATOR TAPE . A PRECAUTIONARY ENGINE SHUTDOWN WAS PERFORMED FOLLOWED BY THE DECLARATION OF AN EMERGENCY. ENG IS STILL UNDER INVESTIGATION TO DETERMINE THE CAUSE. (TC NR 20080125001)

<u>CA071221003</u> CESSNA PWC MOTOR DEFECTIVE 12/12/2007 560XL PW545B 31J285704 BLEED VALVE

(CAN) VIBRATION, (RUMBLE) AND EEC REVERSION WAS EXPERIENCED DURING DESCENT. THE CREW ELECTED TO PERFORM AN INFLIGHT SHUTDOWN OF THE ENGINE AND CONTINUE TO DESTINATION. TROUBLESHOOTING REVEALED A DEFECTIVE BLEED VALVE TORQUE MOTOR CAUSING THE COMPRESSOR SURGES/STALLS. THE UNIT WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. (TC 20071221003)

 2008FA0000051
 CESSNA
 ALLSN
 FLEX DRIVE
 WORN

 1/7/2008
 750
 AE3007C
 991434446
 T/E FLAP

AIRCRAFT EXPERIENCED A FLAP FAIL MESSAGE AFTER TAKEOFF, DIVERTED FOR REPAIR AND THE PILOT ELECTED TO DECLARE AN EMERGENCY BEFORE LANDING. THE AIRCRAFT LANDED WITHOUT INCIDENT. AFTER TROUBLESHOOTING, THE FLAP SYSTEM THE RT AND LT NR 5 FLAP FLEX DRIVES WERE FOUND TO BE WORN CAUSING A FLAP FAULT. DRIVES HAVE BEEN REPLACED AND SYSTEM MECHANICAL AND ELECTRICAL OPERATIONAL CHECK ACCOMPLISHED. NO FURTHER DEFECTS WERE FOUND. (K)

<u>CA071114010</u> CESSNA CONT RIB CRACKED 11/14/2007 A150M O200A 0523809 LT AILERON

(CAN) AILERON CENTER RIB P/N 0523809 FOUND CRACKED MULTIPLE LOCATIONS ON FWD VERTICAL ANGLE COMMON TO CONTROL ROD ATTACH BRACKET. IN ADDITION THE CONTROL ROD ATTACH BRACKET P/N 0760011-2 WAS ALSO CRACKED IN 2 LOCATIONS COMMON TO AILERON SPAR. (TC NR 20071114010)

2008FA0000085 CESSNA LINE CHAFED

2/21/2008 T210M 1285094 HYDRAULIC SYS

REPLACED HYDRAULIC TUBE (PN 128509-4) DUE TO CHAFFING FROM LONG SCREW IN WRONG LOCATION OF INSPECTION COVER PLATE. THIS WAS FOUND BY INSPECTION AS DESCRIBED IN SEB07-03 FOR 182 SERIES, AND WHICH 182'S HAVE A SUPERSEDED PN AVAILABLE TO NULLIFY THE POTENTIAL PROBLEM. THIS SERIES AND OTHER MODELS SHOULD BE ADDED TO SB APPLICABILITY.

 CA071202001
 CESSNA
 CONT
 BULKHEAD
 CRACKED

 12/1/2007
 U206G
 IO550F
 FUSELAGE

(CAN) DURING COMPLIANCE WITH SEB 93-5 INSP OF LOWER DOOR POST, THE BULKHEAD WAS FOUND CRACKED ON THE LT SIDE, UPPER PART OF LOWER BULKHEAD, JUST IB OF THE WING STRUT ATTACHMENT FITTING. RT SIDE WAS TO BE FREE OF CRACKS AT THIS TIME. MFG SERVICE KIT SK260-42C WAS INCORPORATED TO THE LT LOWER DOOR POST. AC RETURNED TO SERVICE. THIS INSP IS ALSO CALLED UP IN THE CONTINUED AIRWORTHINESS PROGRAM INSP NR 53-40-01 INITIAL INSPECTION TO BE DONE AT 12000 HOURS AND REPEAT INSPECTIONS EACH 3000 HOURS THERE AFTER. SEB 95-3R1 CALL FOR THIS INSPECTION AT 4000 HOURS TT AND REPEAT INSPECTIONS EACH 1000 HOURS THERE AFTER. NOT ALL OPERATORS OF THESE AC ARE IN COMPLIANCE WITH THE C.A.P MANUALS. (TC NR 20071202001)

<u>CA071207001</u> CNDAIR PWA HAMSTD BLADE UNSERVICEABLE 10/5/2006 CL2151A10 CWASP 6903A10 PROPELLER

(CAN) DURING INSPECTION IAW AD 81-13-06R2 AND S/B 664, A CRACK WAS FOUND EMINATING FROM THE BLADE BUSHING SCREW HOLE. CRACK WAS FOUND TO BE TOO LARGE TO BE REMOVED. BLADE WAS RENDERED UNSERVICEABLE. BLADE S/N 852006. (TC NR 20071207001)

<u>CA071115006</u> CNDAIR PWA BUSS BAR SPARKS 11/15/2007 CL2156B11215 PW123 DAMAGED

(CAN) CPB1 CENTER BUS BAR LINK W57PD SPARKING UNDER LOOSED SCREW. BUS BAR W57PD AND W440PD REPLACED. 10029 DROPS (TC NR 20071115006)

<u>CA071205001</u> CNDAIR PWA FITTING BROKEN
12/5/2007 CL2156B11215 PW123 215T640836 TANK DRAIN

(CAN) MAJOR FUEL LEAK BY THE BROKEN NR 3 COLLECTOR TANK DRAIN FITTING, SOLENOID SIDE. PIPE DRAIN 215T64083-6 REPLACED. (TC NR 20071205001)

<u>CA071227008</u> CNDAIR GE PSEU FAILED 12/20/2007 CL600* CF348C5 895304 MLG

(CAN) A/C EXPERIENCED A PROX SYS FAULT DURING CLIMB OUT MESSAGE BECAME INTERMITTENT AFTER 8-10 MINUTES. FLIGHT RETURNED AND LANDED WITHOUT FURTHER INCIDENT. MAINT REPLACED THE PSEU AND CHECKED THE SYS THROUGH THE MFG SERVICEABLE. GEAR SWINGS C/O, NFF. A/C RETURNED TO SERVICE. (TC NR 20071227008)

<u>CA071227006</u> CNDAIR GE WIRE HARNESS CHAFED 12/13/2007 CL600* CF348E5A1 M2750010SP3U00 RAT

(CAN) DURING INCORPORATION OF SB601-0591 (SPECIAL CHECK/MODIFICATION AIR-DRIVEN GENERATOR SYS REPLACEMENT OF CHAFING ADG POWER FEED WIRE) FOUND THE WIRING CHAFED BARE AND CLAMPS BURNED AFT OF THE FWD PRESSURE BULKHEAD AT THE FIRST STANDOFF AFT OF THE FEED THROUGH AT APPROX FS 210. WIRES HAVE BEEN REPLACED IAW SB601-0591 INSTRUCTIONS. (TC NR 20071227006)

CA080109009 CNDAIR GE CONVERTER FAULTY

1/7/2008 CL6002B16 CF343A1 601509173 SIGNAL DATA

(CAN) DURING ENGINE START, AT ABOUT 40 TO 50 PERCENT, N2, ALL LIGHTS ON THE ITT TAPE INSTANTLY LIGHTED UP. WE IMMEDIATELY SHUTDOWN ENGINE. RESIDUAL ITT WAS ONLY 56 AND NR9702, AFTER MOTORING. VISUALLY INSPECTED THE ENGINE FOR SIGNS OF HEAT OR DAMAGE AND FOUND NOTHING. SUSPECTED INDICATION PROBLEM AND DECIDED TO TRY ANOTHER START. START WAS NORMAL. WHILE WE CRUISED AT FL 390, ABOUT 50NM SOUTH, NOTICED A HIGH ITT (ALL LIGHTS ON AGAIN) ON THE SAME LT ENGINE. IMMEDIATELY WE REDUCED THRUST TO REGAIN WITHIN LIMITS. ABOUT 5 MINUTES LATER, ITT STARTED RISING GRADUALLY, AGAIN WE REDUCED THRUST. CREW DISCUSSED ALTERNATE PLAN (DIVERTING), ITT STARTED AGAIN. KEPT REDUCING THRUST UNTIL WE HAD TO SHUTDOWN THE LT ENGINE AND DIVERTED. DURING THE WHOLE EVENT, ALL INDICATIONS WERE NORMAL EXCEPT THE LT ITT. LANDING (FLAPS 20 AND NR9702,) WAS NORMAL. AFTER TROUBLESHOOTING THE SIGNAL DATA CONVERTER WAS FOUND TO BE AT FAULT. CONVERTER REMOVED AND REPLACED AND AC RETURNED TO SERVICE. (TC NR 20080109009)

CA071211003 CNDAIR GE ADC MALFUNCTIONED

12/8/2007 CL6002B16 CF348C5 8220372497

(CAN) THE FO REPORTED AN AIRSPEED OVER-SPEED TAPE ILLUMINATED AND COVERED THE ENTIRE SPEED TAPE ON THE AIRSPEED INDICATOR. AN AMBER (STALL FAIL) EICAS MESSAGE AND STICK SHAKER ENSUED. THE STALL PTCT SWITCH WAS SELECTED OFF HOWEVER THE STICK SHAKER CONTINUED. QRH PROCEDURE C/O, REVERTED TO NR1 ADC AND SHAKER STOPPED, ALTHOUGH STALL FAIL, SPOILER FAIL AND MANY OTHER EICAS MESSAGES DISPLAYED. OPERATED SINGLE ADC AND ELECTED TO TURN BACK TO DEPARTURE. MDC FAULT HISTORY DISPLAYED ADC 2 NR OUT PUT MESSAGE B1-005863, STALL FAIL B1-008073 AND LABEL 350 BIT 27 SET INCONSISTENT ADC DATA. NR2 ADC AND NR2 AOA SENSOR AT FAULT. NR2 ADC AND NR2 AOA SENSOR REPLACED AND FUNCTION TEST OF ADC-OVERSPEED WARNING AND ALTIMETER SCALE ERROR CHECKS CARRIED OUT AND CHECKED SERVICEABLE. (TC NR 20071211003)

CA080109011 CNDAIR WINDSHIELD CRACKED

1/6/2008 CL6002B19 NP13932110 COCKPIT (CAN) THE RT WINDSHIELD CRACKED WHILE IN CRUISE. WINDSHIELD WAS REPLACED IAW AMM. (TC NR

20080109011)

CA071217001 CNDAIR GE FAN BLADE DAMAGED

12/5/2007 CL6002B19 CF343A1 RT ENGINE

(CAN) CREW REPORTED N2 VIB ICON (RT ENG) POSTED DURING CRUISE AT FL320. CREW FOLLOWED QRH AND COULD NOT CONTROL VIB IFSD AND DIVERTED. MAINTENANCE OBSERVED FOD DAMAGE TO FAN BLADES. ENGINE REMOVED AND REPLACED (TC NR 20071217001)

<u>CA071113006</u> CNDAIR GE BRUCE CAMLOCK WORN 11/12/2007 CL6002B19 CF343A1 BJ10021003 BJ10021003 LIGHT

(CAN) DURING AN OVERNIGHT MAINTENANCE INSPECTION IT WAS DISCOVERED THAT THE LT WING INSPECTION LIGHT LENS WAS MISSING TOGETHER WITH THE BULB HOLDER LEAVING THE WIRES EXPOSED. WHEN THE FAIRING WAS REMOVED TO REPLACE THE ASSEMBLY IT WAS NOTICED THAT A CAMLOC NUT HAD BEEN STRETCHED CAUSING THE FASTENER TO BE LOOSE. FORTUNATELY THE MISSING PARTS DID NOT DAMAGE THE AIRCRAFT OR THE ENGINE. (TC NR20071113006)

 CA080121001
 CNDAIR
 GE
 WINDSHIELD
 CRACKED

 1/16/2008
 CL6002B19
 CF343A1
 NP1393219
 COCKPIT

(CAN) ON CLIMB OUT THROUGH 6000 FT CREW SELECTED WINDSHIELD HEAT. THE (L WSHLD HEAT) EICAS MESSAGE ILLUMINATED. ABOUT 15 SECONDS LATER CAPTAIN'S FRONT WINDSHIELD OUTER PLY BEGAN CRACKING. SPIDER WEB LIKE CRACKING CONTINUED UNTIL WHOLE OUTER PANE APPEARED SHATTERED. CAPTAIN'S FRONT WINDSHIELD WAS REPLACED. AS A PRECAUTION, THE LT WINDSHIELD TEMPERATURE CONTROLLER PN 1659-1 WAS ALSO REPLACED. (TC NR 20080121001)

CA080121002 CNDAIR GE FCU DEFECTIVE

1/20/2008 CL6002B19 CF343A1 5275102 TE FLAPS

(CAN) FLAPS FAILED ON INITIAL SELECTION FROM 0 TO 8 DEGREES JUST AFTER PUSHBACK FOR HEADSTART FLIGHT. OAT WAS -29 C OVERNIGHT. MAINTENANCE GOT CODES FROM FECU, CLEARED FAULT AND RESET FLAPS. FLAPS FUNCTION CHECKED SERVICEABLE, BUT DUE TO RECENT HISTORY IT WAS DECIDED TO FERRY THE AC FOR FURTHER TROUBLESHOOTING. TROUBLESHOOTING IS UNDER WAY AND INFORMATION WILL BE UPDATED AS SOON AS IS AVAILABLE. (TC NR 20080121002)

CA080126002 CNDAIR GE THROTTLE CONTROL MALFUNCTIONED

1/17/2008 CL6002B19 CF343A1 1603730003 LT ENGINE

(CAN) CREW REPORTED LT ENG REMAINED AT HIGH POWER SETTING WHEN AC BROUGHT TO IDLE. N1 REMAINED BETWEEN 82 AND 91 PERCENT. IFSD PILOT COMMANDED IN FLIGHT SHUTDOWN: CONFIRMED, AFTER (ABORTED APPROACH) PILOT SHUTDOWN THE LT ENG USING FIRE PUSH DURING (GO AROUND). LANDED ON ONE (RT) ENGINE. NOT POSSIBLE TO LAND THE A/C WITH (LT) AT 82 TO 90 PERCENT N1 FWD THRUST, NO ABILITY TO RETARD LT THRUST LEVER TO REDUCE THRUST AND EFFECT FUEL SHUTOFF. CONTROL ASSY, THROTTLE PUSHPULL (LT) P/N: 1603730 AND NR 8722. 003 S/N: UKN (TC NR 20080126002)

<u>CA080126004</u> CNDAIR GE BUSHING MIGRATED 1/24/2008 CL6002B19 CF343A1 NAS76A16011 PAX DOOR

(CAN) CREW REPORTED THAT AT 12000 FT PAX DOOR WARNING MSG POSTED. FOLLOWED QRH AND RETURNED TO FIELD. FOUND BUSHING IN FWD LATCH CAM FITTING MIGRATED. REINSTALLED BUSHING IN UPPER FWD CAM LEVER REF AMM 52-11-23. NOTE: AC WAS PRE SB 601R-52-110 CONFIGURATION. MECHANISM GA, PASS DOOR LATCH MFG 601R31903. BUSHING: P/N: NAS76A16-011 MIGRATED 24960:41 TSN / 22803 CSN (TC NR 20080126004)

<u>CA080128002</u> CNDAIR GE FLAP SYSTEM FAILED
1/27/2008 CL6002B19 CF343A1 TE FLAPS

(CAN) WHEN EXERCISING FLAPS DURING MAINTENANCE COLD WEATHER CHECKS, FLAP FAIL MESSAGE SHOWED AS SOON AS FLAPS SELECTED. A/C FERRIED, MFG FSR CALLED TO ATTEND HANGAR FOR TEARDOWN AND INSPECTION. MORE TO FOLLOW. (TC NR 20080128002)

<u>CA071126003</u> CNDAIR GE BPSU UNSERVICEABLE 11/23/2007 CL6002B19 CF343A1 855D1009 TE FLAP

(CAN) FLAP FAIL CAUTION MESSAGE ILLUMINATED WHILE IN CRUISE AND FLAPS WERE AT 0 DEG. FLAPLESS LANDING C/O AND A/C LANDED SAFELY. MAINT RANG OUT WIRES AND COULD NOT FIND ANY FAULTS. THE FECU AND THE RT BPSU WERE REPLACED. A TEST FLIGHT WAS C/O TO COLD SOAK TEMPERATURES FOR (2) HOURS AND THE A/C TESTED SERVICEABLE. THERE HAS NOT BEEN A REOCCURRENCE AT THIS TIME. (TC NR 20071126003)

<u>CA071213001</u> CNDAIR GE GE SCAVENGE PUMP FAILED 12/12/2007 CL6002B19 CF343A1 6087T04P09 ENGINE

(CAN) DURING CRUISE FLIGHT, THE CREW RECEIVED RED NR 2 ENG LOW OIL PRESS MESSAGE AND GAUGE INDICATION FOR NR 2 ENGINE SHOWED (0) PSI, CREW ELECTED TO SHUTDOWN ENGINE AND RETURN TO DEPARTURE AIRPORT, NORMAL LANDING. MAINTENANCE FOUND NR 2 ENGINE, OIL LUBE/SCAVENGE PUMP ROTATES FREELY WITH NO PRESSURE OUTPUT. PUMP TO BE SENT OUT TO VENDOR FOR INVESTIGATION. OIL PUMP INFORMATION: MFG CO P/N 99207SOCN6087T04P09, CODE IDENT 86329, REF 4406-9 S/N NMAAD498 TSN 29540HR / 24208CY, TSO 367HR / 309CY.(TC NR 20071213001)

<u>CA071219006</u> CNDAIR GE SKIN CRACKED 12/17/2007 CL6002B19 CF343A1 NACELLE

(CAN) BOTH THE LT AND RT REPAIR DOUBLERS THAT ARE IDENTIFIED AS ITEM -1 ON THE ATTACHED REO601R-53-61-358, REVISION A, WERE FOUND CRACKED DURING AN INSPECTION OF THE ENGINE SUPPORT BEAMS AT A HEAVY CHECK VISIT. THIS AC CAME INTO OUR AIRLINE OPERATION AT APPROX 20859 CYCLES. WE ARE UNABLE TO CONFIRM THE EXACT TIME THIS REPAIR WOULD HAVE BEEN INCORPORATED ON THIS AC. WE HAVE CONTACTED THE MFG TECHNICAL HELP DESK WITH OUR FINDING AND ARE AWAITING FURTHER REPAIR

INSTRUCTIONS FROM THEM. (TC NR 20071219006)

| CA071218007 | CNDAIR | GE | SHROUD | CHAFED |
|-------------|-----------|---------|--------|--------|
| 12/14/2007 | CL6002B19 | CF343A1 | CA447 | BS 559 |

(CAN) DURING HEAVY CHECK INSP, THE FUEL DISTRIBUTION PRESSURE BOX ASSY, P/N 601R62676-5 WAS FOUND CRACKED AND BOTH THE FUEL SHROUD AND FUEL LINES HAVE CHAFFING DAMAGE BEYOND LIMITS. THESE COMPONENTS ARE LOCATED AT FUSELAGE STATION FS559. PARTS ARE ON ORDER AND DAMAGED FUEL SHROUD AND THE FUEL BOX WILL BE REPLACED BEFORE AIRCRAFT IS RELEASED FROM HEAVY CHECK. NOTE:-PLEASE REFER TO PREVIOUS SDR NR 20071005001 (TC NR20071218007)

| CA071217005 | CNDAIR | GE | ACTUATOR | FROZEN |
|-------------|-----------|---------|----------|----------|
| 12/14/2007 | CL6002B19 | CF343A1 | 852D100 | TE FLAPS |

(CAN) FLAP FAIL DURING DESCENT. FLAPS WOULD NOT EXTEND WHEN SELECTED, FLAP 0 APPROACH AND LANDING CONDUCTED. AIRCRAFT LANDED WITHOUT FURTHER INCIDENT. FAULT CODES SENT TO TECH OPS, AIRCRAFT WILL BE FERRIED WHEN CREW AVAILABLE. FAULT CODES ARE AS FOLLOWS: EVENT 1 FLIGHT LEG 4555 JAM/ LT BPSU/ PDU DIFFERENTIAL/ 5 1B/ 5 2B/ 9 1A/ 9 2A/ 17 1A/ 17 2A/ 25 BC. EVENT 2 FLIGHT LEG 4555 JAM/ ADC SIGNALS/ LH BPSU FAIL/ 5 2B. FAULT INDICATION IS POINTING A FREEZE EVENT. MORE INFORMATION WILL BE ADDED AS SOON AS BECOME AVAILABLE. (TC NR 20071217005)

| CA071228002 | CNDAIR | GE | IDG | DAMAGED |
|-------------|-----------|---------|---------|---------|
| 12/27/2007 | CL6002B19 | CF343A1 | 720845E | NR 2 |

(CAN) AT ALTITUDE CREW RECEIVED AN IDG CAUTION MESSAGE. THE NR 2 IDG WAS DEFERRED UNTIL MAINT COULD BE ACCOMPLISHED. AC WAS BROUGHT TO THE HANGER TO HAVE REPAIRS C/O, REMOVAL OF THE IDG REVEALED THAT THE INTERNAL SHAFT OF THE IDG PUNCHED THROUGH THE OUTER CASING AND METAL SHAVINGS COLLECTED AT BOTTOM OF IDG/AGB MATING FLANGE PLUGGING DRAIN HOLE. ALL METAL DEBRIS WAS CLEANED FROM THE FLANGE AND DRAIN AND NEW CARBON SEAL AND IDG INSTALLED AND CHECKED SERVICEABLE. (TC NR 20071228002)

| CA080102001 | CNDAIR | GE | FCU | UNSERVICEABLE |
|-------------|-----------|---------|------------|---------------|
| 1/1/2008 | CL6002B19 | CF343A1 | 601R930507 | TE FLAPS |

(CAN) ON APPROACH, GOING THROUGH 6500FT AT 200KTS, FLAP FAIL MESSAGE ILUMINATED WHEN SELECTED FROM 0 TO 8 DEGREES. FLAPS DID NOT MOVE, REMAINED AT 0 DEGREES. FLAPLESS LANDING CARRIED OUT WITHOUT FURTHER INCIDENT. NOTE: NO SKEW DETECTION LIGHTS WERE ILLUMINATED. FAULT CODES RETRIEVED AND HAVE DETERMINED THAT THE NR1 FECU IS AT FAULT. FECU CHANGED IAW THE AMM 27-51-0. RIG AND FUNCTION CHECKS CARRIED OUT, NO FURTHER MESSAGES OR CODES. AIRCAFT RETURNED TO SERVICE AND NO FURTHER ISSUES NOTED. (TC NR 20080102001)

| CA071231001 | CNDAIR | GE | BPSU | UNSERVICEABLE |
|-------------|-----------|---------|-----------|---------------|
| 12/28/2007 | CL6002B19 | CF343B1 | 855D10011 | TE FLAPS |

(CAN) FLAP FAIL ON APPROACH. FLAP ZERO APPROACH AND LANDING CARRIED OUT. FLIGHT LANDED WITHOUT FURTHER INCIDENT. RT FLAP BRAKE SENSOR UNIT, SKEW DETECTION UNIT AND RT OB FLEX DRIVE SHAFT REPLACED. FLAP SYS FUNCTION CHECKED SERVICEABLE. (TC NR 20071231001)

| CA080102006 | CNDAIR | GE | WINDSHIELD | BROKEN |
|-------------|------------|---------|------------|---------|
| 1/1/2008 | CI 6002B19 | CF343B1 | ND13032111 | COCKPIT |

(CAN) (RT WINDSHIELD SHATTERED IN FLIGHT). THE WINDSHIELD WAS REMOVED AND REPLACED. WINDSHIELD, (RT) P/N OFF: 601R33033-14 P/N ON: NP-139321-14 S/N OFF: 02277H7295 S/N ON: 07212H4821 (TC NR 20080102006)

| CA080102007 | CNDAIR | GE | A/C PACK | SMOKE |
|-------------|-----------|---------|----------|-------|
| 12/30/2007 | CL6002B19 | CF343B1 | | RIGHT |

(CAN) (AC RETURNED TO THE FIELD DUE TO SMOKE TOILET WARNING. THERE WAS A HAZE IN THE CABIN. THEY DECLARED AN EMERGENCY) FOUND THAT THE RT PACK WAS SMOKING UP THE CABIN. DEFERRED THE RT PACK. ADDITIONAL INFORMATION REQUESTED TO THE FSR, AC STILL UNDER MMEL (TC NR 20080102007)

CA071226001 CNDAIR GE ANTI-ICE VALVE UNSERVICEABLE

12/22/2007 CL6002B19 CF343B1 300013000003 LT NACELLE

(CAN) WHILE ENROUTE, AC DEVELOPED A COWL ANTI ICE SNAG. THE AC RETURNED TO FOR REPAIRS. MAINTENANCE FOUND THE COWL ANTI ICE VALVE TO BE AT FAULT ONCE REPLACED OPERATIONAL CHECKS WERE C/O SERVICEABLE. A/C WAS RETURNED TO SERVICE. (TC NR 20071226001)

<u>CA071227001</u> CNDAIR GE ACTUATOR UNSERVICEABLE 12/24/2007 CL6002B19 CF343B1 854D1001921 TE FLAPS

(CAN) AFTER LANDING, CREW WERE UNABLE TO RETRACT FLAPS, STUCK AT 41 DEGREES. FLT CANCELLED AS A RESULT. EXPECT TO FERRY AC. CODES RETRIEVED: 1)FECU/BPSU 2)ETHER BPSU 3)WIRING, AC RETRIEVED CODES, FORWARDED TO TECH. CARRIED OUT ACTION PLAN 168 AND ALL WIRING RANG OUT OK. FLAPS WERE CYCLED 5 TIMES IN HANGAR WITH NO FAULTS NOTED. PERFORMED A LOW TEMP TORQUE CHECK OF THE ACTUATORS AND REPORT FAILED UNITS. TAIL 168 FLAP ACTUATOR FREEZE TORQUE CHECK COMPLETED AND RESULTS AS FOLLOWS: LT IB FLAP, IB ACT FAILED, C NR 5275305 LT IB FLAP, OB ACT PASSED LT OB FLAP, IB ACT FAILED, C NR 5275306 LT OB FLAP, OB ACT FAILED, C NR 5275307 RT OB FLAP, IB ACT FAILED, C NR 5275309 ALL IB AND OB FLAP ACTUATORS REPLACED, SAFETIED AND RIGGED. A TEST FLIGHT IS SCHEDULED FOR TODAY. INFORMATION WILL BE UPDATED AS SOON AS IS AVAILABLE. (TC NR 20071227001)

CA071227002 CNDAIR GE SENSING ELEMENT CHAFED

12/23/2007 CL6002B19 CF343B1 355924400 14TH STAGE DUCT

(CAN) RT 14TH STAGE DUCT MESSAGE DURING CLIMBOUT. FLIGHT RETURNED TO AIRFIELD. MAINTENANCE INSPECTION DISCOVERED 14TH STAGE COWL DUCT INSULATION BROKEN AND CHAFING ON SENSING LOOP. BOTH SENSING LOOP AND DUCT WERE REPLACED AND ENGINE RUN'S WERE C/O AND THE AC WAS CHECKED SERVICEABLE. (TC NR 20071227002)

<u>CA080104001</u> CNDAIR GE BPSU UNSERVICEABLE

1/3/2008 CL6002B19 CF343B1 855D10096 TE FLAPS

(CAN) CREW FLYING AT LEVEL 340 FOR 30 TO 40 MIN AND THE FLAP FAIL CAME ON WITH NO SELECTION, FLAPS AT 0 DEG. O FLAP LANDING. TEMP AT ALTITUDE WAS -60 DEG. FERRIED BOTH BPSU'S REPLACED FLAPS FUNCTIONED CHECKED SER (804406 1/4/2008 06:57) (TC NR 20080104001)

<u>CA071217008</u> CNDAIR GE DRIVE ASSY FAULTY
12/12/2007 CL6002B19 CF343B1 5275200 TE FLAPS

(CAN) FLAPS FAILED AT 30 DEG WHEN 45 DEG SELECTED. FLAP ACTUATORS, PDU AND FECU REPLACED TEST FLIGHT CARRIED OUT CHECKED SUSPECT POWER FLAP DRIVE AT FAULT DUE TO HISTORY. (TC NR 20071217008)

<u>CA071217009</u> CNDAIR GE ACTUATOR MALFUNCTIONED

12/14/2007 CL6002B19 CF343B1 854D10019 TE FLAP

(CAN) ON APPROACH THE CREW RECEIVED A FLAP FAIL CAUTION MESSAGE AFTER SELECTING THE FLAP LEVER TO 8 DEGREES. THE EICAS FLIGHT CONTROL PAGE WAS SHOWING THE FLAP POSITION AT 2 DEGREES. THE CREW REQUESTED EMERGENCY SERVICES AND LANDED WITHOUT FURTHER INCIDENT. AC WAS INSPECTED AND FERRIED. ADCF 2007-10 AND SB601R-27-150 WERE COMPLETED. THE LT NR4 AND RT NR3 FLAP ACTUATORS FAILED THE -60 DEGREES CELSIUS TORQUE CHECK AT A VALUE OF 35 AND 30 INCHES/POUND RESPECTIVELY. LT NR4, P/N 854D100-19, S/N 2312, TSN 7255:58, CSN 5839, TSR 1971:52 RT NR3, P/N 853D100-20, S/N 3377, TSN 8268:20, CSN 6104, TSR 1971:52 BOTH ACTUATORS WERE REPLACED. THE LT NR3, RT NR1 AND NR4 FLAP ACTUATORS WERE FOUND NEAR SERVICE LIMIT AND WERE REPLACED. THE AIRCRAFT WAS RELEASED FOR A TEST FLIGHT. (TC NR 20071217009)

<u>CA071217010</u> CNDAIR GE FCU FAULTED 12/13/2007 CL6002B19 CF343B1 TE FLAPS

(CAN) FLAP FAIL ON APPROACH WHEN FLAPS SELECTED TO 20 FROM 8. SYS RESET AND CHECKED SERVICEABLE, MAINT EMPLOYEE ON SITE GOT FAULT CODES FROM FECU. SKEW BITE RESET AND FLAP CONTROL AND POWER DRIVE UNIT RESETS CARRIED OUT. FLAP FAULT CLEARED. FLAPS CYCLED SEVERAL TIMES NO FAULTS NOTED. SYSTEM FUNCTION CHECKED SERVICEABLE FOR FLIGHT. (TC NR 20071217010)

<u>CA071211004</u> CNDAIR GE PDU FAILED
12/5/2007 CL6002B19 CF343B1 865D1007 TE FLAPS

(CAN) AFTER LANDING WITH FLAPS AT 45 DEGREES, FLAPS SELECTED TO 0 DEGREES. CREW RECEIVED A FLAP FAIL AMBER MESSAGE AT FLAPS 41 DEGREES. MAINTENANCE TROUBLESHOOTING REVEILED FECU FAULT CODES FOR ASYMMETRY, BINDNG AND FLAPS NOT IN POSITION LEADING TO REPLACEMENT OF THE FLAP POWER DRIVE UNIT IAW AMM 27-52-01-400. WILL UPDATE WHEN TEAR DOWN RESULTS BECOME AVAILABLE. (TC NR 20071211004)

<u>CA071211005</u> CNDAIR GE FLEX DRIVE TWISTED 12/5/2007 CL6002B19 CF343B1 1104SD10020 TE FLAPS

(CAN) AFTER LANDING WITH FLAPS AT 45 DEGREES, FLAPS SELECTED TO 0 DEGREES. CREW RECEIVED A FLAP FAIL AMBER MESSAGE AT FLAPS 41 DEGREES. DURING MAINTENANCE TROUBLESHOOTING OF FLAPS THE NR 2 RT FLEX DRIVE SHAFT ASSY WAS FOUND TWISTED. UPON REMOVAL PART LENGHTH WAS DISCOVERED TO BE 40 INCHES INSTEAD OF 39 INCHES IAW MFG SPECIFICATIONS. NO RECORD OF PREVIOUS REPLACEMENT SINCE AC NEW. IPC 27-53-00 FIG 1, ITEM 10B. (TC NR 20071211005)

<u>CA071126009</u> CNDAIR GE COWLING BROKEN 11/23/2007 CL6002B19 CF343B1 2285000808 NACELLE

(CAN) UPON LANDING, DURING THE OPERATION OF NR1 THRUST REVERSER THE NR 1 ENGINE UPPER FAN COWL DEPARTED THE AC. THE PILOTS DID NOT NOTICE THAT THE COWLING WAS MISSING UNTIL THEY DID THEIR POST FLIGHT WALK-AROUND. THE COWLING WAS LATER FOUND BY AIRPORT OPERATIONS ON THE AIRFIELD OFF THE SIDE OF THE RUNWAY. THE COWLING WAS FOUND TO BE BROKEN IN HALF WHEN IT WAS RECOVERED. THE FAA STILL HAS POSSESSION OF THE COWING AT THIS TIME. (WILL ADD COWL SN WHEN THEY ARE MADE AVAILABLE) (TC NR 20071126009)

<u>CA071123004</u> CNDAIR GE WINDOW CRACKED 11/16/2007 CL6002B19 CF343B1 NP1393226 COCKPIT

(CAN) RT SIDE WINDOW CRACKED ON FLIGHT. AC RETURNED. NO FURTHER INFORMATION REPORTED BY CREW. RT SIDE WINDOW CHANGED AND AC RETURNED TO SERVICE. (TC NR 20071123004)

<u>CA080125002</u> CNDAIR GE ACTUATOR FAILED
1/22/2008 CL6002B19 CF343B1 FLAP

(CAN) THE CREW RECEIVED A FLAP FAIL CAUTION MESSAGE ON FINAL AFTER SELECTING FLAP TO 8 DEGREES. AN EMERGENCY WAS DECLARED AND THE AC CONDUCTED A FLAPLESS LANDING WITHOUT FURTHER INCIDENT. THE AC WAS FERRIED. ALL FLAP ACTUATORS WERE REPLACED AND THE AC WAS RELEASED. A SUCCESSFUL TEST FLIGHT WAS CONDUCTED AND THE AC RETURNED INTO SERVICE. ALL FLAP ACTUATORS WERE SENT TO THE SHOP FOR LOW TEMPERATURE TORQUE CHECK. RT NR 4 FLAP ACTUATOR P/N 854D100-20 S/N OFF 1911, TSN 8231 TSR 2946 CSN 6684 CSR 2558 RT NR 3 FLAP ACTUATOR PN 853D100-20 S/N OFF 2604, TSN 8231 TSR 2946 CSN 6684 CSR 2558 RT NR 2 FLAP ACTUATOR P/N 852D100-19 S/N OFF 5996 TSN 2946 TSR 2946 CSN 2558 CSR 2558 RT NR 1 FLAP ACTUATOR PN 852D100-19 SN OFF 5948, TSN 2946 TSR 2946 CSN 2558 CSR 2558 LT NR 1 FLAP ACTUATOR P/N 852D100-21 S/N OFF 4383 TSN 2946 TSR 2946 CSN 2558 CSR 2558 LT NR 2 FLAP ACTUATOR P/N 852D100-21 S/N OFF 6762, TSN 2946 TSR 2946 CSN 2558 CSR 2558 LT NR 2 FLAP ACTUATOR P/N 853D100-19 S/N OFF 2499, TSN 2946 TSR 2946 CSN 2558 CSR 2558 LT NR 10169 TSR 2946 CSN 8325 CSR 2558 (TC NR 20080125002)

<u>CA080126001</u> CNDAIR GE WINDSHIELD BROKEN
1/18/2008 CL6002B19 CF343B1 NP13932113 LT/ CAPTAIN

(CAN) (CAPTAINS WINDSHIELD SHATTERED IN FLIGHT. PRESSURIZATION STAYED NORMAL AND THE AC CONTINUED. MAINT IS GOING TO CHANGE THE WINDSHIELD). REPLACED THE WINDOW WINDSHIELD, MAIN PILOT, NP-139321-13 01355H5650 TSO: 14906.50 CSO: 12838 (TC NR 20080126001)

 CA071127008
 CNDAIR
 GE
 WINDSHIELD
 CRACKED

 11/21/2007
 CL6002B19
 CF343B1
 NP13932114
 COCKPIT

(CAN) F/O WINDSHIELD SHATTERED OUTSIDE LAYERS AT FL340. (TC NR 20071127008)

CA071127009 CNDAIR GE WINDSHIELD CRACKED 11/20/2007 CL6002B19 CF343B1 13932113 **COCKPIT** (CAN) CLIMBING THROUGH 32,400 ON OUR WAY TO 34,000 WE HEARD A POP AND SAW THE PILOTS WINDSHIELD CRACK/ SPLINTER. FOLLOWED QRH AND CONTINUED TO DESTINATION. (TC NR 20071127009) CA080118003 **CNDAIR** GE **ADG** UNWANTED DEPLOY 1/15/2008 CL6002B19 CF343B1 820465 (CAN) WHILE AC WAS IN CRUISE AT 30000 FT, ADG DEPLOYED UN-COMMANDED. ALL ELECTRICAL SYSTEMS WERE POWERED. TRIED SWITCHING BACK TO IDG POWER. ADG WOULD NOT SWITCH OVER. MAINTENANCE REPLACED ADG AUTO DEPLOYMENT CONTROLLER AND ADG RESTORE PUMP. (TC NR 20080118003) CA080117010 **CNDAIR** GE **BPSU FAILED** 1/16/2008 CL6002B19 CF343B1 855D1009 TE FLAPS (CAN) DURING DESCENT, CREW REPORTED A FLAP FAIL CAUTION MESSAGE WITH NO FLAP SELECTION, AN EMERGENCY WAS DECLARED AND AN UNEVENTFUL FLAPLESS LANDING WAS CARRIED OUT. THE AC WAS FERRIED TO MAINTENANCE BASE WERE THE LT BRAKE POSITION SENSOR UNIT (BPSU) WAS REPLACED AND RIGGED. A SUCCESSFUL FLIGHT TEST WAS COMPLETED AND THE AC RETURNED INTO SERVICE. THE UNIT HAS ACCUMULATED 30:20 FLIGHT HOURS SINCE REPAIR. (TC NR 20080117010) CA080117011 **CNDAIR** GE **WINDOW FAILED** CL6002B19 CF343B1 **COCKPIT** 1/16/2008 601R3303319 (CAN) LT COCKPIT SIDE WINDOW SHATTERED IN DESCENT. THE CREW DID NOT REPORT ANY IMPACT OR PROBLEM WITH THE WINDOW PRIOR TO INCIDENT. VISUAL INSPECTION OF THE WINDOW INDICATES THAT ONLY THE OUTER PLY WAS DAMAGED. THE SIDE WINDOW WAS REPLACED. TESTED AND THE AC RETURNED TO SERVICE. (TC NR 20080117011) CA071113010 **CNDAIR** GE **CARBON SEAL LEAKING** CF343B1 NR 3 11/5/2007 CL6002B19 (CAN) JUST AFTER TAKEOFF, THE CABIN STARTED TO FILL WITH SMOKE AND THE LAV SMOKE DETECTOR WENT OFF. THEY DECLARED EMERGENCY AND RETURNED TO THE FIELD. NO EVACUATION, SMOKE CLEARED ON LANDING. MX FOUND THE RT ENGINE NR3 CARBON SEAL TO BE FAULTY. MX REPLACED RT ENGINE (TC NR 20071113010) CA071113009 **CNDAIR** GE **CARBON SEAL DEFECTIVE** 11/8/2007 CL6002B19 CF343B1 **ACTUATOR** (CAN) AFTER TAKEOFF, CREW GOT A (SMOKE TOILET CAUTION MESSAGE). CABIN WAS FILLED WITH SMOKE. AFTER QRH WAS COMPLETED RETURNED TO FIELD AND MESSAGE WAS GONE A SHORT WHILE AFTER. MX FOUND OIL LEAKING FROM ENGINE VARIABLE GUIDE VANE (VG) ACTUATOR STRUTS AND LEAKING INTO THE BLEEDS. SUSPECT NR 3 CARBON SEAL. SLC REPLACED THE RT ENGINE. (TC NR 20071113009) **CNDAIR** CA080118000 GE WINDSHIELD **FAILED** 1/16/2008 CL6002C10 CF343B NP1393216 **COCKPIT** (CAN) COPILOTS WINDSHIELD INNER PANE SHATTERED AT 37,000 FT ON DESENT. NO EVIDENCE OF HEATER FAILURE WAS OBSERVED. (TC NR 20080118000) CA071113008 **CNDAIR** GE **WINDOW** BROKEN CL6002C10 CF348C1 COCKPIT 11/6/2007 NP13932111 (CAN) CREW REPORT THAT AT 360 THE CAPTS FWD WINDOW SHATTERED AND THEY DIVERTED WINDOW REPLACED (TC NR 20071113008) CRACKED CA080126003 **CNDAIR** GE WINDOW 1/16/2008 CL6002C10 CF348C5 601R3303320 COCKPIT

(CAN) AC DIVERTED, FOS SIDE WINDOW CRACKED IN FLT, CREW DECLARED EMRG NO PRESS ISSUES. NOTED

CREW USED MASKS. MASKS NOT DROPPED IN CABIN. SIDE WINDOW P/N:601R33033-20, S/N: 04023H4068: CO-PILOT SIDE WINDOW 9573 HRS / 6860 CYCLES (TC NR 20080126003)

| CA071126008 | CNDAIR | GE | GCU | FAILED |
|-------------|-----------|---------|---------|--------|
| 11/22/2007 | CL6002D24 | CF348C5 | 766283C | NR 2 |

(CAN) ACCORDING TO THE CREW WRITE UP: NR1- HYD 3A FAILED (HYP PUMP 3A CAUTION MSG POSTED) ELECTRICALLY POWERED BY AC BUS NR2 - (GEN2 FAILED) WE DID NOT GET A AMBER GEN FAIL INDICATION OR WARNING. AC BUS 2 FAILED AGAIN, NO WARNING. TRU 2 AND ESS TRU FAILED, NO WARNING. GEN AND IDG PINK ON SYNOPTIC PAGE AND PURPLE DASH LINES FOR KVA, V, HZ. GEN1 DID NOT PICK UP AC BUS 2. MAINTENANCE RAN THE ENGINES, CYCLED THE IDG SW (AUTO/OFF/RESET), COULD NOT DUPLICATE. PLACED A GCU ON ORDER. BASED ON THE MDC INFORMATION. GCU NR 2 REPLACED. (TC NR 20071126008)

| CA080101001 | CNDAIR | GE | ACTUATOR | MALFUNCTIONED |
|-------------|-----------|-----------|-----------|---------------|
| 1/1/2008 | CL6002D24 | CF348C5B1 | 501177003 | STICK PUSHER |

(CAN) ONLY ON LANDING WHEN THE PILOTS HAVE FLARED THE NOSE UP AND THE MLG HITS THE GROUND DOES THE ELEVATOR SEEM TO LOCK UP PREVENTING THE PILOTS FROM PRESSING THE NOSE DOWN TO LAND. TOOK THE COVER OFF THE REMOVED STICK PUSHER ACTUATOR AND FOUND: 1) NOTICE THE TEETH MARKS AT THE SUPPORT POST NEXT TO THE GEAR. 2) SET SCREW WHICH IS STUCK TO THE MOTOR, THIS IS WHAT WE HEARD WHEN SHAKING THE UNIT. 3) THE SCREW WHICH WAS BOUNCING AROUND INSIDE THE BOX, LOOKS LIKE AT SOME POINT IT WAS JAMMED BETWEEN THE DRIVE GEAR AND SUPPORT POST AS EVIDENCED BY TEETH MARKS ON THE SUPPORT POST. (TC NR 20080101001)

| | CA080109001 | CVAC | ALLSN | DOWNLOCK SWITCH | INOPERATIVE |
|--|-------------|---------|---------|-----------------|-------------|
| | 1/8/2008 | 340CVAC | 501D13D | BZE67RNT | RT MLG |
| (CAN) CREW REPORTED RT MLG GEAR LINSAFE LIGHT ILLUMINATED. REPLACED RT MLG DOWNLOCK SWITCH P/N | | | | | |

(CAN) CREW REPORTED RT MLG GEAR UNSAFE LIGHT ILLUMINATED. REPLACED RT MLG DOWNLOCK SWITCH P/N BZE6-7RNT AND RETURNED TO SERVICE. (TC NR20080109001)

| CA071214002 | DHAV | PWA | DHAV | HINGE BRACKET | BROKEN |
|-------------|---------|-------|------|---------------|---------|
| 12/14/2007 | DHC2MKI | R985* | | C2WA126A | AILERON |

(CAN) FAILURE NOTICED DURING WALK AROUND BY MECHANIC. THE SPIGOT (INTEGRAL PART OF THE HINGE BRACKET) HAD FAILED COMPLETELY, JUST BELOW THE UPPER EDGE OF THE BALANCE WEIGHT ARM. JUDGING BY THE SURFACES THE SPIGOT HAD BEEN BROKEN FOR SOME TIME. EXTREMELY DANGEROUS SITUATION. NO LOG BOOKS OR RECORDS AVAILABLE. (TC NR 20071214002)

| CA080122008 | DHAV | PWA | LINE | OBSTRUCTED |
|-------------|---------|---------|------|------------|
| 1/18/2008 | DHC2MKI | R985AN1 | | OIL SYSTEM |

(CAN) WHEN ENG WAS REMOVED FOR O/H, IT WAS DISCOVERED THAT IN THE OIL DELIVERY LINE THERE WAS PLASTIC DEBRIS FROM THE CONTAINERS USED TO REPLENISH THE ENGINE OIL. THERE WAS POOR MAINTENANCE PRACTICE WHEN OPENING THESE CONTAINERS TO POUR THE OIL IN THE TANK IN THE AC, THE CAPS WERE NOT FULLY REMOVED FROM THE CONTAINERS. THERE WERE NUMEROUS ITEMS IN THE OIL SYS AND THIS HAS THE POTENTIAL TO RESTRICT THE FLOW OF THE OIL RESULTING IN SHUTDOWN OF THE ENGINE. CARE MUST BE TAKEN WHEN CARRYING OUT THIS TASK AND THIS NEEDS TO BE COMMUNICATED TO ANYONE WHO IS SERVICING THESE AC. (TC NR 20080122008)

| CA080131008 | DHAV | PWA | HAMSTD | WASHER | CRACKED |
|-------------|---------|-----------|--------|--------|------------|
| 1/9/2008 | DHC2MKI | R985AN14B | | | PROPELLER. |

(CAN) PROP MODEL 2D30-237 S/N B1991. UPON RECEIPT CUSTOMER WAS COMPLAINING THAT PROP WAS NOT CYCLING. ONCE PROP WAS DISMANTLED A CRACKED THRUST BEVEL WASHER WAS NOTICED. THE THRUST WASHER IS CRACKED RIGHT THROUGH, CAUSING THE BLADE TO HANG UP INSIDE OF THE BARREL. THIS UNIT HAS 603.3 HRS SLOH IN NOV 17/05. (TC NR 20080131008)

| CA071204009 | DHAV | PWA | BRACKET | CRACKED |
|---|---------|-----------|----------|---------|
| 11/30/2007 | DHC2MKI | R985AN14B | C2TP160A | STAB |
| (CAN) WHILE COMPLETING THE REQUIREMENTS OF CE 91-42R1 IAW SR 2/47 REV. (E). THE RT EWD STARILIZER | | | | |

ATTACH BRACKET WAS FOUND TO BE CRACKED. THE CRACK EXTENDED FROM THE TOP OF THE IB EAR OF THE BRACKET, THROUGH THE LOCKWIRE HOLE AND CONTINUED APPROX 75 PERCENT OF THE WAY DOWN THE BRACKET. THIS AIRCRAFT OPERATES EXCLUSIVELY ON FLOATS IN A CORROSIVE ENVIRONMENT.

| CAUTIZIOUS DIIAV FVA SCREW SEVEREL | CA071219005 | DHAV | PWA | SCREW | SEVERED |
|------------------------------------|-------------|------|-----|-------|---------|
|------------------------------------|-------------|------|-----|-------|---------|

9/5/2007 DHC2MKI R985AN14B 127599 INTAKE ROCKER

(CAN) DURING AN UNRELATED INSPECTION, THE INTAKE VALVE ROCKER ARM ADJUSTMENT SCREW (127599) WAS FOUND SEVERED INSIDE THE LOCKING JAM NUT. POSSIBLE METAL FATIGUE. (TC NR 20071219005)

<u>CA071212024</u> DHAV PWA EXHAUST DUCT CRACKED 10/26/2007 DHC6100 PT6A20 3009090 ENGINE

(CAN) WHILE INSPECTING THE POWER SECTION FOR REASSEMBLY AFTER HSI, CIRCUMFERENTIAL CRACKS WERE DISCOVERED ALONG THE WELDS OF THE EXHAUST DUCT JUST FWD OF THE PT VANE MOUNTING FLANGE. (4) CRACKS RANGED IN LENGTH FROM .75 INCH TO 4.75 INCH. THE POWER SECTION WAS REPLACED. (TC NR 20071212024)

CA071128006 DHAV PWA ENGINE SURGES

11/3/2007 DHC6100 PT6A20

(CAN) DURING CRUISE, THE CREW OBSERVED ENGINE (SURGES) AND PERFORMED AN INFLIGHT SHUTDOWN. POST FLIGHT INSPECTION REVEALED A SEIZED PROPELLER SHAFT AND POWER TURBINE BLADE DISTRESS. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071128006)

<u>CA071129001</u> DHAV CLEVIS PIN MISSING

11/22/2007 DHC6300 PN3004073 AS121670 OIL TANK DRAIN

(CAN) THIS RT ENGINE S/NPCE-50013, WAS IDENTIFIED TO HAVE THE OIL TANK DRAIN PLUG P/N 3004073, MISSING THE LOCKING PIN P/N AS121670. THIS COULD HAD LEAD TO THE COMPLETE LOSS OF ENGINE OIL, RESULTING OF ENGINE SHUTDOWN, IF THE PLUG HAD LOOSEN AND FALLEN AWAY FROM THE ENGINE. (TC NR 20071129001)

CA080108007 DHAV PWA RELEASE CABLE BROKEN

1/3/2008 DHC6300 PT6A27 C6CE13151 BETA SYSTEM

(CAN) THE RT POWER CONTROL WAS REPORTED STIFF. AFTER AN INSPECTION ON THIS AREA IT WAS NOTICED THE THE BETA RELEASE CABLE HAD BROKEN AND WAS CAUSING THE POWER CABLE TO BE STIFF. A NEW CABLE WAS PURCHASED AND CABLE WAS CHANGED. (TC NR 20080108007)

CA071115004 DHAV PWA BOLT DAMAGED

11/15/2007 DHC6300 PT6A27 CSP28229 ENGINE MOUNT

(CAN) ENGINE MOUNT BOLTS THAT DAMAGED THE THREADS UPON REMOVAL. BOLTS WHERE INSTALLED ON 12/22/2005. (2) OF THE (4) TOP MOUNT BOLTS HAVE DAMAGED THREADS AND ARE NOT RE-USABLE. THREADS IN ENGINE CASE REQUIRE CLEAN-UP. (TC 20071115004)

CA071228003 DHAV PWA COLLAR DISLODGED

12/27/2007 DHC6300 PT6A27 3008779 ACCESSORY G/B

(CAN) DURING AN ENGINE NR 2 SCHEDULE OIL CHANGE WHILE REMOVING OIL AT THE ACCESSORY GB DRAIN PLUG PORT HOLE, A METALLIC COLLAR HALF (P/N 3008779) FELL OUT. SUSPECTED THAT THIS COLLAR HALF HAD FALLEN OFF THE SCAVENGE OIL PUMP DRIVESHAFT. ENGINE REMOVED FROM AIRCRAFT AND SENT TO MFG FOR INVESTIGATION. (TC NR 20071228003)

CA080124011 DHAV SKIN PANEL CORRODED

1/24/2008 DHC7102 FUSELAGE

(CAN) WHILE CONDUCTING A CORROSION INSP ON AC, VENEZUELAN REGISTRATION YV1000, IAW THE CUSTOMERS EQUALIZED MAINT PROGRAM. NUMEROUS AREAS OF CORROSION WERE DETECTED THROUGHOUT THE AC. A THRESHOLD AND REPETITIVE CORROSION INSP PROGRAM IS MANDATED BY ADCF-98-03 AND IS TO BE CARRIED OUT IAW THE AC CORROSION PREVENTION AND CONTROL MANUAL (PSM 1-7-5). NO INFORMATION IS

AVAILABLE TO KNOW IF THE THRESHOLD OR REPEAT CORROSION INSPECTIONS WERE COMPLIED WITH. WHILE CONDUCTING THE 3-YEAR REPETITIVE DISBOND INSP REQUIRED BY ADCF-94-15 IAW MFG SB 7-51-1 AND THE NDT MANUAL (PSM 1-7-7A) PART 5, SEVERAL AREAS OF DISBOND WERE FOUND ON THE FUSELAGE SKIN PANELS, HORIZONTAL STABILIZER SKIN PANELS AND WING PANELS. IN ADDITION, AREAS OF DISBOND WHERE FOUND THAT ARE NOT PART OF THE MFG NDT MANUAL (PSM 1-7-7A) PART 5. THE CORROSION AND DISBOND OF THE DOUBLERS WAS DETECTED BY VISUAL INSP AS PART OF THE CORROSION INSP AND CONFIRMED BY ULTRASONIC INSP. THESE DOUBLERS ARE BONDED TO THE UPPER SKIN AND RIVETS INSTALLED THROUGH BOTH THE DOUBLERS AND SKINS TO STRINGERS. PREVIOUS MAINTAINERS MAY NOT HAVE INTERPRETED THE DETAILS REQUIRED TO PERFORM THESE INSPECTIONS PROPERLY TO THE STANDARDS IDENTIFIED IN THE MRB OR REGULATORY REQUIREMENTS. THE AC HAS VERY LOW HOURS AND CYCLES FROM NEW WHEN COMPARED TO THE AVERAGE AC HOWEVER IT DID HAVE LONG TERMS OF INACTIVITY IN A COASTAL ENVIRONMENT CLOSE TO THE OCEAN. THE LEVEL OF CORROSION AND DISBOND FOUND ON THIS AC IS NOT CONSISTENT WITH THE REST OF FLEET THAT HAS BEEN INSPECTED OVER IT'S 16 YEAR HISTORY OF OPERATING AND MAINTAINING THIS AC. ALL REPORTING REQUIREMENTS OF BOTH AD'S HAVE BEEN SUBMITTED TO THE TYPE CERTIFICATE HOLDER. SPECIFIC DETAILS OF CORROSION AND DISBOND ARE AVAILABLE UPON REQUEST. (TC NR 20080124011)

| CA071115002 | DHAV | PWA | BEARING | FAILED |
|-------------|---------|--------|---------|------------|
| 10/24/2007 | DHC7102 | PT6A50 | L814749 | WHEEL ASSY |

(CAN) AFTER LANDING THE LT OB MAIN WHEEL HUBCAP WAS DISCOVERED MISSING. FURTHER INVESTIGATION FOUND THE INNER BEARING WAS BLOWN APART, THE WHEEL AND BRAKE ASSY HAD EXTENSIVE DAMAGE FROM THE WHEEL RUBBING ON THE BRAKE ASSY. THE AXLE WAS INSPECTED, NO DAMAGE WAS FOUND. DUE TO ALL THE RAIN IN THE AREA, THIS AIRCRAFT IS OPERATING IN A EXTREMELY MUDDY ENVIRONMENT, WE SUSPECT THAT MUD AND WATER MAY HAVE ENTERED THE BEARING AREA CAUSING PREMATURE FAILURE OF BEARING. THIS BEARING HAD 144 LANDINGS SINCE NEW. CURRENTLY, THE BEARINGS ARE INSPECTED AND RELUBRICATED AT THE (A) CHECK (150 HOURS). THIS INSPECTION ALONG WITH THE LUBRICATION OF THE LANDING GEAR WILL BE REDUCED TO 50 HOURS FOR THE DURATION OF THE OPERATION IN THESE CONDITIONS. THE HUBCAP, WHEEL AND BRAKE ASSEMBLIES WERE REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. (TC NR 20071115002)

| CA071217004 | DHAV | PWA | CONTROL CABLE | DISCONNECTED |
|-------------|---------|--------|---------------|-----------------|
| 12/12/2007 | DHC7102 | PT6A50 | 3052970 | CONDITION LEVER |

(CAN) AFTER FLIGHT, THE NR 2 CONDITION LEVER WOULD NOT MOVE TO FEATHER OR CUTOFF, THE ENGINE HAD TO BE SHUTDOWN USING THE T-HANDLE. FURTHER INVESTIGATION REVEALED THAT THE NR 2 TELEFLEX CABLE HAD BECOME UNSCREWED NEAR THE BEARING. WE WERE UNAWARE THAT THE CABLE COULD BE UNSCREWED AT THIS LOCATION, WHEN THE CABLE IS ASSEMBLED THERE IS NO VISUAL INDICATION THAT THE CABLE CAN BE DISASSEMBLED. THERE ARE NO PROVISIONS FOR THE CABLE TO BE LOCK WIRED AT THIS LOCATION. TIME SINCE NEW UNKNOWN. FURTHER INVESTIGATION FOUND ONE OTHER UNSCREWED CABLE ON THE AIRCRAFT. WE WILL BE INSPECTING OUR FLEET TO ASSURE NO OTHER CABLES ARE LOOSE. (TC NR 20071217004)

| CA071221011 | DHAV | PWA | SIGNAL COND UNIT | MALFUNCTIONED |
|-------------|-------|--------|------------------|---------------|
| 12/15/2007 | DHC8* | PW123D | | ENGINE TORQUE |

(CAN) TAKEOFF WAS ABORTED DUE TO NOISES SIMILAR TO ENGINE SURGE OR PROPELLER MALFUNCTION. INSPECTION REVEALED THAT THE ENGINE HAD REACHED 136 PERCENT TORQUE FOR A PERIOD LESS THAN 20 SECONDS. THE PROPELLER, TORQUE PROBE AND TORQUE SIGNAL CONDITIONER WERE REPLACED. ROOT CAUSE HAS NOT BEEN ESTABLISHED. UPDATES WILL BE PROVIDED WHEN AVAILABLE. (TC NR 20071221011)

| CA071221009 | DHAV | PWC | FITTING | LOOSE |
|-------------|-------|--------|---------|------------|
| 11/29/2007 | DHC8* | PW150A | | ENGINE OIL |

(CAN) DURING CRUISE, THE OIL PRESSURE WAS OBSERVED TO DECREASE AND AND A WARNING SOUNDED. THE ENGINE WAS SHUTDOWN AND THE AC RETURNED TO BASE. INITIAL INVESTIGATION REVEALED AN AIRFRAME SUPPLIED OIL COOLER HOSE FITTING HAD PULLED FREE OF THE ENGINE AND CAUSED A MASSIVE LEAKAGE. THE ENGINE HAS BEEN REMOVED AND WILL BE SENT FOR INVESTIGATION. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071221009)

| CA080102004 | DHAV | PWA | LAMP | BURNED |
|-------------|---------|--------|------|----------------|
| 12/27/2007 | DHC8102 | PW120A | | COCKPIT LIGHTS |

(CAN) SIDEWALL LAMP HOLDER AT SEAT AREA 3DF FOUND BURNED WHILE TROUBLESHOOTING SAME POSITION. DEFECT FOUND DURING LAND SERVICE CHECK. LAMP HOLDER/BALLAST ASSY REPLACED. (TC NR 20080102004)

<u>CA080105002</u> DHAV PWA SWITCH BROKEN
1/2/2008 DHC8102 PW120A 992236H18697 HYD SYSTEM

(CAN) SDR BEING SUBMITTED DUE TO (3) OCCURRENCES OF (RUD PRESS) AND (RUD FULL PRESS) CAUTION MESSAGES OVER A PERIOD OF (4) DAYS. (1ST) EVENT OCCURRED DECEMBER 30, 2007 JUST AFTER TAKEOFF AND CAUSED AN AIR TURN BACK TO THE DEPARTURE AIRPORT. MAINT PERFORMED GROUND CHECK, THEN AN OPS CHECK IAW AMM 27-30-38 WITH NO FAULTS FOUND. (2ND) EVENT OCCURRED ON DECEMBER 31, 2007 AGAIN JUST AFTER TAKEOFF. AC RETURNED TO AIRPORT OF DEPARTURE. MAINT TROUBLESHOOTING FOUND RUDDER PRESSURE DROPS APPROXIMATELY 800-1000 PSI ON NR 1 HYD SYS. RUDDER PRESSURE REGULATOR REPLACED BUT WITH NO FIX. NR 1 HYD SYS BLED AND ALSO NO FIX. NR 1 LWR ACTUATOR (PN 11200-1 SN UNK) WAS REPLACED AND OPERATION CHECKED IAW AMM 27-20-01 PG 215. (3RD) EVENT OCCURRED DURING DECENT TO ARRIVAL AIRPORT ON JANUARY 2, 2008. QTY AND HYD PRESS WAS OK, SO THE CREW CONTINUED IAW QRH. MAINT FOUND A BROKEN MICROSWITCH ON THE NR 1 RUD PUSH OFF ON THE GLARE SHIELD PANEL ABOVE THE FGC CONTROLLER. MICROSWITCH REPLACED AND RUDDER SYS TESTED SERVICEABLE IAW AMM 27-20-00. (TC NR 20080105002)

<u>CA071218003</u> DHAV PWA HMU UNSERVICEABLE 12/17/2007 DHC8102 PW120A 78639110 ENGINE

(CAN) NR2 ENGINE EXPERIENCED AN IN FLIGHT SHUTDOWN, SHORT FINAL (500FT AGL) AND WAS IN ECU MODE. CREW DID NOT HAVE THE TIME TO TRY MANUAL MODE. AS THEY WERE FEATHERING THE ENGINE (PROPELLER), THEY NOTICED THE TORQUE INCREASING, AS IT HIT AROUND 90 PERCENT AND THE CREW SHUT THE ENGINE DOWN. FDR WAS REMOVED AND YYC AVIONICS SHOP HAS BEEN RESERVED TO READ THE FDR. ANALYSIS OF THE FDR INDICATES THAT THERE IS AN UNCOMMANDED INPUT OF FUEL TO NR2 ENGINE. THERE IS NO INDICATION THAT THE PROPELLER IS OVER TORQUED AND IS THEREFORE SERVICEABLE FOR FURTHER USE. THE FOLLOWING MAINTENANCE ACTIONS WERE CARRIED OUT: NR2 HMU CHANGED. NR2 ENGINE RIGGING CHECK CARRIED OUT FROM THE COCKPIT OUT TO THE ENGINE. NR 2 SPRING STRUT INSPECTED FOR CONDITION. NEW INFORMATION WILL BE UPDATED AS SOON IS AVAILABLE. (TC NR 20071218003)

<u>CA071219009</u> DHAV PWA SEQUENCE VALVE MALFUNCTIONED 12/18/2007 DHC8102 PW120A 535201 MLG

(CAN) THE GEAR WAS SELECTED UP, IT RETRACTED NORMALLY. THROUGH 2000 FT THUMPING NOISE IN NOSE WAS HEARD FOLLOWED BY AN AMBER LIGHT IN THE SELECTOR KNOB FLASHING ON. OCCASIONALLY A RED NOSE GEAR LIGHT CAME ON. MAINT REPLACED NLG DOOR WARN PROX SWITCH AND SWAPPED THE NOSE GEAR SEQ VALVE RELAY WITH THE RT MLG DOOR SEQ VALVE. AFTER FURTHER T/S IT WAS SUSPECTED THAT MLG SELECTOR HANDLE WAS AT FAULT. AT THIS TIME THE MLG SELECTOR HANDLE WAS REPLACED FOR T/S AND WILL UPDATE FURTHER WHEN AVAILABLE. GEAR SWINGS WERE C/O WITH THE NEW SELECTOR HANDLE AND THE A/C WAS CHECKED SERVICEABLE. (TC NR 20071219009)

<u>CA080109005</u> DHAV PWA CIRCUIT BOARD BURNED

1/5/2008 DHC8102 PW120A PRESS CONTROLLER

(CAN) THE CREW REPORTED A STRONG BURNING ELECTRICAL ODOR UPON ARRIVAL. MAINTENANCE FOUND A FAULTY PRESSURE CONTROLLER. FURTHER INVESTIGATION REVEALED THAT AN ELECTRONIC CIRCUIT BOARD INSIDE THE CONTROLLER HAD SOME BURN MARKS. THE CONTROLLER WAS REPLACED AND THE AIRCRAFT RELEASED INTO SERVICE. (TC NR 20080109005)

<u>CA080109002</u> DHAV PWA BUSHING MISSING
1/4/2008 DHC8102 PW120A NAS771236 MLG ACTUATOR

(CAN) REMOVED NR2 MLG RETRACTION ACTUATOR FOR WORK CARD 2339 AND FOUND THE PICKUP FITTING MISSING (HAT) BUSHING. HOWEVER, THE RETRACTION ACTUATOR WAS ASSEMBLED TO FITTING AND IN SERVICE WITHOUT THIS BUSHING. THIS PLACED SEVERE STRESS ON ATTACHMENT HARDWARE AND FITTING DUE TO THE IMPROPER ASSY. NR2 MLG RETRACTION ACTUATOR FITTING REPLACED ALONG WITH ALL HARDWARE. NR2 MLG RETRACTION ACTUATOR REPLACED. RD8-54-1178 ACCOMPLISHED ALONG WITH NDT INSPECTION TO AFFECTED NACELLE STRUCTURE. MISSING BUSHING REFERENCE: IPC 54-40-00, FIG. 20, ITEM 410, P/N NAS77-12-36. (TC NR

20080109002)

| CA080122002 | DHAV | PWA | WEB | CRACKED |
|-------------|---------|--------|-----|----------|
| 1/5/2008 | DHC8102 | PW120A | | FUSELAGE |

(CAN) DURING MAINT ROUTINE INSP, THE NOSE LANDING GEAR GROUND LOCK MECHANISM WAS FOUND HARD TO OPERATE. FURTHER INVESTIGATION REVEALED THAT THE FLOOR WEB AT ZONE 112, STA X97 WAS CRACKED CAUSING THE GROUND LOCK LEVER TO CONTACT THE PIVOT TUBE ARM. THE CRACKED AREA WAS REPAIRED IN AUGUST 2006 IAW RD8-53-0638. THE AC HAS ACCUMULATED 2451:46 HOURS AND 3379 CYCLES SINCE REPAIRED. THE OLD PATCH WAS REPLACED IAW THE ABOVE RD AND THE AC WAS RELEASED INTO SERVICE. (TC NR 20080122002)

| CA071120001 | DHAV | PWA | LINE | CHAFED |
|-------------|---------|--------|-------------|------------|
| 11/15/2007 | DHC8102 | PW120A | 82970010149 | HYD SYSTEM |

(CAN) AIRCRAFT WAS RETURNING TO BASE WHEN THE HYDRAULIC LOW PRESSURE LIGHT ILLUMINATED. UPON SELECTION OF GEAR DOWN A LOUD (BANGING) NOISE WAS HEARD. GEAR EXTENDED NORMALLY, ALTHOUGH THE LOW PRESSURE LIGHTS WERE FLICKERING IN CONJUNCTION WITH THE (BANGING) NOISE. AC WAS PLACED IN HANGER AND HYDRAULIC SYSTEM INSPECTED. THE RESERVOIR WAS FOUND TO BE LOW. RESERVOIR WAS REFILLED AND HYDRAULIC SYSTEM BLED, IT WAS AT THIS TIME THAT FLUID WAS OBSERVED TO BE LEAKING FROM ABOVE THE NR 2 ENGINE EXHAUST PIPE. UPON FURTHER INSPECTION THE PRESSURE LINE (82970010-149, PRE-MOD 8/670) WAS FOUND TO BE SEVERELY CHAFED. IT APPEARS TO HAVE BEEN CHAFED BY SPIRAL WRAP APPLIED TO THE SUCTION LINE, THE LINE WAS ALSO CLAMPED, BUT IMPROPERLY. ALL PRE-MOD LINES WERE REMOVED AND REPLACED WITH POST-MOD SS LINES. HYDRAULICS SERVICED AND AIRCRAFT RETURNED TO SERVICE. THIS AIRCRAFT WAS THE ONLY ONE IN OUR FLEET TO HAVE THE PRE-MOD LINES AND ONLY IN THE NR 2 POSITION. BOTH AIRCRAFT NOW HAVE POST-MOD LINES ONLY. (TC NR 20071120001)

| CA071126001 | DHAV | PWA | CONTROL ROD | SEPARATED |
|-------------|---------|--------|----------------|-----------|
| 11/23/2007 | DHC8102 | PW120A | 87620102007015 | FUEL SYS |

(CAN) ON TAKEOFF ROLL, THE NR 1 ENG PROPELLER RPM ONLY REACHED 900 RPM (NORMAL 1200RPM) AND THE TORQUE INDICATION REACHED 115 PERCENT FOR APPROX 2 SECONDS. POWER LEVERS WERE RETARDED TO FLIGHT IDLE AND THE TAKEOFF ABORTED, AC RETURNED TO THE GATE. THE PROPELLER WOULD NOT FEATHER NORMALLY SO MANUAL FEATHER WAS SELECTED TO FEATHER AND WHEN THE FUEL CONDITION WAS SET TO SHUTOFF, THE ENGINE DID NOT SHUTDOWN AND THE FIRE T-HANDLE HAD TO BE PULLED TO SHUTDOWN. MAINT INVESTIGATED AND IT WAS FOUND THAT THE FUEL CONDITION CONTROL ROD HAD SEPARATED, THEREFORE THERE WAS NO FUEL SHUTOFF CONTROL. THE FUEL CONDITION CONTROL ROD WAS REPLACED (PN 87620134-003 INSTALLED, 72-20-00-05-150) AND THE AC RETURNED TO SERVICE. (TC NR 20071126001)

| CA071206007 | DHAV | PWA | LUCAS | WIRE HARNESS | WORN |
|-------------|---------|--------|-------|--------------|------------------|
| 12/3/2007 | DHC8102 | PW120A | | | AILERON ACTUATOR |

(CAN) AFTER ROTATION, HEAVY LT AILERON INPUT NEEDED IN FLIGHT. AILERON TRIM WAS CENTERED BUT HAD NO EFFECT. FLIGHT RETURNED TO DEPARTURE AIRPORT SAFELY WITH NO NEED TO DECLARE AN EMERGENCY. MAINT TROUBLESHOOTING, FOUND WIRE HARNESS ON AILERON TRIM ACTUATOR WORN WHERE WIRES ENTER BODY OF ACTUATOR CAUSING CIRCUIT BREAKER TO POP WHEN TRIM IMPUT WAS SELECTED. AILERON TRIM ACTUATOR REPLACED AND SYSTEM TESTED SERVICEABLE. (TC NR 20071206007)

| CA071204010 | DHAV | PWA | OIL FILTER | RESTRICTED |
|-------------|---------|--------|------------|------------|
| 11/23/2007 | DHC8103 | PW120A | 1111065 | ENGINE |

(CAN) INFLIGHT SHUTDOWN AS A PRECAUTION, OIL PRESSURE INDICATION FLUCTUATING IN FLIGHT. OIL FILTER APPEARED CLEAN BUT WAS RESTRICTING FLOW AS TO WHERE IT WAS CAUSING OIL BYPASS IN THE FILTER HOUSING, WHICH CAUSED THE ERRONEOUS INDICATIONS. (TC NR 20071204010)

| CA071128014 | DHAV | PWA | FILTER | FAILED |
|-------------|---------|--------|--------|------------|
| 11/23/2007 | DHC8103 | PW120A | | ENGINE OIL |

(CAN) DURING CLIMB, THE CREW OBSERVED ERRATIC OIL PRESSURE INDICATIONS AND ELECTED TO RETURN TO POINT OF DEPARTURE. THE ENGINE OIL PRESSURE CONTINUED TO REDUCE AND THE CREW PERFORMED AN INFLIGHT SHUTDOWN. INVESTIGATION REVEALED A FAULTY MAIN OIL PRESSURE FILTER WITH A REPORTED

COLLAPSED INTERNAL ELEMENT. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071128014)

CA080123009 DHAV PWA LINE LEAKING

12/18/2006 DHC8103 PW120A 82590010239 HYDRAULIC SYS

(CAN) LEAK FROM PIN HOLE IN HYD LINE RT WING, ON GROUND PRIOR TO TAXI TO GATE A/C GROUNDED. HYD LINE ASSY FOR RT WING SPOILERS REPLACED WITH NO FURTHER INCIDENT OR LEAKAGE. (TC NR 20080123009)

<u>CA071206006</u> DHAV PWA CONTROL CABLE WORN 11/26/2007 DHC8106 PW121 82700518001 AILERON

(CAN) PILOTS REPORTED THAT THE AILERON CONTROLS WERE STIFF (OAT -20C). INSPECTION OF THE AIRCRAFT WAS CARRIED OUT AND THE AILERON CABLE WAS FOUND TO BE WORN WHERE IT CROSSED A ROLLER FAIRLEAD AT APPROX STN YW189.00. THE ROLLER FAIRLEAD WAS NEARLY SEIZED. THE OB AILERON QUADRANT BEARINGS WERE ALSO FOUND TO BE STIFF WHEN COLD. THE CABLES IN BOTH WINGS WERE REPLACED AS WELL AS THE ROLLER FAIRLEAD. THE BEARINGS WERE REPLACED IN THE AILERON QUADRANTS AND THE AIRCRAFT WAS RETURNED TO SERVICE WITH NO FURTHER DEFECTS. (TC NR 20071206006)

<u>CA071217003</u> DHAV PWA FLEX LINE LEAKING

12/5/2007 DHC8202 PW123D DSC252B40124 HYD SYSTEM

(CAN) TOTAL FAILURE OF NR 2 HYD SYS OCCURRED AFTER GEAR EXTENSION (NORMAL). LOSS OF PRESSURE WITH ASSOCIATED CAUTION LIGHTS QUICKLY FOLLOWED BY TOTAL LOSS OF ALL NR 2 HYD QUANTITY (FLUID). UPGRADED CALL TO PAN WITH REQUEST FOR LOCAL SERVICES ON STANDBY. AFTER ALTERNATE GEAR EXTENSION, THE NR 2 HYD PRESSURE ROSE TO NORMAL AT 3000 PSI. AFTER LANDING WITH NORMAL HYD PRESSURE, AC TAXIED CLEAR OF RUNWAY. ENGINEERING INVESTIGATION REVEALED A FAILURE OF THE NLG DRAG BRACE ACTUATOR (DOWN) FLEXIBLE HOSE. HOSE REPLACED AND FOLLOWING APPROPRIATE CHECKS IAW THE MM. THE AIRCRAFT WAS RELEASED BACK TO SERVICE WITHOUT FURTHER INCIDENT. THIS IS A KNOWN ISSUE PREVIOUS SDR 20031030005. (TC NR 20071217003)

<u>CA071205006</u> DHAV PWA ENGINE OIL CONSUMPTION

11/30/2007 DHC8301 PW123

(CAN) OIL MIST WAS NOTED IN THE CABIN AFTER LANDING. INITIAL TROUBLESHOOTING REVEALED THAT 2 LITRES OF OIL WERE CONSUMED DURING THE PREVIOUS FLIGHT. ENGINE WAS REMOVED FOR INVESTIGATION. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071205006)

<u>CA071220001</u> DHAV PWA GROUND STUD LOOSE 12/19/2007 DHC8301 PW123 MLG

(CAN) AFTER SELECTING GEAR UP, LT AND RT MAIN GEAR DOOR AMBER WARNING AND NLG RED WARNING. GEAR SELECTED DOWN AND NORMAL EXTENSION, AFTER GEAR DOWN (AMBER) NLG LIGHT REMAINED ILLUMINATED. MAINT INSPECTION/ TROUBLE SHOOTING REPLACED LANDING GEAR SELECTOR VALVE AND NLG DOOR SEQUENCE VALVE, DURING GEAR SWINGS GEAR FAILED TO RETRACT AFTER SECOND CYCLING. FURTHER INVESTIGATION FOUND NLG DOOR SEQUENCE VALVE GROUND STUD (WIRE DIAGRAM 32-30-00 SHEET 4 OF 4 PAGE 1 WIRE IDENTIFIER 93A22N, STUD IDENTIFIER 3251-GS-1) LOOSE. STUD LOCATED ON BULKHEAD FWD OF FWD PRESSURE BULKHEAD. STUD TIGHTENED, GEAR SWINGS COMPLETED SUCCESSFULLY. AC RETURNED TO SERVICE. (TC NR 20071220001)

CA071221006 DHAV PWA ENGINE SEIZED

12/17/2007 DHC8301 PW123

(CAN) OPERATOR REPORTED THAT THERE WAS AN INFLIGHT SHUTDOWN OF THE ENGINE AND THAT POST FLIGHT INSPECTION REVEALED THAT THE POWER TURBINE ASSY COULD NOT BE ROTATED. NO OTHER DETAILS PROVIDED AT THIS TIME. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071221006)

<u>CA071212009</u> DHAV PWA ENGINE CONTAMINATED

11/14/2007 DHC8301 PW123

(CAN) CREW RECEIVED A LOW OIL PRESSURE WARNING AND ELECTED TO SHUTDOWN THE ENGINE. INITIAL POST FLIGHT INVESTIGATION REVEALS CONTAMINATION OF THE CHIP DETECTORS AND OIL FILTERS. THE ENGINE WILL BE SENT FOR INVESTIGATION. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071212009)

| CA071211001 | DHAV | PWA | JACKSCREW | CONTAMINATED |
|-------------|---------|-------|-------------|---------------|
| 11/8/2007 | DHC8301 | PW123 | 82760174005 | ELEVATOR TRIM |

(CAN) ADVISORY MESSAGE DISPLAY INDICATED (MISTRIM NOSE DN) WITH AUTOPILOT ENGAGED. DISENGAGED AUTOPILOT - FWD CONTROL COLUMN FORCE REQUIRED TO MAINTAIN LEVEL FLIGHT, ATTEMPTED TO TRIM FWD BUT TRIM WHEEL WAS JAMMED WITH TRIM INDICATOR AT FWD OF THE TAKEOFF RANGE. TRIM MOVED REARWARDS OF THAT POSITION BUT NOT FWD OF IT. PAN DECLARED AND SERVICES REQUESTED, NORMAL APPROACH AND LANDING COMPLETED. FUNCTIONAL CHECK OF THE ELEVATOR TRIM SYS CARRIED OUT ON THE GROUND. UNABLE TO REPLICATE REPORTED CONDITION. BOTH THE LT AND RT HAND SCREW JACK ASSEMBLIES, ELEVATOR TRIM WERE INSPECTED AND FOUND TO HAVE SUFFICIENT GREASE LUBRICATION, BUT THE GREASE WAS DETERMINED TO BE WATER CONTAMINATED DUE TO THE DISCOLORATION OF THE GREASE AND PRESENCE OF WATER BOTH AROUND THE SCREW JACK ASSEMBLIES AND EVIDENT ON THE GREASE DURING PURGING BY MAINTENANCE. THE SCREW JACK ASSEMBLIES WERE BOTH LUBRICATED BY MAINTENANCE TO PURGE ALL EXISTING GREASE AND MOISTURE FROM THE ACTUATORS. LEVATOR TRIM SYS WAS LUBRICATED AND TESTED IAW MRB TASK CARD 2730/04 AND AMM 27-36-00. THE AC HAD BEEN SUBJECT TO HEAVY RAIN WHILE PARKED ON THE RAMP PRIOR TO FLIGHT WHICH MAY HAVE RESULTED IN A BUILD UP OF WATER IN THE SCREW JACK ACTUATOR INSTALLATION CAVITIES AND SUBSEQUENT ICE BUILD UP IN FLIGHT CAUSING ELEVATOR TRIM TRAVEL TO BE RESTRICTED. ADDITIONALLY ONE OF THE ACCESS HOLES WAS FOUND TO BE INCORRECTLY SEALED WHICH MAY HAVE PERMITTED WATER TO ENTER THE SCREW JACK ACTUATOR CAVITY. THIS ACCESS HOLE WAS SUBSEQUENTLY RESEALED DURING THE DEFECT RECTIFICATION / INVESTIGATION. (TC NR 20071211001)

| CA071218001 | DIAMON | ROTAX | HOSE | LEAKING |
|-------------|--------|----------|------------------|------------|
| 12/8/2007 | DA20A1 | ROTAX912 | FC3401B01B01B029 | ENGINE OIL |

(CAN) PILOT LANDED NORMALLY AND SHUTDOWN AFTER NOTICING FALLING OIL PRESSURE INDICATION. THIS WAS ON INITIAL TEST FLIGHT OF A NEW ENGINE INSTALLATION, ON INSPECTION THE OIL PRESSURE HOSE FITTING AT THE OIL PUMP WAS FOUND TO BE LEAKING, THIS WAS TIGHTENED AND AN INSPECTOR OF THE ENGINE COMPLETED. A SEPARATE MECHANIC VERIFIED THE OIL LINE FITTING AND FOUND IT TO BE LOOSENED OFF AGAIN. A TWIST IN THE HOSE AND A WEAK THREAD ENGAGEMENT WERE SUSPECTED. A NEW HOSE WAS INSTALLED AND THE ENGINE TEST RUN AND CHECKED WITH NO PROBLEMS NOTED, A TEST FLIGHT WAS COMPLETED AND ANOTHER INSPECTION OF THE ENGINE REVEALED NO PROBLEMS. THE AC WAS RETURNED TO SERVICE. (TC NR 20071218001)

| CA071212006 | DIAMON | CONT | SNSNCH | BLADE | CRACKED |
|-------------|--------|--------|--------|-------|-----------|
| 11/27/2007 | DA20C1 | IO240B | | | PROPELLER |

(CAN) LONGITUDINAL CRACK AT BLADE TIP NR 1 BLADE. CRACK APPROX 1.5 INCH LONG AT APPROX .75 CHORD. FOUND DURING INSPECTION (ROUTINE). APPEARS TO BE CAUSED BY IMPACT DAMAGE FROM FOD. (TC NR 20071212006)

| CA071212007 | DIAMON | CONT | BLADE | CRACKED |
|-------------|--------|--------|-------|-----------|
| 11/27/2007 | DA20C1 | IO240B | | PROPELLER |

(CAN) LONGITUDINAL CRACK AT BLADE TIP, NR 1 BLADE. CRACK APPROX 0.75 INCH LONG AT .25 CHORD. FOUND DURING INSPECTION (ROUTINE). NO APPARENT CAUSE, NO IMPACT DAMAGE FROM FOD. (TC NR 20071212007)

| 2008FA0000067 | DIAMON | CONT | GEAR | MAKING METAL |
|---------------|--------|--------|------|--------------|
| 12/19/2007 | DA20C1 | IO240B | | RT MAGNETO |

PRIOR TO PERFORMING SB 03-7 INSPECTION, 2 NEW GEARS WERE ORDERED FROM MFG IN EVENT WOULD NEED THEM DURING INSPECTION. AT 372.9 TACH TIME, THE RT MAGNETO GEAR BROKE A TOOTH DURING START AND WAS IDENTIFIED DURING PRE-TAKEOFF RUNUP. THE ENGINE WAS INSPECTED AND FOUND TO HAVE METAL PARTICLES DISTRIBUTED THROUGHOUT THE ENGINE. (K)

2008FA0000070 DIAMON HINGE BROKEN

1/31/2008 DA42 D605287300 MLG DOOR

DURING FLIGHT WHEN THE LANDING GEAR WAS OPERATED, THERE WAS A NOISE HEARD BY THE CREW. UPON LANDING THE LT MAIN LANDING GEAR DOOR WAS ATTACHED ONLY BY THE LOWER DOOR CONTROL LINK. THE REAR GEAR DOOR HINGE, AFT BRACKET HAD BROKEN AT THE WELD OF THE PIECE BOLTED TO THE WING STRUCTURE. THE DOOR HAD FALLEN LOW ENOUGH TO WHERE THE FORWARD CORNER WAS WORN AWAY BY CONTACT WITH THE GROUND. THIS OPERATOR OPERATES A FLEET OF 9 DA42 AIRCRAFT. ON INITIAL INSPECTION MANY OF THE OTHER AIRCRAFT HAD CRACKS DEVELOPING AT THE POINT OF FRACTURE OF THE DAMAGED AIRCRAFT. ALL OF THE HINGE POINTS ON ALL OF THE AIRCRAFT WILL BE CHANGED.

<u>CA071121004</u> DORNER PWA TURBINE SEIZED 11/20/2007 DO328100 PW119C A/C PACK

(CAN) AIRCRAFT DEVELOPED WHITE SMOKE IN CABIN WHILE TAXING FOR TAKEOFF. PILOTS NOTICED A CAS LT PACK FAIL LIGHT AND AN AFT LAV SMOKE DETECT CAS MESSAGE. AIRCRAFT RETURNED TO BLOCKS AND PASSENGERS DEBOARDED. CAUSE OF SMOKE WAS TURBINE SEIZED CAUSING A LT PACK OVERHEAT. ENVIROMENTAL CONTROL UNIT (ECU) REPLACED. (TC NR 20071121004)

<u>CA080128001</u> EMB GE CONTROL CABLE BROKEN
1/21/2008 ERJ190100IGW CF3410E5A1 19004212401 AILERONS

(CAN) DURING AILERON CONTROL CABLES INSP, ON LT AND RT WINGS, FOUND AILERON CABLES (LT PN 190-04212-401 AND PN 190-04209-401, RT PN 190-05550-401 AND PN 190-04209-401) WORN AND HAS SEVERAL WIRES BROKEN AT FAIRLEAD LOCATED AT LT AND RT WINGS RIB 4A WS -3025.80 MIL. SPAR 2 IN MLG WHEEL WELL. REFERENCE J/C 27-11-00-003-LT/1 SNAGS NO 128, 165 AND J/C 27-11-00-003-RT/2 SNAGS NR 87, 166. THE WORN AREA WITH A FEW BROKEN STRANDS FOUND UNDER GROMMET NYLON (P/N PE49068-501) MOUNTED ON THE FAIRLEAD. SAME FINDING ON ERJ190 NR 00015 HRS5830 CYCLES 2643, C02 CHECK AND ALSO ERJ190 NR 00013 HRS5720 CYCLES 2635 C02 CHECK. (TC NR 20080128001)

CA061129003FOUNDMASTER LINKDEFECTIVE11/24/2006FBA2CN025AILERON CONTROL

(CAN) DURING FIGHT ID 2C3-30 THE MASTER LINK (N025) FELL OFF THE COPILOT'S AILERON CHAIN CAUSING A LOSS OF AILERON CONTROL FROM THE COPILOT'S SIDE. THE FLIGHT TEST ENGINEER WAS ABLE TO COLLECT ALL THE PIECES FROM THE MASTER LINK DURING THE FLIGHT HOLD AND THE CHAIN FROM JAMMING THE AILERON CONTROL FOR THE REST OF THE FLIGHT. THE PILOT WAS ABLE TO FLY AND LAND THE AC SAFELY WITHOUT USING THE AILERONS. THE AC IS AN EXPERIMENTAL AC IN A FLIGHT TEST PROGRAM, THIS MODEL USES THE SAME AILERON CONTROL SYS AS THE 2C1 AND 2C2 MODELS. BEING THE MFG WE HAVE INITIATED A MATERIAL REVIEW AND WILL BE ISSUING A SB. (TC NR 20061129003)

<u>CA070413003</u> FOUND PEDAL CRACKED
4/11/2007 FBA2C1 B121 COCKPIT

(CAN) DURING CLEAN UP AFTER THE REPLACEMENT OF THE FUEL GAUGE ON AC 52 MECHANIC NOTICED THAT THE CO-PILOTS BRAKE-PEDAL ASSY WAS CRACKED. AFTER DISCUSSION WITH CHIEF ENGINEER HE NOTED THAT THIS WAS THE SECOND TIME, IT HAD HAPPENED PREVIOUSLY TO AC 53. FOUND MFG HAS INITIATED A MATERIAL REVIEW BOARD, A SB WILL BE MAILED OUT. THE SB WILL REQUIRE AN IMMEDIATE VISUAL INSPECTION TO THE BRAKE PEDAL AND A VISUAL INSPECTION EVERY 100 HOURS AFTERWARDS. IF A CRACK IS FOUND OR TO TERMINATE THE SB, A DOUBLER WILL BE INSTALLED. A TEST FIXTURE WILL BE FABRICATED TO TEST THE CRACKED BRAKE PEDAL TO FIND THE RESIDUAL LOAD. THE FIXTURE WILL ALSO BE USED TO TEST A REPAIRED PEDAL AND A NEW DESIGN OF BRAKE PEDAL. (TC NR 20070413003)

<u>CA071108006</u> GULSTM ACTUATOR FAILED 11/7/2007 200 2630000004 MLG

(CAN) AFTER TAKEOFF THE CREW REPORTED THAT THE GEAR WAS SELECTED UP AND THE NOSE AND RT MAIN GEAR RETRACTED WITH NO FAULT, THE LT GEAR DID NOT RETRACT. THE CREW REPORTED THEY CYCLED THE GEAR DOWN AND THE (3) GREEN LIGHTS WAS ON EICAS INDICATING DOWN AND LOCK. ANOTHER ATTEMPT WAS MADE TO CYCLE THE GEAR UP, AGAIN ONLY THE NOSE AND THE RT MAIN RETRACTED. THE LT UNSAFE INDICATION WAS INDICATED ON EICAS. THE CREW ELECTED TO CYCLE THE GEAR DOWN AGAIN AND WAS COMPLETED SUCCESSFULLY, (3) GREENS ON EICAS. THE AIRCRAFT WAS RETURNED TO POINT OF DEPARTURE

AND LANDED NO PROBLEMS. MAINTENANCE WAS CALLED AND THE AIRCRAFT WAS PLACED ON JACKS C/O GEAR SWINGS. TROUBLESHOOTING REVEALED THAT THE LT GEAR ACTUATOR INTERNAL LOCKING MECHANISM WAS FAULTY. REPLACEMENT PART PLACED ON ORDER. (TC NR 20071108006)

CA071127010 GULSTM CONNECTOR CONTAMINATED

11/23/2007 200 NLG STEERING SYS

(CAN) AIRCRAFT LANDED, PILOT REPORTED NO NOSE WHEEL STEERING. PARKED AIRCRAFT AT FBO. LATER A/C WAS TAKEN TO MFG. THE NOSE WHEELING SYSTEM WAS INSPECTED AND MOISTURE WAS FOUND IN THE FEEDBACK POTENTIOMETER CONNECTOR PLUG. CLEANED AND RECONNECTED CONNECTOR PLUG, APPLY SEALANT TO THE CONNECTOR PLUG AND THE COVER FOR THE FEEDBACK POTENTIOMETER. C/O FUNCTION CHECKS ON SYSTEM OK. AIRCRAFT RELEASE FOR RETURN TO SERVICE. (TC NR 20071127010)

<u>CA071128015</u> GULSTM PWC VALVE MALFUNCTIONED 11/26/2007 200 PW306A ZMV811A PARKING BRAKE

(CAN) PILOT REPORTED PARK BRAKE SET AND INDICATED ON EICAS. STARTED RT ENGINE WITH THE CHOCKS REMOVED, READY FOR DEPARTURE. THE AIRCRAFT ROLL FWD AFTER THE ENGINE WAS STARTED. PILOT CHECKED THE INDICATION ON EICAS AND THE INDICATION WAS STILL ON EICAS PARK BRAKE ON. PILOT HAD TO USE NORMAL BRAKE TO STOP AIRCRAFT. MAINT WAS CALLED AND TROUBLESHOOTING REVEALED THAT THE PARK BRAKE VALVE FAILED IN THE CLOSED POSITION. REPLACED PARK BRAKE VALVE AND C/O F/C ON PARK BRAKE SYS AND AC BRAKING SYS ALL FUNCTIONS OK. AC RELEASED FOR RETURN FOR SERVICE. (TC 20071128015)

<u>CA080123002</u> GULSTM GARRTT COLLAR WORN 1/22/2008 690 TPE3315251K 99353 NLG

(CAN) UNSAFE NOSE GEAR, CIRCLING AT AIRPORT, DECIDED TO FLY AC TO ANOTHER AIRPORT. AC CAME BY SLOW WITH GEAR DOWN. NOSE LOOKED DOWN HOWEVER NOSE WHEEL WAS COCKED TO THE RT. PILOT CIRCLED TO THE WEST UNTIL EMERG EQUIPMENT WAS IN PLACE. THEN LANDED RUNWAY 29. HELD THE NOSE OFF AS LONG AS HE COULD THEN LET IT DOWN. NOSE GEAR COLLAPSED. 4 PEOPLE ON THE TAIL WE PULLED THE NOSE GEAR DOWN, THEN TOWED AC TO OUR HANGAR. IT WAS NOTED THAT THEIR WAS A CROSSWIND WHEN THE AC DEPARTED MINOR DAMAGE TO NOSE DOORS. MAINT IS LOOKING INTO THE PROBLEM. MAINT FOUND EXCESSIVE WEAR IN NOSE GEAR TRUNNION SLOT (PN 9935-1) AND DAMPING COLLAR (PN 9935-1, -3). EXCESSIVE WEAR CAUSED BINDING AND PREVENTED NOSE WHEEL FROM CENTERING WHEN NOSE OLEO IS EXTENDED IN THE TURNED POSITION. WHEN THE NOSE GEAR WAS RETRACTED NOT CENTERED IT DAMAGED THE DOORS AND DOOR RODS. BELIEVE THAT WITH THE BENT DOORS AND RODS WHEN THE GEAR WAS RESELECTED DOWN PREVENTED THE GEAR FROM GETTING TO THE FULL DOWN AND LOCKED POSITION. SERVICEABLE PARTS ARE BEING INSTALLED AND BEING FUNCTION CHECKED. (TC NR 20080123002)

<u>CA080121008</u> HUGHES ALLSN SPRAG CLUTCH CORRODED

1/9/2008 369D 250C20B 369D25351DSN MAIN ROTOR

(CAN) DURING 300 HOUR INSPECTION PART WAS FOUND TO HAVE PITTING ON SEVERAL ELEMENTS. SPRAG CLUTCH REPLACED. (TC NR 20080121008)

 CA071210005
 HUGHES
 ALLSN
 DOUG
 HOUSING
 CRACKED

 12/4/2007
 369D
 250C20B
 369A53515
 CLUTCH

(CAN) CLUTCH HOUSING RECEIVED FOR OVERHAUL AFTER PAINT STRIPPING HOUSING SENT OUT FOR NDT INSPECTION AND CAME BACK FOUND CRACKED ON ENGINE SIDE OF HOUSING. (TC NR 20071210005)

<u>CA071227007</u> HUGHES ALLSN ALLSN CAP CRACKED 12/18/2007 369D 250C20B 23035102 6793065 OIL PUMP

(CAN) DURING ROUTINE INSPECTION AND FILTER CHANGE, A CRACK AROUND THE EAR OF THE CAP WAS NOTED. THE STUD WAS ALSO STRIPPED. MFG COVERED THIS TOPIC IN THEIR CSL-1251. TORQUEING IS THE POSSIBLE CAUSE FOR THIS DEFECT, THE LETTER RECOMMENDS 30-40 LBS-IN. IT IS IMPORTANT TO FOLLOW MFG PROCEDURES IN ASSEMBLY AND REPAIR. (TC NR 20071227007)

CA071212003 ISRAEL GARRTT RING INCORRECT

| 5/10/2007 | 1125 | TFE7313A | | 152734 | STBY ALTMETER |
|---|--|--|--|---|---|
| | ATION OF LOCKING NR 20071212003). | | TEM (PN 152734). RI | ING SUPPORT FOUND | ON THIS STBY |
| CA070411003 | KAMAN | LYC | KAMAN | DRIVE GEAR | DAMAGED |
| 3/17/2007 | K1200 | T5317A1LYC | K974002103 | | TRANSMISSION |
| WAS HEARD CO START WAS THE AN ABUNDANCE WANTED US TO GEAR FOR DAM GEAR IS INSIDE | OMING FROM THE EN ABORTED. THE E OF PARTICLES O REMOVE THE OIL IAGE. THIS INSPEC THE TRANSMISSI | POWER TRAIN AS ATTENDING AND FON THE LT SULPHING AND THE CTION REVEALE ON MAIN HOUSI | AND A TRANSMISSION AND A TRANSMISSION THE INSPECTED THE IMP CHIP PLUG. PREDILLE AND THE DRIVE AND THE DRIVE GEAR | ODUCT SUPPORT WAS ASSY AND INSPECT TH HAD SUSTAINED SIGN LD REPAIRABLE ITEM. | HT INDICATION. THE CHIP PLUGS AND FOUND S CONTACTED AND IE OIL PUMP DRIVE NIFICANT DAMAGE. THIS |
| CA071212004 | NAVION | CONT | | DIAPHRAGM | CRACKED |
| 11/10/2007 | STCNAVION | E1853 | | B1192 | PROP HUB |
| REMÓVED. DIAF | PHRAGM REMOVE | D. INNER SURFA | ACE AROUND CENT | ELD. PROP REMOVED. ER ATTACH RING ALM 15, 2007 AND FAILED | OST TOTALLY SPLIT |
| CA071126002 | NAVION | CONT | | DIAPHRAGM | SPLIT |
| 11/10/2007 | STCNAVION | E2254 | | 1192 | PROPELLER |
| APPEARED STIF | FFER THAN THE P | REVIOUS DIAPH | RAM. THE DIAPHRA | N. UNCERTAIN AS TO V IM IS BEING RETURNEI MFG. (TC NR 200711260 | D TO MFG FOR INSP. |
| PAI52008S4818 | PIAGIO | | | STRUCTURE | CHAFED |
| 1/30/2008 | P180 | | | | RUDDER |
| DURING D-CHE | CK INSPECTION, F | OUND RUDDER | TORQUE CHAFED E | BY AFT FAIRING P/N 80 | -561004-401. |
| PAI52008S4858 | PIAGIO | PWA | | SKIN | CRACKED |
| 2/12/2008 | P180 | PT6* | | | HORIZONTAL STAB |
| | | | | HORIZONTAL STABILIZ ZER, 5 INCHES AFT OF | |
| CA071120005 | PILATS | PWA | | DISPLAY | INOPERATIVE |
| 11/19/2007 | PC1245 | PT6A67B | | 066031252500 | COCKPIT |
| ` , | | | | DURING FLIGHT. DEFE FTER POWER UP. (TC N | ECT WAS CONFIRMED IN NR 20071120005) |
| CA071113007 | PILATS | PWA | ISRAEL | DOUBLER | CRACKED |
| 11/8/2007 | PC1245 | PT6A67B | | 5PC41301001 | SEAT PAN |
| | R INSTALLED ON C PC41301-001 INST | | | PC41000-MOD1, FOUNE | CRACKED. NEW |
| CA071114005 | PILATS | PWA | | TRANSMITTER | INOPERATIVE |
| 11/9/2007 | PC1245 | PT6A67B | | | AOA |
| | | | NE HEAT WAS FOU REPLACED. (TC NR | ND INOPERATIVE. PRO 20071114005) | OBE AND PLATE HEAT |
| 22497 | PIPER | LYC | ECI | RETAINER | BROKEN |

| 1/31/2008 | PA18 | O360C4P | | AEL14995 | PUSH ROD |
|--|--------------------------------|----------------------------|--------------------|---|---|
| THE TECHNICIA | N NOTICED AN OI | L LEAK AT THE I | NR4 CYLINDER. FUF | RTHER INSPECTION RE | EST CELL OPERATION EVEALED THAT THE SEAL TO FALL OUT OF |
| CA080122005 | PIPER | LYC | | YOKE | CRACKED |
| 1/11/2008 | PA23250 | IO540C4B5 | | 753227 | MLG |
| ČRAĆK WAS AL | ONG THE EDGE O | F THE CASTING | | WHERE THE OLEO SH | DING GEAR YOKE. THE IAFT IS ATTACHED TO |
| CA061110003 | PIPER | LYC | PIPER | SHROUD | OVERHEATED |
| 11/9/2006 | PA28140 | O320E3D | 7961502 | 7961502 | CABIN |
| (CAN) PART FO | UND DEFORMED A | ABD DISCOLORE | D AND HEAT BLISTI | ERS. (TC NR 200611100 | 003) |
| 2008FA0000073 | PIPER | LYC | | ATTACH FITTING | CORRODED |
| 1/14/2008 | PA28151 | O320* | | 62448003 | FUSELAGE |
| THIS FUSELAGE REAR WING ATTACH FITTING WAS BEING REPLACED DUE TO CORROSION PITTS ON FRONT SURFACE. UPON REMOVAL SOME SEVERE PITTING WAS NOTED JUST IB OF THE .3125 INCH WING ATTACH BOLT HOLE ON THE REAR SIDE OF THE FITTING. THIS AREA IS EXPOSED TO OUTSIDE AIR AND MOISTURE AND IS LOCATED IN A DIFFICULT AREA TO INSPECT. THIS ARA IS ALSO MORE CRITICAL IN RELATION EVENTUAL PART FAILURE THAN THE FRONT SURFACE THAT IS VISIBLE FROM INSIDE THE FUSELAGE. RECOMMEND CLEANING DIRT OUT OF AREA AND INSPECTING WITH A GOOD LIGHT. (K) | | | | | |
| CA070502008 | PIPER | CONT | | CONTROL CABLE | DAMAGED |
| 4/27/2007 | PA28R201T | TSIO360F | | 455361 | MIXTURE CONTROL |
| (CAN) MIXTURE CONTROL WAS FOUND TO BE STIFF BY MAINT ON AN ENGINE START FOR TAXI TO HANGER. CABLE WAS REMOVED. THE CABLE ROUTING POSITIONS THE CABLE LESS THAN (6) INCHES FROM THE TURBOCHARGER. AN ASBESTOS COVER HAD PREVIOUSLY BEEN PLACED OVER THE CABLE AND STITCHED TOGETHER WITH LOCK WIRE TO PROTECT THE CABLE. (NOT DONE AT OUR SHOP). ONCE THE COVER WAS REPLACED WE DISCOVERED THE ENTIRE OUTER CABLE SHIELD DETERIORATED AND MISSING A TWO INCH SECTION. (TC NR 20070502008) | | | | | |
| CA070312007 | PIPER | LYC | | WHEEL HALF | DESTROYED |
| 3/3/2007 | PA30 | IO320B1A | | 16102100 | LANDING GEAR |
| (CAN) SUSPECT HARD LANDING WITH SIDE MOVEMENT STRESSED WHEEL HALF CASTING. THE BACK STOP PORTION OF HUB CASTING HAS A NEW CLEAN BREAK. WITH RACE BROKEN, BEARING CONE FAILED. WHEEL ASSEMBLY TIPPED IN MOUNTING FORK AND RODE ON BRAKE CALIBER TORQUE PLATE. BRAKE DISK WORE ON INSIDE OF MOUNTING FORK. (TC NR 20070312007) | | | | | |
| CA071114001 | PIPER | LYC | | HOUSING | FAILED |
| 10/22/2007 | PA31 | TIO540A2B | | | STARTER GEN |
| (CAN) MOTOR A 20071114001) | ATTACH BOLT PUL | LING OUT OF HO | DUSING. NOT AN INF | FLIGHT SAFETY CONC | ERN. (TC NR |
| CA071123001 | PIPER | LYC | GARRTT | BEARING | FAILED |
| 11/20/2007 | PA31 | TIO540A2C | | | TURBOCHARGER |
| TURBOCHARGE BEARING SEAL | ER. UPON CLOSER BETWEEN THE CO | INVESTIGATION DMPRESSOR AN | N, IT WAS DISCOVE | VAS NOTICED IN THE A RED THAT THE TURBO ILED. THE TURBO WAS 1123001) | CHAGERS EXHAUST |
| CA071203001 | PIPER | LYC | RAPCO | VANE | BROKEN |

12/2/2007 PA31310 TIO540A2C 441CC7 AIR PUMP

(CAN) DURING A PRE-MAINTENANCE GROUND RUN, IT WAS NOTED THAT THE RT AIR PUMP WAS INDICATING INOPERATIVE DURING INSPECTION. THE DRIVESHAFT WAS FOUND TO BE SHEARED DUE TO THE CARBON VANES BREAKING AND JAMMING THE PUMP. (TC NR 20071203001)

| CA071207002 | PIPER | LYC | TRUNNION | CRACKED |
|-------------|---------|-------------|----------|----------|
| 11/20/2007 | PA31350 | LTIO540J2BD | 40327000 | MLG DOOR |

(CAN) DURING INSPECTION, A CRACK WAS FOUND IN THE RT UPPER TRUNNION, MOVING FROM THE BOTTOM OF THE TRUNNION UPWARDS TOWARD THE ATTACHMENT POINT, THE GEAR DOOR ROD. THIS IS THE SECOND ONE THIS YEAR. (TC NR 20071207002)

CA071231002 PIPER LYC CONNECTOR BURNED

12/28/2007 PA31350 TIO540J2BD 2067081 CONTROL PANEL

(CAN) STROBE CB POPPED AND WILL NOT RESET. FAULT T/S TO DAMAGED WIRE IN RT WING. WIRE (L161FF) REPLACED IAW AC43-13-1B AND SECURED. WIRES FOR AILERON TRIM, STALL WARNING, POSITION LIGHTS AND FUEL QUANTITY SENDERS DISTURBED. ALL CONNECTIONS OF THESE SYSTEMS WERE RETERMINATED AND OPERATION CHECKED OK. DURING T/S CONNECTOR E312(TAXI AND LANDING LIGHTS) IN THE OVERHEAD PANEL WAS NOTED DAMAGE. (SEVERAL BURNED PINS) INSULATION TEST OF THE SYS CARRIED OUT AND ADDITIONAL DAMAGE FOUND AT CONNECTOR E302. BOTH CONNECTORS REPLACED AS REQUIRED. TAXI AND LANDING LIGHT LINES MEGGERED OUT WITH NO FURTHER FAULTS INDICATED. SYSTEM OPN TESTED SERVICEABLE. (TC NR 20071231002)

<u>CA071127007</u> PIPER LYC LYC BUTTERFLY VALVE WARPED 11/22/2007 PA31350 TIO540J2BD LTIO540J2BD LW12778 ENGINE

(CAN) THE AC WOULD NOT GET FULL POWER ON THE RT ENGINE. AFTER A RUNUP ALL PARAMETERS WERE NORMAL AND THE TAKEOFF RESUMED. MAINT INSPECTED THE ENGINE AND FOUND THE BUTTERFLY VALVE TUBE THAT GOES OVER THE SHAFT WAS WARPED AND SPLIT. THIS WAS PROBABLY CAUSING AN INTERMITTENT STICKINESS IN THE BUTTERFLY. THE WASTEGATE WAS REPLACED WITH NO FURTHER ISSUES. (TC NR 20071127007)

<u>CA071203002</u> PIPER LYC STRUCTURE CRACKED
12/2/2007 PA31350 TIO540J2BD NLG WW

(CAN) DURING AN EVENT 1 INSP ON THE AC, ENGINEER NOTICED WHAT HE THOUGHT THERE WAS A CRACK ON THE EXTRUSION (LOCATED ABOVE THE NLG WHEEL WELL, JUST AFT OF HYD POWERPACK), TO WHICH THE NOSE LANDING GEAR RETRACTION ACTUATOR ATTACHES TO. AFTER PERFORMING A LIQUID PENETRANT INSP, THE PRESENCE OF A CRACK WAS CONFIRMED. THE EXTRUSION WAS REMOVED FROM THE AIRCRAFT, AT THIS TIME IT WAS ALSO NOTED THAT THE ATTACH POINT (BOLT HOLE) WAS ALSO CRACKED. A NEW EXTRUSION IS BEING INSTALLED. THIS EXTRUSION HAS BEEN INSTALLED SINCE THE AIRFRAME WAS MFG (17328.9 TSN). (TC NR 20071203002)

<u>CA070703001</u> PIPER LYC TRUNNION CRACKED 6/28/2007 PA31350 TIO540J2BD 4032700 LT MLG

(CAN) DURING A SCHEDULED LAYOVER, ON POST FLIGHT WALK AROUND THE PILOTS NOTICED THAT THE LT GEAR STRUT WAS DEFLATED. EXAMINATION BY MAINT SHOWED THAT THE TRUNNION HAD CRACKED ALONG THE WELD THAT HOLDS THE (2) HALVES OF THE TRUNNION TOGETHER. IT HAD CRACKED UP PAST THE ORINGS INTO THE SEALED AREA OF THE STRUT. IT IS UNKNOWN IF THIS STRUT IS THE ORIGINAL AIRCRAFT ONE. (TC NR 20070703001)

 CA071114002
 PIPER
 LYC
 CASE
 FAILED

 11/9/2007
 PA31350
 TIO540J2BD
 STARTER GEN

(CAN) MOTOR ATTACH BOLT PULLING OUT OF HOUSING. (TC NR 20071114002)

<u>CA070312009</u> PIPER LYC ALTERNATOR FAILED 2/20/2007 PA31350 TIO540J2BD 587857 LEFT

(CAN) LT ALTERNATOR FAILED AT CRUISE, FAULT-FIELD POWER FUSE BLOWER. RT ALTERNATOR FAILED/NOT ON LINE, FAULT, BAD ALTERNATOR MASTER SWITCH OR NOT ON. RT INOP ALTERNATOR SWITCH/RELAY FAILED SO NO COCKPIT INOP LIGHT. AC CONTINUED FLIGHT ON BATTERY POWER TO DESTINATION. FLIGHT AT NIGHT -30C AND IFR CONDITIONS. CONCLUSIONS/RECTIFICATIONS: LT FIELD FUSE REPLACED. RT ALTERNATOR INOP SWITCH REPLACED. ALTERNATOR MASTER SWITCH CLEANED/TESTED. BATTERY CHARGED AND TESTED. AC AND ALTERNATOR SYS OPS CHECKED AND AC RETURNED TO SERVICE. (TC NR 20070312009)

CA080121009 PIPER LYC ALTERNATOR INOPERATIVE

1/8/2008 PA31350 TIO540J2BD ALU8421R

(CAN) IN CRUISE, AC STARTED TO LOOSE ELECTRICAL POWER. FIRST INDICATION, THE TRANSPONDER FAILED. AC THEN RETURNED TO AIRPORT. BOTH LT AND RT ALTERNATOR FAIL INDICATOR LIGHTS REMAINED OUT DURING THE FLIGHT. UPON INSP NEITHER ALTERNATOR WAS CHARGING THE SYS. THE ONLY POWER SUPPLY WAS THE AC BATTERY. THE LT ALTERNATOR WAS FOUND TO BE UNSERVICEABLE. THE RT ALTERNATOR, BECAUSE OF THE ADDED ELECTRICAL LOAD PUT ON IT, CAUSED THE ALTERNATOR BELT TO SLIP ON THE PULLEY, MAKING THE ALTERNATOR INOPERATIVE. ALL AC RADIOS, NECESSARY LIGHTS AND DEICING HEAT WAS ON AT THIS TIME. (TC NR 20080121009)

<u>CA070516004</u> PIPER LYC BLADDER INCORRECT 5/5/2007 PA31350 TIO540J2BD FUEL TANK

(CAN) AC IN FOR MAINTENANCE AND FUEL DRAINED FROM AC. DID NOT GET ANY FUEL FROM THIS QUICK DRAIN SO ADDED FUEL TO TANK AND OBSERVED A FUEL LEAK AROUND THE COVER PLATE IN BOTTOM OF WING UNDER THE TANK AND LOCATION OF QUICK-DRAIN. MAINT REMOVED COVER AND FOUND THE QUICK DRAIN NOT CONNECTED TO FUEL BLADDER. FOUND THAT SOMEONE HAD THREADED A BOLT INTO THE BLADDER AND HAD REDUCED THE LENGTH OF CONNECTOR TO THE QUICK DRAIN SO THE COVER PLATE WOULD FIT BACK IN PLACE. NO SNAG ON AIRCRAFT ADDRESSING THIS AND NO WAY FUEL COULD HAVE BEEN SUMPED FROM THIS TANK. FUEL BLADDER TANK WAS REMOVED AND SERVICEABLE BLADDER INSTALLED. (TC NR 20070516004)

 2008FA0000046
 PIPER
 LYC
 WIRE
 FAILED

 1/4/2008
 PA32R301T
 TIO540*
 153615
 MLG

MAIN GEAR DOWN LOCK SWITCH WIRES PULL TIGHT ON STRUT ON RETRACTION AND PULL WIRE STRANDS APART TO BREAKING POINT. SILICONE TYPE WIRE COATING TENDS TO HOLD WIRE ENDS TOGETHER FOR INTERMITTENT CONTACT. NEEDS BETTER WIRE AND ROUTING. (K)

<u>2008FA0000047</u> PIPER LYC WIRE FAILED 1/9/2008 PA32R301T TIO540* 153615 MLG

MAIN GEAR DOWN LOCK SWITCH WIRES PULL TIGHT ON STRUT ON RETRACTION AND PULL WIRE STRANDS APART TO BREAKING POINT. SILICONE TYPE WIRE COATING TENDS TO HOLE WIRE ENDS TOGETHER FOR INTERMITTENT CONTACT. NEEDS BETTER WIRE AND ROUTING. (K)

<u>2008FA0000049</u> PIPER LYC WIRE FAILED 1/11/2008 PA32R301T TIO540* 153615 MLG

MAIN GEAR DOWN LOCK SWITCH WIRES PULL TIGHT ON STRUT ON RETRACTION AND PULL WIRE STRANDS APART TO BREAKING POINT. SILICONE TYPE WIRE COATING TENDS TO HOLD WIRE ENDS TOGETHER FOR INTERMITTENT CONTACT. NEEDS BETTER WIRE AND ROUTING. (K)

<u>2008FA0000050</u> PIPER LYC WIRE FAILED 1/4/2008 PA32R301T TIO540* 153615 MLG

MAIN GEAR DOWN LOCK SWITCH WIRES PULL TIGHT ON STRUT ON RETRACTION AND PULL WIRE STRANDS APART TO BREAKING POINT. SILICONE TYPE WIRE COATING TENDS TO HOLD WIRE ENDS TOGETHER FOR INTERMITTENT CONTACT. NEEDS BETER WIRE AND ROUTING. (K)

CA080128003PIPERPWAFILTERCRACKED5/27/2007PA42720PT6A61460635HYD SYSTEM(CAN) DURING APPROACH TO LANDING, FLIGHT CREW EXPERIENCED DIFFICULTY EXTENDING THE LANDING

GEAR VIA NORMAL MEANS AND SUBSEQUENTLY MANUALLY LOWERED THE GEAR. INVESTIGATION SHOWED SUBSTANTIAL HYD FLUID LOSS THROUGH CRACKED THREADS OF THE LT ENG HYDR FILTER BOWL. MAINT TO REPLACE THE DAMAGED BOWL WITH NEW, AND TO OVERHAUL THE HYDR PUMPS AND FLUSH THE HYD SYS PRIOR TO FURTHER FLIGHT. (TC NR 20080128003)

| CA070425004 | PIPER | LYC | TRUNNION | CRACKED |
|-------------|---------|-----------|----------|---------|
| 4/5/2007 | PA44180 | O360E1A6D | 67054803 | NLG |

(CAN) DURING A PREFLIGHT INSP THE PILOT NOTICED THE NOSE GEAR TRUNNION CRACKED. THE CRACK STARTS FROM THE UPPER PART OF THE CASTING AND GOES DOWN HALFWAY AT WHICH POINT IT SPREADS INTO 3 OTHER CRACKS. THE IDENTICAL CRACK CAN BE FOUND ON THE REAR SIDE OF THE CASTING .THE CRACK IS 5 INCHES LONG. SUSPECT A HARD LANDING, A HARD LANDING INPS WAS CARRIED OUT AND NO FURTHER DAMAGE WAS FOUND. THE NOSE TIRE SHOWED EVIDENCE OF A HARD LANDING. THE PART IS BEING KEPT, CAN SEND A PICTURE OR MAKE THE PART AVAILABLE FOR INSP. (TC NR 20070425004)

| CA070706005 | PIPER | LYC | SHEAR PIN | SHEARED |
|-------------|---------|-----------|-----------|---------|
| 7/3/2007 | PA60600 | IO540K1J5 | 450530501 | LG DOOR |

(CAN) AFTER TAKEOFF THE PILOT SELECTED GEAR UP, THE GEAR UP LIGHT FAILED TO ILLUMINATE. THE LANDING GEAR WAS EXTENDED AND THE AIRCRAFT LANDED AT AIRPORT. UPON INVESTIGATION THE LANDING GEAR DOOR SHEAR PIN WAS FOUND SHEARED. THE PIN WAS REPLACED, THE AIRCRAFT WAS PLACED ON JACKS AND A FUNCTION CHECK OF THE LANDING GEAR AND INDICATING SYSTEM WAS COMPLETED WITH NO FAULTS. THE AIRCRAFT WAS RETURNED TO SERVICE. (TC NR 20070706005)

| 2008FA0000044 | PIPER | LYC | PUSHROD | CORRODED |
|---------------|----------|--------|-----------|----------|
| 1/11/2008 | PA60601P | IO540* | 600050507 | ENGINE |

THE AREA IN WHICH THE CORRODED SECTION OF THE PUSHROD ASSY IS LOCATED IS PRONE TO EXHAUST CONTAMINATION SINCE IT IS DIRECTLY BEHIND THE ENGINE EXHAUST PIPE OUTLETS. THIS AREA NEEDS TO BE KEPT CLEAN OF EXHAUST RESIDUE AND CORROSION PREVENTATIVE APPLIED. OLDER TUBES WERE ALODINED ALUMINUM. NEWER TUBES ARE ZINC CHROMATED ALUMINUM BUT ARE STILL SUSCEPTIBLE TO CORROSION. SB 600-122 ADDRESS THIS SUBJECT. INSPECTION IS DONE THROUGH FLAP ACTUATOR ACCESS PANEL. (K)

| 2008FA0000043 | PIPER | LYC | PUSHROD | CORRODED |
|---------------|----------|--------|-----------|----------|
| 1/11/2008 | PA60602P | IO540* | 600050507 | ENGINE |

THE AREA IN WHICH THE CORRODED SECTION OF THE PUSHROD ASSY IS LOCATED IS PRONE TO EXHAUST CONTAMINATION SINCE IT IS DIRECTLY BEHIND THE ENGINE EXHAUST PIPE OUTLETS. AREA NEEDS TO BE KEPT CLEAN OF EXHAUST RESIDUE AND CORROSION PREVENTATIVE APPLIED. OLDER TUBES WERE ALODINED ALUMINUM. NEWER TUBES ARE ZINC CHROMATED ALUMINUM BUT ARE STILL SUSCEPTIBLE TO CORROSION. INSPECTION OF THIS AREA IS ACCESSIBLE THROUGH THE WING FLAP ACTUATOR ACCESS PANEL. SB 600-122 ADDRESSES THIS SUBJECT. (K)

| <u>43385883</u> | RAYTHN | GARRTT | FMC | MALFUNCTIONED |
|-----------------|-------------|-----------|------------|---------------|
| 1/29/2008 | HAWKER800XP | TFE7315BR | 8220868044 | |

UNCOMMANDED 360 DEGREE TURN AS COMMANDED BY THE FMS. SB 0057-05 DATED DECEMBER 21, 2005 DELETING A WAYPOINT MAY CAUSE THE FMS TO INSERT AND FLY AN UNINTENDED TURN. KNOWN PROBLEM WITH OPTIONAL SOLUTION FOR FMS6000 NO SOLUTION FOR FMS5000 INSTALLED IN AC.

| CA080107004 | ROBSIN | LYC | BEARING | ROUGH |
|-------------|---------|---------|---------|---------------|
| 1/2/2008 | R22BETA | O360J2A | A0311 | PITCH CONTROL |

(CAN) WHILE DOING AD 2003-04-04 THE BEARINGS WERE FOUND ROUGH ON ROTATION. PART WAS REPLACED WITH NEW. (TC# 20080107004)

| CA080121011 | ROBSIN | LYC | MAGNETO | FAILED | |
|--|--------|----------|-------------|------------|--|
| 1/4/2008 | R44 | O540F1B5 | BL600646201 | RT MAGNETO | |
| (CAN) DURING MAGNETO CHECK PRIOR TO FLIGHT, THE RT MAGNETO FAILED. MAGNETO REPLACED AND CHECKED SERVICEABLE. (TC NR 20080121011) | | | | | |

| CA071127003 | ROBSIN | LYC | ROBSIN | BEARING | SPALLED |
|--|----------------------------------|---------------|-------------------------------------|---|--|
| 11/26/2007 | R44 | O540F1B5 | | C1591 | M/R BLADE |
| (CAN) WHILE CONDUCTING A DI, THE M/R BLADE BOOT WAS FOUND DISTORTED. THE BOOT WAS REPLACED AND A CHECK OF THE SPINDLE BEARINGS WERE FOUND TO BE ROUGH. FURTHER INVESTIGATION REVEALED THE NR 6 BEARING INNER RACE WAS FOUND SPALLING. BEARING REPLACED AND ASSY REINSTALLED. (TC NR 20071127003) | | | | | |
| CA080103006 | ROBSIN | LYC | | MAGNETO | UNSERVICEABLE |
| 12/27/2007 | R44 | O540F1B5 | | BL6006163 | ENGINE |
| | | |) FOUND UNSERVI CEABLE. (TC NR 2 | | HANGED, GROUND RUN |
| CA080103001 | ROBSIN | LYC | | MAGNETO | INOPERATIVE |
| 12/24/2007 | R44RAVENII | IO540AE1A5 | | E06KA245 | ENGINE |
| AFTER ENGINE | | GINE SHUTDOW | 'N AND RT MAGNE | GAN TO HUNT. PROBL TO REPLACED. GROU | EM PERSISTED EVEN ND RUN CARRIED AND NO |
| CA080103004 | ROBSIN | LYC | | SERVO | LEAKING |
| 12/23/2007 | R44RAVENII | IO540AE1A5 | | D2121 | HYD SYSTEM |
| | | | HYDRUALIC SERV VICEABLE. (TC NR | | NG AT THE PILOT VALVE. |
| CA071224003 | ROBSIN | LYC | | PUMP | FAILED |
| 12/20/2007 | R44RAVENII | IO540AE1A5 | | D74311 | AUX |
| INVESTIGATION | N REVEALED THE I | PUMP AND AUX | FUEL PUMP PRES | EL PUMP FAILED TO R SURE SWITCH (P/N B4 E NOTED. (TC NR 2007 [,] | 26-6) HAD FAILED. PUMP |
| CA071224001 | ROBSIN | LYC | | WIRE HARNESS | CHAFED |
| 12/23/2007 | R44RAVENII | IO540AE1A5 | | WIRE1544 | AUX FUEL PUMP |
| (CAN) AC HAD AN INTERMITTENT PROBLEM WITH ITS FUEL PUMP WARNING LIGHT. INTERMITTENTLY THE AUX FUEL PUMP WARNING LIGHT WOULD FLICKER ON AND OFF AT APPROX. 60 PERCENT BRIGHTNESS DURING A LONG FLIGHT. AN ENGINEER CHANGED THE AUX FUEL PUMP AND THE FUEL PRESSURE SWITCH. THE PROBLEM DID NOT REOCCUR DURING TESTING. HOWEVER, THE AC WAS BROUGHT BACK TO BASE TO ENSURE THERE WAS NO OTHER PROBLEM. UPON FURTHER INSPECTION, FOUND ONE OF THE WIRES FOR THE FUEL PUMP WAS CHAFING ON A VENT TUBE NEAR THE FIREWALL. REPLACED A SECTION OF WIRE AND COVERED IT IN SPIRAL WRAP, TO PREVENT CHAFING IN THE FUTURE. (TC NR 20071224001) | | | | | |
| CA080105003 | ROBSIN | LYC | | STARTER | INOPERATIVE |
| 1/1/2008 | R44RAVENII | IO540AE1A5 | | BC31510040 | ENGINE |
| | WOULD NOT STAR OUT FURTHER IN | | | RVICEABLE STARTER I | NSTALLED, ENGINE |
| CA080103008 | ROBSIN | LYC | | COVER | LOOSE |
| 12/22/2007 | R44RAVENII | IO540AE1A5 | | | STARTER |
| HOLDING IT IN | | ENED OFF. THE | | G COVER WAS FOUND EPLACED, GROUND RU | D LOOSE. THE 3 SCREWS JN CHECKED |
| CA071211006 | ROBSIN | LYC | | PUMP | LEAKING |
| 11/30/2007 | R44RAVENII | IO540AE1A5 | | LW15473 | ENG FUEL |

(CAN) DURING A 50 HOUR INSPECTION THE ENGINE DRIVE FUEL PUMP WAS FOUND LEAKING FROM SEAL. (INNER

| DIAPHRAM) | TC NR | 20071 | 211006\ |
|-----------|-------|-------|---------|
| | | | |

| DIAPHRAM) (TC NR 20071211006) | | | | | |
|---|------------|------------|---------|----------|--|
| CA071211007 | ROBSIN | LYC | PUMP | LEAKING | |
| 12/11/2007 | R44RAVENII | IO540AE1A5 | LW15473 | ENG FUEL | |
| (CAN) DURING GROUND RUN, PUMP WAS FOUND LEAKING FROM DRAIN. PUMP REPLACED, NO FURTHER DEFECT. (TC NR 20071211007) | | | | | |
| CA071217007 | ROBSIN | LYC | PUMP | FAILED | |
| 12/17/2007 | R44RAVENII | IO540AE1A5 | D7431 | AUX FUEL | |
| (CAN) DILOT ATTEMPTED TO START AIRCRAFT BLIT FAILED FLIRTHER INVESTIGATION REVEALED THE ALLY FLIEL | | | | | |

(CAN) PILOT ATTEMPTED TO START AIRCRAFT, BUT FAILED. FURTHER INVESTIGATION REVEALED THE AUX FUEL PUMP DID NOT SUPPLY FUEL TO START AIRCRAFT. PUMP WAS REPLACED AND NO FURTHER ISSUES WERE NOTED. (TC NR 20071217007)

CA071127004 **ROBSIN** LYC **SERVO LEAKING** 11/20/2007 R44RAVENII IO540AE1A5 D2121

(CAN) WHILE CARRYING OUT A 100 HOUR INSPECTION THE FWD LT SERVO WAS FOUND LEAKING. THE SERVO WAS CHANGED, GROUND RUN AND LEAK CHECK CARRIED OUT WITH OUT FURTHER INCIDENT. (TC NR 20071127004)

CA071127005 **ROBSIN** LYC PUMP **FAILED** 11/25/2007 R44RAVENII IO540AE1A5 LW15473 **FUEL SYS**

(CAN) WHEN PILOT TRIED TO PULL THE AC UP IN A HOVER, THE ENGINE DECELERATED (BOGGED DOWN) UNTIL THE COLLECTIVE WAS LOWERED. THIS WAS TRIED SEVERAL TIMES WITH NO SUCCESS. ALL INDICATIONS WERE NORMAL, TEMPS, PRESSURES, MAG DROPS, ETC. WHILE WAITING FOR THE ENGINEER TO ARRIVE ON SITE, THE PILOT GROUND RAN THE AC FOR 40 MIN TO WARM IT UP AND TRIED TO PULL POWER AGAIN. THIS TIME THE AC LIFTED UP NORMALLY WITH NO SYMPTOMS WHATSOEVER. WHEN THE ENGINEER ARRIVED THE AC WAS INSPECTED AND NO DEFECTS WERE FOUND. A 5 MIN TEST FLIGHT WAS COMPLETED WITH NO ABNORMAL SYMPTOMS. THE AC WAS SHUTDOWN AND REFUELED TO BE REPOSITIONED TO ANOTHER LOCATION. AFTER RE-STARTING AND WHILE TRANSITIONING FROM A HOVER TO FWD FLIGHT, THE ENGINE DECELERATED AND THE PILOT PERFORMED A SUCCESSFUL UNSCHEDULED LANDING. BLACK SMOKE WAS OBSERVED COMING OUT OF THE EXHAUST AND THE ENGINE WAS RUNNING ROUGH. AFTER SHUTTING DOWN THE ENGINE, AV GAS WAS SEEN POURING OUT OF THE FUEL PUMP DRAIN. THE ENGINE DRIVEN FUEL PUMP IS SUSPECTED TO HAVE FAILED. (TC NR 20071127005)

| CA071122007 | ROBSIN | LYC | MAGNETO | FAILED | |
|---|------------|---------------------|-------------|-------------|--|
| 11/21/2007 | R44RAVENII | IO540AE1A5 | BL600646201 | ENGINE | |
| (CAN) ENGINE START ATTEMPTED, RT MAGNETO FAILED TO OPERATE. (TC NR 20071122007) | | | | | |
| CA070604003 | ROBSIN | LYC | LINK | CRACKED | |
| 5/26/2007 | R44RAVENII | Ι <u>Ο54</u> 0ΔΕ1Δ5 | 32001 | STARTER GEN | |

(CAN) DURING 100HR INSPECTION FOUND CRACKED STARTER GENERATOR LINK. (TC NR 20070604003)

LYC CLUTCH CA070531006 **ROBSIN** SEIZED 5/29/2007 R44RAVENII IO540AE1A5 C0183 **TRANSMISSION**

(CAN) LOUD BANG DURING POWER CHANGE ON APPROACH. INSPECTED AC AND FOUND CLUTCH ASSY ROUGH. TURNED IT A FEW TIMES BY HAND AND SEIZED. NEW CLUTCH ASSY INSTALLED. DEFECT RECTIFIED. CLUTCH BEING SENT TO OUR IN HOUSE COMPONENT SHOP FOR INVESTIGATION. WILL FWD THE PICTURES AND INFORMATION WHEN RECEIVED FROM THE COMPONENT SHOP. PICTURES ATTACHED AND CLUTCH ASSY BEING SENT TO MFG FOR WARRANTY AND INVESTIGATION. (TC NR 20070531006)

| CA080129005 | ROBSIN | LYC | SPRAG CLUTCH | CRACKED | |
|---|------------|------------|--------------|------------|--|
| 1/28/2008 | R44RAVENII | IO540AE1A5 | C1883 | MAIN ROTOR | |
| (CAN) DURING OVER HAUL, THE CAGE OF THE SPRAG CLUTCH WAS FOUND CRACKED IN 8 PLACES. (TC NR 20080129005) | | | | | |

| CA071203003 | ROBSIN | LYC | PUMP | FAILED | | |
|--|------------------------------------|--|--|------------------------------------|--|--|
| 12/3/2007 | R44RAVENII | IO540AE1A5 | D7341 | FUEL SYSTEM | | |
| THAT THE PUM | | P LIGHT CAME, AND WOULD NOT EX R PUMPING FUEL. THE PUMP WAS | | | | |
| CA071204006 | ROBSIN | LYC | PUMP | FAILED | | |
| 12/2/2007 | R44RAVENII | IO540AE1A5 | LW15473 | FUEL SYSTEM | | |
| (CAN) THE AIRCRAFT WAS FLOWN FOR AN HOUR AND THEN SHUTDOWN TO WAIT FOR CUSTOMERS. THE AC WAS RE-STARTED A HALF HOUR LATER AND THE PILOT TRIED TO LIFT OFF, WHEN THE ENGINE LOST PARTIAL POWER AND THE MANIFOLD PRESSURE ROSE ABNORMALLY. THE POWER SETTINGS CAME BACK TO NORMAL WHEN THE COLLECTIVE WAS LOWERED BUT WOULD DETERIORATE EVERY TIME THE COLLECTIVE WAS RAISED. AFTER SHUTTING DOWN THE ENGINE, FUEL WAS SEEN FLOWING OUT OF THE ENGINE DRIVEN FUEL PUMP DRAIN. THE OAT WAS -30 CELCIUS AND THE ENGINE WAS PRE-HEATED. (TC NR 20071204006) | | | | | | |
| CA070910002 | ROBSIN | LYC | PUMP | UNSERVICEABLE | | |
| 9/5/2007 | R44RAVENII | IO540AE1A5 | D7431 | AUX FUEL SYS | | |
| (CAN) AUX FUE (TC NR 2007091 | | NSERVICEABLE DURING DI REPLAC | ED AND NO FURTHER | ISSUES WERE NOTED. | | |
| CA071128007 | ROBSIN | LYC | FRAME | BROKEN | | |
| 10/24/2007 | R44RAVENII | IO540AE1A5 | C04621 | FUSELAGE | | |
| | SY THE AME. THE A | FOR A SCHEDULED 100 HOUR INSPI AIRCRAFT WAS GROUNDED AND A I | | | | |
| CA071128017 | ROBSIN | LYC | SERVO | LEAKING | | |
| 11/26/2007 | R44RAVENII | IO540AE1A5 | D2121 | | | |
| | | 00 HOUR INSP THE FWD LT HYDR S ND LEAK CHECK CARRIED OUT SE | | | | |
| CA071130006 | ROBSIN | LYC | STARTER | FAILED | | |
| 11/23/2007 | R44RAVENII | IO540AE1A5 | 14924HTH | ENGINE | | |
| (CAN) A PILOT A STARTER WAS 20071130006) | ATTEMPTING A ST DEFECTIVE. STAF | ART THE AC AND FAILED TO TURN RETER WAS REPLACED AND NO FURT | OVER. FURTHER INVE THER ISSUES WERE N | STIAGTION REVEALED OTED. (TC NR | | |
| CA071128019 | ROBSIN | LYC | TAILPIPE | BURNED | | |
| 10/6/2007 | R44RAVENII | IO540AE1A5 | C16932 | | | |
| (CAN) PILOT REPORTED ODOR OF EXHAUST IN CABIN. INSPECTION OF EXHAUST COMPLIED WITH AND FOUND BURNED OUT AREA AT TAILPIPE JUNCTION. CF90-03R2 COMPLIED WITH 72.8 HRS PREVIOUS WITH NO DEFECTS FOUND AT THAT TIME. EXHAUST REPLACED. (TC NR 20071128019) | | | | | | |
| CA080122001 | ROBSIN | LYC | MAGNETO | UNSERVICEABLE | | |
| 1/8/2008 | R44RAVENII | IO540AE1A5 | BL600646201 | RT | | |
| (CAN) RT MAGNETO FOUND UNSERVICEABLE ON PREFLIGHT. MAGNETO CHANGED, GROUND RUN AND LEAK CHECK CARRIED OUT SERVICEABLE. (TC NR 20080122001) | | | | | | |
| CA061110006 | ROBSIN | LYC | FRAME | BROKEN | | |
| 11/9/2006 | R44RAVENII | IO540AE1A5 | C04623 | NACELLE | | |
| | | (CAN) DURING INSPECTION FOR SB NR 59, C046-23 FOUND BROKEN AT THE EAR AS DESCRIBED IN THE SB PART, ON ORDER FOR REPLACEMENT AND A KIT KI-185 TO PREVENT VIBRATION OF THE TUBE WILL BE INSTALLED. | | | | |

| | | ~ F~P E\/\!\\\\\ | ~~! ! ^ \ | T. (TC NR 20061110006) |
|---------------------------------------|--------------|------------------|-----------------------|--------------------------------|
| | BESENT TO ME | (= =()= = \/ \\ | JULIAM THEIR RECITIES | I /IC NR 200611100061 |
| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | 1. (C N (2000 10000 |

| CA080108009 | ROBSIN | LYC | LINK | DAMAGED |
|-------------|------------|------------|-------|----------|
| 1/8/2008 | R44RAVENII | IO540AE1A5 | B5642 | THROTTLE |

(CAN) WHILE CONDUCTING AN INSPECTION, IT WAS NOTED THAT THE BEARING LOOKED TO BE SEPERATED FROM THE LINK. THE LINK WAS REMOVED AND INDEED IT WAS. THE LINK AND NEW WASHERS (SB-62) WERE INSTALLED AND NO OTHER ISSUES WERE NOTED. WHILE CONDUCTING RECENT THROTTLE LINKAGE WASHER INSTALLATION, WE ALSO NOTED THAT SOME OF THE LINKS HAD LITTLE SURFACE DAMAGE ON OTHER LINKS PRESB WASHER INSTALLATION. (TC NR 20080108009)

| CA071214010 | ROBSIN | LYC | ROD END | SEPARATED |
|-------------|------------|------------|---------|------------------|
| 12/14/2007 | R44RAVENII | IO540AE1A5 | A9333 | THROTTLE CONTROL |

(CAN) ENGINE HAD HIGH IDLE, TRYED TO ADJUST AND WAS UNABLE TO BRING IDLE BELOW 64 PERCENT ENG RPM. INSPECTED THROTTLE LINKAGE AND FOUND ROD END BRG OUTER HOUSING SEPARATED FROM STAKED IN SPHERICAL BEARING. POSSIBLE LOST OF ENGINE CONTROL UNDER QUICK POWER CHANGES. REPLACED ROD END AND RECTIFIED DEFECT. (TC NR 20071214010)

| CA071114004 | ROBSIN | LYC | SHROUD | CRACKED |
|-------------|------------|------------|--------|---------|
| 10/5/2007 | R44RAVFNII | IO540AF1A5 | C16932 | HEATER |

(CAN) THE PILOT SMELLED EXHAUST FUMES IN THE CABIN WHILE IN CRUISE FLIGHT. THE PILOT THEN CLOSED THE HEATER CONTROL AND OPENED THE VENTS FOR FRESH AIR. THE PILOT THEN FLEW BACK TO THE BASE FOR THE ENGINEER TO INSPECT. THE ENGINEER FOUND A CRACK IN THE EXHAUST SYSTEM INSIDE THE HEAT SHROUD AT THE ELBOW WHERE THE EXHAUST EXITS THE MUFFLER. THE EXHAUST SYSTEM WAS THEN REPLACED WITH A NEW PART. (TC NR 20071114004)

| CA071120002 | SAAB | GE | COMPRESSOR | STALLED |
|-------------|------|-------|------------|---------|
| 11/15/2007 | 340B | CT79B | | ENGINE |

(CAN) TAKEOFF ROLL HAD NO PROBLEMS, BUT WHEN CHANGING THROTTLE SETTING FROM CLIMB POWER TO CRUISE POWER THE LT ENGINE EXPERIENCED A COMPRESSOR STALL. THEN THE A/C YAWED, THEN ANOTHER COMPRESSOR STALL OCCURRED AND THE (ENGINE) OVER TEMP`D. LITE FOR THE ITT CAME ON, THE PILOTS THEN SHUT THE LT ENGINE DOWN AND RETURNED TO AIRPORT ON THE RT ENGINE. (TC NR 20071120002)

| CA061201002 | SCWZER | SCWZER | SPAR | CRACKED |
|-------------|---------|---------|---------|---------|
| 11/29/2006 | SGS233A | 33700K3 | 33700K5 | RUDDER |

(CAN) DURING THE COMPANY 12 YEAR STRUCTURAL INSPECTION AND REPAIR PROGRAM (SIRP), A CRACK WAS FOUND IN ON RUDDER SPAR ON THE OUTER LT EDGE OF THE UPPER HINGE ATTACH POINT. LPI INSPECTION WAS USED TO VERIFY THE CRACK (TC NR 20061201002)

| CA061201003 | SCWZER | SCWZER | SPAR | CRACKED |
|-------------|---------|---------|---------|---------|
| 11/29/2006 | SGS233A | 33700K3 | 33700K5 | RUDDER |

(CAN) DURING THE COMPANY 12 YEAR STRUCTURAL INSPECTION AND REPAIR PROGRAM (SIRP), A CRACK WAS FOUND ON THE RUDDER SPAR ON THE OUTER LT EDGE OF THE UPPER HINGE ATTACH POINT. (TC NR 20061201003)

| 901012008 | SKRSKY | PWA | DOOR | DEPARTED |
|-----------|--------|-------|--------------|----------|
| 2/17/2008 | S58T | PT6T6 | S16206327957 | MAIN |

DURING POSTFLIGHT INSP, AFTER LANDING, MAINT DISCOVERED CABIN DOOR WAS MISSING. INSP OF AC FOUND NO DAMAGE OR MISSING COMPONENTS OTHER THAN DOOR. REPLACEMENT DOOR WAS INSTALLED AND OPS CHECKED WITH NO DISCREPANCIES NOTED TO AIRFRAME, DOOR MOUNTING, STRUCTURE AND DOOR OPERATION. AC WAS RETURNED TO SERVICE.

| CA071204008 | SKRSKY | GE | | BEARING | OVERHEATED |
|----------------|-----------------|----------------|------------------|--------------------|--------------------|
| 11/29/2007 | S61N | CT581402 | S613566300 | | GEARBOX |
| (CAN) ON FIRST | FLIGHT OF THE D | AY. AIRCRAFT V | VAS GROUND TAXII | NG TO TAKE OFF ARE | A WHEN GROUND CREW |

NOTICED SMOKE FROM TAIL ROTOR DRIVE INTERMEDIATE GEAR BOX AREA. AIRCRAFT WAS SHUT DOWN, AND INSPECTION REVEALED OVERHEATING IN THE INPUT BEARING AREA. SIKORSKY AND OVERHAUL SHOPS ADVISED, AND ARE INVESTIGATING CAUSE. THIS IS A REOCCURANCE OF PREVIOUS FAILURE. IN BOTH CASES GEAR BOX OIL LEVEL WAS FOUND TO BE SATISFACTORY. (TC# 20071204008)

| CA071126010 | SKRSKY | GE | GEARBOX | MAKING METAL |
|-------------|--------|----------|------------|--------------|
| 11/22/2007 | S61N | CT581402 | S613566300 | MAIN ROTOR |

(CAN) INTERMEDIATE GEAR BOX CHIP LIGHT ILLUMINATED IN FLIGHT. AFTER LANDING CHIP PLUG INSPECTION CONFIRMED METAL CONTAMINATION, AS WELL AS PAINT DISCOLORATION WAS NOTED IN THE INPUT BRG AREA. ASSY WILL BE SENT TO OH SHOP FOR INVESTIGATION. (TC NR 20071126010)

| CRSCW1R075K | SKRSKY | PWA | SKRSKY | SPAR | CRACKED |
|-------------|--------|------|--------|---------------|-----------|
| 2/21/2008 | S76B | PT6* | | 7610105017045 | T/R BLADE |

DURING A ROUTINE INSP, A SLIGHT, OCCASIONAL CLICK WAS HEARD WHILE FLEXING TAIL ROTOR BLADE. BLADE ASSY (P/N 76101-05501-042, S/N A245-00153) WAS REMOVED FOR PRECAUTIONARY MEASURES AND SENT FOR INSP/EVALUATION. UPON DISASSEMBLY AND INSP, SPAR WAS FOUND TO HAVE CRACKS COMING FROM ELIPITICAL PLUG AREA. SPAR WAS SUBSEQUENTLY CHANGED, BLADE INSPECTED AND RETURNED TO SERVICABLE CONDITION. SCRAPED SPAR TOTAL TIME WAS 2905.8 HOURS. THIS IS THE SECOND SPAR WE HAD CRACKED.

| CA071115007 | SKRSKY | BEARING | SPALLED |
|-------------|--------|-----------|-------------|
| 11/14/2007 | S76C | SB2151107 | M/R GEARBOX |

(CAN) MGB REMOVED DUE TO MAKING METAL, THE ABOVE BEARING WAS FOUND TO BE SPALLED (TC NR 20071115007)

| CA071205002 | SNIAS | TMECA | WINDSHIELD | CRACKED |
|-------------|--------|-----------|------------|---------|
| 12/3/2007 | AS350* | ARRIFI 1R | 3501262334 | COCKPIT |

(CAN) DURING PREFILGHT INSP, CRACKS WERE DISCOVERED ON LT WINDSHIELD TECH TOOLS PLASTICS P/N 350126231 AND RT WINDSHIELD TECH TOOLS PLASTICS P/N 3501-2623-1. BOTH LT AND RT WINDSHIELDS WERE CRACKED 4.5 TO 5 INCHES LONG ON BOTTOM EDGE. THE AIRCRAFT HAND FLOWN THE PREVIOUS DAY IN TEMPERATURES OF -30 DEGREES C AND HAD BEEN HANGERED OVERNIGHT. (TC NR 20071205002)

| CA080104003 | SNIAS | TMECA | TRIM TAB | UNSERVICEABLE |
|-------------|--------|-----------|--------------|---------------|
| 12/31/2007 | AS350B | ARRIFI 1B | 355A12003114 | TAIL ROTOR |

(CAN) WHILE PERFORMING A BRIDGING INSPECTION ON AN A/C PREVIOUSLY LEASED TO A DIFFERENT COMPANY, AD 2007-0138-E WAS BEING C/O. SECTION OF MISSING PAINT NOTED ON AREA REQUIRING INSPECTION IAW ASB 05-00.40(IB ATTACHMENT POINT OF T/E TAB). A CRACK WAS NOTED THROUGH VISUAL INSP, AND THE T/R ASSY REMOVED FROM A/C FOR FURTHER EVALUATION. AD HAD BEEN SIGNED OUT BY PIC PRIOR TO PERFORMING FERRY FLIGHT TO OUR BASE. T/R ASSY WAS INSTALLED ON THIS AIRCRAFT 19.7 HRS PRIOR TO DISCOVERY OF DEFECT. BLADE ASSY SENT TO MFG FOR FURTHER EVALUATION (TC NR 20080104003)

| CA080107001 | SNIAS | LYC | BLADE | CRACKED |
|-------------|---------|---------|--------------|------------|
| 1/7/2008 | AS350B2 | LTS101* | 355A12004008 | TAIL ROTOR |

(CAN) ON DAILY INSPECTION, A CRACK IN THE TRAILING EDGE OF THE TIP OF THE TAILROTOR ASSY WAS FOUND. THE CRACK WAS APPROX .5 INCH LONG FROM TIP OF BLADE LEADING TO T/E ON A DIAGONAL. SUSPECT THIS CRACK, IF LEFT, WOULD HAVE CAUSED THE TRAILING EDGE CORNER APPROX .7500 OF AN INCH TO DEPART FROM TIP OF THE BLADE. THIS WAS FOUND ON BOTH BLADES ONE BLADE MORE SEVERE THAN THE OTHER. THERE WAS NO INDICATION OF A TAILROTOR IMPACT. (TC NR 20080107001)

| CA071218008 | SNIAS | TMECA | PIN | LOOSE |
|-------------|---------|-----------|----------------|-----------|
| 12/13/2007 | AS350B2 | ARRIEL1D1 | 22719TK060052X | SEAT BELT |

(CAN) DURING THE PROCESS OF AN ICC FOLLOWING HEAVY MAINT, THE ENGINEER NOTICED THAT THE RETAINING PIN P/N 22719TK060052X FOR THE PILOT`S SEAT BELT OB FITTING WAS LOOSE OR ABOUT TO FALL OUT OF THE FLOOR SUPPORT. UPON INVESTIGATION IT WAS FOUND THAT THE RIVET THAT NORMALLY HOLDS

THE SEAT BELT PIN IN PLACE HAD BEEN REPLACED, POSSIBLE DURING A VERTICAL REFERRENCE WINDOW INSTALLATION. THE RIVET WAS REPLACED WAS BUCKED TO THE NORMAL SIZE IAW STANDARD PRACTICES AND DID NOT PROTRUDE LONG ENOUGH TO HOLD THE PIN IN PLACE. UPON NOTICING THIS OCCURANCE WE CHECKED (4) OTHER AIRCRAFT ON SITE AND FOUND 2 MORE WITH THE SAME PROBLEM. IN THE IPC 53.10.20.000 (04-06) PAGE 02.00 FIGURE 1 SHOWS THE PIN AS DRILLED AT THE END MAYBE FOR A COTTER PIN. THE PINS THAT WE LOOKED AT WERE NOT DRILLED BUT USED THE RIVET TO RETAIN THE PIN FROM FALLING OUT OF SUPPORT. THE VERTICAL REFERENCE KIT WE ARE USING IS THE DART. (TC NR 20071218008)

| CA071210006 | SNIAS | TMECA | CONTROLLER | MALFUNCTIONED |
|-------------|---------|-----------|------------|-----------------|
| 12/7/2007 | AS350B2 | ARRIEL1D1 | RPR2B | HYD ACCUMULATOR |

(CAN) DURING FIRST GROUND RUN FOLLOWING A MAJOR 12 YEAR INSP, THERE WAS SIGNIFICANT HYDR FLUID LOSS IN THE AREA OF THE MAIN ROTOR ACCUMULATORS. THE HELICOPTER HAD BEEN AT 70 PERCENT GROUND IDLE FOR APPROX 3-4 MINUTES. THE HELICOPTER WAS SHUTDOWN IMMEDIATELY AND INSPECTED. ALL (3) ACCUMULATORS UNDERWENT VARYING DEGREES OF DEFORMATION (EXPANSION) DUE EXCESSIVE HYDR PRESSURE. HYDR FLUID LOSS WAS ISOLATED TO THE AREA OF THE COLLECTOR ASSEMBLIES MOUNTED ON THE SIDES OF THE SERVOS, SPECIFICALLY AT THE ACCUMULATOR AND ELECTRO VALVE JOINTS. IT IS SUSPECTED THE PRESSURE REGULATING VALVE OF THE HYDR MANIFOLD STUCK, PREVENTING FLUID FROM RETURNING TO TANK. THIS ALLOWED PRESSURE TO BUILD BEYOND REGULATED PRESSURE. FURTHER INVESTIGATION IS BEING CARRIED OUT AND THE HYDR MANIFOLD WILL BE SENT OUT FOR TESTING. (TC NR 20071210006)

| CA071120007 | SNIAS | TMECA | BLOWER MOTOR | UNSERVICEABLE |
|-------------|---------|-----------|---------------------|---------------|
| 11/10/2007 | AS350B2 | ARRIEL1D1 | 350A5310520351 | OIL COOLER |

(CAN) HEARD NOISE AFTER LANDING AND SHUT THE AIRCRAFT DOWN. UPON INSPECTION FOUND THE BLOWER ROTOR COMPLETELY GONE. REPLACED THE ROTOR, DUCT AND MOTOR TO GET THE AIRCRAFT SERVICEABLE. (TC NR 20071120007)

| CA070713002 | SNIAS | TMECA | DRIVE SHAFT | OUT OF ROUND |
|-------------|---------|-----------|--------------|--------------|
| 7/12/2007 | AS350B2 | ARRIEL1D1 | 350A34021006 | TAIL ROTOR |

(CAN) UNABLE TO BALANCE SHORT SHAFT, RUNOUT CHECK OF FWD END OF SHAFT WAS .017 INCH. PREVIOUS T-CHECK REVEALED A RUNOUT OF .009 INCH WITH TROUBLES OF SAME NATURE AND SHORT SHAFT WAS INSPECTED AND FOUND TO BE BENT, AND REPLACED WITH BALANCE OBTAINED. (TC NR 20070713002)

| CA071120006 | SNIAS | TMECA | HOSE | BURST |
|-------------|---------|-----------|--------------|--------|
| 11/6/2007 | AS350B2 | ARRIEL1D1 | 704A34402034 | HEATER |

(CAN) HEATER LINE FROM ENGINE FOUND BURST AND NOT SUPPLYING ALL THE HEAT TO THE CABIN. (TC NR 20071120006)

| CA071115005 | SNIAS | TMECA | TAIL ROTOR | OUT OF BALANCE |
|-------------|---------|-----------|--------------|----------------|
| 11/15/2007 | AS350B2 | ARRIEL1D1 | 355A12004008 | |

(CAN) UNABLE TO BALANCE T/R WITH OUT LARGE AMOUNTS OF BALANCE WEIGHT. T/R WOULD GO OUT OF BALANCE EVERY 3 TO 4 DAYS. SENDING T/R TO MFG FOR EVALUATION. (TC NR 20071115005)

| CA070529002 | SNIAS | TMECA | SNIAS | SPHERICAL STOP | MISMANUFACTURED |
|-------------|---------|-----------|---------|----------------|-----------------|
| 5/28/2007 | AS350B2 | ARRIEL1D1 | AS350B2 | 704A3363320851 | M/R HEAD |

(CAN) ALL SPHERICAL STOPS WHERE REPLACED DURING A 500 HRS INSPECTION. PILOT REPORTED UNCONTROLLED STICK MOVEMENT DURING HYDRAULIC OFF TEST. WITH HYDRAULIC ON, NO PROBLEM WAS REPORTED. DURING TROBLESHOOTING THIS PROBLEM IT WAS FOUND THAT ONE OF THE SPHERICAL STOP BEARINGS PREVIOUSLY INSTALLED HAD A MFG DESIGN PROBLEM. THE PRESET ANGLE ATTACH BOLT WHICH ATTACH TO THE STARFLEX WAS FOUND NOT IAW SPEC WHICH INDUCED AN UNCONTROLLED STICK MOUVEMENT DURING HYDRAULIC OFF TEST. THIS PART WAS RETURNED TO MFG FOR EXCHANGE UNDER WARRANTY (TC NR 20070529002)

| CA061005012 | SNIAS | TMECA | LEVER | DAMAGED |
|-------------|---------|-----------|--------------|------------------|
| 10/5/2006 | AS350B2 | ARRIEL1D1 | 355A27008200 | LOAD COMPENSATOR |

(CAN) LOAD COMPENSATOR ARM WAS FOUND TO HAVE ELONGATED ATTACHMENT HOLES. NEW LEVER INSTALLED. THE OLD LEVER HAS BEEN SENT TO MFG FOR EVALUATION AS TO WHAT MAY BE THE CAUSE OF THIS. SUSPECT EXCESSIVE FORCE APPLIED BY THE ACCUMULATOR. (TC NR 20061005012)

| CA080121005 | SNIAS | TMECA | GUIDE | WORN |
|-------------|---------|-----------|--------------|------------|
| 1/18/2008 | AS350B2 | ARRIEL1D1 | 350A37000402 | SWASHPLATE |

(CAN) DURING A SCHEDULED 100 HOUR INSPECTION THE COLLECTIVE LEVER WAS RAISED TO EXAMINE THE SWASHPLATE GUIDE. IT WAS DISCOVERED THAT THE SELF ADHESIVE TAPE APPLIED TO THE GUIDE WAS BUNCHED UP BETWEEN THE ROTATING SWASHPLATE AND THE SWASHPLATE GUIDE. THE ROTATING SWASHPLATE CONTACTED THE SWASHPLATE GUIDE LEAVING LIGHT WEAR MARKS AROUND THE CIRCUMFERENCE. THE SWASHPLATE GUIDE WAS REPLACED AND WILL BE SENT TO THE MFG FOR EVALUATION AND SERVICEABILITY CHECK. (TC NR 20080121005)

| CA070529008 | SNIAS | TMECA | PRESSURE SWITCH | DEFECTIVE |
|--|---------|-----------|-----------------|------------------|
| 5/28/2007 | AS350B2 | ARRIEL1D1 | MA12401 | HYDRAULIC SYSTEM |
| (CAN) SWITCH REMAINED OPEN AND WOULD NOT ACTIVATE THE HYDRAULIC PRESSURE WARNING HORN. (TC NR 20070529008) | | | | |

| CA080123004 | SNIAS | TMECA | SPHERICAL STOP | CRACKED | |
|---|---------|----------|----------------|-----------------|--|
| 10/9/2007 | AS350B3 | ARRIEL2B | 704A33633208 | MAIN ROTOR HEAD | |
| (CAN) PROTEUDING BURRER FOUND COMING OUT, IN THE MIDDLE OF CTOR (TO NE 20000402004) | | | | | |

| (CAN | I) PROTRUDING RUBBER FOUND | COMING OUT | IN THE MIDDLE OF | STOP. (TC NR 20080123004) |
|------|----------------------------|------------|------------------|---|
| (| ., | | | • · • · · (· • · · · · = • • • · = • • · ·) |

| CA080123005 | SNIAS | TMECA | FREQ ADAPTER | BLISTERED |
|-------------|---------|----------|--------------|-----------------|
| 10/9/2007 | AS350B3 | ARRIEL2B | 350431182703 | MAIN ROTOR HEAD |

(CAN) ON INSP OF MAIN ROTOR HEAD AT THE END OF THE DAY ENGINEER FOUND BLISTERS ON THE SIDE OF ONE FREQUENCY ADAPTER. BLISTERS WHERE FOUND TO BE BEYOND LIMITS: REPLACED ALL (3) ADAPTERS. (TC NR 20080123005)

| CA070425005 | SNIAS | TMECA | | BEARING | WORN |
|-------------|---------|----------|--------------|---------|----------------|
| 4/25/2007 | AS350B3 | ARRIEL2B | 350A35109223 | 593733 | HYDRAULIC PUMP |

(CAN) DURING DI, HYDRAULIC PUMP PULLEY WAS NOTICED TO BE LOOSE LATERALLY WHEN MOVED SIDE TO SIDE. WHEN MAIN ROTOR WAS ROTATED HYDRAULIC PUMP PULLEY WAS FOUND NOT SPINNING SQUARE AND THE HYDRAULIC BELT WAS OFF SET FROM CENTER. HYDRAULIC PUMP PULLEY WAS REMOVED AND BEARING INNER RACE WAS FOUND SPINNING ON SHAFT AND WORE A SUBSTANTIAL GROOVE IN PULLEY SHAFT. (TC NR 20070425005)

| CA071123002 | SNIAS | TMECA | TMECA | | MALFUNCTIONED |
|-------------|---------|-----------|-----------|--|---------------|
| 11/23/2007 | AS350B3 | ARRIEI 2B | ARRIEI 2R | | |

(CAN) PILOT IN CRUISE FLIGHT, APPROX 2000 FEET, EXPERIENCED ENGINE PROBLEMS WITH ANNUNCIATOR INDICATIONS . PROCEEDED WITH SUCCESSFUL AUTOROTATION LANDING IN FIELD. REST IS UNDER INVESTIGATION (TC NR 20071123002)

| CA071211008 | SNIAS | LYC | WYE PIPE | LEAKING |
|-------------|---------|-------------|----------|-------------|
| 12/10/2007 | AS350BA | LTS101600A2 | | FUEL SYSTEM |

(CAN) THE AC WAS BEING REFUELED OUT SIDE WHEN FUEL STARTED POURING ON THE GROUND FROM SOMEWHERE IN THE FUEL TANK AREA. FURTHER INVESTIGATION REVEALED THE (Y) CONNECTION OF THE FUEL SUPPLY LINE FROM THE 2 BOOST PUMPS HAD SIMPLY FALLEN OUT OF THE FUEL LINE GOING UP TO THE FUEL FILTER ON THE TRANSMISSION DECK. THE 2 GEAR CLAMPS THAT SECURE THE HOSE TO THE (Y) FITTING WERE SECURED TIGHT ENOUGH THAT THE CLAMPS FELT TIGHT AND COULD NOT BE ROTATED ON THE HOSE BUT WHEN CHECKED WITH A SCREWDRIVER, THEY COULD BE TIGHTENED BY A FEW TURNS. DUE THE NATURE OF THE ROUTING AND CLAMPING OF THE HOSE, THERE WAS A NATURAL TENDENCY FOR THE Y FITTING TO PULL DOWN ON THE UPPER HOSE. THE HOSE WAS REPOSITIONED AND CLAMPED PROPERLY TO ALLOW FOR A LITTLE SLACK. ALL OTHER CLAMPS ON THE FUEL SYSTEM WERE CHECKED FOR TIGHTNESS. THE 2 CLAMPS HOLDING THE FUEL HOSE ON THE INLET OF THE A/F FUEL FILTER WERE TIGHT ENOUGH THAT THEY COULD NOT BE

ROTATED ON THE HOSE BY HAND BUT WHEN A SCREW DRIVER WAS USED TO CHECK THE TORQUE, ONE CLAMP NEEDED 3 TURNS TO BE TIGHT AND THE OTHER WAS NOT ADJACENT TO THE FILTER INLET PIPE. ALL CLAMPS WERE CHECKED AND TIGHTENED ON THIS AC. THE SAME CHECK WAS MADE ON AN AC THAT IS CURRENTLY BEING RE-BUILT AND ON WHICH THE FUEL SYS WAS INSTALLED A MONTH AGO. I WAS FOUND THAT MOST CLAMPS ON THE FUEL SYS HAD ALSO LOST SOME CLAMPING EFFECT ON THE HOSES AND ALL NEEDED TO BE RE-TIGHTENED. ALL CLAMPS ON ALL FLEXIBLE HOSES ON ALL OUR AC WERE IMMEDIATELY CHECKED FOR TIGHTNESS, MANY OF WHICH NEEDED TO BE TIGHTENED. (TC NR 20071211008)

<u>CA071221001</u> SNIAS TMECA WIRE INCORRECT 12/19/2007 AS350BA ARRIEL1 HYD CONTROL

(CAN) DURING AN AC CONVERSION IAW SB 01.00.50 THE HYD CONTROL WIRE WAS FOUND NOT CRIMPED PROPERLY IN SPLICE CONNECTOR. WIRE DH5E PULLED OUT OF SPLICE DURING HANDLING. WIRE CONNECTOR SHOW NO SIGN OF PROPER CRIMP. THE INSTALLATION OF THIS SPLICE IS MANDATED BY EASA AD F-2004-089 (ASB 29.00.07). WIRE CONNECTION FAILURE RENDERS THE PILOT UNABLE TO PERFORM EMERGENCY PROCEDURES LISTED IN THE FLIGHT MANUAL SECTION 3.3 (HYD FAILURE) AND SECTION 3.1 PARA 5 (TAIL ROTOR CONTROL FAILURE) THE LACK OF PROPER CRIMPING WAS ALSO FOUND ON AC. (TC NR 20071221001)

<u>CA071212014</u> SNIAS TMECA STRAINER CONTAMINATED 12/11/2007 AS350BA ARRIEL1B 704A34629013 HYD SYSTEM

(CAN) STRAINER WAS INSPECTED AND FOUND CONTAMINATED WITH PARTICLES FOREIGN MATTER AND SLIVERS OF MATERIAL FROM THE O-RING, P/N MS28775-016, WHICH WAS HARD AND BRITTLE. THE MFG MM REQUIRES INSPECTION AND CLEANING OF THE STRAINER ONLY WHEN THE MANIFOLD IS REPLACED DURING A HYDRAULIC PUMP REPLACEMENT, THERE IS NO SCHEDULED INTERVAL FOR CLEANING. ALL AC IN THE COMPANY FLEET WILL BE INSPECTED ON OR BEFORE THE NEXT 100 HOUR INSPECTION AND THIS TASK WILL BE ADDED TO 500 HOUR T-INSPECTION. THE MFG TECH REP HAS BEEN INFORMED OF THE FINDINGS OF THIS INSPECTION. (TC NR 20071212014)

<u>CA070831001</u> SNIAS TMECA RING LOOSE 7/26/2007 AS350D ARRIEL1D M/R HEAD

(CAN) DURING ENGINE SHUTDOWN THE MAIN ROTOR BLADE DROOP STOP RING FELL DOWN THE MAST ASSY. THE HARDWARE HOLDING THE RING BRACKET ALL CAME OFF ALLOWING THE RING TO FALL DOWN THE MAST TO THE SWASHPLATE DRIVE LINK. SINCE THIS WAS REPORTED, IT HAS BEEN DETERMINED THAT THIS IS NOT THE FIRST TIME THE HARDWARE FOR THE DROOP RING HAS COME LOOSE AFTER INSTALLATION. THE MAINTENANCE REVIEW BOARD HAS NOTIFIED TO SEE IF ANY ADDTION MAINTENANCE REQUIREMENTS ARE NECESSARY. (TC NR 20070831001)

 2008FA0000069
 SOCATA
 HINGE
 CRACKED

 1/23/2008
 TBM700
 T700A5510065000
 STABILIZER

HINGE FOUND CRACKED IN AREA OF CONCERN IDENTIFIED IN AD 99-07-11, PREVIOUS INSPECTION 100 HOURS EARLIER SHOWED NO SIGN OF CRACKING.

<u>CA080124005</u> SWRNGN GARRTT NUT BACKED OUT 1/22/2008 SA226TC TPE33110UA 8937373 GEAR SHAFT

(CAN) A/C CAME IN TO THE MAINT HANGER DUE TO HAVING A CHIP LIGHT COME ON IN THE COCKPIT. INSP FROM MAINT NOTICED THAT THERE WAS METAL ON THE CHIP DETECTOR OF ENGINE P-54121. AT THAT TIME THE ENGINE WAS FORWARDED TO THE ENGINE SHOP FOR FURTHER INSP. THE ENGINE WAS DISMANTLED TO FIND THAT THE HIGH SPEED PINION NUT (HSP) PN 893737-3, WAS STARTING TO BACK OFF FROM ITS OVERHAULED TORQUE SPECIFICATIONS. THE HSP WAS OVERHAULED ON THE 22 JULY 05. THE NUT WHEN TORQUED IS SUPPOSED TO HAVE A PIN PN S815N4-0-200 STAKED BESIDE THE NUT TO PREVENT IT FROM BACKING OFF. UPON FURTHER INSPECTION OF THE PIN AREA IT DOES NOT LOOK LIKE THERE WAS EVER A PIN INSTALLED AT THE TIME OF INSP, WITH THE NUT BACKING OFF OF THE HSP THIS COULD HAVE CAUSED A CATASTROPHIC FAILURE OF THE ENGINE IF THE NUT DROPPED INTO THE PLANETARY GEARS. (TC NR 20080124005)

<u>CA071218006</u> SWRNGN GARRTT WINDSHIELD CRACKED
12/14/2007 SA226TC TPE33110UA 2719442004 COCKPIT

(CAN) UPON ENGINE START AND TAXI THE F/O HEATED WINDSCREEN CRACKED. THE GLASS CRACKED FROM THE BOTTOM UP. THE CREW TURNED AROUND AND SHUTDOWN. MAINT REMOVED AND REPLACED THE WINDOW. OUR COMPANY CONTINUES TO HAVE PROBLEMS WITH THESE HEATED WINDSHIELDS AND IN SPEAKING WITH OTHER OPERATORS IN THE RECENT PAST THEY HAVE HAD SIMILAR FAILURES OF THESE WINDSHIELDS. MOST OF THE FAILURES ARE IN FLIGHT FAILURES. THE TOTAL TIME ON THE WINDSHIELD WAS DETERMINED TO BE 4884.1 BUT MAY BE SLIGHTLY HIGHER AS THIS WINDSHEILD WAS INSTALLED ON THE AC PRIOR TO PURCHASE. REGARDLESS OF TOTAL TIME THE FAILURE MODE OF THESE WINDOWS IS A SAFFTY CONCERN. (TC NR 20071218006)

| CA071121003 | SWRNGN | GARRTT | SWITCH | BURNED |
|-------------|---------|---------|--------|-----------------|
| 11/15/2007 | SA227AC | TPE331* | AN3230 | BUSS TIE |

(CAN) PILOT REPORTED STRANGE SMELL COMING FROM LT BLEED IN COCKPIT. AFTER TROUBLESHOOTING BY MAINTENANCE IT WAS FOUND THAT LT ESSENTIAL BUS TIE SWITCH WAS CRACKED AND THE WIRE CONNECTORS GOING TO THE LT CB PANEL HAD BECOME OVERHEATED AND MELTED THE HEAT SHRINK AND THE RUBBER PROTECTIVE BOOT AT THE TERMINALS. BUS TIE SWITCH REPLACED AND BOTH CONNECTORS REPAIRED. (TC NR 20071121003)

| CA071203008 | SWRNGN | GARRTT | FRCHLD | BUTTON | SHORT |
|-------------|---------|-----------|--------|--------|-------|
| 11/26/2007 | SA227AC | TPE33111U | | | MLG |

(CAN) UPON DISASSEMBLY OF A MLG FOR OVERHAUL AND SERVICING IT WAS NOTICED THE CYLINDER PISTON TEFLON BUTTONS WERE UNDER FLUSH WITH THE PISTON. THE TEFLON BUTTONS AND PINS ALLOW THE PISTON TO SLIDE INSIDE THE CYLINDER WITHOUT SCORING AND WITHOUT ALLOWING FLUID BLOWBY. UPON INSPECTION OF THE PISTON IT WAS NOTICED THE HOLES WERE TOO DEEP FOR THE TEFLON BUTTONS AND PINS AND ALLOWED FOR SCORING OF THE CYLINDER WALLS. WHEN COMPARED TO A KNOWN CERTIFIED PART, IT DID NOT MEET THE SAME MEASUREMENTS. ACTUAL ENGINEERING DRAWINGS WITH SPECIFIC MEASURMENTS WERE NOT AVAILABLE TO CONFIRM PISTON MEASURMENTS. LIKELY THIS PART IS SUBSTANDARD BUT THE POSSIBILITY OF BEING AN UNAPPROVED PART EXISTS. TOTAL TIME ON THE PISTON IS UNKNOWN AND IAW AIRCRAFT MFG IS TO BE MAINTAINED ON CONDITION.

| CA071204011 | TCRAFT | CONT | ATTACH FITTING | BROKEN |
|-------------|--------|------|----------------|--------|
| 11/23/2007 | BC12D | A658 | | MLG |

(CAN) WHILE INSTALLING NEW STRUTS IAW APPLICABLE STC, THE LT REAR ATTACH FITTING SEPERATED (BROKE IN HALF) AS VERY SLIGHT DOWNWARD PRESSURE WAS APPLIED TO THE LIFT STRUT. INSPECTION OF THE FAILED PART SHOWED A PRE EXISTING CRACK UNDER THE LOCKNUT. (TC NR 20071204011)

| FAILED PART SHOWED A PRE EXISTING CRACK UNDER THE LOCKNUT. (TC NR 20071204011) | | | | | | | | |
|--|--------|---------|--------------|------------|--|--|--|--|
| CA070309002 | UROCOP | TMECA | BLADE | CRACKED | | | | |
| 3/8/2007 | EC120B | ARRIU2F | C621A1006103 | MAIN ROTOR | | | | |
| (CAN) BLADE CRACKED BY TRAILING EDGE OF TRIM TAB, IB SIDE. (TC NR 20070309002) | | | | | | | | |

CA071114007 UROCOP TMECA UROCOP CHIP DETECTOR SHORTED

10/12/2007 EC120B ARRIU2F BM1021 M/R GEARBOX

(CAN) MAIN GEARBOX MAGNETIC CHIP PLUG SHORTED INTERNALLY. (TC NR 20071114007)

<u>CA080110001</u> UROCOP PWA BATTERY BOX CRACKED
1/8/2008 EC135P1 PW206B L243M3810103 FUSELAGE

(CAN) DURING A PREFLIGHT CHECK IT WAS NOTED THAT THE BATTERY TRAY WAS CRACKED. REPLACED WITH NEW PART. (TC NR 20080110001)

<u>CA071205005</u> UROCOP PWA COWLING BURNED 12/2/2007 EC135P1 PW206B ENGINE

(CAN) DURING START, AN ENGINE COMPARTMENT FIRE WAS NOTED. DAMAGE IS EVIDENT TO COWLING, ENGINE AND ENGINE COMPARTMENT. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071205005)

CA080121004 ZLIN LYC BAFFLE CRACKED

| 1/18/2008 | Z242L | AEIO360A1B6 | L24266710000 | EXHAUST |
|--------------------------------|-----------------|-----------------------------|---------------------|----------------|
| (CAN) INTERNAL 20080121004) | . BAFFLE ATTACH | WELD WAS FOUND CRACKED DURI | NG A 100 HOUR INSPE | ECTION. (TC NR |

 CA071211002
 ZLIN
 LYC
 CONTROL CABLE
 FRAYED

 12/10/2007
 Z242L
 AEIO360A1B6
 Z4243130000
 TE FLAPS

(CAN) THE FLAP CENTER CABLE WAS FOUND FRAYED DURING REGULARLY SCHEDULED MAINTENANCE. (TC NR 20071211002)

END OF REPORTS