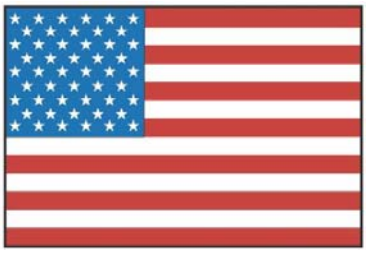
U.S. Department of Transportation
Federal Aviation Administration

AFS-600
Regulatory Support Division

ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



ALERT NUMBER 359

JUNE 2008

CONTENTS

AIRPLANES

AMERICAN CHAMPION 1
BEECH 1
BOEING 2
CESSNA 4
DASSAULT 6
PIPER 6

HELICOPTERS

BELL 8
LYCOMING 10

ACCESSORIES

KELLY 10

AIR NOTES

INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE 14
IF YOU WANT TO CONTACT US 15
AVIATION SERVICE DIFFICULTY REPORTS 15

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

AMERICAN CHAMPION

American Champion: 7FC; Cracked Wing Spar; ATA 5711

An A&P mechanic writes, "This aircraft was being modified to include the installation of wing spar inspection hole kits as supplied by DBA Rainbow Flying Service per STC number SA00527SE. A portion of the wing leading edge skin was removed and the wing spar was visually inspected as specified in the installation instructions supplied with the STC. During this visual inspection, a crack was observed on the top surface of the right wing front spar *(P/N 5-146R)*. The crack originated at the inboard end of the aft plywood reinforcement plate. Said reinforcement plate is located on the aft side of the front spar, under the lift strut attachment fitting. The crack progressed outboard along the top surface of the spar at a slight forward angle—towards the forward plywood reinforcement plate. *(It does not pass through...)* bolt holes or nail holes. The aircraft maintenance records indicate a wing spar inspection had previously been completed in accordance with AD 2000-25-02. This aircraft showed no evidence of accident/incident wing damage subsequent to said inspection."

Part Total Time: 3,177.0 hours.

BEECH

Beech: 58; Broken Rod-End on Nose Gear Retract Tube; ATA 3220

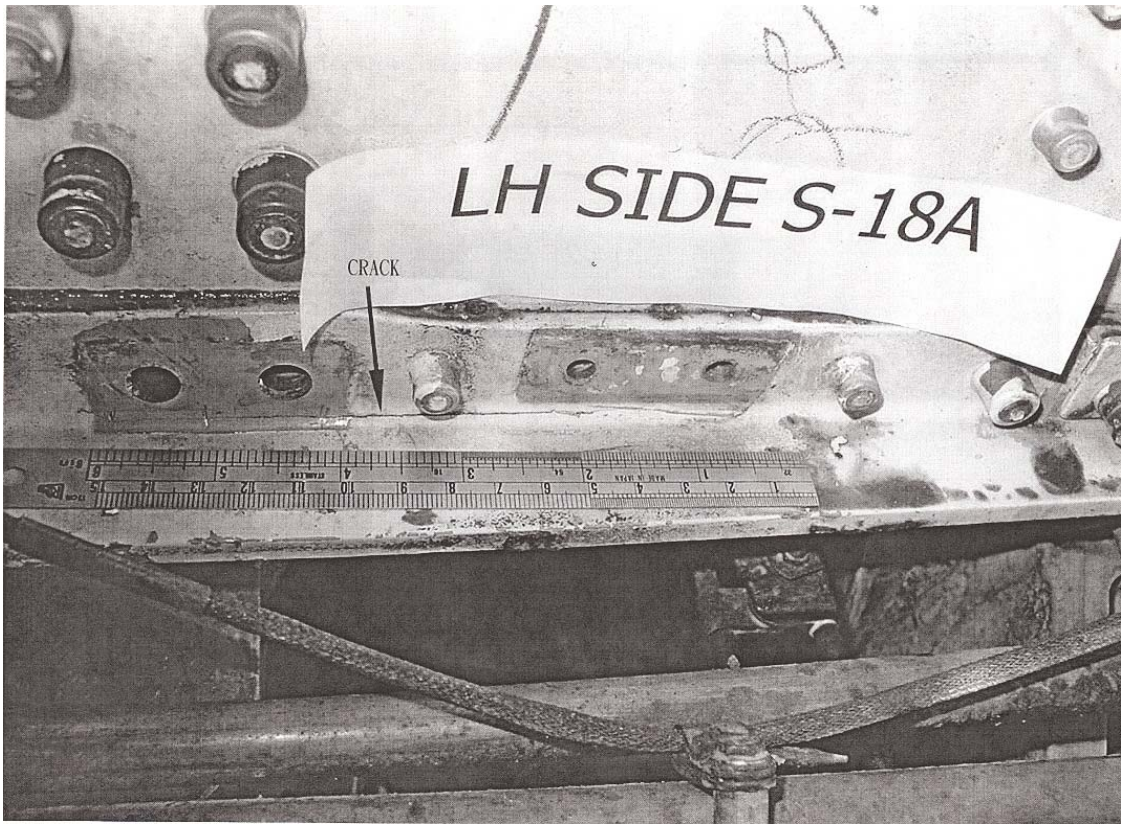
An unknown submitter provides the following description and photograph. "The nose gear would not lock down because of a broken rod-end *(P/N ADNE5-323)* on the nose gear retract rod. This rod-end connects the retract rod to the aft nose gear drag brace. *(This defect)* resulted in a nose gear-up landing."

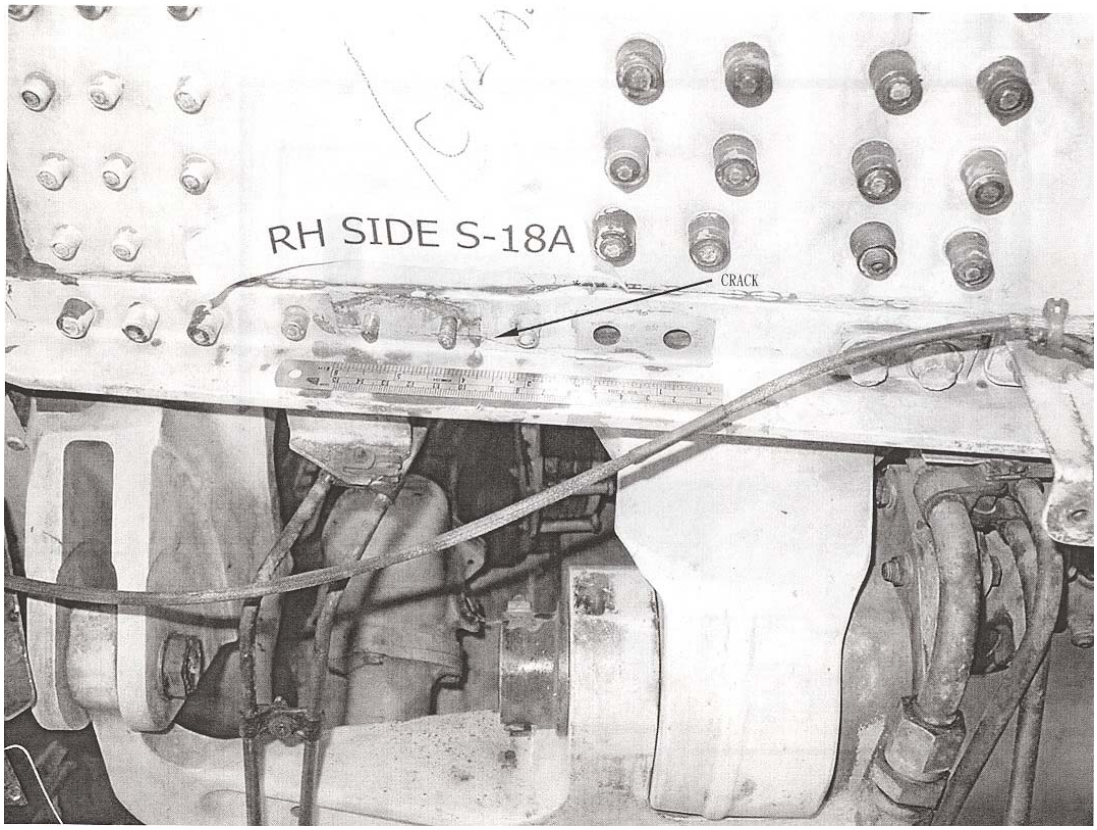
Part Total Time: 2,000.0 hours (approximately).

BOEING

Boeing: B727-200; Cracked Fuselage Stringers; ATA 5313

A quality assurance manager for an FAA certificated repair station *(located in Asia)* submitted this defect report and photographs. In part, the writer states, "This aircraft was input to Air Asia for a 4C check *(time/inspection type)* and CPCP *(corrosion prevention control program inspection)*. During the CPCP *(activity)* visual inspection found a five inch long crack on both L/H and R/H fuselage stringers (S18A) between BS940 and BS945 *(bulkhead station reference points)*."


LH SIDE S-18A
CRACK


RH SIDE S-18A
CRACK

(A specific stringer part number was not provided with this submission. "Thank-you" goes to the Q.A. manager for his photos.)

Part Total Time: (unknown).

CESSNA

Cessna: 172D; Broken Ball-End on Steering Rod; ATA 3250

(A note for the occasional, uninitiated reader: there are numerous apparent and real contradictions with many terms in all disciplines. The Beech entry above references a broken "rod-end" on a retract "tube." This Cessna entry states a "...ball-end" on a steering "rod." Typically, convention has "tubes" as being hollow and "rods" as being solid or...less hollow. "Rod-end" can be a generic reference to any of various connection designs, allowing the tube or rod to transmit push-pull, torsion, rotary, and other forces. These terms are also frequently very specific, and may be included with the formal part name as given by the manufacturer. Here the submitter references the typical push-pull tube specifically as a "rod," and demonstrates alternative intentions of the design. See the submitter's note in the second paragraph. Had it not been for the close proximity of these two descriptions, this arm-chair mechanic would never have considered how confusing tubes and rods could be to other readers—Ed.)

About this Cessna 172D our anonymous mechanic writes, "The L/H side McFarlane steering rod's ball-end broke after 215.92 hours time since new (P/N MC543022-1). *(The rod shown in figure 1...)* attaches to the right rudder bar assembly (P/N 0411306-14).

"*(Failure)* of this rod-end *(ball)* left the R/H steering rod as the only steering *(input)* for the nose gear. (Note: the 'rods' are not solid rods; they are designed to push and not pull—they slip inside when pulled.) It requires both rods to steer *(the aircraft)*; the R/H pedal and L/H rod will turn the nose to the right, and the L/H pedal and R/H rod will turn it to the left.

"On landing roll-out this plane began to drift to the left—the L/H rudder pedal was disconnected from the nose gear—it would not respond. *(Airflow over the rudder had also diminished*), causing the aircraft to drift more and more to the left with no response. As the pilot applied brakes the aircraft continued its left drift off the runway, then the nose gear collapsed.

"This aircraft had 3,321.80 hours total time. The McFarland FAA/PMA replacement Cessna part only had 216.92 hours. The rod-end *(ball)* had been cracked for a period of time *(prior to this failure as evidenced)* by rust in the crack—the remaining metal looked crystallized (see figure 2).

"After an extensive inspection of the broken parts it was found that the Cessna rod-ends (P/N S1107-3) also had thread cracks with rust. These rod-ends thread into the nose gear steering collar (Cessna P/N 0743011-4). The ball-end attaches to the nose gear steering rod (either the Cessna P/N 0543022-1, or in this case the McFarlane P/N MC0543022-1). Rod-end (P/N S1107-3) is a hollow, threaded shaft style (see figure 3) that threads into the steering collar. Both the L/H and R/H rod-ends failed at the jam-nut (see figure 4). There was no entry *(into the log books)* on the replacement of the L/H or R/H rod-ends (P/N S1107-3).

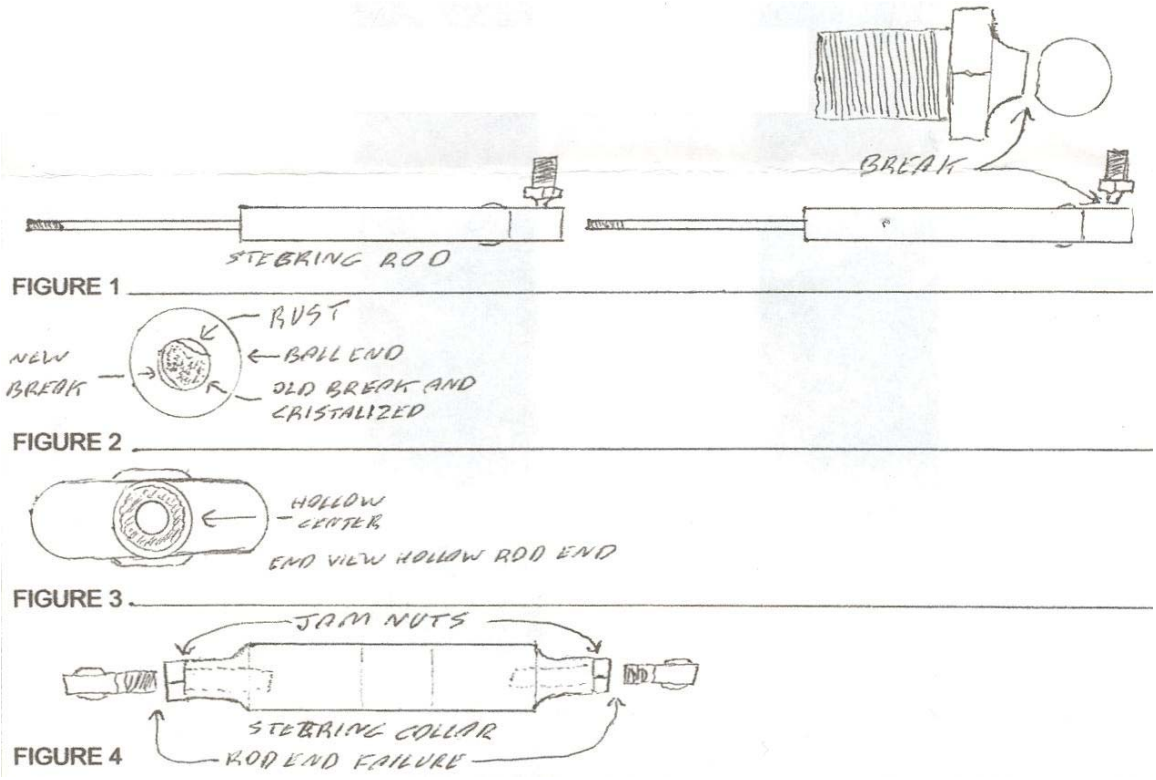
"The aircraft had been in a *(previous)* accident where the plane undershot the landing area and nosed over in snow. There was damage and repairs to the wings—and to the belly skin immediately behind the nose gear and firewall. This Cessna (1986-88) was equipped with a Landis Nose Fork (Model PA28-206) using an 8.50 x 6 nose wheel, tire, and tube. After *(the accident)* it had the Cessna heavy duty nose fork and a 6.00 x 6 wheel, tire, and tube.

"The Cessna rod-ends (P/N S1107-3) in question have a total time in service of 3,321.80 hours. Cessna has no time life on the hollow rods; Beechcraft also uses them, but with a time life of 2000 hours in service.

"My recommendations:

“Cessna Parts—replace the hollow rod-ends (P/N S1107-3) with a solid rod-end (P/N MS21151-3 or equivalent) by field approval, thereafter every 4,000 hours. If not...then replace the *(original)* hollow rod-ends every 2,000 hours or whenever damage to either the nose gear or aircraft could cause extra stress—even if there is no visible sign of damage.

“Landis Nose Fork—(with the 8.50 x 6 wheel, tire, and tube installed)—replace the hollow rod-ends (P/N S1107-3) with a solid rod-end (P/N MS21151-3 or equivalent) by field approval, thereafter every 3,000 hours. If not...then replace the *(original)* hollow rod-ends every 1,500 hours or whenever damage to either the nose gear or aircraft could cause extra stress—even if there is no visible sign of damage.”



A search of the FAA Service Difficulty Reporting System data base revealed at least three additional listings. *Thanks for the analysis effort and the terrific hand drawings—Ed.)*

Part Total Time: 216.92 hours.

Cessna: 750; Ruptured Nose Wheel Steering Hose; ATA 3250

A repair station technician provides the following narrative. “The nose wheel steering (centering) flexible hydraulic hose ruptured where the hose body is swaged to a 45 degree fitting attached to a bulkhead fitting in the nose wheel well. This condition allowed the loss of hydraulic fluid in the ‘A’ system. This aircraft landed without incident. The ruptured hydraulic hose *(P/N AE1011889G0116)* is currently made of Kevlar and is being replaced with a stainless steel braided version, along with other hoses attached to the nose gear.”

A search of the FAA Service Difficulty Reporting System data base t*his P/N also hits three additional times.)*

Part Total Time: 7,516.0 hours.

DASSAULT

Dassault: Falcon 50; Damaged Flap-Well Wire Bundles; ATA 5797

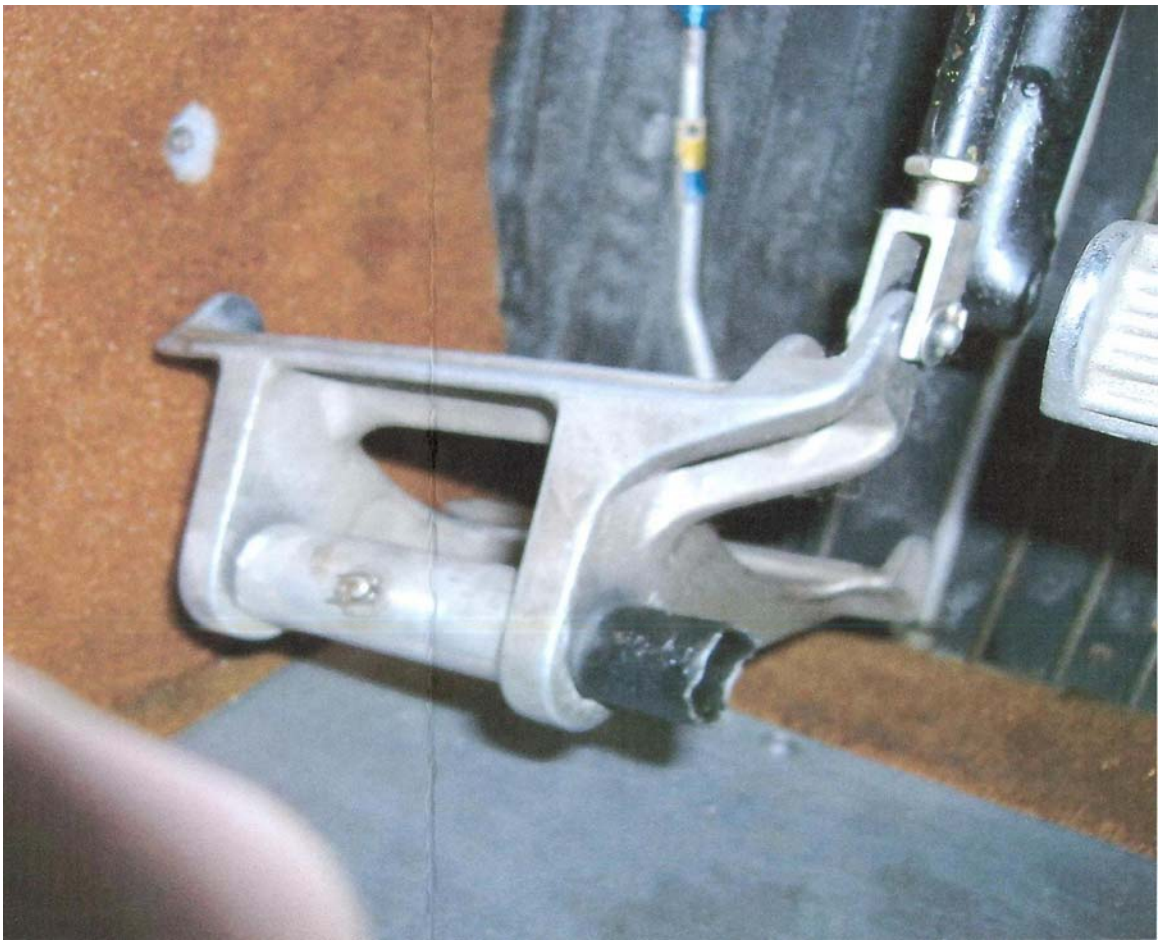
“During a routine block inspection,” says a mechanic, “a visual inspection of the wings revealed multiple wires showing damage in the flap-well area forward of the inboard flaps. The cause of damage to the wire bundles F50B602101A1 and F50B602102A1 could not be determined. Some showed signs of heat damage and others seemed frayed or chaffed—or chewed. No system malfunctions were noted by the flight crew prior to the inspection. The aircraft was on an international flight prior to the inspection. The wires were replaced IAW the manufacturer’s maintenance manuals and standard practices (and additional shielding was applied). Inspection of other aircraft in the fleet showed no similar damage. *(My)* recommendation is to shield these wire bundles better and to pay more attention to flap well areas during preflight inspections.” *(Landings noted at 7,945.)*

Part Total Time: *(aircraft)* 10,534.6 hours.

PIPER

Piper: PA24-260; Failed Rudder Torque Tube; ATA 2720

An unidentified submitter states, “During maintenance run-up and taxi check (after maintenance) the left rudder torque tube broke off *(P/N 2223900)*. It appeared to have been cracked for some time prior to failing during taxi. It is suggested the area be cleaned and inspected with a 10X magnifying glass. A borescope with a side view end could also be inserted in the tube to inspect if from the inside. If this had happened during landing and had broken at initial brake application, the aircraft would probably have departed the runway.



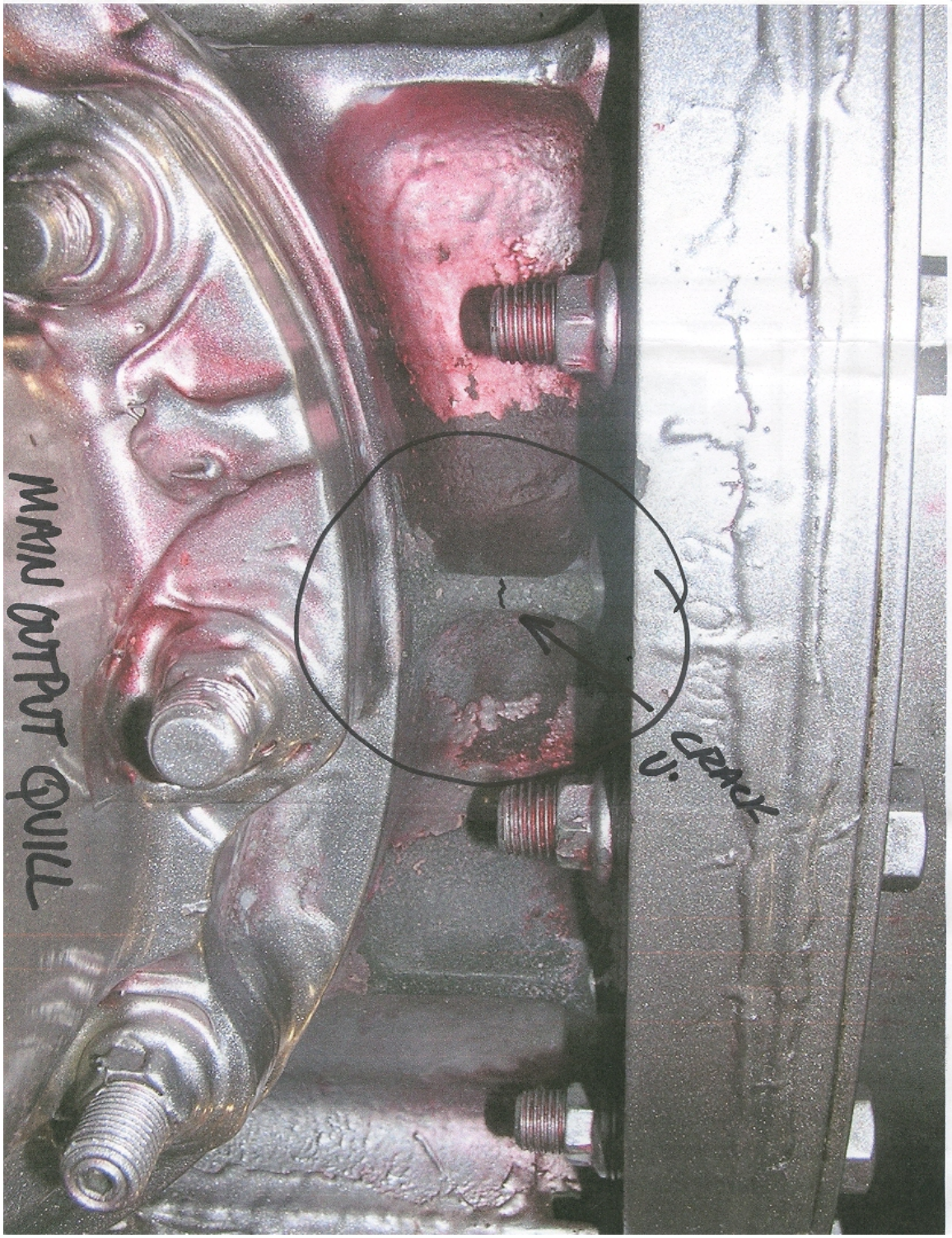
Part Total Time: 3,404.0 hours.

HELICOPTERS

BELL

Bell: UH1F; Cracked Gearbox Web Casting; ATA 6320

A technician for a helicopter operator writes, "A crack was found on the main gear box (transmission) in the vertical cast webbing above the engine to transmission drive quill *(P/N204-040-016-005)*. The military technical manual allows ¼ inch radius/polish into the webbing. This crack has been found on three transmissions on other aircraft, with one penetrating the gear box *(sufficiently)* to leak fluid."



Part Total Time: (unknown).

LYCOMING

Lycoming: O-320-D2A; Sinking Carburetor Float; ATA 7322

A mechanic and pilot from Tennessee says, “The engine died on final to the airport. I pumped the throttle and the engine started running. When I retarded the throttle the engine again died. I could not get the engine to restart on the ground. Then engine was started the next day showing a fuel flow of 11 to 12 gallons per hour at idle.
I removed the carburetor and *(found)* one pontoon of the plastic 90 per cent full of fuel.” *(Aircraft is a Van’s RV-9A. Precision Airmotive carburetor, model number LW-1586; float P/N 30-804. Included note says the “...seam failed at the glue line.”)*

Part Total Time: 33.0 hours.

ACCESSORIES

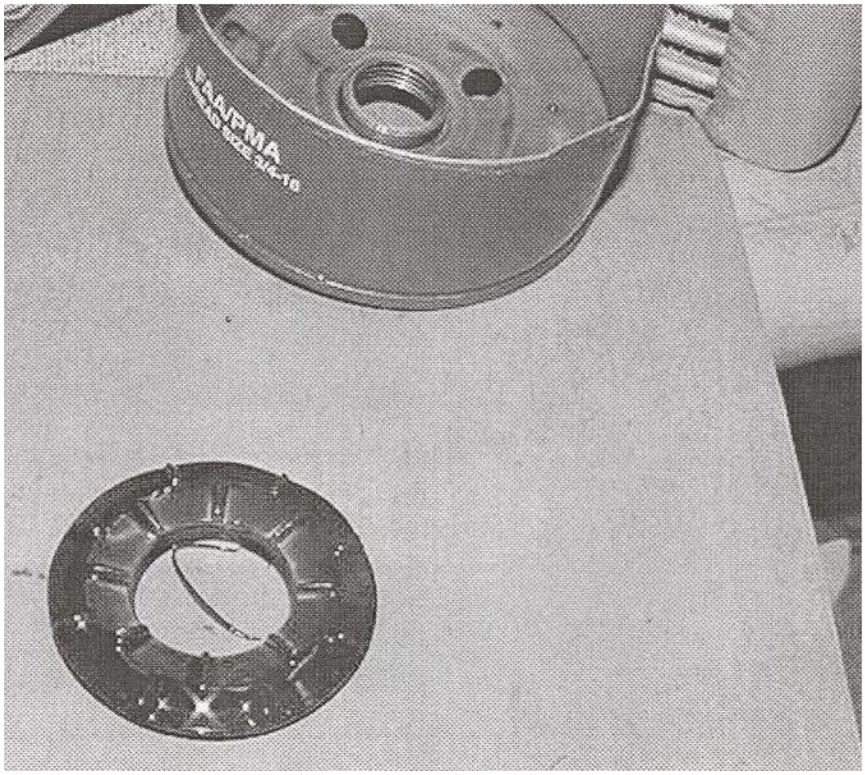
KELLY

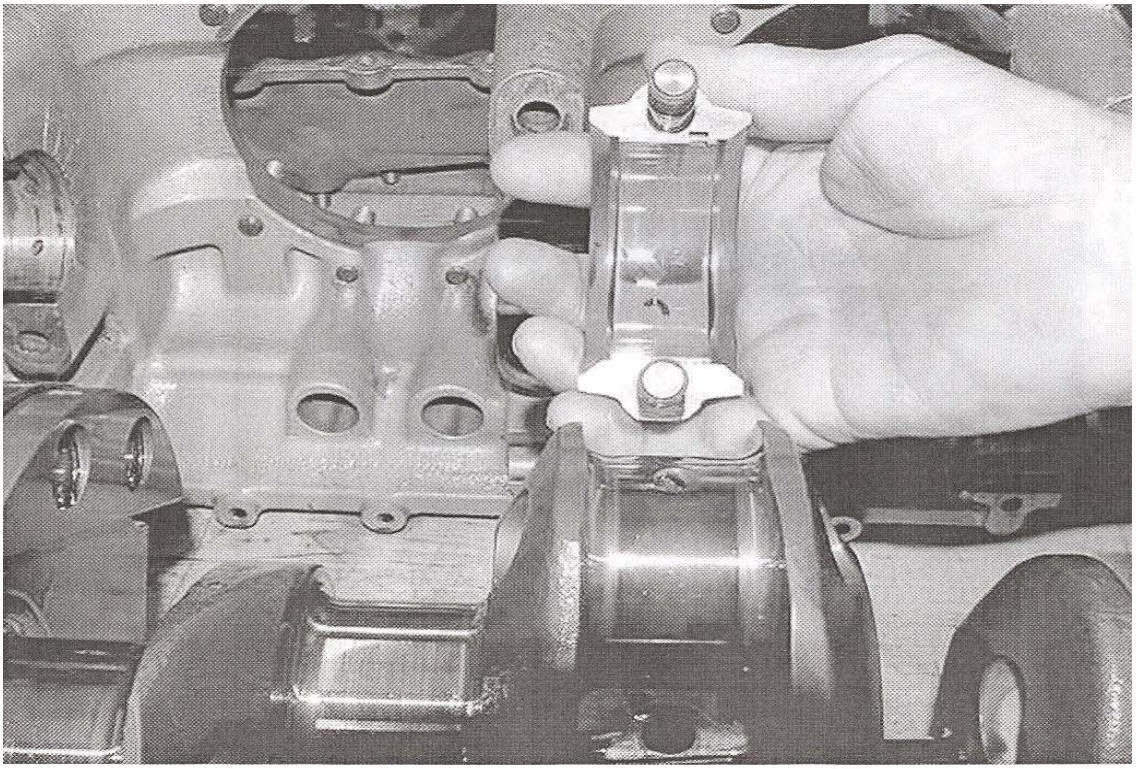
Kelly Oil Filter: ES48109; Defective Filter; ATA 8550

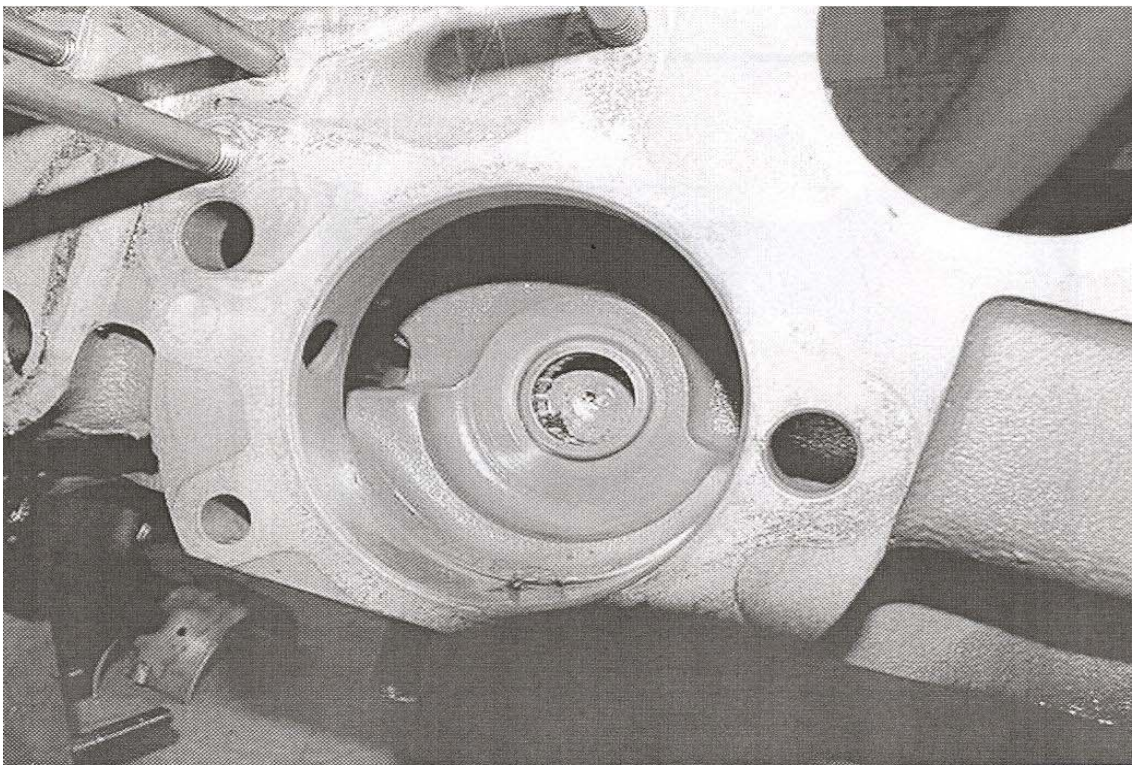
(This defect report references a Continental IO-520M engine.)

A technician for an operator writes, “On disassembly of this engine rubber debris was found in the oil passage that feeds the starter adapter pilot bearing—the passage was plugged. Upon splitting the engine case debris was found in the oil passage to the #3 main bearing. Both oil cooling jets to this bearing were plugged with rubber debris. The right *(jet)* was plugged with a piece 5/8 inch long, the left a piece 3/16 inch. One piece of rubber debris was located in the oil passage to the #5 bearing.

"This engine had utilized Kelly Aerospace oil filters (P/N ES48109) prior to the engine disassembly. *(Opening this engine's Kelly filter indicated ...)* the top rubber seal within the filter was damaged—and this damage may have occurred at the time of the filter manufacture. *(Any debris)* from this filter would not be caught by the filter *(material)* because the rubber seal is located on the oil exiting portion of the filter. This debris...may restrict the lubrication to some parts of the engine and eventually result in an engine failure."


FAA/PMA





(Thanks for the photo effort—Ed.)

Part Total Time: (unknown).

AIR NOTES

INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE

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

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

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

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

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

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

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

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

The SDRS and iSDR web site point of contact is:

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

IF YOU WANT TO CONTACT US

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

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

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

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

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

AVIATION SERVICE DIFFICULTY REPORTS

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

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

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

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

Federal Aviation Administration

Service Difficulty Report Data

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

Control Number	Aircraft Make	Engine Make	Component Make	Part Name	Part Condition
Difficulty Date	**Aircraft Model**	**Engine Model**	**Component Model**	**Part Number**	**Part Location**
2008FA0000297				ADAPTER	MISMANUFACTURED
4/26/2008					OIL SYSTEM

ORDERED SPIN ON OIL FILTER ADAPTER MODEL NR (TAFL). MACHINED PART WAS NOT COMPLETELY FINISHED. AN IMPORTANT HOLE IN THE OIL PASSAGE DID NOT CONNECT WITH THE OIL DELIVERY LINE BECAUSE IT WASN'T DRILLED DEEP ENOUGH. MFG HAS BEEN COOPERATIVE AND AGREES TO REPLACE, HOWEVER IF ANY OF THESE DEFECTIVE PARTS HAVE BEEN INSTALLED IN THIS CONDITION, ENGINE FAILURE COULD RESULT. (SN 28653L)

CA080225015				BEARING	EXCESS PLAY
2/25/2008			106006169		MAGNETO

(CAN) MAG WAS RECEIVED FOR A 500 HR INSP. BEFORE THE MAG WAS DISASSEMBLED THE ROTATING MAGNET (ROTOR) WAS SPUN TO CHECK FOR BRG ROUGHNESS OR END PLAY. SOME SIDE PLAY WAS NOTICED (MFG DOES NOT ALLOW ANY) AND THE END PLAY WAS MEASURED AT .003 INCH. THE BRGS WERE INSPECTED, SHIMS WERE ADDED, THE REST OF THE 500 HOUR INSP WAS CARRIED OUT, AND THE MAG WAS RETURNED TO SERVICE. THE MAG HAD 473.8 HRS SINCE ITS PREVIOUS 500 HR INSP. (TC NR 20080225015)

CA080201002				SPRING	MISMANUFACTURED
2/1/2008			107902010	1051324	IMPULSE COUPLING

(CAN) MAGNETO WAS RECEIVED ON AN ENG FOR INSP, DUE TO VIBRATION. MAG ROTOR WAS SPUN BY HAND TO INSPECT BEARINGS AND WHEN THE IMPULSE COUPLING FLYWEIGHTS CONTACTED THE STOP PINS THE FORCE REQUIRED TO WIND UP THE SPRING WAS FOUND TO BE LESS THAN NORMALLY REQUIRED. THE MAG HAD A 500 HOUR INSP PERFORMED 116.2 HOURS AGO AND IT APPEARS THAT THE SPRING WAS IMPROPERLY WOUND AT THAT TIME. REPAIR OF MAG IS BEING HELD OFF PENDING ESTIMATE OF ENTIRE ENGINE. (TC NR 20080201002)

CA080214008				ELT	CRACKED
2/13/2008				0010009C	CABIN

(CAN) BATTERY CASE FOUND CRACKED DURING ANNUAL RECERTIFICATION. BATTERY KNOWINGLY NEVER DROPPED. UNKNOWN CAUSE OF CRACK, LOCATED AT BOTTOM OF THE CASE IN ANTENNA STOWAGE CHANNEL. (TC NR 20080214008)

CA080220003				BEARING	WORN
2/20/2008					MAGNETO

(CAN) MAG WAS RECEIVED FOR INSPECTION DUE TO ENGINE OVERSPEED. WHEN THE ROTATING MAGNET (ROTOR) WAS SPUN BY HAND THERE WAS NOTICEABLE SIDE PLAY IN THE BEARINGS. THE END PLAY WAS MEASURED AND FOUND TO BE .003 NR. MFG HAS A LIMIT OF NO SIDE PLAY ALLOWED. THE MAG WAS INSPECTED AND NO OTHER DEFECTS WERE FOUND. SHIMS WERE ADDED TO THE BEARINGS TO THE PROPER PRELOAD AND THE MAG WAS TESTED AND RETURNED TO SERVICE. THIS WAS A FACTORY NEW MAGNETO WITH ONLY 121.5 HOURS IN SERVICE. (TC NR 20080220003)

CA080418003				TUBE	FAILED
3/18/2008				302120402	MLG TIRE

(CAN) MULTIPLE FAILURES OF INNER TUBES ON VARIETY OF COMPANY C-208 MAIN WHEELS. TUBES FAIL IN DIFFERENT WAYS FROM PIN HOLES TO 18 INCH SPLITS. THERE HAVE BEEN NO FOREIGN OBJECTS FOUND IN THE

AFFECTED TIRES AND ASSY PRACTICES HAVE BEEN OBSERVED TO ENSURE CORRECT PROCEDURES ARE BEING FOLLOWED. TUBES ARE PURCHASED FROM A VARIETY OF SUPPLIERS AND ORIGINATE IN DIFFERENT COUNTRIES. (TC NR 20080418003)

CA080324001			TUBE	DEFECTIVE
3/24/2008			600X6	TIRE

(CAN) BELIEVE TO HAVE ENCOUNTERED A DEFECTIVE TIRE TUBE BATCH. THE TUBES IN QUESTION ARE MFG 6.00 X 6, SOLD UNDER BATCH NR 032358. WE HAVE HAD 5 INSTANCES OF TIRE TUBE FAILURE OUT OF 6, WITH THE CONCERNED TUBE BATCH. (TC NR 20080324001)

CA080325011			ROTOR	MISMANUFACTURED
3/25/2008			ALV9510R	ALTERNATOR

(CAN) WHEN INSTALLING DRIVE HUB, THE CUSTOMER NOTICED COTTER PIN COULD NOT BE INSERTED WITH NUT TORQUED AND NUT ALIGNED WITH COTTER PIN HOLE LOCATION. WHEN INSPECTED IN-HOUSE THE COTTER PIN HOLES WERE FOUND DRILLED TOO FAR DOWN THE SHAFT. ALSO THE O-RING BETWEEN THE SPACER AND WASHER UNDER THE DRIVE HUB WAS FOUND TO BE TOO BIG TO ALLOW THE WASHER TO SEAT AGAINST THE SPACER. HAS INFORMED US THAT THEY HAD SOME ROTORS LEAVE THEIR FACILITY WITH THIS ISSUE AND THE ALTERNATOR WAS RETURNED TO THEM FOR WARRANTY PURPOSES. (TC NR 20080325011)

CA080325013		ALLSN	SHAFT	CRACKED
3/20/2008		250C47B	23038136	TURBINE

(CAN) ENGINE NOISE WAS NOTED AT GROUND IDLE. THE NOISE WAS REDUCED WHEN IN HOVER BUT CONSISTENTLY APPEARED DURING SPOOL DOWN TO GROUND IDLE. THE ENGINE WAS REMOVED AND RETURNED TO THE OVERHAULER FOR REPAIR. THE NOISE WAS CONFIRMED DURING AN ENGINE TEST WITH VIBRATION MEASUREMENTS. ENGINE DISMANTLE AND INSP ON THE 26TH OF FEBRUARY 2008 REVEALED A CRACKED POWER TURBINE SHAFT. THE CRACK LOOSENED THE FIT AT THE TURBINE 4TH WHEEL CURVIC COUPLING AND CAUSED FRETTING AND THE LOSS OF A COUPLING TOOTH. PT OUTER SHAFT P/N 23038136, S/N KU95766 AND 4TH TURBINE WHEEL RETURNED TO MFG FOR INVESTIGATION. (TC NR 20080325013)

CA080222002		CONT	CYLINDER	UNSERVICEABLE
2/21/2008		O470*	655475A	ENGINE

(CAN) FACTORY NEW CYLINDER ASSY RECEIVED FROM MFG WITH INCORRECT EXHAUST AND INTAKE VALVE GUIDES INSTALLED. INTAKE GUIDE P/N 655166 AND EXHAUST GUIDE P/N 636242 ARE REQUIRED IAW SB 04-11. UNABLE TO DETERMINE P/N OF GUIDES ACTUALLY INSTALLED IN NEW CYLINDER. SUSPECT INTAKE AND EXHAUST VALVE GUIDES INSTALLED IN WRONG LOCATIONS. CYLINDER SUBJECT TO WARRANTY THROUGH MFG. (TC NR 20080222002)

CA080418001	PWA	VIKING	RHEOSTAT	MELTED
4/16/2008	PT6A50	72510090005	REE75R	RESISTANCE COILS

(CAN) CONCERNED WITH THE USE OF RHEOSTAT (PN REE75R) FOR REPLACEMENT OF RHEOSTAT SWITCH 20465-1. THE SB 7-33-21 CALLS THE NEW RHEOSTAT, A RHEOSTAT SWITCH BUT IT DOES NOT HAVE AN "OFF" POSITION LIKE THE ORIGINAL RHEOSTAT SWITCH HAD. AS SUCH, WHEN IT IS TURNED TO THE SIMULATED OFF POSITION, IT IS STILL IN CIRCUIT (EVIDENCED BY THE FACT THAT THE UTILITY LIGHT HAS A SLIGHT GLOW) AND DISSIPATING MAXIMUM WATTAGE. THE HEAT IS TRANSFERRED THROUGH THE RHEOSTAT SHAFT CAUSING KNOB PN MS91528-1C1-B TO BECOME DEFORMED AND HOT TO THE TOUCH. ALSO, THE PANEL MATERIAL ADJACENT TO THE RHEOSTAT SHOWS EVIDENCE OF HEAT DAMAGE (CRACKING/DISCOLORATION). HAVE CONDUCTED BENCH TESTS ON THIS RHEOSTAT TO SIMULATE THE AC CIRCUIT AND HAVE FOUND THE TEMP TO EXCEED 125 DEGREE C IN AN OPEN AREA. IN AN ENCLOSURE THE TEMP ROSE ABOVE 160 DEGREE C. (TC NR 20080418001)

CA080328001		PWA	BEARING RACE	MAKING METAL
3/20/2008		PW123	310703301	NR 15

(CAN) EIR PW100 2008-025, METAL CONTAMINATION OF THE RGB OIL SYS. (TC NR 20080328001)

CA080222003	AEROSP	PWA	WIRE HARNESS	CHAFED
2/20/2008	ATR42300	PW120		BOOST PUMP

(CAN) DURING TROUBLESHOOTING OF A FUEL BOOST PUMP SNAG, MAINT DISCOVERED THE RELATED WIRING HARNESS HAD BEEN DAMAGED DUE TO CHAFING ON THE EDGE OF THE FIXED CARGO LINER PANEL AT THE AFT SIDE OF THE 91VU SHELF. THE CARGO LINER PANEL IS PART OF THE FIRST AIR CLASS C INTERIOR, STC SA22-122 NOT AN OEM COMPONENT. THE WIRING WAS REPAIRED AND CLEARANCE ADJUSTED TO PRECLUDE FURTHER ISSUE. THE COMPANY HAS INITIATED A FLEET CAMPAIGN TO INSPECT FOR SIMILAR ANOMALIES. (TC NR 20080222003)

CA080213008	AEROSP	PWA	PUMP	MALFUNCTIONED
2/8/2008	ATR42300	PW120		HYD SYSTEM

(CAN) SHORTLY AFTER DEPARTURE, THE CREW OBSERVED A LOW PRESSURE INDICATION ON THE BLUE HYDR SYS. THE AC RETURNED TO POINT OF DEPARTURE AND LANDED WITHOUT FURTHER PROBLEM. MAINT REPLACED THE BLUE SYS PUMP AND THE AC WAS RETURNED TO SERVICE. (TC NR 20080213008)

CA080221009	AEROSP	PWA	EEC	FAULTED
2/14/2008	ATR72202	PW124B		ENGINE

(CAN) DURING CRUISE, AN EEC FAULT WAS FOLLOWED BY AN ENGINE POWER LOSS AND VIBRATION. THE CREW SHUT THE ENGINE DOWN AND DIVERTED THE FLIGHT ACCORDINGLY. POST FLIGHT INVESTIGATION REVEALED BOTH OIL FILTERS TO BE CONTAMINATED WITH DEBRIS AND THAT THE PROPELLER COULD NOT BE ROTATED. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20080221009)

CA080220006	AEROSP	PWA	PWA	TURBINE BLADES	FRACTURED
2/6/2008	ATR72212	PW127	PW127		ENGINE

(CAN) DURING CLIMB, THE ITT WAS NOTED TO RISE TO 800 DEGREES C, FOLLOWED BY SMOKE IN THE CABIN. THE CREW ELECTED TO SHUTDOWN THE ENGINE AND RETURN TO POINT OF DEPARTURE. POST FLIGHT INSPECTION INDICATED FRACTURED POWER TURBINE BLADES AND EVIDENCE OF OIL LEAKAGE. THE ENGINE WILL BE RETURNED TO MFG FOR INVESTIGATION. UPDATES WILL BE PROVIDED. (TC NR 20080220006)

2008FA0000311	AEROSP	TMECA	LINE	LOOSE
5/2/2008	SA365N1	ARRIEL2C		P2 OIL

ENGINE NR2 P2 LINE TO THE M5 MODULE WORKED LOOSE INFLIGHT RESULTING IN A LOSS OF OIL PRESSURE WITH THE ASSOCIATED WARNING LIGHT LOGIC. ENGINE NR2 WAS SHUTDOWN BY THE PILOT AND A UNEVENTFUL SINGLE ENGINE LANDING WAS ACCOMPLISHED.

2008FA0000312	AEROSP	TMECA	LINE	LOOSE
5/2/2008	SA365N1	ARRIEL2C		P2 OIL

ENGINE NR2 P2 LINE TO THE M5 MODULE WORKED LOOSE INFLIGHT RESULTING IN A LOSS OF OIL PRESSURE WITH THE ASSOCIATED WARNING LIGHT LOGIC. ENGINE NR2 WAS SHUTDOWN BY THE PILOT AND A UNEVENTFUL SINGLE ENGINE LANDING WAS ACCOMPLISHED.

2008FA0000313	AEROSP	TMECA	LINE	BACKED OUT
5/2/2008	SA365N1	ARRIEL2C		P2 OIL

ENGINE NR2 P2 LINE TO THE M5 MODULE WORKED LOOSE INFLIGHT RESULTING IN A LOSS OF OIL PRESSURE WITH THE ASSOCIATED WARNING LIGHT LOGIC. ENGINE NR2 WAS SHUTDOWN BY THE PILOT AND A UNEVENTFUL SINGLE ENGINE LANDING WAS ACCOMPLISHED.

2008FA0000314	AEROSP	TMECA	LINE	BACKED OUT
5/2/2008	SA365N1	ARRIEL2C		P2 OIL

ENGINE NR2 P2 LINE TO THE M5 MODULE WORKED LOOSE INFLIGHT RESULTING IN A LOSS OF OIL PRESSURE WITH THE ASSOCIATED WARNING LIGHT LOGIC. ENGINE NR2 WAS SHUTDOWN BY THE PILOT AND A UNEVENTFUL SINGLE ENGINE LANDING WAS ACCOMPLISHED.

CA080314016	AIRBUS	GE	SWITCH	CONTAMINATED
3/9/2008	A310300	CF680C2*	A275704050400	KRUEGER FLAP

(CAN) DURING CLIMB, ECAM WARNING "FLAP KRUEGER NOT RETRACTED LIGHT" CAME ON. FLIGHT RETURNED TO THE STATION. SFCC INDICATED FAULT COMING FROM THE LT KRUEGER RETRACT SWITCH. MAINT FOUND THE SWITCH BACK SHELL CONTAMINATED WITH WATER. CONNECTOR AND SWITCH CLEANED OUT AND SYS TESTED SERVICEABLE. AC DEPARTED AND SAME SNAG REOCCURRED DURING CLIMB. THE AC RETURNED TO THE STATION AND WAS REMOVED FROM SERVICE FOR TROUBLESHOOTING. DURING INSP, FOUND SLIGHT DAMAGE ON WIRE, 2 INCHES FROM CONNECTOR. WIRE PROTECTION CARRIED OUT IAW ESPM 20-53-00 AND SWITCH ASSY REPLACED. SYS TESTED SERVICEABLE. AC WAS RETURN TO SERVICE WITH NO REOCCURRENCE. (TC NR 20080314016)

CA080314005	AIRBUS	RROYCE	TIRE	FAILED
3/11/2008	A330*	RB211*	542K694	MLG

(CAN)THE AC BLEW THE NR (4) MAIN TIRE ON DEPARTURE. THE FLIGHT CREW ELECTEDTO DIVERT, AND ULTIMATELY LANDED APPROXIMATELY 15000 KGS OVER THE MAXIMUM STRUCTURAL LANDING WEIGHT OF 185000KGS. DURING TAXI, THE NR (3), RT FWD IB MAIN TIRE DEFLATED AND THE AC WAS SUBSEQUENTLY SERVICED BY MAINT, BEFORE BEING ABLE TO POSITION TO THE GATE. INVESTIGATION IS ONGOING. SDR WILL BE UPDATED ACCORDINGLY. (TC NR 20080314005)

CA080128004	AIRTRC	PWA	CONTROL CABLE	STUCK
1/28/2008	AT802A	PT6A67A		RUDDER

(CAN) DURING INSP, THE LT RUDDER CABLE WAS FOUND SNAGGED ON THE WATER RUDDER CABLE PULLEY GUARD. (TC NR 20080128004)

SWDG20085569	AIRTRC	PWC	GOVERNOR	LEAKING
4/14/2008	AT802A	PT6A67AG	311849703	PROPELLER

GOVERNOR HAS EXCESSIVE BETA VALVE OIL LEAKAGE AND ERRATIC TORQUE FLUCTUATION. PART REMOVED AND SENT TO REPAIR STATION FOR EVALVUATION.

SWDG20080024	AIRTRC	PWC	GAS GENERATOR	ERODED
3/19/2007	AT802A	PT6A67AG	310718501	ENGINE

ENGINE REMOVED FOR OVERHAUL EVALUATION. DUE TO THE FINDING OF SEVERE EROSION DAMAGE TO THE 'C' FLANGE AND NUMEROUS BROKEN 'T' BOLTS ON 3 OTHER ENGINES, THE DISSASSEMBLED EXHAUST DUCT AND GAS GENERATOR CASE FLANGES HAVE BEEN PHOTOGRAPHED AND FOUND THAT THIS 4TH ENGINE SUFFERS FROM SIMILAR DAMAGE. IT SHOULD BE NOTED THAT THE MANUFACTURER HAS BEEN NOTIFIED AND THAT THEIR REP HAS TAKEN PICTURES OF THE DAMAGED ENGINES AND HAS TOLD US THAT THE BROKEN BOLTS, 'C' FLANGE DAMAGE, AND P3 AIR LEAKAGE ONTO THE OIL TUBES ARE NOT SAFETY OF FLIGHT ISSUES. IT IS SUGGESTED THAT THE MANUFACTURER IMPLEMENT WARRANTY PROVISIONS FOR THE INCORORATION OF A SEALING RING ON THE -67AG JUST LIKE SIMILAR ENGINES IN THE FAMILY.

SWDG20080113	AIRTRC	PWC	GAS GENERATOR	ERODED
3/19/2007	AT802A	PT6A67AG	310718501	ENGINE

ENGINE PARAMETERS ABNORMAL AND SUBSIQUENT INSPECTION FOUND T5 HARNESS DAMAGED AT ASSEMBLY. IT WAS FURTHER NOTED THAT SUBSTANTIAL MATERIAL LOSS IN THE CENTER BOLT HOLE @ THE SCAVENGE TUBE COUPLING WAS ALLOWING COMPRESSOR AIR TO ERODE THE 'T' BOLT SHANK. MANUFACTURER REP TOOK PICTURES OF DAMAGE AS NOTED ON NOVEMBER 22, 2006 AND HAS YET TO OFFER SUGGESTED CAUSE OR REPAIR SCHEME. THE "WITNESS" MARK OF SURFACE CONTACT OF THE 'C' FLANGES INDICATE NON-UNIFORM ALIGNMENT AXIALY OF THE FLANGE WELDED TO THE CASE. THE MANUFACTURER REPS HAVE FURTHER COMMENTED THAT P3 AIR LEAKAGE IS NOT A SAFETY OF FLIGHT ISSUE AND THAT FLANGE DAMAGE AND BOLT DAMAGE OR LOSS IS NOT A SAFETY OF FLIGHT ISSUE.

SWDG20080016	AIRTRC	PWC	GAS GENERATOR	ERODED
3/18/2007	AT802A	PT6A67AG	310718501	ENGINE

BROKEN 'T' HEAD BOLT SHANK FOUND IN COWLING. MANUFACTURER REP VISITED AND TOOK PICTURES OF ERODED GAP IN THE 'C' FLANGE AT THE SCAVENGE TUBE COUPLING LOCATION WHERE THE BOLT HAD BEEN SEVERED. THE DAMAGE TO THE BOLT, FLANGE MATING SURFACES AND COUPLING ARE CLEARLY NOT THE RESULT OF CORROSION BECAUSE THE SURFACES IN THE AREAS OF DAMAGE ARE CLEAN AND HAVE AN ALMOST

POLISHED APPEARANCE. SIMILAR ENGINES HAVE A SEALING RING INCORPORATED INTO THE FLANGE APPARENTLY FOR THIS VERY REASON. THE MANUFACTURER REPS HAVE STATED THAT THIS EROSION IS UNEXPLAINED AND THEREFORE IS NOT A SAFETY OF FLIGHT ISSUE. THE MACHINING OF THE FLANGES AND INSTALLATION OF SEALING RING WOULD BE A START FOR REPAIRS, AND THE SOLUTION WOULD BE A CLOSE INVESTIGATIO INTO THE FLANGE/WELD ATTACHMENT AT THE PART PRODUCTION LEVEL.

SWDG20080077	AIRTRC	PWC	GAS GENERATOR	ERODED
3/19/2007	AT802A	PT6A67AG	310718501	ENGINE

AS THE 'T' HEAD BOLTS WERE BEING REMOVED FOR HSI, ONE NUT DETACHED FROM THE BOLT SHANK WITH THE THREAD INSIDE THE NUT. CLOSE INSPECTION OF THE ADJACENT BOLT REVEALED SEVERE EROSION (NOT CORROSION OR STRETCH DAMAGE) TO THE BOLT SHANK. IT WAS FURTHER NOTED AND PHOTOGRAPHED BY THE MANUFACTURER REP THAT THE EXHAUST DUCT FLANGE AND GAS GENERATOR FLANGE IN THE BROKEN BOLT AREA HAD MATERIAL LOSS THAT WAS ALLOWING P3 AIR LOSS THAT MAY BE ATTRIBUTED TO THE HIGHER THAN NORMAL OIL TEMP INDICATION ON THE GROUND. THE AIR LEAK IS VENTING ONTO THE SCAVENGE OIL TUBE COUPLING. MANUFACTURER REPS SAY THAT THIS IS AN ISOLATED CASE AND IS NOT A SAFETY OF FLIGHT ISSUE AS THAT THERE ARE MANY MORE BOLTS THAT HOLD 'C' FLANGE TOGETHER.

SWDG08RD0113	AIRTRC	PWC	PWC	SEAL	DEFORMED
5/8/2008	AT802A	PT6A67AG		3030988	RGB

EXCESSIVE OIL LEAKAGE AROUND PROP SHAFT. FOUND FELT SEAL MISALIGNED AND INTERFERING WITH THE SHAFT SEAL.

CA080423012	AMD	PWC	OIL SYSTEM	LEAKING
4/17/2008	FALCON2000	PW306C		ENGINE

(CAN) AFTER TAKEOFF, THE CREW NOTED OIL SMELL FOLLOWED BY VISIBLE VAPOR IN THE CABIN AIR AND OIL PRESSURE GAUGE FLUCTUATIONS. THE FLIGHT WAS DIVERTED TO AN ALTERNATE LANDING SITE. THE ENGINE WAS SHUTDOWN FOLLOWING LANDING. OIL WAS OBSERVED INSIDE THE BYPASS DUCT AND FAN STATOR. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20080423012)

DXTA200803018	AMD	PWC	SENSOR	INOPERATIVE
4/24/2008	FALCON2000	PW308C	RP16100	BLEED AIR SYS

BLEED OVERHEAT LIGHT CAME ON 2 MIN AFTER TAKEOFF. CHECKLIST ACCOMPLISHED AND CREW WAS UNABLE TO ISOLATE THE MALFUNCTION. FAULT CODE 404 AND 428. BLEED OVERHEAT COMES ON WITH APU BLEED ON AND ENGINE OFF. REMOVED & REINSTALLED TEMP SENSOR L70HU. OPS & LEAK CHECKS GOOD IAW MM 36-70-00

2008FA0000304	AMD	GARRTT	CONTROL HEAD	BURNED
1/25/2008	FALCON50MYST	TFE731*	G6860113	COCKPIT

DURING NORMAL DESCENT, AT JUST PRIOR TO 18000 FT, CREW NOTICED DISTINCT BURNING ELECTRICAL ODOR, OXY MASK PULLED AND THE SMOKE CHECKLIST WAS RUN. EMERGENCY PRIORITY REQUESTED UPON ARRIVAL, POSSIBLE LIGHT SMOKE IN COCKPIT ONLY WITH NONE IN THE CABIN. IN LESS THAN (1) MINUTE THE ODOR WAS NOT INCREASING AND SUBSEQUENTLY BEGAN TO CLEAR. THROUGH 10000 FT IT WAS NOTED THAT THE NR 2 NAV CONTROL HEAD WAS BLANK AND SUSPECTED AS THE PROBABLE CAUSE AS IT WAS CLOSE TO THE STRONGEST SMELL. NO CIRCUIT BREAKERS POPPED. REMOVAL OF UNIT NAV/COM CONTROL HEAD (PN G6860113 SN298) NOTED ELECTRICAL BURNED SMELL WITH UNIT. PART HAS 9 HOURS SINCE REPAIR/MODIFICATION. UNIT TO BE SENT BACK FOR REPAIR. (K)

CA060504005	AYRES	WRIGHT	BATTERY	UNSERVICEABLE
4/21/2006	S2RR1820	R182099	GS21	ELT

(CAN) FOUND CORROSION AROUND BATTERY. (TC NR 20060504005)

CA080306002	BAG	GARRTT	VALVE	FAILED
3/4/2008	JETSTM3212	TPE33110UG	HTE400005	HYD SYSTEM

(CAN) THE RT NON RETURN VALVE ASSEMBLY DOWNSTREAM OF THE RT HYDRAULIC PUMP FAILED. NON RETURN

VALVE ASSEMBLY IS A UNIT THAT IS SWAGED TOGETHER. THE SWAGE LET GO, ALLOWING HYDRAULIC FLUID TO VENT OVERBOARD. THIS VALVE IS INSTALLED TO PREVENT PRESSURE FROM EITHER ENGINE DRIVEN PUMP GOING TO THE OPPOSITE PUMP IN THE EVENT OF A PUMP FAILURE OR ENGINE SHUTDOWN. TIME AND CYCLES ON PART ARE UNKNOWN BUT IT IS VERY LIKELY ORIGINAL EQUIPMENT. (TC NR 20080306002)

CA080416003	BBAVIA	LYC	ELT	INOPERATIVE
4/16/2008	7GCAA	O320A2B	ELT10	

(CAN) WHEN TESTING UNIT FOR ITS 12 MONTH CERTIFICATION IAW CAR 571 APPENDIX G, UNIT DID NOT HAVE ANY TRANSMIT POWER. ELT TRANSMITTER BOARD REPLACED AND UNIT TESTED SERVICEABLE. (TC NR 20080416003)

CA080220005	BEECH	PWA	ENGINE	MAKING METAL
1/30/2008	1900C	PT6*		

(CAN) DURING DESCENT, THE PROPELLER AUTO-FEATHERED UNCOMMANDED. THE CREW ELECTED TO SHUTDOWN THE ENGINE AND PERFORMED A SINGLE ENGINE LANDING. POST FLIGHT INSP REVEALED A GRINDING NOISE WHEN TURNING THE PROP BY HAND. REDUCTION GEARBOX WAS CONTAMINATED WITH OIL. THE ENGINE HAS BEEN SENT FOR INVESTIGATION AND REPAIR. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20080220005)

CA080423014	BEECH	PWA	LINE	FRACTURED
4/17/2008	1900C	PT6A65B		ENGINE

(CAN) OPERATOR REPORTS (2) EVENTS OF POWER LOSS FOLLOWED BY ENGINE SHUT DOWN. ONE EVENT APRIL 17, 2008, THE OTHER APRIL 18, 2008. BOTH CAUSED BY FRACTURE OF THE PY LINE. AIRCRAFT RETURNED TO SERVICE FOLLOWING 2ND REPLACEMENT OF THE PY LINE. (TC# 20080423014)

CA080220008	BEECH	PWA	ENGINE	SEIZED
2/11/2008	1900D	PT6A67D		

(CAN) SHORTLY AFTER TAKEOFF, WHEN SELECTING BLEED AIR ON, THE CREW HEARD TWO (2) LOUD BANGS FOLLOWED BY SEEING SPARKS FROM THE EXHAUST. PILOT SECURED THE ENGINE AND RETURNED TO POINT OF DEPARTURE. POST FLIGHT INSP REVEALED A SEIZED PROP AND IMPACT DAMAGE INSIDE EXHAUST DUCT. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20080220008)

CA080422002	BEECH	PWA	BLADE	DEFORMED
4/17/2008	200BEECH	PT642A	3053094CL	ENGINE

(CAN) THE PILOTS NOTICE THAT THE ENGINE WAS RUNNING 50 DEGREES HOTTER THAN NORMAL. A HOT SECTION (HSI) WAS COMPLETED AND IT WAS FOUND THAT THE OLD SEGMENT 3053094CL WAS INSTALLED 820 HOURS BEFORE WITH A NEW WHEEL AND BLADES. THE SEGMENTS HAD DEFORMED AND THE CT BLADES HAD RUBBED AGAINST THE SEGMENTS CAUSING EXCESSIVE CLEARANCES. THIS WORK HAD BEEN DONE BY MFG. THE HOT SECTION WAS SENT BACK FOR WARRANTY CONSIDERATION . (TC NR 20080422002)

MV1R200808136	BEECH	PWA	BLOWER	BURNED OUT
4/29/2008	200BEECH	PT6A41	1013841761	ZONE 100

DURING FLIGHT, SMOKE INITIATED FROM BEHIND INSTRUMENT PANEL CENTER BELOW. PROJECT POWER TERMINATED. ALL ELECTRICAL POWER NOT NECESSARY FOR FLIGHT, OFF. EMERGENCY LANDING, ON GROUND MAINT FOUND VENT BLOWER ASSY INOP AND BURNED. BLOWER MEL'D AND FLOWN WITHOUT FURTHER INCIDENT.

2008FA0000300	BEECH	PWA	BULKHEAD	CRACKED
4/22/2008	400A	JT15D5	45A3490111	FUSELAGE

WHILE PERFORMING AN (A-B) INSPECTION FOUND RT AFT FUSELAGE BLEED AIR LINE ATTACH BRACKETS PULLED FROM AFT FUSELAGE BULKHEAD RESULTING IN CRACKS IN THE BULKHEADS AT FRAME STA 329.92. RECOMMEND INSPECTING AREA THOROUGHLY AT EACH INSPECTION. RECOMMEND CONTACTING MFG FOR REPAIR OPTIONS. THIS IS THE 5TH AIRCRAFT IN A ROW THAT THE BULKHEAD HAS BEEN CRACKED. THE CRACK HAS BEEN FOUND

ON BOTH SIDES OF THE AC. (K)

CA080208002	BEECH	LYC	ELT	FAILED
2/8/2008	60	TIO541E1C4	AK450	

(CAN) WHEN TESTING THE ELT AT ITS ANNUAL INSP THE ELT HAD NO MODULATION AND NO OUTPUT POWER. THE ELT REPLACED WITH A SERVICEABLE UNIT. (TC NR 20080208002)

2008FA0000321	BEECH	BEECH	SPAR CAP	CRACKED
4/25/2008	E90		00011001316	RT WING

THE CRACK EMANATES FROM THE 5TH RIVET OUTBOARD OF THE LOWER FORWARD WING BOLT FITTING, (4TH RIVET FROM END OF SPAR CAP)IN THE REAR ROW OF RIVETS, & EXTENDS TO THE TRAILING EDGE OF CAP. THE A/C PASSED 2-400 HR WING SIRM INSPECTIONS. THE CRACK WAS DETECTED AT THE CURRENT 400 HR INTERVAL WING SIRM INSPECTION. NOTE:BEECH HAS REDUCED INTERVAL FOR EDDY CURRENT INSPECTION ITEM OF SPAR CAP TO 200 HRS DUE TO RECURRENCE OF THIS PROBLEM. REF 8110-4 FOR N776DC FOR SIMILAR DETAILS. A/C IS ON USFS CONTRACT.

CA080423013	BEECH	PWA	FUEL CONTROL	MALFUNCTIONED
3/28/2008	E90	PT6A28		ENGINE

(CAN) DURING APPROACH, UPON RETARDING THE POWER LEVER TO IDLE, THE ENGINE ACCELERATED TO 90 PERCENT NG WITH AN ASSOCIATED TEMPERATURE OF 800 DEGREES. THE PILOT ELECTED TO SHUTDOWN THE ENGINE AND FEATHER THE PROP. THE FUEL CONTROL WAS SUBSEQUENTLY REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. (TC NR 20080423013)

CA080227007	BELL	ALLSN	BEARING RACE	SPALLED
2/27/2008	206B	250C20	6898607	COMPRESSOR

DURING FLIGHT THE PILOT HAD A CHIP LIGHT INDICATION. UPON INSPECTION, THE CHIP PLUG HAD LITTLE DEBRIS AND SMUDGE. THE CHIP WAS CLEANED, REINSTALLED AND FURTHER GROUND RUNS WHERE CARRIED OUT PRIOR TO FLIGHT. NO FURTHER ISSUES WERE NOTED AND THE FLIGHT CONTINUED. A FEW HOURS LATER ANOTHER CHIP LIGHT HAD ILLUMINATED. THE AIRCRAFT WAS RETURNED TO THE BASE VIA TRUCK AND TRAILER. FURTHER INVESTIGATION REVEALED FWD CHIP PLUG HAD METAL EVIDENT ON THE PLUG. THE COMPRESSOR WAS REMOVED AND THE NR 1 BEARING INNER RACE SHOWED EVIDENCE OF SPALLING. THE GEARBOX ALSO HAD AN ISSUE ADDRESSED BY ANOTHER SDR RELATED TO THIS AIRCRAFT. WILL SUBMIT PICTURES WHEN THEY ARE AVAILABLE. (TC# 20080227007)

CA080227008	BELL	ALLSN	BEARING RACE	SPALLED
2/27/2008	206B	250C20	23034787	GEARBOX

(CAN) METAL WAS FOUND ON ENGINE LOWER CHIP PLUG. THE 2 1/2 BEARING IN THE GEARBOX WAS REMOVED AND FOUND THE SPALLING ON THE OUTER RACE.

CA080227005	BELL	ALLSN	STIFFENER	CRACKED
1/31/2008	206B	250C20	206031322003	FUSELAGE

(CAN) LT STIFFENER UNDER THE OIL COOLER HANGER BEARING CRACKED FROM FWD ANCHOR NUT WHOLE. REPLACED WITH NEW PART. (TC NR 20080227005)

CA080215005	BELL	ALLSN	CASE HALF	DAMAGED
2/15/2008	206B	250C20		COMPRESSOR

(CAN) ON SPLITTING THE COMPRESSOR CASE HALVES FOR AN INSPECTION, IT WAS NOTED THERE WERE AREAS OF THE PLASTIC COATING THAT WERE MISSING. CASES REPLACED. (TC NR 20080215005)

CA080305015	BELL	PWA	ENGINE	FAILED
10/27/2007	212	PT6T3B		

(CAN) DURING APPROACH, VIBRATION WAS NOTED BY THE CREW THROUGH THE FLIGHT CONTROLS. LANDING WAS ABORTED AND AC RETURNED TO BASE. NEARING BASE, VIBRATION LEVEL INCREASED ABD CREW DECLARED AN EMERGENCY. DURING LANDING FLARE, (2) LOUD NOISES WERE HEARD. POST FLIGHT INSP

REVEALED NON-CONTAINMENT OF ENGINE POWER TURBINE SECTION HARDWARE WHICH HAD PENETRATED THE AIRFRAME DECK, COWLING AND BELLY. MFG WAS NOTIFIED OF THIS BY THE OVERHAUL AGENCY CONDUCTING THE INVESTIGATION. THE DAMAGED HARDWARE WILL BE RETURNED TO MFG FOR FURTHER ANALYSIS. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20080305015)

CA080229008	BELL	ALLSN		ENGINE	VIBRATION
2/6/2008	407	250C47B			

(CAN) EXCESSIVE ENGINE NOISE AND HIGH VIBRATION FELT BY PILOT AT GROUND IDLE. VERFIED BY ENGINEER. COMPLETE ENGINE REMOVED AND SENT FOR INVESTIGATION. WILL FWD REPORT WHEN AVAILABLE. (TC NR 20080229008)

CA080229010	BELL	ALLSN	ALLSN	SCROLL	CRACKED
2/27/2008	407	250C47B			COMPRESSOR

(CAN) COMPRESSOR 390.6 SINCE 2000 HOUR INSP. CRACK LOCATED BY ENGINEER DURING GROUND RUN UP FOLLOWING SCHEDULED INSP. LOCATED BY AIR LEAK FOUND BY BARE HAND CHECK. CRACK LOCATED SLIGHTLY BELOW SCROLL ARMPIT REINFORCEMENT PATCH AREA, NOT IN NORMAL CRACK LOCATION. A SMALL PIECE OF PATCH MATERIAL ALSO FOUND MISSING. COMPRESSOR REMOVED AND SENT FOR REPAIR. (TC NR 20080229010)

CA080328011	BOEING	PWA	DUCT	LEAKING
3/28/2008	727200	JT8D9A		BLEED AIR

(CAN) AFTER TAKEOFF OUT, NR 2 ENGINE FIRE WARNING CAME ON. THE THROTTLES WERE RETARDED AND THE WARNING EXTINGUISHED. THE AC RETURNED TO AIRPORT. AFTER INVESTIGATION, MAINTENANCE FOUND THE DUCT FOR THE FUEL HEAT VALVE HAD COME OUT OF ITS SLEEVE CAUSING A DUCT LEAK. THE DUCT WAS REPAIRED AND LEAK CHECKED SERVICEABLE. (TC NR 20080328011)

CA080425002	BOEING	PWA	WARNING SWITCH	CLOSED
4/21/2008	72722C	JT8D7B	32EN614	LOWER STABILIZER

(CAN) WHILE ATTEMPTING TAKEOFF, TAKEOFF WARNING INTERMITTENT, HORN SOUNDED UPON POWER LEVER ADVANCEMENT. TAKEOFF WAS ABORTED AND AC RETURNED TO BLOCKS. TROUBLESHOOTING REVEALED THE LOWER HORIZONTAL STABILIZER TAKEOFF WARNING SWITCH WAS NOT CONTACTING ACTUATING CAM. THE SWITCH WAS FOUND TO BE HOLDING CLOSED DUE TO BINDING OF THE ROTARY SHAFT. FURTHER EXAMINATION REVEALED SHAFT HAD BEEN BENT. IT IS SPECULATED THAT ICE MAY HAVE BUILD UP ON THE SWITCH ACTUATION (STABILIZER) CAM. THE AC HAD JUST BEEN DE-ICED DUE TO SNOW ACCUMULATION PRIOR TO TAKEOFF ATTEMPT. THE SWITCH WAS REPLACED AND THE AC RETURNED TO SERVICE. (TC NR 20080425002)

CA080401002	BOEING	PWA	BLADE	DAMAGED
3/13/2008	72722C	JT8D7B	806101	COMPRESSOR

(CAN) WHILE PERFORMING AC DAILY INSP, NR (3) ENGINE C-1 FAN ASSY WAS FOUND TO HAVE SUBSTANTIAL DAMAGE TO (3) BLADES. THE (3) BLADES HAD SIGNIFICANT L/E DEFORMATION WITH ONE EXHIBITING VISUAL CRACKING. THE C-1 FAN WAS REMOVED FROM SERVICE AND REPLACED. THE AC WAS INSPECTED IAW MFG ABNORMAL OCCURRENCE "BIRD STRIKE". NO FAULTS WERE FOUND. IT HAD BEEN OBSERVED AT THE END OF THE PRECEDING FLIGHT THAT ICE ACCUMULATION FALLING FROM THE EMPENNAGE AFTER ARRIVAL AND SHUTDOWN. IT IS SPECULATED THAT INGESTION OF ICE AT SOME STAGE OF FLIGHT MAY HAVE OCCURRED. THERE HAD BEEN NO INDICATIONS OF ENG OR AIRFRAME ABNORMALITIES DURING THE FLIGHT AND THE PROCEEDING DAILY INSP HAD NOT REVEALED THE DAMAGE. (TC NR 20080401002)

CA080418002	BOEING	PWA	FIRE DETECTOR	FALSE INDICATION
4/17/2008	727247	JT8D15		NR 1 NACELLE

(CAN) AFTER TAKEOFF, AT APPROX 1,000 FEET AGL, THERE WAS A FIRE WARNING ON THE NR 1 ENGINE. THRUST LEVER RETARDED, LIGHT REMAINED ON. EMERGENCY DRILL COMPLETED AND LIGHT EXTINGUISHED AFTER FIRE BOTTLE DISCHARGED. AC RETURNED AND LANDED WITHOUT FURTHER INCIDENT. THERE WAS NO EVIDENCE OF A FIRE. MAINT FOUND THE FAULT IN THE NR 1 FIRE DETECTION B SYS. (TC NR 20080418002)

CA080423004	BOEING	PWA	WINDSCREEN	BURNED
4/16/2008	727260	JT8D17	5893543130	COCKPIT

(CAN) AFTER COCKPIT SETUP SMOKE AND FLAME WAS OBSERVED BY THE FLIGHT CREW FROM THE TOP LT CORNER OF THE R1 WINDOW. WHEN THE R1 WINDOW HEAT WAS SELECTED OFF THE FLAME AND SMOKE CEASED. THE R1 WINDSCREEN WINDOW HEAT SYS WAS DEFERRED BY MAINT. UPON ARRIVAL AT THE DESTINATION THE R1 WINDOW WAS REPLACED AND THE R1 WINDOW HEAT CONTROLLER WAS ALSO REPLACED AS A PRECAUTION. THE AC WAS RETURNED TO SERVICE. (TC NR 20080423004)

CA080225014	BOEING	PWA	CLUTCH	DISENGAGED
2/22/2008	737200	JT8D17A		TE FLAP

DEPARTING YOW THE AIRCRAFT EXHIBITED AN UNCOMMANDED ROLL TO THE LEFT REQUIRING 2-3 UNITS OF RUDDER TRIM TO CORRECT. THE CREW OBSERVED NO ASSYMMETRY INDICATION IN THE FLIGHT DECK BUT IT WAS VISUALLY CONFIRMED THAT THE RIGHT INBOARD AFT FLAP WAS PARTIALLY EXTENDED. MAINTENANCE FOUND THE INBOARD TRAILING EDGE FLAP CLUTCH DISENGAGED. THE MECHANISM WAS INSPECTED, THE CLUTCH BELLCRANK RESET AND THE SYSTEM FUNCTION CHECKED SERVICEABLE. (TC# 20080225014)

CA080425006	BOEING	FRAME	CRACKED
4/25/2008	737490	654653969	BS 616

(CAN) VISUAL INSPECTION FOUND THAT INNER FRAME CHORD AT BS 616, RT, WL 200 AT STUB BEAM TO BE CRACKED. (TC NR 20080425006)

CA080325008	BOEING	FLOORBEAM	CORRODED
3/25/2008	737490	654681163	BS 986 RBL43

(CAN) FLOORBEAM FOUND CORRODED DURING VISUAL INSP AND REPAIRED WITH REPAIR PART IAW EA AND SRM. (TC NR 20080325008)

CA080325009	BOEING	FLOORBEAM	CORRODED
3/25/2008	737490	654681179	BS 986 RBL 35-40

(CAN) FLOORBEAM CAP AT BS 986.5, RBL 35 AND 40 FOUND CORRODED DURING VISUAL INSPECTION AND REPAIRED WITH REPAIR PART IAW CUSTOMER EA AND SRM. (TC NR 20080325009)

CA080325010	BOEING	FLOORBEAM	CORRODED
3/25/2008	737490	654681179	BS 986 RBL 27

(CAN) FLOORBEAM AT BS 98605, RBL 27, WL 207.5 CORRODED UNDERSIDE UNDER CLIP NUT. REPAIRED WITH REPAIR PART IAW CUSTOMER EA AND SRM. (TC NR 20080325010)

CA080220012	BOEING	STRINGER CLIP	CRACKED
2/20/2008	7374S3	650163312	BS 294.5 S13L

(CAN) TIE CLIP AT BS 294.5, S13L CRACKED AND REPAIRED IAW CUSTOMER EA. (TC NR 20080220012)

CA080220022	BOEING	CHANNEL	CORRODED
2/20/2008	7374S3	654659247	AFT CARGO PIT

(CAN) AFT CARGO PIT FLOOR CHANNEL AT BS 767+4, LBL 8 CORRODED AND REPAIRED IAW CUSTOMER EA. (TC NR 20080220022)

CA080220009	BOEING	CHANNEL	CORRODED
2/20/2008	7374S3	654659249	AFT CARGO PIT

(CAN) AFT CARGO PIT FLOOR CHANNEL AT BS 767+6, LBL 3 CORRODED AND REPAIRED IAW CUSTOMER EA. (TC NR 20080220009)

CA080220010	BOEING	CHANNEL	CORRODED
2/20/2008	7374S3	654659247	AFT CARGO PIT

(CAN) AFT CARGO PIT FLOOR CHANNEL AT BS 767+6, LBL 8 CORRODED AND REPAIRED IAW CUSTOMER EA. (TC NR 20080220010)

CA080220011	BOEING	CHANNEL	CORRODED
2/20/2008	7374S3	654659249	AFT CARGO PIT

(CAN) AFT CARGO PIT FLOOR CHANNEL AT BS 847+14 - 867+14, LBL 3 CORRODED AND REPAIRED IAW CUSTOMER EA. (TC NR 20080220011)

CA080220021	BOEING	CHANNEL	CORRODED
2/20/2008	7374S3	654659247	AFT CARGO PIT

(CAN) AFT CARGO PIT FLOOR CHANNEL AT BS 847+14 - 867, LBL 8 CORRODED AND REPAIRED IAW CUSTOMER EA. (TC NR 20080220021)

CA080220017	BOEING	CHANNEL	CORRODED
2/20/2008	7374S3	654659247	AFT CARGO PIT

(CAN) AFT CARGO PIT FLOOR CHANNEL AT BS 727 F +8, LBL 11 CORRODED AND REPAIRED IAW CUSTOMER EA. (TC NR 20080220017)

CA080220018	BOEING	SKATE ANGLE	CHAFED
2/20/2008	7374S3	655484221	VERTICAL STAB

(CAN) V STAB TO FUSELAGE SKATE ANGLE LT CHAFED AND REPAIRED IAW CUSTOMER EA. (TC NR 20080220018)

CA080220019	BOEING	CHANNEL	CORRODED
2/20/2008	7374S3	6546592503	AFT CARGO PIT

(CAN) AFT CARGO PIT FLOOR CHANNEL AT BS 727E+8, RBL 3 CORRODED AND REPAIRED IAW CUSTOMER EA. (TC NR 20080220019)

CA080219005	BOEING	CHANNEL	CORRODED
2/19/2008	7374S3	654659244	BS 790

(CAN) FLOOR CHANNEL AT BS 790, RBL 8 AFT CARGO PIT CORRODED AND REPAIRED IAW CUSTOMER EA (TC NR 20080219005)

CA080219006	BOEING	FLOOR PANEL	CORRODED
2/19/2008	7374S3	654659247	AFT CARGO PIT

(CAN) AFT CARGO PIT FLOOR CHANNEL CORRODED AT BS 767+6, LBL 3 AND REPAIRED IAW CUSTOMER EA. (TC NR 20080219006)

CA080219007	BOEING	CHANNEL	CORRODED
2/19/2008	7374S3	654659249	AFT CARGO PIT

(CAN) AFT CARGO PIT FLOOR CHANNEL AT BS 727+8, LBL 3 CORRODED AND REPAIRED IAW CUSTOMER EA. (TC NR 20080219007)

CA080220013	BOEING	DOOR FRAME	GOUGED
2/20/2008	7374S3	651768537	L1 DOOR

(CAN) L1 DOOR CUTOUT FRAME AT STA 349, WL 216 GOUGED AND REPAIRED IAW CUSTOMER EA. (TC NR 20080220013)

CA080220014	BOEING	SHROUD	CRACKED
2/20/2008	7374S3	656612115	APU

(CAN) APU UPPER SHROUD CRACKED FWD OF FWD LATCH REPAIRED IAW CUSTOMER EA. (TC NR 20080220014)

CA080220015	BOEING	STRINGER SPLICE	CRACKED
2/20/2008	7374S3	65617777	BS360 S15L

(CAN) STRINGER SPLICE AT BS 360, STR 15L CRACKED AND REPAIRED IAW CUSTOMER EA. (TC NR 20080220015)

CA080220016	BOEING		CHANNEL	CORRODED
2/20/2008	7374S3		65465926	AFT CARGO PIT

(CAN) AFT CARGO PIT FLOOR CHANNEL AT BS767+6, LBL11 CORRODED AND REPAIRED IAW CUSTOMER EA. (TC NR 20080220016)

CA080220020	BOEING		CHANNEL	CORRODED
2/20/2008	7374S3		6546592503	FUSELAGE

(CAN) AFT CARGO PIT FLOOR CHANNEL AT BS 767+6 - BS247+14, RBL 3 CORRODED AND REPAIRED IAW CUSTOMER EA. (TC NR 20080220020)

CA080305004	BOEING	CFMINT	COUPLER	CRACKED
2/21/2008	7378Q8	CFM567B26US	14C3308	POTABLE WATER

(CAN) DURING CRUISE, CREW NOTED CABIN ALTITUDE WARNING. UNABLE TO CLOSE OUTFLOW VALVE EITHER ELECTRICALLY OR MANUALLY. EMERGENCY DESCENT PERFORMED, OXYGEN MASKS DROPPED. OUTFLOW VALVE WOULD CLOSE TO THE .2500 POSITION ON GAUGE. ATTEMPTED TO CLOSE VALVE MANUALLY AT 10000FT (OAT +13 DEG C), NO RESPONSE. VALVE CLOSED SUCCESSFULLY AFTER 10 MIN. ON INSP FOUND PORTABLE WATER LEAKING AT FITTING AND FITTING PARTLY SEPARATED WITH WIGGENS COUPLING OPEN. UPON INSP OF REMOVED COUPLING FOUND CRACKED. (TC NR 20080305004)

CA080222004	BOEING	GE	ELECTRICAL BOX	BURNED
2/15/2008	767333	CF680C2B6F	284T3501315	CARGO HANDLING

(CAN) WIRING DAMAGE FOUND IN FWD CARGO HANDLING ACCESS PANEL P35 DURING THE (XM) VISIT. 57 WIRES BURN, 3 WIRES MAJOR DAMAGED, 1 FOUND CUT, FOUND LUG DAMAGE ON TERMINAL A1,B1,C1 OF RELAY K245 (P35). FOUND WIRES DAMAGE ON CONNECTOR D5886P. AFTER AN INVESTIGATION , FOUND CARGO PDU P/N 43104-14 AT POSITION 7R FAULTY (FOUND INTERNAL WIRES BURNED) ROOT CAUSE , THE FAULTY PDU CAUSED A SHORT IN THE P35 PANEL DAMAGING WIRES AND RELAY (TC NR 20080222004)

CA080229007	BOEING	GE	LEVER	MISINSTALLED
2/20/2008	76735H	CF680C2B6F	416T28243	OVERWING SLIDE

(CAN) OVER-WING SLIDE COMPARTMENT DOOR OPENING ACTUATING MECHASIM - LEVER DESCRIPTION: A LEVER THAT JOINS THE FIRING PIN CLEVIS OF THE OFF-WING ESCAPE SLIDE COMPARTMENT DOOR OPENING ACTUATOR TO THE ACTUATING ROD IS BEING INSTALLED UPSIDE-DOWN. THIS APPEARS TO CAUSE THE LEVER TO BIND WITH THE FIRING PIN CLEVIS AND COULD PREVENT NORMAL DOOR OPENING ACTUATION IN A REAL SITUATION. IT SEEMS THAT NO SDR WAS RAISED FOR THE PREVIOUS FINDING. LEVER ORIENTATION CORRECTED IAW DIAGRAMS SUPPLIED IN THE IPC AS WELL AS THOSE DIAGRAMS INCLUDED WITH THE RIGGING INSTRUCTIONS IN THE AMM. ENGINEERING APPROACHED TO ADDRESS A POSSIBLE AMENDMENT TO THE AMM. (TC NR 20080229007)

CA080215001	BOEING	PWA	VIDEO MONITOR	FIRE
2/7/2008	7673Y0	PW4060	4954200001	CABIN

(CAN) AFTER LANDING AND AFTER PASSENGERS HAD DEPLANED, THE F/A STILL ONBOARD THE AC NOTICED ONE OF THE BULKHEAD INFLIGHT ENTERTAINMENT MONITORS HAD FLAMES AND SMOKE EMINATING FROM IT. AFTER INSPECTION OF VIDEO MONITOR, MAINT FOUND A PLUG MELTED AT PIN. HARNESS WAS DISCONNECTED FROM P1 DISCONNECT ABOVE NO SMOKING SEATBELT SIGN. COAX CABLE ALSO DISCONNECTED. MONITOR REMOVED. FOUND CB ON P-37 PANEL IN E/E COMPT POPPED. VIDEO MONITOR MFR P/N: 02190830-1, MFG CODE: P0173 (TC NR 20080215001).

CA080416001	BOLKMS	ALLSN	SPRING	BROKEN
4/14/2008	BO105S	250C20B	V40GT3911AA	TAIL BOOM

(CAN) COMING OUT OF A MAJOR INSP, WHERE THE EJECTION SPRINGS ON ALL THE COWLS (P/N 105-62648, 105-62664, 105-62643, 105-62663 AND 105-30851) WERE REPLACED. SEVERAL EJECTION SPRINGS P/N V40GT39-1-1AA WERE BREAKING INTO (2) PIECES. THIS PROBLEM HAPPENED STATICALLY ON THE GROUND. THESE EJECTION SPRINGS WERE ORDERED NEW FROM MFG, BATCH NR S0000243616 COMING FROM DIFFERENT LOT NR. BREAKAGE HAPPENS IN THE MFG LOGO STAMPED ON THE EJECTION SPRING. NEW EJECTION SPRINGS SAME PN,

SAME BATCH NR USED TO REPLACE BROKEN ONES ON THIS AC. (TC NR 20080416001)

CA080213004	BOMBDR	HNYWL	OUTFLOW VALVE	FAILED
2/6/2008	BD1001A10	AS90711A	811441A010302	CABIN PRESSURE

(CAN) DURING CLIMB, THROUGH FL270, CABIN ROC (RATE OF CLIMB) INCREASED TO 3000 FPM (FT PER MINUTE), CABIN ALTITUDE STARTED TO CLIMB. MANUAL PRESSURIZATION WAS SELECTED RESULTING IN AN INABILITY TO REDUCE CABIN ALTITUDE. AC DESCENDED, EICAS (CABIN ALT) MESSAGE POSTED AND OXYGEN MASKS DEPLOYED. AN EMERGENCY WAS NOT DECLARED. TROUBLESHOOTING WAS CARRIED OUT, RT SAFETY VALVE FAILED THE TEST. BOTH SAFETY VALVES WERE REMOVED, THE INVESTIGATION IS ONGOING. (TC NR 20080213004)

CA080213005	BOMBDR	HNYWL	OUTFLOW VALVE	MALFUNCTIONED
1/3/2008	BD1001A10	AS90711A	811441A010302	CABIN PRESSURE

(CAN) DURING CRUISE AT 45,000 FEET, THE PILOT REPORTED THAT THE CABIN ALT CLIMBED TO 22 000 FT, OXYGEN MASKS DEPLOYED AND AN EMERGENCY DESCENT WAS CARRIED OUT. WAITING MORE INFO FROM CUSTOMER. THE MFG HAS INSPECTED THE VALVES AND THEY CONCLUDE THE VALVES WERE (NO FAULT FOUND). THE INVESTIGATION IS ONGOING. (TC NR 20080213005)

CA080423003	BOMBDR	RROYCE	EEC	UNSERVICEABLE
4/21/2008	BD7001A10	BR700710A220	1520KDC0501	ENGINE

(CAN) THE AIRCREW REPORTED THE FOLLOWING, AC WAS CRUISING AT FL450 AND CREW REALIZED THAT THE LT ENGINE SPOOLED DOWN TO IDLE WITHOUT PILOT INPUT. CREW ATTEMPTED TO MOVE THE THROTTLE IN EPR AND N1 MODE AND THERE WAS NO REACTION FROM THE LT ENGINE. EICAS MESSAGE (L FADEC FAULT) (CYAN) POSTED. CREW REQUESTED LOWER FLIGHT LEVEL AND LEVELED OFF AT FL370. APU WAS STARTED. THEY DESCENDED FURTHER TO FL290 AND SHUTDOWN THE LT ENGINE TO ATTEMPT A START AND RUN ON THE OPPOSITE ENGINE ELECTRONIC CONTROLLER (EEC) CHANNEL TO REGAIN LT ENGINE CONTROL. ENGINE WAS RESTARTED AND ALL LT ENGINE CONTROLS RETURNED TO NORMAL OPERATING CONDITIONS. CREW DIVERTED, AS A PRECAUTIONARY MEASURE, IN ORDER TO HAVE THE AC EVALUATED AND REPAIRED BEFORE ATTEMPTING TO CROSS THE ATLANTIC OCEAN. THE FOLLOWING MAINTENANCE ACTION WAS PERFORMED TO ADDRESS THE ABOVE ISSUE: LT ENGINE, ENGINE ELECTRONIC CONTROLLER (EEC) NON VOLATILE MEMORY, FDR DATA, AND FAULT WARNING COMPUTER DATA INFO WAS DOWNLOADED AND PROVIDED TO THE MFG FOR ANALYSIS. MFG ADVISED TO REPLACE THE LT EEC. LT EEC WAS REPLACED AND OPS TESTED, SERVICEABLE. NO FAULTS FOUND. AC RETURNED TO SERVICE. (TC NR 20080423003)

CA080428005	BOMBDR	PWC	BEARING	FAILED
4/21/2008	DHC8400	PW150A	29685	WHEEL ASSY

(CAN) DURING TAXI FOR DEPARTURE, THE AC FOLLOWING THE SUBJECT S/N 4168 AC, REPORTED (SMOKE AND FIRE) FROM THE RT GEAR. THE F/A CONFIRMED. THE AC STOPPED AND PASSENGERS WERE EVACUATED ON THE TAXIWAY. INSP BY MAINT DETERMINED THE CAUSE TO BE A WHEEL BEARING FAILURE. THE WHEEL WAS REMOVED AND THE AC WAS TOWED TO THE HANGER. MAINT REPLACED THE MAIN WHEEL ASSY AND THE AC RETURNED TO SERVICE. (TC NR 20080428005)

CA080228004	BOMBDR	PWC	SEQUENCE VALVE	FAILED
2/19/2008	DHC8400	PW150A	483025	NLG

(CAN) AN OPERATOR COMPLETED AN EMERGENCY LANDING DUE TO NLG DOOR OPEN INDICATION AFTER SELECTING GEAR UP. UNSCHEDULED LANDING, CREW FOLLOWED THEIR QRH, PERFORMED ALTERNATE GEAR EXTENSION. NLG SOLENOID SEQUENCE VALVE REPLACED. (TC NT 20080228004)

CA080225003	BOMBDR	PWC	PUMP	SEPARATED
2/19/2008	DHC8400	PW150A	6617303	NR 2 ENGINE

(CAN) NR 2 EDP FAILED IN FLIGHT WITH A BANG FOLLOWED SHORTLY AFTER BY NR1 HYD FLUID HOT CAUTION LIGHT ILLUMINATING, FOLLOWED BY THE 1 HYD ISO VALVE TO CLOSING. THE AC MADE A FLAPLESS EMERGENCY LANDING. INITIAL INVESTIGATION BY MAINT FOUND THAT THE NR2 HYD SYS HAD LOST ITS FLUID, THE NR2 EDP PORT CAP HAD SEPARATED FROM THE EDP PUMP BODY, THE PTU WAS INOPERATIVE (OVERSPEED AND EVIDENCE OF OVERHEAT), PTU FLEX HOSES EVIDENCE OF OVERHEAT. MAINT ACTIONS: REPLACEMENT OF NR1

AND NR2 EDP`S, PTU, PTU SELECTOR VALVE, NR1 AND NR2 HYDR SYS FILTERS, REPLACEMENT OF PTU FLEX HOSES, FLUSHING/BLEEDING OF THE APPLICABLE HYDR LINES. (TC NR 20080225003)

CA080228009	BOMBDR	PWC	SENSOR	FAULTED
2/25/2008	DHC8400	PW150A		MLG DOWNLOCK

(CAN) AFTER DEPARTURE, AN ABNORMAL GEAR INDICATION WAS OBSERVED. DECISION TO CONTINUE TO NEXT BASE IAW MCC AND OCM. ON ARRIVAL, ALTERNATE GEAR EXTENSION, ACCORDING PROCEDURE PERFORMED. NORMAL INDICATION (3 GREEN) ON MAIN AND ALTERNATE SYS. DURING FINAL: GEAR UNSAFE-INDICATION ON MAIN INDICATION AGAIN, NORMAL INDICATION ON ALTERNATE SYS. UNEVENTFUL LANDING AND NORMAL DISEMBARKATION ON THE RUNWAY FOLLOWED. PSEU FAULT CODES AS FOLLOWS: LEG 00: LGDLK 1 PROX SENSOR OPEN, LGDLK 1 PROX SENSOR SHORT, PSEU CHANNEL D FAIL CHANNEL INOP, LGDLK1 UNREASONABLE NEAR, NLGLK2 UNREASONABLE NEAR, NLGLK1 UNREASONABLE NEAR, NGDRCL UNREASONABLE NEAR, NGWOFW2 UNREASONABLE NEAR NGWOFW1 UNREASONABLE NEAR, NGDN2 UNREASONABLE FAR, NGDN1 UNREASONABLE FAR, LGDRCL UNREASONABLE FAR, RGDRCL UNREASONABLE FAR, NGDRCL UNREASONABLE FAR, LGDLK1 UNREASONABLE FAR, LEG: 01, LGDLK SENSOR SHORT. BASED UPON THE REVIEWED DATA PROVIDED (FDR DOWNLOAD, PSEU FAULT CODES AND DETAILED DISCRETION OF DEFECT) FOR THIS AIRCRAFT, IT IS DETERMINED THAT THE LGDLK 1 SENSOR WAS AT FAULT. MLG NR1 DOWNLOCK SENSOR REPLACED AND GEAR RETRACTIONS AND OCF ACCOMPLISHED SATISFACTORY. AIRCRAFT RETURNED TO SERVICE. (TC NR 20080228009)

CA080317005	CESSNA	LYC	PISTON PIN	WORN
3/4/2008	152	O235L2C		NR 1 CYLINDER

(CAN) ALUMINUM FOUND IN OIL FILTER DURING 100 HOUR INSP. CYLINDER BOROSCOPED, SUSPECT CYLINDER REMOVED, FWD PISTON PIN FOUND WORN ON NR 1 CYLINDER. (TC NR 20080317005)

CA080213002	CESSNA	LYC	TUBE	STUCK
2/11/2008	152	O235L2C	MC09543022	NLG STEERING

(CAN) PROBLEM WAS DISCOVERED DURING PRE-INSP RUN UP. WHEN FULL RUDDER DEFLECTION WAS APPLIED THE RUDDER MOVEMENT WAS RESTRICTED AND WOULD ONLY RELEASE WHEN ALTNATE RUDDER PRESSURE WAS APPLIED. (TC NR 20080213002)

CA070405011	CESSNA	LYC	SUPPORT	CRACKED
4/3/2007	172M	O320E2D	05521335	ENGINE COWL

(CAN) THE ORIGINAL PART WAS FOUND CRACKED AND WAS REPLACED LESS THAN 50 HOURS AGO. THE CRACKS ORIGINATE AT THE 4 O'CLOCK AND 8 O'CLOCK POSITIONS, AT THE END OF THE FLANGED SECTION OF THE SUPPORT. SUBMITTER SUSPECTS THAT THE PULSATING AIRFLOW FROM THE PROPELLER, WHICH IS IMMEDIATELY IN FRONT OF THIS ASSEMBLY, IS RESPONSIBLE FOR THE FATIGUE CRACKING.

CA080211019	CESSNA	THIELT	SELECTOR	MALFUNCTIONED
1/4/2008	172M	TAE12501	20282004500R	FUEL SYS

(CAN) AC WAS BEING RETRO-FITTED WITH A 2.0 TURBO DIESEL ENGINE IAW STC. THE FUEL SYS WAS COMPLETED, FUEL INSTALLED AND INSPECTED FOR LEAKS. A LEAK WAS DISCOVERED COMING FROM THE FUEL SELECTOR AT THE NIPPLE FOR THE FUEL LINE GOING TO THE HEADER TANK. THE B-NUT WAS CHECKED FOR TIGHTNESS BUT FUEL CONTINUED TO LEAK. THE SELECTOR WAS THEN REMOVED AND THE NIPPLE WAS FOUND NOT TO HAVE A CORRECT MATING SURFACE FOR THE FLARE. AFTER BENCH CHECKING THIS SELECTOR ALONG WITH (2) OTHER REPLACEMENTS ALL WERE FOUND TO HAVE THE SAME DEFECT. ONE FUEL SELECTOR NIPPLE WAS RESURFACED AND AFTER INSTALLATION NO LEAKS WERE FOUND. THE OTHER (2) FUEL SELECTORS WERE SENT BACK TO THE FACTORY FOR INVESTIGATION. (TC NR 20080211019)

CA080213013	CESSNA	THIELT	SELECTOR	LEAKING
1/4/2008	172M	TAE12502114	20282004500R	FUEL SYSTEM

(CAN) AC WAS BEING RETRO-FITTED WITH A 2.0 TURBO DIESEL ENGINE IAW STC. THE FUEL SYS WAS COMPLETED, FUEL INSTALLED AND INSPECTED FOR LEAKS. A LEAK WAS DISCOVERED COMING FROM THE FUEL SELECTOR AT THE NIPPLE FOR THE FUEL LINE GOING TO THE HEADER TANK. THE B NUT WAS CHECKED FOR TIGHTNESS BUT FUEL CONTINUED TO LEAK. THE SELECTOR WAS THEN REMOVED AND THE NIPPLE WAS FOUND

NOT TO HAVE A CORRECT MATING SURFACE FOR THE FLARE. AFTER BENCH CHECKING THIS SELECTOR ALONG WITH (2) OTHER REPLACEMENTS ALL WERE FOUND TO HAVE THE SAME DEFECT. ONE FUEL SELECTOR NIPPLE WAS RESURFACED AND AFTER INSTALLATION NO LEAKS WERE FOUND. THE OTHER TWO FUEL SELECTORS WERE SENT BACK TO THE FACTORY FOR INVESTIGATION. THIS IS THE SECOND PART. (TC NR 20080213013)

CA080213014	CESSNA	THIELT	SELECTOR	DAMAGED
1/4/2008	172M	TAE1250299	20282004500R	FUEL SYSTEM

(CAN) AC WAS BEING RETRO-FITTED WITH A 2.0 TURBO DIESEL ENGINE IAW STC. THE FUEL SYS WAS COMPLETED, FUEL INSTALLED AND INSPECTED FOR LEAKS. A LEAK WAS DISCOVERED COMING FROM THE FUEL SELECTOR AT THE NIPPLE FOR THE FUEL LINE GOING TO THE HEADER TANK. THE B-NUT WAS CHECKED FOR TIGHTNESS BUT FUEL CONTINUED TO LEAK. THE SELECTOR WAS THEN REMOVED AND THE NIPPLE WAS FOUND NOT TO HAVE A CORRECT MATING SURFACE FOR THE FLARE. AFTER BENCH CHECKING THIS SELECTOR ALONG WITH (2) OTHER REPLACEMENTS ALL WERE FOUND TO HAVE THE SAME DEFECT. ONE FUEL SELECTOR NIPPLE WAS RESURFACED AND AFTER INSTALLATION NO LEAKS WERE FOUND. THE OTHER (2) FUEL SELECTORS WERE SENT BACK TO THE FACTORY FOR INVESTIGATION. THIS IS THE THIRD PART. (TC NR 20080213014)

CA080331002	CESSNA	LYC	CABLE ASSY	CRACKED
3/12/2008	172N	O320H2AD	505530401	SEAT

(CAN) DURING INSTALLATION OF SERVICE KIT SK210-175 - SECONDARY SEAT STOP, IT WAS FOUND THAT THE THREADS ON THE HOUSING FOR THE ADJUSTMENT CABLE WERE CRACKED. (TC NR 20080331002)

2008FA0000286	CESSNA	LYC	COVER	CRACKED
4/14/2008	172P	O320D2J	AEL61247	ENGINE

FOUND ROCKER BOX COVER WITH MULTIPLE CRACKS DURING AC FLEET INSPECTION, FOLLOWING DISCOVERY OF ANOTHER CRACKED COVER ON A DIFFERENT AC. CRACKS CAUSED, DUE TO IMPROPER CLEARANCE BETWEEN COVER AND ROCKER ARMS ALLOWING ROCKER ARMS TO CONTACT COVER. THERE IS A NOTABLE CLEARANCE DIFFERENCE BETWEEN ORIGINAL MFG COVER AND THE OTHER MFG COVER AT THE LOWER PORTION OF THE COVER. RECOMMEND REPLACEMENT OF ALL SS COVERS PN AEL61247 WITH ORIGINAL MFG OR SUITABLE SUBSTITUTE. (K)

2008FA0000287	CESSNA	LYC	COVER	CRACKED
4/14/2008	172P	O320D2J	AEL61247	ENGINE

FOUND ROCKER BOX COVER CRACKED DURING 100 HOUR INSPECTION. CRACKS CAUSED DUE TO IMPROPER CLEARANCE BETWEEN COVER AND ROCKER ARMS ALLOWING ROCKER ARMS TO CONTACT COVER. THERE IS A NOTABLE CLEARANCE DIFFERENCE BETWEEN AN ORIGINAL MFG COVER AND THE OTHER MFG COVER AT THE LOWER PORTION OF THE COVER. (K)

LJER210408	CESSNA	LYC	HOUSING	CRACKED
4/21/2008	172RG	O360*	12810016	LT MLG ACTUATOR

LANDING GEAR FAILED TO RETRACT. LT MAIN ACTUATOR HOUSING CRACKED AT MOUNTING HOLE.

2008FA0000288	CESSNA	LYC	BULKHEAD	CRACKED
4/1/2008	177B	O360*	12210628	RT WING

DURING ROUTINE INSPECTION, FOUND PART CRACKED. CHECKED (2) OTHER CARDINALS THAT HAPPENED TO BE IN OUR SHOP AND FOUND (1) OF THEM TO HAVE A SIMILAR CRACK. THIS SECTION OF THE BULKHEAD IS THE ATTACH STRUCTURE FOR THE LOWER ATTACH ANGLE FOR THE IB FLAP DRIVE BELLCRANK. IT IS CURIOUS THAT THE FACTORY INSTALLED SOME EXTRA REINFORCEMENT STRUCTURE (A BRACKET) IN THIS POSITION IN THE LT WING. THERE ARE EVEN SOME (PILOT DRILL) (PD) HOLES DRILLED AT THE FACTORY IN THE RIB AND HEAVY ATTACH ANGLE ON THE AFFECTED RT SIDE. IT WOULD APPEAR THAT BOTH LT AND RT BELLCRANKS WOULD EXPERIENCE THE SAME FORE-AFT FORCES BY AIR LOADS ON THE FLAPS. SO WHY REINFORCE ONLY ONE SIDE? IS IT POSSIBLE THAT THE FACTORY ASSY LINE NEGLECTED TO INSTALL AN INTENDED SIMILAR REINFORCEMENT ON THE RT SIDE? (K)

2008FA0000289	CESSNA	LYC	BULKHEAD	CRACKED
4/1/2008	177RG	IO360A1B6	12210628	RT WING

DURING ROUTINE INSP, FOUND PART CRACKED. CHECKED (2) OTHER CARDINALS THAT HAPPENED TO BE IN OUR SHOP AND FOUND (1) OF THEM TO HAVE A SIMILAR CRACK. THIS SECTION OF THE BULKHEAD IS THE ATTACH STRUCTURE FOR THE LOWER ATTACH ANGLE FOR THE IB FLAP DRIVE BELLCRANK. IT IS CURIOUS THAT THE FACTORY INSTALLED SOME EXTRA REINFORCEMENT STRUCTURE (A BRACKET) IN THIS POSITION IN THE LT WING. THERE ARE EVEN SOME (PILOT DRILL) (PD) HOLES DRILLED AT THE FACTORY IN THE RIB AND HEAVY ATTACH ANGLE ON THE AFFECTED RT SIDE. IT WOULD APPEAR THAT BOTH LT AND RT BELLCRANKS WOULD EXPERIENCE THE SAME FOR-AFT FORCES BY AIR LOADS ON THE FLAPS. SO WHY REINFORCE ONLY ONE SIDE? IS IT POSSIBLE THAT THE FACTORY ASSY LINE NEGLECTED TO INSTALL AN INTENDED SIMILAR REINFORCEMENT ON THE RT SIDE? (K)

CA071213004	CESSNA	CONT	SHAFT	CRACKED
7/25/2007	180J	O470S	07600323	RUDDER PEDALS

(CAN) RUDDER BAR ASSY CRACKED AT SPIGOT ATTACH POINT WHERE RUDDER PEDAL STUB SHAFT (PN 0411307) CONNECTS TO RUDDER BAR ASSY. PILOTS REPORTED A SOFT PEDAL ON WATER OPERATIONS, INVESTIGATION REVEALED A SPHERICAL CRACK ON THE RUDDER PEDAL TORQUE TUBE. (TC NR 20071213004)

2008FA0000270	CESSNA	LYC	ATTACH FITTING	CRACKED
4/3/2008	182T	IO540AB1A5	07436062	NLG

DISCOVERED CRACK DURING ANNUAL INSPECTION. (2) LONG CRACKS APPROXIMATELY (1) INCH ON (1) SIDE OF THE FITTING ONLY, (1) AT THE LT LOWER ATTACHMENT AND THE OTHER JUST AFT AND LT OF THE AREA WHERE THE STRUT BARREL IS SECURED. SUSPECT HARD LANDING BUT NO OTHER DAMAGE NOTED. (K)

2008FA0000268	CESSNA	PWA	DRAIN	PLUGGED
3/4/2008	208B	PT6A114		FUSELAGE

DURING FLT IN MODERATE TURBULENCE THE AP STARTED TO DISCONNECT, TWICE. THIRD ATTEMPT TO ENGAGE THE AP, THE AC MADE AN UNCOMMANDED 1500 FPM DESCENT. ATTEMPT TO CORRECT THE ATTITUDE WITH THE CWS FUNCTION WAS MADE BUT THE AP WOULD NOT DISENGAGE. THE AP DISCONNECT BUTTON WOULD NOT LET GO EITHER. HAD TO OVERPOWER THE AP CLUTCHES TO REGAIN CONTROL AND ATTEMPTED TO DISCONNECT THE SYS WITH THE C/B, THE AP REMAINED ON AND LIT AFTER PULLED. RECYCLED THE C/B AND WAS SUCCESSFUL. THIS HAPPENED ON DESCENT, THE SYS HAD BEEN FUNCTIONING NORMALLY PRIOR TO THE INCIDENT. MX FOUND WATER ACCUMULATED BEHIND THE REAR CURTAIN. THIS IS THE AREA THAT THE PITCH SERVO IS LOCATED. THEY FOUND THAT THE SERVO HAD A SOLENOID STUCK CLOSED WHICH WOULD NOT LET THE SERVO RELEASE. ALSO, THEY FOUND THAT THE AUTO-PILOT FLIGHT COMPUTER WAS BURNED OUT. THE WATER ACCUMULATION WAS CAUSED BY PLUGGED BILGE DRAINS. (K)

CA080221010	CESSNA	PWA	ENGINE	FAILED
2/14/2008	208B	PT6A114		

(CAN) DURING CRUISE, A LOUD NOISE WAS HEARD FOLLOWED BY REDUCTION IN ENGINE POWER TO ZERO. THE AC LANDED ON A PUBLIC ROAD. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20080221010)

CA080104002	CESSNA	PWA	KNOB	SEPARATED
12/29/2007	208B	PT6A114A	SL60112SL6011	POWER LEVER

(CAN) (2) KNOBS ON EITHER SIDE OF THE POWER LEVER ARE USED TO RAISE A GATE TO ALLOW REVERSE THRUST. THE KNOBS ARE SCREWED TOGETHER. DURING FLIGHT THE KNOBS SEPARATED (UNSCREWED) AND FELL OFF. THIS ALLOWED THE GATE TO PIVOT IF THE POWER LEVER WAS RETARDED ALLOWING THE ENGINE/PROP TO ENTER THE REVERSE MODE OF OPERATION. (TC NR 20080104002)

CA071219008	CESSNA	PWA	WIRE	CHAFED
12/13/2007	208B	PT6A114A	AAPA4CHAFED	NR 2 BUS BAR

(CAN) DURING CRUISE FLIGHT ALL (3) BUS, NR 2 CIRCUIT BREAKERS POPPED AND THE STANDBY POWER CIRCUIT BREAKER ON BUS, NR 2 POPPED. THE AC LANDED WITHOUT FURTHER INCIDENT. UPON ARRIVAL MAINT PERSONNEL INSPECTED THE WIRING ON THE DISTRIBUTION PANEL AND FOUND WIRE AAPA4 CHAFED TO THE NR 2 BUS BAR. THE CHAFED WIRE WAS REPAIRED IAW STANDARD PRACTICES AND THE AC WAS GROUND RUN AND CHECKED SERVICEABLE. (TC NR 20071219008)

CA080305002	CESSNA	PWA	COOLING FAN	NOISY
3/3/2008	208B	PT6A114A	C4140070102	COCKPIT

(CAN) ON CLIMBOUT FLIGHT CREW HEARD A LOUD SQUEALING NOISE FROM THE AVIONICS COOLING FAN. IN COLD TEMPERATURES THIS IS TYPICAL OF THE COOLING FAN AND THE FLIGHT CREW DECIDED TO ALLOW THE FAN TO WARM UP. AFTER A COUPLE MINUTES THE FLIGHT CREW DECIDED TO RETURN. APPROX 5 MINUTES LATER DURING VECTORS BACK THE FLIGHT CREW BEGAN TO SMELL A BURNED SMELL IN THE COCKPIT AND PULLED THE AVIONICS FAN CIRCUIT BREAKER, THE SMELL STOPPED. AT THE TIME, THE FLIGHT CREW ALSO COMMENTED ON SMOKE LIGHT, SMOKE IN THE COCKPIT. THE FLIGHT WAS CONTINUED AND LANDED WITHOUT FURTHER INCIDENT. MAINT REPLACED THE AVIONICS COOLING FAN AND GROUND RUN THE AC WITHOUT ANY ADDITIONAL FAULTS. THE AC WAS RELEASED. (TC NR 20080305002)

CA071227003	CESSNA	CONT	BOLT	BROKEN
10/15/2007	2105	IO470S	NAS464P5A42	NLG DRAG STRUT

(CAN) WHILE TAXING ON BUSH STRIP, NOSE GEAR AFT DRAG STRUT BOLT BROKE AND WORKED OUT CAUSING NOSE GEAR TO FOLD FWD. (TC NR 20071227003)

2008FA0000302	CESSNA	CONT	GASKET	FAILED
4/19/2008	210L	IO520*	649964	OIL COOLER

THE OIL COOLER ADAPTER GASKET TAILED IN FLIGHT CAUSING (2) QUARTS OF OIL IN ONE HOUR TO BE PUMPED INTO THE ENGINE COWLING. THIS ENGINE IS A FACTORY REMANUFACTURED ENGINE WITH 140 HOURS SINCE REMAIN. ON INSPECTION AND DISASSEMBLY THE OIL COOLER ADAPTER BOLTS DID NOT APPEAR TO BE TORQUED ENOUGH BUT THE GASKET ITSELF WAS BRITTLE AND LEAKING. THE ENGINE AND ADAPTER SURFACE WERE FLAT AND CLEAN. THE REPLACEMENT GASKET APPEARS TO BE A BETTER QUALITY. (K)

CA080229004	CESSNA	CONT	PULLEY	SEPARATED
2/28/2008	210R	IO520L		ALTERNATOR

(CAN) WHILE IN FLIGHT, NR1 ALTERNATOR FAILED, NR1 ALT AMBER LIGHT CAME ON, ON THE GROUND, INSP REVEALED THAT THE DRIVE PULLEY HAD SEPARATED FROM ALTERNATOR, PULLEY FOUND DAMAGED WITH OTHER BROKEN PULLEY PIECES ON THE BUTTOM OF COWLING. RETAINING NUT HAD GONE AWAY. END SHAFT (ARMATURE) WAS NOT SEIZED. SUSPECT A QC PROBLEM IN THIS CASE. ALTERNATOR REPLACED WITH O/H UNIT. (TC NR 20080229004)

CA070927001	CESSNA	CONT	WHEEL	BROKEN
8/31/2007	310R	IO520M	4040A	RT MLG

(CAN) DURING MAINT THE RT MAIN WAS FOUND WITH PART OF THE BEAD MISSING, PILOT SAID THE WHEEL WAS OK PRIOR TO DEPARTURE AND LANDING NORMAL. TOWER ADVISED AND CREW SENT OUT FOR INSP, NO PIECES FOUND. (TC NR 20070927001)

CA080424003	CESSNA	CONT	BENDIX	BRUSHES	MISSING
4/23/2008	340A	TSIO520NB	BL3492205	10160844	MAGNETO

(CAN) LT ENGINE REPORTED DIFFICULT TO START. MAGNETO REMOVED AND BENCH TESTED, FOUND TO HAVE LOW AND INCONSISTENT OUTPUT. MAGNETO DISASSEMBLED FOR INSP AND FOUND CARBON BRUSH ASSY NOT INSTALLED IN DISTRIBUTOR GEAR. NO EVIDENCE OF BRUSH OR SPRING REMNANTS FOUND INSIDE OF MAGNETO. MAGNETO RE-ASSEMBLED WITH NEW BRUSH, BENCH TESTED IAW BENDIX OVERHAUL MANUAL X42000-1. MAGNETO RE-INSTALLED ON ENGINE, ENGINE STARTS NORMAL. (TC NR 20080424003)

CA080314013	CESSNA	CONT	ENGINE	MAKING METAL
3/7/2008	401	TSIO520E	TSIO520EB	

(CAN) ON FINAL APPROACH INTO AIRPORT THE RT ENGINE MANIFOLD PRESSURE STARTED CHANGING. THE PILOT THEN NOTICED THAT THE RT OIL PRESSURE HAD DROPPED TO THE RED LINE. THE RT PROP WAS FEATHERED AND THE ENGINE WAS SHUTDOWN. SMALL BITS OF METAL WERE FOUND UNDER THE OIL PRESSURE RELIEF VALVE. THE ENGINE WAS REMOVED AND SENT FOR WARRANTY. (TC NR 20080314013)

CA070123009	CESSNA	CONT	BRACKET	CORRODED

1/23/2007	402C	TSIO520VB	51220465	

(CAN) WHEN FLAPS LOWERED AC SEEMED TO ROTATE SLIGHTLY. PILOT RETURNED TO BASE. FLAP SYS INSPECTED AND FAULT FOUND WITH LT FLAP BELLCRANK LOWER MOUNTING BRACKET. BELLCRANK MOUNTING HOLE WAS SEVERELY CORRODED ALLOWING LARGE BOLT MOVEMENT WHEN FLAPS OPERATED. BRACKET REMOVED AND NEW PART ON ORDER. (TC NR 20070123009)

CA080304011	CESSNA	GARRTT	ACTUATOR	FAILED
1/18/2008	441	TPE3318	99101399	NLG

(CAN) AIRCRAFT INDICATED (3 GREEN) ON APPROACH, UPON LANDING, NOSE GEAR RETRACTED RESULTING IN AC DAMAGE. UPON ARRIVAL, MAINT NOTED GEAR INDICATION REMAINED (3 GREEN) AND AC WAS SITTING ON ITS NOSE. THE AC WAS RAISED AND THE NOSE GEAR WAS PULLED INTO THE DOWN AND LOCKED POSITION. INITIAL INSP OF THE GEAR SYS FOUND ALL TO BE IN WORKING ORDER, GEAR SWINGS PERFORMED NORMALLY. THE ACTUATOR`S INTEGRAL POSITION INDICATION SWITCH MALFUNCTIONED CAUSING THE HYD SYS PRESSURE TO THE NOSE GEAR ACTUATOR TO STOP PREMATURELY BEFORE THE NOSE GEAR WAS FULLY EXTENDED AND IN THE OVER CENTER POSITION. (TC NR 20080304011)

CA080423011	CESSNA	PWA	ENGINE	MALFUNCTIONED
3/30/2008	500CESSNA	JT15D1A		

(CAN) THE CREW REPORTED VIBRATIONS SHORTLY AFTER TAKEOFF AND WAS ATTEMPTING TO RETURN TO POINT OF DEPARTURE. THE AC CRASHED. ALL ON BOARD WERE FATALLY INJURED. BOTH ENGINES SHOWED INDICATIONS CHARACTERISTIC OF THE ENGINES PRODUCING LOW POWER OR WINDMILLING UNDER AIR LOADS AT THE TIME OF IMPACT. THERE WERE NO INDICATIONS OF ANY PRE-IMPACT ANOMALIES TO ANY OF THE COMPONENTS OBSERVED. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20080423011)

CA080108008	CESSNA	PWA	CESSNA	VALVE SEAT	DAMAGED
12/17/2007	550	JT15D4	55275042	55275042	UPLOCK ACTUATOR

(CAN) WHEN PRESSURE IS APPLIED TO THE UPLOCK ACTUATOR THE ACTUATOR MUST TRAVEL FULL STROKE BEFORE ALLOWING FLUID TO THE GEAR ACTUATOR. IN THIS ACTUATOR THE DAMAGED SEAT ALLOWED FLUID TO THE GEAR ACTUATOR BEFORE THE UPLOCK HAD RELEASED THE GEAR. WE HAVE HAD A COUPLE INCIDENTS WHERE THE GEAR WOULD NOT EXTEND WHEN THE GEAR ACTUATOR APPLIED DOWN FORCE TO THE GEAR BEFORE THE UPLOCK COULD RELEASE AND THE UPLOCK COULD NOT OVERCOME THE FORCE. UPLOCK ACTUATOR WAS REPLACED. (TC NR 20080108008)

2568	CESSNA	PWA	BRAKE ASSY	BROKEN
5/1/2008	550	JT15D4	215286	RT MLG

RT MLG BRAKE LOCK UP DURING TAXI. AN INSP BY MAINT HAS DETERMINED THAT THE BRAKE STATOR CAME APART AND LOCKED UP THE BRAKE. THE C/A GIVEN WAS FOR THE REMOVAL AND REPLACEMENT OF THE OF THE RT WHEEL AND TIRE ASSY AND BRAKE. A GEAR SWING WAS ALSO PERFORMED IAW MM 32-00.

6001LOXYGEN	CESSNA	PWA	OXYGEN BOTTLE	LEAKING
4/23/2008	550	JT15D4	176174	NOSE

INSTALLED REPAIRED EMERGENCY OXYGEN BOTTLE IN AC AND SERVICED. WHEN BOTTLE WAS TURN ON WAS FOUND TO LEAK FROM ON-OFF VALVE. UNIT WAS REPAIRED ON JANUARY 21,2008.

CA080305013	CESSNA	PWA	ENGINE	FLAMED OUT
2/19/2008	550	PW530A		

(CAN) WHILE DEICING THE AC AND PERFORMING SYSTEMS CHECKS, THE ENGINE FLAMED OUT WHEN BROUGHT TO IDLE POWER. THE ENGINE FLAMED OUT (2) ADDITIONAL TIMES UNDER SIMILAR CIRCUMSTANCES DURING TROUBLESHOOTING. ATTENTION IS FOCUSING ON THE FUEL CONTROL AND AIRFRAME RIGGING. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20080305013)

CA071220004	CESSNA	PWA	HOSE	CRACKED
12/15/2007	560CESSNA	JT15D5	AE2463531G0460	HYDRAULIC PUMP

(CAN) ALL GEARS DOWN AND LOCK WITH (3) GREEN LIGHTS. WHEN PILOT SELECTED FLAPS DOWN, LT HYD FLOW LIGHT COMES ON AND FOLLOW THE RT SIDE. FINALLY, HYD FLUID LEVEL LIGHT COMES ON. AC LANDED SAFELY WITH NO HYD SYS AVAILABLE. FOUND LT ENG HYD PRESSURE HOSE CRACKED. BOTH HYD PRESSURE HOSE REPLACED WITH AE2463531G0460 ON LT SIDE AND AE2463531G0226 ON RT AND BOTH ENG DRIVEN HYD PUMP REPLACED WITH 9912062-4. HYD FILTER INSPECTED AND REPLACED WITH NEW FILTER KIT CPDPHF-1. FUNCTIONAL CHECK C/O AND AC RETURN TO SERVICE. (TC NR 20071220004)

CA080424005	CESSNA	PWA	IGNITION LEAD	DEFECTIVE
4/23/2008	560CESSNA	PW535A	90591507	LT ENGINE

(CAN) DURING ROUTINE INSP OF THE ENGINE, THE LT ENG OB IGNITER LEAD WAS FOUND DEFECTIVE. UPON REMOVAL OF IGNITER FROM LEAD, FOUND THE LEAD`S CENTER ELECTRICAL POST LOOSE AT IGNITER END. APPROX ONE INCH OF THE CENTER POST OF LEAD FEEL OUT WITH CERAMIC INSULATOR AND NOTED BURNING MARKS AROUND WHERE THE CENTER CORE HAD BROKEN AWAY. LEAD REPLACED WITH NEW UNIT. (TC NR 20080424005)

CA080227002	CESSNA	PWA	SPINDLE	WORN
2/26/2008	560XL	PW545A	SL51043	MAIN CABIN DOOR

(CAN) CREW SNAGGED MAIN CABIN DOOR OUTER HANDLE AS BEING SLOPPY. DISASSEMBLED DOOR HANDLE AND FOUND OUTER DOOR HANDLE SPINDLE TO BE EXESSIVELY WORN WHERE PIN FOR ATTACHING OUTER HANDLE FITS. MEASURED REMAINING MATERIAL AND FOUND TO BE 0.028 INCH ON ONE SIDE AND 0.031 INCH ON THE OTHER. REMOVED AND REPLACED SPINDLE WITH NEW AS IT WAS FELT THAT THIS PIECE WOULD FAIL SOON AND ALLOW THE HANDLE (OUTER) TO COME OFF AND POSSIBLY BE INGESTED BY THE LT ENGINE. (TC NR 20080227002)

CA080305012	CESSNA	PWA	EEC	MALFUNCTIONED
2/19/2008	560XL	PW545A		ENGINE

(CAN) DURING TAKEOFF ROLL, THE ENGINE ELECTRONIC CONTROL DROPPED OFF LINE. THE CREW ADVANCED THE THRUST LEVER TO ACHIEVE REQUIRED THRUST, BUT THE POWER LEVEL REMAINED 10 PERCENT LESS THAN THE REQUIRED LEVEL.THE FLIGHT WAS ABORTED AND THE AIRCRAFT RETURNED TO THE GATE. TROUBLESHOOTING IS ONGOING. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20080305012)

CA071214008	CESSNA	PWC	VALVE	FAILED
12/13/2007	560XL	PW545B	CAC99126259	MLG

(CAN) AT LANDING GEAR SELECTION, THE LANDING GEAR DID NOT COME DOWN AND NONE OF THE FOLLOWING INDICATIONS WERE OBSERVED: HYD PUMP OPERATION GEAR MOVEMENT / NOISE GEAR DOWN LIGHTS INDICATION ON THE CONTROLLER, NOTE: ALL OTHER HYD CONSUMERS WERE OPERATIONAL THE GEAR WAS RECYCLED WITH NO SUCCESS. A GO-AROUND WAS INITIATED THEN THE ABNORMAL/EMERGENCY CHECKLIST WAS REVIEWED AND CARRIED OUT, GEAR CAME DOWN AND LOCKED . VALVE REPLACED GEAR SYS, OK (TC NR 20071214008)

CA080305016	CESSNA	PWC	PWC	ENGINE	POWER LOSS
3/1/2008	560XL	PW545B	PW545B		

(CAN) DESCENDING THROUGH FL370, THE ENGINE ELECTRONIC CONTROL REVERTED TO MANUAL AND ENGINE N2 SPEED REDUCED TO 41 PERCENT ASSOCIATED WITH VIBRATION. THE ENGINE DID NOT RESPOND TO THRUST LEVER INPUT AND THE CREW ELECTED TO SHUTDOWN THE ENGINE. TROUBLESHOOTING IS ONGOING. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20080305016)

CA080326003	CESSNA	GARRTT	COUPLING	MISINSTALLED
3/24/2008	650	TFE7313C		TEMP CONTROL

(CAN) CREW WROTE UP, CABIN PAC STUCK ON FULL COLD. TROUBLESHOOTING CARRIED OUT AND FOUND THAT THE COUPLING FOR CABIN TEMP CONTROL HAD DISCONNECTED FROM THE ENVIROMENTAL CONTROL UNIT. BOTH CLAMPS AND THE COUPLING WERE INTACT HOWEVER THE COUPLING HAD BEEN INSTALLED INCORRECTLY. COUPLING WAS REINSTALLED AND LEAK CHECKED SERVICEABLE. (TC NR 20080326003)

CA080229005	CESSNA	CONT	BRACKET	BROKEN
2/29/2008	A185E	IO520D	0512128	TE FLAPS

(CAN) ON PREFLIGHT INSPECTION, PILOT FOUND WHEN FLAPS EXTENDED, LT FLAP HAD NO TENSION, AND COULD BE LIFTED TO THE RETRACT POSITION, POTENTIALLY CAUSING DISIMILAR LIFT WHEN ACTIVATED IN FLIGHT. INSPECTED AREA, AND FOUND LT BRACKET BROKEN AT F.S. 65.33, IB MOUNTING TABS BROKEN. SIMILAR OCCURANCE INSPECTED AREA EACH 100 HRS SINCE, NO INDICATION OF CRACKS PREVIOUSLY DETECTED. SUSPECT THAT FAILURE IS IMMEDIATE AS BREAKS LOOK NEW. POORLY DESIGNED PART FOR LOADS THAT ARE IMPOSED. (TC NR 20080229005)

CA060608003	CESSNA	CONT	SHAFT	DAMAGED
6/8/2006	A185E	IO520D	041321318	AFT END

(CAN) ON INSP, IT WAS FOUND THAT THE RT AND LT CONTROL WHEELS WERE LOOSE ON THE CONTROL SHAFTS. AVION RESEARCH STC 00709LA HAD PREVIOUSLY BEEN INSTALLED TO REPLACE THE CONTROL WHEELS, HOWEVER, THE INSTALLATION INSTRUCTIONS CW-8001 REV1 FEB26/98 DO NOT ADDRESS THE DIFFERENCE IN FASTENER SIZES BETWEEN THE ORIGINAL AND REPLACEMENT CONTROL WHEELS. THE STC HOLDER WAS CONTACTED AND A REVISED INSTRUCTION PAGE WAS SUPPLIED THAT REQUIRED ASSEMBLY OF THE CONTROL WHEELS WITH LOCTITE APPLIED TO THE CONTROL SHAFT. NO REVISION DOCUMENT WAS PROVIDED FOR THE ORIGINAL INSTUCTIONS.

2008FA0000296	CESSNA	LYC	UNKNOWN	MALFUNCTIONED
4/25/2008	T182	TIO540*	011N097200	COCKPIT

WHEN TURNING THE INNER "CRS" COARSE KNOB THE OUTER "BARO" BAROMETRIC PRESSURE KNOB WOULD TURN ALSO. CHANGING THE ALTITUDE.

O7TR200800001	CESSNA		TURBOCHARGER	FAILED
3/11/2008	T182T		46C22924E	ENGINE

MAJOR TURBO FAILURE DUE TO SEPARATION OF TURBINE WHEEL HEAD FROM SHAFT.

2008FA0000291	CESSNA	LYC	UNKNOWN	MALFUNCTIONED
4/24/2008	T182T	TIO540*	011N097200	COCKPIT

WHEN TURNING THE (CRS) COURSE KNOB, THE INNER KNOB (BARO) BAROMETRIC PRESSURE KNOB WOULD TURN ALSO. CHANGING THE ALTITUDE INDICATED.

CA071227004	CESSNA	CONT	BULKHEAD	CRACKED
9/9/2007	TU206A	TSIO520C	12128582	FUSELAGE

(CAN) CRACK IN REAR BULKHEAD PIN DURING MANDATORY NDT INSPECTION OF THE ARGA. (TC NR 20071227004)

CA080325006	CESSNA	CONT	BULKHEAD	CRACKED
3/12/2008	U206E	IO520F	12127071	FUSELAGE

(CAN) BULKHEAD CRACK 1.25 IN LONG AT RT SIDE FROM LIGHTNING HOLE. NEAR STAB ATTACH POINT. (TC NR 20080325006)

2008FA0000307	CIRRUS	CONT	OIL COOLER	WORN
2/25/2008	SR20	IO360ES	646880	

THE OIL COOLER SUPPORT SHOE RUBBER COATING IS FAILING AND EATING INTO THE OIL COOLER .020 TO .040 OF AN INCH. IAW MM IT IS INSTALLED AT ENGINE ASSY AND ADJUSTED AFTER INITIAL TEST RUN. THERE IS NO PUBLISHED IN SERVICE INSTRUCTION FOR IT. IF THIS CONDITION IS NOT ADDRESSED BY REPLACEMENT OF SHOE AND OIL COOLER THE POSSIBILITY OF LOSS OF ENGINE OIL IS HIGH. THE 5 AIRCRAFT THAT WE HAVE FOUND, ON THOSE AC THE OIL COOLER HAD TO BE REPLACED. IN ADDITION TO THAT WE HAVE TO REPLACE 18 OIL COOLER SHOE'S PN 632983. THE FAILURE TIME FROM NEW TO HAVING WORN INTO THE ENGINE OIL COOLER IS LESS THEN 600HRS TTAF. THIS IS DUE TO THE RUBBER PORTION OF SHOE FAILING AND ALLOWING THE STEEL PART TO CUT INTO THE OIL COOLER.

CA080108006	CNDAIR	PWA	CNDAIR	SKIN	CRACKED
1/8/2008	CL2151A10	CWASP	2151506180	215150622	AILERON TAB

(CAN) AC UNDERGOING TURBO-PROP CONVERSION AT PRESENT. RT AILERON GEAR TAB INSPECTION REVEALED A CRACK IN THE LOWER SKIN UNDER THE LOWER IB MASS BALANCE WEIGHT MOUNT. THE CRACK IS APPROX 1.75 IN. LONG AND LOCATED LATERALLY, FWD OF THE BALANCE WEIGHT MOUNT ATTACHMENT FASTENER HOLES. THE REPLACEMENT GEAR TAB WAS INSPECTED AND FOUND CRACKED IN THE SAME LOCATION. THE CUSTOMER AND OEM HAVE BEEN INFORMED. (TC NR 20080108006)

CA080331003	CNDAIR	PWA	SPAR CAP	CRACKED
3/17/2008	CL2151A10	CWASP	2151003268	WING

(CAN) WHILE PERFORM AD CF-1992-26R1, ULTRA SONIC INSPECTION OF THE WING REAR SPAR CAP, CRACKS WERE INDICATED ON BOTH REAR SPAR CAPS. VISUAL INSPECTIONS WERE CARRIED OUT AND CRACKS DISCOVERED ON BOTH SPAR CAPS AT WS 51.00 FS 434.80. THIS AD WAS DUE AT A/F TIME 2651.3 AND WATER DROPS 9820. WE CARRIED IT OUT DURING WINTER MAINT AT A/F TIME 2530.8 AND WATER DROPS 9521. THE AC MFG WAS CONTACTED AND APPROVED DRAWINGS SENT SHOWING REPAIRS. (TC NR 20080331003)

CA080331001	CNDAIR	PWA	FRAME	CRACKED
3/17/2008	CL2151A10	CWASP	21531062212	FS 434.80

(CAN) WHILE PERFORMING AD CF-1997-07R2, NDT INSP OF FRONT AND REAR SPAR WING TO FUSELAGE FRAME ANGLES A CRACK WAS DETECTED ON THE REAR LT OB ANGLE. THE CRACK ORIGINATED AT THE TOP HI-LOK AND WAS HEADED UP ABOUT .1250 TH OF AN INCH. IT COULD NOT BE DETECTED BY THE NAKED EYE. THE AD WAS ACTUALLY DUE AT A/F TIME 2573.4 AND WATER DROPS 9726. WE PERFORMED IT DURING WINTER MAINT AT A/F 2530.8 AND 9521 WATER DROPS. APPROVED REPAIRS WILL BE CARRIED OUT AND THE AC RELEASED FOR SERVICE. (TC NR 20080331001)

CA080222005	CNDAIR	PWA	O-RING	DETERIORATED
2/22/2008	CL2151A10	R2800CA3	3620377	MLG

(CAN) O-RING LOCATED BEHIND INDICATED SCREW IN DIAGRAM, DETERIORATED CAUSING A HYDRAULIC LEAK. THERE ARE (6) LOCATIONS ON THE AC THAT INCORPORATES THIS VALVE. THIS LEAK WAS DISCOVERED ON THE NLG SELECTOR VALVE LOCATED UNDER CO-PILOTS SIDE. (TC NR 20080222005)

CA080304001	CNDAIR	GE	COMPUTER	FAULTY
2/4/2008	CL600*	CF343A2	543036B29	STALL WARNING

(CAN) IT TOOK (3) STALL WARNING COMPUTER BEFORE GETTING ONE THAT WAS SERVICEABLE , THEY ALL FAIL THE TEST IAW TEST PROCEDURE MM PSP601-2 CHAP 27-39-00 P 206 207 NB MFG PRODUCTS (TC NR 20080304001).

CA080218001	CNDAIR	GE	CONTROL UNIT	FAULTY
2/16/2008	CL600*	CF348C5	90004433	ANTI SKID SYS

(CAN) ON LANDING, CREW RECEIVED IB ANTI-SKID CAUTION MESSAGE. AFTER TAXIING CLEAR OF ACTIVE RUNWAY IT WAS DETERMINED BOTH LT MAIN TIRES FLAT. MAINT FOUND MDC FAULT CODES INDICATED FAULTY ASCU. ASCU REPLACED, AXLE INSP. FOR OVERTEMP AND TIRES REPLACED. FUNCTION CHECKS C/O WITH NO FURTHER FAULTS. (TC NR 20080218001)

CA080217002	CNDAIR	WINDSHIELD	BROKEN
2/11/2008	CL6002B19	NP13932111	COCKPIT

(CAN) CAPTAINS WINDSHIELD BROKE CLIMBING THROUGH 19000 FT. FOLLOWED QRH AND RETURNED TO FIELD. WINDSHIELD IS A POST SB CONFIGURATION (TC NR 20080217002)

CA080217003	CNDAIR	WINDSHIELD	CRACKED
2/11/2008	CL6002B19	NP13932111	COCKPIT

(CAN) ON ROTATION CAPTAINS WINDSHIELD CRACKED. FOLLOWED QRH AND RETURNED TO THE FIELD. WINDSHIELD IS A POST SB CONFIGURATION. (TC NR 20080217003)

CA080314001	CNDAIR	WINDOW	CRACKED
2/6/2008	CL6002B19	NP1393225	COCKPIT

(CAN) FLT NR 3874 DISCREPANCY: (CAPT`S SIDE WINDOW FWD UPPER CORNER, MIDDLE PANE CRACKED DURING APPROACH) REQUESTED THE PN/SN, TSN/CSN INFORMATION. UPDATE 2/6: REPLACED THE WINDOW. (TC NR 20080314001)

CA080401001	CNDAIR	WIRE	BROKEN
3/27/2008	CL6002B19	W31G1120	THRUST REVERSER

(CAN) ABOUT 20 MINUTES BEFORE EXPECTED ARRIVAL , RECEIVED THAT THERE WAS REV UNLOCKED MESSAGE ON EICAS IN FLIGHT, THE CREW ACCORDING TOOK QUICK CHECKLIST OPERATION, SHUTDOWN THE LT ENGINE MANUALLY, DID SINGLE ENGINE LANDING PROCEDURES. STARTED THE TROUBLESHOOTING. CHECKED THE PDU, ETC. FINALLY, FOUND THE PROBLEM, THE WIRE OF THE W31G/1/1-20 OF THROTTLE LOCKOUT THROTTLE LOCKOUT WAS BROKEN, THE BROKEN WIRE WAS TOO SHORT, (ALL THE WIRE SHOULD HAVE THE SAME LENGTH NORMALLY) THEY SHOULD BE RIGGED TO MAKE SURE EVERYTHING WOULD BE OK, WE CHANGED THE THROTTLE LOCKOUT MICROSWITCH REF AMM78-37-01, AND REF ESPM20-16-10C, DID THE SOLDER SLEEVE WIRE SPLICING OF THROTTLE LOCKOUT MICROSWITCH, TESTING IS NORMAL BETWEEN EVERY PIN. THEN RAN THE ENGINE 10 TIMES, THERE IS NO FAULT OR FAILURE MESSAGE, AND DID THE TASK OF PUT THE AC IN A WEIGHT OFF WHEELS CONFIGURATION WITH THE AC ON THE GROUND REF AMM32-61-00-860-801, CHECKING AND TESTING ARE OK. THUS, THE TROUBLESHOOTING IS OVER. (TC NR 20080401001)

CA080328010	CNDAIR	GE	FLAP SYSTEM	FAILED
3/27/2008	CL6002B19	CF343A1		TE FLAP

(CAN) ON APPROACH WHEN MAKING INITIAL FLAP SELECTION CREW RECEIVED FLAP FAULT MESSAGE, FLAPS FAILED TO OPERATE. CREW PERFORMED FLAP (0) LANDING. CREW ADVISE OAT WAS -57 TO -59 FOR ABOUT AN HOUR AT FLIGHT LEVEL 260 PRIOR TO COMMENCING DESCENT. ON GROUND FLAPS POSITIONED TO 8 DEG AND AC FERRIED WITH FLAPS AT 8 DEG TO MAINT BASE FOR CORRECTIVE ACTION. FLAP FAULT CODE INDICATED FLAP JAM. MAINT FOLLOWING COMPANY POLICY IS REPLACING ALL FLAP ACTUATORS, CLEANING AND LUBRICATING ALL FLAP DRIVES, NO OBVIOUS ABNORMALITIES NOTED. (TIMES PROVIDED ARE AC TT AS NO SPECIFIC COMPONENT IDENTIFIED AS TO CAUSE) (TC NR 20080328010)

CA080331006	CNDAIR	GE	FLAP SYSTEM	FAILED
3/28/2008	CL6002B19	CF343A1		TE FLAPS

(CAN) FLAP FAILED ON APPROACH , LT FLAP INDICATING 3 DEG , RT INDICATING 4 DEG PARTIAL FLAP LANDING CARRIED OUT. MAINT ACTIONS : ALL 8 FLAP ACTUATORS REPLACED IAW COMPANY FLAP FAIL POLICY. (TC NR 20080331006)

CA080314017	CNDAIR	GE	FLAP SYSTEM	MALFUNCTIONED
3/6/2008	CL6002B19	CF343B1		TE FLAPS

(CAN) FLAP FAIL MESSAGE SHORT FINAL WHEN CREW WERE SELECTING FROM FLAP 8 TO FLAP 20 POSITION, FLAPS REMAINED AT 8 DEGREES AND LANDED NORMAL. MAINT REPORTED THAT THE LIST OF FAULTS IN MDC ARE : 1- JAM 2- FECU 3- L MOTOR BRAKE THE FAULT CODES WERE RETRIEVED FROM THE FECU AND POINT TOWARDS POWER LOSS DUE TO THE SDS LT SKEW DETECTOR FLAGGED. MAINT RESET THE SDU AND FECU. RAN THE FLAPS UP AND DOWN 2 TIMES. THEN THE SDU FLAGGED THE LT SKEW DETECTOR AGAIN. DUMMY BOX INSTALLED, SYSTEM TESTED AND IT WAS CONFIRMED THE SKEW DETECTION IS AT FAULT. MAINT HAS CONFIRMED THAT THE SDU FECU POWER 1 AND 2 LIGHTS FLAGGED, AND THE LT OB PANEL SKEW L4 AND L3 LIGHTS FLAGGED. SKEW DETECT SYS BOUND AT FAULT. SKEW DETECT SYS DEACTIVATED IAW AMM TASK 27-51-15-040-801. MEL 27-51-03 APPLIED. (TC NR 20080314017)

CA080215011	CNDAIR	GE	FLAP SYSTEM	FAILED
2/14/2008	CL6002B19	CF343B1		TE FLAPS

(CAN) DURING SELECTION OF FLAPS FROM 30 DEG TO 45 DEG ON APPROACH RECEIVED (FLAP FAI) MESSAGE ON EICAS. FLAPS FAILED TO MOVE WITH INDICATION OF 34 DEG. NORMAL LANDING. MAINT INSP FOUND NO ABNORMALITIES. FLAP DRIVE SHAFTS REMOVED AND LUBRICATED IAW COMPANY POLICY. (TC NR 20080215011)

CA080221003	CNDAIR	GE	PUMP	UNSERVICEABLE

2/20/2008	CL6002B19	CF343B1	601R751547	HYD SYSTEM

(CAN) CREW RECEIVED A GEAR DISAGREE MESSAGE AFTER TAKEOFF WITH AN APPLICABLE RED NOSE GEAR INDICATION AND 2 MAIN GEAR AMBER MESSAGES. CREW ACTIONED THEIR QRH AND DO AN ALTERNATE EXTENSION, A/C RETURNED. PSEU CODES RETRIEVED AND THE AC WAS ROUTED WHERE MAINT WILL INVESTIGATE FURTHER. NOSE GEAR OLEO SERVICED TO C/O AND 3A HYD PUMP TO BE REPLACED. MORE INFORMATION TO FOLLOW. (TC NR 20080221003)

CA080211013	CNDAIR	GE	PCU	MALFUNCTIONED
2/10/2008	CL6002B19	CF343B1	274001	RUDDER

(CAN) TASK NR RJ2-27-900-714 FOR THE BACKLASH AND FUNCTIONAL CHECK OF RUDDER CONTROL SYS WAS CARRIED OUT ON THIS AC DURING A HEAVY MAINT CHECK. TEST RESULT PARAMETERS WERE FOUND BEYOND LIMITS. FURTHER INVESTIGATION DURING RECTIFICATION LEAD TO THE DISCOVERY OF THE NR 2 RUDDER PCU LINKAGE ROD BEING FOUND COMPLETELY SHEARED OFF. THERE WERE ALSO DAMAGE TO THE RUDDER ATTACH FITTING AND THE VERTICAL STABILIZER BRACKET. A NEW PCU IS ON ORDER AND THE FAILED UNIT WILL BE REPLACED BEFORE AC IS RELEASED FROM HEAVY CHECK. ENGINEERING DEPART HAS BEEN CONTACTED FOR DAMAGE EVALUATION AND POSSIBLE ISSUE OF A REPAIR EO FOR THE RUDDER FITTING AND BRACKET. THOSE UNITS WILL BE REPLACED AS WELL IF THEY ARE FOUND BEYOND REPAIR. IT SHOULD BE NOTED THAT THERE WAS (NO) INDICATION OF THIS FAILURE WHILE THE AC WAS IN SERVICE. (TC NR 20080211013)

CA080314002	CNDAIR	GE	ENGINE	FIRE
3/13/2008	CL6002B19	CF343B1	CF343B1	NR 2

(CAN) AC LANDED, AFTER THE PILOT HAD DECLARED AN EMERGENCY FURTHER TO A FIRE ON ENG NR 2. THE AC FLEW IN CRUISE AT FL 220, WHEN THE PILOT GOT A FIRE ALARM ON ENG 2. THE TEMP (ITT) OF ENGINE SHOWED CLEARLY THAT AN ACTUAL FIRE HAD BROKEN OUT. PILOT DECLARED AN EMERGENCY, APPLIED THE FIRE DRILL, ACTIONED THE FIRE PROTECTION SYS (BOTH BOTTLES) AND WENT IN AN EMERGENCY DESCEND TOWARDS AIRPORT. DURING DESCEND, THE TEMP OF ENG NR 2 STAYED AT A HIGHER LEVEL (760 DEGREE C) THAN ENG NR 1 (600 DEGREE C). THE AC LANDED SAFELY, ATC PERSONNEL WITNESSED A SLIGHT BLACK SMOKE COMING FROM THE ENGINE. THE FIRE BRIGADE WENT INTO ACTION AND USED FIRE EXTINGUISHING AGENT, BUT DID NOT REPORT HAVING ACTUALLY SEEN FLAMES. (TC NR 20080314002)

CA080304010	CNDAIR	GE	SELECTOR VALVE	FAILED
3/3/2008	CL6002C10	CF7002D2	533407	MLG

(CAN) DISC LANDING GEAR WOULD NOT EXTEND. PERFORMED MANUAL/EMERGENCY EXTENTION. ENG HYDR PUMP PRESSURE WAS NORMAL. REMOVED AND REPLACED LANDING GEAR SELECTOR VALVE IAW AMM 32-32-10. ADDITIONAL INFORMATION: ATTEMPTED TO EXTEND GEAR 3 TIMES BUT FAILED. DID GET A LG DISAGREE WARNING. HAD TO DO A GO AROUND TO GET GEARDOWN. (TC NR 20080304010)

CA080225005	CNDAIR	GE	SHAFT	BROKEN
2/22/2008	CL6012A12	CF343A2	731579	IDG

(CAN) 3 MINUTES AFTER TAKEOFF, GENERATOR FAILED, AC RETURNED TO BASE. GENERATOR REMOVED, FOUND BROKEN SHAFT INSIDE THE IDG (NOT THE MAIN SHAFT). IT BROKE, MELTED THE COVER AND CAME OUT (TC NR 20080225005)

CA080225012	CNDAIR		FITTING	CORRODED
2/22/2008	CL604		19064104	MLG

DURING LANDING GEAR 96 MONTH DETAIL INSPECTION HEAVY PITTING CAUSED BY CORROSION. FOUND ON MAIN LANDING GEAR MAIN FITTING TRAILING ARM ATTACHMENT INBOARD LUG BUSHING AREA AND BORE, RESULTING CONSIDEABLE AMOUNT OF MATERIAL FROM AFFECTED LOCATION, LEADING MAIN FITTINGTO REDUCED LOAD CARRYING CAPACITY

CA080227003	CNDAIR	GE	OIL SYSTEM	LOW PRESSURE
2/19/2008	CL604	CF343B		ENGINE

(CAN) LOW OIL PRESS WARNING ON NR 2 ENGINE APPROX 3 MINS AFTER TAKEOFF AT 6000FT MSL ON DEPARTURE CLIMBOUT. AFTER IDENTIFICATION OF FAULT AND CONFIRMATION THAT THE FAULT WAS NOT AN

INDICATION PROBLEM NR 2 ENGINE WAS SHUTDOWN AND SECURED. RETURNED SAFELY. THE CAUSE HAS YET TO BE DETERMINED. (TC NR 20080227003)

CA080215009	CVAC	ALLSN	CONNECTOR	DAMAGED
1/11/2008	440	501D13		CONTROL PANEL

(CAN) ON CLIMBOUT, AT 5500FT, THE ADI, HSI AND VSI WENT UNSERVICEABLE AT THE SAME TIME, COMPLETE LOSS OF ELECTRICAL POWER, RT SIDE. AT THE SAME TIME, THE NR 2 ENGINE FIRE WARNING (ILLUMINATED) CAME ON ALL 3 ZONES. CREW COMPLETED ENGINE FIRE DRILL. ATC ADVISED OF THE EMERGENCY, THE AC LANDED WITH NO OTHER INCIDENT REPORTED. AFTER INVESTIGATION FOUND THE RT AC CONTROL PANEL CONNECTOR DAMAGED AT PIN NR 10. BOTH THE AC CONTROL PANEL UNIT AND THE CONNECTOR WAS REPLACED AND TESTED SERVICEABLE. A FLEET CAMPAING WAS CARRIED OUT TO INSPECT ALL THE AC CONTROL PANEL CONNECTORS FOR CONDITION AND NO DEFECT DETECTED. (TC NR 20080215009)

CA080214009	CVAC	ALLSN	DOWNLOCK SWITCH	DEFECTIVE
1/14/2008	440	501D13D		MLG

(CAN) ON APPROACH, ON A FERRY FLIGHT AND WHEN GEARS SELECTED DOWN, THE LT GEAR DID NOT INDICATE DOWN AND LOCKED, LANDING WAS ABORTED. AFTER COMPLETING THE INDICATION, MALFUNCTION CHECKLIST, FOUND IN FACT THAT THE LT GEAR WAS DOWN AND LOCKED. FOR PRECAUTIONARY MEASURES IN THE COMPANY PROCEDURES AN EMERGENCY LANDING WAS DECLARED THAN PROCEEDED WITH NORMAL LANDING. FOLLOWING MAINT INVESTIGATION FOUND LT MLG DOWNLOCK SWITCH DEFECTIVE, THE SWITCH WAS REPLACED AND RIGGED IAW MM AND AC RETUNED TO SERVICE. (TC NR 20080214009)

CA080214006	CVAC	ALLSN	SHAFT	DAMAGED
12/19/2007	440	501D13D	6847100	ENGINE

(CAN) IN CRUISE AT 22,000 FEET, THE CREW OBSERVED A DROP IN RPM FOLLOWED BY A FIRE WARNING IN ENGINE NR1. THE FLIGHT CREW PULLED THE (E) HANDLE AND DISCHARGED THE (2) FIRE EXTINGUISHER BOTTLES. THE FLIGHT CREW THEN PROCEEDED, AFTER DECLARING AN EMERGENCY. THE AC LANDED SAFELY AND NO OTHER INCIDENT REPORTED. THE COMPRESSOR AND TURBINE INTERCONNECT SHAFT AND COUPLING FOUND DAMAGED CAUSING FREE TURBINE ROTATION. THE QEC WAS REMOVED, SPLIT, INSPECTED AND ALL THE PARTS SENT TO THE ENGINE SHOP FOR INVESTIGATION. (TC NR 20080214006)

CA080221001	DHAV	PWA	FUEL TANK	DETERIORATED
2/12/2008	DHC2MK3	PT6A27	CT2P10011	FORWARD

(CAN) THIS FWD FUEL TANK ENCLOSURE WAS FOUND BADLY DETERIORATED DUE TO ITS AGE, THERE WERE OLD REPAIRS FOUND CARRIED OUT. THIS ASSEMBLY HAD BEEN BULGING DUE TO THE FUEL, CAUSING CLOSER TOLERANCES TO THE ELEVATOR CONTROL PUSH/PULL TUBE. THIS ASSEMBLY HAS NOW BEEN REPLACED WITH A NEW CERTIFIED UNIT MADE FROM ALUMINUM IAW STC SA 06-51 MDL P/N VT2MK1555, ISSUE 1. (TC NR 20080221001)

CA080222006	DHAV	PWA	LINE	PUNCTURED
2/19/2008	DHC2MK3	PT6A27		HYD SYSTEM

HYDRAULIC PUMP SUPPLY LINE IN THE COCKPIT DEVELOPED A PIN-HOLE FAILURE IN THE WALL OF THE TUBING. THE HYDRAULIC FLUID AT A PRESSURE OF 1650 PSI WAS RELEASED INTO THE CABIN, ATOMIZING AS IT DID SO, THE DIRECTION OF THE SPRAY WAS DIRECTLY AT THE PILOT. THE POWER WIRE FOR THE HYDRAULIC PUMP ARCED AGAINST THE TUBING, IGNITING THE HYDRAULIC MIST AND IGNITING A FLASH FIRE. THE FIREBALL WAS UNABLE TO SUSTAIN ITSELF AND DID NOT IGNITE THE AIRCRAFT ALTHOUGH THE PILOT WAS SET ON FIRE, SUFFERED 1ST AND 2ND DEGREE BURNS TO HIS FACE AND RIGHT HAND. THE PASSENGER DID NOT RECEIVE ANY INJURIES AND WAS INSTRUMENTAL IN EXTINGUISHING THE PILOT, THE SYSTEM HAS BEEN IN THE ACFT SINCE MANUFACTURING, BUT DOES NOT MATCH ROUTING SHOWN IN THE IPC. AFTER A THOROUGH RECORDS SEARCH, UNABLE TO FIND ANY MENTION OF THE LINES BEING REPLACED OR INSTALLED. TUBING HAS BEEN FORWARDED TO A LAB TO DETERMINE WHAT CAUSED THE ORIGINAL TUBE FAILURE. FLUID SAMPLES OF THE AEROSHELL 41 FLUID HAVE BEEN ALSO SENT OUT TO DETERMINE IF THERE WAS ANY CONTAMINATION PRESENT. ALL THE LINES IN THE CABIN ARE BEING REPLACED WITH NEW AND PROTECTED FOR NOW WITH A FIRE SLEEVE TO ISOLATE THEM FROM EACH OTHER AND ANY POTENTIAL IGNITION SOURCE, WE ALSO CARRIED THIS OUT ON OUR OTHER DHC-2T C-FOPE ITS SETUP DOESN’T RESEMBLE ANYTHING IN THE IPC EITHER. I WILL

UPDATE WHEN WE RECEIVE RESULTS FROM THE LABS. (TC# 20080222006)

CA080418004	DHAV	PWA		PLATE	DAMAGED
4/17/2008	DHC2MK3	PT6A27		VT2E16231	PROP SPINNER

(CAN) RECEIVED A CALL REGARDING DAMAGE THAT OCCURRED TO THE PROP BACKING PLATED ON A TURBO BEAVER WE COMPLETED REG, C-FOEU. THIS DAMAGE IS THE RESULT OF OUR INSTALLATION OF OUR PROP POSITION TRANSMITTER MOD STCSA 98-46, VT2E 1623. IDENTIFIED THE PROBLEM TO BE THE INCOMPATIBILITY BETWEEN THE PROP SPINNER BACKING AND OUR POSITION INDICATOR. THE BACKING PLATE IN QUESTION HAS A DIFFERENT PROFILE FROM THE ONES THAT WE HAVE SEEN BEFORE. COMPARED THIS PROBLEM BACKING PLATE TO OUR A/C AND THERE IS A BIG DIFFERENCE, OURS ALLOWS ALMOST .5 CLEARANCE AND THERE IS NO INTERFERENCE WITH THE CAM ROD THROUGH THE TOTAL MOTION. MFG NEEDS TO IDENTIFY THIS COMPATIBILITY ISSUE IN THE STC AND FOR THE INTERIM SEND OUT A SL TO THE OPERATORS WHO HAVE PURCHASE THIS KIT, THERE NEEDS TO BE A INSP OF THE PROP SPINNER BACKING PLATE FOR DAMAGE. (TC NR 20080418004)

CA080130001	DHAV	PWA	AIRCRFTPRDTS	BOLT	BROKEN
1/28/2008	DHC6100	PT6A20		AN620A	FLOAT ASSY

(CAN) DURING INSPECTION, THE TIE ROD TO FUSELAGE LUG WAS FOUND TO HAVE ONE OF THE (2) ATTACH BOLTS BROKEN. THE BREAK OCCURRED IN THE THREADED AREA OF THE BOLT. BOTH BOLTS WERE REPLACED AND THE AC WAS RETURNED TO SERVICE. THIS AC IS OPERATED IN A GENERALLY ROUGH WATER ENVIRONMENT, WITH SWELLS, LARGE WAVES AND LARGE BOAT WAKES MAKING THE LANDING AREA CHALLENGING AT TIMES. (TC NR 20080130001)

CA080213011	DHAV	PWA		STUD	SHEARED
9/19/2007	DHC6300	PT6A27		712761	NLG STEERING

(CAN) DURING TAXI, A SNAP WAS HEARD BY THE FLIGHT CREW AND HYDRAULIC STEERING CONTROL WAS LOST. THE AC WAS TAXIED TO THE RAMP USING DIFFERENTIAL PWR AND BRAKING. THE STUD SECURING THE HYD STEERING ACTUATOR WAS FOUND SHEARED. THE NOSE GEAR ASSY WAS REPLACED AND AC WAS RETURNED TO SERVICE. THE CAUSE OF THE BROKEN STUD COULD NOT BE DETERMINED. (TC NR 20080213011)

2008FA0000285	DHAV	PWA		PUMP	FAILED
4/2/2008	DHC6300	PT6A27		1D217	FUEL SYSTEM

BOOST PUMP FAILS AT 11,000 TO 12,000 FT OF ALTITUDE. WORKS FINE ON GROUND. (K)

CA080220001	DHAV	PWA		ROD END	BENT
2/19/2008	DHC6300	PT6A27		3018024	NR 2 THROTTLE

(CAN) THE PILOT REPORTED A DEFECT NR 2582A: ABOUT 10 MINUTES AFTER TAKEOFF, THE RT ENGINE NR 2 THROTTLE LEVER WAS STUCK. WORKED THE THROTTLE BACK AND FORTH IN CRUISE 3 - 4 TIMES AND FOUND OK. ON FINAL APPROACH INTO ARRIVAL AIRPORT, THE NR 2 THROTTLE WAS DIFFICULT TO MOVE AGAIN. MAINT LATER FOUND THE WIRE WITH A 1.5 INCH LONG RIGID SPOT AT 18 INCHES FROM THE ROD END ATTACHMENT. THE ROD END P/N: 3008787 WAS FOUND BENT ALSO. BOTH PART WERE REPLACED AND RE-RIGGED THE ENGINE IAW MM. THE ENGINE WAS RECENTLY REPLACED AND HAS 3.4 HOURS SINCE LAST OVERHAUL. (TC NR 20080220001)

CA080229003	DHAV	PWA		PROXIMITY SENSOR	INTERMITTENT
2/21/2008	DHC8*	PW120A		864202	NLG

(CAN) GEAR UNSAFE (NOSE GEAR) ILLUMINATED DURING TAXI-IN WITH ASSOCIATED GEAR WARNING HORN. AC WAS STOPPED AND SHUTDOWN, EMERGENCY SERVICES REQUESTED FROM TOWER. F/O INSERTED NOSE GEAR LOCK IMMEDIATELY AFTER SHUTDOWN. ENGINEERING INSPECTED THE AC AND TOWED IT TO BAY. MAINT CARRIED OUT INDUCTANCE, CONTINUITY AND MEGGER CHECK OF THE NLG DOWNLOCK SENSOR AND NLG DRAG STRUT SENSOR. THE NLG DRAG STRUT SENSOR 3261-S10 (WDM REF NR) WAS FOUND TO HAVE VARIABLE INSULATION OF 100 MEGA OHMS. THE NLG DRAG STRUT SENSOR WAS REPLACED IAW THE AC MM 32-20-11. NLG RETRACTION AND EXTENSION CHECKS/ TESTS CARRIED OUT IAW AC MM 32-30-00, ALL INDICATIONS CHECKED SERVICEABLE. AC RETURNED TO SERVICE. (TC NR 20080229003)

CA080225001	DHAV	PWA	HMU	MALFUNCTIONED
2/12/2008	DHC8*	PW121	78639114	NR 2 ENGINE

(CAN) AFTER CONFIGURING FOR LANDING (FLAP 35, CONDITION LEVERS MAX) CO-PILOT COMMENTED THAT HE HAD NOTICED A SIGNIFICANT POWER LOSS ON THE NR 2 ENG AND POINTED OUT A REDUCTION IN TORQUE. THE NR 2 TORQUE GAUGE WENT TO 0 PERCENT, CREW DECIDED TO SHUTDOWN THE NR 2 ENG. FUNCTIONAL CHECK OF THE ENG WAS CARRIED OUT BY MAINT STAFF. THE ENG WAS ABLE TO BE STARTED WITH VERY SLOW ACCELERATION REPORTED AND LOW IDLE OF 60 PERCENT ONLY ACHIEVED - NP 168, FUEL FLOW 160, ITT 550 DEGREES. FOLLOWING COMMUNICATION OF THIS DATA WITH THE ENG MFG, IT WAS DETERMINED THAT THE MOST LIKELY CAUSE OF THE DEFECT WAS HYDRO MECHANICAL FCU (HMU) FUEL SCHEDULE. THE HMU AND FUEL PUMP ASSY WAS REPLACED IAW THE AC MM 72-01-40 AND SUBSEQUENTLY GROUND RUN TESTED SERVICEABLE. THE AC WAS RETURNED TO SERVICE. THE HMU IS AN ON CONDITION ITEM BUT HAS A COMPANY REQUIREMENT FOR AN O/H EVERY 10,000 FLIGHT HOURS. THIS UNIT HAD BEEN IN SERVICE FOR A TOTAL OF 1,578.13 FLIGHT HOURS SINCE THE LAST O/H. THE HMU HAS BEEN SENT TO THE ENG MFG FOR STRIP, INVESTIGATION, TESTING AND REPORT. (TC NR 20080225001)

CA080221008	DHAV	PWA	ENGINE	FLAMED OUT
2/13/2008	DHC8*	PW121		

(CAN) DURING APPROACH, ENGINE SHUTDOWN UNCOMMANDED AS FLAPS WERE BEING EXTENDED FOR LANDING. POST FLIGHT INSP REVEALED UNSTABLE FUEL FLOW AND LOW ITT AT IDLE POWER. FUEL PUMP AND FUEL CONTROL ARE BEING RETURNED FOR INVESTIGATION. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20080221008)

CA080228010	DHAV	PWA	TORQUE TUBE	SHEARED
2/25/2008	DHC8102	PW120A	734386B	TE FLAPS

(CAN) A/C WAS ON APPROACH INTO AIRPORT, THE FLAPS WERE LOWERED TO 15 DEG WHEN THE (FLAP DRIVE CAUTION LIGHT) CAME ON. THE A/C LANDED WITHOUT INCIDENT. MAINT INSP REVEALED THAT THE LT OB TORQUE TUBE WAS SHEARED OFF. AFTER FURTHER INSP, IT WAS DETERMINED THAT THE TORQUE TUBE WAS SHEARED OFF BY CLAMP INSTALLED ON A DRAIN LINE THAT HAD BEEN CHAFING. THE TORQUE TUBE WAS REPLACED, THE TORQUE SENSOR RIGGED AND THE FLAPS WERE FUNCTION CHECKED SERVICEABLE. (TC NR 20080228010)

CA080314006	DHAV	PWA	ACM	CRACKED
3/12/2008	DHC8102	PW120A	78279018	

(CAN) WHILE CARRYING OUT WORK CARD TO REMOVE COMPONENT IT WAS DISCOVERED THERE WAS A 6 INCH CRACK ON THE INNER SIDE OF THE CHAMBER. (TC NR 20080314006)

CA080424001	DHAV	PWA	FLEX LINE	LEAKING
4/18/2008	DHC8102	PW120A	AE2463510E0124	HYD SYSTEM

(CAN) AFTER TAKEOFF WITH GEAR RETRACTON NR 2 HYD SYS QUANTIY DROPPED TO 2 QUARTS, THE CREW ELECTED TO RETURN TO THE AIRFIELD. DURING LANDING THE NR 2 HYD ISOLATION LIGHT CAME ON AND THE AC LOST THE OB SPOILERS, AND STEERING. THE AC WAS TOWED TO THE HANGAR AND THE LEAK WAS TRACED TO THE NOSE GEAR PRESSURE LINE NEAR THE SWAGE. TT ON THIS PART IS UNDETERMINED. (TC NR 20080424001)

CA080426001	DHAV	PWA	TURBOCHARGER	LEAKING
4/23/2008	DHC8102	PW120A	310440001	NR 1 ENGINE

(CAN) AFTER TAKEOFF, CREW HAD LOW OIL PRESSURE INDICATION ON THE NR1 ENGINE, CREW DID PRECAUTIONARY ENGINE SHUTDOWN AND ADVISED THEY WERE RETURNING. FLIGHT LANDED WITHOUT INCIDENT. MAINT INSPECTED THE ENGINE AND FOUND OIL COMING OUT OF LP OUTLET AND COVERING TOP OF THE ENGINE, ALSO FOUND SEAL DAMAGE . THE ENGINE WAS CLEANED, GROUND RUNS WERE C/O AT MAX POWER FOR 30 MIN TO SEE IF ANY SMOKE SMELL TO SHOW CONTAMINATED DUCTING AND TO SEE IF OIL IS STILL COMING OUT. LEAK FROM COMPRESSOR FOUND TO BE BEYOND LIMITS, ENGINE CHANGE TO BE C/O. TEARDOWN REPORT TO FOLLOW WHEN AVAILABLE. (TC NR 20080426001)

CA080428001	DHAV	PWA	SMITHSIND	CASE	RUPTURED

4/24/2008	DHC8102	PW120A		ACTUATOR

(CAN) WHEN TAXING INTO POSITION FOR TAKEOFF, THE CREW RECEIVED A NR1 HYD ISO VALVE AND A ROLL SPLR IB HYD CAUTION LIGHTS. THE AC RETURNED TO GATE AND A HYD LEAK WAS OBSERVED AT THE RT WING. FURTHER INVESTIGATION REVEALED THAT THE RT IB SPOILER ACTUATOR CASING HAD RUPTURED AND CAUSED THE LEAK. THE ACTUATOR WAS REPLACED, ADJUSTED, LEAK CHECKED AND TESTED SERVICEABLE. THE AC WAS RELEASED AND RETURNED INTO SERVICE. TSR: 1657:43 CSR: 1678 (TC NR 20080428001)

CA080222001	DHAV	PWA	BEARING	DISINTEGRATED
2/19/2008	DHC8301	PW123	L8121482629	MLG WHEEL

(CAN) DURING SERVICE CHECK ON THE RAMP, LINE MAINT OBSERVED THAT NR3 MAIN WHEEL ASSY HUB CAP WAS MISSING AND NOTICED THE PRESENCE OF METAL CHIPS. THE AC WAS REMOVED FROM SERVICE. MAIN WHEEL ASSY WAS REMOVED AND THE FOLLOWING DAMAGES WERE OBSERVED: BOTH WHEEL BRGS WERE DISINTEGRATED ALONG WITH DAMAGE TO THE WHEEL HUB AND BRAKE KEYS, BRAKE DISKS, WHEEL NUT AND MLG AXLE. FOLLOWING OBSERVATIONS WERE NOTICED DURING THE INITIAL INVESTIGATION: THE WHEEL NUT WAS IN PLACE AND SECURED WITH THE TWO LOCK BOLTS. THERE WAS NO LOCKING WIRE OBSERVED. THE WHEEL HUB CAP WAS MISSING BUT (2) OF THE (3) HOLDING SCREWS WERE STILL FIXED TO THE WHEEL FRAME. INSP OF THE INNER BEARING CLEARLY INDICATES THE CORRECT PN L713049*2-629. PN OF THE OUTER BRG COULD NOT BE CLEARLY DETERMINED BUT IS BELIEVED TO BE CORRECT AFTER COMPARING WITH A SERVICEABLE BRG P/N L812148*2-629. THE OUTER BEARING SHOWS SIGN OF ROTATION ON THE AXLE AND THE AXLE OUTER BRG RACE IS GROOVED. ALL DAMAGED PARTS WERE REPLACED AND THE AC RETURNED INTO SERVICE. AT THIS TIME, OBSERVATIONS NOTED SUGGEST A FAILURE OF THE OUTER BRG. IT IS UNKNOWN WHAT COULD HAVE CAUSED THIS FAILURE. MAIN WHEEL AND BRAKE ASSY ALONG WITH ALL REMAINING BRG PARTS ARE BEING SHIPPED TO WHEELS AND BRAKES SHOP FOR FURTHER INVESTIGATION. (TC NR 20080222001)

CA080228003	DHAV	PWA	ACM	FAILED
2/15/2008	DHC8301	PW123	18279018	

(CAN) DURING CLIMB, CREW NOTICED A SMELL OF SMOKE IN THE FLIGHT DECK. CREW DONNED OXYGEN MASKS AND COMPLETED THE (OXYGEN DRILL). UNSCHEDULED LANDING COMPLETED. ENGINEERING ONSITE INVESTIGATION CONFIRMED FAILURE OF THE AFT AIR CYCLE MACHINE (ACM). THE AFT ACM WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE WITHOUT FURTHER INCIDENT. ACM HAS BEEN DISPATCHED TO THE MFG FOR REPAIR/OVERHAUL WITH A REQUEST TO PROVIDE A STRIP REPORT. (TC NR 20080228003)

CA080225002	DHAV	PWA	ROLLER	SEIZED
1/22/2008	DHC8301	PW123	83260024101	NLG

(CAN) AFTER RETRACTING LANDING GEAR ON TAKEOFF, NOSE GEAR AMBER DOOR LIGHT REMAINED ILLUMINATED. CONDUCTED CHECKS IAW QRH (LANDING GEAR DOOR MALFUNCTIONS) UNABLE TO RECTIFY PROBLEM, RETURNED TO BASE WITH LANDING GEAR EXTENDED FOR NORMAL APPROACH AND LANDING. INSP OF THE AC BY MAINT AFTER RETURN OF THE AC TO THE TERMINAL DETERMINED THAT THE NLG DOORS WERE CLOSED BUT THE CORRESPONDING INDICATION WAS OF AN UNSAFE CONDITION. FUNCTIONAL CHECK OF THE NLG DOORS AND INDICATING SYS CARRIED OUT. THE ALTERNATE RELEASE ROLLER TRIPPING ARM BRG WAS DISCOVERED TO BE SEIZED AND THE CLEARANCE BETWEEN THE ROLLER AND OB TOGGLE LINK OUT OF ADJUSTMENT. ROLLER PN 83260024-101 WAS REPLACED AND THE ALTERNATE RELEASE CABLE ADJUSTED IAW THE AC MM 32-35-00. NLG DOOR PROXIMITY SENSOR GAP ADJUSTED IAW AC MM 32-61-50. LANDING GEAR EXTENSION AND RETRACTION CHECKS CARRIED OUT IAW AC MM 32-30-01 NO FURTHER FAULT EVIDENT. THE AC WAS RETURNED TO SERVICE. (TC NR 20080225002)

2008FA0000290	DIAMON	THIELT	DIAMON	FASTENER	MISSING
4/23/2008	DA42	TAE1250299		DIN47108VERZ	MLG

DURING PREFLIGHT, THE CREW NOTICED THAT THE SMALL CIRCLIP (PN DIN471-08-VERZ) THAT SECURES THE MLG DOWNLOCK HOOK PIN IN POSITION WAS MISSING. MAINT JACKED THE AC AND INSTALLED A NEW CLIP. WHEN THIS CLIP IS NOT IN PLACE, THE PIN MIGRATES AFT AND IN SOME CASES DAMAGES THE AFT LIP OF THE WHEEL WELL MATERIAL. THIS OPERATOR HAS 9 OF THESE AIRPLANES AND THERE HAVE BEEN OTHER INSTANCES OF THIS DISCREPANCY.

CA080220007	DORNER	PWA	OIL SYSTEM	LOW PRESSURE

1/15/2008	DO328100	PW119B		ENGINE

(CAN) DURING CRUISE, THE OIL PRESSURE WAS NOTED TO DROP. THE CREW SHUTDOWN THE ENGINE AND PERFORMED A SINGLE ENGINE LANDING. ENGINE IS BEING SENT FOR INVESTIGATION. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20080220007)

CA080207007	DORNER	PWA	ELT	FAILED
1/30/2008	DO328100	PW119C	ELT97A2560000000	

(CAN) NUMEROUS UNCOMMANDED ELT ACTIVATIONS WITH ELT97. HAVE HAD ACTIVATIONS WITH THE AC INFLIGHT AND PARKED ON THE APRON. THE LASTEST WAS WITH ELT S/N-4584 ON JANUARY 30, 2008. THE AC HAD BEEN PARKED ON THE APRON FOR ROUGHLY 2 HOURS WHEN THE ELT SIGNAL WAS DETECTED. ALL ELTS HAVE BEEN CONFIRMED AS DEFECTIVE AFTER AN ACTIVATION BY REPLACEMENT OR BY SWAPPING WITH ANOTHER AC. DEFECTIVE ELTS HAVE BEEN RETURNED TO THE MFG FOR REPAIR OR REPLACEMENT. ATTEMPTS TO GET SUPPORT FROM MFG HAVE YEILDED LIMITED RESULTS. (TC NR 20080207007)

Y5CR200700004	DOUG	DOUG	BEVEL GEAR	BROKEN
5/1/2008	MD500E		369D2512311	M/R TRANSMISSION

M/R TRANSMISSION GEAR HAS BROKEN TOOTH.

CA080213009	EMB	PWA	EMB	WORM DRIVE	STRIPPED
11/1/2007	EMB110P1	PT6A34	D22466	B5195	FLAP ACTUATOR

(CAN) AFTER LANDING, THE WING FLAPS OF AN AC COULD NOT BE RETRACTED. THE ASYMMETRY WARNING SYSTEM HAD BEEN TRIPPED. THE LT AND RT FLAP ACTUATORS WERE REPLACED WITH OVERHAULED UNITS AND THE AC WAS DISPATCHED. UPON DISASSEMBLY OF THE ACTUATOR AT THE OVERHAUL SHOP THE BRASS WORM WHEEL THAT DRIVES THE SCREW JACK WAS FOUND STRIPPED. AWD 82-07-04R3 PART 2 HAD BEEN COMPLETED FEBRUARY 19, 2007. THE PART HAD ONLY 2202 CYCLES AND 1871.8 HOURS SINCE OVERHAUL AND THE ACCOMPLISHMENT OF THE AWD. (TC NR 20080213009)

EY2R080424001	EMB	BEARING	CRACKED
4/24/2008	EMB120	7826761	BLADE

(0087319) CRACKED RACE.

CA080228002	EMB	GE	FLOORBEAM	CORRODED
2/22/2008	ERJ170200SU	CF348E5A1	17003264001	FUSELAGE

(CAN) CORROSION FOUND ON FLOORBEAM LOCATED AT Y = 272 AND Z = -490.0 JUNCTION WITH FRAMES 16, 17, 18 . ALSO (3) SILL PLATES CORRODED BEYOND LIMITS. CORROSION WAS ALSO FOUND ON FR 87, 88, 89 AND 90 UNDER THE AFT RT GALLEY ATTACHMENT POINT AT FLOOR STRUCTURE. REFERENCE: PICTURE NR AFT FUSELAGE FRAME 87, 89, 90 NR FLOORBEAM FRAME 18 POSSIBLE ROOT CAUSE: FLOOR PROTECTION UNDERNEATH THE GALLEY NOT ADEQUATE. (TC NR 20080228002)

CA080211014	EMB	GE	CONTROL CABLE	BROKEN
1/31/2008	ERJ170200SU	CF348E5A1	17005825401	AILERONS

(CAN) DURING CONTROL CABLES INSP ON LT AND RT WINGS, FOUND AILERON CABLES (LT P/N 170-05825-401, P/N 170-05826-401, RT P/N 170-05827-401, P/N 170-05828-401) WORN AND WITH WIRES BROKEN AT SEVERAL FAIRLEADS, LOCATED AT LT AND RT WINGS IB OF THE RIB 12, 15, 17 AND AT RIB 20. FLEET ENGINEERING AS BEEN ADVISED (TC NR 20080211014)

CA080211015	EMB	GE	CONTROL CABLE	BROKEN
2/7/2008	ERJ170200SU	CF348E5A1	17005825401	AILERONS

(CAN) DURING CONTROL CABLES INSPECTION ON LT AND RT WINGS, FOUND AILERON CABLES (LT PN 170-05825-401, P/N 170-05826-401, RT PN 170-05827-401, PN 170-05828-401) WORN AND WITH WIRES BROKEN AT SEVERAL FAIRLEADS, LOCATED AT LT AND RT WINGS IB OF THE 17 FLEET ENGINEERING HAVE BEEN ADVISED (TC NR 20080211015)

CA080215010	EMB	GE	SERVO	MALFUNCTIONED

2/14/2008	ERJ170200SU	CF348E5A1	2R5310A	AUTOPILOT

(CAN) AUTOPILOT UNSERVICEABLE, EICAS MESSAGE (AP FAIL) ON FOR APPROX 3-5 SECONDS, THEN DISAPPEARS. AUTOPILOT AILERON SERVO FAILED. FAULT CODES 22110239PA1 AND 22110239PA2 RECORDED. (TC NR 20080215010)

CA080303001	EMB	GE	FLOORBEAM	CORRODED
2/28/2008	ERJ170200SU	CF348E5A1		FUSELAGE

(CAN) CORROSION FOUND ON FLOORBEAM LOCATED AT Y = 272.0 AND Z = -490.0 JUNCTION WITH FRAMES 16, 17, 18, 19 AND ON FLOORBEAM LOCATED AT Y = -272.0 AND Z = -490.0 AND ON FRAME NR12 AND 14 , 14 AT Y = -337.0 AND Z = -490.0 ALSO THREE SILL PLATES CORRODED BEYOND LIMITS. CORROSION WAS ALSO FOUND ON FRAME 87, 88, 89 AND 90 UNDER THE AFT RT GALLEY ATTACHMENT POINT AT FLOOR STRUCTURE. REFERENCE: PICTURE NR AFT FUSELAGE, FORWARD FUSELAGE DUE TO NO ALLOWABLE REWORK LIMITS AVAILABLE IN THE SRM (STRUCTURAL REPAIR MANUAL) , ALL AFFECTED PARTS WHERE REPLACED OR REPAIRED AS IAW MFG INSTRUCTION. (TC NR 20080303001)

CA080331007	EMB	GE	FLAP TRACK	GOUGED
3/27/2008	ERJ170200SU	CF348E5A1	17039312001	TE FLAPS

(CAN) UPON INSP OF THE IB FLAP TRACK RAILS, GOUGES ARE EVIDENT ON THE UPPER INNER SURFACE FACE AND ON THE UPPER SIDE FACE THAT ARE OUT OF LIMITS. SEE ALSO SDR 20080318006 FOR DETAILS. RAIL AFT, RAIL, RAIL MAIN 1, RAIL MAIN 2 OUT PN: 170-39320-001, 170-39060-01, 170-39310-001, 170-39312-001 DUE TO NO ALLOWABLE REWORK LIMITS AVAILABLE IN THE SRM (STRUCTURAL REPAIR MANUAL) , ALL C/A CARRIED OUT IAW MFG INSTRUCTION. REF: IC2007-17005998C, IC2008-17002015A, IC2008-17002163. (TC NR 20080331007)

CA080222009	EMB	GE	CONTROL CABLE	WORN
2/21/2008	ERJ170200SU	CF348E5A1	17005825401	AILERON

DURING CONTROL CABLES INSPECTION ON LT AND RT WINGS, FOUND AILERON CABLES (LT P/N 170-05825-401, P/N 170-05826-401, RT P/N 170-05827-401, P/N 170-05828-401) WORN AND WITH WIRES BROKEN AT FAIRLEADS, LOCATED AT LT AND RT WINGS INB OF THE RIB 17. THE WORN AREAS AND BROKEN STRANDS ARE LOCATED UNDER NYLON GROMMETS (P/N PE49068-501) MOUNTED ON THE FAIRLEAD. EMBRAER WILL ISSUE A SB END OF MARCH (TC# 20080222009)

CA080314003	EMB	GE	BRACKET	CRACKED
3/7/2008	ERJ190100IGW	CF3410E5A1	19093649001	FUSELAGE

(CAN) EXCERPT FROM MESSAGE RECEIVED FROM MAINT ON THAT FINDING: NOTE THE CRACK RUNNING FROM THE HIGHLOCK. FOUND WHILE T/S ON SNAG L4438921. THIS IS THE MAIN SUPPORT FOR THE LOWER END OF THE CONTROL QUADRANT IN THE LT WHEEL WELL THE FLANGE IS SUPPORTING THE BULHEAD THAT CONCERNS FLEXING AND CONTACTING THE LOWER FWD SECTION OF THE CONTROL QUADRANT. MFG INFORMED OF THE FINDING, REPAIR SUGGESTED TO FLEET ENGINEERING. MORE INFO TO BE PROVIDED. (TC NR 20080314003)

CA080211009	EMB	GE	CONTROL CABLE	BROKEN
2/4/2008	ERJ190100IGW	CF3410E5A1	19004212401	AILERONS

(CAN) C02 CHECK: DURING AILERON CONTROL CABLES INSP ,ON LT AND RT WINGS, FOUND AILERON CABLES (LT P/N 190-04212-401 AND P/N 190-04209-401, RT P/N 190 -05550-401 AND P/N 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 5 AND J/C 27-11-00-003-RT/2 . THE WORN AREA WITH A FEW BROKEN STRANDS FOUND UNDER GROMMET NYLON (P/N PE49068-501) MOUNTED ON THE FAIRLEAD. FLEET DEPARTMENT HAVE BEEN ADVISED (TC NR 20080211009)

CA080211011	EMB	GE	CONTROL CABLE	BROKEN
1/11/2008	ERJ190100IGW	CF3410E5A1	19004212401	AILERONS

(CAN) C02 CHECK: DURING AILERON CONTROL CABLES INSPECTION ,ON LT AND RT WINGS, FOUND AILERON CABLES (LT P/N 190-04212-401 AND P/N 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. REF J/C 27-11-00-003-LT/1 AND J/C 27-11-00-003-RT/2 . THE WORN AREA WITH A FEW BROKEN

STRANDS FOUND UNDER GROMMET NYLON (P/N PE49068-501) MOUNTED ON THE FAIRLEAD. AIR CANADA FLEET DEPARTMENT HAVE BEEN ADVISED (TC NR 20080211011)

CA080211012	EMB	GE	CONTROL CABLE	BROKEN
1/23/2008	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 NR 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. FLEET DEPARTMENT HAVE BEEN ADVISED (TC NR 20080211012)

CA080109007	EMB	GE	BOLT	LOOSE
12/27/2007	ERJ190100IGW	CF3410E5A1	MS955610	PUMP

(CAN) AC WAS ON MONITOR FOR LOW OIL QTY SNAGS SINCE THE 21ST OF DEC. TODAY (27TH) ALL OF THE EDP MIDDLE CASING BOLTS WERE FOUND LOOSE. CMM 29-12-10, ITEM 300: BOLT P/N MS9556-10 AND ITEM 305: WASHER NAS620C10L. (TC NR 20080109007)

CA080303009	FOUND	LYC	SUMP	UNSERVICEABLE
3/1/2008	FBA2C1	IO540L1A5	77517	ENGINE OIL SYS

(CAN) OIL SUMP WAS REMOVED TO INSPECT SUMP BAFFLE IAW SB. INTERNAL CRACK IN THE SUMP WAS FOUND NEAR ONE OF THE MOUNTING LUGS. IAW THE SB, THE OIL SUMP BAFFLE HAD A LACK OF CLEARANCE AND HAD BEEN RUBBING THE BOTTOM OF THE SUMP. BAFFLE, AND SUMP HAD SIGNS OF WEAR. BAFFLE WAS LOOSE, AND HAD (2) BROKEN CONTACT POINTS. ENGINE REMOVED TO FURTHER DETERMINE CONTAMINATION AND SERVICEABILITY. (TC NR 20080303009)

CA080102008	FRCHLD	GARRTT	FRCHLD	MODULE	DAMAGED
12/27/2007	SA227DC	TPE33112UHR	2782797001	3219027001	FIRE EXTINGUISH

(CAN) DURING CLIMB-OUT THE PILOTS NOTICED THE ENGINE FIRE DETECTION INDICATION LIGHT CAME ON. THE ENGINE WAS SHUTDOWN AND THE ENGINE FIRE EXTINGUISHING BOTTLE WAS ACTIVATED. THE PILOTS DECLARED AN EMERGENCY, LANDED SAFELY AT THE AIRPORT OF ORIGIN AND EVACUATED THE AIRCRAFT. NO ENGINE FIRE WAS OBSERVED. MAINTENANCE INSPECTED THE FIRE EXTINGUISHING SYSTEM AND FOUND THAT THE FIRE LOGIC CONTROL BOX HAD HEAT DAMAGE AT AN ELECTRICAL CONNNECTOR. (TC NR 20080102008)

CA080226004	GULSTM	LYC	ALTERNATOR	UNSERVICEABLE
2/22/2008	112	IO360C1D6	ALX8403	ELECTRICAL

(CAN) ALTERNATOR FAILED, CAUSING MAIN BATTERY TO DRAIN RESULTING IN COMMUNICATION DIFFICULTIES WHICH CAUSED PILOT TO CONTACT TOWER BY CELL PHONE FOR CLEARANCE TO LAND. NEW UPGRADED ALTERNATOR INSTALLED PN ALX8521R (TC NR 20080226004)

CA080314019	HILLER	ALLSN	BEARING	FAILED
3/4/2008	UH12E	250C20	6871505	NR 5

(CAN) CHIP LIGHTS METAL CONTAMINATION ENGINE SHOP DETERMINED NR 5 BEARING FAILURE. (TC NR 20080314019)

2008FA0000271	HUGHES		LINE	LEAKING
4/3/2008	269C			FUEL SYSTEM

FUEL LEAKING FROM GASCOLATOR INLET LINE, APPROX 5.0 HRS SINCE NEW. (K)

2008FA0000308	ISRAEL	GARRTT	OXYGEN MASK	COLLAPSED
5/1/2008	1124	TFE731*	17408031	CABIN

DURING AN OPS INSPECTION OF THE PASSENGER OXYGEN DROP DOWN MASKS, THERE WAS ONE THAT WOULD NOT LET OXYGEN FLOW THRU THE CONNECTION BETWEEN THE LARGER LINE ATTACHED TO THE BARBED

FITTING ON THE OXYGEN DROP DOWN BOX AND THE SMALLER LINE THAT GOES TO THE MASK. IN THIS CASE THE SMALLER LINE WAS SQUEEZED SHUT AND WOULD NOT ALLOW OXYGEN TO FLOW TO THE MASK. THE PN IN QUESTION IS A 174080-31 REV "K".

2008FA0000306	ISRAEL	GARRTT	OXYGEN MASK	COLLAPSED
5/1/2008	1124	TFE731*	17408031	CABIN

DURING AN OPS INSPECTION OF THE PASSENGER OXYGEN DROP DOWN MASKS, THERE WAS ONE THAT WOULD NOT LET OXYGEN FLOW THRU THE CONNECTION BETWEEN THE LARGER LINE ATTACHED TO THE BARBED FITTING ON THE OXYGEN DROP DOWN BOX AND THE SMALLER LINE THAT GOES TO THE MASK. IN THIS CASE THE SMALLER LINE WAS SQUEEZED SHUT AND WOULD NOT ALLOW OXYGEN TO FLOW TO THE MASK. THE PN IN QUESTION IS A 174080-31 REV "K".

90XR042708	LEAR	GARRTT	LINE	CHAFED
4/27/2008	45LEAR	TFE7312	AS62306H0073	HYDRAULIC SYS

DURING CRUSE FLIGHT THE PILOTS NOTED THAT MAIN HYDRAULIC SYSTEM LOST PRESSURE. INITIATED AN UNSCHEDULED LANDING. AFTER INSPECTION, THE LT ENGINE DRIVEN HYDRAULIC PRESSURE PUMP LINE WAS LEAKING. THE PRESSURE LINE AND BOTH HYDRAULIC PUMPS WERE REPLACED, WITH NEW PARTS, IAW THE MM.

CA080116001	LEAR	GARRTT		FITTING	CRACKED
1/15/2008	45LEAR	TFE7312	45528030040	4552803060003	ACTUATOR

(CAN) DURING DAILY INSP A CRACK WAS NOTICED ON LT MAIN IB LANDING GEAR DOOR ACTUATOR FITTING, A NEW PART IS ORDERED AND WILL BE REPLACED WHEN RECEIVED. LT IB MAIN GEAR DOOR P/N 4552803004-003 FITTING IS ITEM 69 ON ATTACHED IPC. (TC NR 20080116001)

CA080422003	LKHEED	ALLSN	COUPLER	UNKNOWN
4/20/2008	188A	501D13		ENG/GEARBOX

(CAN) DURING START SEQUENCE OF NR 4 ENGINE, IT WAS OBSERVED THAT RPM AND ACCELERATION CLIMBED TOO FAST, BEFORE LIGHT OFF, ENGINE START ABORTED AND FOUND ENGINE DECOUPLED FROM GEARBOX. SUSPECT TORQUE SHAFT COUPLER (TC NR 20080422003)

CA080213010	LKHEED	ALLSN	HAMSTD	SEAL	TORN
2/9/2008	382G	501D22A	54H60117		PUMP HOUSING

(CAN) ON TAKEOFF FROM AIRPORT, THE CREW OBSERVED A LOW OIL INDICATION ON THE NR 1 PROPELLER. THE AC RETURNED TO POINT OF DEPARTURE AND LANDED WITHOUT FURTHER PROBLEM. MAINT REPLACED THE NR 1 PROPELLER ASSY. THE AC WAS RETURNED TO SERVICE AFTER SATISFACTORY LEAK CHECK AND GROUND RUN. IT WAS DETERMINED THAT THE FLUID LOSS WAS DUE TO A DAMAGED FRONT PROPELLER PUMP HOUSING SEAL (TC NR 20080213010)

2008FA0000301	LUSCOM	CONT	MUFF	FAILED
4/18/2008	8E	C8512F	U086126	RT CARB

AFTER A FLIGHT, IT WAS NOTED THAT A PORTION OF SCAT HOSE WAS HANGING FROM THE BOTTOM OF COWLING OPENING. UPON INSPECTION IT WAS FOUND THAT THE CARBURETOR HEAT FLANGE HAD SEPARATED WITH THE SCAT HOSE ATTACHED WITH CLAMP FRO THE IB HALF OF THE RT CARB HEAT MUFF. THE CARB HEAT MUFF HALVES WERE REMOVED AND INSPECTED. EXAMINATION OF THE FAILED ROUND DUCT FLANGE FOUND THE ENTIRE TUBE BROKE OFF AT THE CIRCUMFERENCE ALONG THE EDGE OF THE WELD. SECONDLY, THERE WERE ABOUT (6) SPIDER LIKE CRACKS AROUND THE BROKEN HOLE WHICH PROPAGATED OUTWARD. A TOTAL OF APPROX 16 CRACKS, BROKEN TABS INCLUDING A PREVIOUS (PATCH) REPAIR WERE NOTED ON BOTH IB AND OB MUFF HALVES. AN INNER MUFF RIB WHICH WAS TACK WELDED IN (3) PLACES HAD ONE TACK WELD BROKEN AND ON THE OPPOSITE OUTSIDE WERE SLIGHT BURN THROUGH AREAS WHERE (2) SMALL PROPAGATING CRACKS FROM THE TACKS. THE TYPE ALLOY MATERIAL USED IN THE PART IS CONTRARY AD AND TO ASTM AND AWS CODES AND STANDARDS IN WELDING. (K)

20080420001	MAULE	LYC	BRACKET	CRACKED
4/20/2008	MX7180A	O360*		ENGINE EXHAUST

ON TAKE-OFF, 50 FEET, PARTIAL POWER LOSS (2,500+ RPM TO 1,100 RPM) AND ENGINE ROUGHNESS. ABORTED TAKE-OFF. WHEN CARBURATOR TAKEN OFF PLANE, FOUND 1 INCH X .5 INCH PIECE OF METAL LOOSE IN AIR/FUEL MIXING CHAMBER UPSTREAM OF VENTURI. PIECE WAS TOO BIG TO GO THROUGH VENTURI, BUT BIG ENOUGH TO DISRUPT FLOW THROUGH VENTURI. FOUND SOURCE OF METAL TO BE A PIECE OF THE BRACKET FROM LEFT MUFFLER. BRACKET USED TO CONNECT SHROUD TO MUFFLER TO CAPTURE HEAT FOR USE IN DIRECTING CARB HEAT. ENTIRE BRACKET WAS ABOUT 12 INCHES LONG. THE 1 INCH LONG PIECE OF THE BRACKET BROKE OFF AND MADE ITS WAY DOWN CARB HEAT DUCTING INTO MIXING CHAMBER OF MUFFLER, UPSTREAM OF VENTURI. BASED ON ENGINE OPERATIONS, BELIEVE PIECE HAD BROKEN FREE WELL AFTER AN ANNUAL INSPECTION BUT APPROXIMATELY 3 MONTHS PRIOR TO SIGNFICANT POWER FAILURE. PROBLEM WAS VERY HARD TO DUPLICATE AND ONLY EFFECT PRIOR WAS OCCASIONAL ENGINE ROUGHNESS WHICH HAD BEEN ATTRIBUTED TO DIRTY SPARK PLUGS.

CA080428002	MOONEY	LYC	CYLINDER HEAD	CRACKED
4/25/2008	M20C	O360A1D	05K21104	ENGINE

(CAN) ON TAKEOFF PILOT FELT SLIGHT VIBRATION THROUGH RUDDER PEDALS. AFTER GETTING TO HIS CRUISE LEVEL THE VIBRATION GOT WORSE. HE RETURNED TO THE AIRPORT, AC WAS BROUGHT INTO MAINT SHOP AND COWLING WAS REMOVED. COMPRESSION TEST WAS COMPLETED AND IT WAS FOUND THAT NR3 CYL NO COMPRESSION. CYL WAS REMOVED FROM ENGINE. FOUND THAT THERE WAS A HOLE BURNED UNDER THE EXHAUST VALVE SEAT AND THERE WAS A PART OF THE EXHAUST VALVE MISSING. RECORDS INDICATE THAT AT ENGINE OVERHAUL THE EXHAUST VALVES AND SEATS WERE REPLACED. AME WONDERS IF WHEN THEY CHANGED THE SEAT THAT THEY MAY HAVE CRACKED THE CYL ALLOWING THE EXHAUST GASES TO BURN THROUGH THE CYL UNDER THE SEAT. (TC NR 20080428002)

CA080314018	PILATS	PWA	BEARING	UNSERVICEABLE
3/7/2008	PC1245	PT6A67B	5325012004	NLG STEERING

(CAN) FORK BEARING ON NOSE LANDING GEAR STEERING FOUND TWISTED. THIS DEFECT WAS FOUND ON NOSE LANDING GEAR SHOCK ABSORBER REPAIR AND SERVICE. (TC NR 20080314018)

CA080331008	PILATS	PWA	B-NUT	FAILED
3/25/2008	PC1245	PT6A67B		CRACKED

(CAN) FOLLOWING AN ANNUAL INSP AND A SATCOM AVIONICS UPGRADE IN THE INITIAL CLIMB PHASE OF A TEST FLIGHT , CABIN PRESSURE WAS INCREASING AT A MAXIMUM RATE. ECS WAS PROMTPLY SHUTDOWN ,CABIN DUMPED, AC LEVELED OFF AND RETURNED TO AIRPORT FOR LANDING. THE SENSE LINE FROM THE CONTROLLER TO THE AUXILLARY VOLUME TANK WAS FOUND TO HAVE A CRACKED B-NUT. UPON A SLIGHT TUG , NUT SEPARATED COMPLETLY AND LINE COULD BE PULLED COMPLETLY FROM FITTING. A NEW LINE WAS INSTALLED , SUBSEQUENT GROUND RUNS AND TEST FLIGHT PROVED SATISFACTORY. SOME OF THE WIRING NECESSARY FOR THE PROJECTS LEADING UP TO THIS INCIDENT WAS CARRIED OUT IN THIS AREA (UPPER FIREWALL). IT IS BELIEVED THAT THE LINE MAY HAVE BEEN DISTURBED IE TYWRAPS, PERHAPS AGGRAVATING A PREVIOUSLY CRACKED NUT OR INITIATING THE NUT FAILURE. (TC NR 20080331008)

CA080108005	PILATS	PWA	HOSE	CRACKED
1/7/2008	PC1245	PT6A67B	9599021231	BLEED AIR SYS

(CAN) ON CLIMB OUT TO CRUISE ALTITUDE, IT WAS DISCOVERED THE AC WOULD NOT PRESSURIZE, AND THERE WAS NO BLEED AIR HEAT. AC RETURNED TO BASE. FOUND BLEED AIR HOSE CRACKED. (TC NR 20080108005)

CA080116002	PILATS	PWA	DRAG LINK	CRACKED
1/9/2008	PC1245	PT6A67B	5322012289	NLG

(CAN) DURING DESCENT, THE INTRANSIT LIGHT CAME ON IN THE COCKPIT FOR THE NOSE GEAR. THE GEAR WAS THEN SELECTED DOWN AND LOCKED. THE CAPTAIN AND MAINT FELT THERE WAS MORE THEN JUST A SIMPLE INDICATION PROBLEM AND RETURNED THE AC TO THE HOME BASE. AS A SAFETY PRECAUTION THE PASSENGERS WERE OFFLOADED ON THE RUNWAY. THE RT DRAG LINK WAS FOUND TO BE CRACKED. THERE WAS NO TELLTALE SIGNS THAT WOULD CAUSE THE LINK TO CRACK LIKE IT DID. FROM THE LOOK OF THE CRACK IT WAS ALL NEW. THE REST OF THE PC-12S IN THE FLEET WERE CHECKED AND NO OTHER DRAG LINKS WERE CRACKED. THE LINK WAS REPLACED, SWINGS WERE COMPLETED AND THE AC WAS RETURNED TO SERVICE. (TC NR 20080116002)

2008FA0000309	PIPER		TORQUE TUBE	BROKEN
5/7/2008	PA24260		2223900	RUDDER CONTROL

DURING MAINTENANCE RUNUP AND TAXI CHECK AFTER MAINTENANCE THE LEFT RUDDER TORQUE TUBE BROKE OFF. IT APPEARED TO HAVE BEEN CRACKED FOR SOME TIME PRIOR TO FAILING DURING TAXI. IT IS SUGGESTED THAT THE AREA BE CLEANED AND INSPECTED WITH A 10X MAGNIFYING GLASS. A BORESCOPE WITH A SIDE VIEW END COULD ALSO BE INSERTED IN THE TUBE TO INSPECT IT FROM THE INSIDE. IF THIS HAD HAPPENED DURING LANDING AND HAD BROKEN AT INITIAL BRAKE APPLICATION, THE AIRCRAFT WOULD PROBABLY HAVE DEPARTED THE RUNWAY.

CA080229012	PIPER	LYC	CYLINDER	UNSERVICEABLE
2/29/2008	PA28140	TIO540J2BD	LW12966	ENGINE

(CAN) PILOT HEARD A BANG WHILE IN CRUISE AND NOTICED A LOSS OF POWER. TURNED BACK TO THE NEAREST AIRPORT TO LAND. UPON INSPECTION THE AME FOUND THAT THE NR1 INTAKE VALVE WAS MISSING. THE ENGINE WAS REMOVED. WHEN WE REMOVED THE NR1 CYLINDER, WE FOUND THAT THE INTAKE VALVE HAD BROKEN OFF AT THE KEEPERS AND A PIECE HAD SHOT OUT THE SIDE OF THE PORT AND LODGED ITSELF IN THE FINS OF THE NR3 CYLINDER. THERE WAS CONSIDERABLE DAMAGE TO BOTH CYLINDERS. THE REST OF THE VALVE HAS YET TO BE SEEN BUT IT IS EXPECTED TO BE FOUND ONCE WE REMOVE THE INDUCTION COVER. (TC NR 20080229012)

CA080318008	PIPER	LYC	SERVO	MALFUNCTIONED
3/17/2008	PA28R180	IO360B1E	252429710	FUEL SYSTEM

(CAN) CHECKED IAW EMERGENCY AWD 2008-06-51. FOUND, DID NOT APPLY BY DATE BUT WHEN VISUALLY INSPECTED FOUND SAME PROBLEM AS REPORTED IN AWD. O/H DATE WAS JANUARY 28, 2005. AWD STATED AUGUST 22, 2006. ALL SERVOS MAY NEED TO BE CHECKED. (TC NR 20080318008)

CA080331009	PIPER	LYC	CYLINDER	CRACKED
3/20/2008	PA31	TIO540A2C	LW12966	ENGINE

(CAN) DURING A ROUTINE INSP, THERE WAS EVIDENCE OF A CRACK LOCATED AROUND THE INTAKE HSG. THE VALVE COVER WAS REMOVED AND FURTHER VISUAL INSP REVEALED THE INTAKE VALVE WAS HITTING THE SIDE OF THE INTAKE HOUSING. WE FEEL THE CONSTANT HITTING OF THE HOUSING CAUSED A STRESS CRACK. CYLINDER WAS REPLACED. (TC NR 20080331009)

CA080215008	PIPER	LYC	PUMP	ERRATIC
2/9/2008	PA31	TIO540A2C	RG9080J4A	FUEL SYSTEM

(CAN) RT ENGINE DRIVEN FUEL PUMP REPLACED DUE TO ERATIC PRESSURE INDICATIONS. (TC NR 20080215008)

CA080304007	PIPER	LYC	ENGINE	MAKING METAL
2/5/2008	PA31310	TIO540A2C		

(CAN) DURING A SCHEDULED INSP, LARGE QUANTITIES OF FERROUS PARTICLES WERE DISCOVERED IN THE PAPER ELEMENT OF THE ENGINE OIL FILTER. LARGER PIECES WERE ALSO DISCOVERED IN THE OIL SUCTION SCREEN FINGER. THE AC IS GROUNDED PENDING REPLACEMENT OF THE AFFECTED ENGINE. ANALYSIS OF THE FILTER ELEMENT REVEALED FINES AND FLAKES OF CARBON STEEL AMS NR 6440 OR 6444 WHICH INDICATES CAMSHAFT AND FOLLOWERS, ALTHOUGH THIS IS NOT AS YET SUBSTANTIATED. THE ENGINE HAS BEEN OPERATED FOR 88.1 HOURS SINCE OVERHAUL FOR AN IDENTICAL FAULT WHERE THE NR 5 CAM LOBE WAS FOUND WORN BEYOND LIMITS. THE ENGINE IS CURRENTLY EN ROUTE FROM INDIA TO THE ORIGINAL ENGINE OVERHAUL SHOP FOR PRECISE FAULT IDENTIFICATION. (TC NR 20080304007)

CA080304008	PIPER	LYC	LYC	INTAKE VALVE	FAILED
3/22/2007	PA31325	TIO540F2BD	05K21108	LW13622	ENGINE

(CAN) WHILE IN CRUISE, THE PILOT HEARD A BANG AND EXPERIENCED A LOSS IN POWER ON THE LT ENGINE. AS THE ENGINE REMAINED RUNNING AND THERE WAS NO IMMEDIATE CONCERN FOR SAFETY THE PILOT CHOSE TO LEAVE THE ENGINE RUNNING AND SET DOWN AT THE NEAREST AIRPORT. UPON EXAMINATION OF THE ENGINE IT WAS DISCOVERED THAT THE NR1 CYLINDER INTAKE VALVE HAD FAILED AT THE TIP KEEPER LOCATION. THE DECISION WAS MADE TO REMOVE THE ENTIRE ENGINE ASSY AND RETURN IT TO THE OVERHAUL SHOP DUE TO THE LOW TIME SINCE OVERHAUL (TSO). I WOULD LIKE TO MAKE NOTE THAT THE ENGINE PARTS MANUAL IS NOT

CLEAR AS TO THE STYLE OF KEEPER REQUIRED FOR THE INTAKE VALVE POSITION AND, THOUGH IT WAS NOT A CONCERN IN THIS CASE, IT COULD BECOME AN ISSUE FOR CONFUSION. THE VALVE THAT FAILED HAD A HORSESHOE STYLE KEEPER AND ROTATOR CAP ON THE TIP, WHEREAS THE PARTS MANUAL SHOWS A TAPER KEEPER WITH NO ROTATOR CAP. THEN ENGINE SHOP HAS SUBMITTED SDR NR 20080229012. (TC NR 20080304008)

CA080305011	PIPER	LYC	SWITCH	INTERMITTENT
3/5/2008	PA31350	TIO540J2B	CD21252	HEATER

(CAN) THE PILOT REPORTED THAT THE HEATER DID NOT WORK. MAINT INVESTIGATED AND DETERMINED THAT THE CYCLING SWITCH WAS DEFECTIVE AND REPLACED THE SWITCH. THE CREW AGAIN REPORTED THAT THE HEATER DID NOT WORK PROPERLY. MAINT DID MORE TROUBLESHOOTING AND DETERMINED THAT THE CYCLING SWITCH FUNCTIONED PROPERLY INSIDE A HEATED HANGAR. HOWEVER WHEN LEFT OUTSIDE AT ABOUT -20 DEGREES CELSIUS THE SECOND SWITCH ALSO FAILED TO FUNCTION PROPERLY. THE HEATER WAS INSTALLED NEW ABOUT 218 HRS AGO AND THE FIRST CYCLING SWITCH FAILED AFTER 188.3 HRS. (TC NR 20080305011)

CA080314022	PIPER	LYC	CIRCUIT BREAKER	OPEN
3/9/2008	PA31350	TIO540J2BD	W23X1A1G40	COCKPIT

(CAN) CIRCUIT BREAKER FOUND IN OPEN CIRCUIT AND ALSO FOUND ONE FAULTY WIRE WHICH WAS REPLACED. (TC NR 20080314022)

CA080229011	PIPER	LYC	SHAFT	SHEARED
2/26/2008	PA31350	TIO540J2BD	4091701	TURBOCHARGER

(CAN) SHORTLY AFTER TAKEOFF, WHEN SETTING CRUISE POWER, THE LT ENGINE WOULD NOT STAY AT CRUISE POWER. AFTER A COUPLE OF ADJUSTMENTS THE POWER DROPPED FROM 31IN TO AS LOW AS 12IN OF MANIFOLD PRESSURE. THE AIRCRAFT RETURNED FOR LANDING. MAINT FOUND THE SHAFT THAT CONNECTS THE EXHAUST AND INTAKE TURBINE WHEELS ON THE TURBOCHARGER WAS BROKEN AT THE EXHAUST TURBINE WHEEL. NO REASON COULD BE FOUND FOR THE FAILURE. THE TURBOCHARGER HAD 2.7 HOURS SINCE OVERHAUL. (TC NR 20080229011)

CA080317004	PIPER	CONT	GEAR	FAILED
2/14/2008	PA34200T	TSIO360EB		ACCESSORY G/B

(CAN) LOW OIL PRESSURE LIGHT CAME ON IMMEDIATELY AFTER TAKEOFF. PWR WAS BROUGHT BACK AND AC RETURNED FOR SAFE LANDING. ENGINE WAS SHUTDOWN OFF RUNWAY, PROP FEATHERED AUTOMATICALLY. BOTH SUCTION SCREEN AS WELL AS OIL FILTER INSPECTED, NO METAL CONTAMINANTS FOUND. PROP DID NOT TURN FREELY. ALTERNATOR PULLED OFF ON THE BACK OF THE ENGINE. GEAR FOUND LYING LOOSE IN ACCESSORY CASE WITH MULTIPLE BROKEN TEETH ON OTHER GEARS. (TC NR 20080317004)

CA080421001	PIPER	LYC	PIPER	COTTER PIN	MISSING
4/8/2008	PA44180	LO360E1A6	7872331	424052	TORQUE LINK

(CAN) COTTER PIN MISSING ON LT MLG TORQUE LINK DURING WALK AROUND. BOLT REMOVED AND FOUND DRY OF LUBRICATION, WHICH COULD HAVE CAUSE NUT TO TURN AND SHEARING OF COTTER PIN. NEW BOLT INSTALLED AND LUBRICATED ON BOTH MAIN GEAR TORK LINKS. (TC NR 20080421001)

2008FA0000303	PIPER	LYC	DRAG LINK	CRACKED
4/21/2008	PA44180	O360*	86280003	NOSE GEAR

NOSE GEAR DRAG LINK (PN 86280-003) CRACK LOCATED IN PIVOT BOLT HOUSING ON DRAG LINK WHERE A STANDARD (AN175-22A) BOLT ATTACHES NOSE GEAR DOWN LOCK (PN 86275-004). PROBABLE FATIGUE CRACK FROM NORMAL CYCLE TIME ON GEAR. RECOMMEND VISUAL INSP OF AREA AT A SPECIFIC PERIOD OF TIME TO BE DETERMINED BY THE MFG. (K)

2008FA0000292	PIPER	LYC	SLICK	CAM	WORN
4/23/2008	PA46350P	TIO540AE2A			MAGNETO

BREAKER CAM WORN BEYOND SERVICEABLE LIMITS, 49.9 HOURS SINCE NEW. TIMING HAD CHANGED CONSIDERABLY AND AIRCRAFT DIFFICULT TO START.

2008FA0000274	RAYTHN		DOOR	DAMAGED
1/28/2008	390		3901104500017	LT MLG

THE PILOT WAS INFORMED BY THE FUEL TRUCK DRIVER THAT THE LT MLG IB DOOR WAS NOT PROPERLY LOCKED IN THE UP POSITION, AND THE OB PORTION OF THE DOOR HAD MADE CONTACT WITH THE RUNWAY DURING LANDING. ENGINEERING DEPT RECOMMENDED THAT THE AIRPLANE BE FLOWN BACK UNDER THE AUSPICES OF FAR PART 21.197, SPECIAL FLIGHT PERMITS. THE DOOR WAS EVALUATED BY MAINT AND QUALITY DEPT, AS WELL AS BY THE LOCAL TECH REP, AND DETERMINED UNREPAIRABLE. AC HAS SINCE BEEN RETURNED TO SERVICE WITH NO FURTHER INCIDENTS WITH THE LANDING GEAR SYSTEM. (K)

2008FA0000275	RAYTHN		WIRE	BROKEN
1/28/2008	390			LT MLG

AFTER LANDING, THE PILOT WAS INFORMED BY FUEL TRUCK DRIVER THAT LT MLG IB DOOR WAS NOT PROPERLY LOCKED IN THE UP POSITION, AND THE OB PORTION OF THE DOOR HAD MADE CONTACT WITH THE RUNWAY DURING LANDING. ENGINEERING DEPT RECOMMENDED THAT THE AC BE FLOWN BACK UNDER AUSPICES OF FAR PART 21.197, SPECIAL FLIGHTS PERMITS. THE DOOR WAS EVALUATED BY MAINT, QUALITY DEPT, AND BY TECH REP, AND DETERMINED UNREPAIRABLE. ADDITIONAL TROUBLESHOOTING REVEALED THAT WIRING FOR THE UPLOCK MICROSWITCH WAS BROKEN, AND IT WAS THIS BROKEN WIRING THAT CAUSED THE MICROSWITCH TO FAIL TO ALLOW THE UPLOCK TO PROPERLY ENGAGE THE LOCKING LUG ON THE DOOR. MICROSWITCH AND A NEW LT MLG IB DOOR WERE ORDERED RECEIVED, INSTALLED, RIGGED AND TESTED SATISFACTORILY, AND THE WIRING WAS REPAIRED. THE AC HAS SINCE BEEN RETURNED TO SERVICE WITH NO FURTHER INCIDENTS WITH THE LANDING GEAR SYSTEM. (K)

2008FA0000272	RAYTHN	WILINT	DOOR	DAMAGED
1/12/2008	390	FJ442A	3901104580007	LT MLG

AFTER ROUTINE FLIGHT, THE PILOT WAS PERFORMING HIS PREFLIGHT WALKAROUND INSP IN PREPARATION FOR THE NEXT LEG OF THE FLIGHT. HE NOTICED THAT BOTH MLG OUTER DOORS WERE DAMAGED. MECHANIC/MAINT WENT TO EVALUATE THE DAMAGE TO THE DOORS. RECOMMENDED THAT THE AIRPLANE BE FLOWN BACK UNDER SPECIAL FLIGHT PERMITS. THE DOORS WERE EVALUATED BY MAINT AND QUALITY DEPT, AS WELL AS TECH REP, DETERMINED UNREPAIRABLE. NEW DOORS WERE ORDERED, RECEIVED, INSTALLED, RIGGED AND TESTED SATISFACTORILY. AC HAS SINCE BEEN RETURNED TO SERVICE WITH NO FURTHER INCIDENTS WITH THE LANDING GEAR SYSTEM. (K)

2008FA0000273	RAYTHN	WILINT	DOOR	DAMAGED
1/12/2008	390	FJ442A	390110458008	RT MLG

AFTER ROUTINE FLIGHT, THE PILOT WAS PERFORMING HIS PREFLIGHT WALKAROUND INSP IN PREPARATION FOR THE NEXT LEG OF THE FLIGHT. HE NOTICED THAT BOTH MLG OUTER DOORS WERE DAMAGED. MECH/ MAINT WENT TO EVALUATE THE DAMAGE TO THE DOORS. RECOMMENDED THAT THE AIRPLANE BE FLOWN BACK UNDER SPECIAL FLIGHT PERMITS. THE DOORS WERE EVALUATED BY MAINT AND QUALITY DEPT, AS WELL AS TECH REP, DETERMINED UNREPAIRABLE. NEW DOORS WERE ORDERED, RECEIVED, INSTALLED, RIGGED AND TESTED SATISFACTORILY. AC HAS SINCE BEEN RETURNED TO SERVICE WITH NO FURTHER INCIDENTS WITH THE LANDING GEAR SYSTEM. (K)

20080506FA001	RAYTHN	PARKERHANFIN	BOLT	SHEARED
5/6/2008	G36		10320400AN53	RT MLG WHEEL

THE PILOT REPORTED A "POP" AS HE WAS GROUND HANDLING THE AIRCRAFT ON THE RAMP (IN A STRAIGHT DIRECTION USING AN AIRTUG). FURTHER INVESTIGATION REVEALED 1 NUT/BOLT COMBINATION HAD SHEARED ON THE INBOARD WHEEL HALF OF THE RIGHT HAND MAIN LANDING GEAR ASSEMBLY. THE BOLT HAD SUBSEQUENTLY BACK OUT APPROXIMATELY 1/4INCH. THIS AIRCRAFT HAS BEEN THROUGH 1 ANNUAL INSPECTION AND HAS NEVER HAD THE WHEEL HALVES DISASSEMBLED. UPON DISCOVERY OF THE SHEARED BOLT, THE LEFT AND RIGHT WHEELS WERE DISASSEMBLED, CLEANED, INSPECTED AND REASSEMBLED WITH NEW BOLTS AND NUTS. DURING DISASSEMBLY OF THE WHEEL HALF RETAINING BOLTS IT WAS NOTED THAT VERY LITTLE FORCE WAS REQUIRED TO BREAK THE NUTS LOOSE. THE NOSE WHEEL WAS THEN CHECKED FOR PROPER TORQUE AND DETERMINED, WITH THE USE OF A DIAL INDICATOR TORQUE WRENCH, THAT THE INSTALLED TORQUE WAS APPROXIMATELY 40IN/LBS. THE TORQUE SPECIFICATION FOR THE NOSE WHEEL IS 90 IN/LBS AND THE MAIN WHEELS ARE 150IN/LBS.

2008FA0000305	RAYTHN	GARRTT		NUT	MISMANUFACTURED
4/29/2008	HAWKER800XP	TFE731*		FN22A524	WHEEL

WHEEL LOCK NUT (P/N FN22A-524) WAS BEING INSTALLED TO COMPLY WITH SB 32-1374 AND WAS FOUND TO HAVE ZERO RUN ON TORQUE. THIS IS A NEW PART AND HAS NEVER BEEN INSTALLED. ONLY ONE OF 24 BOUGHT FROM MFG THAT WAS BAD. THIS BOLT/NUT COMBINATION IS WHAT HOLDS THE (2) HALVES OF THE WHEEL TOGETHER.

LJER050608	ROBSIN			BUSHING	LOOSE
5/6/2008	R22BETA		S4LSC200	10357424	MAGNETO

ROTOR BUSHING DEBONDED AND LOOSE, CAUSED ROTOR AND GEAR PLAY. MAGNETO FAILED.

CA080416002	ROBSIN	LYC		COIL	LOOSE
4/16/2008	R44RAVENII	IO540AE1A5	BL6006163		MAGNETO

(CAN) MAG WAS RECEIVED FOR 500 HOUR INSP. WHEN VENT PLUG WAS REMOVED DIRTY BROWN OIL WAS FOUND IN THE MAGNETO. UPON DISASSEMBLY THE OIL SEAL WAS FOUND TO BE LEAKING. THE COIL WAS LOOSE IN THE HOUSING UNDER THE COIL CLAMPS. THE COIL HAD DARK BROWN MATERIAL AROUND THE MOUNTING AREA OF THE COIL POLES FROM WEARING AGAINST THE HOUSING. BOTH THE COIL AND HOUSING WERE UNSERVICEABLE DUE TO THE AMOUNT OF WEAR. THE MAGNETO HAD A NEW STYLE OF HOUSING WITH THE LETTERS (TCM) RAISED IN THE CASTING AND A NEW CONTINENTAL ALPHA SYS DATAPLATE. THIS MAG WAS REBUILT IN JANUARY OF 2007. THE MAG WAS RETURNED TO MFG FOR WARRANTY PURPOSES. (TC NR 20080416002)

CA080415007	ROBSIN	LYC		STARTER GEN	CRACKED
4/11/2008	R44RAVENII	IO540AE1A5		14924HTH	ENGINE

(CAN) AFTER FIRST GROUND RUN, STARTER CRACKED, REPLACED STARTER (TC NR 20080415007)

CA080417003	ROBSIN	LYC		PUMP	LEAKING
4/13/2008	R44RAVENII	IO540AE1A5			ENGINE OIL

(CAN) DURING INSPECTION THERE WAS EVIDENCE OF OIL COMING OUT OF THE DRAIN LINE. THERE HAS BEEN MANY PUMPS LEAKING FORM THE SEALS AND THIS ALLOWS ENGINE OIL TO BYPASS AND FLOW OUT OF THE DRAIN. PUMP WAS REPLACED AND AIRCRAFT RETURN TO SERVICE. DATE CODE ON THE PUMP IS 4105. (TCNR 20080417003)

CA080221012	ROBSIN	LYC		PUMP	LEAKING
2/14/2008	R44RAVENII	IO540AE1A5		LW15473	FUEL SYSTEM

(CAN) DURING THE PREFLIGHT CHECK THE ENGINE DRIVEN FUEL PUMP FOUND LEAKING OIL. (TC NR 20080221012)

CA080227006	ROBSIN	LYC		CAM	BROKEN
1/22/2008	R44RAVENII	IO540AE1A5		10885435	MAGNETO

(CAN) DURING A 500 HR MAG INSPECTION IT WAS NOTED THE CAM WAS TIGHT TO SHAFT, COULD NOT BE REMOVED BY HAND. CAM WAS TAPPED OFF SHAFT WITH BRASS PUNCH AND HAMMER. WHEN CAM CAME OFF SHAFT IT BROKE INTO 4 PIECES. (TC NR 20080227006)

CA080227001	SAAB	GE		BEARING	FAILED
1/31/2008	SF340A	CT75A2			BLOWER MOTOR

(CAN) CABIN CREW NOTED AN ABNORMAL ODOR IN THE CABIN AND ADVISED THE COCKPIT CREW. IT WAS DECIDED TO LAND AT THE CLOSEST AIRPORT AS A PRECAUTION. PRIOR TO LANDING THERE WERE SEVERAL WISPS OF SMOKE OBSERVED IN THE FLOOR/SIDEWALL AREA. THE AC LANDED UNEVENTFUL. MAINT DETERMINED THAT THE SMELL WAS CAUSED BY A FAILED RECIRCULATION BLOWER MOTOR. IT IS BELIEVED THAT A FAILED BEARING IN THE ASSEMBLY IS THE CAUSE OF THE FAULT. (TC NR 20080227001)

CA080214010	SKRSKY	ALLSN		ATTACH FITTING	FAILED

2/9/2008	S76A	250C30S	3035941	3322203	SEATBELT

(CAN) SUBJECT AC CRASHED ON APPROACH TO LANDING. OPERATOR REPORTED TO THAT AN AFT-FACING CABIN SEAT BELT ATTACH FITTING FAILED ON IMPACT, PERMITTING THE SEAT BELT TO DETACH. INSP OF FAILURE SHOWS THAT UNEXPECTED PRYING LOADS CAUSED THE FAILURE OF THE ALUMINUM ATTACH FITTING. A DESIGN CHANGE IS REQUIRED TO PREVENT SIMILAR OCCURRENCES. I AM THE APPROVAL HOLDER FOR THE MODIFICATION THAT INTRODUCES THESE SEATS INTO THE AC. HAVE RECOMMENDED THAT THE OPERATOR REFRAIN FROM USING THESE SEATS FOR TAKEOFF AND LANDING UNTIL A FIX CAN BE INCORPORATED. AC IS EN-ROUTE BY TRUCK TO MY FACILITY. I HAVE CONTACTED THE SEAT MFG REQUESTING ENGINEERING ASSISTANCE TO ADDRESS THIS DEFECT. (TC NR 20080214010)

CA080305019	SNIAS	LYC	MANIFOLD	UNSERVICEABLE
10/10/2007	AS350B2	LTS101*	419110003	FUEL SYSTEM

(CAN) DURING POST MAINT INSP GROUND RUN, A FUEL LEAK WAS DISCOVERED AT THE FUEL MANIFOLD, IT WAS DETERMINED THE MANIFOLD WAS THE CAUSE, THE PART WAS REPLACED WITHOUT FURTHER INCIDENT. (TC NR 20080305019)

CA080218006	SNIAS	TMECA	THERMOCOUPLE	GROOVED
2/18/2008	AS350B3	ARRIEL2B	9550178220	ENGINE

(CAN) AFTER LESS THAN 500 HRS THERMOCOUPLES FOUND WITH A GROOVE WORN INTO TIPS. THIS IS THE SECOND TIME THIS DEFECT HAS BEEN FOUND. (TC NR 20080218006)

CA080218005	SNIAS	TMECA	THERMOCOUPLE	GROOVED
2/18/2008	AS350B3	ARRIEL2B	955017820	ENGINE

(CAN) AFTER LESS THAN 500 HRS THERMOCOUPLES FOUND WITH A GROOVE WORN INTO TIPS. THIS IS THE SECOND TIME THIS DEFECT HAS BEEN FOUND. (TC NR 20080218005)

CA080218002	SNIAS	TMECA	TMECA	HEAT SHIELD	CHAFED
2/18/2008	AS350B3	ARRIEL2B	ARRIEL2B	0292827110	ENGINE

(CAN) WHILE REPLACING THE MO5, SEVERAL HOLES WERE NOTICED. THESE HOLES WERE DUE TO RUBBING AND WERE ONLY THROUGH THE OUTER LAYER OF THE HEAT SHIELD. (TC NR 20080218002)

CA080417010	SNIAS	TMECA	SEAL	DEPARTED
2/21/2008	AS350BA	ARRIEL1B		CHIN BUBBLE

(CAN) CHIN BUBBLE WINDOW AND SEAL DEPARTED THE AIRCRAFT IN CRUISE FLIGHT. AIRCRAFT WAS LANDED AND CHECKED FOR DAMAGE, NOT FOUND. REVIEW INDCATED THAT THE WINDOW WAS REMOVED FOR MAINT BEFORE THE OCCURANCE. WILL FOLLOW UP FOR SPECIFIC PN (TC NR 20080417010)

CA080304009	SWRNGN	GARRTT	FUEL CONTROL	FAILED
3/3/2008	SA226TC	TPE33110UA	8978017	ENGINE

(CAN) ENGINE HAD BEEN REMOVED IN RUNNING CONDITION FOR SCHEDULED HOT SECTION/GEARBOX INSP. ENG SENT TO ENGINE SHOP. UPON INITIAL START UP FOR THE TEST CELL RUN, THE ENGINE WOULD NOT START. FUEL CAME OUT THE DRAINS AND THE BACK OF THE ENGINE. THE FUEL PUMP PRESSURE WAS TESTED AND WITHIN LIMITS. THE FUEL CONTROL WAS REMOVED AND THE DRIVE SHAFT TURNED WITH NO RESISTANCE, LIKE SOMETHING HAD FAILED INSIDE. THIS FUEL CONTROL IS POST AD 2006-15-08 COMPLIANT AND THE FIRST FAILURE OF THIS TYPE SEEN BY THE OPERATOR OR THE ENGINE SHOP ON ONE OF THESE PN. UNIT TBO IS 7000 HOURS NORMALLY. UNIT HAS BEEN SENT FOR REPAIR AND A TEARDOWN REPORT REQUESTED. (TC NR 20080304009)

CA080326002	SWRNGN	GARRTT	EXHAUST DUCT	CRACKED
3/24/2008	SA226TC	TPE33110UA	3101582	ENGINE

(CAN) WHEN THE ENG WAS UNDERGOING A PHASE 6 INSP, A CRACK APPROX 3 INCH LONG WAS DISCOVERED IN THE ENGINE EXHAUST DUCT NEAR THE EGT PROBE BOSSES. IT APPEARED TO BE ON A PREVIOUS WELD. REMOVED AND REPLACED THE DUCT. (TC NR 20080326002)

CA080220002	SWRNGN	GARRTT	WINDSHIELD	DELAMINATED
2/18/2008	SA226TC	TPE33110UA	2719442004	COCKPIT

(CAN) DURING THE CRUISE PORTION OF FLIGHT, THE CREW WITNESSED THE RT SIDE COCKPIT HEATED WINDSHIELD PHYSICALLY DELAMINATING . THE CREW INDICATED THE AC WAS OPERATING AT A 6.0 PSI DIFFERENTIAL WHICH IS WITHIN THE MAXIMUM 7.25 PSI DIFFERENTIAL FOR THE AC. NO ACTION WAS TAKEN BY THE CREW OR WAS DEEMED NECESSARY AND THE WINDOW DELAMINATION WAS MONITORED CLOSLY UNTIL LANDING. MAINT HAS REPLACED THE WINDSHIELD. (TC NR 20080220002)

CA080215012	UROCOP	TMECA	DISPLAY	MALFUNCTIONED
2/14/2008	EC120B	ARRIU2F	B19030W04	

(CAN) THERE HAS BEEN REPORTS OF NUMEROUS SYS FAILURE REPORTS FROM THE VEMD SUCH AS NF/NR, MODULE, OVERLIMITS, LANE FAILURES AND LIGHTING FAILURES AND NONE OF THESE FAILURES ACTUALLY OCURRED. THIS IS A PROBLEM WITH THE SOFTWARE AND HAS BEEN A PROBLEM ON THESE UNITS WITH YELLOW FAILURES EVERY DAY. (TC NR 20080215012)

CA080317003	UROCOP	TMECA		COOLING FAN	SEPARATED
3/11/2008	EC120B	ARRIU2F	160SG140Q		STARTER GEN

(CAN) DURING THE ENGINE START SEQUENCE, AN UNUSUAL NOISE WAS HEARD BY THE PIC. THE NOISE WAS MOMENTARY AND OCCURRED SEVERAL SECONDS AFTER STARTER GENERATOR ENGAGEMENT AND JUST PRIOR TO ENGINE LIGHT OFF. ENGINE PARAMETERS REMAINED NORMAL SO THE START SEQUENCE WAS COMPLETED. AFTER ENGINE STABILIZATION THE ENGINE WAS SHUTDOWN FOR INVESTIGATION AND THE FLIGHT WAS CANCELLED. MAINT WERE ABLE TO DUPLICATE THE NOISE BY ENGAGING THE STARTER FOR SEVERAL SECONDS. THE STARTER GENERATOR WAS REMOVED TO THE BENCH AND THE COVER WAS REMOVED. IT WAS NOTED IMMEDIATELY THAT THE COOLING FAN HAD BECOME SEPARATED FROM THE ARMATURE SHAFT AND WAS ABLE TO SPIN FREELY. BY QUICKLY SPINNING THE FAN AROUND THE SHAFT, THE NOISE HEARD DURING START COULD BE DUPLICATED. THE COOLING FAN WAS REMOVED FROM THE STARTER GENERATOR WHERE IT WAS FOUND THAT THE STEEL INNER HUB OF THE FAN HAD SEPARATED FROM THE CAST ALUMINUM FAN BLADE ASSY. THE STEEL HUB IS NORMALLY SPLINED TO THE BLADE ASSY AND THE SPLINES WERE FOUND TO BE WORN RIGHT OFF OF BOTH PIECES OF THE ASSEMBLY. THIS STARTER GENERATOR HAS ONLY 128 HOURS SINCE NEW, AND 102 HOURS SINCE REPAIR AT THE MFR. THIS STARTER GENERATOR HAS BEEN RETURNED TO THE MFR. (TC NR 20080317003)

2008FA0000310	UROCOP	TMECA	ENGINE	MAKING METAL
5/6/2008	EC120B	ARRIUS2F	0319008000	

ENGINE CHIP DETECTOR LIGHT ILLUMINATED. INSPECTED CHIP DETECTORS, AND FOUND METAL SLIVERS ON MODULE NR 1 CHIP DETECTOR. ENGINE REMOVED FROM SERVICE.

CA080305008	ZLIN	LYC	ALTERNATOR	FAILED
2/25/2008	Z242L	AEIO360A1B6	ALU8521R	

(CAN) PILOT EXPERIENCED A COMPLETE ELECTRICAL FAILURE. SUBSEQUENT INVESTIGATION REVEALED A MELTED INSULATOR ON THE (BATT) TERMINAL OF THE ALTERNATOR. THE (BATT) WIRE TERMINAL END WAS MELTED AND BROKEN WITH THE FREE END CONTACTING THE ALTERNATOR CASE. THE FREE WIRE ENABLED A RAPID DISCHARGE OF THE BATTERY. (TC NR 20080305008)

END OF REPORTS