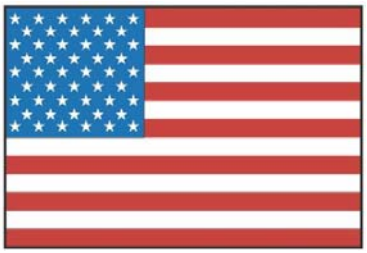
U.S. Department of Transportation
Federal Aviation Administration

AFS-600
Regulatory Support Division

ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



ALERT NUMBER 374

SEPTEMBER 2009

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

AVIATION MAINTENANCE ALERTS

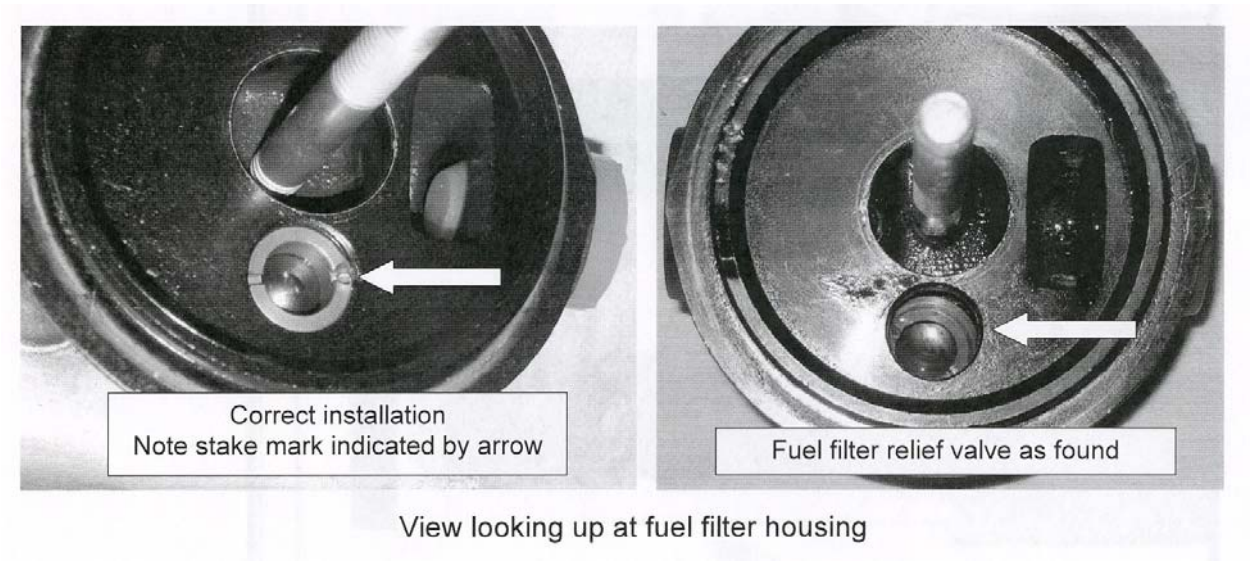
The Aviation Maintenance Alerts provides the aviation community with an economical means to exchange service experiences and to assist the FAA in improving aeronautical product durability, reliability, and safety. We prepare this publication from information operators and maintenance personnel who maintain civil aeronautical products pertaining to significant events or items of interest. At the time we prepared this document, we have not fully evaluated the material. As we identify additional facts such as cause and corrective action, we may publish additional data in subsequent issues of the Alerts. This procedure gives Alerts' readers prompt notice of conditions reported to the FAA Service Difficulty Reporting System (SDRS). We welcome your participation, comments, and suggestions for improvement. 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

Beech: A200; Improperly Staked Fuel Filter Bypass Valve; ATA 2821

A technician writes, "During a scheduled phase inspection, *(we)* found a relief valve backed out of the fuel filter (P/N 50-389110). This firewall mounted filter has a ball-and-spring type relief valve threaded into the filter housing (P/N 02W760-140). The mechanic found the valve seat and ball completely backed out and displaced into the housing, allowing fuel to constantly bypass the filter. *(This)* valve seat (P/N 02FC213) is normally secured into the filter housing by 'staking' the threads. This is the third filter assembly in eight months that we have found in this condition (unstaked and displaced) in our fleet of 60 (plus) aircraft. It is interesting to note the valve backed out upwards, against gravity and spring pressure. The relief valve was reinstalled and staked."



(These pictures make your gravity/spring note quite apparent! Thank-you for the effort—Ed.)

Part Total Time: (unknown)

Beech: 390; Stuck Anti-ice Valve; ATA 3020

A repair station technician says, *(I)* investigated a pilot report of an uncommanded R/H engine anti-ice operation during takeoff and cruise flight. I found the R/H engine anti-ice valve stuck *(in the open position)*. I replaced the valve with a serviceable, overhauled valve: function was normal. I have noted several failures of anti-ice valves after low time in service. I recommend the manufacturer investigate whether valve design or installation is causing the premature failures." *(Dukes valve assembly, P/N 5188-00-1. Airframe has 444.5 hours. See the next report for similar defect.)*

Part Total Time: 444.5 hours

Beech: 390; Stuck Anti-ice Valve; ATA 3020

The same repair station technician as above continues with another sticking valve. He states, "*(I)* replaced the R/H engine anti-ice valve with 0.00 hours TSOH *(time since overhaul)....*" "This valve failed (stuck) in the open position when it was initially tested following installation. I replaced the valve with another *(from the same supplier):* operation was normal. I recommend the manufacturer investigate whether this is a quality control issue or if this valve assembly is subject to hidden internal damage due to rough handling during shipping." *(The Manufacturer is Dukes, Inc.; P/N 5188-00-1.)*

Part Total Time: (unknown: time since overhaul: 0.00 hours)

Beech: 390; Stuck Starter Relay; ATA 8010

A technician writes, "I investigated a pilot report of a R/H engine starter/generator not disengaging from the start function after engine start. I found the 80K5 R/H engine start latch relay stuck in the 'start' function. The R/H starter/generator terminal cover and cooling air inlet duct *(indicated)* signs of overheating. I inspected the starter/generator, replaced the 80K5 relay—the starter/generator now functions normally. I have replaced numerous 80K3 and 80K5 start latch relays in the 390 series aircraft which have failed with short times-in-service. I recommend the manufacturer investigate whether this is a relay quality control or design/installation issue." *(Relay P/N: M83536/6-026L.)*

Part Total Time: 445.0 hours

Cessna: 172R; Chafing Flap Motor Wire Bundle; ATA 2497

"*(During)* a phase II inspection," writes a mechanic, "it was discovered that the wire bundle mount (P/N S2606-2) that holds the flap motor wire harness had detached from the rib in the right wing, and had allowed the wire bundle to chafe into the inspection panel support on the wing. The wire bundle had two wires *(which were)* chaffed *(completely)* through the insulation, *(allowing contact with the inspection panel support).* I recommend inspection of these mounts and to replace them as needed or 'on condition'."

Part Total Time: 4,073.5 hours

Cessna: 208B; Elevator Torque Tube Inspection Admonition; ATA 2730

(The Wichita Certification Office provides the following safety article. Contact information follows the discussion.)

"This information is provided to remind operators and maintenance technicians to do the prescribed inspections of Chapter 5 of the Cessna maintenance manual with specific emphasis of Item Code Number 273001. This elevator inspection is required every 100 hours. Maintenance technicians are alerted to the maintenance concerning rivets that are common to the 2634017-1 Elevator Torque Tube Assembly and 26344017-2 flange.

"Item Code 273001 states, 'Elevator—Inspect elevator skins for cracks and loose rivets; elevator hinges for condition, cracks, and security; and hinge bolts, hinge bearings, torque tube, horn, attach fittings, and bonding jumpers for evidence of damage or wear, failed fasteners, and security. Inspect elevator hinge bolts for proper safetying of nuts with cotter pins. Inspect balance weights for looseness and supporting structure for damage. Inspect outboard tips for cracks in rib flange'."

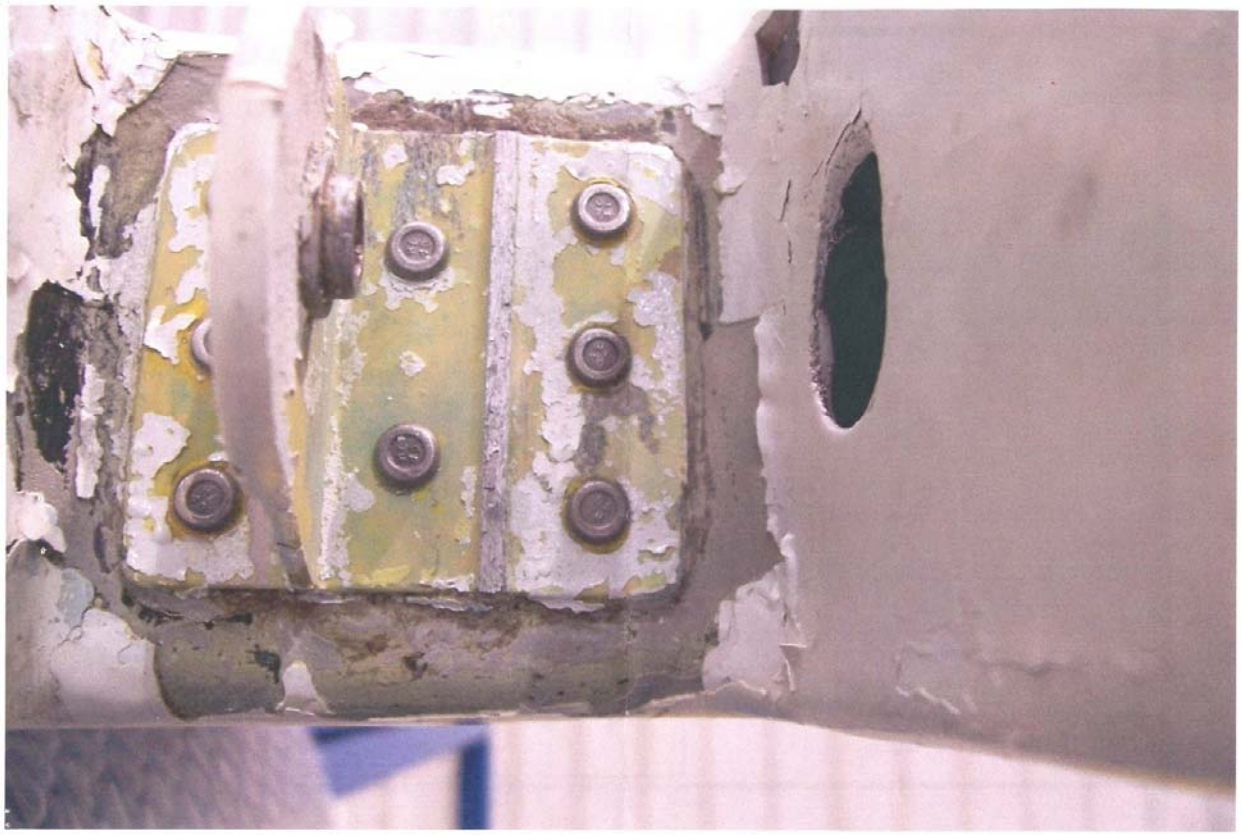
(For further information contact Aerospace Engineer Gary Park; Wichita Aircraft Certification Office, 1801 Airport Road, Room 100; Wichita, Kansas; 67209; phone: 316-946-4123.)

Part Total Time: (n/a)

Cessna: S550; Broken Aileron Hinge Bracket; ATA 5744

(The following report should cause all of us to pay close attention: very small sentences; a very big issue!)

A repair station technician writes, "The left *(aileron)* outboard hinge bracket *(P/N 6590029-1)* broke off during aileron removal. It appears to have failed due to corrosion."



Part Total Time: (unknown)

Learjet: 35A; Cracked R/H Main Gear Door Hinge; ATA 5280

"The crew noticed a 'landing gear door unsafe' indication in flight," says this submitter. The gear was *(subsequently)* lowered, and with the gear down and locked the indications were normal. Inspection revealed the outboard R/H gear door hinge was cracked, which caused the door not to fully close. This condition was aggravated by the high airspeeds." *(Hinge assembly P/N: 2492253-2. See also the next report.)*

Part Total Time: 15,153.0 hours

Learjet: 55; Missing Main Landing Gear Door; ATA 5280

The previous submitter continues here—more door problems on a different aircraft. "AT 10,000 feet the crew observed a 'gear unsafe' light, followed by vibration and air noise. The aircraft *(speed was reduced to less than...)* 250 knots, then the crew heard a 'bang' noise. After landing it was noticed that the R/H outboard gear door had separated from the aircraft." *(Outboard door assembly P/N: 5422151-20).*

Part Total Time: 14,571.0 hours

ACCESSORIES

Slick Magneto: 6351; Improperly Spaced Distributor Gear; ATA 7414

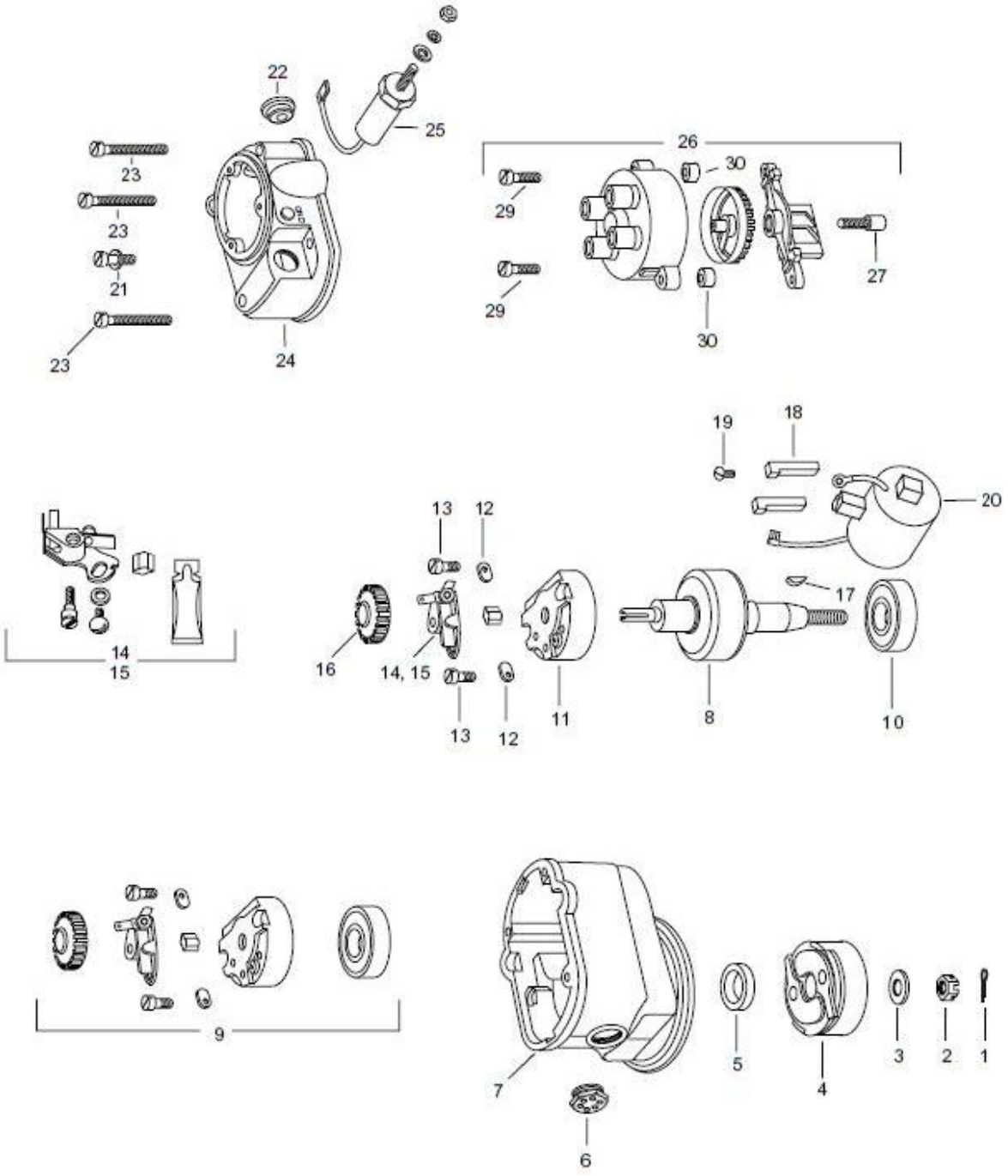
A repair station technician states, "During an internal magneto inspection *(we)* found the spot-faced areas for the *(terminal)* poles in the distributor block to be incorrectly spot-faced. The material that was left behind has the same loft as the bearing boss area on the distributor block. This *(spacing problem)* causes the finger on the distributor gear to rub on the distributor block. *(Distributor block P/N: M3820. The SDRS database returns 22 reports on this magneto model. See the next report for similar issues.)*

Part Total Time: 16.9 hours

Slick Magneto: 4371; Unseated Rotor Gear; ATA 7414

(The following mechanic's submission combines two discrepancy reports for a pair of magnetos from a Lycoming IO-360-L2A. A Cessna 172S follows faithfully behind this engine.)

"The aircraft had intermittent magneto operation on the left magneto position during the ground run-up procedure. Aircraft maintenance was able to duplicate this problem, *(effecting)* removal of the magneto for internal inspection. Rotor (#16) was unseated from the rotor shaft, causing the lip on the rotor gear to be ground-up by the distributor block gear. The lip material was found throughout the inside of the magneto housing. Aircraft maintenance removed the right magneto for visual inspection and found the same damage as the left magneto. Both magnetos had factory torque seal applied to the top cover screws."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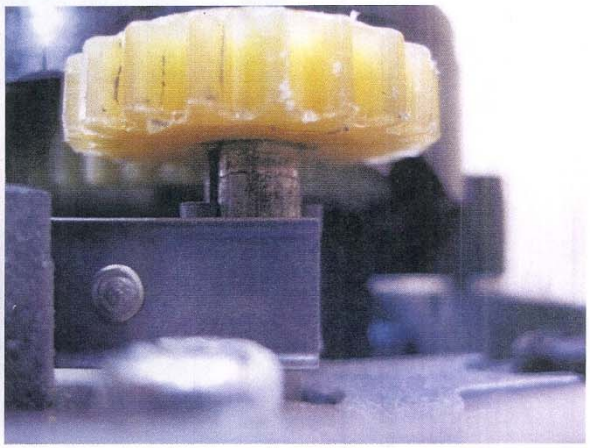
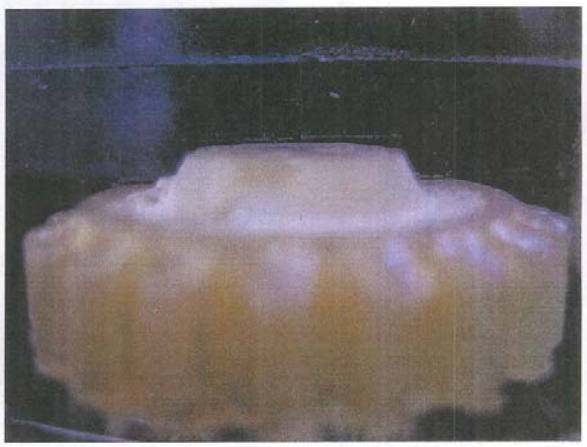
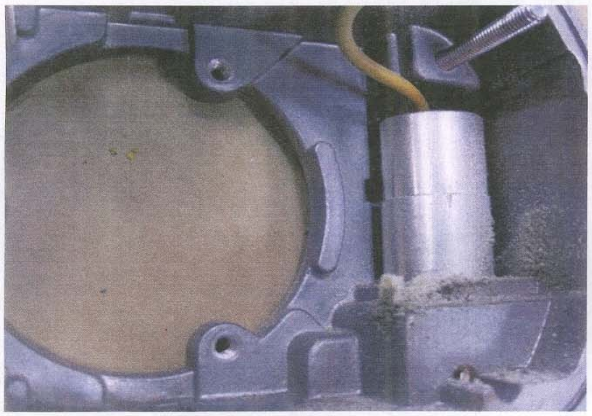
Rotor gears were found up on shaft

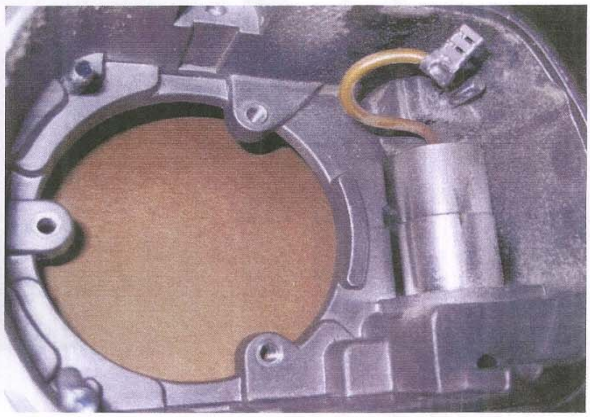


Rotor gears were found in contact with Distributor Block

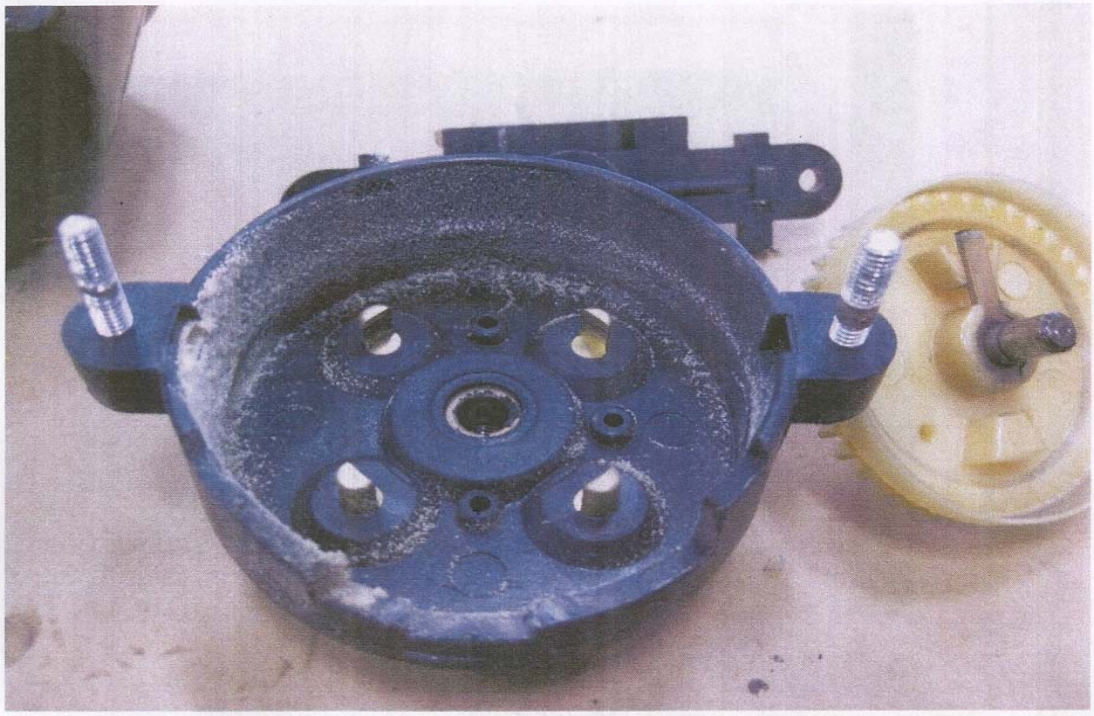


Rotor Gear material

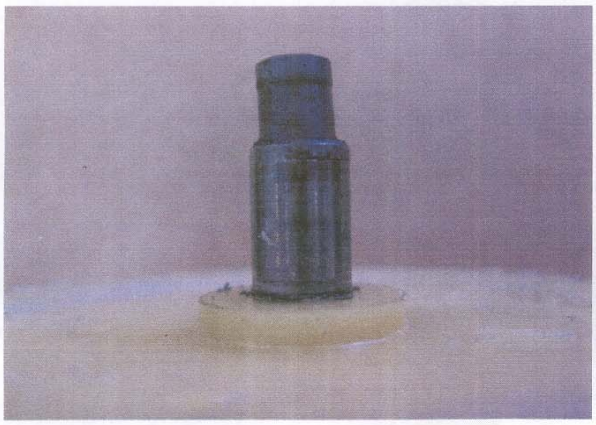


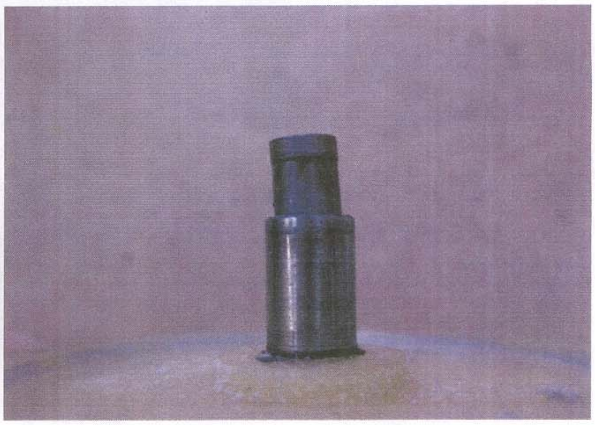


Rotor Gear Material

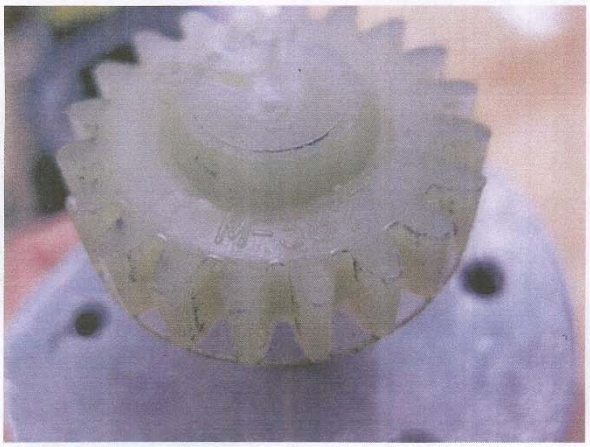


Carbon Brush (#27) Condition





Serviceable Rotor Gear (M3827)



(Twenty-two reports for this model reside in the SDRS database. Thank-you for the side-by-side photo spread—Ed).

Part Total Time: 466.1 hours

AIR NOTES

INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE

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

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

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

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

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

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

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

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

The SDRS and iSDR web site point of contact is:

Pennie Thompson
Service Difficulty Reporting System, Program Manager
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125
Telephone: (405) 954-5313
SDRS Program Manager e-mail address: 9-AMC-SDR-ProgMgr@faa.gov

IF YOU WANT TO CONTACT US

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

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

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

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

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

AVIATION SERVICE DIFFICULTY REPORTS

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

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

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

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

Federal Aviation Administration

Service Difficulty Report Data

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

Control Number	Aircraft Make	Engine Make	Component Make	Part Name	Part Condition
Difficulty Date	**Aircraft Model**	**Engine Model**	**Component Model**	**Part Number**	**Part Location**
CA090622019				CYLINDER	CRACKED
6/22/2009				B18032	PROPELLER

(CAN) CYL WAS MAGNETIC PARTICLE INSP DURING STANDARD O/H PROCEDURES. NO DEFECTS WERE NOTED. CYL SENT FOR RECHROMING IAW SRM 202A VOLUME 10. OLD CHROME WAS STRIPPED AND CYL MAG PARTICLE INSPECTD IN PREP FOR NEW CHROME. CRACK DETECTED AT THIS TIME.

CA090623005				MAGNETO	INOPERATIVE
6/19/2009				5F14LN3	LT ENGINE

(CAN) MAG DROP, REPLACED MAG. ACFT RETURNED TO SERVICE.

CA090623008				ROTOR	MISMANUFACTURED
6/23/2009				4370	MAGNETO

(CAN) MAG WAS RECEIVED FOR 500 HOUR INSP. WHEN MAG WAS DISASSEMBLED, SMALL NYLON ROTOR GEAR WAS FOUND TO BE SITTING TOO HIGH AND RUBBING AGAINST DISTRIBUTOR GEAR. BOTH GEARS HAD A SMALL AMOUNT OF WEAR AT WEB AREA AT END OF GEAR TEETH. ROTOR WAS PRESSED INTO BRGS APPROX .015" TO .020" UNTIL IT SEATED PROPERLY AND BRGS WERE INSPECTED FOR ROTATION AND ROUGHNESS. REST OF 500 HR INSP WAS CARRIED OUT AND MAGS WERE RETURNED TO SERVICE.

CA090623009				ROTOR	MISMANUFACTURED
6/23/2009				4371	MAGNETO

(CAN) MAG WAS RECEIVED FOR 500 HR INSP. WHEN MAG WAS DISASSEMBLED, SMALL NYLON ROTOR GEAR WAS FOUND TO BE SITTING TOO HIGH AND RUBBING AGAINST THE DISTRIBUTOR GEAR. BOTH GEARS HAD A SMALL AMOUNT OF WEAR AT THE WEB AREA AT THE END OF THE GEAR TEETH. ROTOR WAS PRESSED INTO THE BRGS APPROX. .015" TO .020" UNTIL IT SEATED PROPERLY AND THE BRGS WERE INSPECTED FOR ROTATION AND ROUGHNESS. REST OF 500 HR INSP WAS CARRIED OUT AND MAG WAS RETURNED TO SERVICE.

2009FA0000695				WIRE	DAMAGED
6/5/2009					LAV WATER HEATER

A TIA WATER HEATER, PN 500-0576-02, INSTALLED IN ACFT WAS RETURNED TO THE REPAIR STATION FOR INVESTIGATION. DURING THE INVESTIGATION, IT WAS LEARNED THAT REASON FOR REMOVAL WAS SMOKE IN THE CABIN AND ELECTRICAL SMELL. INVESTIGATION FOUND A BURNED CRIMP IN THE WINDOW SPLICE CONNECTING THE 16 AWG HEATER WIRES TO THE OVERHEAT TERMOSTAT. ONLY THE SINGLE WINDOW SPLICE CRIMP SHOWED EVIDENCE OF DAMAGE. ROOT CAUSE WAS DETERMINED TO BE WIRES NICKED DURING INITIAL ASSY STRIPPING. A SB IS BEING WRITTEN WHICH WILL INCLUDE A RECALL OF WATER HEATERS IN THAT PRODUCTION LOT. THE WIRE STRIPPING PROCESS IS BEING REVIEWED TO PREVENT RECURRENCE OF THE FAILURE.

CA090707001				DISTRIBUTOR BLK	LOOSE
7/6/2009			4370	K3822	MAGNETO

(CAN) THE ELECTRODE FINGER ON THE DISTRIBUTOR GEAR WAS FOUND EXCESSIVELY LOOSE DURING A 500 HR

INSP OF THE MAGNETO.

CA090715004			COIL	CRACKED
7/15/2009			10391088	MAGNETO

(CAN) HAVE BEEN NOTICING CRACKS IN 1200 SERIES MAG COILS. THIS IS OCCURRING ON MAGS WITH LESS THAN 500 HRS UP TO 2000+ HRS, 4 OF THESE MAGS WERE MFG IN 2002, 2003, 2004 AND 2008 (INDICATED BY THE FIRST 2 DIGITS OF THE S/N) AND THE `BL` IN THE PN INDICATES TCM REBUILT MAGS. NEW MAGS HAVE A `10` AT THE BEGINNING OF THE P/N. THESE COILS ARE ALL OF THE BLUE PLASTIC COVER DESIGN WITH BATCH NR`S STAMPED IN WHITE IN THE RANGE SHOWN FROM PN BL-349290-1 SN F02KA067R TIME EXP`D CORE, BATCH NR 4800229. FROM PN BL-349310-1 SN F03FA172R TIME EXP`D CORE, BATCH NR 4800315. FROM PN 10-349350-4 SN F04HA183 TIME EXP`D CORE, BATCH NR 4800432. FIRST COIL NOTICED, PN AND SN DATA NOT RECORDED, BATCH NR 4800543. FROM PN BL-349350-4 SN F08CA206R LESS THAN 500 HRS (SENT IN FOR 500 HR INSP.) BATCH NR 4800812. ALL COILS WERE REMOVED FROM SERVICE. MFG IS BEING CONTACTED ABOUT THIS ISSUE.

CA090715007			POINTS	FAILED
7/15/2009			10357174	MAGNETO

(CAN) MAG HAD BEEN IN FOR A 500 HR INSP. CONTACT PONT WAS REPLACED AT THAT TIME AND MAG RETURNED TO SERVICE. 6 DAYS LATER WITH LESS THAN 10 HOURS IN SERVICE CUSTOMER REPORTED A LOSS OF ENG PWR WHEN THIS MAG WAS SELECTED ON THE MAG RPM DROP CHECK. MAG WAS RETURNED TO US AND THE COVER REMOVED TO INSPECT THE MAG. POINT ON GROUND SIDE OF CONTACT POINT ASSY HAS AN ELECTRICAL CONTACT SECTION ATTACHED TO A BACKING MATERIAL THAT IS `RIVETED` TO BASE OF CONTACT POINT ASSY. THIS ELECTRICAL CONTACT WAS NO LONGER ATTACHED AND FURTHER DISASSY OF MAG TO TRY TO LOCATE IT WAS UNSUCCESSFUL. ANOTHER CONTACT ASSY WAS INSTALLED AND MAG WAS RETURNED TO SERVICE. U/S CONTACT ASSY. WILL BE RETURNED TO MFG FOR WARRANTY PURPOSES.

CA090722002			IGNITION SWITCH	MALFUNCTIONED
7/21/2009			103572101	

(CAN) SMALL TAB/LOCK MISSING IN SWITCH ALLOWING START TO OCCUR AT ANY POSTION SIMPLY BY PUSHING IN THE "KEY". SHOULD NOT BE ABLE TO PUSH IN THE KEY UNLESS KEY IS IN START POSITION. PART WAS NOT INSTALLED. PART WAS TAGGED AND QUARANTINED. ANOTHER IDENTICAL PN (FROM SAME BATCH NR THAT STORES RECEIVED), WAS INSTALLED WHICH FUNCTION CHECKED NORMAL.

2009FA0000739	ALLSN		TURBINE NOZZLE	WORN
8/5/2009	250B17C			ENGINE

ENG WAS RECEIVED FOR REPAIR DUE TO NOISE. UPON DISASSEMBLY OF THE TURBINE IT WAS DISCOVERED THE NR 2 NOZZLE DIAPHRAGM HAD BEEN DISLODGED FROM THE CASTING AND WAS MAKING CONTACT WITH THE 2ND STAGE WHEEL. MORE THAN HALF OF THE DIAPHRAGM AND BEEN WORN AWAY; THE WHEEL IS BELIEVED TO BE CLOSE TO THE POINT OF FAILURE. "FAA-PMA" IS CLEARLY VISIBLE ON THE NOZZLE; THE PN IS NOT FULLY VISIBLE BUT APPEARS TO BE 23031938. TOTAL HOURS, CYCLES ARE UNKNOWN FOR ALL ASSEMBLIES OR PARTS.

2009FA0000740	ALLSN	RROYCE	IMPELLER	CRACKED
8/14/2009	250C20B		23058147	COMPESSOR

COMPRESSOR WAS RECEIVED TO REPAIR FOR DAMAGE TO ROTOR. UPON DISASSEMBLY AND INSP, DISCOVERED THAT A SECTION OF SHROUD BETWEEN THE NR 2 VANES AT THE FWD END OF THE IMPELLER (IDENTIFIED AS DIAMETER I) HAD BROKEN OFF. CAUSE COULD NOT BE DETERMINED. HOURS AND CYCLES COULD NOT BE DETERMINED.

2009FA0000663	ALLSN	ALLSN	DRIVE GEAR	WORN
8/3/2009	250C20B		6889700	GEARBOX

METAL IN OIL. MATERIAL LOSS ON GEAR TEETH, WORN THROUGH NITRIDE COATING.

2009FA0000664	ALLSN	RROYCE	GEARSHAFT	WORN
8/3/2009	250C20B		6899402	GEARBOX

METAL IN OIL. MATERIAL LOSS ON GEAR TEETH, WORN THROUGH NITRIDE COATING.

2009FA0000665	ALLSN	ALLSN	GEARSHAFT	WORN
8/3/2009	250C20B		23039079	GEAR TEETH

MATERIAL LOSS ON GEAR TEETH, WORN THROUGH NITRIDE COATING.

2009FA0000666	ALLSN	ALLSN	GEARSHAFT	WORN
8/3/2009	250C20B		23035299	GEAR TEETH

MATERIAL LOSS ON GEAR TEETH, WORN THROUGH NITRIDE COATING.

2009FA0000667	ALLSN	ALLSN	DRIVE GEAR	WORN
8/3/2009	250C20B		6889700	GEAR TEETH

MATERIAL LOSS ON GEAR TEETH, WORN THROUGH NITRIDE COATING.

2009FA0000662	ALLSN		GEAR	FAILED
8/3/2009	250C20B		23075442	

METAL IN OIL. MAKING PASTE FROM GRINDING UP SMALL PIECES OF GEAR SHAFT.

CA090720006	ALLSN		DEICE SYSTEM	MALFUNCTIONED
7/13/2009	501D13D			

(CAN) DURING FINAL APPROACH, A HORSE POWER DROP WAS EXPERIENCED WITH AN INCREASE IN T.I.T. ON NR2 ENG. THE T.I.T. INCREASED ABOVE LSGI LIMITS DURING FINAL PORTION OF TAXI AND ENGINE WAS SHUTDOWN. INSP FOUND THE HEATED INTAKE COWL HAD DELAMINATED ALLOWING PIECES TO ENTER ENG INTAKE. NR 2 ENG AND QEC WERE REPLACED AND ENG RUNS CARRIED OUT AND THE ACFT WAS RETURNED TO SERVICE.

2009FA0000661	ALLSN	ALLSN	GEARSHAFT	BROKEN
8/3/2009	T63A720		23063413	GEARBOX

GEARSHAFT BROKE IN HALF CAUSING A CHIP LIGHT.

CA090707006	LYC	SLICK	COIL	FAILED
7/7/2009	O235L2C	4381	4381	MAGNETO

(CAN) ENG WAS RECEIVED FOR PROP STRIKE INSP. MAGS WERE REMOVED AND 500 HR INSP PERFORMED. THIS MAG WAS OPENED AND GREASE WAS FOUND ON NYLON ROTOR AND DISTRIBUTOR GEAR TEETH. MFG MANUAL STATES NO LUBRICANT SHOULD BE USED ON THESE GEARS DUE TO NYLONS "SELF LUBRICATING" PROPERTIES. WHEN DISTRIBUTOR BLOCK ASSY WAS REMOVED COIL TAB WAS FOUND TO HAVE A RING SHAPED WEAR PATTERN ON IT. COIL TAB WAS FOUND PROTRUDING ABOVE HSG SPLIT LINE APPROX .0312". MFG STATES TAB SHOULD BE LEVEL WITH OR .0312" BELOW THE HSG SPLIT LINE. THIS MAG HAD A O/H STICKER ON IT WITH A DATE OF 10/9/2007 REF NR 15373. HAVE DONE ESTIMATES TO O/H MAGS BUT DUE TO MFG MANUAL STATING ALL INTERNAL COMPONENTS MUST BE REPLACED WITH NEW AT O/H (EXCEPT FOR THE HGS AND ROTOR) CANNOT ECONOMICALLY PERFORM AN O/H. COIL WAS REMOVED FROM THIS MAG BECAUSE OF WEAR RING AND BATCH NR ON BOTTOM OF COIL WAS 010604, INDICATING IT WAS PRODUCED IN 2004. THIS MAG WAS PRODUCED IN JAN. OF 2004 ACCORDING TO THE SN OF THE MAG AND IT SEEMS AS IF THIS IS THE ORIGINAL COIL THE MAG WAS MADE WITH. AN ESTIMATE WAS PROVIDED TO CLEAN AND REPAIR THE MAG.

2009FA0000691	PWA		TURBINE BLADES	CRACKED
6/11/2009	JT15D1A		305501101	TURBINE SECTION

DURING HOT SECTION INSP, FOUND 2 HIGH TURBINE BLADES CRACKED ON THE T/E AT MID SPAN OF THE BLADE. WORST CRACK BEING APPROX .360 AND .200. (K)

2009FA0000673	PWA		FILTER	MISMANUFACTURED
8/6/2009	PT6A135		305925701	ENGINE OIL

RECEIVING INSP ON A NEW OIL FILTER PN 3059257-01, LOT NR 091640 IT WAS DISCOVERED THE INTERNAL CONE SHAPED WIRE MESH FILTER SCREEN WAS MISSING FROM THE FILTER. RECOMMEND VISUAL INSP OF ALL

FILTERS TO INSURE INTERNAL WIRE MESH FILTER SCREEN IS INSTALLED PRIOR TO USE.

CA090713001		PWA	SEAL	FAILED
7/8/2009		PW121	310805501	ENGINE

(CAN) ETR PW100 0500 INTERTURBINE AIR SEAL FAILURE.

CA090702014		ROTAX	LIFTER	WORN
6/8/2009		ROTAX914	881831	ENGINE

(CAN) ENG WAS O/H AND RE-INSTALLED. DURING FLIGHT HOME ENG BEGAN TO RUN ROUGH SO THE PILOT SHUT IT DOWN AND LANDED. NO FAULT WAS FOUND SO HE TOOK OFF TO FLY ANOTHER LEG HOME. A SHORT TIME LATER THE ENGINE BEGAN TO RUN ROUGH AGAIN AND THE OIL PRESSURE ALSO BEGAN TO DROP. THE ENG WAS SHUTDOWN AND HE LANDED AT THE NEAREST AIRPORT. AFTER TROUBLESHOOTING IT WAS DISCOVERED THE NR 2 INTAKE LIFTER WAS WORN ON THE CAM. ENG WAS RETURNED TO THE O/H SHOP FOR INVESTIGATION.

CA090720002	AEROSP	TMECA	TURBINE BLADES	BROKEN
7/17/2009	AS355*	ARRIEL1D1	0292803080	ENGINE

(CAN) DURING A ROUTINE 30 HR INSP, N2 TURBINE BLADE IS INSP IAW ALERT LETTER 2726/09/ARID/82 AND TIP AREA OF BLADE WAS FOUND MISSING. ENG WAS SENT TO FOR INSP AND REPORT TO FOLLOW.

CA090721002	AEROSP	PWA	WINDOW	FAILED
7/21/2009	ATR42300	PW120	NP1588621	COCKPIT

(CAN) DISCREPANT CONDITION NR 2 WAS FOUND ON LT COCKPIT SIDE WINDOW IAW EMERGENCY AD 2009-0159-E. INSP ALSO CARRIED OUT IAW MFG CSB-158862-001 INSP AID DOCUMENT.

CA090618007	AEROSP	PWA	PROXIMITY SWITCH	DENTED
6/14/2009	ATR42300	PW120	D22878001	MLG

(CAN) AFTER TAKEOFF, LANDING GEAR WOULD NOT RETRACT, ACFT RETURNED TO DEPARTURE. MX FOUND THE WEIGHT ON WHEELS SWITCH UNSERVICEABLE, APPEARED TO BE DENTED FROM STONE DAMAGE, AIRPORT IS A GRAVEL STRIP. REPLACEMENT OF THE SWITCH CORRECTED THE PROBLEM.

CA090618010	AEROSP	PWA	CASE	CRACKED
6/13/2009	ATR42300	PW120	307005901	GAS GENERATOR

(CAN) AFTER TAKEOFF, THERE WAS A NR 2 ENG FIRE WARNING, ENG WAS SHUTDOWN, FIRE EXTINGUISHER WAS DISCHARGED AND ACFT RETURNED TO DEPARTURE. MX FOUND A CRACK IN THE ENG COMBUSTION SECTION. PN AND DESCRIPTION WILL FOLLOW. CADOR 2009C1441 REFERS.

CA090626007	AEROSP	TMECA	SEAL	LEAKING
12/31/2008	SA315B	ARTOUSTE2B1		OIL SYSTEM

(CAN) DUE TO OIL DILUTION OF FUEL, ENG WAS REMOVED FROM SERVICE AND RETURNED TO HELI-SUPPORT. OIL DILUTION MAY HAVE BEEN CAUSED BY LEAKING JET BOX SEAL. ENG LOG IS AT HELI-SUPPORT. ENGINE WAS NOT RETURNED TO SERVICE. UN ECONOMICAL TO REPAIR FOR HELICOPTERS. NO MORE INFORMATION AVAILABLE BECUASE THE RECORDS ARE GONE WITH THE ENGINE TO HELI-SUPPORT.

ULXR2009070882607	AGUSTA	PWC	PROBE	INOPERATIVE
7/8/2009	AW139	PT6C67C	3G280V01051	FUEL SYSTEM

RT SECONDARY FUEL PROBE FAILED, SYS INDICATED ZERO. CAS MESSAGE NR2 FUEL PROBE. PROBE REPLACEMENT FIXED PROBLEM.

ULXR2009070282608	AGUSTA	PWC	UNKNOWN	MULTIPLE FAIL
7/2/2009	AW139	PT6C67C		

LOW TORQUE INDICATION (30-40 PERCENT) ON BOTH PILOT'S AND COPILOT'S PFD/MFD DURING MAX GROSS WEIGHT TAKEOFF. CAS INDICATIONS: 1 AP FAIL, AVIONIC FAULT, 1 AHRS FAIL, AFCS DEGRADED.

CA090717001	AIRBUS	CFMINT	TURBINE BLADES	FAILED
7/16/2009	A320211	CFM565A1		NR 1 ENGINE

(CAN) ON T/O AT 4000 FT, LOUD BANG ON ENG NR 1, VIBRATION UP TO 9.5. ENGINE FAILED. FIRE HANDLE PULLED BUT BOTTLES NOT FIRED BY FLIGHT CREW. THIS IS AN OLD PN HPT BLADE FAILURE - 13,000 CYCLES ON THE OLD PN BLADES. THIS IS THE FOURTH -5A ENGINE SUFFERING THE OLD PN HPT BLADE FAILURE.

CA090604009	AIRBUS	CFMINT	DUCT	CRACKED
4/30/2009	A320211	CFM565A1	2380510501	BLEED SYSTEM

(CAN) CREW REPORT: AFTER TAKEOFF EGT OVER LIMIT AND ENG NR2 FIRE WARNING ON ECAM. CREW BOUGHT POWER BACK TO IDLE FIRE WARNING EXTINGUISHED AND RETURN TO DEPARTURE WITH ENGINE AT IDLE. TOWER REPORTED A POSSIBLE BIRD STRIKE TO THE CREW. MX CARRIED OUT TROUBLESHOOTING AND NOTED BLEED AIR LEAKING FROM THE ENGINE COWLS. ONCE THE COWLS WERE OPENED THE 15TH STAGE BLEED DUCT WAS FOUND CRACKED AT A WELD LINE APPROX AT THE 6 O`CLOCK POSITION AFT FACING FWD.

2009FA0000658	AIRBUS		STRINGER	CORRODED
7/30/2009	A320232		57252463200	ZONE 600

DURING ACCOMPLISHMENT OF MPD TASK CARD 572053-02, 57-20-00-220-005; SPECIAL DETAILED INSP OF OUTER, BOTTOM STR BETWEEN RIB 1 AND RIB 8, CORROSION WAS FOUND IN THE RT WING DRY BAY AREA AT LWR STR NR 3 JUST OTBD OF RIB NR 6. THIS AREA IS COVERED BY AD 2008-04-20.

2009FA0000659	AIRBUS		STRINGER	CORRODED
7/30/2009	A320232		57252463200	ZONE 600

DURING ACCOMPLISHMENT OF MPD TASK CARD 572053-02, TITLED 57-20-00-220-005; SPECIAL DETAILED INSP OF OUTER, BOTTOM STR BETWEEN RIB 1 AND RIB 8, CORROSION WAS FOUND IN THE RT WING DRY BAY AREA AT LOWER STR NR 3 JUST OTBD OF RIB NR 6. THIS AREA IS COVERED BY AD 2008-04-20.

CA090727005	AIRBUS	IAE	BLEED VALVE	STUCK
7/24/2009	A320232	V2527A5	AC69859	NR 2 ENGINE

(CAN) AT TOP OF CLIMB ECAM MESSAGE " NR 2 ENG STALL" ENGINE NR 2 FADEC/ENGINE NR 2 SENSOR FAULT WAS ANNOUNCED. THERE WAS NO ABNORMAL AUDIBLE SOUNDS. CREW RETURNED TO BASE, TROUBLESHOOTING INDICATED THAT THE 7TH STAGE BLEED VALVE WAS STUCK IN THE FULL OPEN POSITION. THE BLEED VALVE WAS REPLACED, POWER RUNS CARRIED OUT. ACFT RETURNED TO SERVICE.

CA090709007	AIRBUS	RROYCE	PUMP	LEAKING
6/23/2009	A330342	RB211TRENT77	974800	HYD SYSTEM

(CAN) NR 2 ENG EDP LEAKING AT CASING WHERE PRESSURE LINE CONNECTED. PUMP REPLACED.

CA090723009	AIRTRC	PWA	STUD	BROKEN
7/22/2009	AT802A	PT6A67A	D186126	FLAP MOTOR

(CAN) FLAP MOTOR MOUNTING STUD SHEARED.

CA090618012	AYRES	LYC	INDICATOR	UNSERVICEABLE
6/4/2009	S2C	AEIO540D4A5	EA51728PIT	AIRSPEED

(CAN) DURING PITOT/STATIC GROUND FUNCTION TEST, IT WAS NOTED THAT PILOTS (AFT) AIRSPEED INDICATOR WOULD ACCURATELY INDICATE AN INCREASE IN AIRSPEED BUT WOULD NOT SHOW A DECREASE ONCE PITOT PRESSURE IS RELIEVED AND BROUGHT BACK TO AMBIENT. THIS WOULD CAUSE THE ACFT TO PROPERLY KNOW AIRSPEED WHEN ACCELERATING , BUT WOULD NOT INDICATE THE ACFT DECELERATION AND CRITICAL LANDING/STALL SPEED.

CA090618011	BAG	GARRTT	SPRING	DAMAGED
6/15/2009	JETSTM3112	TPE33110UGR		TAILCONE

(CAN) AD 006-12-99 WAS CARRIED OUT IN 2000. NO FAULTS FOUND. NO REPEAT INSP REQUIRED IAW AD.

REMOVED TAILCONE TO DO A GENERAL INTERNAL INSP. VISUAL SAW UPPER ANGLE , AND LOWER DIAPHRAGM CRACKED IAW THE AD SUGGESTS. REF SB 53-JA-990842 PARTS 2 AND 3. ORDERED AND REPLACED AFFECTED PARTS WITH THE KITS CALLED FOR IN THE SB FOR RECERTIFICATION. THE CRACKS FOUND WERE AROUND 3" IN LENGTH , AND WERE CAUSING A LARGE AMOUNT OF FLEX IN THE FEEL SPRING STRUT SUPPORT ASSY.

CA090709004	BAG	GARRTT	BEARING	FAILED
7/4/2009	JETSTM3112	TPE33110UGR	31030351	FUEL CONTROL

(CAN) ACFT WAS IN CRUISE MODE WHEN ENG FLAMED OUT AND CHIP DETECTOR LIGHT CAME ON. ENG DID NTS AS REQUIRED AND WAS FEATHERED BY CREW. TEARDOWN OF THE ENG INDICATES THAT INTEGRITY OF THE FUEL CONTOL DRIVE TRAIN WAS COMPROMISED WHEN IDLER BRG (PN 3103035-1) FAILED.

CA090713002	BEECH	PWA	WIRE	FAILED
7/8/2009	100BEECH	PT6A28		DME

(CAN) CHANGED (DISTANCE MEASURING EQUIPMENT) DME FREQUENCY AND IT WASN`T SHOWING A READOUT. T\AS THEY LOOKED THE READOUT APPEARED THEN NOTICED PART OF READ OUT FLASHED VERY BRIGHT AND THE REST VANISHED. ALMOST IMMEDIATELY, CO-PILOT STATED THEY COULD SMELL ELECTRICAL SMOKE. PILOT LOOKED AT DME AGAIN AND COULD SEE SMOKE STARTING TO BILLOW OUT. IMMEDIATLY TURNED OFF UNIT, BUT SMOKE DID NOT STOP. TURNED OFF THE AVIONICS MASTER WHILE COPLIOT LOCATED CB AND TURNED AVIONICS BACK ON. SMOKE STOPPED. DEFERRED IAW MEL 34-14 PLACARD INSTALLED.

CA090708002	BEECH	PWA	FEEDER CABLE	BURNED
7/3/2009	1900C	PT6A65B		BATTERY

(CAN) BATTERY FEEDER CABLES TO LT DC PWR CONTROLLER WAS FOUND BURNED OFF AT WING DISCONNECT TERMINAL WHICH IS FOUND AT FLIGHT STA 350-380. IT LOOKS LIKE THE TERMINAL BLOCK WHICH THESE WIRES WHERE CONNECTED TO WAS DESIGNED TO ACCOMMODATE A FUSIBLE LINK, NONE WAS FOUND ON BLOCK. WIRING DIAGRAMS SHOW NO JUNCTION/TERMINAL BLOCK OR FUSE IN THIS CABLE.

CA090619002	BEECH	PWA	WIRE ROPE	BROKEN
6/18/2009	1900C	PT6A65B		TE FLAP CONTROL

(CAN) WHEN THE CREW MOVED THE FLAPS THE LT OTBD FLAP DID NOT MOVE. MX INSPECTED THE FLAP SYS AND DISCOVERED THE LT OTBD FLAP SHAFT WIRE ROPE WAS BROKEN AT THE FLAP ACTUATOR END.

CA090625007	BEECH	PWA	LINE	CRACKED
6/24/2009	1900C	PT6A65B	3032125	AT PROP GOVENOR

(CAN) PY LINE CRACKED AT FLARE FITTING AT PROP GOVENOR ATTACH POINT, ENGINE DECREASED TO IDLE.

CA090626005	BEECH	PWA	ENGINE	SEIZED
6/22/2009	1900D	PT6A67D		RIGHT

(CAN) RT ENG OIL PRESSURE GAUGE VARIES BETWEEN 80 AND 90 PSI IN FLIGHT WITH A MAX FLUCTUATION BETWEEN 100 TO 105 PSI. RT ENG IS A RENTAL ENG FROM MFG. IRREGULARITY SMS REPORT STATES, "DURING CRUISE ACFT QUICKLY AND SLIGHTLY YAWED TO LT. FELT SIMILAR TO YAW DAMP DISCONNECTING. SOON AFTER THE RT OIL PRESSURE BEGAN TO FLUCTUATE BETWEEN 100-50 PSI GENERALLY STAYING IN 90-80 PSI RANGE. ALL OTHER ENG INDICATIONS WERE NORMAL AND LOW OIL PRESSURE LIGHT NEVER CAME ON. PULLED OUT THE CHECKLIST AND STARTED A SLOW DECENT AT 2000LBS OF TQ ON BOTH ENGINES. ADVISED DISPATCH TO HAVE MX MEET ACFT. MX SWAPPED GAUGES AND WAS GOING TO GROUND RUN THE ACFT. MX WENT TO SPIN PROP BUT IT HAD SEIZED. FLIGHT CANCELED. TRIANGLE OTHER ACFT TO FINISH FLIGHT." IRREG 2009JUN46. MX DISCOVERED CONSIDERABLE METAL IN THE CHIP DETECTOR AND OIL FILTER. POSSIBLE SUN GEAR AT FAULT. PROP STOPPED ROTATING ON SHUTDOWN. ENG REPLACED WITH O/H. PCE-114149 TO GO BACK TO MFG. TEARDOWN REPORT TO BE REQUESTED TO CLOSE SDR. ALL MX ACTIONS LEADING UP TO ENG FAILURE REVIEWED. LAST MAINT ACTION WAS A 100 HR INSP WHICH INCLUDED A CHIP DET INSP. NO FAULTS FOUND. 100 CYCLES PRIOR, 51.6 HRS.

CA090720001	BEECH	PWA	CIRCUIT BREAKER	INTERMITTENT
7/17/2009	1900D	PT6A67D	7277210	AC BUSS

(CAN) ON JULY 17 2009, ACFT INBOUND, PILOTS REPORTED THAT LT AC BUSS FAILED CREW LANDED WITHOUT INCIDENT. MX CHECKED OUT SYS LT AC SYS AND COULD NOT DUPLICATE PROBLEM AND REPLACED LT INVERTER FOR PRECAUTIONARY REASONS AND SYS CHECKED OUT GROUND SERVICEABLE AND DISPATCHED. ON INBOUND FLIGHT, PILOTS REPORTED LT AC BUSS HAD FAILED AGAIN ACFT WAS SWAPPED AND BROUGHT TO HANGER. MX FOUND A HARD FAULT ON THE LT AC SYS, TROUBLESHOT SYS FOUND THAT C/B REF DESIGNATOR (CB213) PN (7277-2-10) FOR THE 115 VAC OUTPUT HAD A INTERMITTENT INTERNAL OPEN WITH VIBRATION AND LT INVERTER PN (SPC10) HAD FAILED. C/B (CB213) PN (7277-2-10) REPLACED WITH LT INVERTER PN (SPC10), ACFT GROUND CHECKED SERVICEABLE AND DISPATCHED WITHOUT FURTHER PROBLEM.

CA090716010	BEECH	PWA	SHAFT	UNSERVICEABLE
7/15/2009	1900D	PT6A67D	1013800002	INBD RT FLAP

(CAN) FLAP CABLE RT WING INBD FLAP SHEARED APPROX .2500 INCH TO .1250 INCH INSIDE THE SHEATH BODY. THE MM CALLS FOR A REPLACEMENT OF THE CABLE AT 22,500 CYCLES.

2009FA0000671	BEECH		STIFFENER	CRACKED
8/4/2009	200BEECH		50440012555	ZONE 100

FLOOR PANEL STIFFENER AT IN AFT CABIN WAS FOUND CRACKED IN SEVERAL LOCATIONS.

CA090723006	BEECH	PWA	CONTROL CABLE	WORN
7/20/2009	200BEECH	PT642A	9938000131	CONDITION LEVER

(CAN) DURING SCHEDULED INSP, IT WAS NOTED THAT SWAGED END OF CONDITION LEVER CONTROL CABLE THAT ATTACHED THE FCU WAS WORN/LOOSE ALLOWING A LOGTITUDINAL MOVEMENT OF .1250 - .1875 OF AN INCH OF THE ROD END. CONTROL CABLE WAS REPLACED.

CA090723007	BEECH	PWA	FRAME	CRACKED
7/20/2009	200BEECH	PT642A	10143002611	FUSELAGE

(CAN) DURING FUSELAGE DETAILED INSP, THERE WAS A CRACK NOTED AT THE LWR END OF FRAME 207.125 WHERE A RELIEF HAD BEN CUT OUT FOR A STR DURING MFG. THE CRACK PROPOGATED FROM THE RADIUS OF THE RELIEF. REPAIR WAS CONDUCTED IAW WITH SIRM INSTRUCTIONS.

CA090714005	BEECH	PWA	ATTACH BRACKET	WORN
7/14/2009	200BEECH	PT642A	3516505031	FLAP ACTUATOR

(CAN) DURING INSP, CRACKING AROUND ACTUATOR ATTACH BRACKET WAS FOUND ON RT OTBD FLAP. FLAP WAS REMOVED FOR REPAIR AND IT WAS INSPECTED FOR OTHER DAMAGE. INBD AFT FLAP ATTACH BRACKET WAS BADLY WORN FROM WASHER/BRG. FLAP ON LT SIDE WAS REMOVED TO INSPECT IT AND IT WAS STARTING TO SHOW SLIGHT WEAR ALSO FROM THE WASHER. NEW BRACKETS AND WASHERS/BRGS WERE ORDERED. IF LEFT UNDETECTED THIS CONDITION COULD LET THE FLAP MOVE OTBD AND JAM THE AILERON.

CA090616009	BEECH	PWA	UNKNOWN	SMOKE
6/7/2009	200BEECH	PT642A		CABIN

(CAN) DURING TAKEOFF, CREW NOTICED A LIGHT SMOKE IN THE CABIN AND COCKPIT AREAS. ACFT RETURNED FOR LANDING, WHICH BY THIS TIME SMOKE WAS CLEARING. MX INSPECTED ACFT ELECTRICAL, HYD, FUEL, ENGINE BLEED AIR AND HVAC SYS WITHOUT FINDING ANY ANOMOLIES. THOROUGH GROUND RUNS CARRIED OUT WITH THE SAME SYS OPERATING AND ELECTRICAL LOADS APPLIED DURING INCIDENT FLIGHT WITHOUT ANY ISSUES. ACFT TEST FLOWN WITHOUT FURTHER RECURRENCE. FLIGHT CREW HAD DESCRIBED THE ODOR AS LIGHT HOT OIL RATHER THAN ELECTRICAL. ARE CONTINUING TO INVESTIGATE, WITH PARTICULAR ATTENTION TO ENGINE OIL BEING A POSSIBLE SOURCE.

CA090618005	BEECH	PWA	FLAP SYSTEM	INTERMITTENT
6/2/2009	200BEECH	PT6A41	SM50D7	TE FLAPS

(CAN) FLAPS FAIL TO EXTEND INTERMITTENTLY.

CA090618006	BEECH	PWA	RELAY	INTERMITTENT
6/7/2009	200BEECH	PT6A41	SM50D7	TE FLAPS

(CAN) FLAP`S FAILED TO EXTEND INTERMITTENTLY.

CA090612005	BEECH	PWA	O-RING	CUT
5/29/2009	200BEECH	PT6A41	AS3209114	TRANSFER TUBE

(CAN) ACFT WAS LANDING AFTER A 20 MINUTE FLIGHT AND CREW NOTICED A MIST COMING FROM THE FRONT OF LT ENGINE COWL. AFTER LANDING THERE WAS A POOL OF OIL UNDER THE LT ENG AND THE COWLINGS WERE COVERED IN OIL. PILOT CHECKED THE OIL DIP STICK FOR SECURITY AND IT WAS SECURED PROPERLY. MX REMOVED COWLS AND AFTER TROUBLESHOOTING IT WAS DISCOVERED OIL WAS COMING FROM THE LT INBD SCAVENGE TUBE AT THE FRONT. TUBE WAS REMOVED AND FWD O-RING WAS FOUND TO BE CUT. THERE HAD BEEN NO RECENT MX ACTION UNDERTAKEN WITH REGARD TO TRANSFER TUBE OTHER THAN ROUTINE INSP. O-RINGS WERE REPLACED AND TUBE REINSTALLED. 4 LITRES OF OIL WERE ADDED TO TOP UP THE ENG. ACFT WAS GROUND RUN FOR LEAK CHECK AND NONE FOUND. ACFT WAS RETURNED TO SERVICE.

CA090624002	BEECH	PWA	FRAME	CRACKED
6/23/2009	200BEECH	PT6A41	50430043865	PAX DOOR

(CAN) AN INSPECTION WAS PERFORMED ON ALL THE KING AIR DOORS IN THE FLEET. CRACKS WERE DISCOVERED LEADING OUT FROM 2 OF THE 4 SCREWS THAT SECURE PLATE (PN 101-430032-3) TO DOOR FRAME IN THE AFT UPPER BAYONET LOCATION OF MAIN ENTRY DOOR ASSY. MFG WAS CONTACTED TO SUPPLY A DESIGNED REPAIR FOR THIS DEFECT.

CA090622017	BEECH	PWA	CYLINDER	CRACKED
6/22/2009	200BEECH	PT6A41	B18032	PROPELLER

(CAN) CYL WAS MAGNETIC PARTICLE INSP DURING STANDARD O/H PROCEDURES. NO DEFECTS WERE NOTED. CYL SENT FOR RECHROMING IAW SRM 202A VOLUME 10. OLD CHROME WAS STRIPPED AND CYL MAG PARTICLE INSP FOR PREP OF NEW CHROME. CRACK DETECTED AT THIS TIME.

CA090619010	BEECH	PWA	FRAME	CRACKED
6/18/2009	200BEECH	PT6A41	50430043865	PAX DOOR

(CAN) WHILE PERFORMING A PHASE 3 AIRFRAME INSP, SECTION F, ITEM 28, DETAILED DOOR INSP, CRACKS WERE DISCOVERED LEADING OUT FROM 2 OF THE 4 SCREWS THAT SECURE PLATE PN 101-430032-3 TO THE DOOR FRAME IN THE AFT UPPER BAYONET LOCATION OF THE DOOR ASSY. MFG RDO WAS CONTACTED TO SUPPLY A DESIGNED REPAIR FOR THIS DEFECT.

VIB6BJCWO943	BEECH		STIFFENER	CRACKED
8/13/2009	300BEECH		50440012555	ZONE 100

FLOOR PANEL STIFFENER AT CABIN ENTRY WAS FOUND CRACKED DURING PHASE INSP.

2009F00060	BEECH		SWITCH	OUT OF TOLERANCE
8/26/2009	300BEECH		10138402833	BAROMETRIC

DURING SCHEDULED 12-MONTH TESTING OF CABIN ALTITUDE WARNING SYS NOTED ANNUNCIATOR INDICATION COMING ON AT 9,940 FT ALTITUDE; BELOW 10,000 FT MINIMUM SERVICE LIMIT ALTITUDE. REPLACED PN 101-384028-33 BAROMETRIC SWITCH WITH IMPROVED PN 101-384028-47 SWITCH ASSY. HAVE NOTED SAME OLDER PN SWITCH TO FAIL OUT-OF-TOLERANCE IN OTHER SERIES ACFT. RECOMMEND MFR ISSUE A RECOMMENDED TYPE SB TO REPLACE OLDER STYLE BAROMETRIC SWITCHES WITH IMPROVED PN SWITCH.

2009FA0000710	BEECH	PWA	BEARING	FAILED
3/3/2009	300BEECH	PT6A60		STARTER GEN

FROM MFG: AN ELECTRICAL CURRENT FROM THE STARTER GEN OUT PUT SHAFT DISCHARGED INTO THE ENG ACCESSORY DRIVETRAIN CAUSE AN IN-FLIGHT SHUTDOWN. THE ELECTRICAL DISCHARGE PITTED THE DRIVE GEARS AND NR 1 BRG. THE PITTING OF THE BEARING LEF TO FATIGUE FAILURE OF THE BRG AND SUBSEUENT ENGINE FAILURE. (K)

CA090611001	BEECH	PWA	DOWNLOCK	FAULTY

			SWITCH	
6/1/2009	300BEECH	PT6A60A		LT MLG

(CAN) LANDING GEAR UNSAFE LIGHT IN FLIGHT. NO LT MAIN INDICATION. LANDING GEAR RETRACTED AND EXTENDED TO CONFIRM 3 GREEN. INTERMITTENT ON TAXI IN. TROUBLESHOOT SYS TO FAULTY LT MAIN GEAR DOWNLOCK INDICATION SWITCH.

2009F00062	BEECH		SPACER	MISINSTALLED
8/24/2009	400A		12234004011	ANTENNA

INVESTIGATED FLIGHT CREW REPORT OF HUMMING/WHISTLING NOISES COMING FROM AFT CABIN CEILING AREA. FOUND SIGNIFICANT LEAKAGE FROM BETWEEN ADF ANTENNA ASSY AND FUSELAGE SKIN. UPON ADF ANTENNA REMOVAL NOTED AFT SPACER INSTALLED INCORRECTLY AND GASKET CUT TO FIT INCORRECT INSTALLATION. RE-ORIENTED SPACER IAW SERIES IPC 34-51-15-01 AND REINSTALLED ADF ANTENNA ASSY WITH NEW GASKET. LEAK CHECKS OK, NO ABNORMAL NOISES NOTED WITH CABIN PRESSURIZED. TRANSIENT ACFT, RECORDS NOT AVAILABLE, BUT SUSPECT ANTENNA INSTALLED INCORRECTLY SOME TIME PREVIOUSLY, AND TOOK REPEATED PRESSUIZATION CYCLES FOR SEALANT TO FAIL. RECOMMEND MFG INVESTIGATE FURTHER OR ISSUE A SB TO DETERMINE IF INCORRECT ADF ANTENNA INSTALLATION PROCEDURES ARE BEING PERFORMED AT MFG, OR IF THIS WAS A 1-TIME OCCURENCE.

2009F00063	BEECH		BRACKET	CRACKED
8/17/2009	400A		45A21085004	HORIZONTAL STAB

DURING SCHEDULED A, B, AND C INSP FOUND ROLLER BRACKETS CRACKED ON LT AND RT INBD FWD HORIZ STAB RIBS. NEW RT INBD RIB ASSY HAD BEEN INSTALLED 1190.3 HRS PREVIOUSLY FOR REPLACEMENT OF CRACKED ROLLER BRACKETS. INSTALLED NEW IMPROVED PN RIBS AND BRACKET ASSY. IAW COMMUNIQUE 83. RECOMMEND MFG ISSUE A RECOMMENDED TYPE SB OR KIT TO REPLACE THE ORIGINAL TYPE BRACKET ASSY AND RIBS WITH IMPROVED TYPES. HAVE NOTED NUMEROUS WITH THIS CONDITION, IN SOME CASES THE REPLACEMENT ORIGINAL PN COMPONENTS ALSO CRACKING FOLLOWING REPLACEMENT.

2009FA0000722	BEECH	PWA	BRACKET	CRACKED
8/17/2009	400A	JT15D5	45A21085003	HORIZONTAL STAB

DURING SCHEDULED A, B, AND C INSP FOUND ROLLER BRACKETS CRACKED ON LT AND RT INBD FWD HORIZ STAB RIBS. REPLACED INBD RIB COMPONENTS WITH IMPROVED PN COMPONENTS IAW MFG COMMUNIQUE 83. RECOMMEND MFG ISSUE A RECOMMENDED SB OR KIT TO REPLACE THE ORIGINAL PN COMPONENTS WITH THE IMPROVED PN COMPONENTS. HAVE FOUND THESE ORIGINAL PN ROLLER BRACKETS CRACKED ON NUMEROUS OF THESE ACFT, INCLUDING REPLACEMENT ORIGINAL PN BRACKETS.

2009FA0000668	BEECH	CONT	DIAPHRAGM	CRACKED
7/21/2009	A35	E2258	B1192	PROPELLER HUB

ACFT EXPERIENCED AN IN FLIGHT FAILURE OF THE PROPELLER PITCH CHANGE DIAPHRAGM. THE PILOT PERFORMED AN EMERGENCY DECENT AND A NORMAL LANDING AT THE AIRPARK. UPON SHUTDOWN A TOTAL OF 7 QUARTS OF OIL HAD BEEN LOST. THE DIAPHRAGM HAD BEEN REPLACED 2 YEARS AGO AND HAD LESS THAN 200 HOURS TIME IN SERVICE. ONCE DIAPHRAGM WAS REMOVED, A SMALL TEAR WAS EVIDENT ON THE OUTSIDE CONSISTENT WITH A PRESSURE FAILURE FROM THE INSIDE OUT. LOOKING AT THE INSIDE OF THE DIAPHRAGM REVELED NUMEROUS CRACKS IN THE MATERIAL. PILOT STATED THE ONLY OPERATING CHANGE MADE IN THAT TIME WAS A SWITCH FROM 100 TO 100 PLUS OIL .

2009FA0000648	BEECH	CONT	IMPULSE COUPLING	FAILED
5/22/2009	A36	IO550B	M4059	MAGNETO

MAGNETO, HAVING RT ROTATION AND IMPULSE COUPLING. INSTALLED ON ENG. ONE OF THE FLYWEIGHTS SEPARATED FROM THE IMPULSE COUPLING BODY AND BECAME JAMMED BETWEEN THE COUPLING AND THE MAGNETO HSG. THE DRIVE GEAR FORCE BROKE THE FLANGE OF THE MAGNETO CAUSING IT TO COME OFF OF THE ACCY DRIVE PAD.

CA090604010	BEECH	PWA	SPRING	BROKEN

6/4/2009	B200	PT642A	5052447815	PROP CONTROL

(CAN) MX PERSONNEL DISCOVERED THERE WAS NO POSITIVE FEATHER DETENT ON RT PROP CONTROL AT THE PEDESTAL. INVESTIGATION DETERMINED THE DETENT SPRING HAD BROKEN. SPRING REPLACED WITH NEW PART.

CA090709003	BEECH	PWA	HEATER	CRACKED
6/25/2009	B200	PT642A	10585K	FUEL/OIL

(CAN) A PREVIOUS WELD REPAIR HAD CRACKED ON THE OUTER HSG OF OIL-TO-FUEL HEATER, RESULTING IN OIL LOSS.

2009FA0000649	BEECH		GYRO	DEFORMED
7/23/2009	B300		6226136002	NOSE AVIONICS

INSTALLED GYRO ON 1/9/2009 AT 3268.8 HOURS, AFTER OVERHAUL. UNIT BEGAN FLAGGING THE CO-PILOTS HSI ON 4/9/2009 AT 3348.9 HOURS. VISUALLY INSPECTED UNIT AND FOUND TOP OF ROTOR CAN CRUSHED IN, CAUSING MALFUNCTION. RETURNED FOR WARRANTY REPLACEMENT. REPLACEMENT SUFFERED SIMILAR BUT LESS SEVERE CRUSHING OF THE CAN AFTER 58.5 HOURS. SENT UNIT FOR EVALUATION AND REPAIR. SEAL ON CAN IS SUSPECTED TO HAVE LEAKED AT ALTITUDE AND CRUSH THE CAN ON DESCENT DUE TO ABNORMAL DIFFERENTIAL PRESSURE. ALSO, FOUND GYRO DRIFT OUT OF SPECS AND FLUX DETECTED ELECTRONICS TO BE OUT OF ALIGNMENT.

2009FA0000650	BEECH		GYRO	CRUSHED
7/23/2009	B300		6226136002	NOSE AVIONICS

HSI WOULD FLAG INTERMITTENTLY AND ON VISUAL INSP, FOUND TOP OF ROTOR CAN CRUSHED IN. UNIT HAD ONLY 58.5 HOURS OF OPERATION SINCE OVERHAUL APROX 6 WEEKS EARLIER. SENT FOR 3RD PARTY EVALUATION AND REPAIR SINCE THIS WAS THE SECOND DG IN A ROW IN 6 MONTHS TO HAVE THE SAME FAILURE. FOUND GYRO CAPSULE LID DENTED IN, GYRO DRIFT OUT OF SPECIFICATIONS, FLUX DETECTOR ELECTRONIC OUT OF ALIGNMENT, FOUND IMPROPER SEAL ON GYRO CAPSULE, FOUND EXCESSIVE INNER GIMBAL END PLAY AND INNER GIMBAL BRGS FAILED.

2009FA0000655	BEECH		MOUNT BRACKET	CRACKED
7/28/2009	B300		30014031	AIR CON COMPRESS

WHILE COMPLYING WITH SB 21-3932, IMPROVED AIR CON COMPRESSOR MOUNTING BRACKETS, THE PIVOT MOUNT BRACKET ATTACHED TO THE COMPRESSOR, PN 300-1403-1 WAS FOUND TO BE CRACKED AT THE AFT SECTION AT THE MOUNT BOLT.

CA090709002	BEECH	PWA	DOWNLOCK SWITCH	FAILED
7/8/2009	B300	PT6A60A	1003810061	NLG

(CAN) NLG DOWNLOCK SWITCH, MOUNTED ON DRAG BRACE, FAILED WHEN GEAR WAS SELECTED DOWN. NOSE GEAR WOULD NOT INDICATE GREEN FOR DOWN AND LOCKED. ACFT LANDED SAFELY. FOUND WIRE LOOSE IN SWITCH. SWITCH IS SEALED AT MFG WITH A SILICONE TYPE GASKET WHERE WIRES ENTER SWITCH. IT APPEARS TO WEAKEN OVER TIME WITH FLEXING OF WIRES AND ALLOWS MOISTURE INSIDE. THIS IS THE SECOND FAILURE RECENTLY. WILL LIKELY BEGIN A FLEET CAMPAIGN TO INSTALL PRC OR SIMILAR SEALANT ON THE WIRING TO PREVENT MOISTURE INGRESS TO THE SWITCHES.

CA090617003	BEECH	PWA	HINGE	CRACKED
6/16/2009	E90	PT6A28	5062000016	HORIZONTAL STAB

(CAN) LT HORIZ STAB CTR HINGE LWR OTBD CORNER CRACKED. INITIALLY APPEARED TO BE CRACK IN THE PAINT UNTIL CLOSER EXAMINATION.

CA090706009	BELL	PWA	TUBE	CRACKED
6/27/2009	212	PT6T3B	3017393	PNEUMATIC SYS

(CAN) ON NR 1 ENGINE START UP THE PILOT NOTED A SLOW AND HUNG START AND WAS UNABLE TO SPOOL ENG TO 100 PERCENT, MX PRESSURE CHECKED PNEUMATIC SYS AND FOUND AIR LEAKING FROM A CRACKED

PNEUMATIC TUBE NEAR FLARE AT P3 FILTER.

CA090622005	BOEING	PWA	WINDOW	CRACKED
6/18/2009	727223	JT8D15	5893543130	COCKPIT

(CAN) JUST AFTER TAKEOFF, R1 WINDOW CRACKED EXTERIOR PANE WITH EVIDENCE OF BURNED HEAT ELEMENT. ACFT PROCEDED TO DESTINATION, NORMAL OPERATION, ACFT LANDED WITHOUT INCIDENT.

CA090619007	BOEING	PWA	SHROUD	DELAMINATED
6/12/2009	727225	JT8D15	79104547	FUEL NOZZLE

(CAN) FUEL NOZZLE PHENOLIC HEAT SHROUD DELAMINATED AS VIEWED THROUGH THE ENGINE COLD STREAM IN GROUND INSP. UPON FURTHER INSP DETERMINED DIFFUSER CASE CRACKED 7-8 IN. ENG REPLACED.

CA090619008	BOEING	PWA	DIFFUSER	CRACKED
6/12/2009	727225	JT8D15	780030	ENGINE

(CAN) DURING INSP, FOUND DIFUSSER CASE CRACKED 7-8 IN. ENGINE REPLACED.

CA090622011	BOEING	PWA	DOME	DAMAGED
6/18/2009	727225	JT8D15	65196842	ENGINE

(CAN) UPON LEVELING AT FL380 AND REDUCING THRUST TO CRUISE POWER SETTINGS, FLIGHT CREW NOTICED THAT NR 2 ENG EXPERIENCED AN ENG STALL. THERE WERE NO FURTHER PROBLEMS DURING REMAINDER OF FLIGHT. UPON ARRIVAL AT DESTINATION, MX CARRIED OUT TROUBLESHOOTING OF NR 2 ENG. ENG NOSE DOME WAS REMOVED AND WAS NOTED TO HAVE CRACKED AND DAMAGED MOUNTING PADS. NOSE DOME ASSY WAS REPLACED WITH A SERVICEABLE UNIT AND ENGINE RUNS WERE CARRIED OUT WITHOUT ANY ADDITIONAL FAULTS. MX RELEASED ACFT.

CA090611007	BOEING	PWA	WINDSHIELD	FAILED
6/3/2009	727225	JT8D15	5893543129	COCKPIT

(CAN) ACFT ENROUTE, IN CRUISE AT FL 380 CAPTAIN`S FRONT WINDSHIELD SHATTERED. ACFT DIVERTED, LANDED WITHOUT INCIDENT. MX DETERMINED OUTER PANE FAILED, WINDOW REPLACED.

CA090702003	BOEING	PWA	BOLT	DAMAGED
6/27/2009	727225A	JT8D15	69396421	TE FLAP CARRIAGE

(CAN) WHILE PERFORMING, ACFT DAILY INSP, IT WAS VISUALLY NOTED THAT RT INBD MID FLAP, INBD CARRIAGE, DEAD WEIGHT ROLLER BOLT WAS DAMAGED. CARRIAGE HSG ASSY WAS REPLACED WITH A SERVICEABLE UNIT AND THE ACFT WAS RETURNED TO SERVICE.

CA090625006	BOEING	PWA	CLAMP	LEAKING
6/24/2009	727247	JT8D15	BACC10DU350ABE	BLEED AIR DUCT

(CAN) ENROUTE, HAD AN ENGINE FIRE WARNING. ENG NR 3 DRILL AND CHECK LIST COMPLETED AND NR 1 BOTTLE DISCHARGED. TROUBLESHOOTING CARRIED OUT AND COULD NOT FAULT ON GROUND. WITH ENGINE RUNNING, CARRIED OUT A LEAK CHECK OF PNEUMATIC DUCTS ON THE ENG AND AROUND THE FIREWALL. FOUND 1 DUCT CLAMP LEAKING AT FIREWALL, NEAR THE FIRE LOOP. TRIED TO TIGHTEN CLAMP BUT WOULD NOT STOP THE LEAK. REMOVED AND REPLACED DUCT CLAMP AND LEAK CHECKED SERVICEABLE. ALSO INSPECTED WIRING ON NR 3 ENG, NO FAULTS FOUND. CLOSED NR 3 ENG COWLS AND CARRIED OUT ENGINE RUN TO 1.6 EPR, NO FAULT NOTED. LT ENGINE FIRE BOTTLE REPLACED.

CA090625004	BOEING	PWA	ACTUATOR	FAILED
6/24/2009	727247	JT8D15		TE FLAPS

(CAN) DISCREPANCY ON DESCENT. HYD SYS A, ENG 1 PUMP LOW PRESSURE LIGHT ILLUMINATED WHEN FLAPS WERE EXTENDED. PRESSURE READ NORMAL QUANTITY 0. ENGINE NR 2 PUMP LIGHT ILLUMINATED. BOTH LIGHTS THEN EXTINGUISHED. FLAPS AND GEAR EXTENDED BY NORMAL SYS. ACFT MET AND ESCORTED OFF RUNWAY BY EMERGENCY SERVICES WITH NO HYD ISSUES. TROUBLESHOOTING CARRIED OUT, FOUND HYD LEAKING FROM OTBD FLAP HYD MOTOR. REMOVED AND REPLACED MOTOR. AS A PRECAUTIONARY MEASURE BOTH NR 1 AND NR 3 ENG DRIVEN HYD PUMPS REPLACED. BOTH PUMP`S CASE DRAIN FILTERS AND BOTH SYS `A` HYD

PRESS FILTERS INSPECTED AND NO CONTAMINATION FOUND. BOTH CASE DRAIN AND PRESS FILTERS REPLACED. ENGINE RUN CARRIED OUT IAW JRH CHAP 5 AND SYS LEAK CHECKED AND NO LEAKS FOUND.

CA090618008	BOEING	PWA	ANGLE	BROKEN
6/15/2009	737200	JT8D	654957323	BLOWOUT PANEL

(CAN) ON ARRIVAL, BLOW-OUT PANEL NR 3302L WAS FOUND OPEN. THIS PANEL PROVIDES ACCESS TO THE RAM AIR DUCT. INSP OF AREA FOUND ANGLE PN 65-49573-23 BROKEN. THIS ALLOWED RAM AIR TO LEAK INTO THE PANEL AREA AND CAUSE PANEL NR 3302L TO BLOW OPEN.

SROM20090002	BOEING	SKIN	CRACKED
8/10/2009	737205		FUSELAGE

REPAIR SKIN CUTOUT AT AFT R1 GALLEY ENTRANCE DOOR HINGE. REPAIRED SKIN CUTOUT FOR AFT RT ENTRANCE DOOR HINGE (R1 GALLEY) STA BS 947 BETWEEN STR S14R AND S15R IN ACCORDANCE WITH BOEING STRUCTURAL REPAIR MANUAL (SRM), CHAPTER 53-30-3, FIGURE 35 (NDT-09-0681). REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE TASK CARD 133, DATED 07/20/09.

SROM20090003	BOEING	STRINGER CLIP	CRACKED
8/10/2009	737205	69353501	FUSELAGE

REPAIR DAMAGED STRINGER TO BELTFRAME CLIP. REPLACED DAMAGED STRINGER TO BELTFRAME CLIP AT STA BS 747, STR S26L WITH NEW P/N 69-35350-1 IN ACCORDANCE WITH BOEING STRUCTURAL REPAIR MANUAL (SRM), CHAPTER 51-30-2, PARAGRAPH 7, PAGE 5 AND BOEING DRAWING 65-46548, REV DD, DATED JUNE 15, 1999. REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE TASK CARD 173, DATED 07/22/09.

SROM20090004	BOEING	STRINGER CLIP	CRACKED
8/12/2009	737205	6935364U2	FUSELAGE

REPLACED DAMAGED STRINGER TO BELT FRAME CLIP AT STA BS 986.5, STR S25L WITH NEW P/N 69-35364U2 IN ACCORDANCE WITH BOEING STRUCTURAL REPAIR MANUAL (SRM), CHAPTER 51-30-2, PARAGRAPH 7, PAGE 5 AND BOEING DRAWING 65-46548, REV DD, DATED JUNE 15, 1999. REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE TASK CARD 175, DATED 07/22/09.

SROM20090005	BOEING	FITTING	CRACKED
8/12/2009	737205	6545807U31	FUSELAGE

REPLACED CRACKED ANGLE CLIP AT STA BS 294, STR S11.5R WITH NEW P/N 65-45807U31 IN ACCORDANCE WITH BOEING STRUCTURAL REPAIR MANUAL (SRM), CHAPTER 51-30-2 AND BOEING DRAWING 65-45807, REV K. REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE TASK CARD 189, DATED 07/23/09.

SROM20090006	BOEING	FITTING	CRACKED
8/12/2009	737205	6545807U30	FUSELAGE

REPLACED CRACKED ANGLE CLIP AT STA BS 294, STR S12.5R WITH NEW P/N 65-45807U30 IN ACCORDANCE WITH BOEING STRUCTURAL REPAIR MANUAL (SRM), CHAPTER 51-30-2 AND BOEING DRAWING 65-45807, REV K. REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE TASK CARD 190, DATED 07/23/09.

SROM20090007	BOEING	FITTING	CRACKED
8/14/2009	737205	6545807U30	FUSELAGE

REPLACED CRACKED ANGLE CLIP AT STA BS 294, STR S10.5R WITH NEW P/N 65-45807U30 IN ACCORDANCE WITH BOEING STRUCTURAL REPAIR MANUAL (SRM), CHAPTER 51-30-2 AND BOEING DRAWING 65-45807, REV K. REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE TASK CARD 191, DATED 07/23/09.

SROM20090008	BOEING	FITTING	CRACKED
8/14/2009	737205	654580734	FUSELAGE

REPLACED CRACKED ANGLE CLIP AT STA BS 294, STR S9.5R WITH NEW P/N 65-45807-34 IN ACCORDANCE WITH BOEING STRUCTURAL REPAIR MANUAL (SRM), CHAPTER 51-30-2 AND BOEING DRAWING 65-45807, REV K. REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE TASK CARD 192, DATED 07/23/09.

SROM20090009	BOEING	KEELBEAM	CORRODED
8/14/2009	737205		FUSELAGE

REPAIRED CORROSION ON LOWER KEEL BEAM AT STA BS 680 - BS 685 AND BS 700 - BS 727 LBL 6.5 BY REMOVING CORROSION IN ACCORDANCE WITH BOEING STRUCTURAL REPAIR MANUAL (SRM), CHAPTER 51-10-1 AND 53-10-1 AND REPAIRING KEEL BEAM IN ACCORDANCE WITH FAA DER APPROVED FORM 8110-3 ASI SOLUTIONS, INC 211-1226-09-685, DATED JULY 30, 2009. REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE TASK 224, DATED AUGUST 7, 2009.

SROM20090010	BOEING	SILL	CRACKED
8/14/2009	737205		FUSELAGE

REPAIRED CRACK ON LOWER FORWARD CARGO PIT DOOR SILL IN ACCORDANCE WITH BOEING STRUCTURAL REPAIR MANUAL (SRM), CHAPTER 51-40-3, FIGURE 1, PAGES 1-5. REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE TASK CARD 229, DATED 07/20/09.

SROM20090011	BOEING	SKIN	DAMAGED
8/14/2009	737205	65458001128	FUSELAGE

REPAIRED FUSELAGE SKIN BLEND OUT AND FRAME AT STRINGER S-22R, BETWEEN STA BS 312 AND BS 285.6 IN ACCORDANCE WITH BOEING ENGINEERING DOA APPROVED FORM 8100-9, 200907210070-0003D1, REV IR, DATED AUGUST 5, 2009 BY REMOVAL OF DAMAGE FROM SKIN P/N 65-45800-1128 AND STRAP P/N 65-45808-102 AND INSTALLATION OF FABRICATED REPAIR PARTS. REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE TASK CARD 52, DATED AUGUST 10, 2009.

SROM20090012	BOEING	STRINGER CLIP	CRACKED
8/14/2009	737205	6935364U2	FUSELAGE

REPAIRED DAMAGED STRINGER TO BELT FRAME CLIP AT STA BS 986.5, STR S24L BY REPLACEMENT WITH NEW P/N 69-35364U2 IN ACCORDANCE WITH BOEING STRUCTURAL REPAIR MANUAL (SRM), CHAPTER 51-30-02, PARAGRAPH 7, PAGE 5, AND BOEING DRAWING 65-46548, REV DD, DATED JUNE 15, 1999. REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE TASK 247, DATED JULY 22, 2009.

SROM20090013	BOEING	FITTING	CHAFED
8/17/2009	737205	655075012	TE FLAP

REPAIRED WORN FITTING P/N 65-50750-12 INSIDE RT INBOARD CANOE FAIRING RT WING IN ACCORDANCE WITH FAA DER APPROVED FORM 8110-3 ASI SOLUTIONS, INC 208-1226-09-683, DATED JULY 27, 2009. REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE 325, DATED JULY 29, 2009.

SROM20090014	BOEING	RIVET	PULLED
8/17/2009	737205		FUSELAGE

REPLACED RIVETS PULLING THROUGH KEEL BEAM LOWER SKIN AT STA BS 715 TO BS 727, LBL 6.5 AND STA BS 720 TO BS 727, RBL 6.5 IN ACCORDANCE WITH BOEING STRUCTURAL REPAIR MANUAL (SRM), CHAPTER 53-30-3, FIGURE 40. REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE TASK 383, DATED JULY 20, 2009.

SROM20090015	BOEING	BEAR STRAP	CRACKED
8/17/2009	737205		FUSELAGE

CRACKS FOUND IN FASTENER HOLES AT STA BS 303.90 IN THE BEAR STRAP AT THE UPPER AND LOWER FORWARD ENTRY DOOR HINGE CUTOUTS REPAIRED IN ACCORDANCE WITH BOEING ENGINEERING DOA APPROVED FORM 8100-9, 200907270110-0002D1, REV IR, DATED AUGUST 12, 2009, ALTERNATE METHOD OF COMPLIANCE (AMOC) FOR AD 2008-11-04. REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE 479, DATED AUGUST 13, 2009.

SROM20090016	BOEING	INTERCOSTAL	CRACKED
8/17/2009	737205	651768465	FUSELAGE

REPAIRED CRACK ON FORWARD ENTRY DOOR S-10L AUX INTERCOSTAL P/N 65-17684-65 UPPER HINGE TO SKIN ANGLE AT STA BS 294.5 TO BS 303.9 JUST ABOVE STR S-10L IN ACCORDANCE WITH BOEING ENGINEERING DOA

APPROVED FORM 8100-9, 200907130131-0002D1, REV IR, DATED AUGUST 7, 2009 BY FABRICATION AND INSTALLATION OF HINGE INTERCOSTALS REPAIR KIT 65C38823-1. THIS DEVIATION HAS BEEN APPROVED AS AN ALTERNATE METHOD OF COMPLIANCE (AMOC) TO PARAGRAPH (L) AND (M) OF AD 2005-20-03. REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE TASK CARD 100, DATED AUGUST 10, 2009.

EE4Y090196	BOEING	BEAR STRAP	CRACKED
7/30/2009	737219	654589015	BS 303 S14L

FWD ENTRY DOOR LWR HINGE CUTOUT BEAR STRAP CRACKED.

EE4Y090198	BOEING	SPAR	CORRODED
7/30/2009	737219		LT WING

LT WING FRONT SPAR LOWER CHORD CORRODED.

EE4Y090199	BOEING	SKIN	CRACKED
7/30/2009	737219	654576988	ZONE 100

LWR FUSELAGE GROUND SERVICE CONNECTION CUTOUT FWR CORNER SKIN WITH CRACKS.

EE4Y090200	BOEING	BULKHEAD	CRACKED
7/30/2009	737219	6516300510	ZONE 200

UPPER FUSELAGE AT BS 178, LBL 7.5, WL 231 PRESSURE BULKHEAD WEB WITH CRACK.

EE4Y090197	BOEING	BEAR STRAP	CRACKED
7/30/2009	737219	65458774	BS 291

UPPER FUSELAGE FWD GALLEY DOOR LWR HINGE CUTOUT BEAR STRAP CRACKED.

EE4Y090208	BOEING	PLATE	WORN
8/3/2009	737219	657011421	ZONE 200

SEAL INSTL-TAB TO BODY FRONT SPAR SLIDING LT AND RT FITTING LINK LUG.

EE4Y090203	BOEING	STRINGER	CRACKED
7/30/2009	737219	65558891	ZONE 200

UPPER FUSELAGE PAX CABIN AT BS 789, STR 17L, UPPER FLANGE WITH CRACK.

EE4Y090201	BOEING	BEAR STRAP	CRACKED
7/30/2009	737219	65458774	ZONE 200

UPPER FUSELAGE, FWD GALLEY DOOR UPPER HINGE CUTOUT BEAR STRAP CRACKED.

EE4Y090202	BOEING	FRAME	CRACKED
7/30/2009	737219	652072270	ZONE 100

LWR FUSELAGE FWD CARGO DOOR CUTOUT FWD DOORWAY FRAME WITH CRACK.

CA090716006	BOEING	PWA	SEAL	LEAKING
7/13/2009	737275C	JT8D17		GEARBOX

(CAN) AFTER A CHANGE OF GEARBOX FOR ONE REMOVED SERVICEABLE FROM ANOTHER ENG, THE ENG STARTED LEAKING OIL IN FLIGHT, WHICH GAVE INDICATIONS OF OIL FLUXUATION. ENG WAS SHUTDOWN AS A PRECAUTION. SEAL WHEN REMOVED WAS FOUND FULL OF CARBON. SEAL WAS REPLACED, ACFT RETURNED TO SERVICE.

EE4Y090213	BOEING	FRAME	CORRODED
8/18/2009	7372H4	652072270	FUSELAGE

LOWER FUSELAGE FWD CARGO COMPARTMENT BS 440 BETWEEN STR 24 AND 25 RIGHT SIDE, FRAME CORRODED.

EE4Y090214	BOEING		ANGLE	CORRODED
8/18/2009	7372H4		654795710	FUSELAGE

LOWER FUSELAGE AFT CARGO COMPARTMENT DOOR LOWER CUTOUT FROM BS 795 TO BS 847 ANGLE CORRODED.

EE4Y090215	BOEING		STRINGER CLIP	CRACKED
8/18/2009	7372H4		69353521	ZONE 100

LOWER FUSELAGE AFT CARGO COMPARTMENT BS 887 STRINGER 24 RT CLIP CRACKED.

EE4Y090216	BOEING		BULKHEAD	CRACKED
8/18/2009	7372H4		6546547512	FUSELAGE

LOWER FUSELAGE RT MAIN WHEEL WELL AFT BULKHEAD WEB WITH CRACK IN BS 727 RBL 6 WL 160.

EE4Y090217	BOEING		STRINGER	CORRODED
8/20/2009	7372H4		6545800122	FUSELAGE

LOWER FUSELAGE E&E COMPARTMENT AT BS 324, STR 28R WITH CORROSION.

EE4Y090220	BOEING	BOEING	SKIN	DELAMINATED
8/21/2009	7372H4			AILERON

LEFT WING TRAILING EDGE SECTION, AILERON UPPER SURFACE SKIN DELAMINATED AT STA WBL 518.850 AND WBL 504.

EE4Y090221	BOEING		SKIN	CRACKED
8/21/2009	7372H4		6545768200	FUSELAGE

LOWER FUSELAGE SKIN WITH CRACK AT BS 891, S-23RT.

EE4Y090222	BOEING		SKIN	DENTED
8/21/2009	7372H4		654576989	FUSELAGE

LOWER FUSELAGE SKIN WITH DENT AT BS 867 TO BS 887 BETWEEN S-25R AND S-27R.

EE4Y090228	BOEING		SKIN	CRACKED
8/24/2009	7372H4		65528733	ENTRY DOOR

AFT ENTRY DOOR UPPER HINGE SKIN CRACKED.

EE4Y090229	BOEING		SKIN	DENTED
8/25/2009	7372H4		6546881105	FUSELAGE

FUSELAGE SKIN WITH DENT AT BS 1043 BETWEEN STR 16LT AND STR 17LT.

DU4R2009387	BOEING		BUTTSTRAP	CORRODED
7/26/2009	737524			BS 907 S22-24L

DURING SCHEDULED INSPECTION, FOUND AFT PIT LT SIDE SKIN BUTT JOINT STRAP CORRODED AND BULGED UP FROM SKIN AT BS 907 BETWEEN S-22L TO S-24L.

DU4R2009385	BOEING		ANGLE	CORRODED
7/23/2009	737524			L-1 DOOR

DURING SCHEDULED INSP, FOUND CORROSION AT SEVERAL AREAS ON CUSP ANGLE L-1 DOOR BS 303-360.

DU4R2009386	BOEING		STRINGER	CORRODED
7/25/2009	737524			BS 967 S25L

DURING SCHEDULED INSP, FOUND AFT LWR FUSELAGE HAD 2 EACH RIVETS PULLING IN SKIN LAP BS 967, S-25L.

UPON REMOVAL OF FASTENERS FOUND CORROSION ON LT S-25L AT BS 967.

DU4R2009384	BOEING		INTERCOSTAL	CRACKED
7/18/2009	737524			BS 346-360

DURING SCHEDULED INSP, FOUND CABIN FLOOR INTERCOSTAL CRACKED AT BS 346 TO BS 360 BL 0.

DU4R2009389	BOEING	CFMINT	SKIN	DENTED
7/23/2009	737524	CFM563C1		HORIZONTAL STAB

DENT ON RT HORIZ STAB UPPER SURFACE SKIN 8 INCHES FROM FWD SPAR AND 80 INCHES FROM INBD END.

DU4R2009388	BOEING	CFMINT	FLOORBEAM	GOUGED
7/20/2009	737524	CFM563C1		BS 663

GOUGE IN FLOORBEAM BETWEEN BS 639 AND BS 663.75 BL 25R.

DU4R2009392	BOEING	GE	STRINGER CLIP	CRACKED
8/21/2009	737524	CFM56*		BS 867 S1

DURING SCHEDULED INSPECTION, FOUND CRACKED STRINGER CLIP ATTACHED TO FRAME AT BS 867 AND STR 1, AFT CABIN CEILING.

DU4R2009391	BOEING	GE	FLOOR SUPPORT	CORRODED
8/16/2009	737524	CFM56*		

DURING SCHEDULED INSP, FOUND CORRODED CABIN FLOOR SUPPORT ANGLE AT BS 992.8, BL 37 - BL 45 R.

DU4R2009390	BOEING	GE	FLOOR SUPPORT	CORRODED
8/16/2009	737524	CFM56*		BS 967

CORROSION AROUND FASTENERS FLOOR SUPPORT CABIN BS 967, RBL 4 TO RBL 25.

CA090715003	BOEING		WIRE HARNESS	DAMAGED
6/30/2009	737800*			

(CAN) ON ARRIVAL, CREW REPORTED NO SMOKING/FASTEN SEAT BELT SIGN CIRCUIT BREAKER TRIPPED DURING FLIGHT. UPON INVESTIGATION, MX TECH FOUND NO SMOKING/FASTEN SEAT BELT SIGN HARNESS DAMAGED ABOVE SEAT 11DEF. HARNESS HAD CAUGHT IN THE INFLIGHT ENTERTAINMENT SYSTEM MONITOR RETRACTION SYS AND SHORTED OUT LEAVING SIGNS OF ARCING. NO SMOKING/FASTEN SEAT BELT SIGN HARNESS WAS REPAIRED AND SECURED AWAY FROM THE INFLIGHT ENTERTAINMENT SYS MONITOR RETRACTION SYS. NO SMOKING/FASTEN SEAT BELT SIGN SYS WAS TESTED AND FOUND SERVICEABLE.

CA090708006	BOEING	CFMINT	CONNECTOR	BURNED
7/7/2009	737800*	CFM567B26US	SJS816120	IFE

(CAN) FOLLOWING A PROBLEM WITH INFLIGHT ENTERTAINMENT SYSTEM (IFE) SCREENS BEING INOPERATIVE, TROUBLESHOOTING FOUND A CONNECTOR PN: SJS816220 OR APCD0650(MALE) AND SJS816120 OR APCD0641 (FEMALE), DISCONNECTED/PINS BURNED. BOTH MALE AND FEMALE CONNECTORS WERE REPLACED AND THE IFE SYS WAS TESTED AND CHECKED SERVICEABLE.

CA090717007	BOEING	CFMINT	SCREW	LOOSE
7/15/2009	7378BK	CFM567B26US		REFUEL MANIFOLD

(CAN) DURING REFUELING, A FUEL LEAK IN THE FORM OF MIST AND DROPLETS WAS OBSERVED FROM THE INTERFACE BETWEEN THE REFUEL ADAPTER AND THE MANIFOLD. LEAK WAS STOPPED BY RE-TIGHTENING THE SCREWS IAW AMM AND RE-FUELING CONTUNUED WITHOUT ANY FURTHER INCIDENTS. ACFT RETURNED TO SERVICE.

CA090622007	BOEING	RROYCE	WIRE	SHORTED
6/21/2009	7572Y0	RB211535E4	W5100000520	

(CAN) CIRCUIT BREAKER D28 (ENG PUMP SUPPLY) AND D31 (PTU CONTROL) TRIPPED IN FLIGHT.

TROUBLESHOOTING, FOUND WIRE W 5100-0005-20 AND WIRE W5100-0034-20 JUST AFT OF CONNECTOR D42282 DAMAGED/SHORTED TO GROUND. THE CAUSE OF THE DAMAGED INSULATION WAS A WORN OUT P-CLAMP RUBBER THAT HOLDS THE WIRES IN PLACE.

TIPR20090015	BOEING		SKIN	MISREPAIRED
7/22/2009	767222			ZONE 200

3 EA FUSELAGE REPAIR DOUBLERS DO NOT MEET THE MINIMUM SPACING FROM EACH OTHER IAW SRM 53-00-01, FIG 201, REPAIR 1.BS 1192-1246, STR 12R-12R. REMOVED 3 EA DOUBLERS AND DAMAGED SKIN. FABRICATED AND INSTALLED FILLER AND 1 EA DOUBLER IAW SRM 53-00-01,51-20-01,53-60-01 AND 53-00-01.

TIPR20090014	BOEING		DOUBLER	UNKNOWN
7/22/2009	767222			ZONE 100

DOUBLER REQUIRES EVALUATION BS 1489-BS 1530, STR 32L-35L. REMOVED, FABRICATED AND INSTALLED DOUBLER AND FILLERS IAW SRM 53-00-01,51-20-01 AND 53-60-01.

TIPR20090016	BOEING		BULKHEAD	GOUGED
7/28/2009	767222		311T3281	ZONE 400

NR 1 PYLON AFT BULKHEAD LWR RT CORNER HAS GOUGES. INSTALLED REPAIR IAW REO-G12896 REV A DATED 07-16-2009.

CA090618009	BOEING	GE	WINDOW	BROKEN
6/16/2009	767223	CF680A	141T480013	COCKPIT

(CAN) ACFT DEPARTED, ENROUTE, AT 35,000 FT REPORTED LT NR 1 OTBD WINDOW SHATTERED. ACFT DIVERTED FOR REPAIRS. CADOR 2009Q1130 REFERS.

CA090630002	BOEING	GE	LINE	LEAKING
6/29/2009	767223	CF680A	417T210312	POTABLE WATER

(CAN) THIS IS THE POTABLE WATER HEATED SUPPLY LINE. LINE WAS LEAKING AND DURING REPLACEMENT MX NOTED SEVERAL HOLES IN LINE SUSPECTED TO HAVE BEEN CAUSED BY ELECTRICAL ARCING OF THE HEAT TAPE.

2009FA0000711	BOEING		TURNBUCKLE	MISSING
5/29/2009	76724QER			CONTROL CABLE

DURING MX THE TURNBUCKLE LOCKING CLIPS WERE FOUND MISSING FROM AILERON CONTROL CABLES A1A-1 AND A1A-2. INSTALLED LOCKING CLIPS. (K)

CA090702002	BOEING	GE	SUPPORT BRACKET	CRACKED
6/28/2009	767333	CF680C2B6F		NR 1 NACELLE

(CAN) AFTER LANDING, CREW OBSERVED A LARGE SECTION OF INBD NR 1 ENG TRANSLATING SLEEVE MISSING. MX MEASURED DAMAGE AT 65 INCHES BY 13 INCHES. ACFT FERRIED BACK TO DEPARTURE WHERE MX OBSERVED INNER ACOUSTIC LINER SEGMENT AT 12 O`CLOCK POSITION, MISSING. SUPPORT BRACKET WAS HEAVILY CRACKED WITH A POTION OF THE BRACKET MISSING. DAMAGED BRACKET HAS BEEN SENT OUT FOR ANALYSIS.

CA090702001	BOEING	GE	DUCT	RUPTURED
6/29/2009	767375	CF680C2B6F	214T640441	CARGO HEAT

(CAN) AFTER TAKEOFF, F/A REPORTED EXCESSIVE HEAT IN AFT CABIN THAT COULD NOT BE CONTROLLED. ACFT RETURNED TO DEPARTURE WHERE MX FOUND THAT AFT CARGO HEAT DUCT RUPTURED BETWEEN THE SUPPLY AND THE SHUT-OFF VALVE. DUCT HAD A 4 INCH LONGITUDINAL CRACK. DUCT IS LOCATED IN THE LT AFT SIDEWALL OF AFT CARGO COMPARTMENT (CARGO STA 42L). FLEXIBLE SIDEWALL LINING MATERIAL HAD BUCKLED DUE TO THE IMPINGING HOT AIR BUT WAS NOT BREACHED.

CA090626003	BOMBDR		OUTFLOW VALVE	MALFUNCTIONED

6/21/2009	BD1001A10		81141A010302	CABIN PRESSURE

(CAN) DURING FLIGHT TEST ACFT CABIN COULD NOT PRESSURIZE. CABIN ALTITUDE CLIMBED AT A RATE OF 1800 FT ABOVE FLIGHT LEVEL 15000 FT. 06/28/09 SAFETY VALVE REPLACED, TESTED IAW AMM. PERFORMED CHECK FLIGHT WITH NO PROBLEMS AT FL280 CABIN ALT 3400, DELTA P 8.1 AT FL350 CABIN ALT 5400, DELTA P 8.5 AT FL410 CABIN ALT 7000, DELTA P 8.7.

CA090629008	BOMBDR	HNYWL	OIL CAP	OBSTRUCTED
6/9/2009	BD1001A10	AS90711A		RT ENGINE

(CAN) APPROX 30 MINUTES INTO FLIGHT, RT ENG INDICATED LOW/FLUCATING OIL PRESSURE. CREW ELECTED TO RETURN TO BASE. PRIOR TO LANDING OIL PRESSURE DROPPED TO POINT WHERE CREW ELECTED TO SHUTDOWN ENGINE. AN EMERGENCY WAS DECLARED AND ACFT PERFORMED AN UNEVENTFUL SINGLE ENG LANDING. POST FLIGHT INSP DETERMINED THAT CHAIN SECURING OIL TANK CAP HAD BEEN PINCHED BETWEEN THE CAP AND TANK CAUSING A LOSS OF OIL. REPLACED O-RING, SERVICED OIL AND RETURNED ACFT TO SERVICE.

CA090629009	BOMBDR	HNYWL	APU	FAILED
6/21/2009	BD1001A10	AS90711A	36150BD	

(CAN) CREW REPORTED ON DESCENT, APU FAILED TO START. 2 START ATTEMPTS WERE MADE. FIRST AT 9000FT, 250KTS WITH APU HANGING AT 16 PERCENT AND SECOND AT 5000 FT, 250KTS WITH APU HANGING AT 13 PERCENT. AFTER LANDING, APU STARTED NORMALLY. DURING POST FLIGHT INSP, SOME SOOTING AND HEAT DAMAGE WAS DISCOVERED JUST AFT OF THE INLET SCREEN. SIMILAR DAMAGE WAS REPORTED ON THE SAME ACFT IN JAN 2009 ON SDR NO. 20090126001. FOLLOWING THAT EVENT THE APU WAS REMOVED FOR REPAIR AND WAS REINSTALLED IN MAY 2009. APU WILL NOW BE REPLACED.

CA090710004	BOMBDR	HNYWL	RESERVOIR	LEAKING
6/8/2009	BD1001A10	AS90711A	33147500	HYD SYSTEM

(CAN) RT HYD FLUID DEPLETED IN FLIGHT. PILOT CALLED DURING FLIGHT TO REPORT RT HYD FLUID LEVEL WAS DEPLETING. CAPTAIN IS DIVERTING FLIGHT TO NEAREST SUITABLE AIRPORT. LAST LOOK BEFORE DIVERTING PILOT SAID RT HYD LEVEL WAS 16 PERCENT. UPON LANDING, RT FLUID LEVEL WAS 6 PERCENT. PILOT ADVISED HE HAD 3000 PSI UNTIL HE SHUTDOWN ENGINES AT FBO. MX FOUND INBD B-NUT ON OTBD BRAKE ACCUMULATOR WAS LOOSE AND ALLOWING FLUID LEAKAGE. MX TIGHTENED B-NUT. OPS GOOD.

CA090714007	BOMBDR	HNYWL	HEATER	BURNED
4/22/2009	BD1001A10	AS90711A	343606	

(CAN) 6 INCH ROUND BURN MARK INTERNAL ABOVE BAGGAGE DOOR, ACFT AOG CREW NOTICED WHILE UNLOADING BAGS THE BURN MARK INSIDE ABOVE THE BAGGAGE DOOR. EXTERNAL INSP AT NIGHT REVEALED NO DISCOLORATION. ACFT DELAYED DEPARTURE FOR AN HOUR ON PREVIOUS FLIGHT DUE TO SEVERE STORM. NOT AWARE OF LIGHTNING STRIKE. NO CAS MESSAGES OR BURNING SMELL. PILOT REMOVED THE SIDE WALL PANEL ABOVE BAGGAGE DOOR AND CONFIRMED BURING WAS FROM ELECTRICAL HEAT MAT SYS DISABLED IAW MEL, 10 DAY ITEM.

CA090728007	BOMBDR	HNYWL	TERMINAL	BURNED
7/24/2009	BD1001A10	AS90711A		ELECTRICAL SYS

(CAN) DURING TS OF A STBY INST BATT FAULT CYAN CONDITION, IT WAS NOTED THAT THE R ESS BUS AT THE RT CB PANEL WAS ONLY READING 24.5 VDC WHILE THE RT MAIN BUS WAS READING 27.5 VDC. THIS WAS WITH A GROUND EXTERNAL PWR CART PROVIDING PWR TO ACFT. PWR CART OUTPUT WAS SHOWING 27.9 VDC. TS ONGOING.

CA090630003	BOMBDR	PWC	PUMP	FAILED
6/25/2009	DHC8400	PW150A	6617303	HYD SYSTEM

(CAN) WHILE IN APPROACH TO BASE, CREW NOTE THAT HYD QUANTITY WAS DROPPING. PROCEED WITH A NORMAL GEAR EXTENSION. CREW REQUEST ERS ON STANDBY. CAUTION LIGHT`S: NR 2 ENG HYD AND NR 2 HYD ISO VALVE. NR 2 EDP REPLACED.

CA090619001	BOMBDR	PWC	FADEC	MALFUNCTIONED

6/18/2009	DHC8400	PW150A	312240008	NR 1

(CAN) DURING FLIGHT, POWER PLANT MESSAGE POSTED ON ED. FLIGHT CREW OPTED TO RETURN TO DEPARTURE. ON GROUND TROUBLESHOOTING FOUND FOLLOWING FADEC/PEC FAULT CODES ON THE NR 1 SIDE, CHANNEL A 476, 478, 456, 454, 711, 765, 932 - EMU CHANNEL A 476,478,750,751,752,753. AFTER ATTEMPTING FAULT CLEAR THE POWER PLANT MESSAGE REMAINS WITH FOLLOWING FAULTS ON FADEC A CHANNEL 20,763,765,809,932 B CHANNEL 10,454,456,478. OPERATOR REPLACED NR 1 FADEC. FUNCTION TEST`S CARRIED OUT WITH NO FAULTS , ACFT WAS RETURNED TO SERVICE.

CA090622001	BOMBDR	PWC	WINDSHIELD	FAILED
6/21/2009	DHC8400	PW150A	80260008	COCKPIT

(CAN) ON CLIMB THROUGH 14,000` F/O WINDSHIELD SHATTERED. RETURNED TO DEPARTURE. WINDSHIELD REPLACED IAW AMM 56-10-01 TR 56-019.

CA090622002	BOMBDR	PWC	CONNECTOR	FAILED
6/21/2009	DHC8400	PW150A		NR 1 MPU

(CAN) IN FLIGHT SHUTDOWN OF THE NR 1 ENGINE DUE TO AN OVERSPEED, PAN-PAN DECLARED. THE CREW REPORTED THEY WERE APPROX FL140 WHEN THEY RECEIVED THE NR 1 PEC CAUTION LIGHT WITH NR 1 PROPELLER SPEED INCREASED ABOVE 1020 RPM (RECORDED EXCEEDENCE WAS 1081 RPM OR 105.9 PERCENT), QRH SHUTDOWN WAS ACTIONED. THE F/O LANDED ACFT WITHOUT INCIDENT. ENGINEERING CONFIRMED THAT ACFT HAS NOW RETURNED TO SERVICE. THE NR1 ENGINE MPU WAS REPLACED DUE TO PINS A AND B WERE FOUND TO BE BREAKING DOWN TO THE CONNECTOR BACKSHELL IAW AMM 61-20-06-760-801 ITEM 3.

CA090612001	BOMBDR	PWC	GENERATOR	FAILED
6/11/2009	DHC8400	PW150A	11522185	

(CAN) DURING TAKEOFF ROLL, NR 2 AC GENERATOR CAUTION LIGHT CAME ON. FLIGHT CREW ABORTED TAKEOFF AND RETURNED TO THE DEPARTURE GATE. MX REPLACED THE NR 2 AC GENERATOR. FUNCTION TESTED OK AND ACFT RETURNED TO SERVICE.

CA090610001	BOMBDR	PWC	ACTUATOR	FAILED
6/9/2009	DHC8400	PW150A	800600M02	OIL COOLER DOOR

(CAN) HIGH OIL TEMP WAS OBSERVED DURING FLIGHT AT 117 DEGREES ON THE NO. 2 ENGINE . FLIGHT CREW OPTED TO RETURN TO DEPARTURE AIRPORT. ON GROUND TROUBLESHOOTING REVEALED OIL COOLER DOOR WOULD NOT OPEN. MTCE REPLACE OIL COOLER DOOR ACTUATOR AND BYPASS VALVE FOR PRECAUTION. SYSTEM FUNCTION TESTED AND RETURNED TO SERVICE.

2009FA0000635	BRAERO		SHAFT	FAILED
7/19/2009	HS125700A			HYD PUMP

DURING CRUSE BOTH HYD LOW-PRESSURE LIGHTS ILLUMINATED. CREW COMPLETED ABNORMAL CHECKLIST FOR CONDITION. CREW DIVERTED FROM ORIGINAL DESTINATION (PWK) TO AIRPORT WITH LONGER RUNWAY (RFD) AS PRECAUTIONARY MEASURE. CREW DECLARED EMERGENCY AS A PRECAUTIONARY MEASURE. CREW REPORTED UNEVENTFUL LANDING. HYD TANK WAS DISCOVERED TO BE EMPTY. HYD FLUID WAS DISCOVERED IN THE LT ENG COWLING AREA AND NONE IN THE RT ENG COWLING. LT HYD PUMP WAS REMOVED AND IT WAS FOUND TO HAVE DRIVE SHAFT SHEARED AND LARGE AMOUNTS OF METAL INSIDE PUMP FITTING AREAS. RT HYD PUMP WAS REMOVED AND IT WAS FOUND THAT THE DRIVE SHAFT DID NOT SHEAR AND THERE WAS A SMALL AMOUNT OF METAL INSIDE PUMP FITTING AREAS.

CA090604004	BRAERO	RROYCE	BLADES	FAILED
11/3/2008	HS7482A	DART5342	RK39249	TURBINE SECTION

(CAN) DURING NORMAL COMPANY OPERATIONS A VIBRATION WAS DETECTED COMING FROM RT ENG. UPON INVESTIGATION IT WAS FOUND THAT 1ST STAGE TURBINE ASSY HAD EXPERIENCED SOME KIND OF FAILURE. LARGE SECTIONS WERE MISSING FROM SEVERAL BLADES. SECOND STAGE TURBINE SHOWED IMPACT DAMAGE, MOST LIKELY COMING FROM FIRST STAGE EVENT. ENGINE WAS REPLACED AND THE ACFT WAS RETURNED TO SERVICE. ENGINE AT THIS TIME HAD ONLY 1612.3 HOURS TSO AND 2336 CYCLES SO IT WAS RETURNED TO THE FACILITY THAT O/H IT (NOT OUR NORMAL FACILITY). A DETAILED TEARDOWN WAS COMPLETED. THEY FOUND NO

OTHER DAMAGE FWD OF TURBINES THAT WOULD CAUSE THIS ISSUE. ONLY THING DISCOVERED WAS THAT THERE WERE 2 DIFFERENT TYPES OF HP BLADES USED ON THIS TURBINE ASSY (RK 39249, MOD 1351 AND RK45409 MOD 1581) AND AFTER TESTING A SAMPLING OF THE BLADES ONLY THE MOD 1351 BLADES WERE FOUND TO BE IN A OVERHEATED CONDITION. SUSPECT THAT THIS TURBINE ASSY COULD HAVE BEEN OVERHEATED PRIOR TO COMING INTO SERVICE FOR US. THE FACILITY, THROUGH RESEARCH, COULD NOT CONFIRM OR DENY ANY KIND OF EVENT EVER HAPPENING TO THIS ASSY. AS 20 YEAR OPERATORS OF HS 748S, FEEL THAT INSP OF THESE BLADES IS NOT ADEQUATE AND HAVE BEEN IN CONTACT WITH THE ENGINE MFG REGARDING IT. NOTE: MFG APPROVES THE USE OF THESE TYPE OF BLADES TOGETHER.

CA090615010	BRAERO	RROYCE	ENGINE	MAKING METAL
6/14/2009	HS7482A	DART5342		RIGHT

(CAN) DURING CLIMB, RT OIL PRESSURE LIGHT ILLUMINATED AND OIL PRESSURE WAS CONFIRMED TO BE LOW. ENG WAS SHUTDOWN AS A PRECAUTIONARY MEASURE. ACFT WAS LANDED WITHOUT INCIDENT. MX INVESTIGATION REVEALED METAL PARTICLES IN THE OIL FILTERS AND ENGINE WAS REMOVED FOR REPAIR. NO OTHER DAMAGE WAS APPARENT AND CREW REPORTED NORMAL OPERATING PARAMETERS EXCEPT THE OIL PRESSURE. ENG WAS O/H AND CONVERTED TO MOD 1860 MAY 13/2004 AND REACHED A TSO 6700 HRS. REPAIRS WERE CARRIED OUT AT TSO 3380 HRS AND 4480 HRS. ENGINE WILL BE RETURNED FOR REPAIR/O/H. THIS SDR WIL BE CLOSED ON RECIEPT OF STRIP REPORT.

2009FA0000747	CESSNA	BULKHEAD	CRACKED
8/26/2009	140A	04130003	ZONE 100

UPON LANDING, RT GEAR COLLAPSED. UPON EXAMINATION, FOUND THAT (BULKHEAD ASSY - LANDING GEAR) HAD FAILED. SPECIFICALLY, STRUCTURE IMMEDIATELY UNDER GEAR THAT SANDWICHES GEAR IN PLACE FAILED. UPON EXAMINATION OF FAILED PART, FOUND SEVERAL CRACKS THAT HAVE BEEN WORKING FOR SOME TIME. CRACKS WERE PREEXISTIING TO THE ACCIDENT. ILLUSTRATED PARTS LIST DOES NOT SPECIFICALLY IDENTIFY THE PART THAT FAILED, FAILED PART IS PART OF THE LARGER ASSY (BULKHEAD ASSY - LANDING GEAR). SUBJECT AREA OF FAILURE IS NOT EASY TO INSPECT, GEAR WOULD NEED TO BE REMOVED AND DYE PENETRATED TO FIND CRACKS IN THE STRUCTURE. ACFT JUST CAME OUT OF ANNUAL INSP. ACFT WAS IN GOOD CONDITION, BUT OVER 50 YEARS OLD, DEFINITELY AN AGING AIRCRAFT ISSUE. A REVIEW OF SDRS FOR THE SAME MAKE AND OTHER MFG PRODUCTS DID NOT REVEAL A CRONIC PROBLEM.

CA090612004	CESSNA	LYC	HOUSING	CRACKED
6/12/2009	150H	O320A2B	62815	OIL SCREEN

(CAN) DURING GROUND RUN AFTER ANNUAL INSP OIL APPEARED ON THE WINDSHIELD SHORTLY AFTER STARTING. ENG WAS SHUTDOWN WITH NO FURTHER DAMAGE AND THE UPPER LT FLANGE OF THE OIL PRESSURE SCREEN HSG WAS FOUND TO BE CRACKED. UPON REMOVAL OF THE HSG THE FLANGE DEPARTED FROM HSG. IT DID NOT APPEAR TO HAVE UNDERGONE AN OVER TORQUE, BUT RATHER APPEARED TO HAVE CRACKED/BROKEN DUE TO AGE OR MFG FLAW.

CA090619006	CESSNA	CONT	CONT	VALVE	STUCK
6/18/2009	150L	O200A		646612	CYLINDER NR 3

(CAN) DURING FLIGHT TO PRACTICE AREA, ACFT DEVELOPED A VIBRATION AND LOST RPM. CREW DECIDED TO RETURN TO AIRPORT. RUN UP ON GROUND PERFORMED AND CONFIRMED ROUGH RUNNING ENGINE. TROUBLESHOOTING DISCOVERED THAT EXHAUST VALVE ON NR 3 CYLINDER WAS STUCK IN THE FULL OPEN POSITION. NO OTHER ABNORMALITIES NOTED. CYLINDER REMOVED, VALVE STEM AND GUIDE CLEANED OF BUILD UP. VALVE RE-INSTALLED AFTER CLEANING. CYLINDER RE-INSTALLED. GROUND RUN COMPLIED WITH AND ENGINE RAN WITHIN NORMAL OPERATING PARAMETERS. ACFT WILL BE RETURNED TO OPERATIONAL STATUS ONCE A MX CHECK FLIGHT IS COMPLIED WITH.

CA090708001	CESSNA	CONT	FIREWALL	DEFORMED
7/6/2009	150L	O200A		

(CAN) INSP OF NOSE ASSY REVEILED A SOFT SHIMMY DAMPER, DAMPER WAS SERVICED. INSP REVEALED THAT ACFT PROBABLY HAD A NOSE TIRE LANDING SINCE MINOR DEFORMATION OF UPPER FIREWALL SKIN NOTED. INSP REVEALED THAT BOLT IDENTIFIED IN IPC FIGURE 32, ITEM 3, BENT SO THAT DEFORMATION AT END AT LEAST .25 INCH FROM TRUE. THIS ALSO ALLOWED EXCESSIVE PLAY AT LWR ENG MOUNT TO OLEO CLAMP. NEW BOLT INSTALLED AND OLEO TO ENG MOUNT FRAME NOW HAS NO PLAY. ONCE FINISHED WITH INSP, WILL

PERFORM HIGH SPEED TAXI.

CA090708009	CESSNA	LYC	ALTERNATOR	FAILED
5/27/2009	152	O235L2C		ENGINE

(CAN) ACFT HAD AN INTERMITTENT CHARGING PROBLEM THAT RESULTED IN FAILURE OF ALTERNATOR CONTROL UNIT. ALTERNATOR WAS REPLACED ALONG WITH ALTERNATOR CONTROL UNIT AND FUNCTIONED PROPERLY ON GROUND. ACFT CONTINUED TO HAVE SPORATIC CHARGING PROBLEMS EVEN AFTER ALTERNATOR AND ALTERNATOR CONTROL UNIT WERE REPLACED ONCE AGAIN ALONG WITH SELF SETTING CIRCUIT BREAKER. PROBLEM WAS NEVER ABLE TO BE DUPLICATED ON GROUND. NO DEFECTS COULD BE FOUND IN THE WIRING OTHER THAN MINOR CORROSION THAT HAD BEEN CLEANED ON ACFT ALTERNATOR CONTROL UNIT PLUG. PINS WERE ALL REPLACED IN HOPES THAT THIS WOULD RECTIFY THE PROBLEM. SINCE THEN ACFT HAS NOT RETURNED FOR REPAIRS. IT APPEARS THAT CORROSION ON THESE PINS RESULTED IN A CHARGING PROBLEM THAT ON MORE THAN ONE OCCASION RESULTED IN THE AIRCRAFT RETURNING TO BASE WITH LOST COMMUNICATIONS DUE TO THE FACT THAT PILOT DID NOT NOTICE CHARGING SYS FAILURE UNTIL BATTERY WAS DEPLETED TO STAGE WHERE RADIOS WOULD NO LONGER FUNCTION.

CA090716002	CESSNA	LYC	CAMSHAFT	WORN
7/16/2009	152	O235L2C	75706	ENGINE

(CAN) CAM AND FOLLOWERS FOR NR 1 AND NR 2 CYLINDERS WORN POSSIBLY DUE TO MOISTURE COLLECTING IN ENGINE CAUSING RUST ON AFFECTED PARTS.

CA090608003	CESSNA	LYC	CARBURETOR	FAILED
6/2/2009	152	O235L2C	105267	ENGINE

(CAN) CARB HEAT WAS APPLIED AT 2500` ASL. ENG WOULD NOT PRODUCE MORE THAN 1700 RPM. ATTEMPTED VARIOUS ENG SETTINGS WITH NO IMPROVEMENT. PRECAUTIONARY LANDING IN A FIELD WAS CARRIED OUT. NOTE: AT THIS TIME NO CONCLUSION HAS BEEN REACHED AS TO CAUSE OF THE PARTIAL POWER LOSS. UPDATE: ACFT WAS THEN REASSEMBLED AND A GROUND RUN UP PERFORMED. SYMPTOMS WERE SIMILAR TO THE ORIGINAL DEFECT. ENGINE WOULD NOT ACCELERATE PAST 1700 RPM AND WAS VERY ROUGH RUNNING. IT WOULD NOT IDLE SMOOTHLY AND FELT AS IF IT WOULD QUIT IF ALLOWED TO REMAIN AT IDLE. APPLICATION OF CARB HEAT SEEMED TO IMPROVE LOW RPM RANGE, HOWEVER STILL WOULD NOT GO ABOVE 1700 RPM. CARBURETOR WAS REMOVED AND A REPLACEMENT INSTALLED. GROUND RUN UP WAS CARRIED OUT SUCCESSFULLY WITH NEW CARB INSTALLED, AND AT THIS POINT THE ACFT HAS A MX RELEASE SUBJECT TO A SATISFACTORY TEST FLIGHT. CARBURETOR REMOVED: PN 10-5267 SN DT-0673 TSO 878.6 HRS. CARBURETOR INSTALLED: PN 10-5199 SN CR-0-805 TSO 0.0 HRS. REMOVED CARBURETOR WILL BE SHIPPED TO AN O/H FACILITY AND STRIP REPORT REQUESTED TO DETERMINE THE CAUSE OF THIS PROBLEM. A FURTHER UPDATE WILL BE SUBMITTED WHEN THE REPORT FROM THE O/H FACILITY IS AVAILABLE.

2009FA0000738	CESSNA		WHEEL	INOPERATIVE
7/14/2009	170B		3200	TAIL

DURING ANNUAL INSP IT WAS NOTED THAT THE TAILWHEEL COULD NOT BE STEERED. THE TAILWHEEL HAD BEEN PAINTED I THE PAST. THE GREASE FITTING ON TOP OF THE TAILWHEEL WAS COMPLETELY PAINTED. THE ACFT OWNER STATED THATA MECH WHOM HAD WORKED ON THE ACFT IN THE PAST TOLD HIM NOT TO GREASE THE TAILWHEEL AND TO TIGHTEN THE NUT ON THE BOTTOM OF THE STEERING PIVOT BOLT AS TIGHT AS POSSIBLE. DISASSEMBLY REVEALED THAT ALL PARTS INSIDE THE TAILWHEEL UNIT WERE EXTREMELY WORN. THE PINS THAT SHOULD HAVE BEEN ATTACHED TO THE THRUST PLATE WERE MISSING. ADDITIONALLY, THE AXLE FOR THE TAILWHEEL HAD BEEN DAMAGED PREVIOUSLY AND THE END OF THE AXLE WAS GROUND OFF, PARTIALLY THROUGH THE HOLE FOR THE COTTER PIN TO SECURE THE NUT ON THE END OF THE AXLE. THE ENTIRE TAILWHEEL WAS BEYOND REPAIR AND THE NIT WAS REPLACED WITH A SERVICEABLE TAILWHEEL.

2009FA0000647	CESSNA	CONT	CAM	DEFORMED
7/22/2009	172H	O300*	AM3611	MAGNETO

THE CAM FOR THE MAGNETO WAS FOUND TO BE NON UNIFORM IN SHAPE. AFTER INSTALLATION OF THIS PART THE POINT GAP WAS DIFFERENT ON EACH CAM LOBE.

CA090629001	CESSNA	LYC	CYLINDER HEAD	CRACKED

6/24/2009	172K	O320E2D	AEL65102	ENGINE

(CAN) INITIALLY FOUND ALUMINUM SHAVINGS IN OIL SCREEN, CYL NR 3 FOUND AT LOW COMPRESSION 20/80. CYLINDER ASSY REMOVED AND FOUND PISTON BROKEN BETWEEN THE TOP 2 RINGS, CREATING THE SHAVINGS. ALSO, FOUND CYLINDER HEAD CRACK STARTING NEAR SPARK PLUG HOLE.

CA090710002	CESSNA	LYC	IGNITION SWITCH	WORN
6/9/2009	172K	O320E2D	C2925010105	

(CAN) REF AD 93-05-06. THIS ACFT HAS AFFECTED SWITCH INSTALLED. ACFT IS OUTSIDE OF S/N RANGE. DUE TO AGING ACFT ISSUES, PARTS FROM OUTSIDE THE S/N RANGE ARE GETTING INTO OTHER ACFT. THE LOGS INDICATE THAT, IN THE CLASSIC MANNER, THE AD IN QUESTION HAS "C/W". WHEN LOOKED AT, REQUIRED DIODE WAS NOT INSTALLED ON STARTER SOLENOID AS IS MANDATORY. WHEN SWITCH WAS LOOKED AT, WHITE WITNESS SEALANT WAS STILL IN SCREW SLOTS. THIS CAUSED SWITCH TO BE OPENED UP. INSIDE, THE CONTACTS WERE ALL BADLY WORN AND THERE WAS NO SIGN OF THE REQUIRED LUBRICANT. REF CORRESPONDENSE TOOK PLACE WITH A PERSON AT MFG. THEIR ATTITUDE IS THAT ALL OF THESE SWITCHES, REGARDLESS OF S/N, NEED TO BE SERVICED. MY CONCERN IS THAT THIS A COMPONENT THAT CAN BE MOVED FROM ACFT TO ACFT AND WILL SIDESTEP THE PURPOSE OF THIS AD. THERE IS NO WAY TO DETERMINE THE TTSN OF THE SWITCH.

2009FA0000720	CESSNA	MAGNETO	INOPERATIVE
7/7/2009	172M	4370	RIGHT

EXCESSIVE MAG DROP. REMOVED MAG FOR INTERNAL INSPECTION AND FOUND THAT THE SHAFT HAD FAILED AT THE BASE OF THE SLOT THAT RETAINS THE POINT CAM. REMOVED THE SHAFT GEAR FROM THE CAM AND ONE SIDE OF THE SHAFT STAYED ATTACHED TO THE GEAR. (K)

2009FA0000743	CESSNA	FLAP SYSTEM	MISRIGGED
7/14/2009	172M	052390138	TE FLAPS

DURING THE ANNUAL INSP, IT APPEARED THAT AT LEAST ONE OF THE ROD END BRGS ON THE FLAP CONTROL ROD, PN 0523537-2, WERE FROZEN, WHEN THE FLAPS WERE FULLY EXTENDED. NEITHER ROD END BEARING WAS FROZEN. THE FLAPS WERE MISRIGGED PUTTING EXCESSIVE LOAD ON THE CONTROL ROD ATTEMPTING TO MOVE THE FLAPS PAST THE STOP. THE FLAPS WERE RERIGGED IAW SRM. THE AIRPLANE WAS REPAINTED IN 2005. THERE WAS NO RECORD OF THE REPAINT ENTERED IN THE MX RECORDS. IT APPEARS THE FAULTY FLAP RIGGING OCCURRED WHEN THE AIRPLANE WAS PAINTED.

2009FA0000741	CESSNA	AILERON	FOD
7/14/2009	172M	0523800	

DURING THE ANNUAL INSP, THE AILERONS WERE RERIGGED. DURING THE RERIGGING PROCESS LOOSE HARDWARE WAS FOUND INSIDE THE AILERONS STUCK TO THE INSIDE SKIN OF THE AILERON WITH PAINT. THE LOOSE HARDWARE WAS REMOVED FROM THE AILERON. THE AIRPLANE WAS PAINTED IN 2005. NO RECORD OF THE REPAINT WAS ENTERED IN THE AIRPLANE MX RECORDS. IT APPEARS THAT THE LOOSE HARDWARE WAS ACCIDENTLY DROPPED IN THE AILERON WHEN THE AIRPLANE WAS REPAINTED. (K)

2009FA0000742	CESSNA	AILERON	MISRIGGED
7/14/2009	172M	05238001	

DURING THE ANNUAL INSP, IT WAS NOTED THAT BOTH AILERONS WERE DEFLECTED DOWN 6 DEGREES WHEN THE CONTROL YOKE WAS LEVEL. THE AILERON DEFLECTION DID NOT MEET THE DEFLECTION LIMIT IN THE TYPE CERT DATA. THE AIRPLANE WAS PAINTED IN 2005. THERE IS NO RECORD OF THE PINT IN THE MX RECORDS FOR THE AIRPLANE. IT APPEARS THAT THE FAULTY RIGGING OCCURRED WHEN THE CONTROLS WERE INSTALLED AFTER THE AIRPLANE WAS PAINTED. THE AILERONS WERE RERIGGED IAW SRM. (K)

CA090706007	CESSNA	LYC	B-NUT	LOOSE
7/5/2009	172M	O360A1A		PROP GOVERNOR

(CAN) IN FLIGHT, PILOT NOTICED THE OIL PRESSURE GAUGE FLUCTUATING. PILOT TURNED AROUND AND RETURNED TO DEPARTURE. WHILE RETURNING, OIL PRESSURE DROPPED TO 0 AND OIL TEMP CLIMBED TO RED LINE. PILOT SHUTDOWN ENG AND GLIDED BACK TO AIRPORT. ON TROUBLESHOOTING, CAUSE OF OIL LEAK, B-

NUT ON PROP GOVERNOR LINE WAS FOUND TO BE LOOSE. ACFT HAD UNDERGONE MX JUST PRIOR TO THIS FLIGHT. THIS B-NUT WAS NOT TOUCHED IN THE MX FUNCTION. ON TALKING WITH STAFF, ONE MUST NOT ASUME BECAUSE A LINE OR HOSE IS NOT LEAKING THAT IT IS TIGHT. ON ALL INSP FROM NOW ON, WILL BE CHECK TIGHTENING ALL FLUID LINES. THIS LESSON COST AN EARLY ENGINE CHANGE.

CA090708005	CESSNA	LYC	ENGINE	UNKNOWN
6/17/2009	172M	O360A4M		

(CAN) DURING TAKEOFF, PILOT REPORTED, LOST 60 PERCENT OF PWR, LANDING CARRIED OUT PERPINDICULAR TO RUNWAY IN GRASS. ONCE CLEARED BY NTSB ACFT INSPECTED IN FIELD AND NO DAMAGE FOUND. ACFT TOWED BACK TO BLOCKS WHERE VISUAL INSP REVEALED NO ABNORMALITIES. ACFT WAS THEN GROUND RUN AND ACFT ENG OPERATING WITHIN NORMAL PARAMETERS FOR TYPE. ADDITIONAL INSP WAS CARRIED OUT TO ENGINE. D.P, MAGS, PLUGS, VALVES, ROCKER ARMS, SPRINGS ETC. AND NO ABNORMALITIES FOUND. AS PRECAUTIONARY CHANGES, 2 PLUGS AND RT DISTRIBUTOR BLOCK. ACFT WAS THEN FLOWN FOR .7 HOURS THROUGH TRAINING OPERATING ENVOLOPES AND NO FAULT FOUND WITH ENGINE OPERATION. HOWEVER, ON FINAL TOUCH AND GO PILOT HEARD/FELT A ENG RELATED "MIS-FIRE" ON ACCELERATION AND DECIDED TO RETURN TO BLOCKS. ON THE DAY OF INCIDENT - HUMIDITY WAS HIGH AND THE ACFT WAS SEEN AT LOW RPM FOR 5 - 8 MINUTES BEFORE TAKING POSITION FOR TAKEOFF. AS A PRECAUTIONARY RT AND LT MAGS AND IGNITION HARNESS REPLACED WITH NEW. ACFT FLOWN AGAIN AND NO FAULT FOUND.

CA090618002	CESSNA	LYC	CESSNA	BRACKET	LOOSE
6/17/2009	172N	O320D2J	0532001202	05320061	STABILIZER

(CAN) INSP REVEALED LOOSE BRACKET WITH LWR ATTACH RIVETS FOUND WITH RIVET HEAD MISSING.

2009FA0000672	CESSNA	CIRCUIT BREAKER	FAILED
8/4/2009	172R	CM358910	LANDING LIGHT

CIRCUIT BREAKER FOR LANDING LIGHT FAILED.

2009FA0000642	CESSNA	LYC	THROTTLE CABLE	DAMAGED
7/19/2009	172R	IO360L2A		ENGINE

LOSS OF ENG PWR OCCURRED DURING FLIGHT. NO ACCIDENT, NO INJURIES. IT WAS DETERMINED THE THROTTLE CABLE HAD DISCONNECTED FROM ROD END AT THE FUEL CONTROLLER. JAM NUT APPARENTLY LOOSENED AT THE ROD END. THROTTLE CABLE DOES NOT HAVE A KEYWAY TO PREVENT TURNING. PILOT MAY HAVE THOUGHT A VERNIER CONTROL WAS INSTALLED, WHEN IN FACT, HE WAS UNSCREWING THE ROD END AT THE FUEL CONTROL UNIT.

2009FA0000637	CESSNA	CABLE	FRAYED
7/22/2009	172S	0510105365	RT AILERON

DURING INSP RT AILERON PRIMARY CABLE (PN-0510105-360) WAS FOUND WORN AND FRAYED WHERE IT CONTACTS NYLON PULLEY IN THE CEILING AT FS 65.33. PULLEYS ROTATE FREELY, HOWEVER, CABLE DOESN'T PROVIDE ENOUGH "TRACTION" TO ROTATE IT WHEN AILERON CONTROL IS MOVED FROM STOP TO STOP. THIS RESULTS IN THE CABLE SLIPPING AGAINST PULLEY AND EVENTUALLY WEARING THROUGH THE STRANDS. AREA WITH BROKEN STRANDS APPEARS ONLY AS A SHINY CABLE AND THERE ARE NO OBVIOUS BROKEN STRANDS. IT MUST BE VIEWED WITH A POWERFUL MAGNIFYING GLASS AND BRIGHT LIGHT. IN MANY CASES THE NR OF BROKEN STRANDS FAR EXCEED THE AMOUNT SHOWN IN EITHER MM OR AC 43.13.

2009FA0000638	CESSNA	CABLE	FRAYED
7/22/2009	172S	0510105368	RT RUDDER

DURING INSP RT RUDDER CABLE (PN-0510105-338) WAS FOUND WORN AND FRAYED WHERE IT CONTACTS THE FAIRLEAD AT FS 65.33. THE AREA WITH BROKEN STRANDS APPEARS ONLY AS A SHINY CABLE AND THERE ARE NO OBVIOUS BROKEN STRANDS. IT MUST BE VIEWED WITH A POWERFUL MAGNIFYING GLASS AND BRIGHT LIGHT. IN MANY CASES THE NR OF BROKEN STRANDS FAR EXCEED THE AMOUNT SHOWN IN EITHER MM OR AC 43.13.

2009FA0000639	CESSNA	CABLE	FRAYED
7/22/2009	172S	0510105365	RT AILERON

DURING INSP RT AILERON BALANCE CABLE (PN-0510105-365) WAS FOUND WORN AND FRAYED WHERE IT CONTACTS THE NYLON PULLEY IN THE CEILING AT FS 65.33. PULLEYS ROTATE FREELY, HOWEVER, CABLE DOESN'T PROVIDE ENOUGH "TRACTION" TO ROTATE IT WHEN THE AILERON CONTROL IS MOVED FROM STOP TO STOP. THIS RESULTS IN CABLE SLIPPING AGAINST PULLEY AND EVENTUALLY WEARING THROUGH THE STRANDS. THE AREA WITH BROKEN STRANDS APPEAR ONLY AS A SHINY CABLE AND THERE ARE NO OBVIOUS BROKEN STRANDS. IT MUST BE VIEWED WITH A POWERFUL MAGNIFYING GLASS AND BRIGHT LIGHT. IN MANY CASES THE NR OF BROKEN STRANDS FAR EXCEED THE AMOUNT SHOWN IN EITHER MM OR AC 43.13.

2009FA0000640	CESSNA	CABLE	FRAYED
7/22/2009	172S	0510105360	RT AILERON

DURING A ROUTINE INSP RT AILERON DIRECT CABLE (PN-0510105-360) WAS FOUND WORN AND FRAYED WHERE IT CONTACTS NYLON PULLEY IN THE CEILING AT FS 65.33. PULLEYS ROTATE FREELY, HOWEVER, CABLE DOESN'T PROVIDE ENOUGH "TRACTION" TO ROTATE IT WHEN AILERON CONTROL IS MOVED FROM STOP TO STOP. THIS RESULTS IN CABLE SLIPPING AGAINST PULLEY AND EVENTUALLY WEARING THROUGH THE STRANDS. AREA WITH THE BROKEN STRANDS APPEAR ONLY AS A SHINY CABLE AND THERE ARE NO OBVIOUS BROKEN STRANDS. IT MUST BE VIEWED WITH A POWERFUL MAGNIFYING GLASS AND BRIGHT LIGHT. IN MANY CASES THE NR OF BROKEN STRANDS FAR EXCEED THE AMOUNT SHOWN IN EITHER MM OR AC 43.13.

2009FA0000641	CESSNA	CABLE	FRAYED
7/22/2009	172S	0510105360	LT AILERON

DURING INSP THE LT AILERON CABLE (PN-0510105-360) WAS FOUND WORN AND FRAYED WHERE IT CONTACTS THE NYLON PULLEY IN THE CEILING AT FS 65.33. PULLEYS ROTATE FREELY, HOWEVER, CABLE DOESN'T PROVIDE ENOUGH "TRACTION" TO ROTATE IT WHEN THE AILERON CONTROL IS MOVED FROM STOP TO STOP. THIS RESULTS IN CABLE SLIPPING AGAINST THE PULLEY AND EVENTUALLY WEARING THROUGH THE STRANDS. AREA WITH BROKEN STRANDS APPEAR ONLY AS A SHINY CABLE AND THERE ARE NO OBVIOUS BROKEN STRANDS. IT MUST BE VIEWED WITH A POWERFUL MAGNIFYING GLASS AND BRIGHT LIGHT. IN MANY CASES THE NUMBER OF BROKEN STRANDS FAR EXCEED THE AMOUNT SHOWN IN EITHER MM OR AC 43.13.

2009FA0000636	CESSNA	CABLE	FRAYED
7/22/2009	172S	0510105365	RT AILERON

DURING A ROUTINE INSP THE RT AILERON CABLE (PN-0510105-365) WAS FOUND WORN AND FRAYED WHERE IT CONTACTS THE NYLON PULLEY IN CEILING AT FS 65.33. PULLEYS ROTATE FREELY, HOWEVER, CABLE DOESN'T PROVIDE ENOUGH "TRACTION" TO ROTATE IT WHEN THE AILERON CONTROL IS MOVED FROM STOP TO STOP. THIS RESULTS IN CABLE SLIPPING AGAINST THE PULLEY AND EVENTUALLY WEARING THROUGH THE STRANDS. AREA WITH THE BROKEN STRANDS APPEARS ONLY AS A SHINY CABLE AND THERE ARE NO OBVIOUS BROKEN STRANDS. IT MUST BE VIEWED WITH A POWERFUL MAGNIFYING GLASS AND BRIGHT LIGHT. IN MANY CASES THE NR OF BROKEN STRANDS FAR EXCEED AMOUNT SHOWN IN EITHER MM OR AC 43.13.

2009FA0000634	CESSNA	CABLE	FRAYED
7/22/2009	172S	0510105360	ZONE 200

DURING A ROUTINE INSP THE LT AILERON PRIMARY CABLE (PN-0510105-360) WAS FOUND WORN AND FRAYED WHERE IT CONTACTS THE NYLON PULLEY IN THE CEILING AT FS 65.33. THE PULLEYS ROTATE FREELY, HOWEVER, CABLE DOESN'T PROVIDE ENOUGH"TRACTION" TO ROTATE IT WHEN THE AILERON CONTROL IS MOVED FROM STOP TO STOP. THIS RESULTS IN CABLE SLIPPING AGAINST PULLEY AND EVENTUALLY WEARING THROUGH STRANDS. AREA WITH BROKEN STRANDS APPEARS ONLY AS A SHINY CABLE AND THERE IS NO OBVIOUS BROKEN STRANDS. IT MUST BE VIEWED WITH A POWERFUL MAGNIFYING GLASS AND BRIGHT LIGHT. IN MANY CASES THE NR OF BROKEN STRANDS FAR EXCEED THE AMOUNT SHOWN IN EITHER THE MM OR AC 43.13.

2009FA0000678	CESSNA	CONTROL CABLE	FRAYED
8/12/2009	172S	0510105365	ZONE 600

DURING INSPECTION THIS CABLE WAS FOUND BADLY WORN AT WS 100.25 NEAR THE SUPPORT ARM. THE CABLE APPEARS SHINY AND SMOOTH, BUT WHEN MAGNIFIED MANY BROKEN STRANDS CAN BE SEEN.

2009FA0000684	CESSNA	CONTROL CABLE	FRAYED
8/12/2009	172S	0510105364	ZONE 200

DURING A ROUTINE INSP, THIS CABLE LOCATED IN CTR CEILING, AT STA 65.33, WAS FOUND BADLY WORN WHERE IT CONTACTS ONE OF 3 PULLEYS. PULLEY FREELY ROTATES HOWEVER THERE IS NOT ENOUGH "TRACTION" FROM CABLE TO ROTATE THE PULLEY DURING NORMAL OPERATION. THIS CAUSES THE CABLE TO SLIDE ACROSS THE PULLEY WHICH CREATES A WEAR POINT. CABLE APPEARS SHINY, BUT IF VIEWED WITH A STRONG MAGNIFIER MANY INDIVIDUAL STRANDS CAN BE SEEN BROKEN.

2009FA0000682	CESSNA		CONTROL CABLE	FRAYED
8/12/2009	172S		0510105339	RUDDER

THE LT RUDDER CABLE (PN-0510105-339) WAS FOUND WORN AT WS 65.33. THE CABLE APPEARS SHINY AND SMOOTH, BUT WHEN VIEWED WITH A MAGNIFIER, INDIVIDUAL BROKEN STRANDS CAN BE SEEN.

2009FA0000683	CESSNA		CONTROL CABLE	FRAYED
8/12/2009	172S		0510105308	ELEVATOR

THE UP ELEVATOR CABLE (PN-0510105-308) WAS FOUND WORN AT WS 65.33. THE CABLE APPEARS SHINY AND SMOOTH, BUT WHEN VIEWED WITH A MAGNIFIER, INDIVIDUAL BROKEN STRANDS CAN BE SEEN.

2009FA0000679	CESSNA	LYC	CONTROL CABLE	FRAYED
8/12/2009	172S	IO360L2A	0510105360	

DURING A ROUTINE INSP, THIS CABLE LOCATED IN THE CTR CEILING, AT STA 65.33, WAS FOUND BADLY WORN WHERE IT CONTACTS ONE OF THE 3 PULLEYS. THE PULLEY FREELY ROTATES HOWEVER THERE IS NOT ENOUGH "TRACTION" FROM THE CABLE TO ROTATE THE PULLEY DURING NORMAL OPERATION. THIS CAUSES THE CABLE TO SLIDE ACROSS THE PULLEY WHICH CREATES A WEAR POINT. THE CABLE APPEARS SHINY, BUT IF VIEWED WITH A STRONG MAGNIFIER, MANY INDIVIDUAL STRANDS CAN BE SEEN BROKEN.

2009FA0000731	CESSNA	LYC	STARTER	FAILED
7/1/2009	172S	IO360L2A	149NL	ENGINE

STARTER END CAP SHATTERED. THIS IS 3RD OCCURRENCE SEEN ON THESE ACFT. (K)

CA090610007	CESSNA	LYC	MAGNETO	MALFUNCTIONED
6/9/2009	172S	IO360L2A	4371	ENGINE

(CAN) THE MAGNETO WAS TIMED TO THE ENGINE AT TAFT 5068.2. NEXT INSP, TIMING WAS OUT OR RETARDED 6 DEGREES. MAGNETO IS EXHIBITING SYMPTOMS SPECIFIED IN SB3-08A WITHOUT THE AFFECTED S/N.

CA090618004	CESSNA	LYC	HOUSING	BROKEN
6/8/2009	172S	IO360L2A		STARTER GEAR

(CAN) STARTER GEAR HOUSING BROKE CAUSING STARTER TO BECOME INOPERATIVE.

CA090717009	CESSNA	LYC	LAMAR	DRIVE GEAR	BROKEN
7/16/2009	172S	IO360L2A		PM2401	STARTER

(CAN) STARTER BEGAN TO TURN ENG AND STOPPED. NO FURTHER ROTATION WAS OBTAINED. UPON INSP, A BROKEN STARTER DRIVE GEAR WAS NOTED, ALONG WITH A MISSING TOOTH ON ENGINE`S RING GEAR. IT IS NOT CLEAR WHETHER THE BROKEN RING GEAR TOOTH PRECIPITATED FAILURE OR IF THE STARTER DRIVE GEAR STARTED THE TROUBLE, BUT IT IS OF INTEREST TO NOTE THAT MFG ISSUED A LSI-009, DATED 08/12/04, RECALLING A QUANTITY OF THESE PM2401 STARTERS WITH POTENTIALLY DEFECTIVE STARTER DRIVE GEARS. THE SN RANGE GIVEN DOES NOT APPLY TO OUR STARTER.

CA090708003	CESSNA	LYC	CONTROL CABLE	FRAYED
7/7/2009	172S	IO360L2A		AILERONS

(CAN) UPON REMOVAL OF LT WING, BOTH FWD AND AFT AILERON CABLES WERE FOUND WITH BROKEN STRANDS AT WING STA 71.125. CABLES RUN THROUGH REAR RIB OF WING, AND RUN OVER A PHENOLIC CABLE GUARD. CHAFFING WITH THIS GUARD IS CAUSE OF STRANDS BEING BROKEN. THERE IS NO INSP PANEL IN OR NEAR THIS AREA. A BOROSCOPE IS NEEDED TO EFFECTIVELY INSPECT CABLES AND GUARD FOR WEAR. HAVE INSTALLED INSP PANELS ON BOTH WINGS AT STA AND PLAN TO DO SO ON THE REST OF MODELS. CABLES HAVE BEEN

REPLACED.

CA090622003	CESSNA	CONT	SUPPORT BRACKET	CRACKED
6/12/2009	182J	IO470S	07436061	NLG

(CAN) ACFT STEERING AND RELATED SYS WERE INSPECTED DUE TO COMPLAINT REGARDING ACFT BEING HARD TO TURN TO THE RT. AN OPEN CRACK WAS FOUND ON LWR OLEO SUPPORT BRACKET DESCRIBED ABOVE. CONDITION MAY HAVE CAUSED FAILURE OF OLEO SUPPORT, POSSIBLY RESULTING IN OLEO FOLDING UNDER, PROPELLER STRIKE AND SIGNIFICANT DAMAGE TO FIREWALL AND FWD ACFT STRUCTURE.

2009FA0000721	CESSNA	CONT	ATTACH FITTING	DAMAGED
7/10/2009	182L	O470R	1231013	VERTICAL STAB

COMPIED WITH AD72-07-09 DATED 10/17/74 BY INSP AND FOUND SIGNS OF WORKING AT LEFT SIDE AND RIGHT SIDE AFT VERTICAL FIN ATTACHMENT BOLTS. PERFORMED DYE PENETRANT INSP IAW PARA C,1, D, 1 AND 2 WITH NO CRACKS FOUND. CHECKED ATTACHMENT HOLES FOR EXCESSIVE ELONGATIN IAW PARA C, 2 AND FOUND (2) AFT VERTICAL FIN ATTACH BOLT HOLES TO BE BEYOND LIMITS MEASURING .389 IN ON PILOT SIDE AFT ATTACH HOLE ON VERTICAL FIN AND .386 IN ON COPILOT SIDE AFT ATTACH HOLE ON VERTICAL FIN. REAMED LT AND RT SIDE AFT BOLT HOLES TO .4375 IN AND REMOVED ALL SIGNS OF ELONGATION OF BOLT HOLES. REINSTALLED VERTICAL FIN ASSY. INSTALLED NEW HARDWARE AND CENTER AFT VERTICAL FIN ATTACH HARDWARE WITH NEW (3) AN 5-6A BOLTS, (3) MS21042 NUTS, (3) AN 960-516 WASHERS, AND TORQUED TO 225 IN LBS. (K)

2009FA0000692	CESSNA	CONT	SPAR	CORRODED
6/2/2009	182N	O470*	07116053	FUSELAGE

FOUND THE REAR SPAR CARRY THROUGH TO AFT DOOR POST WITH 6 RIVET HEADS POPPED OFF. FOUND BOTH LT AND RT AFT FITTINGS, PN 07116069 AND -10 AS WELL AS 0422229-12 AND -23 CORRODED SO THAT THEY ARE IN 2 PIECES. THE REAR SPAR CARRY THROUGH HAS A 1 INCH CRACK AT THE WING MOUNT BOLT HOLE. THERE IS NO INSPECTION ACCESS TO THIS AREA. HAD NO IDEA THAT THE AFT WING SPAR ATTACH POINT WAS THIS DETERIORATED UNTIL THE WING WAS REMOVED. (K)

2009F00061	CESSNA	CONT	LANDING GEAR	BROKEN
8/24/2009	185	IO520F	07410016	RIGHT

RT MLG FAILURE AT UPPER AXLE ATTACH BOLT HOLES.

2009FA0000657	CESSNA		SPRING	BROKEN
7/29/2009	208B		26430622	NLG STRUT

NLG DRAG SPRING SEPARATED 6 INCHES AFT OF THE LOWER LUG ATTACHMENT HOLES DURING GROUND RUN AT POWER. VISUAL INSP SUGGESTED A LARGE CORROSION PIT IN LWR WALL NOT VISIBLE FROM THE EXTERIOR SURFACE AS THE STARTING POINT FOR THE BREAK.

CA090615009	CESSNA	PWA	AILERON SYS	MALFUNCTIONED
6/15/2009	208B	PT6A114A		

(CAN) FACTORY INSTALLED BELLCRANK WAS NOTED AS BEING VISUALLY DIFFERENT. WHEN COMPARED TO A SERVICABLE PART FROM STOCK, IT APPEARS THAT THE STOP LUG ON THE LT (ONLY) WAS WELDED INCORRECTLY AT MFG. THE AILERON RIGGING IS CORRECT, WITH THE STOP ADJUSTED TO GIVE CORRECT MOVEMENT.

CA090622020	CESSNA	CONT	EXHAUST VALVE	STUCK
6/19/2009	210L	IO520L		ENGINE

(CAN) ACFT WAS UNDERGOING A 50 HR INSP. INSP REVEALED AN OIL LEAK ON RT SIDE OF ENG. INVESTIGATION REVEALED EXHAUST PUSH TUBE SEALS WERE LEAKING. REMOVAL OF THE PUSH TUBE AND ROD REVEALED PUSH ROD WAS BENT. OIL LEAK WAS CAUSED BY PUSH ROD DISPLACING SEALS ON PUSH TUBE CREATING LEAK. INVESTIGATION REVEALED THAT EXHAUST VALVE HAD CONTACTED FACE OF PISTON. ALL OTHER PISTONS ON THE ENG WERE CHECKED AND FOUND A TOTAL OF 3 PISTONS WITH EXHAUST VALVE CONTACT. ALL 6 CYL REMOVED FOR FURTHER INVESTIGATION AND REPLACEMENT. REPLACED NEW AT ENG O/H OCTOBER 18, 2006.

ENG WAS THEN INSTALLLED THE AIRCRAFT NOVEMBER 24, 2006.

2009FA0000746	CESSNA	CONT	CYLINDER HEAD	BROKEN
8/24/2009	310Q	IO470V	EC646144CN	ZONE 600

CYLINDER HEAD SEPARATED FROM BARREL.

CA090712001	CESSNA	CONT	VALVE	FAILED
7/12/2009	337G	IO360G		PARK BRAKE

(CAN) ON LANDING, THE PILOT NOTED THE ACFT PULLED TO THE LT. AFTER LANDING, IT WAS NOTED THAT THE LT TIRE HAD A FLAT SPOT THAT MIGHT HAVE BEEN DUE TO BRAKE BEING ON. INSP OF THE PARKING BRAKE REVEALED THAT WHEN THE PARK BRAKE WAS PUT ON AND THEN TURNED OFF SLOWLY THE BRAKES DID NOT RELEASE. INSP OF THE PARK BRAKE VALVE REVEALED THAT THE CAM AND THE POPPET VALVES WHERE WORN TO A POINT THAT THE VALVE WOULD NOT OPEN SOMETIMES. MFG HAS NO WEAR DIMENSIONS FOR THIS PART.

2009FA0000709	CESSNA		BLOCK	CRACKED
7/8/2009	340A		50240051	AILERON BEARING

FOUND NUTPLATES ATTACHED TO BEARING BLOCK ASSY CRACKED THROUGH THREADED PORTION OF NUTPLATE. NUTPLATE HOLDS INBD AND OTBD HINGE BOLT. SUSPECT FURTHER FAILURE COULD RESULT IN SEPARATION OF AILERON FROM ACFT IN FLIGHT. (K)

CA090710007	CESSNA	CONT	SCREW	BROKEN
7/9/2009	401A	TSIO520EB	084113	RT ADJUST

(CAN) RT MLG COLLAPSED DURING TURN TO LINE UP FOR TAKEOFF. PARTS FOUND FAILED AFTER COLLAPSE. ADJUSTING SCREW PN 0841113-3 FOUND SHEARED. BOLT ATTACHING BELLCRANK ASSY TO LANDING GEAR TRUNNION FOUND SHEARED. BOLT PN NAS464P4-26 FOUND SHEARED. MOUNTING LUG ON TRUNNION BROKEN OFF.

CA090616011	CESSNA	CONT	DOWNLOCK SWITCH	FAILED
6/15/2009	402CESSNA	TSIO520E	S20884	MLG

(CAN) PILOT REPORTED INTERMITTENT LT MAIN GEAR DOWNLOCK INDICATION, REPLACED BULB TO TROUBLESHOOT, PROBLEM NOT FIXED CONTACTED GROUND PERSONNEL AND MADE LOW PASSES TO ENSURE GEAR PROPERLY DOWN AND LOCKED. ON GROUND, DOWNLOCK INDICATION BEGAN TO WORK PROPERLY. TROUBLESHOOTING REVEALED FAULTY DOWNLOCK SWITCH, SWITCH REPLACED, RETRACTION TEST C/O.

2009FA0000732	CESSNA	CONT	CYLINDER HEAD	CRACKED
6/5/2009	414A	TSIO520NB	AEC631397	ENGINE

CYLINDER HEAD FAILED IN FLIGHT AND BLEW OUT A SECTION OF THE HEAD AND FINS. INVESTIGATION REVEALED A .5 INCH HOLE DEVELOPED FROM A CRACK THAT PROGRESSED FROM THE EXHAUST VALVE SEAT TO UPPER SPARK PLUG HOLE. ADDITIONAL CRACK WAS FOUND ON THIS CYLINDER FROM THE UPPER SPARK PLUG HOLE TO THE INJECTOR BOSS. AFTER INSPECTION OF ALL CYLINDERS ON BOTH ENGINES 5 OTHER OF THE ORIGINAL CYLINDERS INSTALLED AT OVERHAUL WERE FOUND CRACKED. ALL CRACKS WERE EITHER FROM THE INJECTOR BOSS TO THE UPPER PLUG HOLE OR EXHAUST VALVE TO UPPER PLUG HOLE. BOTH ENGINES WERE O/H AT THE SAME TIME AND THE CYLINDERS HAD THE SAME AMOUNT OF TIME ON THEM. NO METALLURGICAL ANALYSIS WAS PERFORMED AND NO CAUSE COULD BE DETERMINED. ALL CYLINDERS WERE SENT BACK TO THE MFG. (K)

2009FA0000733	CESSNA	CONT	CYLINDER HEAD	CRACKED
6/5/2009	414A	TSIO520NB	AEC631397	ENGINE

CYLINDER HEAD FOUND CRACKED FROM INJECTOR BOSS TO THE UPPER PLUG HOLE. AFTER INSPECTION OF ALL CYLINDERS ON BOTH ENGINES 5 OTHER OF THE ORIGINAL CYLINDERS INSTALLED AT O/H WERE FOUND CRACKED. ALL CRACKS WERE EITHER FROM THE INJECTOR BOSS TO THE UPPER PLUG HOLE OR EXHAUST VALVE TO UPPER PLUG HOLE. BOTH ENGINES WERE O/H AT THE SAME TIME AND THE CYLINDERS HAD THE SAME AMOUNT OF TIME ON THEM. NO METALLURGICAL ANALYSIS WAS PERFORMED AND NO CAUSE COULD BE

DETERMINED. ALL CYLINDERS WERE SENT BACK TO THE MFG. (K)

2009FA0000735	CESSNA	CONT	CYLINDER HEAD	CRACKED
6/5/2009	414A	TSIO520NB	AEC631397	ENGINE

CYLINDER HEAD FOUND CRACKED FROM INJECTOR BOSS TO THE UPPER PLUG HOLE. AFTER INSPECTION OF ALL CYLINDERS ON BOTH ENGINES 5 OTHER OF THE ORIGINAL CYLINDERS INSTALLED AT O/H WERE FOUND CRACKED. ALL CRACKS WERE EITHER FROM THE INJECTOR BOSS TO THE UPPER PLUG HOLE OR EXHAUST VALVE TO UPPER PLUG HOLE. BOTH ENGINES WERE O/H AT THE SAME TIME AND THE CYLINDERS HAD THE SAME AMOUNT OF TIME ON THEM. NO METALLURGICAL ANALYSIS WAS PERFORMED AND NO CAUSE COULD BE DETERMINED. ALL CYLINDERS WERE SENT BACK TO THE MFG. (K)

2009FA0000734	CESSNA	CONT	CYLINDER HEAD	CRACKED
6/5/2009	414A	TSIO520NB	AEC631397	ENGINE

CYLINDER HEAD FOUND CRACKED FROM INJECTOR BOSS TO THE UPPER PLUG HOLE. AFTER INSPECTION OF ALL CYLINDERS ON BOTH ENGINES 5 OTHER OF THE ORIGINAL CYLINDERS INSTALLED AT O/H WERE FOUND CRACKED. ALL CRACKS WERE EITHER FROM THE INJECTOR BOSS TO THE UPPER PLUG HOLE OR EXHAUST VALVE TO UPPER PLUG HOLE. BOTH ENGINES WERE O/H AT THE SAME TIME AND THE CYLINDERS HAD THE SAME AMOUNT OF TIME ON THEM. NO METALLURGICAL ANALYSIS WAS PERFORMED AND NO CAUSE COULD BE DETERMINED. ALL CYLINDERS WERE SENT BACK TO THE MFG. (K)

2009FA0000736	CESSNA	CONT	CYLINDER HEAD	CRACKED
6/5/2009	414A	TSIO520NB	AEC631397	ENGINE

CYLINDER HEAD FOUND CRACKED FROM INJECTOR BOSS TO THE UPPER PLUG HOLE. AFTER INSPECTION OF ALL CYLINDERS ON BOTH ENGINES 5 OTHER OF THE ORIGINAL CYLINDERS INSTALLED AT O/H WERE FOUND CRACKED. ALL CRACKS WERE EITHER FROM THE INJECTOR BOSS TO THE UPPER PLUG HOLE OR EXHAUST VALVE TO UPPER PLUG HOLE. BOTH ENGINES WERE O/H AT THE SAME TIME AND THE CYLINDERS HAD THE SAME AMOUNT OF TIME ON THEM. NO METALLURGICAL ANALYSIS WAS PERFORMED AND NO CAUSE COULD BE DETERMINED. ALL CYLINDERS WERE SENT BACK TO THE MFG. (K)

2009FA0000737	CESSNA	CONT	CYLINDER HEAD	CRACKED
6/5/2009	414A	TSIO520NB	AEC631397	ENGINE

CYLINDER HEAD FOUND CRACKED FROM INJECTOR BOSS TO THE UPPER PLUG HOLE. AFTER INSPECTION OF ALL CYLINDERS ON BOTH ENGINES 5 OTHER OF THE ORIGINAL CYLINDERS INSTALLED AT O/H WERE FOUND CRACKED. ALL CRACKS WERE EITHER FROM THE INJECTOR BOSS TO THE UPPER PLUG HOLE OR EXHAUST VALVE TO UPPER PLUG HOLE. BOTH ENGINES WERE O/H AT THE SAME TIME AND THE CYLINDERS HAD THE SAME AMOUNT OF TIME ON THEM. NO METALLURGICAL ANALYSIS WAS PERFORMED AND NO CAUSE COULD BE DETERMINED. ALL CYLINDERS WERE SENT BACK TO THE MFG. (K)

2009FA0000716	CESSNA	PWC	ACTUATOR	SEIZED
6/24/2009	510	PW615FA	99126402	RT WING TE FLAP

CREW REPORTED A ONE-OFF INCIDENT ON 24 JUNE, 2009 WHERE FLAP SYS FAILED ON APPROACH. UNDER INVESTIGATION, SYS SHOWED NO FAULTS AND WAS CONSIDERED FIT FOR RETURN TO SERVICE. ACFT PERFORMED SATISFACTORILY FOR 15.4 FLYING HOURS/ 9 LANDINGS. ON 26 JULY, 2009 CREW REPORTED FLAP FAILURE IN THE UP POSITION. ON INVESTIGATION, WHEN FLAPS SELECTED 15 DEGREES THERE WAS NO MOVEMENT AND THE FLAP FAILUE ANNOUNCIATOR ILLUMINATED. RT FLAP ACTUATOR FOUND SEIZED AND WAS REPLACED. RIGGING CHECKS CARRIED OUT. C/A: TO ENABLE REMOVAL OF FLAP ACTUATOR IN FLAP UP POSITION, ACTUATOR ACCESS PANEL NEEDS TO BE ATTACHED WITH SCREW FASTENERS RATHER THAN RIVETED. CONDITION REPORT WAS RAISED TO ADVISE MFG OF MALFUNCTION AND REPORT ON RESULTS OF AN INVESTIGATION INTO CAUSES FOR THE ACTUATOR FAILURE. (K)

2009FA0000676	CESSNA	PWA	ENGINE	READS HIGH
8/8/2009	560XL	PW545A	31J1900	LEFT

LT ENG WAS INSTALLED ON THIS ACFT, 22 HOURS OF FLIGHT PRIOR TO THIS INCIDENT. 3 DAYS PRIOR TO INCIDENT LT ENG EXPERIENCED A 15-20PSI RISE IN OIL PRESSURE. ON MORNING OF INCIDENT FLIGHT, PILOT NOTED NO OIL SHOWING IN SIGHT GLASS. CONTACTED MX WHO INFORMED THEM TO OPERATE ENG AND CHECK

OIL LEVEL AFTER RUNNING FOR 20 MIN AT 75-80 INCH N1. 1.7QTS OF OIL WERE ADDED TO ENG TO BRING OIL LEVEL UP TO MIN LEVEL. PILOT ELECTED TO TEST FLY ACFT PRIOR TO MAKING TRIP WITH PASSENGERS ONBOARD. 20 MIN INTO TEST FLIGHT, LT RENTAL ENG EXPERIENCED A 15-20 PSI RISE IN OIL PRESSURE. SHORTLY AFTER RISE, OIL PRESSURE WENT TO ZERO. ENG WAS SHUTDOWN IN FLIGHT AND ACFT RETURNED TO DEPARTURE ON 1 ENG WITHOUT INCIDENT. OIL WAS FOUND ON OUTSIDE OF ENG IN BYPASS DUCT INSIDE EXHAUST NOZZLE AND POOLED BEHIND FAN AND IN INTERMEDIATE CASE. MX FROM MFG ARRIVED ON 8/9/2009 TO REPLACE LT ENG WITH ANOTHER RENTAL UNIT PROVIDE BY MFG. THE OIL WAS DRAINED FROM THE ENG AND ONLY 4 QUARTS OF OIL WERE NOTED REMOVED FROM ENG. ENG WILL BE RETURNED TO MFG FOR EVALUATION AND REPAIR.

CNQ8918C	CESSNA		ATTACH BRACKET	CORRODED
5/27/2009	680CE			RUDDER

FOUND CORROSION AT RUDDER ATTACH POINTS THAT WAS BEYOND LIMITS.

CA090717006	CESSNA	LYC	HUB	UNSERVICEABLE
7/15/2009	A152	O235L2C	1A103TCM694	PROPELLER

(CAN) DURING INSP, IAW AD 2003-12-05, CORROSION WAS FOUND IN THE HUB BORE. UPON DIMENSIONAL INSP OF BORE AND CONSULTATION WITH THE MFG IT WAS DETERMINED THAT THE BORE WAS OVERSIZE BY 0.230 INCH.

CA090615005	CESSNA	CONT	PUSHROD	BENT
6/12/2009	A185E	IO520D	538304	ENGINE

(CAN) DURING A CYLINDER CHANGE, PUSHROD WAS FOUND TO BE BENT, REPLACED WITH SERVICEABLE UNIT.

CA090619014	CESSNA	CONT	CYLINDER HEAD	CRACKED
6/16/2009	A185E	IO520F	SAC52001	ENGINE

(CAN) PILOT REPORTED VIBRATION, ACFT REMOVED FROM WATER AND LEAKAGE TEST COMPLETED REVEALING LEAKING CYLINDER. PROBLEM CYLINDER REMOVED (SN 002379), INSPECTED INTERNALY, FOUND CRACKED, CYLINDER REPLACED WITH NEW.

CA090619016	CESSNA	CONT	CYLINDER HEAD	CRACKED
6/16/2009	A185E	IO520F	SAC52001	ENGINE

(CAN) AFTER LEAKAGE TEST, FOUND 1 CYL CRACKED, CUSTOMER REQUESTED TO REMOVE OTHER CYL AND INSPECT INTERNALLY. FOUND 3 OTHER CYL TO HAVE CRACKS STARTING (SN 002464, SN 002369, E46980). CYLINDERS REPLACED.

2009FA0000643	CESSNA		ALTERNATOR	LOOSE
7/22/2009	A185F		DOFF10300BR	

FOUND ALTERNATOR CASE HALVES LOOSE DURING INSP. CASE BOLTS WERE SAFETY WIRED.

2009FA0000644	CESSNA		ALTERNATOR	LOOSE
7/16/2009	A185F		DDOFF10300BR	ZONE 400

PILOT NOTED NOISE IN RADIO. FOUND HIGH RIPPLE VOLTAGE WITH TESTER.

2009FA0000645	CESSNA		ALTERNATOR	INOPERATIVE
12/24/2008	A185F		DOFF10300BR	ENGINE

ALTERNATOR WOULD POP THE FIELD C/B.

2009FA0000646	CESSNA		ALTERNATOR	DAMAGED
7/1/2009	A185F		DOFF10300BR	ENGINE

FOUND ALTERNATOR CASE HALVES LOOSE DURING INSP. CASE BOLTS WERE SAFETY WIRED. REPLACED UNDER WARRANTY.

2009FA0000718	CESSNA	LYC	SEAT TRACK	MISINSTALLED

8/14/2009	T206H	TIO540AJ1A	12108166	COCKPIT

DURING 100 HR/ANNUAL INSP THE PILOTS OTBD SEAT TRACK (PN1210816-6) WAS FOUND TO HAVE BEEN INSTALLED INCORRECTLY (180 DEGREES OUT FROM THE INBD TRACK) THIS INSTALLATION WOULD NOT ALLOW THE PILOTS SEAT LOCKING PINS TO ENGAGE AND LOCK THE SEAT IN POSITION. (K)

CA090706004	CESSNA	CONT	ENGINE	FAILED
6/18/2009	T207A	TSIO520M	TSIO520HC	

(CAN) ENGINE FAILED IN FLIGHT, WEATHER WAS GOOD, RESTART FAILED, ACFT MADE FORCED LANDING MINOR INJURIES. ACFT TO BE RECOVERED AND INVESTIGATED BY SAFETY BOARD.

CA090707002	CESSNA	CONT	ANEROID	FAILED
6/10/2009	TU206G	TSIO520M	6467683AR	FUEL PUMP

(CAN) FUEL PUMP ANEROID FAILED CAUSING ERRATIC FUEL FLOWS.

2009FA0000712	CESSNA	CONT	CYLINDER	PEELING
7/13/2009	TU206G	TSIO520M	TISN712BCA	ENGINE

CYLINDER BARREL PEELING FOUND AFTER A LOW COMPRESSION TEST. THE BARREL PEELED IN AN AREA APPROX 2 INCHES WIDE. THE METAL CONTAMINATED THE ENG LUBRICATION SYS REQUIRING A COMPLETE TEARDOWN OF THE ENG. THIS CYL WAS INSTALLED AT ENG O/H ON 5/30/2009. (K)

CA090707007	CESSNA	CONT	HINGE	CRACKED
7/7/2009	U206E	IO520F	12205317	AILERON

(CAN) HINGE DOUBLERS CRACKED AT LWR ANGLE BEND, UPON REMOVAL OF HINGE, FOUND MORE CRACKS NEAR TOP OF HINGE, NOT VISIBLE UNLESS THE SKIN IS PEELED BACK OR THE USE OF A BORESCOPE.

CA090707008	CESSNA	CONT	HINGE	CRACKED
7/7/2009	U206E	IO520F	122005217	AILERON

(CAN) CRACKS LOCATED AT DOUBLER ANGLE BENDS, TOP AND BOTTOM, ONLY LWR CRACKS ARE VISIBLE. CRACKS AT TOP ONLY VISIBLE WITH BORESCOPE OR REMOVING THE SKIN.

CA090707009	CESSNA	CONT	CABLE	FRAYED
7/7/2009	U206E	IO520F	1260505129	ELEVATOR

(CAN) FRAYED AT STA 138, PULLEY NOT SEIZED.

CA090620002	CESSNA	CONT	CASE	FAILED
6/20/2009	U206E	IO520F		ALTERNATOR

(CAN) CASE HALVES FOUND LOOSE.

CA090622012	CESSNA	CONT	CYLINDER	CRACKED
6/18/2009	U206F	IO520F	649166AG	NR 2

(CAN) DURING INSP, IT WAS DISCOVERED THAT NR 2 CYL HAD LOW COMPRESSION, VALVE COVER WAS REMOVED AND IT APPEARED LEAK WAS COMING FROM EXHAUST VALVE SPRING. CYL WAS REMOVED ALONG WITH VALVES, FURTHER INSP REVEALED THAT EXHAUST PORT HSG WAS CRACKED. CYL ASSY WAS SCRAPED AND A NEW ASSY WAS INSTALLED WITH NO FURTHER INCIDENT.

CA090707010	CESSNA	CONT	LOCK	FAILED
7/4/2009	U206F	IO520F	12436292	MLG

(CAN) LANDING, ACFT VEERED TO THE RT UNCONTROLLABLY. ACFT ENDED UP BEYOND APPROACH LIGHTS IN THE GRAVEL. NO DAMAGE TO ACFT AND ACFT LANDING GEAR IS BEING INSPECTED TO DETERMINE THE CAUSE. LOCKING DEVICE OR OLEO OVER INFLATED MAY BE CAUSE.

CA090626009	CESSNA	CONT	TRANSPONDER	SHORTED

6/26/2009	U206G	IO520F	414201114	ATC SYSTEM

(CAN) PILOT SAW SMOKE COMING FROM AVIONICS STACK. SHUTOFF AVIONICS, ELECTRICAL ETC, LANDED WITHOUT INCIDENT. MX DISCOVERED SOME HARWARE AND ELECTRICAL TRANSISTOR LOOSE IN TRANSPONDER CASE, SUSPECTED FROM THE TRANSPONDER. REPLACED TRANSPONDER WITH LIKE SERVICEABLE UNIT.

CA090722003	CESSNA	CONT	CYLINDER	CRACKED
7/20/2009	U206G	IO520F	SA52006A1	NR 4

(CAN) WHILE TAXING IN, HISSING SOUND FROM ENG COULD BE HEARD. UPON VISUAL INSP OF ENGINE, CRACK ON NR 4 CYL WAS DISCOVERED.

CA090620001	CESSNA	CONT	CASE	LOOSE
6/19/2009	U206G	IO520F		ALTERNATOR

(CAN) CASE HALVES FOUND LOOSE.

2009FA0000656	CIRRUS		CARTRIDGE	CORRODED
6/1/2009	SR22			PITCH TRIM

ON SHORT FINAL APPROACH, PILOT REDUCED THE THROTTLE TO IDLE PR FOR LANDING. ABOUT 25 FT ABOVE GROUND LEVEL, THE NOSE PITCHED DOWN. PILOT TRIED TO PULL BACK ON THE YOKE TO FLARE, BUT ELEVATOR CONTROL WAS STUCK IN THE MID-RANGE POSITION. ACFT TOUCHED DOWN ON THE NOSE GEAR FIRST AND THEN BOUNCED BACK UP INTO THE AIR. THE SUDDEN JOLT OF TOUCHDOWN SEEMED TO FREE ELEVATOR CONTROL AND PILOT WAS ABLE COMPLETE A NORMAL LANDING. AS THE PILOT TAXIED FROM RUNWAY, HE WAS ABLE TO DUPLICATE THE CONTROL JAM. (DOM) REPORTED THAT AFTER THE INCIDENT, ELEVATOR PITCH TRIM CARTRIDGE WAS REMOVED AND EXAMINED. WHEN DOM ACTUATED THE CARTRIDGE BY HAND, HE FELT THE SPRING FUNCTIONING, BUT NOTED THAT THE CONTROL ROD MOVEMENT WAS "GRITTY." FURTHER EXAMINATION OF CARTRIDGE REVEALED SOME CORROSION ON THE CARTRIDGE SPRING. DOM FURTHER STATED THAT ANOMALY DID NOT REOCCUR AFTER THE PITCH TRIM CARTRIDGE WAS REMOVED AND REPLACED. SUSPECT PITCH TRIM CARTRIDGE WAS ORIGINAL INSTALLED ON THE ACFT.

2009FA0000698	CIRRUS	CONT	SCREW	LOOSE
5/1/2009	SR22	IO550N	NAS514P4407P	ELEV TRIM ACT

IN CRUISE FLIGHT THE CFI EXPERIENCED ELEVATOR FLUTTER WHICH DECREASED AIR SPEEDS BELOW 140KTS. REPORTS THE COCKPIT WAS VIBRATING NOTICEABLY AND WHEN HE LOOKED BACK HE SAW THE ELEVATOR VIBRATING. INSP OF THE ELEVATOR SYS SHOWED NO DEFECTS EXCEPT FOR THE FACT THE ELEVATOR TRIM SERVO MOTOR WAS LOOSE ON ITS MOUNT. THE (4) EA NAS514P440-7 SCREWS WERE ALL LOOSE. WHEN THE ELEVATOR T/E WAS MOVED UP AND DOWN BY HAND, THE MOTOR ROCKED IN ITS MOUNT ENOUGH TO BE SEEN AND FELT. UPON INSPECTION OF THE MOUNT AND THE MOTOR FOR DAMAGE, AND REPLACEMENT OF THE SCREWS A TEST FLIGHT TO 175KT REVEALED NO FURTHER VIBRATION OR ELEVATOR FLUTTER. PROBABLE CAUSE IS SCREWS WERE NOT TORQUED AT ORIGINAL INSTALLATION, WHICH ALLOWED SLIGHT MOVEMENT TO OCCUR WHICH GREW OVER TIME. RECOMMENDATIONS TO PREVENT RECURRENCE IS TO INSPECT THE SERVO MOTOR FOR SECURITY AT EVERY SHEDULED INSP DUE TO THE POTENTIAL DANGER OF ELEVATOR FLUTTER IF LEFT UNDETECTED. (K)

CA090615007	CNDAIR	PWA	WINDOW	MISSING
6/11/2009	CL2156B11215	PW123	215330176	RT FUSELAGE

(CAN) ON JUNE 11TH, 2009 DURING A FIREFIGHTING MISSION IN ACRI (CS) A/C I-DPCN (2070) SUFFERED THE LOSS OF THE GLAZING WINDOW PN:215-33017-6 LOCATED ON THE RT SIDE OF THE FUSELAGE FS 265, W.L. 220 (REFER TO ATTACHMENT FIG 1 AND 2). FLIGHT CREW DID NOT NOTICE THE OCCURENCE AND COMPLETED THE MISSION, LANDING IN AIRPORT AT 20:00. ONCE IN BASE, LINE MX MECHANICS, DURING THE AFTER LANDING WALK AROUND, NOTICED THE DISCREPANCY AND PERFORMED CORRECTIVE ACTION.

CA090624003	CNDAIR	GE	QUICK DISCONNECT	LOOSE
6/23/2009	CL600*	CF348C5	H155006191001	NR 1 BRAKE UNIT

(CAN) AFTER LANDING, FLIGHT CREW REPORTED THAT ACFT REQUIRED A LOT OF PWR TO TAXI AND THE LT SIDE

BRAKES SEEMED TO BE DRAGGING. ONCE CLEAR OF RUNWAY THEY STOPPED ON TAXIWAY AND TWR CONFIRMED THAT THEIR NR 1 MAIN WHEEL WAS FLAT. MX WAS DISPATCHED TO ACFT AND FOUND:) NR 1 MAIN WHEEL HAD A LARGE FLAT SPOT AND HOLE IN IT INDICATIVE OF LANDING WITH A LOCKED BRAKE, NR 1 BRAKE QUICK DISCONNECT FITTING WAS LOOSE (IT CAME OFF WITH ONLY HALF TURN). LOOSE FITTING ALLOWED HYD PRESSURE TO BE TRAPPED IN BRAKE CAUSING IT TO REMAIN LOCKED ON LANDING. QUICK DISCONNECT FITTING (PN H155006-191-001, IPC 32-11-35, FIG. 1-180) WAS TIGHTENED AND LOCKED, BOTH MAIN WHEELS WERE REPLACED AND THE ACFT RETURNED TO SERVICE. THE AME THAT COMPLETED THIS WORK MENTIONED THAT HE HAS SEEN THIS ISSUE MORE THAN ONCE, WHERE THE QUICK DISCONNECT FITTING IS LOOSE OR IN ONE CASE COMPLETELY OFF (WHICH CAUSED THE BRAKE TO NOT WORK AT ALL). IT APPEARS THAT THIS FITTING IS SUSCEPTIBLE TO BACKING OFF IF IT IS NOT CORRECTLY LOCKED.

CA090623001	CNDAIR	GE	HINGE	WORN
6/22/2009	CL600*	CF348C5	BA690951031	

(CAN) DURING TRANSIT CHECK IT WAS NOTED THAT THE FLOATATION VALVE WAS MISSING. INVESTIGATION FOUND THE VALVE RELOCATED AMONG THE ELEVATOR CABLES. IT WAS FOUND TO HAVE WORN THROUGH ITS PIANO HINGE. PIANO HINGE WAS STILL ATTACHED TO MOUNTING SIDE OF THE HINGE. INSP C/OUT AND FLOATATION VALVE REPLACED AND ACFT RETURN TO SERVICE.

CA090630001	CNDAIR	GE	HINGE	CRACKED
6/27/2009	CL600*	CF348C5	BA690951031	VALVE

(CAN) DURING ROUTINE MX A SPECIAL INSP OF FLOTATION VALVE (PN BA690-95100-1, IPC 21-32-02, FIG 1-5) WAS CALLED UP IAW TASK RJ9-21-32-02-DVI-801-FCD. HINGE FOR FLOATATION VALVE WAS FOUND CRACKED DURING THIS INSP. HINGE WAS REPLACED IAW TASK RJ9-21-32-02-RP-801-0. THIS SPECIAL INSP WAS CALLED UP DUE TO FLOATATION VALVE HAVING FALLEN COMPLETELY OFF ON ANOTHER ACFT IN FLEET. ALL THE FLEET HAVE NOW BEEN INSPECTED AND THIS IS THE ONLY OTHER OCCURRENCE OF A DAMAGED FLOATATION VALVE FOUND AT THIS TIME.

CA090614001	CNDAIR	GE	UNKNOWN	SMOKE
6/12/2009	CL6002B16	CF343B		COCKPIT

(CAN) AFTER TAKEOFF ON RUNWAY 06R AT APPROX 500 FEET AGL BLUE SMOKE WAS OBSERVED COMING OUT BETWEEN GLARESHIELD AND WINDSHIELD CTR POST. ACRID ODOR. ELECTRICAL IN NATURE. EMERGENCY DECLARED AND IMMEDIATE RETURN REQUESTED TO ATC. LANDING WAS PERFORMED ON 24L AND EVACUATION CARRIED OUT ON TAXIWAY A2. ACFT IS ACTUALLY IN QUARANTINE, INVESTIGATION FOR ROOT CAUSE STILL ON GOING AT THE MOMENT, NCR C309057198 RAISED FOR TROUBLESHOOT AND REPAIR. WAITING FOR SYS ENGINEERING DIRECTIVES.

CA090618013	CNDAIR	FLEX DRIVE	BROKEN
5/5/2009	CL6002B19	1104SD10040	TE FLAPS

(CAN) AFTER LANDING ROLL OUT UPON RETRACTING THE FLAPS, RECEIVED "FLAPS FAIL" (C) MESSAGE. INVESTIGATION REVEALED THE RT NR 4 FLEX SHAFT WAS BROKEN. THE FLEX SHAFT ASSY WAS REMOVED AND REPLACED. AS PRECAUTION OPERATOR REMOVED AND REPLACED ALL 8 ACTUATORS AND ALL FLEX SHAFTS.

CA090618014	CNDAIR	UPLOCK	MALFUNCTIONED
6/16/2009	CL6002B19	17051101	LT MLG

(CAN) GEAR DISAGREE AFTER TAKEOFF, RED DASHES ON LT MLG INDICATION. ACFT RETURNED TO DEPARTURE AND LANDED WITHOUT FURTHER INCIDENT. MX REMOVED AND REPLACED LT MLG UPLOCK IAW AMM 32-32-05 AND OPS CHECKED. NO FURTHER DEFECTS NOTED. ACFT RETURNED TO SERVICE.

CA090618015	CNDAIR	PRIORITY VALVE	FAILED
6/12/2009	CL6002B19	4622	NLG

(CAN) GEAR DISAGREE MSG AFTER TAKEOFF. NOSE GEAR WOULD NOT COME UP. THE ACFT RETURNED TO DEPARTURE AND LANDED WITHOUT FURTHER INCIDENT. MX INSP THE NLG AND REMOVED AND REPLACED THE NLG PRIORITY VALVE. OPS CHECKED CARRIED OUT AND NO FURTHER DEFECTS NOTED. ACFT RETURNED TO SERVICE.

CA090619005	CNDAIR	GE	UPLOCK	MALFUNCTIONED
6/11/2009	CL6002B19	CF343A1	16600101	NLG

(CAN) WHEN SELECTING GEAR DOWN ON APPROACH GOT A DISAGREE AND CANCELLED HORN, THEN HERD A CLUNK, THEN GEAR (NOSE DOOR AND GEAR RED) UNSAFE THEN GEAR WENT FULLY DOWN WITH 3 GREEN. MAIN NORMALLY AND NOSE 1 MIN LONGER TO GO DOWN. AFTER MX INVESTIGATION, FOUND THAT THE HOCK OF THE NOSE LANDING GEAR UPLOCK DON`T GO IN THE FULL OPEN POSITION. NLG UPLOCK REPLACED, SYS TEST SERVICEABLE, ACFT RETURN TO SERVICE.

CA090615003	CNDAIR	GE	MECHANISM	JAMMED
6/11/2009	CL6002B19	CF343A1		PAX DOOR HANDLE

(CAN) CREW REPORTED MAIN PASSENGER DOOR CAUTION DECENDING THROUGH FL11000 ON APPROACH. F/A REPORTED ON TOUCHDOWN MCD COMPLETELY UNLATCHED AND REQUIRED HIM TO HOLD TO PREVENT OPENING. ACFT FERRIED TO FOR REPAIR WITH OUTER HANDLE TAPED DOWN. ENGINEERS FOUND INNER-HANDLE RETENTION MECHANISM JAMMED IN THE COMPRESSED POSITION. THEY DISSASEMBLED,CLEANED,LUBED AND REASSEMBLED THE MECHANISM.

CA090729003	CNDAIR	GE	BPSU	MALFUNCTIONED
7/25/2009	CL6002B19	CF343A1	855D1009	TE FLAPS

(CAN) ON SHORT FINAL, FLT CREW RECEIVED A FLAP FAILURE CAUTION MESSAGE WITH THE FLAPS TRAVEL STOPPING AT30 DEGREES. ACFT HAD POST MOD ACTUATORS INSTALLED AT THE LAST FLAP FAIL EVENT, BACK AT FEB 08,2008. THE FECU (52B AND 25C)CODES WERE RETRIEVED BY MAINT. IT WAS DECIDED TO CHANGE BOTH BPSU TO THE LATEST POST MOD P/N 855D100-13.THIS ACTION IS RECORDED IN TRAX UNDER DEFECT 860158 W.O 200857 NR-0001.

CA090721001	CNDAIR	GE	RELAY	FAILED
7/19/2009	CL6002B19	CF343A1	VS643	AC BUSS

(CAN) WHILE INBOUND TO DESTINATION ACFT HAD A MOMENTARY AC BUS 1 ELECTRICAL PWR INTERUPTION. CREW RECEIVED LT WINDOW AND WINDSHEILD CAUTION MESSAGES. ALSO, LOST LT SIDE WALL LIGHTS AND CABIN EMERGENCY LIGHTS CAME ON. FAULTS CLEARED AFTER A FEW SECONDS WITH NO ACTION FROM THE CREW. ACFT LANDED WITHOUT FURTHER INCIDENT. TROUBLESHOOTING LED MX TO REPLACE THE K1XD RELAY P/N VS-643 IN JB6 IPC REF 24-01-06 FIG 1. OP CHECKS INCLUDING ENG RUNS COMPLETED AND SYS CHECKED SERVICEABLE.

CA090710006	CNDAIR	GE	FITTING	PLUGGED
7/8/2009	CL6002B19	CF343A1	600627991	COLLECTOR TANK

(CAN) COLLECTOR TANK IS HOUSED IN THE CTR FUEL TANK. WHEN DRAINING CTR FUEL TANK, IT WAS PROVEN THROUGH TROUBLESHOOTING THAT EVEN WHEN THE COLLECTOR TANK DRAIN (ITEM 235) WAS OBSTRUCTED BY FOD, YOU WILL STILL HAVE FUEL DRAINING FROM THE CTR FUEL TANK DRAIN BECAUSE THE COLLECTOR TANK DRAINS INTO A TEE FITTING THAT IS ALSO CONNECTED TO THE GRAVITY FEED LINE WHICH DRAINS OUT OF THE COLECTOR TANK UNDER WING FUEL DRAIN (ITEM 115) AS WELL. FOUND MORE FUEL IN THE COLLECTOR TANK AFTER THE CTR FUEL TANK WAS DRAINED. UPON FURTHER INVESTIGATION, METAL SWARF, PRC AND PAINT CHIPS WERE FOUND OBSTRUCTING THE COLLECTOR TANK DRAIN THAT IS HOUSED IN THE CTR TANK. THIS GIVES ONE A FALSE INDICATION THAT ALL FUEL IS DRAINED AND THERE IS NO FUEL IN THE COLLECTOR TANK AND CTR TANK. THE AME WAS PERFORMING TASK RJ2-28-900-750 WITH RIL NR 0586 WHEN DISCOVERED THIS DEFECT.

CA090723003	CNDAIR	GE	ELEMENT	DAMAGED
7/16/2009	CL6002B19	CF343B1	356124310	

(CAN) FLT CREW REPORTED AN ANTI ICE DUCT FAIL MSG ON EICAS ALONG WITH ANTI-ICE DUCT FAIL SWITCH LIGHT. THE SYNOPTIC PAGE ON EICAS SHOWS LT FUSELAGE DUCT IN RED. ACFT WAS NEVER IN ICING CONDITIONS AND RETURNED TO AND LANDED WITHOUT FURTHER INCIDENT. MX FOUND THE 14TH STAGE SENSING LOOP TO BE UNSERVICEABLE. LOOP REPLACED AND SYS OPS CHECKED SERVICEABLE. SENSING ELEMENT (FENWALL NOT IN THE DATABASE, MFG ENTERED FOR NOW) 35612-4-310 S/N: NOT APPLICABLE.

CA090724001	CNDAIR	GE	ACTUATOR	FAILED

7/21/2009	CL6002B19	CF343B1	83963	STAB TRIM

(CAN) INBOUND OF LANDING DESTINATION, CREW RECEIVED A "MACH TRIM" AND "STAB TRIM" CAUTION MESSAGE. ABNORMAL PROCEDURES, DESCRIBED IN THE QUICK REFERENCE HANDBOOK (QRH), WERE EXECUTED AND THE ACFT LANDED WITHOUT FURTHER INCIDENT. BOTH STAB CHANNELS COULD BE ENGAGED BUT THE SYS WAS FAULTING AS SOON AS A TRIM SWITCH WAS PRESSED. AN AOG MX TEAM FLEW TO THE OUTSTATION AND A BITE TEST WAS PERFORMED AT THE HORIZ STAB TRIM CONTROL UNIT (HSTCU) INDICATING A FAULTY HORIZONTAL STABILIZER TRIM ACTUATOR (HSTA). THE HSTA WAS REPLACED AND THE ACFT RETURNED INTO SERVICE. THE UNIT IS BEING SHIPPED TO AN OVERHAUL SHOP.

CA090722001	CNDAIR	GE	ACTUATOR	FAULTED
7/20/2009	CL6002B19	CF343B1		HORIZONTAL STAB

(CAN) ON CLIMB, THE CREW RECEIVED A "MACH TRIM" AND "STAB TRIM" CAUTION MESSAGE. ABNORMAL PROCEDURE DESCRIBED IN (QRH) WAS COMPLETED AND DECISION WAS MADE TO TURN BACK. ACFT LANDED WITHOUT FURTHER INCIDENT. NEITHER OF HORIZ STAB TRIM CHANNEL 1 OR 2 COULD BE ENGAGED, SYS WAS FAILING FEW SECONDS AFTER SELECTED ON. HORIZ STAB TRIM ACTUATOR (HSTA) WAS FOUND AT FAULT, IT COULD NOT BE DETERMINED IF IT WAS BECAUSE OF AN INTERNAL, MECHANICAL OR ELECTRICAL FAILURE. HSTA WAS REPLACED AND ACFT RETURNED INTO SERVICE. UNIT IS BEING SHIPPED TO AN O/H SHOP.

CA090722009	CNDAIR	GE	CABLE	BROKEN
7/18/2009	CL6002B19	CF343B1	601R3181273	PAX DOOR

(CAN) MX WHILE COMPLETING TASK RJ252-11-21-OP-801-FCD, "PAX DOOR INNER HANDLE UNLOCK FORCE CHECK" DISCOVERED DOOR COULD NOT BE OPENED FROM INSIDE. TROUBLSHOOTING DISCOVERED ICE BREAKER CABLE PN 601R318127-3 (IPC 52-11-15, FIG 01A, ITEM 085) BROKEN/SEVERED. CABLE WAS REPLACED AND DOOR FUNCTION CHECKED SERVICEABLE. MX NOTED THAT WHERE CABLE EXITS THE END OF THE SWAGED FITTING IT IS REQUIRED TO BEND 90 DEGREES. THIS CAUSED THE CABLE TO EVENTUALLY BREAK AT THAT LOCATION. LENGHTH OF END OF SWAGED FITTING APPEARS TO BE TOO LONG CAUSING THE CABLE TO BE STRESSED AT THIS LOCATION. IT ALSO CAUSED CABLE TO RUB AGAINST PART OF INTERIOR DOOR STRUCTURE.

CA090722010	CNDAIR	GE	CABLE	FRAYED
7/20/2009	CL6002B19	CF343B1	601R3181273	PAX DOOR

(CAN) WHILE COMPLETING TASK RJ252-11-21-OP-801-FCD "PAX DOOR INNER HANDLE UNLOCK FORCE CHECK" DISCOVERED DOOR ICE BREAKER CABLE PN 601R318127-3 (IPC 52-11-15, FIG 01A, ITEM 085) BADLY FRAYED/ALMOST SEVERED. MX HAD FOUND A BROKEN CABLE ON ANOTHER ACFT A FEW DAYS EARLIER, CABLE AND AS A PRECAUTION DECIDED TO CHECK THE CABLE ON THIS ACFT. CABLE WAS REPLACED AND DOOR FUNCTION CHECKED SERVICEABLE. MX NOTED THAT WHERE CABLE EXITS, END OF THE SWAGED FITTING IT IS REQUIRED TO BEND 90 DEGREES. THIS CAUSED THE CABLE TO EVENTUALLY BREAK AT THAT LOCATION. LENGHTH OF THE END OF SWAGED FITTING APPEARS TO BE TOO LONG CAUSING THE CABLE TO BE STRESSED AT THIS LOCATION. IT ALSO CAUSED CABLE TO RUB AGAINST PART OF INTERIOR DOOR STRUCTURE.

CA090723001	CNDAIR	GE	STABILIZER	STUCK
7/7/2009	CL6002B19	CF343B1		

(CAN) STAB/MACH TRIM CAUTION MESSAGE. DISCONNECTED AUTOPILOT AFTER STAB MACH TRIM MESSAGE AND APPLIED QRH. CREW INDICATED THAT TRIM WAS STUCK AND WOULD NOT MOVE WITH QRH PROCEDURES. LANDED ACFT WITH FLAPS 20 NORMALLY.EMERGENCY SERVICES NOTIFED. NO ADDITIONAL DETAILS AT THE PRESENT TIME.

CA090728005	CNDAIR	GE	LOCK	LOOSE
7/22/2009	CL6002B19	CF343B1	3056T13P01	JET PIPE

(CAN) PILOTS REPORTED LT ENG JET PIPE OVERHEAT WARNING ACTIVATED DURING CRUISE FOR APPROX 20 SECONDS THEN WENT AWAY BY ITSELF. ACFT RETURNED TO BASE. MX INVESTIGATED AND FOUND A PLUG/PLATE AT APPROX 11 0`CLOCK WITH 1 NUT FOUND IN BOTTOM OF COWL AND THE OTHER NUT LOOSE ABOUT 4 TURNS. NOTE: THIS PLUG IS LOCATED AT SAME ENG STA AS THE ITT PROBES. LOCKING TAB PN 3056T13P01, NUT PN MS9357-10 IT IS UNCLEAR WHEATHER HOT GASES ESCAPING FROM THE LOOSE PLATE CAUSED JET PIPE OVERHEAT WARNING OR THE NUT FALLING DOWN AND CONTACTING THE TERMINAL LUGS OF THE SENSE ELEMENTS. NO RECURRENCE OF FAULT SINCE PLUG/PLATE REINSTALLED.

CA090703004	CNDAIR	GE	ENGINE	INOPERATIVE
7/2/2009	CL6002B19	CF343B1	CF343B1	LEFT

(CAN) AT FL 250, LOSS OF PWR ON LT ENGINE. LT ENGINE THROTTLE RETARDED TO IDLE. UNABLE TO GET CLIMB THRUST ON LT ENGINE. LT ENGINE THROTTLE RETARDED TO IDLE. FLIGHT ABORTED AND RETURN TO ORIGIN AIRPORT. PROBLEM TO REACH TOP ON GROUND TESTINGS. REMOVED LT ENGINE MFP AND MFC. LT ENGINE MFP AND MFC SENT TO THE SHOP. LT ENGINE IS BEING REPLACED DUE TO M50 PARTICLES FOUND (THIS ENGINE WAS ON WATCH). THIS IS NOT BELIEVED TO BE THE CAUSE OF THE POWER LOSS. NB: STILL MISSING INFORMATION AT THE PRESENT TIME.

CA090703005	CNDAIR	GE	FCU	MALFUNCTIONED
6/28/2009	CL6002B19	CF343B1	601R930303	TE FLAPS

(CAN) "ENROUTE DECENT AT 300 KTS, FLAPS WERE DEPLOYING/RETRACTING BETWEEN 0-20 DEGREES ERRATICALLY WITH FLAP SELECTOR POSITION AT 0 DEGREES. RECEIVED INTERMITTENT "HYD PUMP 2B" CAUTION MESSAGE. RECEIVED "FLAPS DEGRADED" STATUS MESSAGE. SLOWING THROUGH 220 KTS FLAPS DEPLOYED TO 45 DEGREES AND RETRACTED. RAN QRH FOR HYD PUMP 2B CAUTION. PROBLEM PERSISTED. SELECTED FLAPS 8, PROBLEM DISCONTINUED". FSR COMMENTS: HAVE TRIED TO CONFIRM WHETHER THIS WAS A TRUE FLAP MOVEMENT EVENT OR AN INDICATION EVENT. HAVE NOT BEEN ABLE TO CONFIRM EITHER WAY. RAISING THE SER BASED ON THE WRITE UP IN THE ACFT MX LOG ATTACHED BASED ON INFORMATION AVAILABLE, WRITE UP AND DISCUSSION WITH ISE. SUSPECT EVENT MAY BE RESULT OF FLAP POSITION TRANSMITTER AS ADDRESS IN SL 27-097 (ATTACHED). HOWEVER OPERATOR HAS REMOVED AND REPLACED (FECU) PN: 860D100-18 ABCD SN: 1350. WILL MONITOR THIS AND PROVIDE UPDATES AS THEY BECOME AVAILABLE. "INSPECTED FLAP SYS AND FOUND FECU TO BE FAULTY INDICATING MULTIPLE FECU FAILS IN FAULT HISTORY. REPLACED FECU IAW AMM 27-51-05. OPS CHECKED GOOD. ALSO OPS CHECKED HYD PUMP 2B WITH FLAPS DOWN AT 8 DEGREES PUMP COMES ON. RETRACTED PUMP GOES OFF. OPS CHECKED GOOD OF SYS 2B PUMP. PREFORMED FLAP/LANDING GEAR OVERSPEED INSPECTION". UPDATE: 07-01-09 SPOKE WITH CAPTAIN (20848) THAT FLEW ACFT. CAPTAIN STATED THE FLAP INDICATION ON ED1 EICAS SHOWED VERY SLOW DEPLOYMENT OF FLAPS IN CLIMB AROUND 30,000 FT. BUT FLAPS DID NOT ACTUALLY DEPLOY IT WAS INDICATION ONLY. LT FLAP POSITION TRANSMITTER UNIT WAS REMOVED AND REPLACED. FLAP POSITION TRANSMITTER UNIT 601R93030-3 4906898 REPAIRED.

CA090708008	CNDAIR	GE	INDICATOR	MALFUNCTIONED
7/6/2009	CL6002B19	CF343B1	855D10013	BRAKE POSITION

(CAN) CREW SELECTED FLAP LEVER TO 8 DEGREES AND RECEIVED A FLAP FAIL CAUTION MESSAGE. MULTIFUNCTION DISPLAY (MFD) WAS INDICATING FLAP AT ZERO DEGREE. THERE WAS NO EMERGENCY DECLARED AND ACFT LANDED WITHOUT FURTHER INCIDENT. FLAP ELECTRONIC CONTROL UNIT (FECU) FAULT CODES WERE RETRIEVED AND ANALYZED. THE LT BPSU WAS REPLACED, ADJUSTED AND TESTED SERVICEABLE.

CA090616001	CNDAIR	GE	LINE	CORRODED
6/15/2009	CL6002B19	CF343B1	C68C32	APU FUEL

(CAN) APU FEED LINE FAILED LEAK TEST & SHROUD REMOVED . FEED LINE FOUND HEAVILY CORRODED & LINE BROKEN DUE TO CORROSION . INSP AT FIRST REVEALED A DEPOSIT AT BOTTOM OF SHROUD. SHROUD ALSO CORRODED IN VARIOUS AREAS. PARTS HAVE BEEN REPLACED. SHROUD AND FUEL FEED LINE C68C32 AND 601R62662 AND NR 8722,5 THE PN C68C32 IS PROVIDED BY ONE GROUP. THE PN 601R62662-5 IS A MFG PART.

CA090616002	CNDAIR	GE	APU	SMOKE
5/19/2009	CL6002B19	CF343B1	38004883	

(CAN) FLT NR 2455, DURING TAXI OUT, FLT CREW REPORTED SMOKE IN THE CABIN WHEN THE APU BLEED WAS SELECTED. ACFT RETURNED TO GATE. MX REMOVED AND REPLACED APU ASSY IAW AMM.

CA090624001	CNDAIR	GE	APU	INOPERATIVE
6/19/2009	CL6002B19	CF343B1	36150RJ	

(CAN) AT COMPLETION OF SECOND ENG START, GROUND CREW REPORTED A "POPPING" SOUND AND SMOKE COMING FROM APU EXHAUST. FLIGHT CREW OBSERVED APU SHUTTING DOWN AND APU DOOR CLOSING. NO SMOKE OR UNUSUAL ODORS WERE DETECTED IN CABIN OR COCKPIT. UPON FURTHER INVESTIGATION, IT WAS

FOUND THAT APU WOULD NOT ROTATE. OIL SYS WAS NOT CONTAMINATED, NO METAL WAS FOUND ON CHIP PLUG, OIL FILTER WAS NOT INDICATING A BYPASS CONDITION. APU WAS REMOVED AND IT APPEARS THAT THE COMPRESSOR HAS SUFFERED A FAILURE. NO EVIDENCE OF FAILURE NOTED ON THE TURBINE WHEEL. APU TT 3053, CYC 5450. APU IS BEING SENT TO MFG FOR REPAIR.)

CA090624004	CNDAIR	GE	THERMAL SWITCH	FAILED
6/24/2009	CL6002B19	CF343B1	601R593201	WING

(CAN) OPS CHECK OF WING DEICE STANDBY THERMAL SWITCHES WAS CALLED UP DURING A SCHEDULED "C" CHECK INSP. MOST OF THERMAL SWITCHES FAILED THE OPS CHECK. NEW SWITCHES WERE DRAWN FROM STOCK AND RETESTED PRIOR TO INSTALLATION. MOST OF THESE NEW SWITCHES TESTED WERE REGISTERING AROUND 200 DEGREES CELCIUS. CORRECT PARAMETERS SHOULD BE 218+- 8 DEGREES CELCIUS. BATCH NR ON PO`S WERE 1501528 AND 1501226.

CA090629005	CNDAIR	GE	WHEEL	CRACKED
6/28/2009	CL6002B19	CF343B1	50105711	MLG

(CAN) ON LANDING NR 1 MAIN WHEEL ASSY (PN 5010571-1, SN DEC98-0302), OUTER FLANGE (PN 5010581, IPC 32-41-00, FIG 5-40) DEPARTED WHEEL HUB ASSY FOLLOWED BY TIRE WHICH SHREDDED TO 2 LARGE PIECES. CREW DID NOT REALIZE THEY HAD LOST A TIRE UNTIL THE FOD WAS REPORTED ON RUNWAY BY THE NEXT LANDING ACFT. MX INSPECTED ACFT AND CARRIED OUT A BURST TIRE SPECIAL INSP WITH NO FAULTS. FOUND OTHER THAN THE DAMAGED WHEEL ASSY. DAMAGED WHEEL ASSY AND IT'S AXLE MATE WERE REPLACED AND THE ACFT RETURNED TO SERVICE. UPON INSP OF REMAINS OF THE WHEEL ASSY IT WAS NOTED THAT THE LOCKING RING (PN 5013230, IPC 32-41-00, FIG 5-35B) WAS STILL IN PLACE ON THE WHEEL HUB ASSY. OUTER FLANGE (PN 5010581, IPC 32-41-00, FIG 5-40) WAS FOUND ON THE RUNWAY AND WAS FOUND CRACKED. TIRE CARCASS WAS ALSO FOUND ON THE RUNWAY. WHEEL ASSY HAD 1111 HOURS TSO AND 875 CYCLES SINCE LAST O/H. WHEEL ASSY HAS BEEN REPAIRED (SHOP VISIT) TWICE SINCE THE LAST O/H. WHEEL ASSY HAD 173 HOURS AND 136 CYCLES SINCE THE LAST REPAIR (SHOP VISIT). OUTER FLANGE IS ULTRASONICALLY NDT INSP AT EVERY SHOP VISIT. LAST LPI OF THE OUTER FLANGE WAS DONE AT THE LAST O/H.

CA090624005	CNDAIR	GE	WINDSHIELD	CRACKED
6/9/2009	CL6002D24	CF348C5	NP13932113	COCKPIT

(CAN) AT FL 170 - 250/290 KIAS, RT WINDSHIELD CRACKED. FLIGHT DIVERTED. MX REPLACED RT WINDSHIELD. WINDSHIELD (NP 139321-13 06201H6258) CRACKED, PART NOT SEEN.

CA090727006	CNDAIR	GE	LINE	BROKEN
7/23/2009	CL6002D24	CF348C5	S70477	CREW O2 SERVICE

(CAN) AFTER IN FLIGHT TEST OF ACFT ADG MX NOTICED AN AUDIBLE HISS COMING FROM THE CREW OXYGEN SERVICE POINT. UPON FURTHER INVESTIGATION IT WAS DISCOVERED THAT THE CAPILARY LINE (P/N S7047-7) OFF THE BACK OF THE CREW OXYGEN SERVICE POINT GAUGE WAS FRACTURED AT THE FWD BULKHEAD END OF THE LINE. SUSPECT VIBRATION FROM THE OPERATION OF THE ADG CAUSED THE LINE TO FRACTURE.

CA090723002	CNDAIR	GE	AHRS	UNSERVICEABLE
7/22/2009	CL6002D24	CF348C5	6229336400	NR 2

(CAN) FLIGHT ABORTED - LOSS OF AHRS NR 2 INFORMATION ON CLIMB. FLT IB 8712 MAD/LYS CLIMBING TO FL 350: FOLLOWING EICAS/PFD MESSAGES APPEARED: PITCH FEEL FAULT (STATUS) YD 2 INOP (STATUS) PFD: FD-ATT-MAG RED FLAG NR 2 MFD: MAG RED FLAG NR 2 A/P DISCONNECT ATTITUDE, FD, MAG IN RED. C/B ATT HDG NR 2 CBP-2 K4 POPPED OUT. RESET ONCE = SAME. FLIGHT ABORTED, RETURN TO ORIGIN AIRPORT. MX REPLACED AHRU NR 2, AHRU 622-9336-400 27JNB U/S NOT KNOWN/INTERNAL.

CA090720005	CNDAIR	GE	CONNECTOR	BURNED
7/14/2009	CL6002D24	CF348C5		GALLEY

(CAN) CONNECTOR PLUG J114, P114 BEHIND THE GALLEY HEATER PANEL ON THE G1 GALLEY WAS FOUND SMOKING AND BADLY BURNED. ALSO, WIRE BUNDLE WAS BADLY BURNED AS THE TERMINAL BLOCKS, ETC ALSO STARTED TO BURN THE INSULATION ON THE CEILING. AIRLINE IS IN THE PROCESS OF PULLING THE G1 GALLEY TO IDENTIFY TOTAL DAMAGE AND ALSO TO TRY TO FIND THE ROOT CAUSE. NO ADDITIONAL DETAILS AVAILABLE AT THE PRESENT TIME.

CA090728002	CNDAIR	GE	HEATER	OVERHEATED
7/27/2009	CL604	CF343B	307402	FLOORMAT

(CAN) OPERATOR REPORTED AFTER A 4 HR FLIGHT THAT SUITCASES STORED IN BAGGAGE COMPARTMENT ON THE FLOOR JUST INSIDE CARGO NET (RT SIDE) ARE TOO HOT TO TOUCH. ONE SUITCASE HAS SUFFERED HEAT DAMAGE (DAMAGE TO THE CREW SUITCASE HANDLE). MX WIRING VERIFICATION DONE, NO ANOMALY NOTED. BAGGAGE BAY FLOORMAT HEATER SYS TESTED IAW SMM, NO ANOMALY NOTED. BAGGAGE BAY FLOORMAT HEATERS HAVE BEEN DEACTIVATED (GALLEY TOUCH SCREEN CB PULLED) AS A PRECAUTIONARY. AFTER THAT, THE FLOORMAT HEATERS (3X) HAS BEEN REMOVED AND SENT TO MFG FOR INVESTIGATION. OPERATOR FLOORMAT HEATERS HAVE BEEN BENCH TESTED BY MFG, NO ANOMALY NOTED. MFG RELEASED ADVISORY WIRE AW600-21-2323 (JULY 22, 2009) TO THEIR OPERATOR ADVISING ABOUT THIS POSSIBLE CONDITION. AFTER INVESTIGATION, A NEW DESIGN HAS BEEN INTRODUCED TO THE (COMPLETION) LINE, NEW DESIGN CONSIST OF REMOVING 2 OF THE 3 FLOORMAT HEATERS. NEW DESIGN IS ALSO AVAILABLE TO IN-SERVICE ACFT VIA A SERVICE REQUEST FOR PRODUCT SUPPORT ACTION (SRPSA) AS INDICATED IN ADVISORY WIRE.

CA090716001	CNDAIR	GE	BEARING	FAILED
6/23/2009	CL604	CF343B		APU COMPRESSOR

(CAN) THE APU WAS STARTED IN FLIGHT AND ACFT LANDED. WHEN IT GOT TO FBO SMOKE STARTED TO COME INTO CABIN. IT WAS NOT BAD ENOUGH TO WARRANT AN EMERGENCY EVACUATION AND AS APU SHUT ITSELF DOWN IT DID NOT GET ANY WORSE. IT WAS OBSERVED BY FBO THAT AT THE SAME TIME FLAMES AND SMOKE WERE COMING FROM THE APU INLET. CUSTOMER HAD A LOCAL TECH CHECK AROUND AND THERE APPEARS TO BE NO DAMAGE TO INLET OR THE APU. AN ATTEMPT WAS MADE TO START THE APU BUT IT ONLY WENT TO 14 PERCENT WITH ERRATIC EGT. 25 JUNE THE APU HAS BEEN REMOVED AND TURBINE CAN BE MOVED UP AND DOWN BY ABOUT 0.120"-0.200". SUSPECT THE BRG HAS SELF DESTRUCTED. APU REPLACED.

CA090629006	CNDAIR	GE	APU	FAILED
6/23/2009	CL604	CF343B	38008041	

(CAN) WHILE THE ACFT WAS TAXIING TO FBO RAMP, SMOKE AND FLAMES WERE COMING OUT OF THE APU INLET. APU WAS SHUTDOWN. APU ENCLOSER AND INTAKE WAS INSPECTED, CHECKED OIL LEVEL AND CHIP DETECTOR. FOUND TO BE OK. TRIED TO START THE APU, IT WOULD ACCELERATE TO 14 PERCENT AND EGT RISING ANORMALLY. APU MANUAL START ABORTED. APU WAS DEACTIVATED. APU WAS REMOVED AND FOUND THAT TURBINE WAS NOT TURNING, THERE WAS ALSO SOME SIDE PLAY AND DEBRIS IN COMPRESSOR INLET. NOTE THAT THE APU HAD PREVIOUSLY HAD A LOW OIL PRESSURE SHUTDOWN AND AT THAT TIME AN OIL FILTER WAS SENT TO MFG LAB AND THE OIL WAS CHANGED.

CA090722007	CURTIS	PWA	FITTING	CRACKED
7/22/2009	C46DCURTIS	R280051M3	201305756	ELEVATOR

(CAN) DURING A DAILY INSP OF ELEVATOR, AD 58-17-02, VEE TAB INBD FITTING WAS FOUND TO BE CRACKED. CAUSE OF CRACK IS DETERMINED TO BE OVERSTRESS AT SOME POINT OF EITHER OVERTIGHTENING OR SIDE LOADING WITHOUT SUPPORT. THIS EVENTUALLY CAUSED THE SMALL CRACK TO PROPEGATE ENOUGH TO APPEAR IN THE PAINT. PART WAS REPLACED AND ACFT RELEASED BACK TO SERVICE.

CA090722005	CVAC	ALLSN	AMPLIFIER	MALFUNCTIONED
7/16/2009	340CVAC	501D13D	4002603	

(CAN) PILOTS WENT TO DOWNSHIFT ENGINES AFTER LANDING AND NR 2 ENG RPM DECAYED BELOW 10000 RPM SO "E" HANDLE PULLED. ENG RESTART ATTEMPTED AFTER FUELING AT 5000 RPM TIT ONLY REACHED 450 DEGREES WITH TD SYS IN CONTROLLED, SO START ABORTED. ENG STARTED WITH TD SYS IN "NULL" ENG START NORMAL. TD SYS TAKING TOO MUCH FUEL.

CA090622015	CVAC	ALLSN	GENERATOR	INOPERATIVE
6/20/2009	340CVAC	501D22	976J2525	NR 1

(CAN) ON APPROACH, PILOT NOTICED NR 1 AC GENERATOR INOP LIGHT ON AND VOLTMETER INDICATED 0 VOLTS. CIRCUIT METERED BACK THROUGH VOLTAGE REGULATOR AND FOUND OPEN FIELD. GENERATOR REPLACED.

CA090617008	CVAC	ALLSN	SELECTOR VALVE	INOPERATIVE

6/14/2009	340CVAC	501D22	20772	TE FLAPS

(CAN) PILOT UNABLE TO RETRACT FLAPS THROUGH NORMAL ELECTRIC FLAP CONTROL SWITCH. FLAPS RETRACTED USING MANUAL EMERGENCY FLAP SELECTOR. TROUBLESHOOTING DETERMINED ELECTRIC SOLENOID WAS WORKING BUT UNABLE TO POSITION VALVE INSIDE SELECTOR TO PORT PRESSURE TO FLAP MOTORS.

CA090623002	CVAC	ALLSN	LEVER	STICKING
6/17/2009	440	501D13	3408500004	MLG

(CAN) ON FLIGHT, DURING APPROACH AT FLIGHT LEVEL 2000 NO GREEN LIGHTS (3) ON GEAR DOWN ACTION AND NO GEAR UNSAFE INDICATION. 3 GEARS WERE DOWN AND 3 GREEN LIGHTS NOT ILLUMINATED, CHECK SUPPLEMENT COMPLETED AND GEARS (3) CONFIRMED DOWN VISUALLY, NO FLAPS AND NO THROTTLES HORN SOUNDING, LANDING COMPLETED UNEVENFULL. MX FOUND LOCKPIN PN 240-3150699 STICKING INSIDE THE LANDING GEAR LEVER HOUSING PN 340-8500004-9, CLEANED AND LUBRICATED LOCK PIN ASSY AND TESTED SYS SERVICEABLE.

CA090713004	CVAC	ALLSN	ENGINE	OVERTEMP
7/9/2009	440	501D13D		NR 1

(CAN) AS ACFT APPROACHED FIRE TO DROP LOAD, ENG NR 1 SURGE WAS NOTICED, FOLLOWED BY OVER TEMP CONDITION, POWER LEVER WAS RETARDED. AS ACFT PASSED THROUGH SMOKE ENGINE OPS RETURNED TO NORMAL. ENG PRECAUTIONARY SHUTDOWN WAS DONE DUE TO OVER TEMP.

CA090615004	DHAV	PWA	VIKING	ATTACH FITTING	CRACKED
6/12/2009	DHC2MK3	PT6A27		C2TP187A	HORIZONTAL STAB

(CAN) DURING THE COMPLETION OF AD CF-1991-42R1, STAB ATTACH FITTING WAS FOUND CRACKED FROM UPPER MOUNTING HOLE TO EDGE OF FITTING, PART WAS REPLACED.

CA090622004	DHAV	PWA	TUBE FRAME	CRACKED
6/8/2009	DHC2MKI	R985AN1	C2FS3203A	FUSELAGE

(CAN) SYR INSP REQUREMENT - FOUND LARGE CRACK IN BIRD CAGE TUBULAR STRUCTURE.

CA090625001	DHAV	PWA	DHAV	OIL CAP	LOOSE
6/21/2009	DHC2MKI	R985AN14B		C2P383	OIL TANK

(CAN) PILOT NOTICED OIL SEEPING FROM AROUND OIL CAP AND FILLER NECK. OIL TANK VENT WAS INSPECTED WITH NO DEFECTS FOUND. ENG COMMPRESSION WAS TAKEN AND FOUND SATISFACTORY. OIL CAP WAS FOUND TO BE A LOOSE FIT. A NEW CAP GASKET WAS INSTALLED AND CAP WAS ADJUSTED FOR A TIGHTER FIT. ENG WAS GROUND RUN AND FOUND SATISFACTORY. OIL TANK MAY HAVE BEEN FILLED TO TOP OF NECK AND WITH A POOR SEALING CAP OIL WILL SEEP FROM TANK FILLER NECK.

CA090622008	DHAV	PWA	BLEED VALVE	INOPERATIVE
6/18/2009	DHC3	PT6A34	310082903	ENGINE

(CAN) AFTER 9.9 HRS IN ACFT, BLEED VALVE STARTED TO MAKE A HOOTING NOISE AND ALSO PRODUCED VIBRATIONS. ABOVE SYMPTOMS WERE ONLY SEEN ON POWER REDUCTIONS. BLEED VALVE WAS REPLACED WITH A SERVICEABLE UNIT WHICH CORRECTED THE DEFECT.

CA090622009	DHAV	PWA	BLEED VALVE	INOPERATIVE
6/18/2009	DHC3	PT6A34	310082903	ENGINE

(CAN) AFTER 3.7 HRS IN ACFT, BLEED VALVE STARTED TO MAKE A HOOTING NOISE AND ALSO PRODUCED VIBRATIONS. ABOVE SYMPTOMS WERE ONLY SEEN ON POWER REDUCTIONS. ORIGINAL BLEED VALVE, WHICH HAD TIME REMAINING ON IT WAS REINSTALLED AND THE PROBLEM WAS RESOVLED.

CA090707003	DHAV	PWA	BLEED VALVE	NOISY
7/6/2009	DHC3	PT6A34	310082903	ENGINE

(CAN) AFTER 382.2 HRS IN ACFT, BLEED VALVE STARTED TO MAKE A HOOTING NOISE AND ALSO PRODUCED

VIBRATIONS. ABOVE SYMPTOMS WERE ONLY SEEN ON PWR REDUCTIONS. THERE WAS A SERVICEABLE BLEED VALVE INSTALLED FROM ANOTHER ACFT AND PROBLEM WAS RESOLVED.

CA090611004	DHAV	WALTER	GEAR	FAILED
5/30/2009	DHC3	M601E11		STARTER GEN

(CAN) REAR CHIP DETECTIOR LIGHT ILLUMINATED 15 MINUTES PRIOR TO LANDING ACFT. METAL WAS FOUND IN REAR CHIP DETECTOR AND REAR CHIP DETECTOR SCREEN, ENGINE REMOVED FROM ACFT FOR REPAIR.

CA090703001	DHAV	PWA	BOLT	BROKEN
6/30/2009	DHC6100	PT6A27	AN620A	FLOATS

(CAN) HEARD A LOUD BANG IN FLIGHT AND PILOTS NOTICED MOVEMENT IN THE FLOATS, ACFT LANDED WITHOUT ANY PROBLEMS. (2) AN6-20A BOLTS HOLDING THE LUG-TIE ROD TO FUSELAGE WERE FOUND BROKEN. BOLTS WERE REPLACED AND FLOAT STRUTS AND SPREADER BARS AND ALL FLOAT ATTACH FITTINGS WERE INSPECTED SERVICEABLE.

CA090706006	DHAV	PWA	FEEDER CABLE	BURNED
5/20/2009	DHC6300	PT6A27	C6NF10381	GENERATOR

(CAN) LT ENG FAILED TO START, NO PWR TO START GENERATOR, WHEN LT INBD L/E WAS OPENED LUG FOR GENERATOR CABLE AT NACELLE FEED THRU WAS BURNED UP, CABLE WAS REPLACED AND ACFT RETURNED TO SERVICE. THIS CONNECTION WAS LAST SECURED WHEN WINGS WERE REINSTALLED DURING A RECENT VISIT FOR ACFT PAINTING.

CA090610002	DHAV	PWA	TRANSMITTER	MALFUNCTIONED
6/10/2009	DHC6300	PT6A27	39108703082	FUEL QUANTITY

(CAN) DURING INSTALLATION AND LEAK CHECK, FUEL WAS COLLECTING ON THE BASE PLATE. THE MOUNT BOLTS WERE SUBSEUENTLY TIGHTENED AND THE BASE WIPED DRY, WITHIN A MINUTE FUEL HAD AGAIN COLLECTED ON THE BASE PLATE CAUSING A FUEL DRIP. THE FUEL SYSTEM HAD 120 LBS. ONLY FOR INITIAL LEAK TEST WHICH WAS REMOVED TO ENABLE CLOSER INSPECTION OF THE FUEL TRANSMITTER. UPON REMOVAL, INSPECTION REVEALED THE DATA PLACARD WAS QUITE LOOSE AND FUEL APPEARED TO BE UNDERNEATH THE PLACARD. THE PLACARD WAS REMOVED TO REVEAL A CORROSION PIT THAT EXTENDED THROUGH THE BASE PLATE INTO THE FUEL CELL. THIS FUEL QUANTITY TRANSMITTER WAS JUST BACK FROM BENCH TEST AND INSPECTION. THE COMPONENT SHOP HAS BEEN ADVISED OF THIS DIFFICULTY. (TC# 20090610002)

CA090619011	DHAV	PWA	FUEL CELL	LEAKING
6/19/2009	DHC6300	PT6A27	C6SC10583	NR 8

(CAN) A REPAIRED FUEL CELL WAS INSTALLED IN NR 8 POSITION DURING FUEL SYS BUILD-UP. WHEN SYS WAS FILLED WITH FUEL AND LEAK CHECKED A SMALL PERSISTANT LEAK DEVELOPED. CELL WAS REMOVED AND INSPECTED AS WELL AS ATTACHING COMPONENTS AND SYS WAS REASSEMBLED, WHEN NO OBVIOUS SIGNS OF LEAKAGE COULD BE DETERMINED. SYS WAS AGAIN FILLED AND LEAK CHECKED, PERSISTANT LEAK REAPPEARED. CELL WAS REMOVED AND PRESSURE CHECKED. UNDER A SMALL PRESSURE LOAD APPROX 3-4 PSI WITH A SOAP MIXTURE APPLIED TO CELL SURFACE A BLISTERED AREA ON CELL BOTTOM APPEARED. EXAMINATION OF CELL INTERIOR REVEALED AN AREA WHERE THE RUBBER MATERIAL WAS MISSING AND THE INNER LINER OF CELL WAS EXPOSED. FUEL CELL WILL BE HELD FOR REQUIRED PERIOD.

CA090622018	DHAV	PWA	CYLINDER	CRACKED
6/22/2009	DHC6300	PT6A27	B18032	PROPELLER

(CAN) CYL WAS MAGNETIC PARTICLE INSP DURING STANDARD O/H PROCEDURES. NO DEFECTS WERE NOTED. CYL SENT FOR RECHROMING IAW SRM 202A VOLUME 10. OLD CHROME WAS STRIPPED AND CYL MAG PARTICLE INSP IN PREP FOR NEW CHROME. CRACK DETECTED AT THIS TIME.

CA090714006	DHAV	PWC	MOUNT	CORRODED
7/12/2009	DHC8*	PW150A	9604208	ENGINE

(CAN) UPON ENG CHANGE AND GOING THROUGH THE INSP OF ALL PARTS THAT WILL BE RE-INSTALLED WITH NEW ENG IT WAS DISCOVERED THAT THE AFT ISOLATOR MOUNT WAS BADLY FRET. FURTHER INVESTIGATION

REVEALS THAT THESE UNITS HAVE 3 BOLTS WITH SAME DIAMETER AND 2 DIFFERENT LENGTHS. AIRLINES BELIEVE THAT WHEN THIS ISOLATOR WAS ORIGINALLY INSTALLED ONE OF BOLTS WAS IN THE INCORRECT LOCATION (ONE OF THE LONG BOLTS IN THE CTR INSTEAD OF SHORT ONE) WHICH WILL ALLOW THIS ASSY TO HAVE .1875" OF PLAY CAUSING THE FRETTING. PLEASE ALSO BE ADVISED THAT AIRLINES HAVE INFORMED MFG OF THIS FINDING FOR THEIR FEEDBACK.

CA090716003	DHAV	PWA	PITOT HEAD	ICED
6/30/2009	DHC8102	PW120A	PH11001DH	

(CAN) DURING A SYS CK FLIGHT AFTER HEAVY MX AND 20 MINUTES INTO FLIGHT, PILOTS SIDE AIRSPEED INDICATION DROPPED TO ZERO AND CO-PILOTS SIDE AIRSPEED INDICATION DROPPED TO ZERO WITHIN 2 TO 3 MINUTES THEREAFTER. CREW DECLARED AN EMERGENCY WITH ATC AND REQUESTED AN ALTITUDE AND POSITION CHANGE TO GET OUT OF SERVICING CONDITION. SHORTLY AFTER ACFT WAS IN NON-ICING CONDITIONS, AIRSPEED INDICATIONS RETURNED AND ACFT LANDED WITH OUT INCIDENT. NO MX HAD BEEN PERFORMED ON PITOT HEATER SYS DURING HEAVY MX CHECK. UPON LANDING, IT WAS OBSERVED THAT BOTH CIRCUIT BREAKERS FOR PITOT HEATERS HAD "POPPED". DURING MX INVESTIGATION OF INCIDENT, BOTH OF PITOT HEATER SYS WERE GROUND RUN FOR 1.75 HOURS WITHOUT INCIDENT. PILOTS SIDE PITOT PROBE WAS REMOVED AND BENCH TESTED TO DETERMINE CURRENT ELECTRICAL DRAW, RESULTS DID NOT INDICATE A FAULT WITH PROBE AT THIS POINT. THE 7.5 AMP CIRCUIT BREAKER FOR PILOTS SIDE PITOT HEAT WAS REMOVED AND BENCH TESTED TO DETERMINE IF IT HAD MALFUNCTIONED, NO APPARENT MALFUNCTION WAS EVIDENT. CIRCUIT BREAKER AND PITOT PROBE WERE THEN CONNECTED TOGETHER FOR A BENCH TEST WHICH SUBJECTED THEM TO 28VDC AND THEN IMMERSED THE PITOT PROBE IN ICE WATER, THE RESULTS SHOWED THAT A SUSTAINED CURRENT DRAW OF 8.4 AMPS COULD BE ACHIEVED WHEN THE PITOT PROBE WAS LEFT IMMERSED IN THE ICE WATER UP TO THE LEVEL OF 3 CM FROM THE EDGE OF THE POINT OF ATTACHMENT TO ACFT. IN ADDITION, CIRCUIT BREAKER "POPPED" AFTER APPROX 75 SECONDS UNDER THIS LOAD. BOTH OF CIRCUIT BREAKERS FOR THE PITOT HEAT SYS AND BOTH OF THE PITOT PROBES HAVE BEEN REPLACED AND ALL ELECTRICAL CONNECTIONS HAVE BEEN CHECKED IAW MFG RECOMMENDATIONS.

CA090615006	DHAV	PWA	MESSIER	HOUSING	CRACKED
6/7/2009	DHC8102	PW120A			MLG ACTUATOR

(CAN) NR 2 HYD SYS QUANTITY WAS NOTED AS BEING LOW ON FLUID. VISUAL INDICATIONS SHOWED A HYD LEAK AT RT MAIN GEAR AND WHEEL WELL AREA. A DETAILED INSP FOUND THAT LEAK WAS CAUSED BY RT MAIN GEAR RETRACTION ACTUATOR. ACTUATOR WAS REMOVED AND REPLACED. ONCE REMOVED, A FURTHER INSP OF THE ACTUATOR FOUND THAT THE ACTUATOR HSG ASSY WAS CRACKED IN MAIN BODY OF HSG, ALONG LENGTH OF THE ACTUATOR. CRACK COULD VISUALLY BEEN SEEN IN THE HSG.

CA090714002	DHAV	PWA	WINDSHIELD	FAILED
7/12/2009	DHC8202	PW123	8SC0043013	COCKPIT

(CAN) DURING CRUISE AT FL200 APPROX 100 NM FROM DESTINATION, SPARKS OCCURED WHEN WINDSHIELD HEAT WAS SELECTED TO "NORMAL". WINDSHIELD HEAT WAS SELECTED OFF IMMEDIATELY. AS A RESULT OF THIS, WINDSHIELD BECAME MISTY. SO WINDSHIELD HEAT WAS SELECTED TO LOW POWER "WARM UP" MODE AND APPROXIMATELY 10 SECONDS AT `WARM UP`, THE PILOT SIDE WINDSHIELD SHATTERED WITH A SUDDEN NOISE. QRH ACTIONS COMPLETED TO `DESCEND TO 14000 FT. ACFT MADE A NORMAL LANDING AT DESINATION AIRPORT WITHOUT INCIDENT. MX REMOVED AND REPLACED THE PILOT SIDE WINDSHIELD. ACFT RETURNED TO SERVICE.

CA090625002	DHAV	PWA	CONTROL PANEL	INOPERATIVE
5/29/2009	DHC8301	PW123	860TS09Y00	LANDING GEAR

(CAN) ON APPROACH, UPON LDG DOWN SELECTION, ALL LDG POSITION INDICATORS ARE IN RED AND THE TRANSIT LIGHT IS ON. RECYCLED LDG = SAME. ALTERNATE EXTENSION PERFORMED. ON LDG SELECTOR PANEL, INDICATION IS STILL THE SAME. ALTERNATE EXTENSION DOWN AND LOCKED ADVISORY LIGHTS VERIFIED AND OK (ALL GREEN). EMERGENCY WAS DECLARED. MX REPLACED THE LANDING GEAR CONTROL PANEL WHICH WAS CREATING THE PROBLEM.

CA090626006	DHAV	PWA	BOLT	FAILED
6/25/2009	DHC8311	PW123	NAS71036	WINDOW

(CAN) DEFECT 854517, WO-197013 NR 00001. PILOTS SIDE WINDOW. DASH 8, IPC 56-10-00 FIG 5 ITEM 140. FOUND 3

BOLTS WITH THEIR HEADS MISSING. BOLTS ROUTED TO LAB FOR TESTING AND ANALYSIS, REPORT WILL FOLLOW.

CA090616010	DHAV	PWA	BEARING	FAILED
6/11/2009	DHC8314	PW123		AILERON

(CAN) DURING CLEANING OF NAV LIGHT LENS ON THE RT WING IT WAS NOTICED THAT THE NR 4 AILERON HINGE ARM HAD A FRESH SIGN OF IMPACT IN THE GREASE. WHEN THE AILERON WAS PULLED ON WITH LIGHT FORCE AT THE END, IT WAS FOUND THAT THERE WAS APPROX 1" OF MOVEMENT IN THE UPWARD DIRECTION AND .7500" IN THE DOWNWARD. ACCESS PANELS WERE REMOVED AND YOU COULD SEE THAT THE BRGS LOOKED OUT OF PLACE. ONCE THE AILERON WAS REMOVED, IT WAS FOUND THAT THE BRGS HAD MIGRATED OUT OF THE FITTING, CAUSING DAMAGE TO THE FITTING AND MINOR FRETTING TO BOTH THE INBD AND OUTBD SIDE OF NR 4 HINGE ARM/BUSHING. ALL OTHER BGS ON THIS AILERON WERE FOUND TO BE WORN. THE LT AILERON WAS REMOVED AND INSPECTED, THE BRGS WERE ALSO WORN, BUT NO OTHER DAMAGE WAS FOUND.

CA090717002	DHAV	PWA	SUPPORT BRACKET	CRACKED
7/17/2009	DHC8314	PW123	85711569	LT WING

(CAN) WHILE DOING A WALKAROUND AND MOVEMENT OF THE AC, MX SAW THE LT AILERON HAVING AROUND 1 INCH FREE PLAY. INVESTIGATION WAS DONE AND BOTH LT AND RT AILERON INPUT SUPPORT BRACKETS PNS 85711569 FOUND WITH SERIOUS CRACKS. SB 8-57-43 COMPLETED BEFORE NEXT FLIGHT TO RECTIFY THE DAMAGE.

CA090714003	DIAMON	CONT	MOUNT BRACKET	CRACKED
7/13/2009	DA20C1	IO240B	2224121400	ALTERNATOR

(CAN) ROUTINE INSP OF THE ACFT REVEALED THAT ALTERNATOR MOUNTING BRACKET WAS CRACKED AT THE UPPER BEND CLOSE TO THE MOUNTING HOLE. BRACKET WAS SEPARATED INTO 2 PIECES RESULTING FROM THE CRACK. ALTERNATOR OPERATION AND SECURITY WAS NOT AFFECTED.

CA090709006	DIAMON	CONT	MOUNT BRACKET	CRACKED
7/9/2009	DA20C1	IO240B	2224121400	ALTERNATOR

(CAN) DURING 50 HR INSP, A CRACK WAS NOTICED ON RADIUS OF ALTERNATOR MOUNTING BRACKET. UPON PULLING BRACKET ASSY OFF ENG BRACKET FELL INTO TWO PIECES. FURTHER TO THAT ATTACHING HARDWARE SPACER AND BOLT ASSY WERE FOUND TO HAVE THEIR ATTACHING THREADS STRIPPED. THIS MOUNTING HARDWARE IS ALSO PART OF THE UPPER CRANKCASE ATTACHMENT. HAVE HAD SEVERAL OF THESE OCCURANCES WITH THIS PARTICULAR ASSY AND AS PART OF MX UPGRADING IT IS NOW THE FIRST ITEM OF INSP ON ENG. CAUSE APPEARS TO BE DUE TO HEAVY WELDED AREA THAT MEETS A MORE STREAMLINED OR THINNER METAL AREA OF THE BRACKET.

CA090616007	DIAMON	LYC	HOUSING	CRACKED
6/10/2009	DA42	IO360M1A	D6032176151	MOUNTING BOLTS

(CAN) DURING 100 HOUR INSP BOTH LT AND RT MLG REAR BEARING HOUSING WERE FOUND CRACKED ALONG THE HOUSING MOUNTING BOLTS. PART IDENTIFIED IN IPC AS ITEM NR 110, CHAPTER 32-10 PAGE 588 THRU 594.

CA090612003	DIAMON	LYC	HOUSING	CRACKED
6/10/2009	DA42	IO360M1A	D6032176151	BEARING

(CAN) DURING 100 HOUR INSP, REAR BRG HSG ON LT MLG ASSY WAS DETERMINED TO BE CRACKED UNDER MOUNTING BOLT AT 1 O`CLOCK POSITION WHEN SEEN FROM AFT TO THE FRONT. BOLT WAS REMOVED AND IT WAS OBSERVED THAT THE BOLT SHANK WAS BADLY CORRODED AND SOME WEAR MARKS WERE FOUND ON IT. BOLT PN LN9037-M8X28 REF: DA 42 IPC CHAPTER 32-10 PAGE 588 THRU 594.

CA090619009	DIAMON	THIELT	FIRE DETECTOR	MALFUNCTIONED
6/18/2009	DA42	TAE12502114	D60902616	LT NACELLE

(CAN) THE LT ENGINE FIRE DETECTOR ILLUMINATED ON APPROACH. PILOT DECLARED AN EMERGENCY AND CONTINUED APPROACH TO LANDING. WARNING ANNUNCIATOR EXTINGUSHED ABOUT 1 MIN LATER (CO-

INCIDENTAL WITH CLEARING IMC CONDITIONS). THE PILOT CONTINUED TO LANDING. A SUBSEQUENT GROUND CHECK SHOWED NO SIGNS OF FIRE OR OVERHEATING. WHEN CHECKED WITH THE ACFT MFG, THEY APPEARED TO BE AWARE OF SIMILAR FALSE INDICATIONS POSSIBLY AS A RESULT OF MOISTURE.

CA090616003	DOUG	PWA	CYLINDER	CRACKED
6/10/2009	DC6B	CWASP	R2800CB3	ENGINE

(CAN) CYLINDER HEAD CRACKED AROUND EXHAUST EAR.

CA090722004	DOUG		FILTER HOUSING	FRACTURED
7/8/2009	DC9			FUEL SYSTEM

(CAN) DURING GROUND RUNS AFTER 3 HRS, CSD OIL LEVEL LIGHT ILLUMINATED. ENG WAS SHUTDOWN. AFTER EXITING THE ACFT, IT WAS FOUND THAT FILTER BOWL HAD COMPLETELY FRACTURED FROM THE FILTER HSG AND ALL OIL WAS LOST. AFTER FURTHER INVESTIGATION, IT WAS FOUND THAT IT HAD BEEN PROPERLY INSTALLED AND TO THE PROPER TQ WAS APPLIED TO THE FILTER BOWL. DO NOT LOOK AFTER THIS ACFT ON A REGULAR BASIS SO NOBODY WOULD KNOW WHAT TQ IS APPLIED IN THE PAST.

CA090617004	DOUG	PWA	WINDSHIELD	CRACKED
6/17/2009	DC981	PW120	80260011	COCKPIT

(CAN) DURING DESCENT, FL 100, CAPTAINS WINDSHIELD SUDDENLY CRACKED. DESCENDED ACCORDING TO PROCEDURES AND MADE A NORMAL LANDING. SPEED REDUCED TO 180 KTS AND PRESSURISATION REDUCED TO 2.5-3.0 DIFF. PSI DURING DESCEND (QRH). MX REMOVED AND REPLACED THE WINDSHIELD AND ACFT RETURNED TO SERVICE.

EE4Y090210	DOUG		SUPPORT ANGLE	CRACKED
8/5/2009	MD83		995766437	CARGO DOOR

FWD CARGO COMPARTMENT DOOR AT STA Y389, BTWN BEAM NR 1 AND PAN INTERNAL WITH SUPPORT ANGLE CRACKED.

2009FA0000697	DOUG		CONNECTOR	BROKEN
6/18/2009	MD9030			GENERATOR

CONNECTOR BROKEN OFF GENERATOR. UNIT RUBS WHEN ROTATED. CAUSE OF FAILURE WAS DUE TO ADE BEARING FAILURE. ROOT CAUSE WAS UNDETERMINED. (K)

2009FA0000706	EMB		FLOOR SUPPORT	CORRODED
5/29/2009	EMB135KL			FUSELAGE

DURING A HMBV INSPECTION A PREVIOUS REPAIR ON THE LT OMEGA BEAM AT FRAME 20 WAS FOUND TO BE CORRODED, CAUSED BY MOISTURE BEING CONTAINED AT THE OMEGA BEAM AND CROSS MEMBER. DO NOT HAVE ENOUGH INFORMATION AT THIS TIME TO DETERMINE CAUSE OF DAMAGE. (K)

2009FA0000705	EMB		FLOOR SUPPORT	CORRODED
5/29/2009	EMB135KL			FUSELAGE

DURING A HMBV INSPECTION, A PREVIOUS REPAIR ON THE CENTER OMEGA BEAM BETWEEN FRAMES 24 AND 25 WAS FOUND TO BE CORRODED, CAUSED BY MOISTURE BEING CONTAINED AT THE OMEGA BEAM AND CROSS MEMBER. DO NOT HAVE ENOUGH INFORMATION AT THIS TIME TO DETERMINE THE CAUSE OF DAMAGE. (K)

2009FA0000704	EMB		FLOOR SUPPORT	CORRODED
5/29/2009	EMB135KL			FUSELAGE

DURING A HMBV INSPECTION, A PREVIOUS REPAIR ON THE CENTER OMEGA BEAM ABOVE THE CARBON CROSSBEAM FWD OF FRM 27 WAS FOUND TO BE CORRODED CAUSE BY MOISTURE BEING CONTAINED AT THE OMEGA BEAM A CROSS MEMBER. DO NOT HAVE ENOUGH INFORMATION AT THIS TIME TO DETERMINE THE CAUSE OF DAMAGE. (K)

2009FA0000703	EMB		FLOOR SUPPORT	CORRODED
5/29/2009	EMB135KL			FUSELAGE

DURING A HMBV INSPECTION, A PREVIOUS REPAIR ON THE LT OMEGA BEAM ABOVE THE CARBON CROSSBEAM FWD OF FRAME 27 WA FOUND TO BE CORRODED, CAUSED BY MOISTURE BEING CONTAINED AT THE OMEGA BEAM AND CROSS MEMBER. DO NOT HAVE ENOUGH INFORMATION AT THIS TIME TO DETERMINE THE CAUSE OF DAMAGE. (K)

2009FA0000707	EMB	BEAM	CORRODED
5/8/2009	EMB135LR		FUSELAGE

DURING A HMBV INSPECTION, THE LT SIDE OF THE CTR BEAM WAS FOUND TO BE CORRODED AT THE THIRD CARBON CROSSBEAM FROM THE FRONT. DO NOT HAVE ENOUGH INFORMATION AT THIS TIME TO DETERMINE THE EXACT CAUSE OF DAMAGE. (K)

2009FA0000701	EMB	FLOOR SUPPORT	CORRODED
7/8/2009	EMB135LR		FUSELAGE

DURING A HMBV INSPECTION, THE LT OMEGA BEAM WAS FOUND TO BE CORRODED AT FRAME 29. DO NOT HAVE ENOUGH INFORMATION AT THIS TIME TO DETERMINE THE EXACT CAUSE OF DAMAGE. (K)

2009FA0000702	EMB	FLOOR SUPPORT	CORRODED
7/6/2009	EMB145LR		FUSELAGE

DURING A HMBV INSPECTION, A PREVIOUS REPAIR ON THE LT OMEGA BEAM @ FRAME 20 WAS FOUND CORRODED. DO NOT HAVE ENOUGH INFORMATION AT THIS TIME TO DETERMINE THE EXACE CAUSE OF DAMAGE. (K)

2009FA0000699	EMB	WEB	DAMAGED
7/10/2009	EMB145LR		DOOR FRAME

DURING AN IMBV THE SERVICE DOOR CUT OUT LWR WEB WAS FOUND TO HAVE ELONGATED HOLES. DO NOT HAVE ENOUGH INFORMATION AT THIS TIME TO DETERMINE THE EXACT CAUSE OF DAMAGE. (K)

2009FA0000700	EMB	DOOR FRAME	CORRODED
7/10/2009	EMB145LR		FUSELAGE

DURING AN IMBV THE SERVICE DOOR CUT OUT AFT FRAME WAS FOUND TO BE CORRODED. DO NOT HAVE ENOUGH INFORMATION AT THIS TIME TO DETERMINE THE EXACT CAUSE OF DAMAGE. (K)

CA090625005	EMB	GE	CABLE	BROKEN
6/11/2009	ERJ170200SU	CF348E5A1	72CF10230	SLIDE

(CAN) UPON ARRIVAL AT THE GATE, S/D MADE THE ANNOUNCEMENT TO DISARM DOORS. FA AT BACK DID SO AND CONTACTED THE SD TO SAY IT WAS DONE. UPON LEAVING THE ACFT, CREW HEARD A HISSING SOUND AS S/D TRIED TO ENTER THE R2 DOOR. ONCE SLIDE DEPLOYED BOTH CREW MEMBERS AS WELL AS S/D EMPLOYEES VERIFIED THAT THE ARMING LEVER AND VENT FLAP WERE IN THE APPROPRIATE DISARMED POSITION. MX WAS CALLED TO REPLACE THE SLIDE AND INSPECT DOOR. UPON INVESTIGATION, FLEXBALL CABLE WAS FOUND BROKEN, THUS PREVENTING GIRT BAR TO DISENGAGE THE FITTINGS WHEN DOOR WAS DISARMED.

CA090629002	EMB	GE	COUNTERBALANCE	CORRODED
6/22/2009	ERJ190100IGW	CF3410E5A1		RUDDER

(CAN) PAINT PEELING AND VISIBLE CORROSION ON RUDDER COUNTERBALANCE WEIGHT. A ROUTINE VISUAL INSP OF RUDDER UNCOVERED AN INDICATION OF PAINT PEELING FROM THE RUDDER COUNTERBALANCE WEIGHT. FURTHER INVESTIGATION SHOWED VISIBLE SIGNS OF CORROSION ON COUNTERBALANCE WEIGHT BOTH IN AREAS WHERE PAINT HAS LIBERATED, AND ALSO THROUGH WHAT APPEARS TO BE BONDED PAINT. PRELIMINARY INVESTIGATION OF THE INSTALLED RUDDER LED TO REMOVAL OF THE FLIGHT CONTROL FOR FURTHER ASSESSMENT.

CA090610004	EMB	GE	LINK	MISINSTALLED
6/9/2009	ERJ190100IGW	CF3410E5A1	17070760903	ROD END

(CAN) UPON INSPECTION THE R/H NOSE LANDING GEAR FIXED DOOR LINKAGE WAS FOUND NOT IN SAFETY AT

GEAR DOOR END. THE NUT, LOCKWIRE AND LOCKPLATES WERE LOOSE AND EASILY SPUN ON ROD END. A PIECE OF ALUMINUM CASTING WAS FOUND BROKEN ON THE LINK TOWARDS ROD END NEAR BEARING, AND THE TAB WAS MISSING FROM THE TAB WASHER AS WELL (PLEASE REFER TO ATTACHED PICTURES). (TC# 20090610004)

2009FA0000726	GLASFL		SPOILER SYS	UNRESPONSIVE
7/26/2009	LIBELLE201B		201568	

ON THE DOWNWIND LEG TO LAND GLIDER, OPENED THE AIRBRAKES (ALSO KNOWN AS DIVE BRAKES OR SPOILERS), AND THEY BECAME STUCK IN THE OPEN POSITION. TRIED REPEATEDLY TO CLOSE THEM, BUT THEY WOULD NOT CLOSE. TIGHTENED UP MY PATTERN BECAUSE ACFT WAS DESCENDING RAPIDLY DUE TO THE OPEN AIR BRAKES.

CA090619015	GRUMAN	WRIGHT	CYLINDER	DAMAGED
6/17/2009	FIRECAT	982C9HE2	R1820	

(CAN) WHILE IN CRUISE, PILOT EXPERIENCED VIBRATION IN NR 1 ENGINE. THE ENGINE WAS SHUTDOWN AND PROP FEATHERED. UPON INSP, SERVERAL CYLINDERS WERE FOUND DAMAGED. ENGINE WILL REQUIRE CHANGING.

CA090724002	GRUMAN	WRIGHT	CYLINDER	CRACKED
7/18/2009	TS2ACALFORST	982C9HE2	CON0080463	ENGINE

(CAN) "STRANGE" VIBRATION WAS NOTICED BY THE PILOT IN FLIGHT ALONG WITH A LOT OF GRAY COLORED OIL LEAKING FROM THE PUSH ROD HSG TUBES. REF RPM CHECK WAS FOUND TO BE LOW AND A COMPRESSON TEST WAS DONE AND FOUND TO BE 8/80 PSI UPON CLOSER INSP. IT WAS FOUND THAT THE HEAD OF THE CYL WAS ACTUALLY SPLITTING FROM THE BARREL.

CA090727012	GULSTM	GARRTT	PUMP	UNSERVICEABLE
7/25/2009	690	TPE3315251K	A4033A	FEATHERING SYS

(CAN) NTS TEST FUNCTION FAILED ON PREFLIGHT CHECK FOR NR 1 ENGINE. UNFEATHER PUMP NOT FUNCTIONING WHEN AIR-START MODE SELECTED, 24 VOLTS PRESENT AT CONNECTOR.

CA090623006	GULSTM	GARRTT	GAUGE	LEAKING
6/23/2009	690A	TPE33110T	13551000509	MLG

(CAN) GAUGE OVERHAULED, DATE MAR 24/2009. GAUGE HAS INTERNAL LEAK.

CA090625003	GULSTM	GARRTT	SEAL	FAILED
6/18/2009	690A	TPE3315251K		COCKPIT WINDOW

(CAN) DURING CRUISE, STRANGE NOISE COMING FROM THE LT OVERHEAD PANEL. NO ABNORMAL CONTROL RESPONSES. ELECTED TO DIVERT TO NEAREST AIRPORT. MX DISCOVERED A 4-5 INCH SECTION OF LT WINDOW SEALANT HAD COME LOOSE AND WAS SLAPPING ON THE TOP OF THE CABIN. TRIM REPAIRED, FLIGHT CARRIED ON.

CA090706008	GULSTM	GARRTT	ENGINE	SMOKE
7/3/2009	690A	TPE3315251K		RIGHT

(CAN) AFTER LANDING AND EXITING RUNWAY 33, A SLIGHT SQUEAL WAS NOTED FROM RT ENG. TAXIED ACFT TO TANKER BASE PARKING, T485 CALLED ON MF 122.3 VHF "57 YOUR RT ENGINE IS SMOKING." CHECKED VISUALLY ENG GAUGES = NORMAL OPERATING AND OUTSIDE = VISIBLE WHITE SMOKE FROM TAIL PIPE. IMMEDIATE SHUTDOWN VIA AC690 EMERGENCY AND ABNORMAL PROCEDURES CHECKLIST FOR NACELLE FIRE/TAIL PIPE FIRE. ENG WAS SECURED VIA CHECKLIST/AAO BRIEFED ON EVAC, STOPPED ACFT AND INVESTIGATED FURTHER FOR FIRE, EXTINGUISHED TAIL PIPE FIRE WITH 2 SEPARATE SHOTS FROM SMALL ABC HANDHELD EXTINGUISHER ONBOARD. ENGINE SHUTDOWN VIA NACELLE FIRE CHECKLIST. CONDITION LEVER-EMERG FEATHER, ENG CONTROL SWITCH- OFF, FUEL AND HYD S/O SWITCH- EMERG OFF, BATTERY SWITCH - OFF, CABIN - EVACUATE, FIRE - EXTINGUISH (PORTABLE FIRE EXTINGUISHER) SHUTDOWN ENG IMMEDIATELY WHEN PROBLEM WAS IDENTIFIED. THERE WERE NO COCKPIT INDICATIONS OF FAILURE OR FIRE VIA ENG GAUGES OR ANNUCIATOR PANEL YET. ENGINE SECURED, CABIN EVACUATED AND FIRE IN TAIL PIPE EXTINGUISHED. ENG CEASED IN

FEATHERED POSITION, ALL FAILURES OCCURRED WHILE FIIL WAS ON THE GROUND.

2009FA0000651	GULSTM	STRUCTURE	DEBONDED
7/23/2009	GVSPG550		E/E RACK

2 FWD ELECTRICAL RACKS ON THE ACFT ARE VERY UNSAFE DURING A 9G FWD EMERGENCY LANDING. THE ANALYSIS FOR THE CERTIFICATION IS INADEQUATE. STRUCTURE CANNOT SUSTAIN THE IMPACT LOAD OF ELECTRICAL EQUIPMENT AND HONEYCOMB WILL DEBOND. DEFLECTION ON HONEYCOMB PANELS OF THE ELECTRICAL WILL BE MORE THAN THE GAP BETWEEN ELECTRICAL RACKS AND PILOT SEATS, RESULTING IN SEVERE INJURY TO BOTH PILOTS. MFG IS AWARE OF THESE DEFECTS, BUT IS UNWILLING TO TAKE NECESSARY STEPS TO CHANGE DESIGN, BECAUSE OF FINANCIAL REASONS. SUBSEQUENT ANALYSIS USING COMPUTER SIMULATION HAVE DEMONSTRATED THAT 2 FWD ELECTRICAL RACKS CANNOT SUSTAIN 9G FWD EMERGENCY LANDING. FASTENERS IN THE ELECTRICAL RACKS ARE INSTALLED IN THE SIDE OF THE HONEYCOMB (XY DIRECTION) INSTEAD OF NORMAL Z-DIRECTION (THE FASTENER NORMAL Z-DIRECTION IS PARALLEL TO THE XY-DIRECTION OF THE HONEYCOMB). DUE TO THE REPEATED LOADING THE AL SKIN WILL DEBOND FROM THE HONEYCOMB (STRUCTURAL FAILURE OF THE ELECTRICAL RACKS).

DELR081309	LEAR	LENS	MELTED
7/30/2009	31A	122250022804	NAV LIGHTS

NEW NAV LENS FROM ACFT ARE MELTING THROUGH IN SHORT TIME PERIODS. THIS ACFT HAD A NEW ONE THAT ONLY LASTED 200 HRS, THE REPLACEMENT IS NOW WARPING AT 20 HRS AND WILL NEED TO BE REPLACED AGAIN SOON.

2009FA0000730	LEAR	CONNECTOR	DEFORMED
8/6/2009	45LEAR		HYD RESERVOIR

CONNECTOR PLUG ADAPTER ON BACK OF SWITCH DEFORMS UNDER PRESSURE, O-RING DISPLACES, AND HYD FLUID LEAKS BY. LOSS OF HYD FLUID LED TO COMPLETE HYDRAULIC FAILURE. PILOTS FREEFALLED NOSE GEAR DOWN. (4) SIMILAR SWITCHES IN ACFT. MFG IS WORKING ON SB TO REPLACED SWITCHES. RECOMMEND REPLACING SWITCHES WITH STRONGER UNIT. (K)

CA090618001	LEAR	GARRTT	DIPSTICK	BROKEN
6/15/2009	45LEAR	TFE731*	3615309481	RT ENGINE

(CAN) DURING OIL LEVEL CHECK, FOUND PART OF THE RT ENGINE OIL LEVEL DIPSTICK WAS MISSING. OIL RESERVOIR WAS DRAINED AND THE MISSING PART OF THE DIPSTICK WAS FOUND LAYING IN THE TANK BOTTOM. MAGNETIC CHIP DETECTOR WAS INSPECTED AND NO EVIDENCE OF DEBRIS WERE FOUND. DIPSTICK WAS REPLACED. COULD NOT FIND THE CAUSE OF THE BROKEN DIPSTICK.

2009FA0000744	LEAR	TIRE	FAILED
7/28/2009	55LEAR		MLG

ON DEPARTURE, BLEW MAIN GEAR NR 1, NR 3, AND NR 4 TIRES AT 1545 JULY 28, 2009. (K)

CA090723004	LEAR	PWA	BRACKET	CRACKED
7/20/2009	60LEAR	PW305A	266000325	THRUST REVERSER

(CAN) UPON INSP OF LT THRUST REVERSER REF:PHASE C3-1200 HOURS INPECTION/CHECKS REF IRN NR: E7830038. IT BEEN NOTICE THAT ON LT UPPER THRUST REVERSER DOOR, OTBD BRACKET CRACKED.

CA090723005	LEAR	PWA	BRACKET	CRACKED
7/20/2009	60LEAR	PW305A	266000325	THRUST REVERSER

(CAN) UPON INSP OF RT THRUST REVERSER REF: PHASE C3-1200 HOURS INSP, REF: IRN NR:E7830038. IT BEEN NOTICED THAT ON RT UPPER THRUST REVERSER DOOR , INBD BRACKET CRACKED.

2009FA0000729	LET	CONTROL CABLE	FRAYED
8/21/2009	L23	A740254N255N	RUDDER

RUDDER CABLES FOUND FRAYED DURING 100 HR INSP. TT ON LT AND RT RUDDERS - 186.1 HOURS. SHOULD LAST 1000 HOURS IAW LET MM. THIS IS A CHRONIC PROBLEM.

CA090615011	LKHEED	ALLSN	MODULE	BURNED OUT
6/13/2009	188A	501D13	6508977	PROP SYNC

(CAN) SEVEN MINUTES FROM AIRPORT, CREW NOTICED SMOKE COMING FROM ELECTRICAL BAY. WITH NO SYSTEMS FAILED, THE CREW RETURNED TO DEPARTURE WITH NO INCIDENTS. MX FOUND NR 1 PROP PHASE SYNC MODULE HAD BURNED OUT. ALL ACFT WIRES WERE CHECKED OUT TO BE OK, THE SYS WAS DEACTIVATED IAW THE MEL AND RETURED TO SERVICE UNTIL PARTS ARE INSTALLED.

CA090615008	LKHEED	ALLSN	ENGINE	FLUCTUATES
6/12/2009	188C	501D13		NR 1

(CAN) NUMBER ONE ENGINE TIT WAS FLUCTUATING BETWEEN 750-830 DEG. THE HORSEPOWER WAS ALSO FLUCTUATING THE RPM WAS STABLE. AS A PRE-CAUTIONARY THE CREW ELECTED TO SHUT NUMBER ONE ENGINE DOWN, THE ABNORMAL CONFIGURATION CHECK LIST WAS CARRIED OUT AND ONE ENGINE INOP CHECKLIST WAS REVIEWED. THE LANDING AT CYQU WAS COMPLETED WITHOUT INCIDENT. MAINTENANCE HAS INSPECTED THE SYSTEMS AFFECTED AND HAS NOT FOUND ANY DEFECTS AT THIS TIME. GROUND RUNS HAVE FOUND THE A/C SERVICABLE. TROUBLESHOOTING IS STILL IN PROGRESS.

CA090727002	LKHEED	ALLSN	SWITCH	FAULTY
7/23/2009	382G	501D22A	FS48	EXTERNAL POWER

(CAN) ACFT TAXIED TO POSITION, CREW NOTICED A STRONG ODOR AND REALIZED THAT SMOKE WAS COMING FROM AN OVERHEAD PANEL AT THE FLIGHT ENGINEERS STA. ACFT WAS SHUTDOWN AND TOWED BACK TO RAMP. MX IDENTIFIED THE PROBLEM TO BE A FAULTY EXTERNAL POWER SWITCH. SWITCH WAS REPLACED AND ACFT RETURNED TO SERVICE.

2009FA0000713	MTSBSI		WINDOW	CRACKED
8/14/2009	MU2B36A		010A31870	EMERGENCY EXIT

PILOT COMPLAINED OF LOSS OF PRESSURIZATION IN FLIGHT AND UNABLE TO MAINTAIN SUFFICIENT CABIN PRESSURE TO SUSTAIN FLIGHT AT HIGHER ALTITUDES. RT CABIN WINDOW FWD OF EMERGENCY EXIT WAS FOUND TO HAVE SEVERE CRACKS AT BOTH UPPER CORNERS ALLOWING PRESSURE FROME THE CABIN TO ESCAPE TO THE ATMOSPHERE. REPLACED AFFECTED WINDOW WITH NEW MU2-11002-101 CABIN WINDOW UNDER STC SA01594SE. (K)

CA090714008	PILATS	PWA	SCREW	FAILED
7/11/2009	PC1245	PT6A67B		TORQUE LIMITER

(CAN) DURING A MX ACTION IT WAS NOTED THAT LOCKWIRE ON TOP OF TORQUE LIMITER WAS LOOSE. THIS LOCKWIRE LOCKS 2 SCREWS WHICH HOLD OIL FITTING AND LINE THAT ATTACHES TO TORQUE TRANSDUCER. LOCKWIRE WAS REMOVED AND ONE SCREW WAS FOUND STRIPPED INTERNALLY. A SERIUOS OIL LEAK WAS AVOIDED. SCREW AND LOCK WIRE ARE INSTALLED AT O/H FACILITY. INSP OF COMPANY ACFT IS UNDERWAY FOR ANY OTHER SIMILAR FAULTS. IT APPEARS 1 SCREW WAS INSTALLED AND TIGHTENED AND THEN SECOND SCREW INSTALLED AT AN ANGLE AND TIGHTENED AND LOCKWIRED. TORQUE LIMITER HAS BEEN SENT FOR O/H AND A REQUEST FOR A TEARDOWN REPORT HAS BEEN MADE.

CA090721004	PILATS	PWA	FITTING	LEAKING
7/19/2009	PC1245	PT6A67B		TORQUE LIMITER

(CAN) DURING A PREFLIGHT, FLIGHT CREW NOTED AN OIL LEAK. MX INSP THE ACFT AND FOUND THE 2 SCREWS THAT SECURES THE OIL FITTING TO TOP OF TORQUE LIMITER, LOOSE. THIS IS A SECOND OCCURENCE WITH THE TORQUE LIMITER AND LOOSE SCREWS. THESE SCREWS ARE INSTALLED AND LOCKED AT THE O/H FACILITY.

5APR577Y10	PILATS	PWA	BRAKE DISC	BROKEN
8/13/2009	PC1245	PT6A67B	244755	BRAKE ASSY

DURING A LINE CHECK IT WAS DISCOVERED THAT THE LT MAIN BRAKE ASSY OTBD DISC WAS CRACKED. THE BRAKE ASSY WAS REMOVED AND REPLACED.

CA090616012	PIPER	LYC	TUBE FRAME	CORRODED
6/12/2009	PA23250	IO540C4B5	1713444	FUSELAGE

(CAN) FUSELAGE FRAME TUBING, SPECIFICALLY LWR LONGERONS, FOUND TO HAVE SERIOUS EXTERNAL CORROSION. DETECTED BY ANOTHER AMO DURING MX, OUR AMO WAS BROUGHT IN TO COMPLETE REPAIRS TO THE TUBING. WHEN RT TUBE WAS CUT TO FACILITATE REPAIRS THERE WAS MOISTURE PRESENT AND SERIOUS INTERNAL CORROSION, BEYOND ECONOMICAL REPAIRS.

2009FA0000670	PIPER		MASTER SWITCH	FAILED
8/3/2009	PA28R200		9937705	CABIN

ELECTRICAL POWER FAILED AFTER GEAR EXTENSION. TROUBLESHOT SYS AND FOUND HIGH RESISTANCE IN MASTER SWITCH.

CA090710001	PIPER	LYC	ACTUATOR	BROKEN
6/8/2009	PA28R201	IO360C1C6	JE6	DOWN LOCK

(CAN) GEAR SELECTED DOWN FOR LANDING. NO NOSE GEAR DOWN INDICATION IN COCKPIT. FLYBY CARRIED OUT. TOWER CONFIRMED GEAR APPEARED DOWN. LANDING UNEVENTFUL. GEAR DOWNLOCK ACTUATOR FOUND BROKEN.

CA090710005	PIPER	LYC	WEDGE	LOOSE
7/10/2009	PA31	TIO540A2C	10349219	MAGNETO

(CAN) MAG WAS RECEIVED FOR 500 HR INSP BUT NO HOURS WERE PROVIDED. WHEN MAG WAS DISASSEMBLED ONE OF ALUMINUM COIL WEDGES WAS FOUND LOOSE AND HAD TRAVELLED AROUND INSIDE MAG CAUSING DAMAGE TO DISTRIBUTOR GEAR. APPROX 5 GEAR TEETH WERE BROKEN OFF AND WERE FOUND IN THE MAG AS WELL. MAG STILL HAD THE ORIGINAL MFG TORQUE SEAL ON THE COVER SCREW INDICATING IT HAD NEVER BEEN OPENED BY ANYONE ELSE. THE COIL WEDGES ARE DRIVEN IN WITH A HAMMER AND PUNCH TO RETAIN THE COIL ASSY. OTHER WEDGE WAS STILL HOLDING THE COIL PROPERLY. DUE TO OIL LEAKAGE PAST THE DRIVE END BALL BRG SEAL THE MAG WAS DISASSEMBLED FURTHER TO CLEAN OUT ALL CONTAMINATION (OIL AND MATERIAL FROM THE DISTRIBUTOR GEAR AND COIL WEDGE) AND AN ESTIMATE TO REPAIR WAS PROVIDED TO THE CUSTOMER. THE CUSTOMER OPTED TO HAVE THE MAG OVERHAULED. IT WAS AND HAS BEEN RETURNED TO THE CUSTOMER.

CA090630005	PIPER	LYC	MAGNETO	FAILED
6/30/2009	PA31350	LTIO540J2BD	BL68291018	ENGINE

(CAN) MAG WAS SENT IN DUE TO TIMING SPLIT BETWEEN LT AND RT POINTS OF APPROX 5 DEGREES. CUSTOMER REQUESTED 500 HR INSP BE CARRIED OUT BUT DID NOT SUPPLY THE TT ON THE MAG. TIMING WAS CHECKED AND FOUND TO BE ABOUT 5 DEG LATE ON THE LT POINTS AND 10 DEG LATE ON THE RT POINTS. RETARD POINTS WERE BARELY OPENING ON 3 OF 4 LOBES OF RETARD CAM AND NOT OPENING AT ALL ON 4TH LOBE. WHEN DISASSEMBLED ROLLER BRG WAS FOUND TO HAVE A DARK BROWN GREASE IN IT INSTEAD OF THE WHITE GREASE THEY ARE SUPPLIED WITH. MFG DOES NOT ALLOW REGREASING THESE BRGS, THEY COME PRE-PACKED FROM THE FACTORY. BROWN GREASE HAD COATED CAMS AND CONTAMINATED THE POINTS, POSSIBLY CAUSING THE TIMING ISSUES. WHEN THE DISTRIBUTOR BLOCK WAS REMOVED THE RT COIL TAB WAS BENT UP ENOUGH THAT IT CONTACTED THE END OF THE DIST GEAR SHAFT AND A SMALL WEAR SPOT HAD STARTED. RESISTANCE OF BOTH COILS WERE TESTED AND LT COIL READING (15,500 OHMS) INDICATES THAT IT IS A 4 CYL COIL INSTEAD OF THE 6 CYL COIL REQUIRED FOR THIS MAG. THIS MAG HAD AN STICKER STATING IT HAD BEEN O/H`D ON 21/5/07 REF NR 14255.

CA090617001	PIPER	LYC	DRAG BRACE	DAMAGED
6/3/2009	PA31350	LTIO540J2BD	40336000	MLG

(CAN) THIS PART WAS REMOVED FOR FLUORESCENT LPI INSPECTION IAW S/L 1088. PART FAILED IAW NDT REPORT NR LCN-1905.

CA090616005	PIPER	LYC	HINGE	FAILED
6/12/2009	PA31350	LTIO540J2BD		AFT PAX DOOR

(CAN) THE ACFT WAS ON DEPARTURE, ENROUTE, APPROX 2 MINUTES INTO THE FLIGHT. THE FLIGHT CREW NOTICED A LOUD RUSHING AIR SOUND, WHICH WAS QUICKLY IDENTIFIED AS THE REAR DOOR COMING AJAR. AS THEY WERE FINISHING THE TURN, TO RETURN TO THE RUNWAY, REAR UPPER DOOR FLEW OPEN. THE ACFT RETURNED TO THE AIRPORT WITH NO FURTHER INCIDENT. THERE WAS SIGNIFICANT DAMAGE TO THE UPPER

AND FWD HINGE (IT HAD SEPARATED). MX REPLACED THE DOOR AND DOOR HINGES PRIOR TO FURTHER FLIGHT.

CA090616006	PIPER	LYC	GUSSET	CRACKED
6/13/2009	PA31350	LTIO540J2BD	5237600	PAX DOOR

(CAN) WHILE REMOVING THE UPPER PASSENGER DOOR FROM THE ACFT, IT WAS FOUND THAT THE UPPER DOOR HINGE MOUNTING PLATE WAS CRACKED ALONG THE MOUNTING FASTENERS.

CA090626004	PIPER	LYC	SPAR	CRACKED
6/24/2009	PA31350	LTIO540J2BD		WING

(CAN) DURING A 100 HR INSP, (3) CRACKS WERE VISUALLY FOUND IN THE AFT WING SPAR AFT UPPER RADIUS BETWEEN THE LT AND RT IB SEAT TRACKS. ON FURTHER INSP WITH EDDY CURRENT, IT WAS FOUND THAT FWD UPPER RADIUS OF AFT SPAR WAS CRACKED BETWEEN THE LT AND RT IB SEAT TRACKS. TOTAL DAMAGED AREA ON THE FWD AND AFT SIDE OF SPAR IS APPROX 9 INCHES LONG. REPAIR IS BEING DESIGNED BY A DAR AND TO BE COMPLETED.

CA090615012	PIPER	LYC	TURBOCHARGER	FAILED
5/21/2009	PA31350	TIO540J2B	LW12463	LT ENGINE

(CAN) AFTER TAKEOFF, CREW NOTICED THE LT ENG STARTED RUNNING ROUGH & FOLLOWED BY A PARTIAL POWER LOSS. RETURNED TO AIRFIELD & LANDED WITHOUT FURTHER INCIDENT, TOWER NOTED SMOKE COMING FROM LT ENGINE. AFTER LANDING, OIL WAS DRIPPING FROM EXHAUST STACK & GEAR COVERED IN OIL. MX REMOVED EXHAUST PIPE FROM TURBOCHARGER & FOUND OIL INSIDE TURBO. TURBINE BLADES HAD HIT HOUSING, SHAFT BENT & VERY SLOPPY. BEARING FAILURE SUSPECTED. OIL FILTER & SUCTION SCREEN INSPECTED FOR METAL CONTAMINATION & TRACES FOUND BUT NOT SIGNIFICANT. NEW FILTER INSTALLED. COMPRESSION CHECKED ON ALL CYLINDERS AS PRECAUTION, ALL SERVICEABLE. FAULTY TURBOCHARGER REPLACED WITH AN OVERHAULED TURBO. ACFT GROUND RUN FOR FUNCTION CHECK & LEAK CHECK, & RELEASED PENDING A SATISFACTORY FLT TEST. ACFT FLOWN BACK TO MAIN BASE WHERE OIL WAS DRAINED & FILTERED, SUCTION SCREEN & OIL FILTER INSPECTED FOR CONTAMINATION. NO CONTAMINATES FOUND. NEW FILTER INSTALLED & OIL REPLENISHED WITH NEW. ACFT RETURNED TO SERVICE.

CA090611006	PIPER	LYC	TAPPET	FAILED
5/21/2009	PA31350	TIO540J2B		ENGINE

(CAN) AFTER TAKEOFF, CREW NOTICED RT OIL PRESSURE HAD DROPPED INTO YELLOW ARC. ACFT RETURNED TO AIRPORT AND LANDED WITHOUT FURTHER INCIDENT. ENG WAS INSPECTED AND NO APPARENT CAUSE WAS FOUND INITIALLY. THE OIL SUCTION SCREEN WAS INSPECTED AND A LARGE PIECE OF METAL WAS FOUND. IT WAS SUSPECTED TO BE FROM A TAPPET BODY. OIL FILTER WAS INSP AND FERROUS METAL WAS FOUND WHICH APPEARED TO BE CAMSHAFT MATERIAL. ENG WAS REMOVED AND SENT FOR REPAIR. IT WAS FOUND THAT A COUPLE CAM LOBES WERE WORN EXCESSIVELY AND THAT A TAPPET BODY WAS INDEED BROKEN. ENG HAD 496 HRS. TSO. ENG WAS REPAIRED AND REINSTALLED. PROP, PROP GOV, AND OIL COOLER WERE FLUSHED AND REINSTALLED. ACFT WAS RETURNED TO SERVICE AFTER SATISFACTORY RUNS AND TEST FLIGHT.

2009FA0000654	PIPER	LYC	THROTTLE CABLE	FROZEN
7/9/2009	PA44180	O360A1H6	554528	RT ENGINE

DURING FLIGHT TRAINING, RT THROTTLE CABLE FROZE JUST BELOW MID TRAVEL. PROP WAS FEATHERED AND ENG WAS SHUTDOWN FOR UNEVENTFUL LANDING. MX FOUND CABLE BOUND ON THE ENG END IN THE RIGID SHEATH AREA. A HALF MOON SHAPED SLIVER OF METAL WAS FOUND BETWEEN THE SHEATH AND SWAGGED CABLE END (RUBBER BOOT WAS IN PLACE). REPLACEMENT CABLE CURED PROBLEM. MFG WAS NOTIFIED.

CA090724003	PIPER	LYC	DIODE	FAILED
7/20/2009	PA60600	IO540K1J5	1N4003	MLG

(CAN) WHEN GEAR WAS SELECTED DOWN, GEAR DOWN AND LOCKED LIGHT DID NOT ILLUMINATE. WHEN GEAR WAS THEN SELECTED UP, THE SAFETY SOLENOID DID NOT DISENGAGE AND SO HAD TO BE MANUALLY OVERRIDDEN.

2009FA0000694	RAYTHN	GARRTT	HOLDER	FAILED

4/15/2009	HAWKER800XP	TFE731*	155020A	FUSE

WHILE TROUBLESHOOTING A PULSE LIGHT SYS PROBLEM ON OUR ACFT, FOUND AN ISSUE INVOLVING 2 IN-LINE FUSE HOLDERS WHICH WERE INSTALLED IN COMPLIANCE WITH MANDATORY SB 33-3682 (RE-ACTIVATION OF PULSE LIGHT SYS). THESE 2 FUSE HOLDERS (PN 155020A) ARE IN-LINE WITH THE PULSE LIGHT SYS LANDING LIGHT CIRCUITS AND ARE LOCATED JUST BEHIND PANEL DA, SUBPANEL D. ORIGINALLY ACCESSED THESE FUSE HOLDER TO CHECK THE CONTINUITY OF THE FUSES, AS THE LT LANDING LIGHT WAS NOT ILLUMINATING UPON PULSE LIGHT SELECTION. WHEN OPENED, SOME DARK COLORED DEBRIS FELL OUT FROM INSIDE EACH FUSE HOLDER. ALTHOUGH THE FUSES TESTED SATISFACTORILY, THE WIRING GOING INTO THE FUSE HOLDERS WAS MELTED AND SHRUNK BACK FROM T5452HE CRIMPED END TERMINUS. THESE WIRES WERE OBVIOUSLY OVERHEATED AND WE FEEL THAT THE DEBRIS THAT FELL FROM THE FUSE HOLDER IS PROBABLY RESIDUE LEFT OVER FROM THE MELTED INSULATION. INSTALLED NEW IN-LINE FUSE HOLDERS TO REPLACE THESE MELTED UNITS. (K)

2009FA0000750	RAYTHN		SEAL	MISMANUFACTURED
7/27/2009	HAWKER900XP		J3081X9FT	FAIRING

ON DEPARTURE, THE RT WING FUSELAGE FAIRING TO WING SEAL STRIP CAME LOOSE, CAUSING THE STRIP TO LIFT UP AND BEAT AGAINST THE WIND FAIRING CREATING A VERY LOUD NOISE IN THE CABIN AND SOME VIBRATION. THE ACFT RETURNED TO DEPARTURE AND LANDED WITHOUT FURTHER INCIDENT. THE DECISION WAS MADE TO GROUND THE ACFT FOR FURTHER INVESTIGATION AND TO REPLACE ALL WING FAIRING STRIPS WITH A MFG REP ON SITE. MFG WAS CONTACTED AND EFFECTED A REPAIR ON THE ACFT, WHICH THEN RETURNED TO HOME BASE. UPON REMOVAL OF THE ACFT WING SEAL STRIPS, IT WAS NOTED THAT THE GLUE HAD BEEM INCONSISTENTLY APPLIED AND WAS SPOTTY IN SOME PLACES. ALL NEW WING TO FUSELAGE FAIRING STRIPS WERE INSTALLED ON ALL COMPANY ACFT IAW THE PROCEDURES OUTLINED IN THE MM SECTION 57-20-00. THIS WORK WAS CARRIED OUT UNDER THE SUPERVISION OF ACFT MFG TECH AND TECH REP ON SITE. (K)

CA090610005	ROBSIN	LYC	BEARING	WORN
6/10/2009	R44RAVENII	IO540AE1A5	2202	MAGNETO

(CAN) MAG WAS RECEIVED FOR A 500 HR INSP. BEFORE DISASSEMBLY, ROTOR WAS SPUN AND END PLAY WAS FOUND (0.0035 INCHES, MAX ALLOWABLE IS 0.0015"). THE MAG WAS DISASSEMBLED AND SMALL BRG (PN 2-202) WAS FOUND TO HAVE WEAR MARKS ON THE INNER RACE AND BRG CAGE WAS ALSO FOUND WORN. IT IS UNKNOWN IF BRG WEAR CAUSED END PLAY OR IF EXCESSIVE END PLAY CAUSED BRG WEAR. THIS MAG STILL HAD ORIGINAL WHITE TORQUESEAL ON ONE OF THE HSG SCREWS INDICATING IT HAD NOT BEEN DISASSEMBLED SINCE ITS MFG IN 2007. IN ADDITION, 1 OF THE 3 SCREWS HOLDING DISTRIBUTOR BLOCK TO HSG WAS FOUND BENT JUST UNDER THE CAPTIVE WASHER AND LOCKWASHER LOCATION. THIS DID NOT CAUSE ANY ISSUES IN THE MAG BUT DID SLIGHTLY INDENT THE POLYESTER DISTRIBUTOR BLOCK. CUSTOMER REQUESTED MAG BE O/H, BOTH BRGS WERE CHANGED, AND MAG WAS RETURNED TO SERVICE.

AMCR200904	SKRSKY	PWA	RELAY	FAILED
8/19/2009	S76B	PT6*	MS24171D2	ZONE 100

FREON AIR CONDITIONING SYS WOULD WORK FOR ABOUT 6 SECONDS THEN SHUTOFF. FOUND K1 RELAY WOULD OPERATE BUT NO PWR WOULD PASS THROUGH CONTACTOR. FOUND CONTACTOR PLATE AND PLUNGER STEM AND COMPONENTS BURNED AND MELTED. THIS PREVENTED THE PLUNGER FROM PULLING THE CONTACTORS FULLY CLOSED. RELAY IS ONE YEAR OLD WITH ABOUT 30 OPERATING HOURS ON IT.

2009FA0000708	SKRSKY		DOWNLOCK SWITCH	DEFECTIVE
7/2/2009	S76C		7645001005102	MLG

LANDING GEAR WOULD NOT EXTEND WHEN GEAR DOWN WAS SELECTED. FOUND GEAR DOWN SWITCH IN CONTROL PANEL DEFECTIVE. (K)

CA090610006	SNIAS	TMECA	STARTER GEN	ARCED
6/4/2009	AS350B2	ARRIEL1D1	150SG122Q	

(CAN) PILOT REPORTED LOSS OF GEN IN FLIGHT AND ELECTRICAL NOISES IN THE RADIOS. GEN LIGHT DID NOT ILLUMINATE. PILOT ATTEMPTED TO RESET GEN TWICE WITH NO SUCCESS. THEN TURNED GEN SWITCH OFF AT

WHICH TIME LIGHT ILLUMINATED AND WOULD NOT EXTINGUISH WHEN ATTEMPTING TO TURN GEN BACK ON. UPON SHUTDOWN, AN ELECTRICAL ODOR WAS NOTED IN ENG AREA. FURTHER INVESTIGATION REVEALED EXTENSIVELY BURNED BRUSHES AND COMMUTATOR. GEN HAD UNDERGONE MX FOR FRENCH AD 2009-0027 15.2 HOURS PRIOR AND SHOWED NO ANOMALIES AT THAT TIME.

2009FA0000696	STNSON	FRNKLN	ENGINE	POWER LOSS
5/17/2009	10ASTNSON	4AC199E3		

EXPERIENCED LOSS OF ENG POWER. ATTEMPTED TO RESOLVE ENG PROBLEM, CHECKED CARB HEAT, FUEL VALVE, LT AND RT MAGS, THROTTLE, NO SUCCESS. ENG WOULD ATTEMPT TO RUN OCCASIONALLY FIRING ON CYLINDERS. FULL FUEL ON BOARD. (K)

CA090707005	SWRNGN	GARRTT	LOCK	BROKEN
7/6/2009	SA226AT	TPE33110UA		GUIDE COLLAR

(CAN) 2 LATCH START LOCKS WERE FOUND UNAIRWORTHY. ONE HAD A MISSING COTTER PIN AND THE OTHER HAD COTTER PIN BUT COTTER PIN HOLE WAS ALMOST CRACKED THROUGH THE HSG.

CA090717004	SWRNGN	GARRTT	SHUTOFF VALVE	STICKING
7/13/2009	SA226TC	TPE33110UA	39423091	ENGINE FUEL

(CAN) THE AIRCRAFT WAS FLYING, PILOT TRIED TO SHUTDOWN ENG WITH STOP BUTTON. ENG WOULD NOT SHUTOFF AT THAT TIME WHEN STOP BUTTON WAS PRESSED. PILOT PULLED STOP AND FEATHER BUTTON TO GET ENGINE TO STOP AT THAT TIME. PILOT WENT TO START ENGINE TO TRY AND FIND OUT WHY HE COULD NOT STOP ENGINE THE FIRST TIME AND AT THAT TIME HE HAD NOTICED THAT THE EGT WAS RAPIDLY RISING TO AN OVERTEMP SITUATION ON THE ACFT. AT THAT TIME PILOT HIT THE STOP BUTTON AND PULLED STOP AND FEATHER AND HAD NOTICED THAT ENGINE WAS STILL ACCELERATING AND WOULD NOT SHUTDOWN. PILOT CLOSED FIREWALL FUEL SHUTOFF AND ENGINE SLOWLY STOPPED. WITH TROUBLESHOOTING WITH MX, PILOT WAS ASKED TO START ENG AGAIN WHEN HE NOTICED THAT ENG DID NOT TURN OVER. PILOT WAS ADVISED BY MX AT THAT TIME THAT THEY WOULD SEND SOMEONE UP TO HAVE A LOOK. UPON FURTHER INVESTIGATION ENG WOUND UP BEING OVERTEMPED AND HAD TO BE REMOVED AT THAT TIME. ENG WAS CHANGED IN AND FLOWN BACK WITHOUT ANY FURTHER ISSUES. ENG WAS FORWARDED TO TURBINE SHOP FOR AN OVERTEMP INSP AND REPAIR. WHEN TROUBLESHOOTING OVERTEMP SITUATION, ENG FUEL SHUTOFF VALVE PN 394230-9-1, SN P-3528C WAS TESTED AND FOUND TO BE STICKING PARTIALLY OPEN ON THE SHUTDOWN SIDE WHICH WOULD HAVE CAUSED THE ENGINE TO NOT SHUTDOWN COMPLETELY AND CAUSE ENG OVERTEMP CONDITION. FUEL SHUTOFF VALVE WILL BE SENT OUT FOR REPAIR AT THIS TIME.

CA090720003	SWRNGN	GARRTT	SHUTOFF VALVE	FAILED
7/16/2009	SA226TC	TPE33110UA	39423091	ENGINE FUEL

(CAN) WHEN DOING SOME TROUBLESHOOTING ON AN ENG SNAG, THE FUEL SHUTOFF VALVE WAS FOUND TO NOT BE FUNCTIONING. IT WAS REMOVED FROM THE ACFT AND TESTED ON THE BENCH WERE IT FAILED ON A SERIES OF TESTS. VALVE, WHEN TESTED, WOULD STICK OPEN AND CLOSED ON VARIOUS TESTS. THE FSO VALVE WAS REPLACED WITH A NEW ONE.

CA090622016	SWRNGN	GARRTT	CYLINDER	CRACKED
6/22/2009	SA226TC	TPE33110UA	B18032	PROPELLER

(CAN) CYL WAS MAGNETIC PARTICLE INSP DURING STANDARD O/H PROCEDURES. NO DEFECTS WERE NOTED. CYL SENT FOR RECHROMING IAW SRM 202A VOLUME 10. OLD CHROME WAS STRIPPED AND CYL MAG PARTICLE INSPECTED FOR PREP OF NEW CHROME. CRACK DETECTED AT THIS TIME.

CA090617007	SWRNGN	GARRTT	PLENUM	CRACKED
6/16/2009	SA227*	TPE33111U	310166812	RT ENGINE

(CAN) WHEN ACFT WAS DOWN FOR HEAVY MX, MECHANIC HAD NOTICED THAT THE RT ENGINE HAD A CRACK ON THE PLENUM AROUND THE BLEED AIR PORT. ENGINE WAS REMOVED AND FORWARDED TO THE COMPANY'S ENGINE SHOP FOR REPAIR. PART WAS REPLACED AND ENGINE WAS REINSTALLED ON THE ORIGINAL ACFT. THE TIME ON THE PART IS U/K DUE TO AT OVERHAUL IF THEY PASS NDT THEY CAN BE REINSTALLED.

CA090708007	SWRNGN	GARRTT	OIL JET	BROKEN

7/7/2009	SA227AC	TPE33111U	31035811	ENGINE

(CAN) ACFT HAD LANDED AND WAS TAXING BACK TO HANGER WHEN RT ENG HAD SHUT ITSELF DOWN WITHOUT ANY INPUT FROM THE CAPTAIN. MAINT WAS NOTIFIED OF ISSUE AND WHEN TURNING THE PROP OVER BY HAND A LOUD CLICKING NOISE WAS NOTED. AT THAT TIME TURBINE SHOP WAS NOTIFIED. ENGINE GEARBOX WAS REMOVED TO DETERMINE WHAT THE NOISE WAS. WHEN GEARBOX WAS REMOVED EVIDENCE OF METAL WAS NOTED IN THE ENG. CAUSE OF NOISE AND METAL WAS NOTED FROM AN ACCESSORY DRIVE OIL JET THAT HAD BROKEN OFF AND JAMMED INTO THE FUEL PUMP DRIVE GEAR AND CAUSED THE TEETH OF THE FUEL PUMP DRIVE GEAR TO GRIND OFF THE GEAR WHICH CAUSED THE FUEL PUMP TO STOP AND NOT SUPPLY ANYMORE FUEL TO THE ENG. ENG WAS FLUSHED OF ALL METAL AND A COMPLETE INSP CARRIED OUT ON GEAR CASE TO MAKE SURE NO MORE ISSUES WERE PREVALENT. A NEW OIL JET WAS INSTALLED AND THE TWO IDLER GEARS WERE CHANGED. THE ENG WAS PUT BACK TOGETHER WITH NO OTHER ISSUES.

CA090626001	ZLIN	LYC	CABLE	FRAYED
6/24/2009	Z242L	AEIO360A1B6	Z4243130000	TE FLAP

(CAN) THE FLAP CONTROL CTR CABLE WAS DISCOVERED FRAYED DURING SCHEDULED MX.

CA090626002	ZLIN	LYC	CABLE	FRAYED
6/24/2009	Z242L	AEIO360A1B6	Z14242260100	RUDDER

(CAN) BOTH LT AND RT RUDDER CABLES WERE DISCOVERED FRAYED DURING SCHEDULED MX.

CA090629004	ZLIN	LYC	TIRE	FLAT
6/22/2009	Z242L	AEIO360A1B6	301003530	MLG

(CAN) THE ACFT RT TIRE WENT FLAT DURING REFUELING OPERATIONS. TIRE WAS REINFLATED IN ORDER TO BE PUSHED INTO THE HANGAR WHERE IT WENT FLAT AGAIN SHORTLY AFTERWARDS. TIRE AND TUBE WERE DISASSEMBLED. TUBE WAS WORN THROUGH BY DAMAGE TO THE INSIDE WALL OF THE TIRE. CAUSE OF DAMAGE IS UNKNOWN. THERE ARE NO INDICATIONS OF DAMAGE ON THE OUTSIDE OF THE TIRE.

CA090611005	ZLIN	LYC	CRANKCASE	CRACKED
6/3/2009	Z242L	AEIO360A1B6		ENGINE

(CAN) A 4-6 CM VERTICAL CRACK WAS NOTED BETWEEN NR 2 AND NR 4 CYL IN THE CRANKCASE DURING A 100 HR INSP. CRACK WAS SEEPING OIL.