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of Transportation
**Federal Aviation
Administration**

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Regulatory Support Division

ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



**ALERT
NUMBER
355**



**FEBRUARY
2008**

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

AVIATION MAINTENANCE ALERTS

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

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

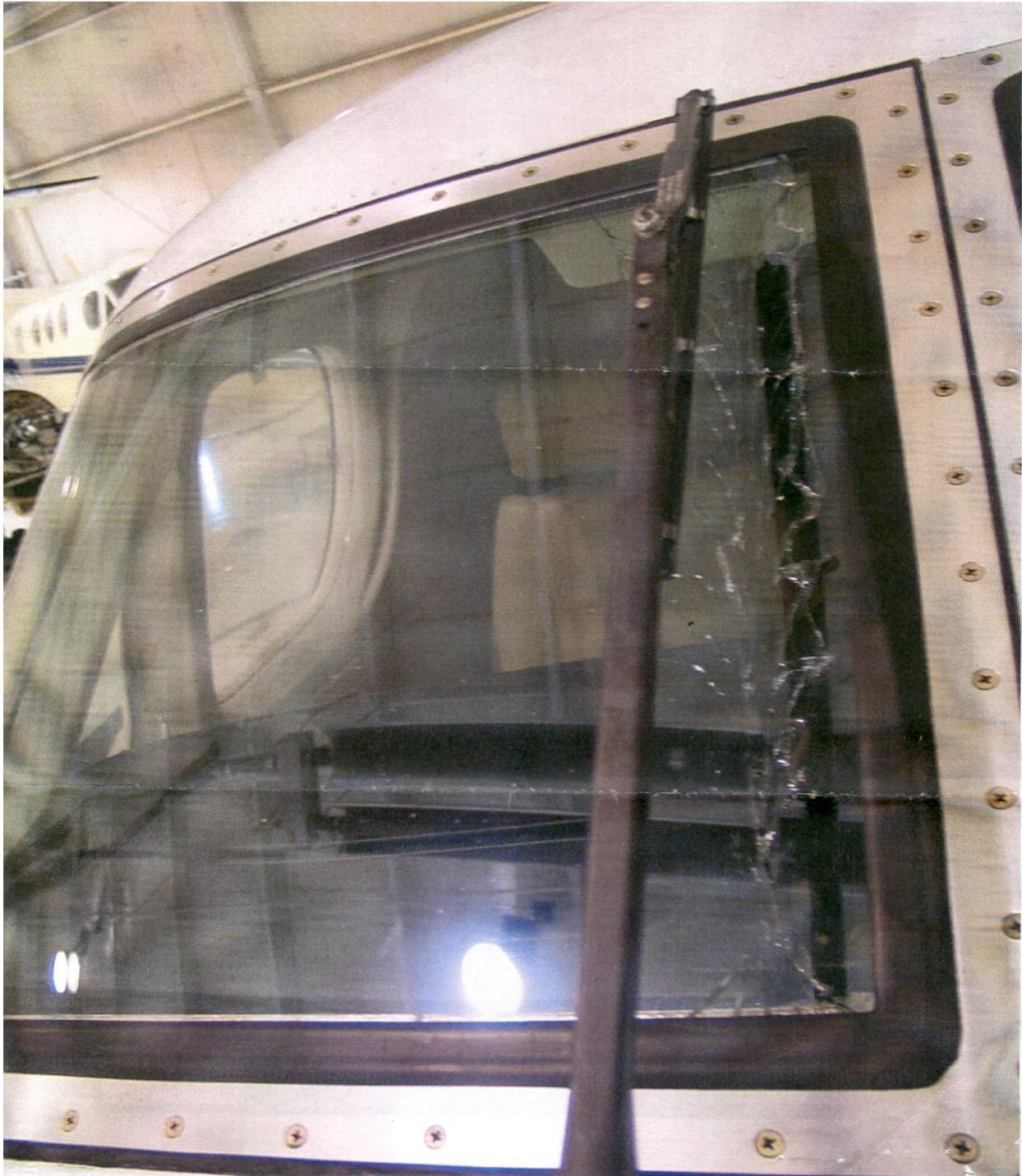
AIRPLANES

BEECHCRAFT

Beechcraft: B300; Cracked Windscreen; ATA 5610

A repair station submission reads, "At an altitude of 17,000 feet (*and an outside temperature of minus 6 degrees Celsius*) the right windshield cracked (*about 2 inches outboard of the center post*), from the top to the bottom in the outer pane. The aircraft returned to the departing airport without any problems (*and*) the windshield (*P/N 101-384025-24*) was replaced. There was no known cause for this part to have cracked."

(Reference also the following Alerts: December 2004, for two such reports; January 2005, for another. The full part number returns 12 such reports from the FAA Service Difficulty Reporting System (SDRS) data base. Truncating this number from the right one digit at a time for successive searches yields the following results—almost all within the 5610 ATA code: -1 returns, 113 entries since 1998; -2 returns, 209 since 1995; -3 returns, 218 since 1995; -4 returns, 229 since 1995; -5 begins mixing codes. Readers are reminded the SDRS search tool found at: <http://av-info.faa.gov/isdr/default.asp> requires all part numbers to be entered WITHOUT dashes—Ed.)



Part Total Time: 728.0 hours.

CESSNA

Cessna: 310L; Cracked Wheel; ATA 3246

A mechanic writes, “Upon changing a tire on a Cleveland wheel assembly on this aircraft, it was discovered the wheel half holding the bearing race was cracking. It had cracked over 180 degrees around the opening, which eventually could have *(led)* to a serious accident.”

Contact with the aircraft owner provided additional discussion and two excellent photos. Don Higgins writes, “Some tips for owners and mechanics: we noticed the first indication of this problem as uneven tire wear. When we had *(our mechanics)* turn the tire 180 degrees to even out the wear, they found the loose race—*(prompting)* them to look further. The wheel crack was *(then)* found, *(having progressed)* more than 180 degrees around the axle hole. My suggestion is anytime a wheel is off the axle, not only do the bearings need to be checked, but also the races. If the race is loose the tire needs to be pulled apart and checked to see if there is a crack causing the race to loosen up.”

“Cessna 310’s touch down in the 90 knot range. To have a wheel assembly fail (as this one was working up to) would render the aircraft uncontrollable and easily cause injury or death to the pilot/passengers.” *(Provided wheel P/N’s are 199-64 and/or 40-40A.)*





(Thanks Don, for the time and trouble. Your effort might well cause other owner/operators to pay careful attention for this defect—Ed.)

Part Total Time: 2,200.0 hours.

DIAMOND

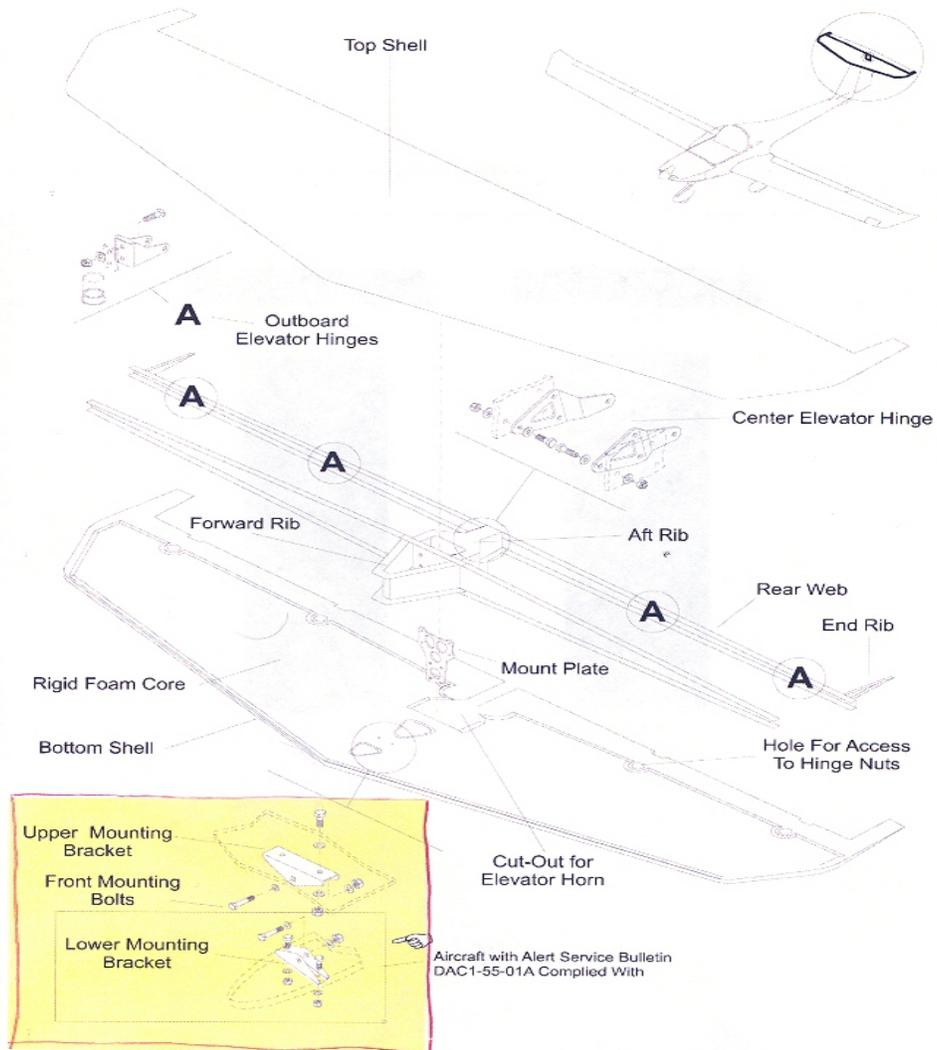
Diamond: DA-20; Broken Horizontal Stabilizer Bolts; ATA 5551

A technician for a flight training school writes, “*(This aircraft)* returned from flight with both horizontal stabilizer mount bolts broken (*P/N AN3-11A*).” “We removed the rudder and horizontal stabilizer to inspect the entire area. The aft mount plate and forward mount bracket were replaced, along with all new bolts, washers, and nuts. We also inspected our other (*DA-20*) aircraft and replaced all of their (*horizontal stabilizer mounting*) bolts. No other issues were found on our aircraft. Diamond Aircraft has been briefed and they are working with the NTSB (*National Transportation Safety Board*).”

Stabilizers



ADTH 3
DA20-C1 AMM



Page 2
20 Mar 2001 **55-10-00**

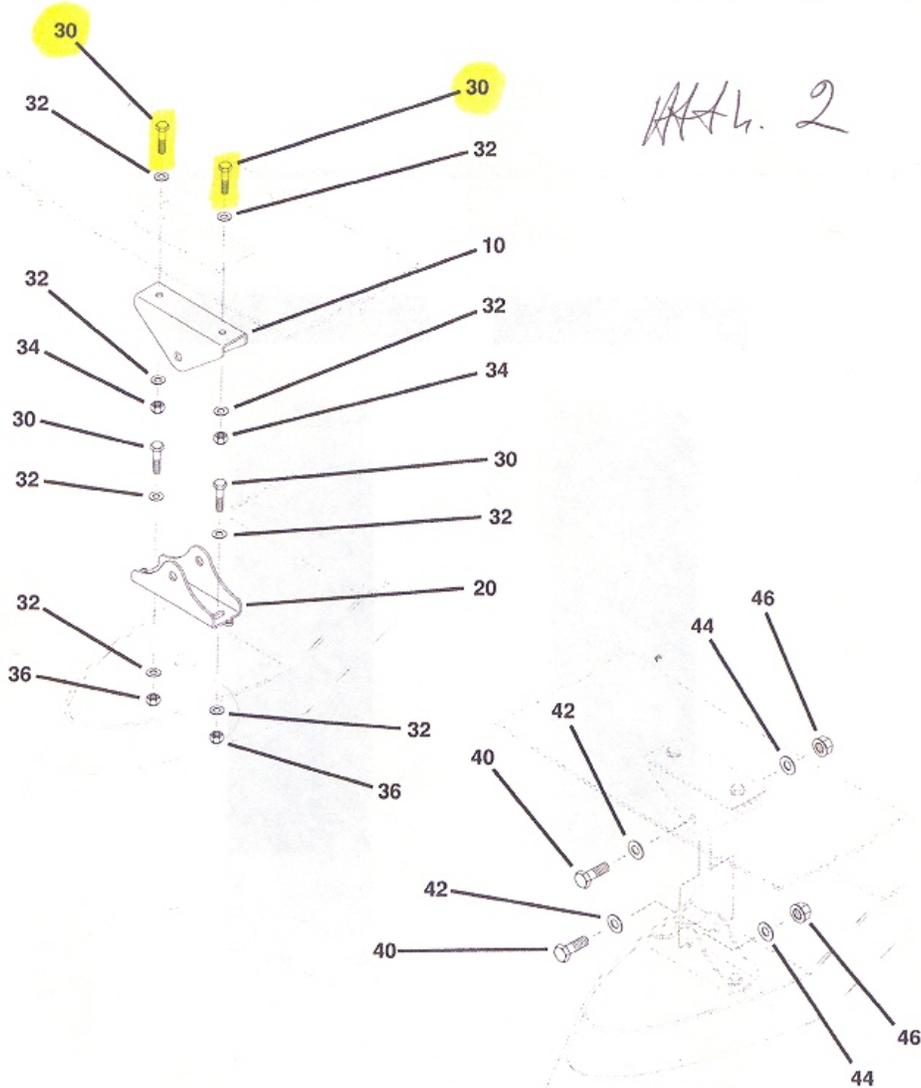
Doc # DA201-C1
Rev. 5

DA20-C1 IPC



Horizontal Stabilizer

EXCERPT FROM PARTS MANUAL

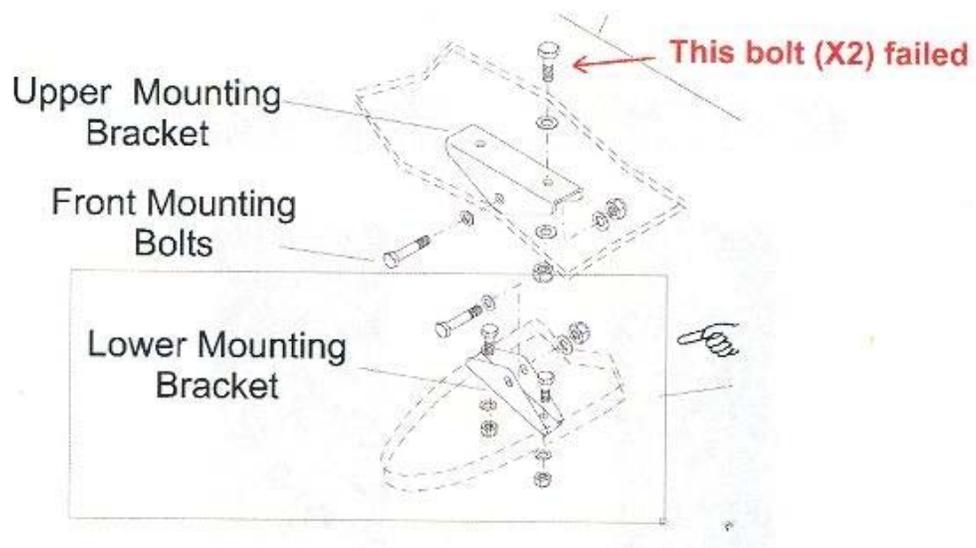


DA203-C1 IPC Brake Template (Parres).dwr

Doc # DA203-C1
Rev 1

55-10

Fig 02
Page 4
08 Mar 04





(Thank you for the submission effort—it would be terrific if you would send me an article describing the results of the structural analysis—Ed.)

Part Total Time: 189.9 hours.

MOONEY

Mooney: M20J; Corroded Cowling Rivets; ATA 7110

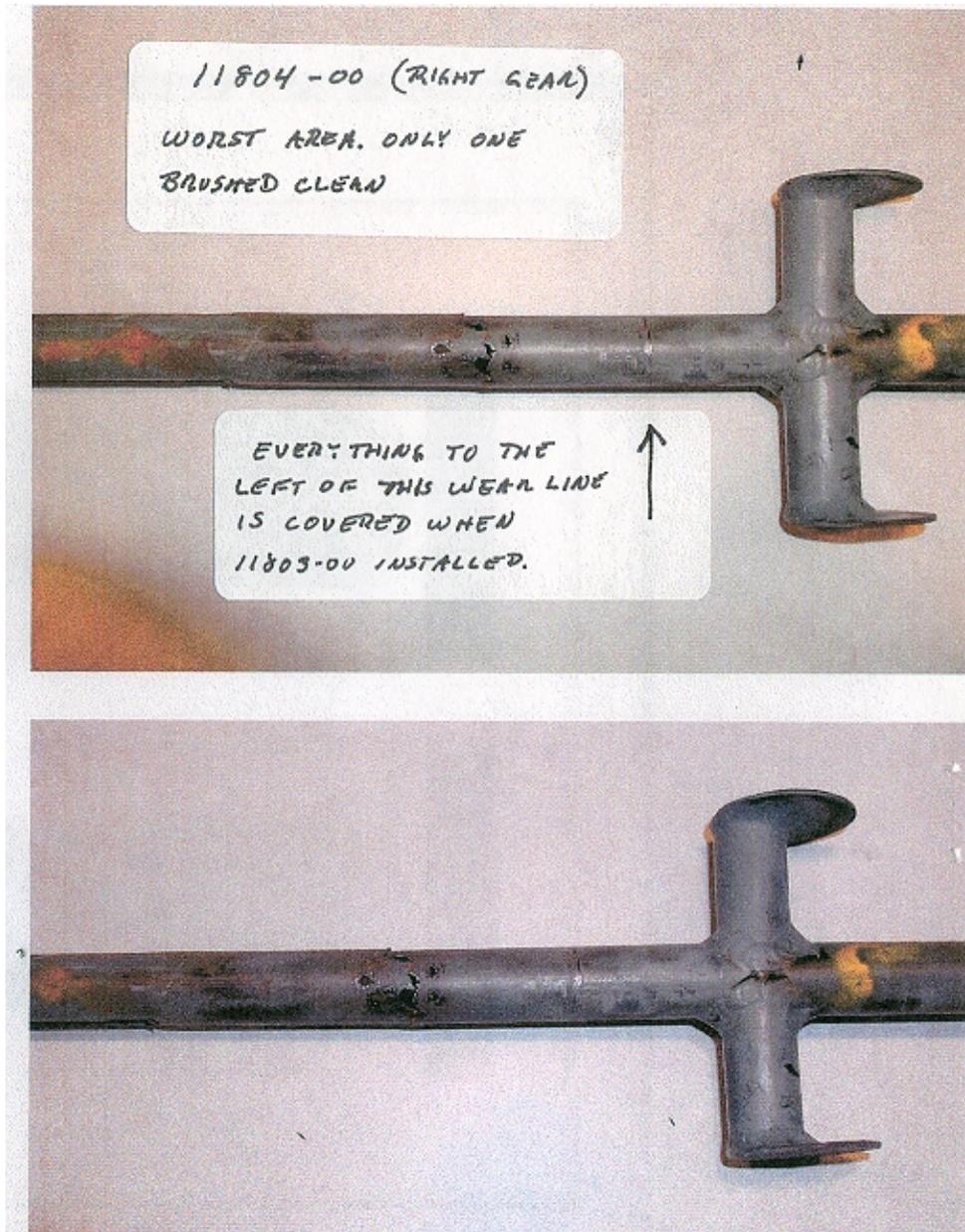
A technician for a repair station writes, “The owner brought (*his aircraft’s*) cowlings in for repair because the through-skin rivets were corroding and shearing off at the manufacturer’s-head as exhibited by blistering paint at the rivet locations. Inspection revealed most of the AD (*composition code 2117*) rivets were severely corroded because the cowlings are constructed with a hybrid composite laminate of e-glass and carbon graphite plies. It is standard industry practice to use corrosion resistant fasteners such as Monel rivets through carbon graphite structure—it is unknown why aluminum rivets are used in this case.” (*No part numbers were provided with this submission.*)

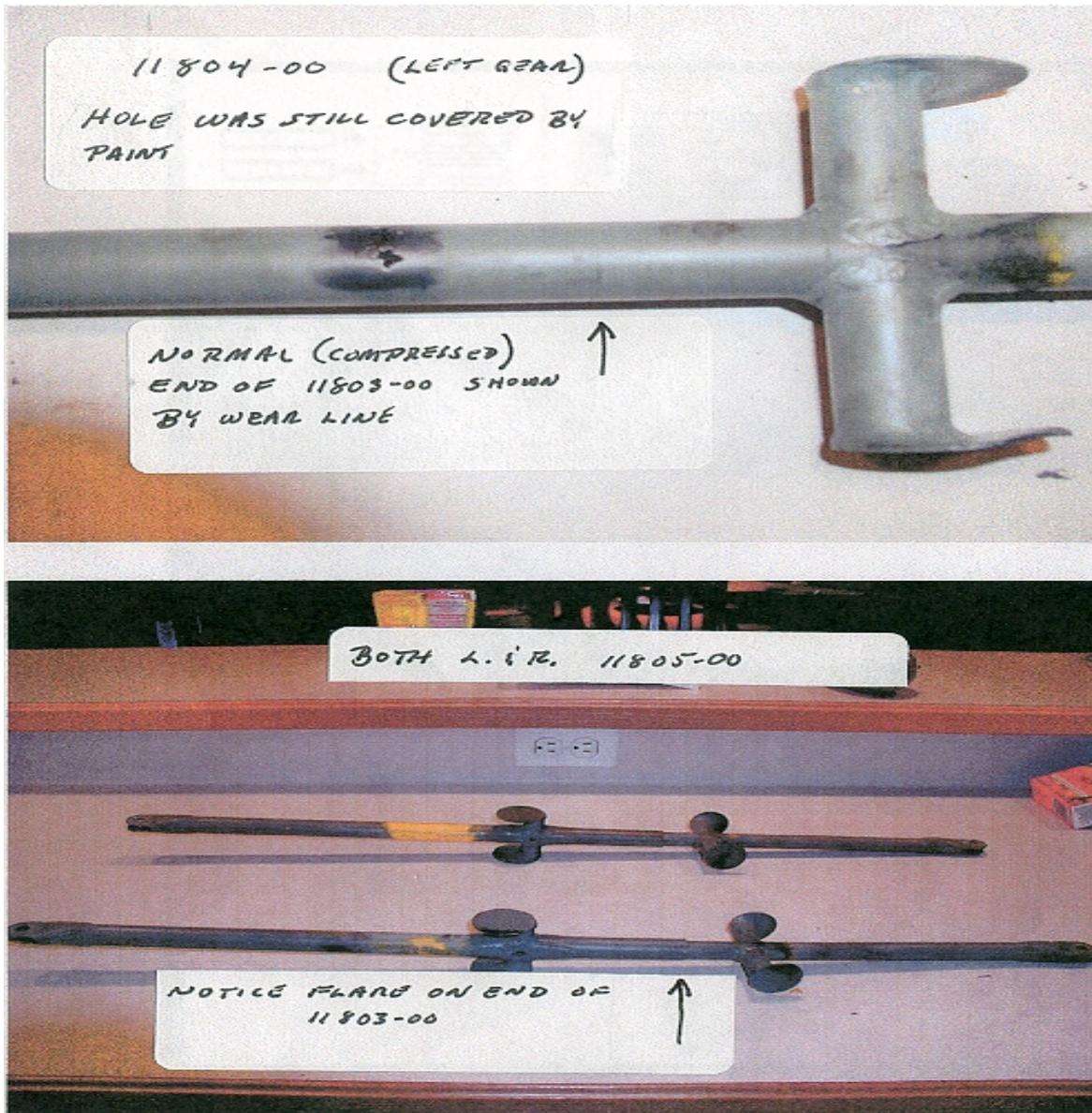
Part Total Time: (unknown).

PIPER**Piper: PA17; Corroded Strut Tubes; ATA 3230**

A mechanic holding an IA (*inspection authorization*) says, “When changing shock cords on this aircraft, I noticed a discoloration of the inner strut tube (the longer tube—P/N 11804-00). I removed it from the outer tube (the shorter tube—P/N 11803-00). One of these inner strut tubes was corroded approximately 50 per cent (*around*) its circumference. The other inner strut had multiple corrosion holes through out (*the part*). Both outer short tubes showed oval elongation at the ends, indicating flexing/bending of this assembly during landings and takeoffs. I believe only the relatively new bungees kept this gear from final failure and (*the predictable*) ground loop.

“Installed bungee cords cover this (*corrosion*) area and they also (usually) have a cloth or aluminum fairing over them. Detection of this (*defect*) requires removal of the fairings at a minimum, and (*preferably*) removal of the bungees to clearly see the outer tube’s circumference. To inspect the area that failed, it is necessary to disassemble the unit (P/N 11803-00) and view the inner and outer pieces separately. I would recommend whenever bungees are changed, the pieces should be removed from the aircraft, disassembled, and inspected for corrosion.”





Part Total Time: 2,500.0 hours.

Piper: PA31-350; Failed Main Gear Bolt; ATA 3230

A mechanic writes, "Our aircraft had a 'gear unsafe light' and no 'left down and locked' indication light. The gear handle (*also*) would not return to neutral position. The aircraft landed with out incident. We believe the upper bolt retaining the main gear retraction arm broke due to fatigue. This allowed the main gear actuator to bind on the upper section of the drag leg, breaking the main gear actuator ball end out of the main shaft of the actuator.

“There is a Piper Service Letter Number 1092 (dated June 15, 2005) that requires the Main Gear Retraction Arms (P/N’s 42042-000 or 42042-002) to be inspected (*at 1500 hours*) using a 10 power magnifying glass and liquid penetrant. Thereafter (*this inspection is performed*) at each 250 hours until the part reaches retirement at 6,000 hours.

“There is no requirement for the bolts (P/N AN6-17) that retain the main gear retraction arms to be inspected or replaced. These bolts are (*given a cursory*) inspection during retraction arm removal by a visual check for wear and corrosion. We believe these bolts need to also have a life limit or be magnaflux inspected. These bolts showed little wear. The bolt that failed appears it may have been cracked for sometime before it failed completely, but it was not detected during the last compliance with SL-1092.” *The FAA Service Difficulty Reporting System (SDRS) data base returns 14 similar entries for the base part number 42042 with ATA 3230.*)

PIPER PARTS CATALOG

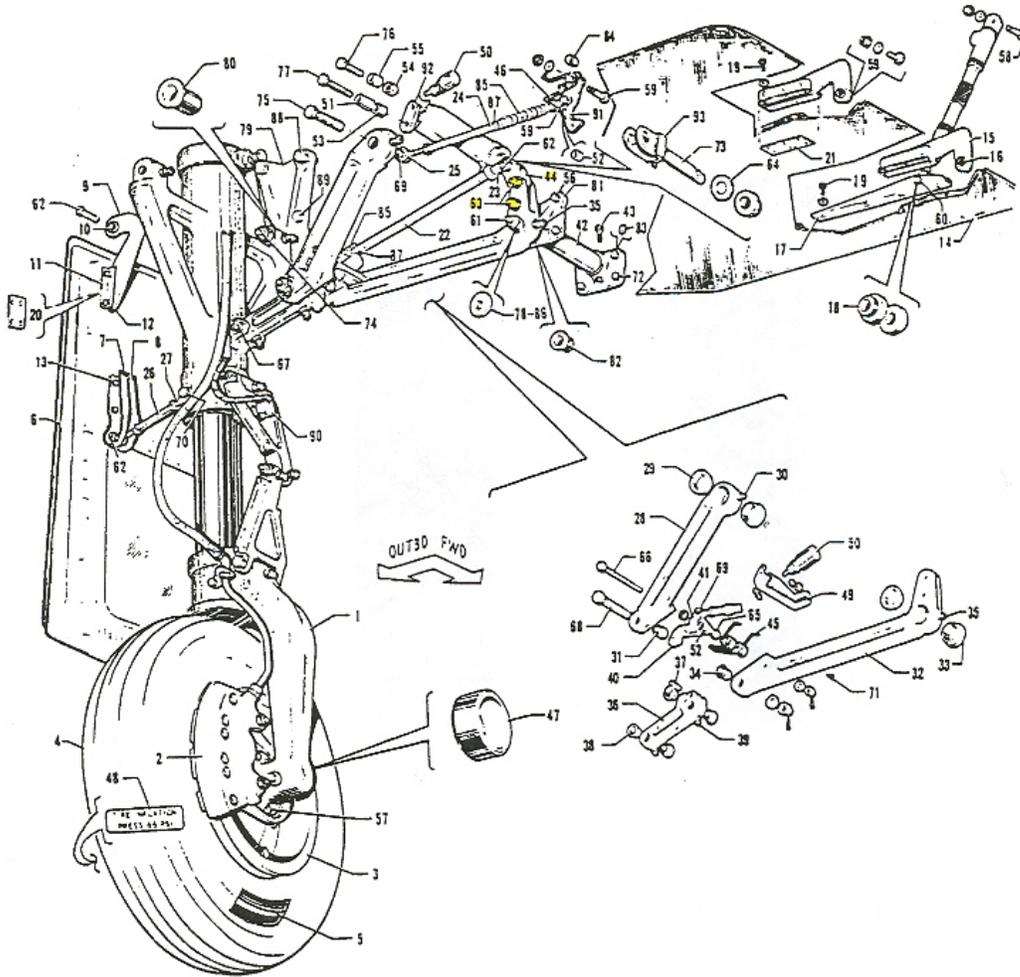


Figure 39. Main Landing Gear Installation

REVISED: MAY 1984

1H14

PA-31-350

Part Total Time: 24,842.9 hours.

RAYTHEON

Raytheon: 400A; Partial Nose Gear Up-lock Engagement; ATA 3230

A repair station technician states, “The flight crew reported the red (*colored*) landing gear handle warning light stayed illuminated after gear retraction. The gear was cycled several times—the handle warning light stayed illuminated. (*Inspection*) found the nose gear landing up-lock was not fully engaging. (*We*) adjusted the up-lock as required per the Beechjet 400 series maintenance manual: landing gear retract/extension checks were okay; no faults (*observed*). We have noted this (*up-lock adjustment defect*) on low-time Beechjet 400A series aircraft on several occasions, particularly during cold weather operation. Up-lock adjustment faults usually show up in the (*maintenance manual*) 32-00-00 functional low pressure/low flow tests.”

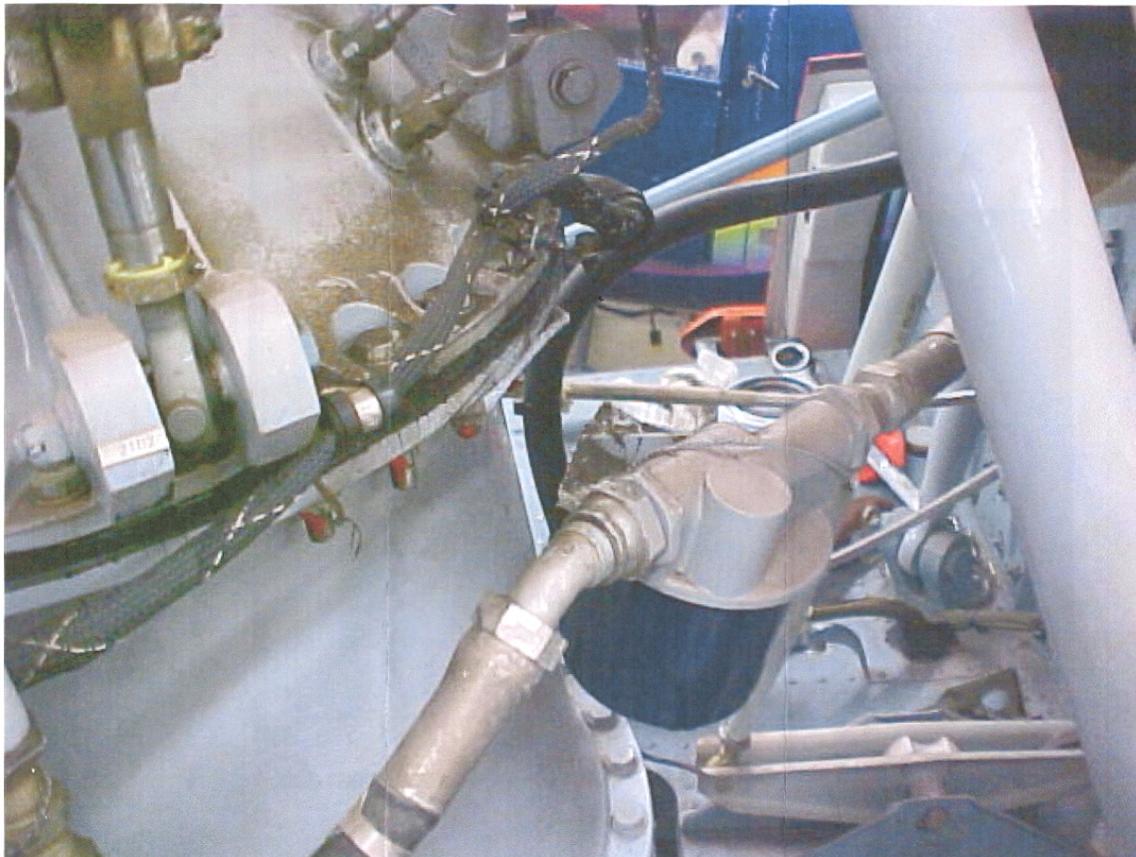
Part Total Time: 243.4 hours.

HELICOPTERS

AEROSPATIALE

Aerospatiale: AS350B3; Broken Oil Filter Mount Bracket; ATA 7261

A repair station technician states, “During a 100 hour inspection, the mechanic reached to unscrew the oil filter and the bracket broke off in his hand (*P/N N325400A*). This part was replaced. The entire break looked fresh—even with 10 power magnification. It (*appears to be*) a pot-metal bracket.”



Part Total Time: 480.6 hours.

POWERPLANTS

HONEYWELL

Honeywell: TPE331-14GR-801Z; Obstructed Fuel Filter; ATA 7310

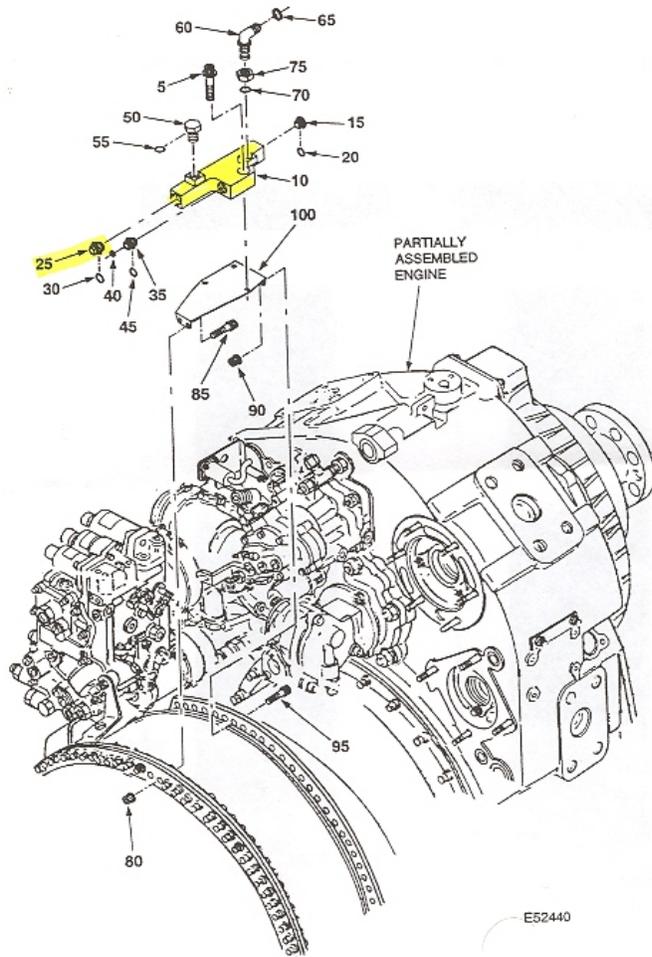
(The following discrepancy report references a Grumman/Marsh S2F3AT airplane.)

A lead quality control inspector for this repair station writes, “During this aircraft’s 200 hour progressive inspection of the L/H engine fuel manifold (P/N 3105455-1), the in-line 40 micro fuel filter (P/N 337-541-9106) was removed to inspect for fuel limitation issues. The filter screen was found to be clogged and collapsed. This filter is not referenced in the Honeywell Illustrated Parts Catalog (73-20-40 page 0) and it is not required to be inspected and/or cleaned during routine or special inspections. This filter needs to be removed, inspected, and cleaned every 200 flight hours until a suitable solution to this issue is found by the engine manufacturer. A collapsed filter could lead to fuel limitation and performance issues—and improper troubleshooting by maintenance technicians.

“Honeywell technical representatives have been contacted and (*they*) are aware of this (*problem*). Since then several filters have been found clogged and collapsed on other, same type aircraft and engines. Other, similar engine installations could (*also*) have this manifold/filter installed.”



ILLUSTRATED PARTS CATALOG
GARRETT TPE331-14 (REPORT NO. 72-04-10)

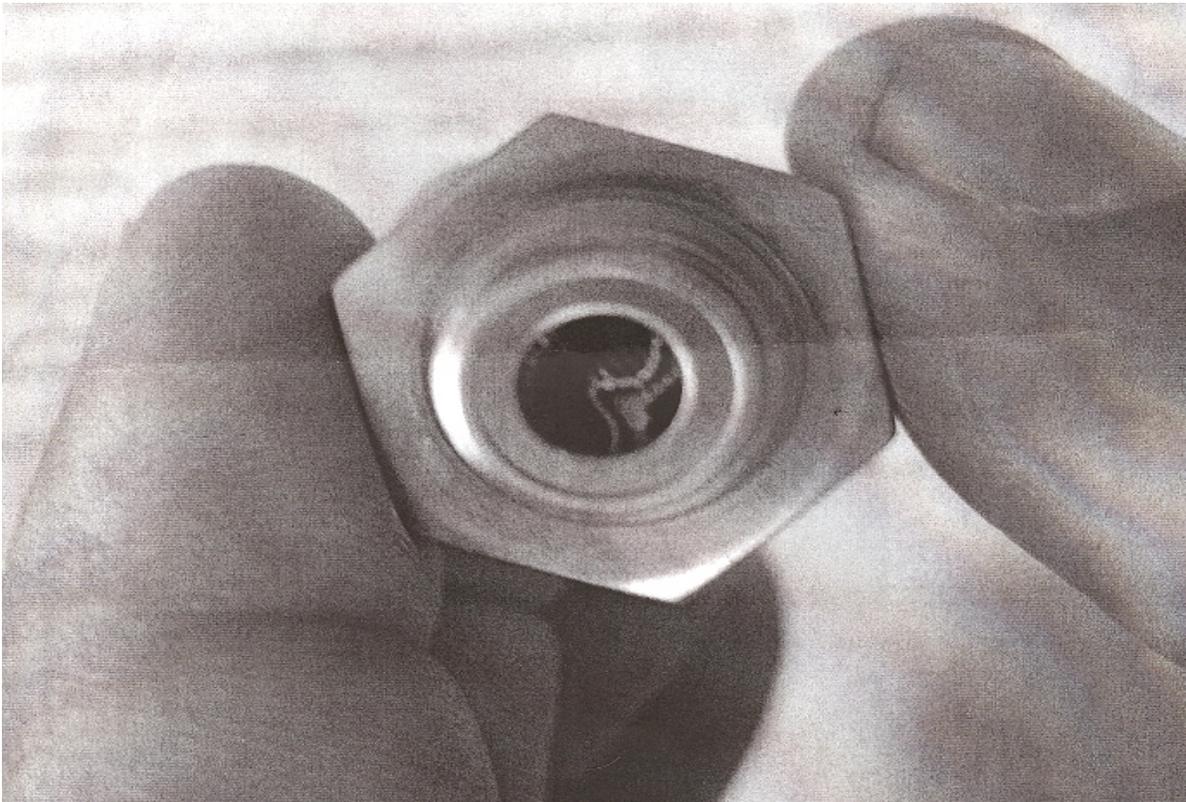
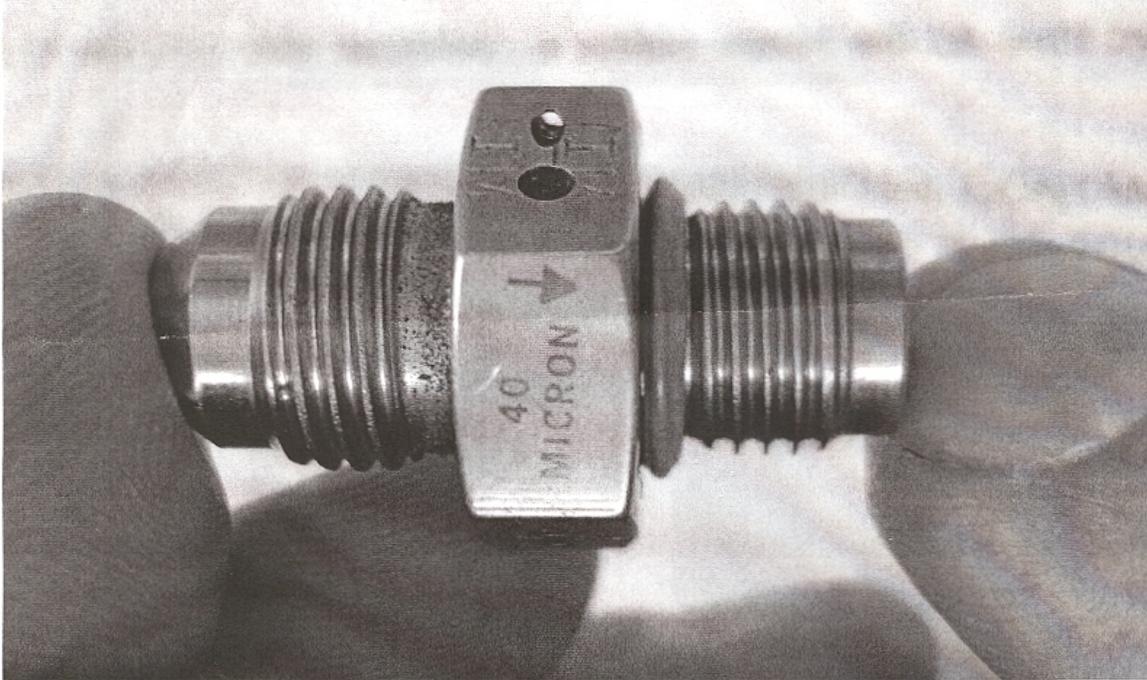


E52440

Flow Control Manifold Installation
Figure 1

73-20-40
Page 0
Dec 24/98

GEG70-2A



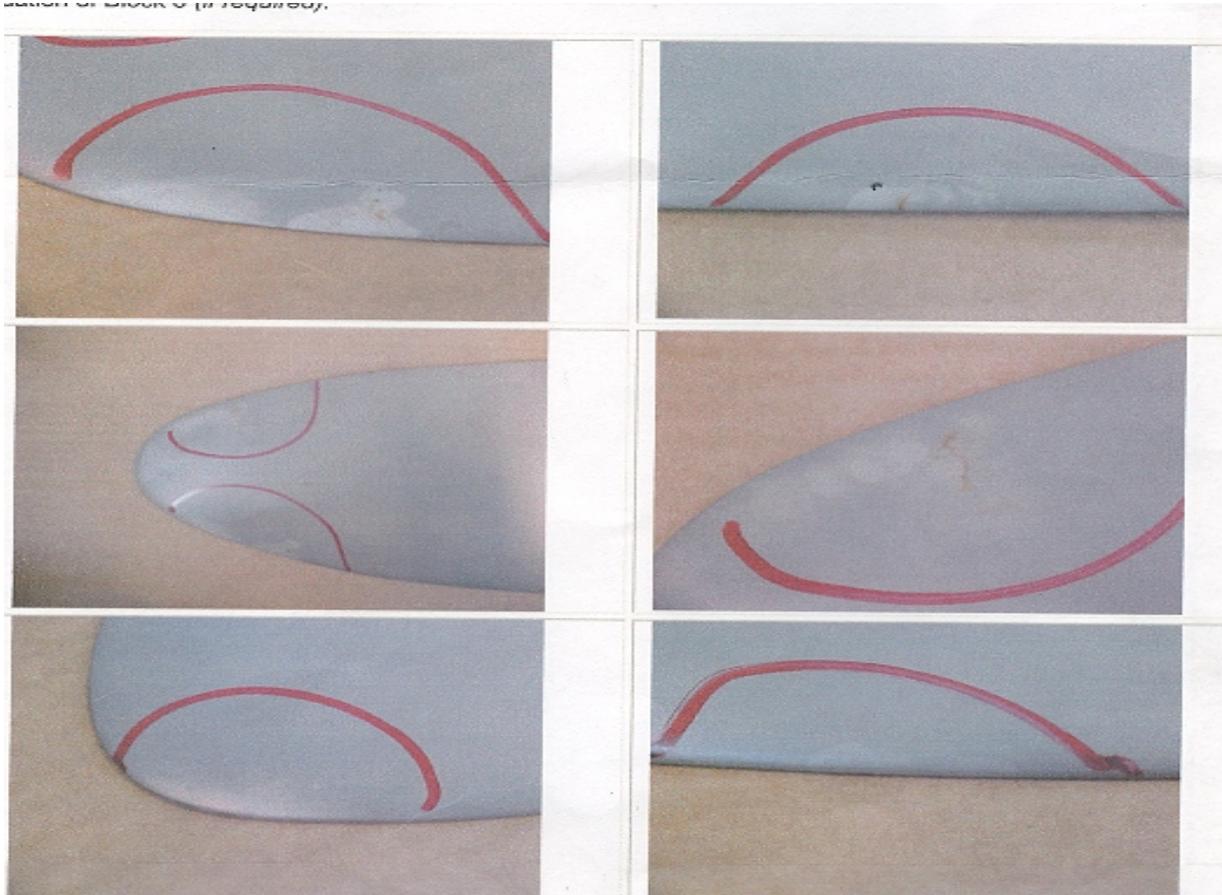
Part Total Time: 949.0 hours.

ACCESSORIES

HARTZELL PROPELLER

Hartzell Propeller: HC-C3YR-1RF; Unapproved Repair; ATA 6111

A repair station manager submits this defect report. He states, “Two of three propeller blades (*on this unit*) were previously repaired using an unapproved weld method in several locations on the blade airfoil. The blades have been scrapped—pending disposition instructions from Hartzell Propellers, Inc. The customer has been contacted for historical records.” (*P/N's for the propeller blades are F8483.*)



Part Total Time: (unknown).

AIR NOTES

INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE

The Federal Aviation Administration (FAA) Internet Service Difficulty Reporting (iSDR) web site is the front-end for the Service Difficulty Reporting System (SDRS) data base that is maintained by the Aviation Data Systems Branch, AFS-620, in Oklahoma City, Oklahoma. The iSDR web site supports the Flight Standards Service (AFS), Service Difficulty Program by providing the aviation community with a voluntary and electronic

means to conveniently submit in-service reports of failures, malfunctions, or defects on aeronautical products. The objective of the Service Difficulty Program is to achieve prompt correction of conditions adversely affecting continued airworthiness of aeronautical products. To accomplish this, Malfunction or Defect Reports (M or Ds) or Service Difficulty Reports (SDRs) as they are commonly called, are collected, converted into a common SDR format, stored, and made available to the appropriate segments of the FAA, the aviation community, and the general public for review and analysis. SDR data is accessible through the "Query SDR data" feature on the iSDR web site at: <http://av-info.faa.gov/isdr/>.

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

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

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

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

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

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

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

The SDRS and iSDR web site point of contact is:

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

IF YOU WANT TO CONTACT US

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

Editor: Daniel Roller (405) 954-3646

FAX: (405) 954-4570 or (405) 954-4655

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

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

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

AVIATION SERVICE DIFFICULTY REPORTS

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

FAA

Aviation Data Systems Branch, AFS-620

PO Box 25082

Oklahoma City, OK 73125

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

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

Federal Aviation Administration

Service Difficulty Report Data

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

Control Number	Aircraft Make	Engine Make	Component Make	Part Name	Part Condition
Difficulty Date	Aircraft Model	Engine Model	Component Model	Part Number	Part Location
2007FA0001076			CONT	DISTRIBUTOR GEAR	LOOSE
12/15/2007				10357586	MAGNETO
500-HOUR INSPECTION PERFORMED ON BOTH MAGNETOS REMOVED FROM. FOUND AXLE CRIMPED WASHER LOOSE ON SHAFT AND WORN TO THE POINT OF FALLING OFF GEAR. THIS IS THE SECOND TIME THIS CONDITION HAS BEEN FOUND ON MAGNETOS USING THIS GEAR. TTS NEW 500 AND 580.					
2007FA0001077			CONT	DISTRIBUTOR GEAR	LOOSE
12/15/2007				10357586	MAGNETO
500-HOUR INSPECTION PERFORMED ON BOTH MAGNETOS REMOVED. FOUND AXLE CRIMPED WASHER LOOSE ON SHAFT AND WORN TO THE POINT OF FALLING OFF GEAR. THIS IS THE SECOND TIME THIS CONDITION HAS BEEN FOUND ON MAGNETOS USING THIS GEAR. TTSNEW 500 AND 580.					
FCPR200700118				CARBURETOR	NO TEST
12/27/2007				10603511	ENGINE
CARBURETOR FAILED THE STUMBLE TEST, FOUND TO BE ACCELERATOR CIRCUIT. PART RETURNED TO MFG FOR FURTHER EVALUATION. (K)					
FPFC20070113				CARBURETOR	NO TEST
12/26/2007				10603511	
CARBURETOR FAILED THE STUMBLE TEST, FOUND DEFECTIVE ACCELERATOR CIRCUIT. PART RETURNED TO PRECISION FOR FURTHER EVALUATION.					
2008FA0000005				CABLE	WRONG PART
12/20/2007					ESCAPE SLIDE
INCORRECT PULL HANDLE CABLE (FIRING CABLE) DEPLOYMENT CABLE WAS SECURED WITH TAPE WHICH HINDERED DEPLOYMENT OF SLIDE. INCORRECT HANDLE AND CABLE ASSEMBLY FITTED. CABLE NOT THREADED TROUGH GROMMET DUE TO INCORRECT FIRING CABLE ASSEMBLY. CMM 25-61-10, STEPS 26 PAGE 50 WAS NOT FOLLOWED. 8130-3 TRACKING NR SBP-5473, SO NR 287413, PO NR R9246, DATED 10/23/2007, MO 0598171.					
FCPR200700125				CARBURETOR	NO TEST
12/27/2007				10603511	ENGINE
CARBURETOR FAILED THE STUMBLE TEST, FOUND TO BE ACCELERATOR CIRCUIT. PART RETURNED TO MFG FOR FURTHER EVALUATION. (K)					
2008FA0000026				CARBURETOR	FAILED
12/27/2007				10603511	ENGINE
CARBURETOR FAILED THE STUMBLE TEST, FOUND TO BE ACCELERATOR CIRCUIT. PART RETURNED TO PRECISION FOR FURTHER EVALUATION. (K)					
2008FA0000030			ROTOL	BLADE	CRACKED

12/11/2007

6607132886

PROPELLER

BLADE RECEIVED FROM CUSTOMER WITH A CRACKED ROOT END OUTERSLEEVE. NO REPAIR AVAILABLE. PART HAS BEEN REMOVED FROM FURTHER SERVICE. (K)

[2007FA0001111](#)

CONT

THRU BOLT

BROKEN

12/17/2007

IO520C

SA6419311075

CRANKCASE

INSTALLING ALL NEW SA641931-10.75 LOT NR K070059179, REV E THRU BOLTS IN ENGINE. AFTER TORQUE, WITHIN A FEW HOURS THE THRU BOLT SNAPPED, AT THE OIL RING GROOVE. THIS IS THE THIRD THRU BOLT THAT HAS SNAPPED AFTER TORQUE, AND SETTING. PROBABLE CAUSE, IS IMPROPER HEAT TREATING DURING OR AFTER PLATING. (K)

[DSC4331DL6292](#)

GARRTT

RETAINER SEAL

CRACKED

1/10/2008

TPE33110R

31022811

ENGINE

NO GEARCASE NEGATIVE PRESSURE INDICATED DURING ENGINE TEST STAND FUNCTIONAL TESTING. TROUBLESHOOTING FOUND CRACKS IN SEAL RETAINER. SUBJECT RETAINER IS MADE WITH ALUMINUM. OLDER PN 693905-10 IS MADE WITH STEEL. SB 72-0224 AUTHORIZED INSTALLATION OF ALUMINUM RETAINER.

[2007FA0001108](#)

RROYCE

BEARING

DAMAGED

10/29/2007

RB211535E4

ENGINE

DAMAGE FOUND ON STRIP. HP AND IP SHAFTS SEIZED, HP/IP BEARING DAMAGED, ALSO LP VISIBLE COUPLINGS AND SEAL ARM. DESIGN ORGANIZATION AND UK CAA HAVE BEE NOTIFIED. THE ENGINE WAS BEING OPERATED BY AA AT TIME OF IN-FLIGHT SHUTDOWN. THE ENGINE WAS RECEIVED IN OCTOBER, 2007 FOR REPAIR. (MEMS D070108) (K)

[2007FA0001107](#)

RROYCE

TURBINE BLADES

CRACKED

11/29/2007

RB211TRENT89

ENGINE

DURING INSPECTION, A CRACKED FIRTREE POST HAS BEEN HIGHLIGHTED. THE DISC HAS BEEN SCRAPPED OFF AND THIS ISSUE HAS BEEN FORWARDED TO MFG. THE DISC HAS BEEN SENT TO LAB FOR ANALYSIS. REF NR: MEM5 D070133. (K)

[CA071024009](#)

AEROSP

PWA

TIE BOLT

BROKEN

10/13/2007

ATR42300

PW120

MS2125006038

MLG WHEEL

(CAN) MAINTENANCE CREWS NOTED A BROKEN MAIN WHEEL TIE BOLT. THE MAIN WHEEL ASSEMBLY AND BRAKE ASSEMBLY WERE REPLACED. (TC NR 20071024009)

[CA071031009](#)

AIRBUS

CFMINT

WIRE HARNESS

BROKEN

10/21/2007

A319114

CFM565A1

EH19565

CABIN

(CAN) AN APPARENT NOTICEABLE ELECTRICAL ODOR WAS DETECTED IN VICINITY OF SEATS 19 DEF BY IN FLIGHT CREW AND PASSENGER. ODOR PERSISTED FOR APPROX 5 MIN AND STOPPED AT THE TIME WHEN INFLT VIDEO SYSTEM WAS SHUTDOWN. FOUND BROKEN WIRE IN THE HARNESS THAT RUNS FROM UNDER SEATS 18 DEF TO UNDER THE FLOOR. BROKEN WIRE CAPPED AND STOWED INSIDE HARNESS CONNECTOR. THIS APPEARS TO BE AN INSTALLATION ERROR. THE WHITE WIRE APPEARS TO HAVE BEEN INSTALLED UNDER TOO MUCH TENSION, AND WAS PULLED FROM THE BACK OF THE CONNECTOR. (TC NR 20071031009)

[CA070316002](#)

AIRTRC

PWA

LINE

BROKEN

3/16/2007

AT802

PT6A67A

BLEED AIR

(CAN) DURING ANNUAL INSPECTION, THE BLEED AIR LINE FOR THE CABIN HEATER WAS FOUND UNSECURED UNDER THE COCKPIT FLOOR. FURTHER INVESTIGATION FOUND THE MUFFLER FOR THE LINE BROKEN IN (2) PIECES AT THE FWD END. THE PARTS WERE REPLACED. THE REMAINING AIRCRAFT IN THE FLEET WERE INSPECTED. ONE ADDITIONAL AIRCRAFT WAS FOUND WITH THE SAME DEFECT. THE PARTS WERE REPLACED WITH SERVICEABLE UNITS. (TC# 20070316002)

[CA070921004](#)

AVIAT

LYC

SEAL

LOOSE

9/21/2007 A1B O360A1P INDUCTION SYS

(CAN) REFERENCED TO SDR NR 20070917013 AFTER FINDING COWLING SEAL LODGED IN THE CARB VENTURI. THE PILOT/OWNER OF THIS AIRCRAFT WAS REQUESTED TO CHECK THE CONDITION OF THE COWLING SEAL, IT WAS FOUND TO BE LOOSE AND DETERIORATED AS WELL. ALL OF THE SEAL WAS REMOVED FROM THE COWLING. (TC NR 20070921004)

CA071029003	AYRES	PWA	CYLINDER	CRACKED
10/19/2007	S2RHGT65	R1340AN1	399357	NR 7

(CAN) PILOT REPORTED FAILURE OF ENGINE TO MAINTAIN FULL POWER AT THE TAKEOFF SETTING. AIRCRAFT RETURNED TO THE RAMP. COMPRESSION TEST REVEALED CYLINDER NR 7, WAS LOW ON COMPRESSION AND LEAKING VIA A CRACK IN THE EXHAUST PORT AREA OF THE CYLINDER. THE OFFENDING CYLINDER WAS REMOVED AND AN OVERHAULED CYLINDER WAS INSTALLED. AIRCRAFT RETURNED TO FLIGHT STATUS. (TC NR 20071029003)

FAA010808001	AYRES	PWA	BREATHER TUBE	COLLAPSED
1/8/2008	S2RT15NORMAL	PT6*	MILH60001	ENGINE

ENGINE BREATHER HOSE SWELLED ON INSIDE FROM THE ORIGINAL 1INCH DIAMETER TO .3750 INCH DIAMETER FROM HOT OIL FUMES. THRUSH ADDRESSED THE SAME PROBLEM ON THE MFG POWERED LINE. THIS IS NOT AN ISOLATED INCIDENT. THE CONDITION NOTED CAN ONLY BE FOUND AFTER HOSE REMOVAL. EXTERIOR OF HOSE LOOKS OK. SUGGEST A SCHEDULE OF REPLACEMENT EVERY 2000 HOURS.

CA071108007	BAG	LYC	LINK	UNSERVICABLE
11/7/2007	BAE146200A	ALF502R5	200915254	MLG

(CAN) IT HAS BEEN DISCOVERED DURING INSPECTION OF THE ABOVE MENTIONED PART THAT IT IS IN AN UNSERVICABLE CONDITION. WHILE ON JACKS THE COMPONENT WAS INSPECTED AND MOVEMENT COULD BE FELT BETWEEN THE ROD ASSY AND EYE END. THE EYE END IS THREADED INTO THE ROD FOLLOWED BY A JAMB NUT AND SAFETY ASSY. NO MOVEMENT IS PERMITTED. THERE IS EVIDENCE OF CORROSION DEPOSITS LEACHING THROUGH THE SEALANT. THIS IS THE SUSPECTED CAUSE. (TC NR 20071108007)

FAA010208003	BBAVIA	CONT	VALVE	DAMAGED
12/19/2007	7EC	O200A	SAS6250	OIL TANK

INSTALLED OIL QUICK DRAIN VALVE PN SG250 ON NEW AIRCRAFT/ ENGINE. AIRCRAFT FLEW APPROX 1 HOUR. OIL LEAK NOTICED FROM DRAIN VALVE. REMOVED VALVE TO FIND VALVE SNAP RING IN OIL DRAINED FROM ENGINE AND VALVE O-RING DAMAGED. ONE CUT THROUGH AND THE OTHER NICKED. INVESTIGATION REVEALED OIL DRAIN VALVE CONTACTED THE EDGE OF THE OIL PICK-UP TUBE CAUSEING DAMAGE. SUBJECT VALVE IS NOT COMPATABLE WITH THE O200A66B ENGINE. (K)

CA061120006	BBAVIA	LYC	RUDDER PEDAL	CRACKED
11/20/2006	7GCBC	O320A2D	41621L	COCKPIT

(CAN) DURING REPLACEMENT OF THE FUEL SHUTOFF VALVE THE LT FRONT RUDDER/BRAKE PEDAL WAS FOUND CRACKED BETWEEN THE BRAKE PEDAL UPRIGHT AND THE OB PEDAL HINGE. THE DEFECT APPEARS TO BE CAUSED BY BRAKING FORCES APPLIED BY THE FLIGHT INSTRUCTOR IN THE REAR SEAT, THE LINK ROD AND BELLCRANK ON THE FRONT PEDAL TWIST THE PEDAL TO ACTUATE THE MASTER CYLINDERS, LOCATED FORWARD OF THE FRONT PEDALS. THE TWISTING BENDS AND CRACKS THE PEDAL. THIS IS THE OLD-STYLE PEDAL. THE NEWER STYLE IS PLATE-SHAPED RATHER THAN TEE-SHAPED AND SHOULD BE MORE RESISTANT TO THE TWISTING FORCES. (TC NR 20061120006)

CA071214006	BEECH	PWA	LINE	CRACKED
12/12/2007	100BEECH	PT6A28	3011847	ENGINE

(CAN) AFTER DEPARTURE DURING CLIMB, THE PILOT NOTICED SLIGHT POWER LOSS ON THE LT ENGINE WHICH SLOWLY DECAYED UNTIL TORQUE WAS AT 100LBS AT WHICH TIME THE PROP WAS FEATHERED. THE CREW ELECTED TO LEAVE THE ENGINE RUNNING AS ALL OTHER INDICATIONS WERE GREEN AND THEY WANTED THE GENERATOR RUNNING AS ICING CONDITIONS WERE FORECAST. UPON INSPECTION BY MAINTENANCE, IT WAS DISCOVERED THE PY LINE FROM THE PROP GOVERNOR TO THE FCU WAS CRACKED. THE LINE WAS REPLACED

GROUND RUNS CARRIED OUT AND THE AIRCRAFT WAS RETURNED TO SERVICE. (TC NR 20071214006)

TAS07003	BEECH		CAP	CRACKED
11/16/2007	1900		1FA100433	MLG ACTUATOR

MLG ACTUATOR WAS RECEIVED DUE TO INDICATIONS FOUND IN THE END CAP DURING ULTRASONIC TESTING. ACTUATOR WENT THROUGH A PRELIMINARY INSPECTION AND A COMPLETE FUNCTIONAL TEST WITH NO EXTERNAL EVIDENCE OF LEAKING OR CRACKING. AFTER DISASSEMBLY, A CRACK IN THE INTERNAL RADIUS OF THE END CAP WAS CONFIRMED BY A FLUORESCENT PENETRANT INSPECTION.

CA070907004	BEECH	PWA	FUEL LINE	CHAFED
9/6/2007	1900C	PT6A65B	3040637	ENGINE BAY

(CAN) FUEL LINE ASSY WAS FOUND TO HAVE BEEN CHAFED BY THE STARTER GENERATOR VENT HOSE, CAUSING A VERY SMALL PIN HOLE IN THE RIGID STAINLESS FUEL LINE, RESULTING IN A FUEL LEAK. (TC NR 20070907004)

CA071102006	BEECH	PWA	DOWNLOCK SWITCH	INOPERATIVE
10/31/2007	1900C	PT6A65B	1CH25	MLG

(CAN) UNABLE TO GET NLG (GREEN LIGHT) ON APPROACH. RECYCLED 3 TIMES AND GREEN LIGHT OBTAINED. NLG DRAG LINK DOWN AND LOCK SWITCH REPLACED. GEAR SWINGS COMPLETED. NO FURTHER FAULTS AT THIS TIME. (TC NR 20071102006)

CA070528009	BEECH	PWA	LINE	CHAFED
5/27/2007	1900C	PT6A65B	3032791	LT ENG FUEL

(CAN) FUEL FLOW TRANSMITTER LINE P/N 3032791 FOUND CHAFED. NEW PART ON ORDER. (TC NR 20070528009)

CA071105001	BEECH	PWA	ENGINE	MALFUNCTIONED
11/1/2007	1900D	PT6A67D		

(CAN) CREW OBSERVED LOW OIL PRESSURE WARNING, FOLLOWED BY SMOKE IN THE CABIN. ELECTION WAS MADE TO PERFORM AN INFLIGHT ENGINE SHUTDOWN. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. FULL ENGINE SN GAS GENERATOR MODULE: 114283 POWER SECTION MODULE: 114135 (TC NR 20071105001)

CA071023003	BEECH	PWA	CABLE	SHEARED
10/15/2007	1900D	PT6A67D	1013800005	LT FLAP DRIVE

(CAN) ON APPROACH , PILOTS SELECTED APPROACH FLAP. FLAPS STOPPED MOVING JUST PRIOR TO 17 DEGREES APPROACH FLAP POSITION. THE FLAP ASYMMETRY SWITCH WAS ACTIVATED. UPON INSPECTION THE LT OB FLAP DRIVE CABLE WAS CEASED. THE FLAP DRIVE CABLE WAS REMOVED AND REPLACED WITH A SERVICEABLE UNIT. FURTHER INSPECTION OF THE CABLE REVEALED IT WAS SHEARED AT APPROXIMATELY 85 INCHES OB OF FLAP MOTOR AND TRANSMISSION ASSEMBLY. EVIDENCE OF CORROSION AND MOISTURE WERE FOUND IN THE FLAP DRIVE SHEATHING AND CABLE WHICH LIKELY CONTRIBUTED TO THE CABLE FAILURE. (TC NR 20071023003)

CA071010008	BEECH	PWA	ACTUATOR	SEIZED
10/3/2007	1900D	PT6A67D	1295210325	LT AILERON TRIM

(CAN) DURING A 50 HOUR ROUTINE INSPECTION MAINTENANCE PERSONEL DISCOVERED THAT THE AILERON TRIM WAS NOT MOVING. UPON INSPECTION OF THE SYSTEM IT WAS DISCOVERED THAT THE AILERON TRIM ACTUATOR WAS SEIZED. THE ACTUATOR WAS REMOVED AND DISSASSEMBLED. THERE WAS INTERNAL RUST IN THE TRIM ACTUATOR HOUSING AND ONE BEARING WAS SEIZED. (TC NR 20071010008)

WSA12262007	BEECH		BOLT	MISMANUFACTURED
12/26/2007	200BEECH		998100611	MLG

HAVE ORDERED FROM MFG THE LANDING GEAR DRAG LEG BOLTS TWICE AND HAVE RECEIVED (2) DEFECTIVE BOLTS EACH TIME. THE COTTER PIN HOLE WAS MISDRILLED AND WOULD COULD NOT GET THE HOLES TO LINE UP WITH THE NUT CASTELLATION. (2) OF THE BAD BOLTS WERE DATE TAGGED 12/2/2006. THE ACTUAL BOLT

MANUFACTURER IS UNKNOWN ALTHOUGH THEY WERE SOURCED FROM AC MFG. IT IS BELIEVED THAT AC MFG HAS PULLED THESE FROM THEIR INVENTORY AFTER OUR PROBLEM.

CA060804009	BEECH	PWA	DOUBLER	DAMAGED
8/2/2006	200BEECH	PT642A	50420066281	FUSELAGE

(CAN) DURING PHASE 2 INSPECTION AND WHILE PERFORMING SPECIAL INSPECTION ON NR 25 (INSPECTION OF UPPER AND LOWER WINDSHIELD CORNERS), DAMAGE TO THE DOUBLER BELOW THE WINDSCREEN WAS FOUND. THE PN OF THE DOUBLER IS 50-420066-281 LOCATED BETWEEN FS 94.00 AND FS 100.50. THE DAMAGE WAS CAUSED FROM THE ITT HARNESSES CHAFFING INTO THE DOUBLER. THE DAMAGE IS LOCATED BETWEEN 1.5 TO 5.5 LT OF THE WINDSCREEN CENTER POST, THE DOUBLER THICKNESS IS .100, THE CHAFFING DAMAGE RANGES FROM .010 TO .069 IN DEPTH. THE DAMAGED AREA HAS BEEN MAPPED, AND THE INFORMATION SENT TO MFG REPAIR DESIGN OFFICE FOR ASSESSMENT. A FOLLOW UP REPORT SHALL BE SUBMITTED. (TC NR 20060804009)

CA070504008	BEECH	PWA	BEECH	PUMP	MALFUNCTIONED
5/3/2007	200BEECH	PT6A41		1013640867	FUEL TRANSFER

(CAN) RT FUEL PUMP RUNNING EVEN AFTER MASTER SWITCH OFF. (TC NR 20070504008)

CA071029011	BEECH	PWA	CONTROL CABLE	CHAFED
10/27/2007	200BEECH	PT6A41		AILERONS

(CAN) GRINDING NOISE UNDER PILOT FLOOR WHEN AILERONS ARE MOVED. CONTROL CABLE FOUND CHAFING ON STEEL BRAIDED NITROGEN LINE. APPROX 3 INCH DEFLECTION OF CONTROL CABLE CAUSED, DUE TO INCORRECT ROUTING OF NITROGEN LINE. NITROGEN PRESSURE LINE REROUTED. AILERON CABLE HAS 1 BROKEN STRAND WITHIN ACCEPTABLE LIMITS IAW AMM CH20-04-00-201 (TC NR 20071029011).

CA070528011	BEECH	PWA	WINDSHIELD	CRACKED
5/28/2007	200BEECH	PT6A41	PPG10138402522	LT COCKPIT

(CAN) CO-PILOTS WINDSCREEN CRACKED UNDER PRESSURIZED CONDITION. AIRCRAFT RETURNED TO BASE FOR WINDSHIELD REPLACEMENT. UNABLE TO INDICATE CORRECT MFG. (NOT IN LIST) (TC NR 20070528011)

CA071107002	BEECH	PWA	BLADES	FAILED
11/5/2007	200BEECH	PT6A41		COMPRESSOR

(CAN) PILOTS OBSERVED SPARKS COMING OUT RT ENGINE EXHAUST ON LANDING. MAINTENANCE INSPECTION FOUND COMPRESSOR BLADES LAYING IN THE ENGINE BAY. (TC NR 20071107002)

2008FA0000064	BEECH	PWA	STARTER GEN	FAILED
11/19/2007	300BEECH	PT6A60A	23085001	

THE NR 1 BEARING FAILED RESULTING IN A CATASTROPHIC FAILURE AND AN IN FLIGHT SHUTDOWN. THE ENGINE WAS REMOVED AND SENT FOR REPAIR. DURING THE FAILURE INVESTIGATION, ELECTRICAL ARCING WAS FOUND ON THE NR 1 BEARING, INPUT SHAFT, AND STARTER/GENERATOR DRIVE GEAR. SD ADVISORY NR AV-2007-05 ISSUED THAT STATES ACCUMULATION OF BRUSH DUST CAN CAUSE STARTER GENERATOR ARMATURE LEAKAGE. OUR RESEARCH DOES NOT SHOW ANY PREVENTATIVE MAINTENANCE ACTIONS THAT MAY BE PERFORMED TO THE STARTER GENERATOR TO CHECK FOR ELECTRICAL DISCHARGE. (K)

102N07110026	BEECH	LYC	CABLE	CHAFED
10/15/2007	56TC	TIO541*		OXYGEN SYSTEM

ISSUE WITH THE FIXED OXYGEN SYSTEM DISPLAY FOR STC SA01078SE WHERE THE DISPLAY (NOT IN CONTACT WITH OXYGEN) RIBBON CABLE CHAFED AND CREATED A SHORT TO GROUND WHERE THE RIBBON CABLE SMOKED BUT DID NOT FAIL, THE INDICATOR LIGHT OF THE SYSTEM, NOR FAILED TO OPERATE. ISSUE WAS NOTED DURING ANNUAL INSPECTION AND NOT REPORTED AT THE TIME OF INCIDENT. MFG HAS BEEN IN CONTACT WITH THE ACO AND IS ISSUING A SERVICE BULLETIN.

RC2R130L	BEECH	CONT	PILOT VALVE	BROKEN	
1/23/2008	58	IO520CB	B210800REVJ	5221220F	GOVERNOR

PROPELLER WENT TO FEATHER IN FLIGHT AND WAS UNABLE TO UNFEATHER. AFTER RECEIVING THE GOVERNOR

FOR INSPECTION IT WAS DISCOVERED THAT THE BOTTOM END OF THE PILOT VALVE (P/N 5221-220) HAD BROKEN OFF AND WAS MISSING. IT WAS PRESUMED THAT IT EXITED THE BOTTOM END OF THE DRIVE GEAR AND ENTERED THE ENGINE SUMP. THE OPERATOR WAS NOTIFIED AND THE MISSING PIECE WAS RETRIEVED.

2007FA0001088	BEECH	CONT	BEECH	RIB	CRACKED
11/9/2007	95B55	IO520E		3516505084	T/E FLAP

AT ANNUAL INSPECTION FOUND CRACK ON FLAP RIB. (FLAP ROD ATTACH POINT) BOTH LT AND RT FLAPS. (K)

CA071024010	BEECH	PWA		TORQUE KNEE	CRACKED
10/21/2007	A100	PT6A28		50810323	LANDING GEAR

(CAN) AFTER LANDING, UPON DECELERATING THROUGH 60 KIAS THE AIRCRAFT BEGAN TO VIOLENTLY SHAKE, SHUDDER AND APPEAR TO SKIP WHILE VEERING TOWARD THE LT SIDE OF THE RUNWAY. CONTROL WAS MAINTAINED AND THE AIRCRAFT WAS BROUGHT TO A SLOW TAXI AT WHICH TIME THE CONDITIONS CEASED. UPON EXAMINATION OF THE AIRCRAFT, IT WAS DISCOVERED THAT THE LT MAIN GEAR LOWER TORQUE KNEE HAD FAILED. THE TORQUE KNEE WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. THIS PART, 4 YEARS SINCE INSPECTION, DUE EVERY 8000 LANDING OR 6 YEARS. (TC NR 20071024010)

CA071022011	BEECH	PWA		ENGINE	MAKING METAL
10/19/2007	A100	PT6A28			RIGHT

(CAN) RT ENGINE CHIP DETECTOR LIGHT CAME ON IN FLIGHT SO WE SHUTDOWN THE RT ENGINE. ENGINE BEING REMOVED AND SENT TO ENGINE O/H FACILITY FOR REPAIR. LOANER ENGINE TO BE INSTALLED. (TC NR 20071022011)

CA071030002	BEECH	PWA		FLAP TRACK	CRACKED
10/25/2007	A100	PT6A28		501600183	TE FLAPS

(CAN) ON MAINTENANCE WALKAROUND THE RT OB FLAP HAD MORE PLAY THAN USUAL. FLAP WAS REMOVE AND THE OB FLAP TRACK WAS FOUND TO BE CRACKED ON THE REAR TIP. TRACK REPLACED AND AIRCRAFT RETURNED TO SERVICE. (TC NR 20071030002)

2007FA0001086	BEECH	CONT		NOSE RIB	CRACKED
11/9/2007	A36	IO550B		3516505084	T/E FLAP

AT ANNUAL INSPECTION FOUND BOTH LT AND RT FLAP ATTACH POINT RIBS CRACKED. (K)

2008FA0000052	BEECH	LYC		BOOT	SEPARATED
1/16/2008	A60	TIO541*			PROPELLER

A PROPELLER CAME IN FOR REPAIRS WHICH NECESSITATED THE INSTALLATION OF NEW DEICE BOOTS ON ALL 3 BLADES. THE PROP WAS LATER INSTALLED BY THE OWNER'S MECHANIC. 1 OF THE 3 BOOTS CAME OFF RESULTING IN A DENT ON THE AIRCRAFT FUSELAGE, REPORTED AFTER ABOUT 7 HOURS OF FLYING. QUESTIONING OF OUR TECH THAT INSTALLED THE BOOTS REVEALED NO DEVIATIONS IN PROCEDURES OCCURRED DURING THE INSTALLATION. IT WAS DETERMINED THAT THE GLUE USED FOR THE INSTALLATION WAS RECEIVED BY OUR FACILITY ON 8/23/07 WITH AN EXPIRATION DATE OF 9/30/08. MM 202A LISTS THE SHELF LIFE OF 1300L ADHESIVE AS 15 MONTHS. AS A PRECAUTION, THE ADHESIVE WAS REMOVED FROM USE EVEN THOUGH NO DISCREPANT CONDITION COULD BE FOUND. FACILITY VISITED LOCATION OF AC AND INSTALLED A NEW DEICE BOOT ON PROP. IT WAS OBSERVED THAT THE ADHESIVE ADHERED TO THE AREA OF THE BLADE WHERE BOOT CAME OFF, THE ADHESIVE DID NOT SEPARATE FROM THE BLADE. THE BOOT WAS NOT RECOVERED AND COULD NOT BE INSPECTED. THE BOOTS ON THIS PROP ARE LONG STRAP BOOTS. THE BOOT STRAP, ON THIS TYPE OF INSTALLATION, MUST BE POSITIONED WITHIN THE SPINNER SUCH THAT THE CENTRIFUGAL FORCES DURING OPERATION DO NOT PUSH THE STRAP THROUGH THE GAP BETWEEN THE SPINNER CUT OUT AND THE PROP BLADE. SHOULD THE STRAP BE IMPROPERLY POSITIONED DURING SPINNER INSTALLATION, IT IS POSSIBLE FOR THE STRAP TO COME OUT OF THIS GAP, WHICH RESULTS IN SEPARATION OF THE BOOT FROM THE BLADE. WHEN PROPERLY POSITIONED THE STRAP REMAINS CONTAINED WITHIN THE SPINNER. SIMILARLY, SHOULD THE PROP BE RUN UP ON THE GROUND WITHOUT THE SPINNER INSTALLED, THE BOOTS CAN SEPARATE FROM THE BLADE. SINCE THE 2 REMAINING BOOTS ARE ATTACHED TIGHTLY, IT IS LIKELY THAT THE BOOT STRAP WAS NOT POSITIONED PROPERLY DURING SPINNER INSTALLATION WHICH RESULTED IN THE BOOT SEPARATING FROM THE BLADE. (K)

CA071011001	BEECH	GARRTT		MOTOR	UNSERVICABLE
9/14/2007	B100	TPE3316252B		1153800025	LANDING GEAR

(CAN) IN DESCENT FOR LANDING, THERE WERE ONLY 2 GREEN GEAR DOWN INDICATION LIGHTS INSTEAD OF THREE. AFTER RECYCLING THE GEAR, THE PROBLEM PERSISTED. THE EMERGENCY LANDING GEAR SYSTEM WAS DEPLOYED AND THE 3 GREEN LIGHTS WERE ON AS REQUIRED. AIRCRAFT LANDED WITHOUT INCIDENT. FURTHER INSPECTION REVEALED THE LANDING GEAR MOTOR WAS UNSERVICEABLE. (TC NR 20071011001)

CA070827006	BEECH	GARRTT	SAFT	CONNECTOR	MELTED
7/27/2007	B100	TPE3316252B		MS33491	BATTERY

(CAN) WHILE IN FORMATION FLIGHT, THE LT (BATTERY CHARGE) LIGHT CAME ON AND STAYED ON FOR 15 MINUTES AND THEN EXTINGUISHED. AFTER LANDING AND ENGINES SHUTDOWN, THERE WAS NO MORE POWER COMING FROM THE BATTERIES. AN INSPECTION WAS CARRIED OUT AND THE LT BATTERY WAS DISCOVERED (TOASTED) INCLUDING THE BATTERY COMPARTMENT. THE CAUSE WAS DETERMINED TO BE A BAD CONTACT ON THE NEGATIVE POLE. (TC NR 20070827006)

CA071029005	BEECH	PWA	CLEVELAND	BOLT	MISSING
10/27/2007	B200	PT642A		10310300	TORQUE PLATE

(CAN) DURING MAINTENANCE ON AIRCRAFT, NR 4 MAIN TIRE WORN TO LIMITS. DURING NR 4 MAIN WHEEL AND TIRE CHANGE, FOUND 3 OUT OF 6 BRAKE TORQUE PLATE ATTACH BOLTS MISSING AND REMAINING ATTACH BOLTS LOOSE. A LOOSE BOLT WAS FOUND LODGED IN WHEEL BETWEEN A WHEEL HALF TIE BOLT HEAD AND THE BRAKE DISC. 3 NEW BOLTS WERE INSTALLED AND ALL 6 BOLTS WERE INSTALLED AND TORQUED TO MFG SPECS. OTHER 3 BRAKE INSTALLATIONS AND 4 BRAKE INSTALLATIONS VISUALLY VERIFIED NO BOLTS MISSING. HAVE CONTACTED MFG TO PURSUE THE USE OF DRILLED AND LOCKWIRED BOLTS. (TC NR 20071029005)

CA071025006	BEECH	PWA		ENGINE	MAKING METAL
10/11/2007	B200	PT642A			

(CAN) 15 MINUTES INTO FLIGHT, THE ENGINE CEASED OPERATION AND SIMUTANEOUSLY ILLUMINATED THE CHIP DETECTOR INDICATOR. THE CHIP DETECTOR CIRCUIT BREAKER WAS THEN REPORTED TO HAVE 'POPPED'. AIRCRAFT RETURNED TO POINT OF DEPARTURE. POST FLIGHT INSPECTION REVEALED SUBSTANTIAL INTERNAL ENGINE DISTRESS. THE CHIP DETECTOR HAD 'POPPED' ON THE PREVIOUS FLIGHT AND HAD BEEN RESET. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

CA071025007	BEECH	PWA	BEECH	ROLLER	SEIZED
10/24/2007	B200	PT642A			RT TE FLAP

(CAN) ON APPROACH WHEN FLAPS WERE SELECTED DOWN, THE RT WING BECAME HEAVY. AILERON CONTROL WAS REDUCED AND FELT DIFFERENT THAN NORMAL. THE PILOT LANDED WITHOUT FURTHER INCIDENT AND SELECTED FLAPS UP. THE FLAPS DID NOT MOVE WHEN SELECTED UP, SPLIT-FLAP SAFETY MECHANISM WAS ACTUATED. THE RT OB FLAP, IB AFT ROLLER APPEARS TO HAVE SEIZED AND TORE OUT OF THE FLAP BRACKET. WHEN THE AMO DRILLED APART THE FLAP FOR REPAIR, THEY NOTED THAT THE BRACKET WAS WORN THIN FROM THE ROLLER. THIS, WOULD ONLY BE VISIBLE ONCE THE ROLLER WAS REMOVED. THE MM DOES NOT SPECIFICALLY REQUIRE REMOVAL OF FLAPS OR ROLLERS FOR INSPECTION OR LUBRICATION. A REGULAR REMOVAL OF ALL FLAPS TO INSPECT CONDITION OF ROLLERS AND FLAP BRACKETS WOULD LIKELY HAVE CAUGHT THIS PROBLEM BEFORE IT FAILED. (TC NR 20071025007)

CA071106007	BEECH	PWA		INDICATOR	LEAKING
11/6/2007	B200	PT642A		9536830	HYD SYSTEM

(CAN) WE HAD A PRESSURE GAUGE THAT HAD A SMALL LEAK SO WE PURCHASED A NEW GAUGE FROM MFG AND INSTALLED IT ON THE AIRCRAFT. WHEN SYSTEM WAS BROUGHT UP TO THE PROPER PRESSURE THE NEW GAUGE LEAKED WORSE THAN THE ORIGINAL GAUGE. THE GAUGE WAS SENT BACK TO BEECH AND WE ARE WAITING FOR A REPLACEMENT. THIS IS A QUALITY CONTROL ISSUE. (TC NR 20071106007)

CA071024008	BEECH	PWA		ENGINE	FAILED
10/4/2007	B200	PT642A			

(CAN) AT FL260, ITT INCREASED TO NEAR MAXIMUM. POWER WAS REDUCED TO FLIGHT IDLE HOWEVER ITT

REMAINED HIGH. HEAVY SMOKE WAS OBSERVED COMING FROM EXHAUST. CREW ELECTED TO SHUTDOWN ENGINE AND PERFORM SINGLE ENGINE LANDING. POST FLIGHT INSPECTION REVEALED OIL DRIPPING FROM EXHAUST AND SEIZED PROPELLER SHAFT. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

CA070826000	BEECH	PWA	MICHEL	TUBE	DETACHED
8/25/2007	B200	PT642A			TIRE

(CAN) ON TAKEOFF THE CREW NOTICED A STRONG VIBRATION. THEY DECIDED TO CANCEL THE FLIGHT AND LAND BACK AT AIRPORT. FOUND THE NOSE TIRE BALANCE PATCH (FACTORY INSTALLED) HAD COME DISCONNECTED AND WAS TUMBLING LOOSE INSIDE THE TIRE. (TC NR 20070826000)

T4OR4765001	BEECH	PWA		LEVER	TWISTED
12/21/2007	B200	PT6A42		5043004315	CABIN DOOR

WHILE TRYING TO RIG THE CABIN DOOR UPPER LATCH HOOKS FOR PROPER OVERCENTER, IT WAS FOUND PROPER OVERCENTER COULD NOT BE OBTAINED WITHOUT THE ADJUSTING ROD END WITNESS HOLES BEING EXPOSED. CLOSER EXAMINATIONS SHOWED THE FWD AND AFT DOOR ACTUATION LEVER ASSEMBLIES, PN 50-430043-15 (FWD) AND 50-430043-17 (AFT) WERE TWISTED, CHANGING THE RELATIVE ANGLE BETWEEN THE LATCH HOOK AND ROD END ATTACH POINT. NORMALLY THE ANGLES BETWEEN THE LATCH HOOK AND LATCH ROD ATTACH POINT IS ABOUT 90 DEGREES. THE PARTS IN THIS DOOR WERE SOMEWHAT LESS THAN 90 DEGREES, CLOSER TO 75 DEGREES DUE TO THE TWIST. WITH THIS CONDITION, THE PUSHROD FOR THE UPPER HOOK OVERCENTER ADJUSTMENT WOULD NEED TO BE EXTENDED FARTHER THAN DESIGNED, EXPOSING THE ROD END WITNESS HOLES IN THE PUSHRODS.

CA071015005	BEECH	PWA		IGNITION LEAD	DAMAGED
10/12/2007	B300	PT6A60A		CH5339906	ENGINE

(CAN) WHILE CARRYING OUT A FUEL NOZZLE REPLACEMENT, FOUND A DAMAGED INSULATOR ON THE IGNITER END OF THE IGNITION LEAD. REPLACED IGNITION LEAD AND TESTED SERVICEABLE. (TC NR 20071015005)

CA071011010	BEECH	PWA		ACTUATOR	BYPASSING
5/14/2007	B300	PT6A60A		11013880141	MLG

(CAN) WHILE CONDUCTING A LANDING, THE PILOTS NOTED THAT WHILE SELECTING THE GEAR DOWN THE GEAR MOTOR RAN LONGER THAN NORMAL. THEY THEN NOTED THAT THE RT GEAR INDICATION LIGHT HAD FAILED TO SHOW A DOWN AND LOCKED POSITION. THEY TRIED AN EMERGENCY GEAR EXTENSION WITH NO LUCK. THEY FLEW THE AC TO A BIGGER CENTER WHERE EMERGENCY SERVICES WERE AVAILABLE. CONDUCTED A FLYBY AND THE GEAR WAS VERIFIED TO BE IN THE DOWN AND LOCKED POSITION. THE AIRCRAFT LANDED WITH NO INCIDENT. MAINTENANCE CREW FLEW NORTH TO INVESTIGATE. DURING THIS TIME IT WAS NOTED BY THE ENGINEERS THAT THE GEAR ACTUATOR WAS BY-PASSING INTERNALLY, FAILING TO BUILD SUFFICIENT PRESSURE TO COMPLETELY LOCK THE GEAR SYSTEM. THE AIRCRAFT WAS FLOWN BACK SOUTH ON A FLIGHT PERMIT AND ACTUTOR REMOVED AND SENT TO MFG FOR FURTHER INVESTIGATION. (TC NR 20071011010)

CA071116002	BEECH	PWA		REGULATOR VALVE	INOPERATIVE
11/15/2007	B300	PT6A60A		1013800273	PNEUMATIC PRESS

(CAN) WHILE IN CRUISE FLIGHT AT FL230 THE FLIGHT CREW OBSERVED THE PNEUMATIC PRESSURE GUAGE RAPIDLY FLUCTUATING BETWEEN 18 AND 23 PSI. THERE WAS AN ASSOCIATED CHATTERING HEARD IN THE AIRFRAME, IN CONJUNCTION WITH THE FLUCTUATING INDICATOR. FLIGHT CREW DECIDED TO RETURN TO BASE AND PNEUMATIC INDICATIONS RETURNED TO NORMAL DESCENDING THROUGH 15,000 FEET AND REMAINED THAT WAY TO LANDING. MAINTENANCE REPLACED PNEUMATIC PRESSURE VALVE/REGULATOR PN 101-380027-3 (PN 1H75-12). (TC NR 20071116002)

2007FA0001084	BEECH	LYC		NOSE RIB	CRACKED
11/9/2007	B95	O360A1A		3516505084	T/E FLAP

IN-FLIGHT, PILOT LOWERED FLAPS AND AIRCRAFT STARTED TO ROLL TO THE RT. PILOT NOTICED RT FLAP WAS RETRACTED, HE THEN RETRACTED FLAP HANDLE. AIRCRAFT LANDED SAFELY, WITHOUT INCIDENT. UPON INSPECTION, FOUND RT FLAP ROD ATTACH BRACKET BROKEN AND FLAP NOSE RIB NUTPLATE FLANGE TORN.

INSPECTED LT SIDE AND FOUND NOSE RIB FLANGE AND WEB CRACKED. (K)

CA071031008	BEECH	PWA	BEECH	BEARING	FAILED
10/30/2007	B99	PT6A28		950476	MAIN WHEEL

(CAN) ON TAKEOFF THE CREW NOTED THAT THEY FELT A SLIGHT VIBRATION, BUT FELT THAT IT WAS LIKELY THE RAISED RUNWAY LIGHTS. AFTER TAKEOFF THEY WERE ADVISED THAT THEY HAD LOST A TIRE. THE AIRCRAFT WAS LANDED WITHOUT INCIDENT. MAINTENANCE FOUND THAT ONE OR BOTH WHEEL BEARINGS HAD FAILED. THIS ALLOWED THE WHEEL TO DEPART FROM THE AXLE. INSPECTION SHOWED NO DAMAGE TO ANY OTHER PART OF THE AIRCRAFT, INCLUDING AXLE AND BRAKE. THE WHEEL ASSY. INCLUDING BEARINGS WERE REPLACED AND THE AIRCRAFT WAS RELEASED TO SERVICE. (TC NR 20071031008)

IG0R200751070	BEECH	PWA	HNYWL	BELLOWS	DAMAGED
12/19/2007	C90	PT6A21	DPF2	2523631	FCU

ENGINE WENT TO IDLE IN FLIGHT. FAILED BELLOWS BENCH TEST. BELLOWS BREACHED. UPON FURTHER INSPECTION THERE WAS NO PHYSICAL DAMAGE TO THE BELLOWS HOWEVER THERE WAS CORROSION ON THE TOP OF THE BELLOWS AND AT THE FIRST CONVOLUTION. REPLACED BELLOWS AND RECALIBRATED FUEL CONTROL UNIT.

FAA20080118	BEECH	PWA		ACTUATOR	CRACKED
1/18/2008	C90	PT6A21		505212234	ZONE 600

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

2007FA0001097	BEECH	PWA		BUMPER BLOCK	UNBONDED
12/12/2007	C90A	PT6*		509800913	RT MLG

COMMUNIQUE NR 2000-04 ANNOUNCED THAT STARTING LJ-1088 AND AFTER THAT LANDING GEAR BUMPER BLOCK WILL BE BONDED TO THE MAIN SPAR WHERE IT CROSSES INSIDE THE LANDING GEAR WHEEL WELLS. THIS AC FOUND THE RT LANDING GEAR BUMPER BLOCK ON THE FLOOR OF HIS HANGER. NOT KNOWING WHAT THIS PART WAS THE OWNER ALMOST THREW IT IN THE TRASH. LUCKILY HE KEPT IT FOR AT OUR NEXT PHASE INSPECTION, WE FOUND THAT IT WAS MISSING AND TOLD THE OWNER, WHO REMEMBER STORING THIS UNKNOWN PART IN A LOCKER AT THIS HANGER. CLEANED THE AREA AND ATTACHED THE BUMPER BY APPLYING THE EC2216 EPOXY IAW THE COMMUNIQUE. THIS BLOCK ON EARLIER AC WERE BOLTED ONTO THE SPAR. THIS METHOD WAS MOST LIKELY DISCONTINUED BECAUSE ELIMINATION OF APPLYING EXTRA HOLES INTO SPAR. PERFORMING MANY STRUCTURAL INSPECTIONS , HAVE NEVER SEEN A CRACK ORIGINATE FROM THIS AREA OF THE SPAR. (K)

2007FA0001085	BEECH	CONT		NOSE RIB	CRACKED
11/9/2007	D55	IO520C		3516505084	T/E FLAP

AT ANNUAL INSPECTION, FOUND CRACKED FLAP ROD ATTACH POINT RIB. RT FLAP ONLY. (K)

2007FA0001089	BEECH	CONT	BEECH	RIB	CRACKED
11/9/2007	F33A	IO550B		3516505084	T/E FLAP

AT ANNUAL INSPECTION, FOUND RT FLAP ROD ATTACH POINT RIB CRACKED. (K)

FAA122808001	BEECH	PWA		BOLT	SHEARED
12/28/2007	H18	R985*		AN7520	NLG

DURING THE INVESTIGATION. IT WAS DISCOVERED THAT THE REMAINDER OF THE BOLT FOR NOSE GEAR RETRACT PUSH PULL TUBE TO CANTILEVER ARM FOR DRAG BRACE HAD SHEARED ON (2) DIFFERENT OCCASIONS FOR REASONS UNDETERMINED. THE OPERATOR ALSO OPERATES (2) OTHER VOLPAR TRICYCLE GEARED AC, A BOLT FROM ONE OF THOSE AC WAS REMOVED TO FIND SCORE MARKS IN THE SHANK OF THE BOLT IN THE SAME VICINITY OF THE SHEAR POINTS OF THE INCIDENT AIRCRAFT BOTH AIRCRAFT HAVE SIMILAR AIRFRAME TT. IT WAS DISCUSSED WITH THE OPERATOR ON TECHNIQUES AND MISTAKES MADE DURING LANDING AND IT WAS DISCOVERED THAT IF THE AIRCRAFT IS EMPTY/LIGHT AND THE PILOT ALLOWS THE NOSE TO SETTLE TOO SOON IF COULD INDUCE A PORPOSING EFFECT THAT COULD PUT LARGE SHEAR LOADS ON THIS BOLT AS

THE NOSE GEAR BOUNCES DOWN THE RUNWAY. THE OPERATOR HAS REPLACED ALL NOSE GEAR PUSH/PULL TUBE TO DRAG BRACE CANTILEVER ARM ATTACH BOLTS IN THEIR FLEET.

2007FA0001087	BEECH	CONT	BEECH	RIB	CRACKED
11/9/2007	V35B	IO520BA		3516505084	T/E FLAP

AT ANNUAL INSPECTION FOUND RT FLAP ROD ATTACH POINT RIB CRACKED. (K)

CA071029006	BELL	LYC		CIRCUIT BREAKER	ODOR
10/25/2007	205B	T5317BLYC		MS2524475	

(CAN) SMOKE AND ODOR IN CABIN. LANDED BACK AT PAD. (TC NR 20071029006)

CA071026001	BELL	ALLSN		STARTER GEN	DEFECTIVE
10/12/2007	206B	250C20		150SG117Q	

(CAN) DURING SHUTDOWN, IT WAS NOTED THAT A NOISE WAS COMING FROM THE ENGINE BAY AREA. FURTHER INVESTIGATION NOTED THE STARTER GEN REQUIRED TO BE REPLACED. STARTER GEN WAS REPLACED FOR NO FURTHER DEFECTS. (TC NR 20071026001)

CA070703003	BELL	ALLSN	AIRBORNE	CARTRIDGE	UNSERVICEABLE
7/1/2007	206B	250C20		1C27	BOOST PUMP

(CAN) CAUTION LIGHT ILLUMINATED DURING FLIGHT INDICATING A BOOST PUMP FAILURE. FUEL SYSTEM INSPECTED FWD BOOST FOUND TO BE NOT OPERATING. CARTRIDGE CHANGED OUT WITH AN OVERHAULED UNIT.FUEL SYSTEM SERVICABLE. (TC NR 20070703003)

CA070917001	BELL	ALLSN		PIN	BRINELLED
9/14/2007	206B	250C20		30000556001	CYCLIC SERVO

(CAN) DURING ROUTINE MAINTENANCE, FLIGHT CONTROL CHECKS REVEALED A RATCHET SENSATION DURING MOVEMENT OF SHOULDER PIN ON LT LATERAL SERVO. PIN REMOVED AND INSPECTED REVEALING INDICATIONS OF BRINELLING AND THE POSSIBILITY OF PLATING WHICH HAS BEEN ADDRESSED BY AD CF95-11 R2 (ASB 206-95-84).SERVO AND PIN WILL BE FORWARDED FOR FURTHER INSPECTION. (TC NR 20070917001)

CA071102003	BELL	ALLSN	BELL	BOOT	DETERIORATED
10/29/2007	206B	250C20		206040272101	DRIVE SHAFT

(CAN) DRIVE SHAFT WAS RECENTLY INSPECTED, GREASED AS REQUIRED AT MFG. OLD BOOTS WERE SERVICEABLE, BUT AGE WAS NOT KNOWN SO REPLACEMENT WAS ELECTED AS A SAFETY PRECAUTION. NEW BOOTS INSTALLED AND DRIVE SHAFT SERVICED. 21.1 HOURS AFTER REPACK GREASE LEAK WAS DETECTED BY PILOT AND DRIVE SHAFT REMOVED. AS A SERVICEABLE DRIVE SHAFT WAS AVAILABLE THE LEAKING ONE IN QUESTION WAS (RED TAGGED). UNSERVICEABLE DRIVE SHAFT DISASSEMBLED AND BOOT FOUND DETERIORATED, ALMOST TO A DISSOLVED STATE, RUBBER SEEMS MORE LIKE A PLASMA THEN RUBBER STATE. BOOT INFO SKF BO201 SKF BCO-BO-7206 MFG 1/19/07. (TC NR 20071102003)

CA071024005	BELL	ALLSN		SERVO	WORN
10/23/2007	206B	250C20		41103750017	HYDRAULIC SYS

(CAN) PLAY NOTED IN CYCLIC CONTROL. ONCE INVESTIGATED THE PILOT VALVE LINKAGE ON RT CYCLIC SERVO FOUND WORN BEYOND LIMITS. (TC NR 20071024005)

CA071023005	BELL	ALLSN		OIL SYSTEM	LOW PRESSURE
10/22/2007	206B	250C20B			ENGINE

(CAN) LOSS OF ENGINE OIL PRESSURE IN FLIGHT. ENGINE WILL BE REMOVED AND SENT FOR INVESTIGATION. (TC NR 20071023005)

CA071015006	BELL	ALLSN		FCU	OUT OF ADJUST
9/20/2007	206B	250C20B		23065104	ENGINE

(CAN) FCU SN 304536 REMOVED FOR OVERHAUL(RUNNING NORMAL)FCU SN 308210 TSO 0 INSTALLED (FROM SAE)AND REQUIRED MAXIMUM ADJUSTMENTS,START DERICH AND START ACCEL.TO GET ENGINE TO START. AFTER 7.3HRS, OUR AME DEEMED IT NECESSARY TO CHANGE IT FOR A BETTER ONE. A LOANER FCU WAS RECEIVED AND SN 308210 WAS REMOVED AND SN 87041003 WAS INSTALLED AGAIN FROM SAE. THIS UNIT WOULD NOT EVEN START THE AC EVEN AFTER ALL ADJUSTMENTS. ANOTHER FCU WAS RECEIVED FROM ESSENTIAL TURBINES SN BR54951 AND IT WAS INSTALLED WHICH STARTED NORMALLY WITH LITTLE ADJUSTMENT. NEEDS TO CHECK ITS FLOW BENCH FOR CALIBRATION. (TC NR 20071015006)

CA071030004	BELL	ALLSN	ALLSN	CARBON SEAL	DAMAGED
10/29/2007	206B	250C20B		6898607	NR 1

(CAN) DURING AN OIL LEAK WAS DISCOVERED BY THE BLEED VALVE. NR 1 BEARING CARBON SEAL FOUND DAMAGED, THE BEARING WAS REMOVED AND UPON INSPECTION FOUND UNSERVICEABLE. THE BEARING WHEN TURNED HAD A ROUGH, COURSE FEELING TO IT. (TC NR 20071030004)

CA071030010	BELL	ALLSN		HOUSING	MISMANUFACTURED
10/30/2007	206B	250C20B		6899246	OIL FILTER

(CAN) DUE TO A INTERNAL CASTING DEFECT INSIDE THE OIL FILTER HOUSING, THE PRESSURE REGULATING POPPET CANNOT FULLY BOTTOM OUT WHEN INSTALLED. THIS THEN GIVES A FALSE INDICATION OF PROPER POSITION OF THE POPPET WHEN (BACKED OUT) 5.5 TURNS FOR INITIAL ADJUSTMENT FOLLOWING OVERHAUL. THE MFG WAS ADVISED AND RECOMMENDS THAT AN APPROVED FACILITY MACHINE THE INTERNAL SURFACE OF THE HOUSING TO REMOVE THE DEFECT. (TC NR 20071030010)

CA071029004	BELL	ALLSN		HOUSING	CRACKED
8/9/2007	206L	250C20R2			M/R TRANSMISSION

(CAN) OIL FOUND ON TRANSMISSION DECK AFTER BRIEF DAILY INSPECTION, OIL LEAK FOUND FROM THE BOTTOM OF THE TRANSMISSION. UPON FURTHER INVESTIGATION TRANSMISSION REMOVED AND BOTTOM CASING FOUND TO BE CRACKED AT LOWER MAST SUPPORT BRG. (TC NR 20071029004)

CA071023004	BELL	ALLSN	BELL	NUT	FAILED
10/22/2007	206L4	250C30P		206040078103	MAST BEARING

(CAN) WHILE INVESTIGATION MAST BEARING PLAY, UNABLE TO REMOVE NUT (BEARING TORQUE). MAST ASSEMBLY SENT TO MFG FOR INVESTIGATION. NEW MAST ASSEMBLY PROVIDED BY MFG. (TC NR 20071023004)

CA071023002	BELL	ALLSN	BELL	NUT	LOOSE
10/22/2007	206L4	250C30P		206040078103	MAST ASSY

(CAN) WHILE INVESTIGATING MAST BEARING PLAY. UNABLE TO REMOVE NUT (BEARING TORQUED). MAST ASSY SENT TO MFG FOR INVESTIGATION. NEW MAST ASSY PROVIDED BY MFG (TC NR 20071023002).

CA071026003	BELL	PWA		CYCLIC STICK	CORRODED
10/25/2007	212	PT6T3		204001363015	

(CAN) PILOTS CYCLIC STICK DISASSEMBLED FOR PAINT AND REFURBISH. STEEL RING PN 204-001-369-001 IS RIVETED ON THE CYCLIC STICK. THE STEEL RING IS USED FOR APPLICATION OF FRICTION. THE STEEL RING WAS REMOVED AND EXTREME CORROSION PITTING WAS FOUND IN THE CYCLIC STICK. IF THE CORROSION DEPTH COULD BE MEASURED ACCURATELY IT WOULD BE 40-50 PERCENT OF THE TUBE THICKNESS. PULLED A USED CYCLIC STICK ASSY OUT OF OUR STOCK INVENTORY DISASSEMBLED IT ONLY TO FIND IT CORRODED AS WELL NOT QUITE AS BAD BUT BEYOND SERVICEABLE. FINDING 2 HAS PROMPTED US TO CONSIDER THIS TO BE MORE THAN A ONE OF ISSUE CORROSION ISSUE. (TC NR 20071026003)

2007FA0001098	BELL	PWA		ATTACH FITTING	GOUGED
12/19/2007	412	PT6*			CYCLIC STICK

DURING INSPECTION FOR BHT ASB-412-07-127 (CYCLIC STICK BEARING INSPECTION) IT WAS FOUND THAT THE LATERAL CONTROL TUBE PN 412-001-307-101 FIXED (OB) CLEVIS PN 212-001-059-001 OR -103 HAD GOUGED THE CYCLIC LEVER ASSEMBLY BEYOND REPAIRABLE LIMITS AND THE BEARING GREASE SEAL RETAINER WAS DISLODGED. THIS DAMAGE WAS CAUSED BY ANGULAR MISSALIGNMENT OF THE FIXED CLEVIS WITH RELATION

TO THE ADJUSTABLE (IB) CLEVIS. IT WAS ALSO NOTED THAT BOTH CLEVIS'S WERE A DIFFERENT DESIGN THAN THE OTHER CLEVIS'S INSTALLED ON THE CYCLIC OF THIS AND OTHER 412 AIRCRAFT AVAILABLE FOR INSPECTION. THIS DESIGN WAS A STRAIGHT (TUNNING FORK) DESIGN AS APPOSED TO THE OTHER CLEVIS DESIGN WITH AN ELONGATED (C) SHAPE WHICH ALLOWED FOR MORE CLEARANCE. MFG SUPPORT WAS CONTACTED TO VERIFY THIS DESIGN CLEVIS WAS APPROVED FOR USE IN THIS LOCATION. REPLACED LEVER ASSEMBLY, REALIGNED CLEVIS AND FOUND ASSEMBLY TO HAVE MINIMAL TO NO CLEARANCE AT EXTREME CYCLIC STOPS.

CA071030001	BELL		CHECK VALVE	OBSTRUCTED
10/24/2007	412EP		204076437003	HYD SYSTEM

(CAN) DURING GROUND RUN, FIRST START OF THE DAY, BOTH HYDRAULIC SYSTEMS NR 1 AND NR 2 INDICATED GOOD PRESSURE AND BOTH HYDRAULIC CAUTIONS WERE EXTINGUISHED. THE FORCE TO DISPLACE PEDALS WAS NOTED TO BE ABNORMALLY HIGH. TO CONFIRM SYSTEM NR 1 WAS FUNCTIONING CORRECTLY, SYSTEM NR 2 WAS SELECTED OFF. A TOTAL LOSS OF HYDRAULICS WAS ENCOUNTERED TO BOTH CYCLIC AND COLLECTIVE. THE AIRCRAFT WAS IMMEDIATELY SHUTDOWN. DURING INVESTIGATION, FOD WAS FOUND OBSTRUCTING THE CHECK VALVE, ORIGIN OF FOD IS UNKNOWN AND UNDER INVESTIGATION. (TC NR 20071030001)

CA071026006	BELL	LYC	BLADE	BROKEN
10/24/2007	47G2	VO435A1D	4711012050	MAIN ROTOR

(CAN) DURING NORMAL TRAINING FLIGHT, VIBRATION WAS FELT AND AUTOROTATION LANDING CARRIED OUT. UPON SHUTDOWN AND INSPECTION OF BLADES, A FIVE (5) FOOT SECTION OF BLADE COVERING WAS DISCOVERED MISSING FROM THE UNDERSIDE OF THE BLADE FROM THE TIP EXPOSING THE WOOD BLADE CORE CAUSING THE ABNORMAL VIBRATION. BLADES WERE REMOVED AND AIRCRAFT TRANSPORTED BACK TO THE MAINTENANCE FACILITY. NTSB WERE ON SITE SHORTLY AFTER AND REQUESTED THAT THE BLADES BE SHIPPED OFF FOR A DETAILED EXAMINATION. (TC NR 20071026006)

CA070504002	BELL	LYC	BELL	TUBE	CRACKED
5/3/2007	47G2	VO435A1D		471401241	STABILIZER BAR

(CAN) ON NORMAL WALK AROUND PILOT NOTICED STABILIZER BAR TUBE CRACKED AT SLEEVE AT IB END OF TUBE. STAB BAR ASSEMBLY WAS REPLACED AND MACHINE RETURNED TO SERVICE. AD 74-08-02 COVERS THIS ISSUE ON SOME OF THE LATER MODEL STAB BARS BUT NOT THE EARLIER MODELS OF STAB BARS. ALTHOUGH WE CHECK THIS AS PART OF OUR NORMAL PREFLIGHT CHECK AND THIS IS HOW IT WAS FOUND. (TC NR 20070504002)

CA071102013	BELL	LYC	BELL	BEARING CAGE	MAKING METAL
11/1/2007	47G2	VO435A1E		476206283	M/R TRANSMISSION

(CAN) DURING ROUTINE INSPECTION, SMALL AMOUNT OF BRASS WAS FOUND IN OIL SCREEN, THE TRANSMISSION WAS DISASSEMBLED TO LOCATE THE FAILED ITEM AND IT WAS FOUND TO BE ONE OF THE BEARING CAGES IN THE DUPLEX BEARING THAT THE UPPER SUN GEAR GOES THROUGH, THIS IS THE NEW AND IMPROVED BEARING INSTALLED IAW TB 47-75-4 (TC NR 20071102013)

2008FA0000031	BELL		LINER	WORN
12/5/2007	UH1B		2040012741	COLLECTIVE

PILOT EXPERIENCED COLLECTIVE BOUNCE ON TAKEOFF. INSPECTION OF COLLECTIVE LINERS SHOWED A SUFFICIENT AMOUNT OF LINER REMAINING IN THE WEAR AREA. WITH FURTHER INSPECTION, THE MINIMUM COLLECTIVE FRICTION WAS TOO LOW. INSPECTION ON NR 3 AND NR 6 PHASE IAW TM 55-1520-219-PMS, PAGE 6, ITEM NR 2.14 REQUIRES TO INSPECT COLLECTIVE FRICTION LINERS FOR WEAR. ADJUSTMENT OF MINIMUM COLLECTIVE FRICTION SHOULD ALSO BE INCLUDED IN THE PHASE INSPECTION CHECKLIST ALONG WITH VISUAL INSPECTION OF THE LINERS. (K)

2007FA0001109	BOEING		BRACKET	CRACKED
12/24/2007	727233		SB727570112	BS 760

RT PREVENTATIVE MODIFICATION FWD IB ANGLE CRACKED AT BS 760.95. REPAIRED CRACK AT RT BL 70.5, BS 760.95, UPPER AND LOWER MOST FORWARD HOLES. OVERSIZED CRACKED HOLE IAW 57-112. NDT PERFORMED TO CONFIRM CRACK TERMINATION. COMPLIED WITH TERMINATION REPAIR IAW SB 727-57-0112. REMOVED RT

PREVENTATIVE MODIFICATION FWD IB ANGLE BRACKET. (K)

CA071029009	BOEING	CFMINT	SHAFT	CONTAMINATED
10/27/2007	737*	CFM567B22	273A45141	NLG

(CAN) THE FLIGHT CREW REPORTED THAT AFTER TAKEOFF, (THE NOSE GEAR INDICATES DOWN IN THE UP POSITION. WHEN GEAR HANDLE PUT IN THE OFF POSITION, THE NOSE GEAR CAME DOWN.) THE FLIGHT RETURNED TO BASE AND MADE AN UNEVENTFUL LANDING. MANUAL EXTENSION ARM FOUND IN THE EXTEND POSITION AND WOULD NOT RELEASE. PAINT FOUND ON THE P/N 273A4514-1 SHAFT. PAINT REMOVED, MICARTA BUSHINGS CLEANED AND SHAFT REINSTALLED IAW OHM 32-35-05 AND SOPM 20-50-01. NOSE GEAR RETRACT TEST C/W IAW AMM 32-33-00 WITH NO FAULT FOUND. HAVE ADVISED MFG OF THE EVENT AND THE REPORT OF PAINT FOUND ON THE SHAFT ASSEMBLY. (TC NR 20071029009)

CA071106012	BOEING	PWA	CIRCUIT BREAKER	FAILED
11/4/2007	737*	JT8D17A	BACC18AE35	

(CAN) ENROUTE AT FL300, THE CREW EXPERIENCED AN AUTO PILOT DISENGAGEMENT AS WELL AS THE LOSS OF THE FOLLOWING, YAW DAMPER, MACH TRIM, CAPTS. PITOT STATIC, NR 1 ENG ANTI ICE, RADAR ALTIMETER, NO 2 EGT AND SEVERAL OTHERS. THE CREW ATTEMPTED A RESET OF THE NR 1 NORMAL TRANSFER BUS CIRCUIT BREAKER, WHICH FAILED. THE AIRCRAFT WAS DIVERTED AND LANDED WITHOUT FURTHER INCIDENT. MAINTENANCE REPLACED THE CIRCUIT BREAKER AND THE AIRCRAFT HAS RETURNED TO SERVICE WITHOUT FURTHER PROBLEM. (TC NR 20071106012)

CA071130008	BOEING		FLOORBEAM	CORRODED
11/30/2007	737790		146A75035	AFT CARGO PIT

(CAN) AFT CARGO PIT FLOORBEAM RAIL CORRODED AT BS 767+6 LBL 8 AND REPAIRED IAW CUSTOMER EA LEVEL 2 CORROSION (TC NR 20071130008)

CA071130009	BOEING		FLOORBEAM	CORRODED
11/30/2007	737790		147A55047	BS 947

(CAN) AFT CABIN FLOOR SUPPORT BEAM AT BS 947 LBL 53 CORRODED AND REPAIRED IAW CUSTOMER EA LEVEL 2 CORROSION (TC NR 20071130009)

CA071130010	BOEING		SKIN	CHAFED
11/30/2007	737790		112A410210	RWS 240

(CAN) RT WING LWR SKIN AT AFT EDGE CHAFFING DAMAGE FROM CONTACT WITH NACELLE STRUT AFT FAIRING INBD BLADE SEAL AT APPROX. WS 240 REPAIRED IAW CUSTOMER EA (TC NR 20071130010)

CA071130011	BOEING		SKIN	CHAFED
11/30/2007	737790		112A41029	LWS 260

(CAN) LT WING LWR SKIN CHAFFING DAMAGE FOUND FROM CONTACT WITH NACELLE STRUT AFT FAIRING OB BLADE SEAL AT APPROX WS 260 REPAIRED IAW CUSTOMER EA (TC NR 20071130011)

CA071030006	BOEING		SKIN PANEL	CHAFED
10/30/2007	737790		112A41029	LWS 260 & 240

(CAN) LT WING LWR SKIN PANEL CHAFFING DAMAGE FROM CONTACT WITH NACELLE STRUT AFT FAIRING BLADE SEAL APPROX WSTA 260, 240 REPAIRED IAW EA 5720-01337. (TC NR 20071030006)

CA071030007	BOEING		SKIN PANEL	CHAFED
10/30/2007	737790		112A410210	RWS 240,260

(CAN) RT WING LWR WING SKIN PANEL CHAFFING DAMAGE FROM CONTACT WITH NACELLE STRUT AFT FAIRING BLADE SEAL APPROX WSTA 240,262 REPAIRED IAW EA 5720-01338. (TC 20071030007)

CA071026009	BOEING		FLOORBEAM	CORRODED
10/26/2007	737790		147A55067	BS 986.5

(CAN) AFT CABIN BS 986.5 BEAM UPPER CAP CORRODED AT LBL24, LBL18, RBL10, RBL, RBL32, RBL28, RBL22, RBL17 REPAIRED IAW CUSTOMER EA. (TC NR 20071026009)

CA071026011	BOEING		STRIP	CORRODED
10/26/2007	737790		453A26113	BS 847-947

(CAN) CORROSION ON CAP STRIP BETWEEN BS 847 AND BS 947 RT SIDE AFT CARGO REPAIRED IAW CUSTOMER EA. (TC NR 20071026011)

CA071130013	BOEING		SKIN	CHAFED
11/30/2007	737790		112A410210	RWS 260

(CAN) RT WING LWR SKIN CHAFFING DAMAGE FROM CONTACT WITH NACELLE STRUT AFT FAIRING OB BLADE SEAL AT APPROX WS 260 REPAIRED IAW EA.(TC NR 20071130013)

CA071202002	BOEING		SKIN	CHAFED
12/1/2007	737990		112A4101209	RWS 260

(CAN) A/C UNDERGOING C-CHECK,HEAVY MAINTENANCE. RT WING, LOWER SKIN PANEL CHAFING DAMAGE FOUND FROM CONTACT WITH NACELLE STRUT AFT FAIRING OB BLADE SEAL AT APPROX WS 260. REPAIRED IAW EA 5720-01345. (TC NR 20071202002)

CA071202003	BOEING		SKIN	CHAFED
12/1/2007	737990		112A4101209	LWS 240

(CAN) A/C UNDERGOING C-CHECK HEAVY MAINTENANCE. LT WING LOWER SKIN PANEL CHAFING DAMAGE FOUND DUE TO CONTACT WITH NACELLE STRUT AFT FAIRING IB BLADE SEAL AT APPROX WS 240. REPAIRED IAW EA 5720-01345. (TC NR 20071202003)

CA071106003	BOEING		SKIN	SCRATCHED
11/6/2007	737990		146A323110	BS 777-830 RBL26

(CAN) SCRATCHES ON FUSELAGE SKIN BELOW AFT CARGO PIT LOWER SILL BS 777 TO BS 830, RBL 26 REPAIRED IAW CUSTOMER EA. (TC NR 20071106003)

CA071106004	BOEING		SKIN	CHAFED
11/6/2007	737990		112A4102209	LWS 240

(CAN) LT WING LOWER SKIN PANEL CHAFFING AT WSTA 240, IB OF BLADE SEAL. REPAIRED IAW CUSTOMER EA (TC NR 20071106004)

CA071106005	BOEING		SKIN	CHAFED
11/6/2007	737990		112A4102209	LWS 260

(CAN) LT WING LOWER SKIN PANEL CHAFFING DAMAGE AT WSTA 260, OB OF BLADE SEAL FAIRING. REPAIRED IAW CUSTOMER EA (TC NR 20071106005)

CA071106006	BOEING		SKIN	CHAFED
11/6/2007	737990		112A4102210	RWS 240

(CAN) RT WING LOWER SKIN CHAFING DAMAGE AT WSTA 240, IB OF FAIRING SEAL REPAIRED IAW CUSTOMER EA (TC NR 20071106006)

CA071108005	BOEING	RROYCE	LINE	CHAFED
11/5/2007	75728A	RB211535E437	LJ35801	NR 1 ENGINE

(CAN) DURING CLIMB, THE CREW NOTICED THAT NR1 ENGINE PARAMETERS WERE NOT AS SCHEDULED. AIRCRAFT RETURNED TO THE AIRPORT. WITH DECREASING ALTITUDE THE NR1 ENGINE PARAMETERS IMPROVED AND A NORMAL LANDING WAS PERFORMED. FOUND P1 LINE CHAFED THROUGH. LINE REPLACED. TEST FLIGHT CONDUCTED. ALL PARAMETERS NORMAL. AIRCRAFT RETURNED TO SERVICE. (TC NR 20071108005)

2007FA0001091	BOEING		MANIFOLD	FRACTURED
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5/25/2007

767*

252T13021

SPOILERS

MANIFOLD CRACKED IN THE FILTER BOWL AS DESCRIBED IN BETWEEN WHAT IS DESCRIBED IN THE SERVICE LETTER AND THIS UNIT FRACTURED COMPLETELY. VISUAL INSPECTION APPEARS TO SHOW THAT THE CRACK ORIGINATED IN THE THREAD ROOT AT THE THINNEST AREA OF THE HOUSING. THE CRACK PROPAGATED UNTIL THERE WAS DUCTILE OVERLOAD FAILURE OF THE HOUSING. (K)

CA071023006	BOLKMS	ALLSN	GEARBOX	MAKING METAL
10/3/2007	BO105S	250C20B	6894171	NR 1 ENGINE

(CAN) APPROXIMATELY 5 MILES FROM DESTINATION, MAG NR1 LIGHT ILLUMINATED. PULSED OFF AND 2 MINUTES LATER LIGHT BACK ON. NR1 THROTTLE ROTATED TO IDLE, CONTINUED APPROACH TO DESTINATION, CRASH TRUCK ADVISED. ON FINAL, NR1 THROTTLE ADVANCED AND NORMAL LANDING CARRIED OUT. ENGINE SHUTDOWN AND MAINTENANCE ADVISED. UPON INSPECTION OF UPPER MAG PLUG, 7 SLIVERS OF METAL WERE FOUND AND THE LOWER PLUG WAS COVERED WITH MANY PARTICLES AND FUZZ. THE ESCAPED OIL WAS CAPTURED AND METAL PARTICLES WERE VISIBLE IN THE OIL. OIL TANK DRAINED, N1 CAP FILTER REPLACED, GEARBOX OIL FILTER INSPECTED AND SCAVEMGE LINE FLUSHED. GEARBOX REPLACE WITH OVERHAULED UNIT (TC NR 20071023006)

CA071025001	BOLKMS	ALLSN	SPRING	MISMANUFACTURED
10/23/2007	BO105S	250C20B	V40G3911AA	EJECTOR

(CAN) POOR METAL COMPOSITION IN PART CAUSES CRACKING. THESE PARTS WILL CRACK WITHOUT BEING SUBJECT TO FLIGHT. ONE BATCH HAS BEEN DISPOSED OF AND THE NEXT BATCH HAS THE SAME ISSUE. THE MFG HAS BEEN NOTIFIED. REF MBB-BO-105 IPC 60-00-00 FIG 8 ITEM NR 440. (TC NR 20071025001)

CA071022006	BOLKMS	ALLSN	GEARBOX	MAKING METAL
10/3/2007	BO105S	250C20B	6894171	NR1 ENGINE

(CAN) APPROXIMATELY 5 MILES FROM AIRPORT, MAGI NR1 LIGHT ILLUMINATED. PULSED OFF AND 2 MINUTES LATER LIGHT ILLUMINATED AGAIN. AN EMERGENCY LANDING WAS CARRIED OUT. BOTH NR1 AND NR2 MAGNETIC PLUGS CHECKED AND FOUND CONTAMINATED WITH METAL. THE GEARBOX WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. (TIC NR 20071022006)

CA071112001	BOMBDR	PWC	WIRE HARNESS	FAILED
11/11/2007	DHC8400	PW150A	473901	NLG

(CAN) AFTER TAKEOFF, NOSE GEAR UNSAFE ILLUMINATED. CREW PERFORMED NORMAL EXTENSION AND THE NLG DOORS DID NOT OPEN. ALSO, NLG NOT SHOWING DOWN AND LOCKED. SECOND ATTEMPT FOR EXTENSION, NOSE DOOR AMBER LIGHT ILLUMINATED. CREW PERFORMED ALTERNATE EXTENSION AND LANDED WITHOUT FURTHER INCIDENTS. MAINTENENCE DISCOVERED PSEU REPORTED FAULT, NLG LOCK PROX 1. NOSE LOCK SENSOR REPLACED AND AIRCRAFT RETURNED TO SERVICE. (TC NR 20071112001)

CA071113001	BOMBDR	PWC	CONTROLLER	MALFUNCTIONED
11/10/2007	DHC8400	PW150A	699018002	PROPELLER

(CAN) DURING FLIGHT, CREW REPORTED A NR 2 PEC CAUTION LIGHT ILLUMINATED FOLLOWED BY THE NR 2 ENGINE NP SURGE. THE QRH CONSULTED AND THE NR 2 ENGINE WAS SHUTDOWN. EMU DOWNLOAD C/O, FAULT ISOLATION C/O FOR CODES 236 AND 260 IAW TASK 61-20-05-810-822, 61-20-06-810-818. SERVO VALVE CONNECTORS RT J26 AND J27 CLEANED AND TREATED WITH STABILANT. PEC CONNECTORS 20 AND 21 CLEANED AND TREATED WITH STABILANT. AUTO FEATHER AND UP TRIM CHECKED SERVICEABLE FOR RETURN TO SERVICE IAW TASK 61-20-00-710-801. FURTHER FAULT CODE 131 DISPLAYED IN CDS. RT PEC REPLACED IAW AMM 61-20-36 AND C/O IAW AMM 71-00-00, NIL FAULTS EVIDENT. (TC NR 20071113001)

CA071102010	BOMBDR	PWC	SENSOR	FALSE INDICATION
10/17/2007	DHC8400	PW150A		CARGO DOOR

(CAN) AIRCRAFT WAS ALREADY UNDER MEL 52-10-05 DUE FORWARD BAGGAGE DOOR GIVES A FALSE (OPEN) INDICATION IN THE COCKPIT. AIRCRAFT COULD FLY PRESSURIZED BUT PRESSURIZATION SYSTEM MUST BE CONTROL IN MANUAL MODE. AIRCRAFT SUFFERED A DEPRESSURIZATION AT 20,000 FT. ALL SYSTEM CHECK AND NO FAULT WAS FOUND IN MANUAL AND AFTER DOOR SENSOR WAS REPAIR SYSTEM WORK ALSO IN AUTO MODE.

STILL UNDER INVESTIGATION. (TC NR 20071102010)

CA071102011	BOMBDR	PWC	ENGINE	NOISY
10/31/2007	DHC8400	PW150A		LEFT

(CAN) AROUND 20000 FT, AFTER HEARING A STRANGE SOUND THAT SEEM TO COME FROM THE LT ENGINE, PILOT NOTICED THAT THE LT ENGINE SUDDENLY STOPPED BY ITSELF. PILOT WAS ABLE TO FEATHER THE PROP. EMERGENCY WAS DECLARED. A/C LANDED WITHOUT OTHER PROBLEM. NO ONE INJURED. UNDER INVESTIGATION (TC 20071102011)

CA071101002	BOMBDR	PWC	ENGINE	POWER LOSS
10/31/2007	DHC8400	PW150A		

(CAN) DURING FLIGHT, A LOUD NOISE WAS HEARD FOLLOWED BY A LOSS OF POWER RESULTING IN AN INFLIGHT SHUTDOWN OF THE ENGINE. POST FLIGHT EXAMINATION REVEALED SEVERE INTERNAL DAMAGE. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071101002)

CA071109001	BOMBDR	PWA	BATTERY	FAILED
11/5/2007	DHC8402	PW120A	4011769	MASTER

(CAN) DURING ENGINE NR 2 START UP, THE NR STALLED AT 20 NR AND THE ITT INDICATOR REACHED 800 DEGREES CELSIUS. THE ENGINE START WAS ABORTED FOLLOWING BY A LOUD BANG FROM THE NOSE COMPARTMENT. MAINTENANCE WAS CALLED IN AND THEY FOUND THE MAIN BATTERY TOP COVER POPPED OUT. NO STRUCTURAL DAMAGE WAS OBSERVED. THE MAIN AND AUXILIARY BATTERIES WERE REPLACED. THE AIRCRAFT WAS RELEASED AND RETURNED INTO SERVICE. (TC NR 20071109001)

CA071016021	BRAERO	GARRTT	FLOAT VALVE	STUCK
10/16/2007	BAE125800A	TFE7315R	257PV6589A	VENTRAL TANK

(CAN) DURING REFUELLING USING SINGLE-POINT SYS & FILLING BOTH MAIN (WINGS) & VENTRAL TANK. AS VENTRAL TANK REACHED 1.5 TO 3 QUARTERS CAPACITY FUEL WOULD FLOW THROUGH VENT SYS INTO LT SURGE TANK & SHUTDOWN BY CLOSING MAIN VALVE. COMPLETION OF REFUELLING COULD ONLY RESUME ONCE SURGE TANK EMPTIED & VENTRAL TANK FUELED VIA FUELING CAP. ON REMOVAL OF VENTRAL TANK, DISCOVERED RT VENT FLOAT INADVERTENTLY GLUED TO VALVE BODY & NEEDLE HARD TO OPERATE. BOTH CONDITIONS LEFT RT VENT VALVE OPEN DURING ALL CONDITIONS CAUSING FUEL TO ENTER VENT PIPING THOUGH NONE EXISTED. FLOAT REMOVED & NEW NEEDLE INSTALLED, OPS OF VALVE CHECKED FOR SMOOTHNESS & PROPER SEALING OF NEEDLE TO SEAT. MODIFICATION (25G137A) EMBODIED TO INCORPORATE AN ACCESS PANEL FOR EASE OF INSTALLATION OF VENT VALVE ASSY & ENSURE PROPER SEALING & INSPECTION OF AREA. INTEGRITY OF VENT SYS LEAK CHECKED. COMPONENTS WERE INSTALLED & VENTRAL TANK CHECKED FOR LEAKS & PROPER REFUELLING. ALL SYSTEMS SATISFACTORY.

CA071106011	BRAERO	GARRTT	TUBE	CHAFED
10/25/2007	HS125700A	TFE7313R1H	30733341	FUEL SYSTEM

(CAN) ON A PREFLIGHT INSPECTION, MAINTENANCE DISCOVERED THE FIRE DETECTOR (P/N 3001-31-900-400-17) AGAINST THE FUEL TUBE ASSEMBLY (P/N P-84417). UPON REPOSITIONING THE FIRE DETECTOR INTO POSITION, A CHAFED MARK ON THE NR 1 ENGINE FUEL TUBE ASSEMBLY WAS DISCOVERED. THE FUEL TUBE ASSEMBLY WAS ORDERED AND REPLACED. AN ENGINE RUN WAS CARRIED OUT FOR A LEAK CHECK INSPECTION. (TC NR 20071106011)

CA071112003	BRAERO	RROYCE	FIRE LOOP	FAULTY
11/9/2007	HS7482A	DART5342		NR 1 NACELLE

(CAN) AFTER TAKEOFF, ENGINE NR 1 FIRE-WARNING ALARM WENT OFF. THE FLIGHT CREW INFORMED TOWER AND RETURNED TO AIRPORT. A HOLE WAS FOUND IN THE FLEXIBLE DUCT AT THE SUPERCHARGER OUTLET. ALSO, (2) FIRE DETECTION LOOPS WERE REPLACED BECAUSE THEY FAILED THE RESISTANCE CHECK LIMITS FOUND IN THE HS 748 MM. (TC NR 20071112003)

CA071102005	CESSNA	LYC	ROCKER BOSS	CRACKED
10/26/2007	152	O235L2C	LW167035C	CYLINDER HEAD

(CAN) ON CYLINDER NR 3 THE ROCKER SHAFT RT BOSS HAS BEEN FOUND BROKEN (SPLIT) IN THE MIDDLE SECTION. THE BROKEN PART/ALL AND REST JUST BESIDE THE EXHAUST VALVE. (TC NR 20071102005)

2007FA0001075	CESSNA	CONT	ADAPTER	WORN
12/12/2007	172E	O300*	053200135	LT ELEVATOR

LT ELEVATOR TORQUE TUBE ARM ADAPTER RIVET HOLES WERE WORN POSSIBLY DUE TO UNSECURED CONTROLS IN GUSTY WINDS.

CA071019002	CESSNA	LYC	NUT PLATE	MISREPAIRED
10/19/2007	172K	O320E2D	NAS680A08	FUEL TANK BAYS

(CAN) UPON INSPECTING THE FUEL TANKS, FOUND SEVERAL NUTPLATES PREVIOUSLY DAMAGED. UPON FURTHER INSPECTION FOUND THAT AT A PREVIOUS TIME, SOME SCREWS BROKE OFF IN THE NUTPLATES AND RATHER REPAIR/REPLACE THE NUTPLATES, IT APPEARS THE DAMAGED NUTPLATES WERE DRILLED AND SHEET METAL SCREWS WERE INSTALLED WHERE STRUCTURAL SCREWS SHOULD HAVE BEEN. THE REPAIR WAS SIMPLE, DRILL OUT THE OLD NUTPLATES AND NEW NUTPLATES INSTALLED. AS THE FUEL TANK COVERS ARE A STRUCTURAL PART OF THE WING I RECOMEND KEEPING THIS AREA IN GOOD REPAIR. (TC# 20071019002)

FAA122707001	CESSNA	LYC	CYLINDER HEAD	CRACKED
11/11/2007	172P	O320D2J	AEL65102SN041	ENGINE

HEAD CAME OFF BARRELL OF CYLINDER P/N AEL65102 SN0.41 S/N 20255-13 1083.3 HOURS ON CYLINDER SINCE INSTRUCTION OF 10/5/04 (HEAD, BARRELL SEPARATED).

ZB0R20080002	CESSNA	LYC	SENSOR	INTERMITTENT
1/11/2008	172S	IO360A1A	S35942	FUEL QTY

RT FUEL QUANTITY INTERMITTENT AT HIGH FUEL LEVELS.

ZB0R20080001	CESSNA	LYC	SENSOR	INTERMITTENT
1/11/2008	172S	IO360A1A	S35942	FUEL QTY

RT FUEL QUANTITY INTERMITTENT AT HIGH FUEL LEVELS.

2007FA0001112	CESSNA	LYC	CIRCUIT BREAKER	FAILED
11/30/2007	172S	IO360L2A	727755	

CIRCUIT BREAKER WILL RESET AFTER BEING TRIPPED BY ROTATING THE KNOB. THIS RESULTS IN A BREAKER THAT IS RESET WHILE BEING IN THE TRIPPED POSITION. THIS BREAKER WILL PRODUCE THIS RESULT EVERY TIME THAT THIS PROCEDURE IS TRIED. THIS PARTICULAR BREAKER WAS INSTALLED IN THE AUTOPILOT SYSTEM. THE CIRCUIT BREAKER IN QUESTION IS ATTACHED. (K)

CA071102012	CESSNA	LYC	BUSHING	SEPARATED
11/2/2007	172S	IO360L2A	05412024	MLG

(CAN) THE MAIN GEAR LEG BUSHINGS ARE A STEEL OUTER TUBE, WITH A THICK INNER URETHANE CENTER. DURING PROGRESSIVE CARE OPERATION NR 4, INSPECTION OF THE LT MAIN GEAR LEG REVEALED THAT THAT THE URETHANE INNER BUSHING MATERIAL HAD DEPARTED FROM THE OUTER STEEL BUSHING (P/N 0541202-4). IT HAD MOVED LOOSELY ALONG THE TUBULAR GEAR LEG TOWARDS THE CENTER OF THE AIRCRAFT. THIS ALLOWED THE TUBULAR GEAR LEG TO RATTLE ON THE INSIDE OF THE STEEL OUTER BUSHING. THE STEEL OUTER BUSHING IS HELD IN PLACE WITH 2 (C) CLIPS, HOWEVER THE URETHANE INNER PART OF THE BUSHING LOOKS TO BE ONLY A PRESS FIT. (TC NR 20071102012)

2008FA0000018	CESSNA	LYC	YOKE	MISINSTALLED
1/8/2008	177B	O360*		

WHILE DOING AN ANNUAL, FOUND LOOSENESS IN THE YOKE FOR AND AFT MOVEMENT. AFTER MUCH CHECKING, FOUND THE LOOSENESS TO BE BETWEEN THE YOKE LEVER ASSY 1767033-7 AND 1767037-2 WHICH IS THE SHAFT. ALSO THERE WAS LOOSENESS BETWEEN THE SHAFT 1767037-2 AND THE QUADRANT 1767024-1. FURTHER INVESTIGATION FOUND STANDARD AN4 BOLTS INSTEAD OF THE NAS464P4-17 CALLED FOR IN THE PARTS

MANUAL CONNECTING THESE PARTS. THE DIFFERENCE IN DIAMETER OF THE BOLTS CAUSED THE LOOSENESS. PARTS MANUAL, FIGURE 63.

2008FA0000027	CESSNA	CONT	BRACKET	CRACKED
12/12/2007	185A	IO470F	109033	ALTERNATOR

INSTALLED PLANE POWER ALTERNATOR CONVERSION KIT, STC SA 10682SC ON AC. DURING OIL CHANGE FOUND ALTERNATOR BRACKET CRACKED TOTOALLY IN HALF. ALTERNATOR HAD ONLY BEEN IN USE 3 WEEKS AND APPROX 45 HRS. (K)

CA071102002	CESSNA	PWA	SWITCH	OVERHEATED
10/31/2007	208B	PT6A114A	CM358930	AVIONICS 2

(CAN) SHORTLY AFTER DEPARTURE THE PILOT BECAME AWARE OF A BURNING ODOR. HE NOTICED THAT THE AVIONICS 2 SWITCH WAS HOT TO TOUCH. THE PILOT RETURNED TO BASE. INVESTIGATION FOUND THAT THE AVIONICS 2 SWITCH HAD OVERHEATED TO THE POINT OF FAILURE. A NEW SWITCH P/N 7270-5-30 WAS INSTALLED. (REF CAB97-8) (TC NR 20071102002)

CA071113003	CESSNA	PWA	ENGINE	POWER LOSS
11/6/2007	208B	PT6A114A		

(CAN) SHORTLY AFTER TAKEOFF WHILE PERFORMING A LOW LEVEL TURN, THE ENGINE REPORTEDLY LOST POWER. EMERGENCY POWER LEVER WAS ACTIVATED WITH NO RESPONSE. AIRCRAFT LANDED ON A STREET, NO FATALITIES. INITIAL INVESTIGATION REVEALED NO EVIDENCE OF PRE-IMPACT ANOMALIES. FUEL SYSTEM COMPONENTS WILL BE INVESTIGATED. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071113003)

CA071109007	CESSNA	PWA	CESSNA	GEAR	BROKEN
10/13/2007	208B	PT6A114A		C1450046	TRANSMISSION

(CAN) THE PILOT WAS ON DECENT AND WENT TO SELECT FLAPS AND THE CIRCUIT BREAKER POPPED AFTER THE FLAPS WERE AT ABOUT 10 DEGREES. HE THEN LANDED THE AIRCRAFT NORMALLY. MAINTENANCE FOUND THE FLAP TRANSMISSION TO BE MAKING NOISE OUT OF THE NORM. THE INTERNAL GEAR THAT DRIVES THE TRANSMISSION JACK SCREW WAS FOUND TO HAVE CHIPS OUT OF A FEW TEETH. THE TRANSMISSION WAS REPLACED AND SYSTEM FUNCTIONED NORMAL. (TC NR 20071109007)

2007FA0001072	CESSNA		WARNING SYSTEM	MALFUNCTIONED
12/8/2007	310K			T/E FLAP

AC EXPERIENCED FLAP ASYMMETRIC LIGHT IN CRUISE FLIGHT CREW DIVERTED TO ATL LIGHT WENT OUT AND FLAPS WORKED PROPERLY FOR AN UNEVENTFUL LANDING. PROBLEM COULD NOT BE DUPLICATED SO BOTH FLAP FOLLOW UPS WERE REPLACED IAW THE MM. AIRCRAFT OPS CHECK GOOD.

2008FA0000065	CESSNA		WHEEL HALF	CRACKED
8/24/2007	310L			LANDING GEAR

UPON CHANGING A TIRE ON A CLEVELAND WHEEL ASSEMBLY ON ABOVE AIRCRAFT IT WAS DISCOVERED THAT THE PORTION OF THE WHEEL HALF THAT HOLDS THE BEARING RACE WAS CRACKING. IT HAD CRACKED OVER 180 DEGREES AROUND THE AXLE OPENING, WHICH COULD HAVE EVENTUALLY HAD A SERIOUS ACCIDENT.

CA071004006	CESSNA	CONT	CABLE	BROKEN
10/1/2007	414	TSIO520N	991027114	MIXTURE CONTROL

(CAN) DURING THE ENGINE RUN-UP, THE RT ENGINE DID NOT RESPOND TO MIXTURE CONTROL. THE MIXTURE CONTROL CABLE WAS FOUND BROKEN UNDER THE ENGINE CONTROL PEDISTAL. THE BRAKE WAS INSIDE THE CONTROL CABLE HOUSING AND COULD NOT BE SEEN WITH ANY INSPECTION. (TC NR 20071004006)

0001	CESSNA	CONT	CYLINDER	CRACKED
9/25/2007	414A	TSIO520NB	AEC631397	RT ENGINE

PILOT WAS INFORMED BY LINE PERSONNEL DURING TAXI TO TIE DOWN, THAT ENGINE WAS MAKING A LOUD (AIR

PULSING) SOUND. PILOT COULD ONLY HEAR THE SOUND AFTER REMOVING NOISE CANCELLING HEAD SET. PILOT THEN SHUTDOWN ENGINE. INSPECTION REVEALED THE NR 4 CYLINDER TO BE CRACKED AT THE PARTING SURFACE. EXHAUST WAS ESCAPING FROM THE CRACK CAUSING THE (AIR PULSING) SOUND.

FAA010208002	CESSNA	PWA	O-RING	DISINTEGRATED
11/2/2007	425	PT6A60A	MS28775218	NLG ACTUATOR

AN EMERGENCY LANDING MADE, DID NOT GET A GREEN DOWN AND LOCK INDICATION FOR MLG. MADE SAFE LANDING. FOUND RT MLG NOT DOWN AND FULLY LOCKED. DISCOVERED BLOW DOWN BOTTLE FULLY DISCHARGED, DISCOVERED HYDRAULIC RESERVOIR EMPTY. JACKED ACFT & ATTEMPTED TO MANUAL EXTEND RT MLG BY HAND. DISCOVERED THAT RT MLG WAS HYDRO-LOCKED. BLED OFF HYDRAULIC PRESSURE FROM ACTUATOR, ABLE TO ENGAGE DOWNLOCK. , JACKED ACFT AND TRIED TO CYCLE GEAR SYSTEM. GEAR WOULD NOT CYCLE UP OR DOWN. TROUBLESHOT AND DISCOVERED NLG ACTUATOR, PISTON O-RINGS HAD COME APART AND WENT THRU THE ENTIRE MLG AND PLUGGED SYSTEM. PRIOR TO FLIGHT, FWD SEALS ON ACTUATOR HAD BEEN REPLACED DUE TO EVIDENCE OF HYD LEAK. AFTER SEALS HAD BEEN REPLACED, PERFORMED A PHASE 8 HYDRAULIC PRESSURE CHECK. NO LEAKS OR MALFUNCTION DETECTED. AFTER FINDING THE DISINTEGRATED PISTON O-RINGS IN THE NLG ACTUATOR, FLUSHED SYSTEM AND OVERHAULED NLG ACTUATOR. REINSTALLED ACTUATOR & PERFORMED FUNCTIONAL TEST RE-RIGGING INSPECTION ON MLG SYSTEM, WHILE PERIODICALLY CHECKING SYSTEM FILTERS FOR ANY OTHER FOREIGN OBJECTS. SUCCESSFULLY TESTED SYSTEM THRU A TOTAL OF 65 FAULT CYCLES. TEST FLEW AC AND SYSTEM WORKED CORRECTLY. (K)

2007FA0001082	CESSNA	GARRTT	BRACKET	CRACKED
9/26/2007	441	TPE331*		

FOUND BROKEN T-BRACKET DURING ROUTINE 2, 3, D INSPECTION. (K)

2007FA0001083	CESSNA	GARRTT	TAIL CONE	CRACKED
9/27/2007	441	TPE331*	581201412	

FOUND CRACK DURING ROUTINE 2,3,D PHASE INSPECTION. (K)

FAA012408001	CESSNA		CABLE	WORN
1/24/2008	550		556536118	AILERON

DURING A PHASE 5 IT WAS FOUND THAT THE AILERON CABLES WERE LOCATED IN THE WRONG GROOVES OF THE FUSELAGE SECTOR, CAUSING GROOVES TO BE WORN INTO THE SECTOR BY THE CABLES. THERE IS A SPECIAL "NOTE" IN THE MAINTENANCE MANUAL 27-11-08 SECTION 7 FOR THE AILERON LEFT WING CONTROL CABLE REMOVAL/INSTALLATION, STATING CABLES 8 AND 9 ROUTE AROUND THE SECTOR ASSEMBLY IN THE LOWER GROOVE. THIS IS THE FIRST INSPECTION OF THIS SINCE THE AIRCRAFT WAS NEW AND THE IMPROPER ROUTING WAS DONE AT THE FACTORY. CORRECTIVE ACTION WAS TO REPLACE THE PART.

CA071109002	CESSNA	PWA	LEVER	INOPERATIVE
11/7/2007	550	JT15D4	55657544	TRIM WHEEL

(CAN) PILOT ABORTED TAKEOFF. UPON INSPECTION FOUND ELEVATOR TRIM TAB WAS ALMOST ON FULL NOSE DOWN TRIM POSITION. TRIM INDICATION IN THE COCKPIT WAS AT TAKEOFF. FOUND THAT THE INDICATOR LEVER HAD JUMPED ON THE CONTROL WHEEL TO GIVE THE WRONG INDICATION. TRIM CONTROL WHEEL AND INDICATOR LEVER REPLACED AND INDICATION SYSTEM RIGGED IAW AMM. (TC NR 20071109002)

CA071107003	CESSNA	PWA	LEVER	WORN
11/7/2007	550	JT15D4	55657544	TRIM INDICATOR

(CAN) PILOT ABORTED TAKEOFF DUE TO NO RESPONSE TO CONTROL COLUMN INPUT. UPON INSPECTION FOUND ELEVATOR TRIM TAB WAS ALMOST ON FULL NOSE DOWN POSITION AND TRIM INDICATION IN COCKPIT WAS AT TAKEOFF. FOUND INDICATOR LEVER AND CONTROL WHEEL WORN, INDICATOR LEVER HAD JUMPED ON CONTROL WHEEL TO GIVE WRONG INDICATION. TRIM CONTROL WHEEL AND INDICATOR LEVER REPLACED AND INDICATION SYSTEM RIGGED IAW AMM AIRCRAFT WAS RETURNED TO SERVICE. (TC NR 20071107003)

2008FA0000056	CESSNA	PWA	ATTACH BOLT	UNDERTORQUED
1/23/2008	560CESSNA	JT15*		HORIZONTAL STAB

DURING A ROUTINE PHASE INSPECTION WE FOUND 50 PERCENT OF THE HORIZONTAL STABILIZER AFT ATTACH BOLTS TO BE UNDERTORQUED, AND CAUSING SOME MOVEMENT AND A POPPING NOISE WHEN THE STABILIZER WAS PUSHED UP AND DOWN AT THE OB TIP. WE RE-TORQUED ALL BOLTS AND THE NOISE AND MOVEMENT WENT AWAY. SOME OF THE BOLTS REQUIRED 180 DEGREE ROTATION TO OBTAIN PROPER TORQUE. PERFORMED HIDDEN DAMAGE INSPECTION, NO DEFECTS WERE NOTED.

CA071113005	CESSNA	PWA	FUEL CONTROL	FAILED
11/6/2007	560CESSNA	JT15D5	32448809	ENGINE

(CAN) DURING APPROACH, ENGINE SPEED DESCENDED TO SUBNORMAL VALUE. NO/SLOW RESPONSE FROM THRUST LEVER. CONDITION WAS REPEATABLE ON GROUND FOLLOWING THE INCIDENT. FUEL CONTROL CHANGED AS PART OF TROUBLESHOOTING. (TC NR 20071113005)

CA071108004	CESSNA	PWC	EEC	DEFECTIVE
10/25/2007	680CE	PW306C	8228224004	ENGINE

(CAN) DURING FLIGHT, THE CREW RECIEVED A YELLOW, HIGH TEMPERATURE, (WARNING LIGHT). THE POWER WAS REDUCED AND THE FLIGHT WAS DIVERTED. TROUBLESHOOTING REVEALED A DEFECTIVE ELECTRONIC ENGINE CONTROL. (TC NR 20071108004)

CA071011002	CESSNA	CONT	MUFFLER	CRACKED
10/3/2007	A185E	IO520D		ENGINE

(CAN) MUFFLER CRACKED AROUND PIPE AFTER BACKFIRE. (TC NR 20071011002)

2008FA0000066	CESSNA	LYC	FITTING	FAILED
1/22/2008	T206H	O360E1A6D		STATIC SYS

PRIOR TO COMPLIANCE WITH FAR 91.411, A STATIC SYSTEM CHECK WAS CONDUCTED. UNDER TEST SYSTEM SHOWED APPROXIMATELY 100 FPM DESCENT RATE. INSPECTION REVEALED THE 90 DEGREE PLASTIC FITTINGS (ONE ON EACH SIDE OF THE FORWARD FUSELAGE) FOR STATIC SYSTEM PLUMBING WERE MADE OF MOLDED PLASTIC AND INCLUDED A TINY RIDGE (MOLD LINE) ALONG THE THREADED AREA. ADDITIONALLY MFG INSTALLED THE PART WITHOUT THE USE OF PIPE SEALING COMPOUND MAKING AT LEAST PARTIAL FAILURE INEVITABLE.

CA071101005	CESSNA	ALLSN	MAGNETIC SEAL	LEAKING
10/29/2007	U206G	250C20	78023061	PROP RGB

(CAN) ONE OF THE PILOTS NOTICED A SMALL ENGINE OIL LEAK ON BOTTOM OF ENGINE COWLING. REMOVED THE ENGINE COWLING AND FOUND LEAK ON PROP REDUCTION GEARBOX INPUT SEAL AREA. REMOVED PROP REDUCTION GEARBOX, INPUT QUILL ASSY AND REPLACED MAGNETIC SEAL. UNDER 10X MAGNIFYING GLASS, A SCRATCH AT 90 DEGREE ACROSS THE CARBON SEALING SURFACE WAS FOUND. AIRCRAFT GROUND RUN, NO LEAKS, RETURN TO SERVICE. DEFECTIVE MAGNETIC SEAL RETURN TO MFG. (TC NR 20071101005)

CA071031005	CIRRUS	CONT	TUBE	DAMAGED
10/23/2007	SR20	IO360E	50339001	CYLINDER INTAKE

(CAN) INTAKE PIPE ON NR 1 CYLINDER FLANGE DAMAGED. (TC NR 20071031005)

CA071031004	CIRRUS	CONT	TUBE	DETERIORATED
6/21/2007	SR20	IO360ES	6552241	CYLINDER INTAKE

(CAN) INTAKE TUBE AT FLANGE TO CYLINDER DETERIORATED. NEW INTAKE PIPE 655224-1 AND GASKET 554227 INSTALLED (NR 3 CYLINDER). (TC NR 20071031004)

CA071031002	CIRRUS	CONT	INTAKE PIPE	DETERIORATED
4/17/2007	SR20	IO360ES	6552241	ENGINE

(CAN) INTAKE PIPE FLANGE DETERIORATED AND AIR LEAK OCCURRED. ENGINE IDLE INCREASED AND ENGINE RUNS SLIGHTLY ROUGH. INSTALLED NEW INTAKE PIPE P/N 655224-1 AND GASKET 554227 (NR 3 CYLINDER) (TC NR 20071031002)

FAA010208001	CIRRUS	CONT	UNKNOWN	MALFUNCTIONED
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11/30/2007

SR22

IO550*

PFD

PFD AND GPS/NAV1 BOTH REBOOTED AT THE SAME TIME. RESTARTED WITHOUT GOING THROUGH EITHER ITS STANDARD INITIALIZATION OR ITS FAST START ROUTINE. THE AUTOPILOT SEEMED TO BE STILL ENGAGED BUT THE VS SELECTION, QNH, ALTITUDE PRE-SELECT AND HEADING WERE RESET AND THESE RESET VALUES APPEARED TO BE PASSED TO THE AUTOPILOT. THIS OCCURRED AT LOW LEVEL, IN THE CLIMB, IN IMC WITH HEADING AND ALTITUDE ACQUIRE SET ON THE AUTOPILOT. THERE WAS SOME ELECTRICAL ACTIVITY WITHIN 10 MILES. THE AIRCRAFT WAS FLOWN SAFELY BACK TO THE DEPARTURE FIELD USING BACKUP INSTRUMENTS. ENGINEERS SUSPECT EITHER A SPIKE FROM ALTERNATOR 2 OR MFG BELIEVES THIS COULD BE A BONDING ISSUE AND WAS CAUSED BY STATIC. MFG INCIDENT REF: 871500HQ. ENGINEERS SUSPECT THAT THE AHRS DID NOT REBOOT, BUT THIS WAS NOT APPARENT TO THE PILOT.

[2007FA0001106](#)

CIRRUS

CONT

WIRE HARNESS

DAMAGED

12/22/2007

SR22

IO550*

ALTERNATOR

ALTERNATOR FAILED ON FIRST FLIGHT AFTER INSTALLATION FROM OVERHAUL. FOUND FIELD WIRE RIPPED OUT OF FIELD BRUSH AND BARE WIRE DEBRIS INSIDE ALTERNATOR CASE. SUSPECT WIRE EPOXY HOLD DOWN VIBRATED LOOSE ALLOWING ROTOR ASSEMBLY TO SNAG WIRE.

[CA071026002](#)

CNDAIR

PWA

SPAR CAP

CRACKED

10/24/2007

CL2151A10

CWASP

215003268

WS 50.0

(CAN) WHILE PERFORMING AD 92-26R1 IAW SB 215-A454 REV 3, NO DEFECTS WERE FOUND IAW OUTLINED ULTRASONIC INSPECTION PROCEDURES. THE NDI TECH NOTED THAT HE WAS PICKING UP WHAT HE THOUGHT WAS A SUSPECTED CRACK OUTSIDE THE AREA OUTLINED IN THE SB AND PROCEEDED TO ENQUIRE ABOUT THE SURROUNDING STRUCTURE WITH A COMPANY AME. FS 434.8 REAR SPAR WS 50.0 THE SUSPECTED CRACK ON THE ULTRASOUND WAS SHOWN TO THE AME AND A LINEAR MEASUREMENT WAS MADE AS TO THE SCALE ON THE INSTRUMENT. IT WAS BELIEVED THAT THE CRACK WOULD BE AT APPROXIMATELY LT WING WS 50.0 IN LINE WITH THE REAR OUTER VERTICAL PICK-UP ANGLE TO REAR SPAR CAP ATTACHMENT VIA LOCK FASTENER. NR 2 FUEL CELL AND FUEL BAY LINERS WERE REMOVED AND A CRACK IN THE PAINT PRIMER WAS NOTICED AT THE FIRST LOCK FASTENER ABOVE THE SPAR CAP ATTACHMENT AT WS 50.0. THE AREA WAS PAINT STRIPPED AND A VISUAL CRACK WAS CONFIRMED USING A MAGNIFYING GLASS. CRACKS WERE ALSO DETECTED ON THE VERTICAL EDGE OF THE SPAR CAP AND THE LOWER HORIZONTAL EDGE OF THE CAP, BELIEVING THAT THE CAP IS CRACKED ALL THE WAY THROUGH. THIS AC HAD UNDERGONE A SPAR CAP REPAIR, WITH SPAR WEB SPLICE REPLACEMENT IN THE WINTER OF 06/07 ON THE RT SIDE. A CRACK INDICATION WAS PICKED UP IN THE FALL OF 06 DURING NDI TESTING AT RWS 51.0, F.S. 434.8 (REAR SPAR). UPON REMOVAL OF THE SPAR CAP FAIL SAFE STRAP PN 215-10032-76, ANOTHER CRACK WAS FOUND AT APPROXIMATELY WS 49.5 ON THE SPAR CAP. AGAIN THESE CRACKS FOUND WERE OUTSIDE THE INSPECTION AREA OUTLINED IN SB 215-A454 REV 3. A FURTHER NOTE TO TAKE INTO CONSIDERATION IS THAT IN THE WINTER OF 2000/01 A CRACK WAS DETECTED ON THE RT REAR SPAR CAP AT WS 51.0 OF AC SN 1044 AND UPON REMOVAL OF FUEL TANK NR 2 AND LINERS A VISUAL CRACK AS DESCRIBED ON SN 1068 WAS FOUND ON THE REAR SPAR WEB. UPON REMOVAL OF FAIL SAFE STRAP, THE SPAR CAP WAS FOUND BROKEN ALL THE WAY THRU AT APPROXIMATE WS 49.5. THIS IS THE 3RD OCCURRENCE OF THIS TYPE.

[CA071029007](#)

CNDAIR

PWA

BEARING

DAMAGED

10/29/2007

CL2156B11215

PW123

DAT4864A

RUDDER

(CAN) RUDDER BEARING FOUND DAMAGED ON C-CHECK. THE BEARING WAS INCORPORATED BY SB ON WINTER WORK 2005-2006 AND CUMULATE 421 HOURS SINCE INSTALLATION. A/C HOURS 2141 CYCLES 1316 DROPS 11678 (TC NR 20071029007)

[2008FA0000033](#)

CNDAIR

ACTUATOR

FAILED

10/15/2007

CL6002B16

21207008

PITCH TRIM

PITCH TRIM ACTUATOR, PN 21207-008, SN 344: CONNECTOR P5CD- PINS A, B AND D ARE SHORTED TO PIN E. THE SHORT IS LESS THAN 1. PIN C HAS A 25 SHORT TO PIN E. FLEXING THE CONNECTOR CAUSES THE SHORT TO COME AND GO. (K)

[CA071029010](#)

CNDAIR

GE

GRIMES

HOUSING

DAMAGED

10/28/2007

CL6002B19

CF343A1

63E951

FUEL FILTER

(CAN) JUST BEFORE PUSHBACK, THE RAMP CREW OBSERVED A FUEL LEAK COMING FROM THE APU AREA. CAPTAIN PERFORMED RAPID PASSENGER DEPLANEMENT WITH EMERGENCY CREWS ON STAND-BY. MAINTENANCE FOUND THE FUEL LEAK COMING FROM THE NR 2 ENGINE- FUEL FILTER HOUSING, BY THE FUEL FILTER IMPENDING BYPASS PLUG. IN THIS AREA, THE FUEL FILTER HOUSING AND THE SQUARE PLUG WERE FOUND GROOVED AND THE SQUARE PLUG SEAL WAS FOUND DAMAGED AS WELL. MAINTENANCE REPLACED THE ALL FUEL FILTER ASSY. (TC NR 20071029010)

CA071102001	CNDAIR	GE	ACTUATOR	FAILED
10/29/2007	CL6002B19	CF343A1	852D10019	TE FLAPS

(CAN) DURING APPROACH, THE CREW RECEIVED A FLAP FAIL CAUTION MESSAGE WHEN THE FLAPS WERE SELECTED FROM 0 TO 8 DEGREES. THE EICAS FLIGHT CONTROL PAGE WAS INDICATING 0 DEGREE ON BOTH SIDES. THE CREW CONTINUED THE APPROACH AND COMPLETED A FLAPLESS LANDING WITHOUT INCIDENT. NO EMERGENCY WAS DECLARED. THE SYSTEM WAS RESET, THE FLAPS SET TO 8 DEGREES AND THE AC WAS FERRIED FOR MAINTENANCE. ALL FLAP ACTUATORS WERE REMOVED AND SENT TO THE SHOP. THE LT NR1 FLAP ACTUATOR FAILED THE -60 DEGREES TORQUE CHECK. DECISION WAS MADE TO REPLACE ALL FLAP ACTUATORS. FLAP ACTUATORS WERE REPLACED, ADJUSTED, TESTED AND THE AIRCRAFT WAS RELEASED. A SUCCESSFUL TEST FLIGHT WAS CONDUCTED AND THE AIRCRAFT RETURNED INTO SERVICE. (TC NR 20071102001)

CA071102009	CNDAIR	GE	ACTUATOR	FRACTURED
10/30/2007	CL6002B19	CF343A1	601R107022	SPOILERON

(CAN) DURING SHORT FINAL, THE FLAPS WERE SELECTED TO 45 DEGREES AND THE AIRCRAFT ROLLED TO THE RT. FULL AILERON TRIM AND A LITTLE BIT OF AILERON WAS REQUIRED TO KEEP THE AIRCRAFT LEVEL. THE EICAS FLIGHT CONTROL PAGE WAS REVIEWED AND THE RT SPOILERON WAS SHOWING UP. THE AIRCRAFT LANDED WITHOUT INCIDENT. MAINTENANCE DISCOVERED THAT THE RT SPOILERON OB ACTUATOR ATTACHMENT HAS FRACTURED. THE RT SPOILERON ASSY AND BOTH ACTUATORS WERE REPLACED, ADJUSTED AND THE SYSTEM TESTED SERVICEABLE. THE AIRCRAFT WAS RELEASED AND RETURNED INTO SERVICE. (TC NR 20071102009)

CA071103001	CNDAIR	GE	HONEYWELL	ECU	FAULTY
11/1/2007	CL6002B19	CF343A1		21188002	APU

(CAN) FLIGHT RETURNED DUE TO APU OIL PRESSURE MESSAGE CAUSING THE APU TO FAIL. AIRCRAFT WAS ALREADY OPERATING WITH 1 IDG GENERATOR UNSERVICEABLE. MAINTENANCE CHECKED THE SYSTEM AND FOUND AN ECU FAULT MESSAGE. THE APU ECU WAS REPLACED AND THE A/C WAS CHECKED SERVICEABLE. NR 1 IDG WAS ALSO REPLACED AT THIS TIME AND CHECKED SERVICEABLE CLEARING THE MEL. CYCLES SINCE OVERHAUL:4860 (TC NR 20071103001)

CA071214004	CNDAIR	GE	ACTUATOR	UNSERVICEABLE
12/13/2007	CL6002B19	CF343A1	852D10019	TE FLAPS

(CAN) FLAP FAIL ON DESCENT, WHEN FLAP SELECTED FROM 0 DEG TO 8 DEG. FLAPLESS LANDING CARRIED OUT WITHOUT FURTHER INCIDENT. TROUBLESHOOTING IN PROGRESS. WILL UPDATE WHEN MORE INFORMATION IS AVAILABLE (TC NR 20071214004)

CA071105004	CNDAIR	GE	WINDOW	BROKEN
10/30/2007	CL6002B19	CF343B1	601R3303312	COCKPIT

(CAN) OUTBOUND THE FO'S SIDE WINDOW BROKE GOING THROUGH 20,000 FT. MX REPLACED SIDE WINDOW (TC NR 20071105004)

CA071105005	CNDAIR	GE	ENGINE	FAILED
10/26/2007	CL6002B19	CF343B1	601R6000267	NR 1

(CAN) AFTER TAKEOFF, THE CREW SENT ACARS INDICATING THAT THE LT ENGINE HAD A HIGH VIB. AFTER FOLLOWING THE QRH. THEY REDUCED POWER TO ACCOMMODATE THE VIB IN THE GREEN. IN SEPARATE ACARS, THEY HAD ANTI SKID MESSAGE. THEY CONTINUED AND ONCE ON THE GROUND DISCOVERED THAT THE NR 2 MAIN TIRE HAD SHREDDED AND PART OF THE DEBRI WENT INTO THE NR 1 ENGINE. 2 FAN BLADES WERE BENT AND 2 STATORS WERE CRACKED. THE NOSE COWL HAS A DENT THAT IS OUT OF LIMITS. THE REMAINING MAIN WHEEL TIRE PRESSURES WERE ALL ABOVE 200 PSI. PARTS REPLACED: STATOR SPACER PN 5128T05G01 NSN,

FAN BLADE C-25 PN 6018T30P06 SN KLAJ6586 FAN BLADE L-11 PN 6018T30P06 SN KGAR3406 FAN BLADE C-22 PN 6018T30P14 SN KGACR870 FAN BLADE L-8 PN 6018T30P14 SN KGACR950 NOSE COWL PN 228-50020S SN RJNA4C0476 (TC NR 20071105005)

CA071031006	CNDAIR	GE	RADOME	DAMAGED
10/30/2007	CL6002B19	CF343B1	600330061	FUSELAGE

(CAN) FLIGHT ON CLIMB OUT THE CREW HEARD A LOUD BANG IN THE NOSE AND SAW A BIRD TRAVEL PAST THE COCKPIT WINDOW. ALL FLIGHT SYSTEMS WERE NORMAL AND FLIGHT CONTINUED. UPON ARRIVAL MAINTENANCE MET THE AIRCRAFT AND FOUND A HOLE IN THE RADOME AS WELL AS A DAMAGE TO THE LT FUSELAGE AFT OF PITOT HEAD. DAMAGE ASSESSMENT IS UNDER WAY AND IT WILL BE UPDATED AS SOON AS MORE INFORMATION IS AVAILABLE. (TC NR 20071031006)

CA071025011	CNDAIR	GE	COWLING	LOOSE
10/17/2007	CL6002B19	CF343B1	22850080	THRUST REVERSER

(CAN) ACTUALLY WE HAVE A AOG A/C AT PRG. DURING THRUST REVERSER OPERATING AFTER TOUCHDOWN AT PRG WE'RE LOSING THE UPPER AND LOWER RT ENGINE COWLINGS. ONE OF THE COWLINGS HIT THE A/C AT FS 700 IN BETWEEN STR 5 TO 7 AND DAMAGED THE FUSELAGE AND ALSO THE FRAME FS STN 700. (TC NR 20071025011)

CA071025002	CNDAIR	GE	BPSU	FAILED
10/20/2007	CL6002B19	CF343B1	855D1009	TE FLAPS

(CAN) DURING APPROACH, AIRCRAFT RECEIVED A FLAPS FAIL MESSAGE WITH FLAPS AT 30 DEGREES. FLAPS WERE NOT RESELECTED. RECTIFICATION: RT BRAKE POSITION SENSOR UNIT (BPSU) FOUND TO BE AT FAULT. BPSU REPLACED AND RIGGED IAW AMM. (TC NR 20071025002)

CA071118002	CNDAIR	GE	WINDSHIELD	CRACKED
11/8/2007	CL6002C10	CF348C5B1	NP13932113	COCKPIT

(CAN) IN FLIGHT LT WINDSHIELD CRACKED, AIRCRAFT CONTINUED TO DESTINATION. NO FURTHER REPORTED DETAILS. (TC NR 20071118002)

CA071118001	CNDAIR	GE	MENASCO	ROD END	BROKEN
11/15/2007	CL6002D24	CF348C5	510009	510009	PCU

(CAN) REPORT FROM AIR ONE: REF /A/ - AIPC 27-33-01, FIG 1 WHILE PERFORMING TASK CARD 000-27-220-010 - OPERATIONAL TEST OF THE ELEVATOR PCUS, AIR ONE FOUND THAT WITH HYD 1 ONLY, THE ELEVATOR WOULD NOT MOVE. AFTER INSPECTION, THEY FOUND THAT PCU 1 ROD END (ON THE ELEVATOR ATTACHING LUG) WAS BROKEN IN (2) PIECES AT THE PCU PISTON THREADS. PRIOR REMOVING ANYTHING, IT WAS NOTICED THAT THE ROD END SEEMED JAMMED (UNABLE TO TURN THE ROD END AROUND THE BOLT) ON ITS ATTACHING BOLT (REF /A/ ITEM 275) WHILE ATTEMPTING TO REMOVE THE BROKEN ROD END, THE ATTACHING NUT (REF /A/, ITEM 295) WAS EASILY REMOVABLE. HOWEVER, IT WAS NOT POSSIBLE TO TURN OR REMOVE THE BOLT (REF /A/, ITEM 275) FROM THE ELEVATOR PCU FITTING (REF SRM 55-21-02, ITEM 114, P/N AV670-24142-007) (TC NR 20071118001)

CA071026004	CVAC	ALLSN	ACTUATOR	MALFUNCTIONED
10/23/2007	440	501D13D		NLG STEERING

(CAN) DURING APPROACH WHEN LANDING GEARS SELECTED DOWN, THE LANDING GEARS UNLOCK LIGHT CAME ON, HOWEVER, NO NOSE WHEEL DOWN LIGHT CAME ON. THE CREW CONFIRMED VISUALLY GEAR NOT DOWN. AFTER A FEW CYCLES GEAR UP AND GEAR DOWN AND EMERGENCY UPLATCH RELEASE TO NO AVAIL. AFTER TURNING NOSE GEAR STEERING THE NOSE GEAR CAME DOWN AND LOCKED NORMALLY. THE NOSE GEAR STEERING ACTUATOR FOUND TO BE CREEPING TO THE RT ON ITS OWN INTERMITTENTLY. SUBSEQUENT INSPECTION FOUND THAT THE UPPER PIVOT POINT WAS WORN. STEERING ASSY REMOVED AND SENT TO OVERHAUL SHOP FOR INVESTIGATION AND OVERHAUL.

2008FA0000042	DHAV	PWA	CYLINDER HEAD	CRACKED
12/12/2007	DHC2*	R985AN14B		ENGINE

CYLINDER CRACKED IN THE AREA OF EXHAUST VALVE.

[CA071214003](#) DHAV PWA CABLE CORRODED
12/14/2007 DHC2MK1 R985* C2CE523A FUEL SELECTOR
(CAN) FUEL SELECTOR CABLE VERY BADLY CORRODED, CABLE FAILED WHEN REMOVED. NO LOG BOOKS OR RECORDS AVAILABLE. (TC NR 20071214003)

[CA071214005](#) DHAV PWA HINGE BRACKET CRACKED
10/4/2007 DHC2MKI R985AN14B C2FS1253A CARGO DOOR
(CAN) TOP HINGE BRACKET CRACKED ON FWD FACE OF HINGE. (TC NR 20071214005)

[CA071024006](#) DHAV PWA SHUTOFF VALVE LEAKING
10/4/2007 DHC2MKI R985AN14B PV332010 FUEL SYSTEM
(CAN) STRONG FUEL ODOR IN COCKPIT. INVESTIGATED AND FOUND FUEL SHUTOFF VALVE WAS LEAKING. OVERHAULED PN PV3320-10 INSTALLED AND SYSTEM CHECKED FOR LEAKS. AIRCRAFT SERVICEABLE. (TC NR 20071024006)

[CA071026010](#) DHAV PWA LINK ASSY CORRODED
10/26/2007 DHC2MKI R985AN14B C2US1285A AT SKI ATTACH
(CAN) SKIS OLD SURPLUS PARTS, 0 HRS, PUT INTO SERVICE 1 YR AGO. SKIS INSPECTED TO REATTACH TO AIRCRAFT, DISASSEMBLED FOR MAINTENANCE. UPON REMOVAL OF LINK ASSY FROM SKI PIVOT ATTACHMENT, BASE OF LINK FOUND CORRODED OUT AND U/S. CORROSION WOULD HAVE ONLY BEEN APPARENT DURING FULL DISASSEMBLE OF SKI, NOT A NORMAL PRACTICE. SKIS APPEAR TO HAVE BEEN OILED IAW ENGINEERING DWG, BUT 1 PLUG SCREW IS MISSING AND ANOTHER LOSE, LIKELY CAUSE OF WATER TO ENTER LINK ASSY. (TC NR 20071026010)

[CA071108003](#) DHAV PWA DHAV ATTACH FITTING CRACKED
11/2/2007 DHC2MKI R985AN14B LIFT STRUTS
(CAN) WHILE ACCOMPLISHING THE REQUIREMENTS OF SB 2/55, CRACKS WERE DETECTED ON THE LOWER LUGS OF BOTH WING LIFT STRUTS. IN BOTH CASES THE CRACKS WERE LOCATED ON THE IB FACE OF THE LUG AND WERE .7500 INCH LONG LT STRUT P/N C2W1103A, S/N 0140 WAS CRACKED ON THE AFT FACE OF THE FWD LUG RT STRUT P/N C2W1104A S/N 0113 WAS CRACKED ON THE FWD FACE OF THE AFT LUG. S. B. 2/41 WAS COMPLETED 1 YEAR AGO WITH NO FAULTS FOUND AT THAT TIME. THE AC OPERATES EXCLUSIVELY ON FLOATS IN A CORROSIVE ENVIRONMENT. BOTH STRUTS WERE REPLACED AND THE AIRCRAFT WAS RETURNED TO SERVICE. TAT 18060.1 (TC NR 20071108003)

[CA071109004](#) DHAV PWA CRANKCASE CRACKED
10/5/2007 DHC2MKI R985AN14B 16475 ENGINE
(CAN) DURING RUNUP AFTER INSPECTION, INVESTIGATION OF A MINOR OIL LEAK REVEALED THAT THE ENGINE CRANKCASE WAS CRACKED NEAR AN ENGINE THROUGH BOLT AT THE BASE OF NR 2 CYLINDER, BETWEEN CYLS NR 2 AND NR 3. THE ENGINE WAS REPLACED. (TC NR 20071109004)

[CA041222018](#) DHAV ACTUATOR MISMANUFACTURED
12/22/2004 DHC6 PDMC6E101729 SLIDE
(CAN) SLIDE ACTUATOR MANUFACTURED TO INCORRECT LIMITS. SLIDE ACTUATOR WILL NOT FIT ONTO BETA SWITCH BRACKET P/N C6E1060-3. GROOVE FOR SLIDE ON A C6E1017-29 IS .1300 +/- .0005. GROOVE ON SLIDE FROM J.A.S. PDM C6E1017-29 IS .1200 +/- .0005. TRACK ON BETA SWITCH BRACKET IS .1250. (TC NR 20041222018)

[UE5R010208001](#) DHAV PWA NOZZLE SHEARED
1/2/2008 DHC6 PT6A28 3013635 ENGINE
WHEN INSTALLING NOZZLE PN 3013635 ONTO NOZZLE ADAPTER ASSEMBLY USING SPECIFIED OHM TORQUE, NOZZLE SHEARED OFF COMPLETELY AT BASE OF THREADS.

[CA071107001](#) DHAV PWA ENGINE FAILED
11/3/2007 DHC6100 PT6A20 RIGHT

(CAN) PILOTS HAD TO SHUTDOWN RT ENGINE. MAINTENANCE INSPECTION FOUND PROP WOULDN'T TURN, EXPECT POWER SECTION FAILURE. (TC NR 20071107001)

CA071107005	DHAV	PWA	CABLE	CHAFED
10/12/2007	DHC6300	PT6A27	TBC6CF11461	ELEVATORS

(CAN) WHILE INSPECTING THE CONTROL CABLES IAW TRANSPORT, ALERT (SDA) AL-2007-03, THE ELEVATOR CABLE WAS FOUND CHAFED AT THE PULLEYS AT STA 262.0. THE LOCATION OF THE WEAR ON THE CABLE, IS DIRECTLY OVER THE PULLEYS WHEN THE CONTROL LOCKS ARE IN. (TC NR 20071107005)

CA071115011	DHAV	PWA	PLATE	CRACKED
11/14/2007	DHC6300	PT6A27	C6TFM102527	VERTICAL STAB

(CAN) CRACK INDICATION FOUND IN A CORROSION PIT IN THE AFT ATTACH PLATE WHEN INSPECTING IT IAW SB 454. (TC NR 20071115011)

CA041216003	DHAV	PWA	BOLT	SHEARED
12/16/2004	DHC6300	PT6A27	CSP28229	ENG MOUNT

(CAN) AT ENGINE REMOVAL 3 OF THE 4 TOP ENGINE MOUNT BOLTS PN CSP282-29 BOLT FAILED. THE HEADS SHEARED OFF AFTER APPROXIMATELY 3/1 - 1.25 TURN(S) OF THE BOLT. (TC NR 20041216003)

CA041216004	DHAV	PWA	BOLT	SHEARED
12/16/2004	DHC6300	PT6A27	CSP28229	ENGINE MOUNT

(CAN) AT ENGINE REMOVAL, ONE OF THE TOP ENGINE MOUNT BOLTS P/N CSP282-29 BOLT FAILED. THE HEADS SHEARED OFF AFTER APPROXIMATELY A .7500 TURN OF THE BOLT. REVIEWED (TC NR 20041216004)

2007FA0001094	DHAV	PWA	SEAT BACK	BROKEN
12/11/2007	DHC6300	PT6A27		SEAT

BOTH LOWER SEAT BACK BRACES BROKE JUST ABOVE THE WELDS, ABOVE WHERE THE FLANGE BOLTS ON TO THE SEAT BOTTOM. (K)

CA071018004	DHAV	PWA	ADAPTER	MISINSTALLED
10/15/2007	DHC6300	PT6A27	C6FSM181421	

(CAN) WHILE REMOVING ATTACHMENT ADAPTER P/N C6FSM1814-21, IT WAS NOTED THAT THE RIVETS INSTALLED IN THE VERTICAL WEBS TO ADAPTER WERE THE INCORRECT TYPE. THE RIVETS REMOVED FROM THIS ADAPTER PLATE WERE A.D. RIVETS. THE CORRECT RIVET WOULD HAVE BEEN D.D. ADAPTER SHOWS SIGNS OF FRETTING CORROSION CAUSED BY SLIGHT MOVEMENT.

CA071115010	DHAV	PWA	RIB	CRACKED
11/12/2007	DHC6300	PT6A34	C6W11509	WING

(CAN) RIB FLANGE FOUND CRACKED ON IB SIDE WHERE IT IS RIVETED TO THE TOP SKIN CORRUGATIONS. CRACKING FOUND WHEN INSPECTING RIBS 8-22 IAW MFG STRUCTURAL LIFE LIMITS. (TC NR 20071115010)

CA071025005	DHAV	PWA	O-RING	FAILED
10/6/2007	DHC6300	PW123		OIL PRESSURE

(CAN) PILOT OBSERVED A SUDDEN DROP IN OIL PRESSURE AND ELECTED TO PERFORM AN IN FLIGHT SHUTDOWN. FLIGHT WAS DIVERTED. GROUND INSPECTION REVEALED A DEFECTIVE O-RING ASSOCIATED WITH THE PCU (PROPELLOR CONTROL UNIT) ASSEMBLY. (TC NR 20071025005)

CA071025003	DHAV	PWA	OIL CAP	MISINSTALLED
10/4/2007	DHC8*	PW120A	PT08001A01	OIL FILLER

(CAN) DURING CLIMB, THE LOW OIL PRESSURE WARNING ILLUMINATED. THE CREW ELECTED TO PERFORM AN INFLIGHT SHUTDOWN OF THE ENGINE AND RETURN TO POINT OF DEPARTURE. GROUND INSPECTION REVEALED THAT THE OIL FILLER CAP HAD BEEN IMPROPERLY INSTALLED, AND THAT THE SEALING FUNCTION OF THE POST-SB 21150 FILLER NECK CHECK VALVE HAD BEEN RENDERED INEFFECTIVE THROUGH FLATTENING OF THE O-RING

AND MECHANICAL DAMAGE. (TC NR 20071025003)

CA071025008	DHAV	PWC	OIL SYSTEM	LOW PRESSURE
10/22/2007	DHC8*	PW150A		ENGINE

(CAN) DURING CRUISE, THE LOW OIL PRESSURE WARNING WAS ACTIVATED FOLLOWED BY SURGING AND UNCOMMANDED SHUTDOWN. THE FLIGHT WAS DIVERTED. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20071025008)

CA071024004	DHAV	PWA	LINE	SEVERED
10/23/2007	DHC8102	PW120A	82920010265	SELECTOR VALVE

(CAN) THE NR 2 HYDRAULIC ISOLATION VALVE CAUTION LIGHT ILLUMINATED APPROXIMATELY 27 NAUTICAL MILES AFTER TAKEOFF. SHORTLY FOLLOWING THIS, THE NR2 SYSTEM HYDRAULIC FLUID DEPLETED. THE CREW CARRIED OUT THE APPLICABLE QRH PROCEDURES AND RETURNED TO BASE. MAINTENANCE FOUND A SEVERED HYDRAULIC TUBE AT THE LANDING GEAR SELECTOR VALVE. THE HYDRAULIC TUBE WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. (TC NR 20071024004)

CA071025009	DHAV	PWA	ACCESSORY UNIT	DAMAGED
10/20/2007	DHC8201	PW123		ENGINE

(CAN) THE ENGINE WAS REPORTED TO HAVE HAD AN IFSD. GROUND INSPECTION REVEALED THE POWER TURBINES DID NOT TURN FREELY AND THE ACCESSORY DRIVE WAS DAMAGED. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071025009)

CA071024011	DHAV	PWA	OIL SYSTEM	LOW PRESSURE
9/21/2007	DHC8202	PW123D		ENGINE

(CAN) DURING CLIMB, LOW OIL PRESSURE WARNING ANNUNCIATED. PILOT INITIATED SHUTDOWN PROCEDURES AND SINGLE ENGINE LANDING. ENGINE WAS REMOVED FOR INVESTIGATION. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071024011)

CA071115008	DIAMON	CONT	DIAMON	BEARING	SEIZED
10/31/2007	DA20C1	IO240B		HF3M	ROD END

(CAN) PILOT REPORTED MIXTURE STICKING DIFFICULT TO MOVE. INSPECTION REVEALED MIXTURE CONTROL ROD END AT MECHANICAL FUEL PUMP SEIZED. ROD END WAS REPLACED WITH NEW UNIT. THIS ROD END IS OF THE SAME PN WHICH SEIZED ON ANOTHER AIRCRAFT'S THROTTLE CONTROL WHICH RESULTED IN AN OFF AIRPORT LANDING AND DAMAGE TO THE AIRCRAFT BACK IN FEB. 2005. HOPING TO HAVE THE BEARING ANALYZED BY A LAB. (TC NR 20071115008)

CA071102004	DIAMON	CONT	TUBE	DAMAGED
10/31/2007	DA20C1	IO240B	30200530001110	MLG TIRE

(CAN) DURING A SPECIAL INSPECT TO THE MAIN AND NOSE WHEEL ASSEMBLIES, DEFECTS WERE NOTED IN THE TIRE-TUBES INSTALLED INTO BOTH MAIN AND THE NOSE WHEELS. REPORTS HAVE BEEN MADE OF TIRE-TUBES FAILING WITH VERY LOW TIME. AFTER RECEIVING THESE REPORTS AN INSPECTION WAS PERFORMED ON ALL 3 WHEEL ASSEMBLIES ON 2 AIRCRAFT ALL TIRE-TUBES INSPECTED WERE DEFECTIVE, SHOWING THE SAME DEFECTS AS REPORTED. PHOTOGRAPHS OF THE REPORTED TIRE-TUBES FAILURES ARE ATTACHED TO THIS SDR. THE TUBES INSPECTED ARE IDENTICAL IN APPEARANCE. SEVERAL TUBES P/N 5.00-5 TR 67 AND 30200530001110 HAVE BEEN FOUND WITH SIMILAR DISCREPANCIES (TC NR 20071102004)

2008FA0000035	DIAMON	LYC	CONTROL ARM	BROKEN
12/18/2007	DA40	O360*		CARB HEAT

CARBURETOR HEAT CONTROL ARM BROKE OFF OF CARB AIR BOX CAUSING UNCONTROLLED SELECTION OF CARB HEAT VS RAM (COLD) AIR INTAKE. RECOMMEND INSTALLED THINKER MATERIAL ON CARB HEAT CONTROL ARM LEVER, DIFFERENT WELDING PROCESS, OR DIFFERENT ATTACHMENT PROVISION ALTOGETHER. (K)

2007FA0001090	DIAMON	LYC	CONTROL ARM	BROKEN
11/26/2007	DA40	O360A4M		AIRBOX

CARBURETOR HEAT CONTROL ARM BROKEN OFF OF CARB AIR BOX CAUSING UNCONTROLLED SELECTION OF CARB HEAT VS RAM (COLD) AIR INTAKE. RECOMMEND INSTALLED THICKER MATERIAL ON CARB HEAT CONTROL ARM LEVER. DIFFERENT WELDING PROCESS, OR DIFFERENT ATTACHMENT PROVISION ALTOGETHER. (K)

2007FA0001078	DIAMON	DIAMON	RETAINING CLIP	MISSING
12/14/2007	DA42		PNDIN47108VE	LT MLG

DURING PREFLIGHT THE PILOT NOTICED THAT THE LMG DOWNLOCK PIN (P/N-D60-3237-11-34) HAD NO RETAINING CLIP(P/N-DIN471-08-VERZ) AND HAD SHIFTED AFT. THE FORWARD DOWNLOCK HOOK WAS COVERING ONE HALF OF THE HOLE SINCE THERE WAS NO PIN TO STOP ITS MOVEMENT. THE REMAINING CLIP BROKE IN HALF WHEN IT WAS REMOVED. IT APPEARED TO BE BRITTLE. A NEW PIN WAS INSTALLED WITH NEW CLIPS. THOSE CLIPS HAD MORE SPRING TO THEM. ALSO, THE GROOVES IN THE PIN ARE VERY SHALLOW.

2007FA0001079	DIAMON	DIAMON	RETAINING CLIP	MISSING
12/14/2007	DA42		PNDIN47108VE	LT MLG

DURING PREFLIGHT THE PILOT NOTICED THAT THE LMG DOWNLOCK PIN (P/N-D60-3237-11-34) HAD NO RETAINING CLIP(P/N-DIN471-08-VERZ) AND HAD SHIFTED AFT. THE FORWARD DOWNLOCK HOOK WAS COVERING ONE HALF OF THE HOLE SINCE THERE WAS NO PIN TO STOP ITS MOVEMENT. THE REMAINING CLIP BROKE IN HALF WHEN IT WAS REMOVED. IT APPEARED TO BE BRITTLE. A NEW PIN WAS INSTALLED WITH NEW CLIPS. THOSE CLIPS HAD MORE SPRING TO THEM. ALSO, THE GROOVES IN THE PIN ARE VERY SHALLOW.

2008FA0000036	DIAMON		RETAINING CLIP	MISSING
1/14/2008	DA42		DIN47108VERZ	DOWNLOCK PIN

DURING PREFLIGHT THE PILOT NOTICED THAT THE MLG DOWNLOCK PIN (PN-D60-3237-11-34) HAD NO RETAINING CLIPS(PN-DIN471-08-VERZ). THE GROOVES IN THE PIN ARE VERY SHALLOW AND ALLOW THE CLIPS TO MIGRATE OFF.

2007FA0000864	DIAMON	THIELT	CYLINDER HEAD	FAILED
8/9/2007	DA42	TAE12501	02722001002R1	ENGINE

ENGINE BEGAN LOSING COOLANT BY PRESSURIZING THE COOLING SYSTEM WITH COMBUSTION PRESSURE AND BLOWING COOLANT OVERBOARD. WHEN CYLINDER HEAD WAS REMOVED, EACH CYLINDER HAD A CRACK BETWEEN THE GLOW PLUG AND EXHAUST VALVE RECESS. THE ENGINE HAD PASSED A COMPRESSION CHECK AND IT IS SUSPECTED THAT THE CRACKS WOULD ONLY LEAK WHEN THE ENGINE WAS WARMED TO OPERATING TEMPERATURE. THE RESULTANT COOLANT LOSS ONLY INCREASES THE PROBABILITY OF FURTHER TEMPERATURE EXCURSIONS. A PROBABLE CAUSE WOULD BE INADEQUATE DISTANCE IN THE CASTING OF THE CYLINDER HEAD BETWEEN THE EXHAUST VALVE RECESS AND THE GLOW PLUG. ALTERNATE CAUSES INCLUDE INADEQUATE COOLING PROVIDED BY THE AIRFRAME MFG, INADEQUATE WATER JACKETING IN THE ENGINE RESULTING IN HOT SPOTS WHICH COULD LEAD TO CRACKING, AND ENGINE RUNNING AT A HIGHER RPM THAT THE COOLING SYSTEM COULD HANDLE. RECOMMENDATION INCLUDE MANDATORY CYLINDER HEAD REPLACEMENT AT EACH 300 HOURS TIS OR IMMEDIATE GROUNDING OF ENTIRE DA42 FLEET WHEN 400 HOURS TT ENGINE IS REACHED, ALLOWING 10 HOURS TO REACH A SUITABLE REPAIR FACILITY. ALSO AN IMMEDIATE UPGRADE TOT HE 2.0 DIESEL ENGINE, WHEN APPROVED FOR US INSTALLATIONS, OR DIVERGE FROM THE DIESEL AND INSTALL FADEC CONTROLLED POWERPLANTS. (K)

2007FA0000865	DIAMON	THIELT	CYLINDER HEAD	FAILED
8/9/2007	DA42	TAE12501	02722001002R1	ENGINE

ENGINE BEGAN LOSING COOLANT BY PRESSURIZING THE COOLING SYSTEM WITH COMBUSTION PRESSURE AND BLOWING COOLANT OVERBOARD. WHEN CYLINDER HEAD WAS REMOVED, EACH CYLINDER HAD A CRACK BETWEEN THE GLOW PLUG AND EXHAUST VALVE RECESS. THE ENGINE HAD PASSED A COMPRESSION CHECK AND IT IS SUSPECTED THAT THE CRACKS WOULD ONLY LEAK WHEN THE ENGINE WAS WARMED TO OPERATING TEMPERATURE. THE RESULTANT COOLANT LOSS ONLY INCREASE THE PROBABILITY OF FURTHER TEMPERATURE EXCURSIONS. A PROBABLE CAUSE INCLUDE INADEQUATE COOLING PROVIDED BY THE AIRFRAME MFG, INADEQUATE WATER JACKETING IN THE ENGINE RESULTING IN HOT SPOTS WHICH COULD LEAD TO CRACKING, AND ENGINE RUNNING AT A HIGHER RPM THAN THE COOLING SYSTEM COULD HANDLE.

2007FA0000871	DIAMON	THIELT	CYLINDER HEAD	DAMAGED
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8/9/2007

DA42

TAE12501

02722001002R1

ENGINE

ENGINE BEGAN LOSING COOLANT BY PRESSURIZING THE COOLING SYSTEM WITH COMBUSTION PRESSURE AND BLOWING COOLANT OVERBOARD. WHEN THE ENGINE WAS REMOVED AND THE OIL DRAINED, COOLANT WAS FOUND IN THE OIL AND FILLING UP CYLINDER NR 3. IT IS SUSPECTED THAT IF THE CYLINDER HEAD WOULD HAVE BEEN REMOVED, EACH CYLINDER WOULD HAVE HAD A CRACK BETWEEN THE GLOW PLUG AND EXHAUST VALVE RECESSES. THE ENGINE HAD PASSED A COMPRESSION CHECK AND IT IS SUSPECTED THAT THE CRACKS WOULD ONLY LEAK WHEN THE ENGINE WAS WARMED TO OPERATING TEMPERATURE. THE RESULTANT COOLANT LOSS ONLY INCREASES THE PROBABILITY OF FURTHER TEMPERATURE EXCURSIONS. A PROBABLE CAUSE WOULD BE INADEQUATE DISTANCE IN THE CASTING OF THE CYLINDER HEAD BETWEEN THE EXHAUST VALVE RECESS AND THE GLOW PLUG. ALTERNATE CAUSES INCLUDE INADEQUATE COOLING PROVIDED BY THE AIRFRAME MFG, INADEQUATE WATER JACKETING IN THE ENGINE RESULTING IN HOT SPOTS WHICH COULD LEAD TO CRACKING, AND ENGINE RUNNING AT A HIGHER RPM THAN THE COOLING SYSTEM COULD HANDLE. (K)

CA071031007	DOUG	PWA	CYLINDER HEAD	CRACKED
10/29/2007	C54EDC	R20007M2		FUSELAGE

(CAN) CRACK DISCOVERED AT SPARK PLUG HOLE, RETURNED TO BASE AND REPLACED CYLINDER AND A/C RETURNED TO SERVICE. (TC NR 20071031007)

CA071016007	DOUG	PWA	BEARING	FAILED
9/8/2007	MD900	PW206A	311608001	ENGINE

(CAN) THE ENGINE CHIP DETECTOR ACTIVATED, ACCOMPANIED BY VIBRATION AND A TEMPERATURE INCREASE, AND THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INVESTIGATION REVEALED A DAMAGED NR3 BEARING AND RESULTANT TURBOMACHINERY DAMAGE. (TC NR 20071016007)

FAA2007121001	EMB	ALLSN	ACTUATOR	SHORTED
12/10/2007	EMB135BJ	AE3007A	SYLC518361	RAM AIR

WHILE IN FLIGHT THE AIRCRAFT EXPERIENCED AND NR1 PAC OVLD INDICATION WITH SUBSEQUENT NR1 PAC AUTO SHUTDOWN AS A RESULT THE FLIGHT CREW MADE AN IN-FLIGHT DIVERSION AND UNSCHEDULED LANDING. PERFORMED DOWNLOAD OF THE CENTRAL MAINTENANCE COMPUTER WHICH REVEALED 1 OCCURRENCE OF NR1 PAC OVERTEMP AND 63 OCCURRENCES OF NR2 PAC OVERTEMP. TROUBLESHOOTING REVEALED THAT THE LT AND RT PAC OVERTEMP SWITCHES FAILED BENCH CHECK. BOTH SWITCHES WERE REPLACED WITH NEW SWITCHES. DURING THE PERFORMANCE OF THE PAC SYSTEM OPERATIONAL TEST IT WAS DISCOVERED THAT THE RT RAM AIR ACTUATOR HAD AN ELECTRICAL SHORT CAUSING THE CIRCUIT BREAKER TO (POP). REPLACED THE RT RAM AIR ACTUATOR AND PERFORMED PAC SYSTEM OPERATIONAL TESTS. DURING THE ABOVE CENTRAL MAINTENANCE COMPUTER DOWNLOAD, 17 OCCURRENCES OF A NR1 PRECOOLER TEMP CONTROL SYSTEM FAIL MESSAGE WAS NOTED. ACCESSED FAN AIR TEMPERATURE THERMOSTATS FOR TROUBLESHOOTING AND UPON REMOVAL IT WAS NOTED THAT THE AMBIENT AIR TEMPERATURE PORTS ON EACH THERMOSTAT HAD SHIPPING PLUGS IN THEM. REMOVED THE SHIPPING PLUGS AND SWAPPED THERMOSTATS FOR TROUBLESHOOTING. PERFORMED CENTRAL MAINTENANCE COMPUTER DOWNLOAD AFTER THERMOSTAT INSTALLATION WITH NO FAIL MESSAGES NOTED.

GW4R237272	EMB	ALLSN	ACTUATOR	SHORTED
11/29/2007	EMB135BJ	AE3007A	SYLC518361	RT RAM AIR

WHILE IN FLIGHT THE AC EXPERIENCED AND NR1 PAC OVLD INDICATION WITH SUBSEQUENT NR1 PAC AUTO SHUTDOWN AS A RESULT THE FLIGHT CREW MADE AN IN-FLIGHT DIVERSION AND UNSCHEDULED LANDING. DOWNLOAD OF THE COMPUTER REVEALED 1 OCCUR OF NR1 PAC OVERTEMP AND 63 OF NR2 PAC OVERTEMP. LT AND RT PAC OVERTEMP SWITCHES FAILED BENCH CHECK. BOTH SWITCHES WERE REPLACED. DURING THE PAC SYSTEM OPS TEST, THE RT RAM AIR ACTUATOR HAD AN ELECTRICAL SHORT CAUSING THE CIRCUIT BREAKER TO POP. REPLACED THE RT RAM AIR ACTUATOR AND PERFORMED PAC SYSTEM OPERATIONAL TESTS. DURING THE COMPUTER DOWNLOAD, 17 OCCURRENCES OF A NR1 PRECOOLER TEMP CONTROL SYSTEM FAIL MESSAGE WAS NOTED. ACCESSED FAN AIR TEMPERATURE THERMOSTATS FOR TROUBLESHOOTING AND UPON REMOVAL IT WAS NOTED THAT THE AMBIENT AIR TEMPERATURE PORTS ON EACH THERMOSTAT HAD SHIPPING PLUGS IN THEM. REMOVED THE SHIPPING PLUGS AND SWAPPED THERMOSTATS FOR TROUBLESHOOTING. PERFORMED CENTRAL MAINTENANCE COMPUTER DOWNLOAD AFTER THERMOSTAT INSTALLATION WITH NO FAIL MESSAGES NOTED.

GW4R237272NR1	EMB	ALLSN	SWITCH	FAILED
11/29/2007	EMB135BJ	AE3007A	SYLC518361	A/C PACK

IN FLIGHT AC EXPERIENCED AND NR1 PAC OVLD IND WITH NR1 PAC AUTO SHUTDOWN. FLT CREW MADE AN IN-FLIGHT DIVERSION AND UNSCHEDULED LANDING. DOWNLOAD OF THE COMPUTER REVEALED 1 OCCUR OF NR1 PAC OVERTEMP AND 63 NR2 PAC OVERTEMP. LT AND RT PAC OVERTEMP SWITCHES FAILED BENCHCHECK. BOTH SWITCHES WERE REPLACED. DURING THE PAC SYSTEM OPS TEST DISCOVERED THE RT RAM AIR ACTUATOR HAD AN ELEC SHORT CAUSING THE CB TO POP. REPLACED THE RT RAM AIR ACTUATOR AND PAC SYSTEM OPS TESTS. DURING THE COMPUTER DOWNLOAD, 17 OCCURRENCES OF A NR1 PRECOOLER TEMP CONTROL SYSTEM FAIL MESSAGE WAS NOTED. ACCESSED FAN AIR TEMPERATURE THERMOSTATS FOR TROUBLESHOOTING AND UPON REMOVAL IT WAS NOTED THAT THE AMBIENT AIR TEMPERATURE PORTS ON EACH THERMOSTAT HAD SHIPPING PLUGS IN THEM. REMOVED THE SHIPPING PLUGS AND SWAPPED THERMOSTATS FOR TROUBLESHOOTING. PERFORMED CENTRAL MAINTENANCE COMPUTER DOWNLOAD AFTER THERMOSTAT INSTALLATION WITH NO FAIL MESSAGES NOTED.

GW4R200700001	EMB	ALLSN	ACTUATOR	FAILED
12/10/2007	EMB135BJ	AE3007A	SYLC518361	RAM AIR

DURING FLIGHT, AIRCRAFT EXPERIENCED AND NR 1 PACK OVLD INDICATION WITH SUBSEQUENT NR 1 PACK AUTO SHUTDOWN AS A RESULT MADE AN IN-FLIGHT DIVERSION AND UNSCHEDULED LANDING. PERFORMED DOWNLOAD OF THE CENTRAL MAINTENANCE COMPUTER WHICH REVEALED 1 OCCURRENCE OF NR 1 PACK OVERTEMP AND 63 OCCURRENCES OF NR 2 PACK OVERTEMP. TROUBLESHOOTING REVEALED THE LT AND RT PACK OVERTEMP SWITCHES FAILED BENCH CHECK. BOTH SWITCHES WERE REPLACED. DURING PERFORMANCE OF PACK SYSTEM OPS TEST, IT WAS DISCOVERED THAT THE RT RAM AIR ACTUATOR HAD AN ELECTRICAL SHORT CAUSING THE CIRCUIT BREAKER TO TRIP. REPLACED THE RT RAM AIR ACTUATOR AND PERFORMED PAC SYSTEM OPS TESTS. DURING THE ABOVE CENTRAL MAINTENANCE COMPUTER DOWNLOAD, 17 OCCURRENCES OF A NR 1 PRECOOLER TEMP CONTROL SYSTEM FAIL MESSAGE WAS NOTED. ACCESSED FAN AIR TEMPERATURE THERMOSTATS FOR TROUBLESHOOTING AND UPON REMOVAL IT WAS NOTED THAT THE AMBIENT AIR TEMPERATURE PORTS ON EACH THERMOSTAT HAD SHIPPING PLUGS IN THEM. REMOVED THE SHIPPING CONNECTORS AND SWAPPED THERMOSTATS FOR TROUBLESHOOTING. PERFORMED CENTRAL MAINTENANCE COMPUTER DOWNLOAD AFTER THERMOSTAT INSTALLATION WITH NO FAIL MESSAGES NOTED.

2007FA0001113	EMB	ALLSN	BOLT	BROKEN
12/14/2007	EMB145LR	AE3007A	EWD0420839	BEARING CAP

NEW BOLT BROKEN DURING TORQUE. TORQUE VALUE NEVER OBTAINED BEFORE THE BOLT BROKE. THIS BOLT HOLDS THE BEARING CAP IN PLACE THAT HOLDS THE MAIN LANDING GEAR ON THE AIRCRAFT. (K)

CA071029002	EMB	GE	CLAMP	LOOSE
8/15/2007	ERJ170200SU	CF348E5A1	MS21919WDG9	COLUMN ROD

(CAN) PRIOR TO PUSHBACK, WHEN TOE BRAKES WERE PRESSED TO RELEASE PARK BRAKE, THE CONTROL COLUMN YOKE MOVED AFT APPROX 1 INCH. REF: LOAD CELL INSTALLATION. THE CLAMP IS INSTALLED ON THE CONTROL COLUMN ROD ASSY ON THE TAPERED SECTION OF THE ROD. THE CLAMP CANNOT BE PROPERLY TIGHTENED DUE TO THE ANGLE IN THE ROD AND EVENTUALLY BECOMES LOOSE. WHEN THE CLAMP IS FREE TO MOVE ALONG THE ROD, IN CERTAIN CONDITIONS, THE CLAMP CAN INTERFERE WITH CONTROL COLUMN MOVEMENT. MFG HAS CORRECTED THE PROBLEM ON OTHER AC, NOT ON THIS AC, THUS A MODIFICATION IS REQUIRED. (TC NR 20071029002)

CA071025010	EMB	GE	CABLE	BROKEN
10/15/2007	ERJ170200SU	CF348E5A1		PARKING BRAKE

(CAN) AFTER PUSHBACK, PARKING BRAKE CABLE BROKE. EMERGENCY PARKING BRAKE CABLE ASSY REPLACED IAW AMM 32-44-03 (TC NR 20071025010)

CA071107004	EMB	GE	SCREW	WRONG PART
11/7/2007	ERJ190100IGW	CF3410E5A1	MS24693C273	P-ACE RACK

(CAN) RETAINING SCREW FOR THE P-ACE (PRIMARY- ACTUATOR CONTROL ELECTRONICS) LT AND RT RACKS WERE THE WRONG SIZE (DIAMETER AND LENGTH TOO SMALL). THE RT P-ACE AND RACK WERE FREE FLOATING

IN THE SLOT. THE LT P-ACE AND RACK WERE SECURED WITH THE WRONG HARDWARE. THE CORRECT P/N OF THE RETAINING SCREW IS MS24693C273. (TC NR 20071107004)

CA071025004	EMB	GE	HOSE	LEAKING
10/15/2007	ERJ190100IGW	CF3410E5A1		FUEL SYSTEM

(CAN) APU FUEL FEED LINE LEAK WITHIN THE HYDRAULIC SERVICE COMPARTMENT. FUEL LEAKS FROM HOSE CORE AND SOAKS FABRIC BRAID. LEAK IS IN THE AREA OF SECOND AND THIRD SUPPORTING CLAMPS. SUGGEST THAT THIS MAY BE A MATERIAL SPECIFICATION PROBLEM. SUPPORT CLAMPS ARE INTACT AND DO NOT APPEAR TO BE CHAFFING LINE. (TC NR 20071025004)

CA071105003	FOKKER	PWA	TRANSDUCER	DEFECTIVE
10/24/2007	F27MK50	PW125B		ECU

(CAN) TAKEOFF WAS ABORTED DUE TO UNCOMMANDED POWER CHANGES OBSERVED ON GAUGES IN CONCERT WITH AIRCRAFT YAWING MOTION. TROUBLESHOOTING DETERMINED THAT THE PT TRANSDUCER IN THE ELECTRONIC CONTROL WAS DEFECTIVE. PN AND SN TO BE SUPPLIED IN DUE COURSE. (TC NR 20071105003)

2007FA0001110	FRCHLD		SKIN	CRACKED
12/27/2007	FH227D		16920	ELEVATOR

A SMALL CRACK WAS FOUND UNDERNEATH ELEVATOR STATIC WICK BASES APPROX. BL 84.0 ON BOTH LTAND RT ELEVATOR CONTROL SURFACES. A SECOND AIRCRAFT IN THE FLEET REVEALED A SIMILIAR CRACK UNDERNEATH THE STATIC BASE ON THE RT ELEVATOR ONLY. SUSPECT THE CRACK WAS CAUSED BY VIBRATION ON STATIC WICK IN THE SLIPSTREAM OF THE ENGINES. REPAIRED IAW SRM 51-90-04 REPAIR SCHEME NR 6.

CA071106008	FRCHLD	GARRTT	RETAINER	CRACKED
10/25/2007	SA227CC	TPE33111U	31025731	PROP SHAFT

(CAN) WHILE ENGINE WAS BEING REPLACED MAINTENANCE NOTICED FATIGUE CRACKS EMINATING FROM THE (PROP SHAFT) RETAINING BOLT AREA. (TC NR 20071106008)

CA071010009	FRCHLD	GARRTT	ACCUMULATOR	CRACKED
10/5/2007	SA227DC	TPE33112UHR	223002	HYD SYSTEM

(CAN) AIRCRAFT WAS INBOUND WHEN CREW REPORTED THE AIRCRAFT HAD LOST ALL HYDRAULIC PRESSURE. EMERGENCY GEAR EXTENSION WAS USED AND AIRCRAFT LANDED WITHOUT INCIDENT. MAINTENANCE DISCOVERED A 6 CENTIMETER CRACK LOCATED ON THE TOP SHOULDER AREA OF THE HYDRAULIC ACCUMULATOR CAP. (TC NR 20071010009)

CA071029008	GROB	LYC	FRAME	DAMAGED
10/26/2007	G120A	AEIO540D4D5	120A6050	OIL COOLER

(CAN) FLIGHT DEPARTED AT 1344 FOR AT TRAINING FLIGHT TO THE WEST PRACTICE AREA. APPROXIMATELY 5 MINUTES OUT WHILE CRUISING AT 4000 FT AND 120 KTS THE INSTRUCTOR OBSERVED (ALT OFF) ANNUNCIATION. A SCAN OF INTEGRATED ENGINE DISPLAY REVEALED (AMPS) TO BE READING -24A AND VOLTAGE READING 24.7V. THE INSTRUCTOR THEN OBSERVED (VOLT) ANNUNCIATION. THE INSTRUCTOR FOLLOWED EMERGENCY CHECKLIST AND SELECTED (ALTERNATOR) SWITCH OFF AND REMOVED NON-ESSENTIAL ELECTRICAL LOADS. THIS RESULTED IN A REDUCED NEGATIVE LOAD OF -9A. INSTRUCTOR THEN BRIEFLY CONFIRMED FAULT BY RETRYING (ALTERNATOR) SWITCH ON - LOAD WENT BACK TO -24A , (ALTERNATOR) SWITCH WAS IMMEDIATELY SELECTED OFF AGAIN. THE INSTRUCTOR MADE (PAN) CALL AND RETURNED . THE EMERGENCY CHECKLIST WAS COMPLETED INCLUDING EMERGENCY L/G EXTENSION. AFTER SHUTDOWN AND CONFIRMATION FROM FIRE DEPARTMENT THAT THE A/C WAS SAFE TO APPROACH WE NOTED THAT A HOLE HAD BEEN BURNED THROUGH THE BOTTOM OF THE ENGINE COWL AT THE RT FORWARD CAMLOCK FASTENER WHICH SECURES THE OIL COOLER HOUSING TO THE COWL. WHEN WE REMOVED THE LOWER COWL, OBSERVED THAT THE ALTERNATOR WIRING INSULATION HAD BEEN ABRADED DUE TO CONTACT WITH THE TOP OF THE OIL COOLER HOUSING WHICH EXPOSED THE WIRE CONDUCTOR TO THE CARBON FIBER MATERIAL OF THE OIL COOLER HOUSING. THE BOTTOM CAMLOCK FASTENER WHERE THE OIL COOLER HOUSING ATTACHES TO THE ENGINE COWL IS WHERE THE ELECTRICAL LOAD FOUND GROUND TO THE COWL, BURNING AWAY SOME MATERIAL IN DOING SO. THE COWLING AND OIL COOLER HOUSING WERE INSPECTED TO ENSURE THAT NO OTHER AREAS SHOW EVIDENCE OF DAMAGE FROM CURRENT FLOW THROUGH THE MATERIAL. WE ALSO IMMEDIATELY INSPECTED THE OTHER A/C IN OUR

G120A FLEET AND REROUTED ALTERNATOR WIRING BY EMPLOYING CUSHIONED (P) CLAMPS. MFG HAS BEEN ADVISED OF THE INCIDENT AND OUR CORRECTIVE ACTIONS TO DATE.

CA071106001	GULSTM		WINDSHIELD	BROKEN
10/17/2007	200		NP17820110	COCKPIT

(CAN) PILOT REPORTED RT WINDSHIELD CRACKED ON RETURN. C/O INSPECTION ON RT WINDSHIELD AND COULD NOT FAULT THE WINDSHIELD. THE AIRCRAFT WAS RELEASE FOR RETURN TO SERVICE. THE AIRCRAFT MADE (3) OTHER TRIPS. THE PILOTS REPORTED THE SAME CRACK ON THE RT WINDSHIELD. AGAIN C/O THE INSPECTION ON THE RT WINDSHIELD AND COULD NOT FAULT. PILOTS REPORTED THEY COULD ONLY SEE THE CRACK WHEN THE AIRCRAFT IS AT ALTITUDE. SPOKE TO MFG AND DECIDED TO REPLACE THE WINDSHIELD. THE UNIT REMOVED WILL BE SENT BACK TO MFG AND THEY WILL REPORT ON THE FAILURE OF THE WINDSHIELD. THE NEW RT WINDSHIELD WAS INSTALLED AND THE AIRCRAFT HAD SEVERAL FLIGHTS WITH NO FURTHER REPORTS. (TC NR 20071106001)

2008FA0000013	GULSTM	LYC	MAGNETO	WORN
1/2/2008	500S	IO540E1B5	6393	ENGINE

CAM LOBE INSIDE MAG THAT OPENS AND CLOSES POINTS WORN OUT.

CA071010011	GULSTM	GARRTT	SHAFT	CRACKED
10/5/2007	690	TPE3315251K	750069501	NLG

(CAN) DURING ANNUAL INSPECTION, THE SHAFT THAT PIVOTS THE NOSE GEAR UPPER LINK ASSY P/N ES10107 WAS FOUND CRACKED. THE CRACK IS LOCATED ON THE IB END OF THE SHAFT IN THE NOSE WHEEL WELL, WHERE IT IS FLUSH WITH THE EDGE OF THE HOLE IN THE UPPER LINK ASSEMBLY. THE CRACK IS APPROXIMATELY .5 INCH IN LENGTH AND PROGRESSES TO THE THRU BOLT HOLE. THE PIECE WILL BE REPLACED WITH A SERVICEABLE PART. (TC NR 20071010011)

CA071109006	GULSTM	GARRTT	INDICATOR	UNSERVICEABLE
11/8/2007	690A	TPE3315	850568503	ITT

(CAN) DURING CRUISE THE NR2 ENGINE ITT INDICATION BECAME ERRATIC, THEN CLIMBED THROUGH THE RED LINE. THE FLIGHT CREW SHUTDOWN THE ENGINE AND FEATHERED THE PROP. THE AIRCRAFT RETURNED TO AIRPORT. MAINTENANCE TESTED THE ITT SYSTEM AND FOUND THE INDICATOR TO BE AT FAULT. THE ITT INDICATOR WILL BE REPLACED WITH A SERVICEABLE UNIT AND THE AIRCRAFT WILL BE RETURNED TO SERVICE. (TC NR 20071109006)

CA071022005	GULSTM	GARRTT	BOLT	CRACKED
10/18/2007	695A	TPE33110	7500761	DRAG BRACE

(CAN) DURING DISASSEMBLY OF NOSE LANDING GEAR FOR ITS 5 YEAR INSPECTION/OVERHAUL, BOLT P/N 750076-1 OF THE NOSE LANDING GEAR DRAG BRACE-NOSE LANDING GEAR STRUT WAS FOUND BENT WITH VISIBLE CRACK. CRACK WAS CONFIRMED BY NDT(LPI AND MPI). THIS WAS THE AIRCRAFT'S FIRST OVERHAUL OF ITS LANDING GEAR SINCE COMPANY PURCHASED AIRCRAFT 2 YEARS AGO. RECORDS CHECK INDICATED MINIMAL PARTS REPLACEMENT DURING PREVIOUS 5 YEAR OVERHAULS (TC NR 20071022005)

120107	GULSTM	RROYCE	ENGINE	VIBRATION
12/17/2007	G1159	SPEY511*		LEFT

AFTER LANDING, TEMP.AROUND -12C, FREEZING FOG, CREW ELECTED TO TURN OFF ANTI-ICE AFTER LND. AIRCRAFT SAT FOR 1 HR,ENG'S STARTED. LT ENG HAD VIBRATION HUMMING, RT ENG WAS STABLE.TAXIED OUT W/ANTI-ICE ON THRUOUT. A/C TOOKOFF, IT SEEMED TO BE SMOOTH ON THE ROLL AND INITIAL CLIMB, HOWEVER, OUT OF 10,000 FT LT ENG VIB WAS AROUND 1.5 MILS,ABNORMAL FOR THIS AIRPLANE. CREW ELECTED TO DIVERT (MAINT.BASE). LANDING WAS UNEVENTFUL. BOTH ENG'S HAD VISUAL CKS, NOTHING NOTED. CONCLUSION IT MUST HAVE BEEN AN ICING/MELTING PROBLEM.

FAA011808001	GULSTM	RROYCE	FUEL CONTROL	INOPERATIVE
1/4/2008	GIV	TAY6118	CASC514	ENGINE

ON APPROACH TO TTN THE AUTO THROTTLES DISENGAGED. THE RT LEVER KNOB WAS ONE KNOB AFT OF THE

LT. WHEN RT LEVER WAS ADVANCED FORWARD THE RT ENGINE DID NOT RESPOND TO THROTTLE MOVEMENT.

FAA011808002	GULSTM	RROYCE	OIL SYSTEM	LOW PRESSURE
1/10/2008	GIV	TAY6118		ENGINE

30 MINUTE INTO THE FLIGHT OIL PRESSURE DROPPED TO 7 PSI. NO ASSOCIATED CAS MESSAGE. OIL TEMP WAS SLIGHTLY HIGHER THAN LT ENGINE. FUEL TEMP WAS 19 DEGREES HIGHER THAN LT. DURING DESCENT OIL PRESSURE CAME BACK TO 47 PSI.

2007FA0001092	GULSTM	RROYCE	OVEN	FAILED
11/30/2007	GVSPG550	BR700710A110	243185502	GALLEY

FLIGHT CREW REPORTED THE ODOR OF ELECTRICAL SMOKE IN THE GALLEY. THE ODOR WAS COMING FROM THE OVEN, THEN THE OVEN CB OPENED (POP). THE OVEN WAS REMOVED AND REPLACED WITH A NEW UNIT. (K)

CA070909001	HUGHES	LYC	BRACKET	BROKEN
9/8/2007	269C1	HIO360*	LW10382	ALTERNATOR

(CAN) ALTERNATOR BRACKET FOUND WITH BROKEN ATTACHMENT LUG. ALTERNATOR BELT TENSION LOSS AND SUBSEQUENT SYSTEM UNSERVICEABILITY. CAUSE OF FAILURE UNDER INVESTIGATION. (TC NR 20070909001)

CA070523007	HUGHES	ALLSN	HUGHES	PIN	BROKEN
5/21/2007	369A	250C20B			M/R BLADE

(CAN) PIN FOUND BROKEN AT FIRST THREAD / SHANK. NUT WAS CAPTURED IN THE HANDLE CLIP.

CA070924002	HUGHES	ALLSN	DRIVE GEAR	BROKEN
9/11/2007	369D	250C20	369D2512311	M/R TRANSMISSION

(CAN) MAIN ROTOR TRANSMISSION REMOVED DUE TO CHIP LIGHT ILLUMINATION. TRANSMISSION RETURNED TO HELICOPTERS COMPONENT OVERHAUL SHOP FOR REPAIR. UPON DISMANTLE IT WAS DISCOVERED THAT THE I/P GEAR HAD FAILED AND EXHIBITED ONE COMPLETE TOOTH BROKEN OFF FROM THE GEAR. (TC NR 20070924002)

CA071112002	HUGHES	ALLSN	BRACKET	BROKEN
10/26/2007	369D	250C20B	369A75058	RUDDER PEDELS

(CAN) RUDDER PEDALS WERE FOUND TO BE LOOSE IN MOUNTS ON FURTHER INVESTIGATION IT WAS FOUND THE BRACKET THAT THE RUDDER PEDALS MOUNT IN WAS BROKEN ON (3) OF THE (4) MOUNTING BOLT EARS. (TC NR 20071112002)

CA071026007	ISRAEL	GARRTT	BRAKE ASSY	FAILED
10/18/2007	1124	TFE73131G	50028053	RT MLG

(CAN) A-CHECK INSPECTION COMPLETED AT AIRCRAFT. FOLLOWING INSPECTION A TEST FLIGHT WAS COMPLETED, ON RETURN TO BASE, IT WAS NOTED THAT THE RT BRAKE WAS DRAGGING. MAINTENANCE FOUND TOP AFT GRIP AND TUBE OUT OF ADJUSTMENT. REMOVED AND RESET ASSEMBLY TO NEUTRAL POSITION, OPS CHECK BRAKE SERVICEABLE. AC DEPARTED, UPON LANDING THE PILOT NOTED THAT THE BRAKE WAS DRAGGING, AND FOUND THE RT BRAKE WAS NOT FULLY RELEASING. MAINTENANCE WAS CALLED IN, REMOVED RT BRAKE ASSEMBLY (PN: 5002805-3 S/N: S-MAR88-2), AND INSTALLED OVERHAULED BRAKE ASSEMBLY (PN: 5002805-3 S/N: OCT 85-522) PER MM 32-43-01. AIRCRAFT RETURNED TO SERVICE. UNSERVICEABLE BRAKE ASSEMBLY RETURNED TO VENDOR (TSO: 2.7 HRS, 2 LANDINGS).REQUESTING VENDER TO SUPPLY FOLLOW UP REPORT. (TC NR 20071026007)

CA071026005	ISRAEL	GARRTT	ACTUATOR	FAILED
10/16/2007	1124	TFE73131G	793500501	RUDDER TRIM

(CAN) WHILE PERFORMING AN A-CHECK, THE RUDDER TRIM ACTUATOR (PN: 793500-501) FAILED THE FREE PLAY CHECK IAW MM 5-20-06 PARA: 1.F.(4) AND MM 27-20-00 PAGE 503 PARA: 4.A. A NEW RUDDER TRIM LOWER ACTUATOR (PN: 793500-501) (ALTERNATE PN:1092AS100-3) WAS ORDERED. WHEN RECEIVED, THE NEW ACTUATOR 8130-3 RELEASE FORM STATED THAT THE UNIT WAS OVERHAULED. THE PART HAD 3 DISCREPANCIES, BOTH ROD ENDS WERE WORN, CORRODED, SCORED, ALSO THE ELECTRICAL LEAD, CONNECTOR PLUG WAS CORRODED. THE UNIT WAS RETURNED TO VENDOR. (TC NR 20071026005)

2008FA0000053	LEAR	GARRTT	PRESSURE SENSOR	MALFUNCTIONED
1/17/2008	35A	TFE731*	1303687	AFT BAGGAGE

LOSS OF CABIN PRESSURE AT 25K FT. PRESSURE SENSOR MALFUNCTIONED

CA071030005	LEAR	GARRTT	CONNECTOR	TRANPOSED
10/16/2007	35A	TFE73122B		STALL WARNING

(CAN) DURING A 300HR INSPECTION THE STALL WARNING ACCELEROMETER CHECK WAS DUE (IAW AD 82-01-05). WHEN CHECK WAS CARRIED OUT, THE STALL WARNING SYSTEM FAILED. WHEN SYSTEM WAS TROUBLESHOT, IT WAS DISCOVERED THAT CONNECTORS BNC 3 AND BNC 4 (FORM PIN D AND PIN F RESPECTIVELY) WERE FOUND REVERSED. CONNECTORS SWITCHED BACK AND STALL WARNING SYSTEM FUNCTIONED CHECKED SERVICEABLE. SYSTEM LAST CHECKED AT A MFG SERVICE CENTER. (TC NR 20071030005)

CA050303006	LEAR	GARRTT	COMPUTER	WRONG PART
3/1/2005	35A	TFE73122B	5226703002	FLIGHT COMPUTER

(CAN) ON OCTOBER 15, 2004 A FLIGHT COMPUTER (FC) WAS REPLACED ON AIRCRAFT. THE REMOVED FC WAS THEN SENT FOR REPAIR. IT WAS DETERMINED THAT THE FC PN WAS NOT RECOGNIZED. IT WAS THEN SENT TO THE MFG FOR FURTHER INVESTIGATION. MFG CONFIRMED THAT THE INSTALLED ID PLATE WAS NOT THEIR OWN. THE PART WAS THEREFORE CLASSIFIED AS UNAPPROVED. ONCE NOTIFIED OF THE DISCREPANCY, SKYSERVICE PROCEEDED IN A TECHNICAL RECORD REVIEW TO DETERMINE THE ORIGIN OF THE SUBJECT PART. THE AIRCRAFT COMPONENT REPLACEMENT HISTORY HAS BEEN REVIEWED (STARTING BEGINNING OF 2000). NO FC REPLACEMENT HAS BEEN FOUND. (TC NR 20050303006)

CA071106002	LEAR	GARRTT	TIRE	DELAMINATED
11/5/2007	45LEAR	TFE7312	226K084	MLG

(CAN) DURING AN INSPECTION, A BULGE WAS NOTICED ON THE NR 2 TIRE. THIS BULGE WAS NOTICED IN 3 SPOTS ON THE TIRE, EACH EXTENDING FOR ABOUT 3 INCHES. THE BULGE STARTED AT THE CORNER OF THE TREAD AND EXTENDED TO THE SIDEWALL AND. THE TIRE WAS REPLACED. (TC NR 20071106002)

CA070828005	MOONEY	LYC	BLOCK	CORRODED
7/26/2007	M20C	O360A1D	240014901	FLAP HINGE BLOCK

(CAN) RT WING CENTER FLAP HINGE BLOCK HAD SERIOUS INTER-GRANULAR CORROSION. CORROSION APPEARS TO HAVE STARTED IN THE PORTION OF THE BLOCK THAT IS USED AS A STOP. THE STOP IS NOT EMPLOYED IN THE LOCATION THIS HINGE BLOCK WAS INSTALLED, (AFFECTED HINGE BLOCK, CENTER HINGE LOCATION). (TC NR 20070828005)

CHI08CA035	MOONEY	LYC	LYC	NUT	BACKED OUT
11/1/2007	M20E	IO360A1A			CONNECTING ROD

NR 3 PISTON CONNECTING ROD SEPARATED FROM THE CRANKSHAFT. PISTON SHEARED MOUNTING STUDS OF CYLINDER HOUSING AT ENGINE CASING. CYLINDER HOUSING SEPARATED FROM ENGINE CASING. ENGINE SHUTDOWN.

2007FA0001096	PIAGIO	PWA	MOUNT	CHAFED
11/21/2007	P180	PT6*	80446101403	ENGINE

OIL COOLER RETURN LINE CHAFED AGAINST ENGINE MOUNT. DID NOT SHOW SIGNS OF CHAFING STATICALLY DURING ROUTINE INSPECTIONS, WAS CHAFING DURING FLIGHT. INSTALLED REDESIGNED OIL LINE THAT CANNOT COME IN CONTACT WITH MOUNT. MFG DID NOT INFORM OPERATORS ABOUT REDESIGNED OIL LINE, P/N MS8000M300JF, SAID USE AS SPARE IN ILLUSTRATED PARTS CATALOG. ALSO INSTALLED NEW ENGINE MOUNT.

CA071105002	PILATS	PWA	HOSE	FAILED
11/2/2007	PC1245	PT6A67B	9433772104	LT MAIN GEAR

(CAN) WHEN TRYING TO INSTALL THE NEW LINE IT WOULD BIND UP HALF WAY ON, HAD 2 NEW HOSES AND WHEN WE TRIED THE OTHER HOSE IT WENT ON WITH NO PROBLEMS, SUSPECT THREADS ON B-NUT FITTING ON NEW

HOSE. (TC NR 20071105002)

CA071119001	PILATS	PWA	CONTROL MODULE	INOPERATIVE
11/6/2007	PC1245	PT6A67B	065008617	EADI

(CAN) (ALT) LAMP DID NOT ILLUMINATE ON MODE CONTROL. ALTITUDE CAPTURE WAS NORMAL WITH ALT CAPTIONS (ON) AS DISPLAYED ON BOTH EADI SCREENS. (TC NR20071119001)

CA071119002	PILATS	PWA	CONNECTOR	DAMAGED
11/15/2007	PC1245	PT6A67B		OAT INDICATOR

(CAN) OAT INDICATION ON EIS ERRACTIC. ONE OF THE PINS IN OAT CONNECTOR FOUND LOOSE. NEW CONNECTOR INSTALLED WITH 2 NEW PINS. SYSTEM NORMAL. (TC NR 20071119002)

CA071119003	PILATS	PWA	DISPLAY	INTERMITTENT
11/15/2007	PC1245	PT6A67B	0660312525	EADI

(CAN) PILOT'S EADI DISPLAY REPORTED TO GO (FUZZY) AND INTERMITTENTLY GOING BLANK. ED462 REPLACED WITH SERVICEABLE UNIT. (TC NR 20071119003)

2008FA0000028	PIPER	LYC	CLAMP	LOOSE
12/26/2007	PA22150	O320*	MS21919DG3	HEAT BOX

ENGINE DID NOT RESPOND WHEN POWER APPLIED ON A LOW FLY BY AND CAUSED THE PLANE TO LAND NEXT TO RUNWAY IN SNOW, DAMAGING ACFT. FOLLOWING PROBLEMS WERE FOUND ON POST INCIDENT INSPECTION OF ENGINE AND EITHER ONE CAN CONTRIBUTE TO LOSS OF LITTLE ALONE BOTH TOGETHER. FOUND CARBURETOR HEAT CABLE CLAMP LOOSE ON CABLE HOUSING. WRONG CLAMP INSTALLED ON CARBURETOR HEAT CABLE HSG AT REAR OF AIR BOX. AND MUFFLER END WITH THE CARB HEAT SHROUD HAS A SUBSTANTIAL EXHAUST LEAK INTO THE CARB HEAT SHROUD. THE INSIDE OF THE CARB HEAT SHROUD, SCAT HOSE AND AIR BOX ARE VERY SOOTY FROM EXHAUST GASSES. THE EXHAUST MUFFLER CLAMP LEAKING. THIS WILL CAUSE A POWER LOSS DUE TO THE HOT INDUCTION AIR, (K)

FCPR20070110	PIPER	LYC	ROME C	DIAPHRAGM	FAILED
12/8/2007	PA23250	TIO540C1A	RG179801M	RB15985	FUEL PUMP

PUMP VALVE REGULATOR DIAPHRAGM FAILED AT GUIDE PIN, PUMP WOULD NOT FUNCTION.

CA070314006	PIPER	LYC	STRUCTURE	CRACKED
3/7/2007	PA28140	O320E3D		RT WING ROOT

(CAN) RT FORWARD WING WALK ASSEMBLY, P/N 62061-002. RT ROOT WAS CRACKED. (TC NR 20070314006)

2008FA0000034	PIPER	LYC	SUPPORT	CRACKED
10/12/2007	PA28181	O360*	63451000	RUDDER BAR

FOUND CRACKED AFT ZEE ASSY PN 62664-000. THE ZEE ASSY IS RIVETED TO THE TOP FWD END OF TUNNEL PLATE PN 62601-003 AND AS AN ATTACHMENT POINT FOR THE RUDDER BAR SUPPORT ASSY PN 63451-000 USING 4 STANDARD AN3-4A BOLTS, WHICH ARE SECURED THROUGH NUTPLATES THAT ARE RIVETED ON BOTH FORE AND AFT ZEE ASSEMBLIES. CRACKING POSSIBLY CAUSED BY LOOSENESS IN TOE BRAKE SUPPORT BRACKETS PN 63468-000 ON BOTH PILOT AND CO-PILOTS SIDE. THE STANDARD AN3-13A BOLTS USED TO ATTACH THESE TOE BRAKE SUPPORT BRACKETS LOOSEN OVER TIME AND CAUSE LOSS OF SUPPORT TO THE RUDDER PEDAL BAR ASSY PN 63420-000. EXCESS MOVEMENT IN RUDDER BAR SUPPORT ASSY. THIS FLEXING TRANSFERS DOWN TO THE ZEE ASSEMBLIES CAUSING METAL FATIGUE AND SUBSEQUENT CRACKING. RECOMMEND PERIODIC RETORQUING OF TOE BRAKE SUPPORT BRACKET BOLTS. (K)

2008FA0000032	PIPER	LYC	STARTER	INOPERATIVE
12/12/2007	PA28181	O360A4M	MHB4016	ENGINE

OPERATOR COMPLAINED THAT THE ENGINE STARTER WOULD NOT ENGAGE. AFTER INSPECTION, FOUND THAT THE STARTER FIELD CASE HAD SEPARATED FROM GEAR HOUSING. A DETAILED INSPECTION OF THE FIELD CASE SCREW HOLES REVEALED THAT MOST OF THE THREADS WERE STRIPPED OUT AND HOLES WERE ELONGATED.

WOULD RECOMMEND THAT AT EACH 100 HR/ANNUAL INSPECTION, PERFORM TORQUE CHECK OF GEAR HOUSING TO CASE ATTACH SCREWS AND REPAIR AS REQUIRED. (K)

2007FA0001080	PIPER	LYC	CYLINDER	FAILED
11/15/2007	PA28181	O360A4M	653319004	RT MLG

RT M/G CYLINDER FAILED AT THE UPPER TORQUE LINK ATTACH LUGS WHILE TAXIING FROM THE ACTIVE RUNWAY: THE AIRCRAFT (SINCE NEW) IS USED FOR FLIGHT TRAINING IN A 141 FLIGHT SCHOOL. THE PREMATURE FAILURE OF THE CYLINDER WAS PROBABLY CAUSED BY A HARD LANDING. (K)

2008FA0000041	PIPER	LYC	MOUNT	CRACKED
1/9/2008	PA28R201	IO360A1A		LT ENGINE

ENGINE MOUNT FOUND CRACKED AT BOTTOM LT WHERE SHOCK MOUNT ATTACHES. (K)

2008FA0000057	PIPER	LYC	THROTTLE CABLE	INFLT SEPARATION
1/18/2008	PA28R201	IO360A1A	455322	

DURING FLIGHT, THE CREW EXPERIENCED A SEPARATION OF THE THROTTLE CABLE. THE POWER SETTING ALLOWED THEM TO MAINTAIN ALTITUDE PLUS A SLIGHT CLIMB. THE CREW POSITIONED THE AIRCRAFT FOR A LANDING ON A RUNWAY THAT HAD AMPLE LENGTH. AN UNEVENTFUL LANDING WAS MADE. THE THROTTLE CABLE WAS REMOVED AND INSPECTED AND FOUND TO BE BROKEN A FEW INCHES INSIDE THE OUTER HOUSING JUST AFT OF THE FUEL SERVO. THERE IS NO TIME/LIFE LIMIT ON THESE CABLES, HOWEVER THE OPERATOR WILL NOW CHANGE THE CABLES DURING EACH ENGINE CHANGE.

CA071030008	PIPER	LYC	INDICATOR	ERRATIC
10/25/2007	PA31	TIO540A2C	41506	OIL TEMP

(CAN) DURING RUN-UP, OIL TEMP INDICATOR DROPPED OFF SCALE. THEN WENT BACK TO NORMAL INDICATION. THE ERATIC OPERATION COULD BE INDUCED BY ENERGIZING DIFFERENT ELECTRICAL EQUIPMENT. HOURS IN USE, NONE AT THIS TIME.

CA071015001	PIPER	LYC	SEAT BELT	BROKEN
9/28/2007	PA31350	LTIO540J2BD	010816811	COCKPIT

(CAN) AFTER STARTUP THE CAPTAIN WENT TO ATTACH AND TENSION HIS LAPBELT. AT THAT POINT THE LAP BELT DISCONNECTED FROM THE SEAT. CLOSER INSPECTION SHOWED CORROSION IN THE AREA OF THE BOLT HOLE OF THE FEMALE SIDE. THE SEATS ARE PROVIDED WITH A COVER OVER THIS AREA FOR COSMETIC REASONS. IT MAKES THE AREA DIFFICULT TO INSPECT UNLESS THE BOLT IS REMOVED AND THE COVER ALSO REMOVED. DURING FOLLOWUP INSPECTIONS WITH OTHER SEATS IN THIS AC, MORE CORROSION WAS FOUND ON THE ATTACHMENT BRACKETS OF THE SEAT BELTS. IN ALL 3 SETS OF SEAT BELTS WERE REPLACED ON THE AIRCRAFT. A FLEETWIDE INSPECTION OF SEAT BELTS IN THIS AREA IS BEING CARRIED OUT. AS WELL ALL COSMETIC COVERS THAT MAY INTERFERE WITH A PROPER INSPECTION HAVE BEEN REMOVED PERMANENTLY. (TC NR 20071015001)

2008FA0000062	PIPER	LYC	PUMP	INOPERATIVE
1/2/2008	PA31350	TIO540*	2B664	FUEL SYSTEM

ON 1/2/2008 THE PILOT WAS DEPARTING WHEN HE REPORTED THAT HE LOST SUBSTANTIAL POWER TO THE LT ENGINE JUST AFTER TAKEOFF AND THE LT LOW PRESSURE FUEL BOOST PUMP LIGHT ON THE AC ANNUNCIATOR PANEL ILLUMINATED. PILOT LANDED AT AIRPORT AND CALLED AC TECH. AIRCRAFT TECH ON LOCATION COULD NOT FIND ANY PROBLEMS WITH THE ENGINE DURING RUN UP OTHER THAN THE ELECTRIC LOW PRESSURE FUEL BOOST PUMP NOT SUPPLYING RATED PRESSURE. THE ELECTRIC IN-LINE LOW PRESSURE BOOST PUMP IS INTENDED FOR FLIGHT ABOVE 15,000 FT MSL AND CAN BE DEFERRED IAW PART 91 MEL. AC WENT TO DEPART AIRPORT AND THE LT ENGINE LOST POWER AGAIN DURING THE TAKEOFF ROLL AT ABOUT 40 KNOTS OF AIRSPEED. TROUBLESHOOTING OF ENGINE FUEL PUMP, FUEL NOZZLES REVEALED NO PROBLEMS. THE IN-LINE LOW PRESSURE FUEL PUMP REMOVED AND DISCOVERED THAT THE BYPASS VALVE ASSY IN THE PUMP HAD DISLOGED FROM THE PUMP BODY AND ACTED AS A FUEL RESTRICTION GOING TO THE EMERGENCY ELECTRIC FUEL PUMP. (K)

CA070314001	PIPER	LYC	ACTUATOR	BROKEN
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3/14/2007	PA31350	TIO540J2BD	WTC21151	MLG
(CAN) ACTUATOR BROKEN, FOUND DURING REPAIRS TO AIRCRAFT. (TC NR 20070314001)				
CA070817001	PIPER	LYC	CONNECTOR	BURNED
7/18/2007	PA31350	TIO540J2BD	E321A	CONTROL PANEL
(CAN) SMOKE WAS REPORTED FROM THE OVERHEAD SWITCH PANEL WHEN TAXIING FOR TAKEOFF. THE CONNECTOR BEHIND THE PANEL WAS FOUND IN A BURNED CONDITION. THE CONNECTOR WAS REPLACED BY REMOVING THE BURNED WIRING AND SPLICING IN A NEW CONNECTOR. (TC NR 20070817001)				
CA071102008	PIPER	LYC	DOOR	DEPARTED
10/31/2007	PA31350	TIO540J2BD		
(CAN) UPPER DOOR ASSEMBLY DEPARTED THE AIRCRAFT WHILE IN FLIGHT, UPPER DOOR REPLACED AND DAMAGED STRUCTURE REPAIRED. THINK THE PROBLEM AROSE WITH THE FACTORY PIPER SLIDING LOCK. WE SUSPECT THAT IT WAS WORN THOUGH THERE WAS NO PRIOR INDICATION. (TC NR 20071102008)				
2007FA0001103	PIPER		BRACKET	CORRODED
12/20/2007	PA32R301		99271000	ACCONDENSOR DOOR
AIR CONDITIONING CONDENSOR DOOR P/N 99271-000 FAILED IN FLIGHT WHILE DEPLOYED. THE SMALL EXTRUDED ANGLE BRACKET ON THE RT SIDE OF DOOR WHERE THE BEARING ASSY P/N 99561-000 CONNECTS TO THE DOOR CORRODED WHERE THE TWO MEET. THIS CONDITION IS IMPOSSIBLE TO INSPECT UNLESS THE MECHANIC DROPS THE CONDENSOR DOOR DOWN. THE LT SIDE WAS IN PERFECT CONDITION. THE MAIN CAUSE OF THE CORROSION IS THE FACT THAT THAT THE ENGINE EXHAUST TRAVELS DOWN THE RT SIDE OF THE BOTTOM OF THE AIRCRAFT. THIS PORTION OF THESE LOW WING PIPERS ALWAYS SHOW MORE SURFACE CORROSION ON THE RT SIDE OF THE BELLY.				
2008FA0000048	PIPER	LYC	WIRE	FAILED
1/4/2008	PA32R301T	TIO540*	153615	DOWNLOCK SWITCH
MAIN GEAR DOWN LOCK SWITCH WIRES PULL TIGHT ON STRUT ON RETRACTION AND PULL WIRE STRANDS APART TO BREAKING POINT. SILICONE TYPE WIRE COATING TENDS TO HOLD WIRE ENDS TOGETHER FOR INTERMITTENT CONTACT. NEEDS BETTER WIRE AND ROUTING. (K)				
EA25200802753	PIPER	LYC	FITTING	CORRODED
12/18/2007	PA34200	IO360A1A	62522000	FUSELAGE
DURING WINDSHIELD REPLACEMENT, NOTED STEEL FITTINGS AND ATTACHING HARDWARE WERE SUBSTANTIALLY CORRODED. FUNCTION OF FITTINGS IS ATTACHMENT OF FUSELAGE OVERHEAD (A) PILLAR TO FUSELAGE STRUCTURE PROPER. OTHER THAN SOME RIVETS THROUGH THE SKINS, THESE FITTINGS ARE THE MAJOR STRUCTURAL ATTACHMENTS OF THE CABIN OVERHEAD TO THE FUSELAGE STRUCTURE. CAUSE OF CORROSION APPEARS TO BE FOAM INSULATION, HELD IN CONSTANT CONTACT WITH THE FITTINGS, BECOMING AND REMAINING WET THROUGH LEAKING WINDSHIELDS. COMPANY MECHANIC RECOMMENDS REMOVING PORTION OF INSULATION IN CONTACT WITH FITTINGS AND INSPECTING THIS AREA AT EACH 100 HOUR/ANNUAL INSPECTION. ACCESS IS GAINED THROUGH SIMPLE REMOVAL OF INTERIOR WINDSHIELD PILLAR TRIM PANELS. COMPANY MECHANIC FURTHER SUGGESTS AIRWORTHINESS DIRECTIVE DUE TO THE EXTENT OF THE CORROSION, PERCEIVED CRITICALITY OF THE PARTS AND AGE AND SIZE OF THE PA-34 FLEET. AIRCRAFT IS NOT PRESSURIZED. SUBMITTER IS WILLING TO BET THAT ALL OR MOST LOW WING ALL METAL AIRCRAFT USE A SIMILAR STRUCTURAL ARRANGEMENT IN THIS AREA. SUBMITTER HAS NO IDEA HOW MUCH STRESS THESE FITTINGS ARE UNDER NOR WHAT ROLE THEY PLAY IN THE OVERALL STRUCTURAL INTEGRITY OF THE FUSELAGE ASSEMBLY.				
EA25200803022	PIPER	LYC	FITTING	CORRODED
12/18/2007	PA34200	IO360A1A	68257000	
DURING WINDSHIELD REPLACEMENT, MECHANIC NOTED STEEL FITTINGS AND ATTACHING HARDWARE WERE SUBSTANTIALLY CORRODED. FUNCTION OF FITTINGS IS ATTACHMENT OF FUSELAGE OVERHEAD A PILLAR TO FUSELAGE STRUCTURE PROPER. OTHER THAN SOME RIVETS THROUGH THE SKINS, THESE FITTINGS ARE THE				

MAJOR STRUCTURAL ATTACHMENTS OF THE CABIN OVERHEAD TO THE FUSELAGE STRUCTURE. CAUSE OF CORROSION APPEARS TO BE FOAM INSULATION, HELD IN CONSTANT CONTACT WITH THE FITTINGS, BECOMING AND REMAINING WET THROUGH LEAKING WINDSHIELDS. MECHANIC RECOMMENDS REMOVING PORTION OF INSULATION IN CONTACT WITH FITTINGS AND INSPECTING THIS AREA AT EACH 100 HOUR/ANNUAL INSPECTION. ACCESS IS GAINED THROUGH SIMPLE REMOVAL OF INTERIOR WINDSHIELD PILLAR TRIM PANELS.

ZB0R20070009	PIPER	LYC	ROD END	SEPARATED
12/14/2007	PA34200	IO360C1E6	89307000	FUEL CONTROL

IN CRUISE, PILOT ATTEMPTED TO REDUCE POWER FOR MANEUVERS PRACTICE. LT ENGINE WAS UNRESPONSIVE. INSTRUCTOR IDENTIFIED LT ENGINE THROTTLE PROBLEM, ENGINE RPM WAS STABLE AT NEAR FULL POWER. RETURNED TO HOME BASE. PILOT FEATHERED AND SHUTDOWN LT ENGINE ON APPROACH. MAINTENANCE DISCOVERED LT ENGINE THROTTLE CONTROL ROD END AT FUEL CONTROL HAD SEPARATED.

2008FA0000004	PIPER	CONT	STRUT	CRACKED
1/2/2008	PA34220T	TSIO360RB	39489003	RT MAIN GEAR

DURING ANNUAL INSPECTION, IT WAS NOTED THAT A CRACK WAS FOUND ON THE RT MAIN GEAR LOWER FORK ASSEMBLY PN 39489-003. THE CRACK IS LOCATED IN THE MILLED SECTION OF THE CASTING AT THE 11 O'CLOCK AND 1 O'CLOCK POSITIONS. THIS MILLED SECTION IS USED TO BOLT THE TORQUE PLATE PN 451-786 TO THE MAIN LANDING GEAR ASSY. CONTACTED MFG THRU THERE DAS SYSTEM AND WAS TOLD THEY NEVER HEARD OF ANY PROBLEMS. REQUESTED FROM MFG TO BLEND CRACK AREA OUT AND REQUEST WAS DENIED. PROCEEDED TO CONTACT A DER FOR APPROVAL ON BLENDING CRACKED AREA OUT AND AGAIN REQUEST DENIED. FOUND ANOTHER LOWER STRUT IN A SALVAGE YARD WHICH WE PURCHASED ONLY TO FIND THIS STRUT ALSO WAS CRACKED IN THE EXACT SAME SPOT. THIS STRUT CAME OFF A MODEL PA34-220T SENICA IV AND HAD 1200 HRS TT ON THE PART. THESE STRUTS ARE THE SAME PN. ALSO I NOTED THAT THE CASTING VARY IN THICKNESS UPTO .020 DIFFERENCE ON THICKNESS TO EDGE OF MILLED AREA ON CASTING. WE HAVE PICTURES OF THE CRACKED AREAS WE CAN FORWARD TO YOU SHOWING MORE DETAIL AND LOCATIONS.

2008FA0000003	PIPER	CONT	STRUT	CRACKED
1/2/2008	PA34220T	TSIO360RB	39489003	RT MLG

DURING ANNUAL INSPECTION IT WAS NOTED THAT A CRACK WAS FOUND ON THE RT MAIN GEAR LOWER FORK ASSY PN 39489-003. THE CRACK IS LOCATED IN THE MILLED SECTION OF THE CASTING AT THE 11 O'CLOCK AND 1 O'CLOCK POSITIONS. THIS MILLED SECTION IS USED TO BOLT THE TORQUE PLATE PN 451-786 TO THE MLG ASSY. CONTACTED MFG THRU THERE DAS SYSTEM AND WAS TOLD THEY NEVER HEARD OF ANY PROBLEMS. REQUESTED FROM MFG TO BLEND CRACK AREA OUT AND REQUEST WAS DENIED. PROCEEDED TO CONTACT A DER FOR APPROVAL ON BLENDING CRACKED AREA OUT AND AGAIN REQUEST DENIED. FOUND ANOTHER LOWER STRUT IN A SALVAGE YARD WHICH WE PURCHASED ONLY TO FIND THIS STRUT ALSO WAS CRACKED IN THE EXACT SAME SPOT. ALSO I NOTED THAT THE CASTING VARY IN THICKNESS UPTO .020 DIFFERENCE ON THICKNESS TO EDGE OF MILLED AREA ON CASTING.

2007FA0001073	PIPER		TRUNNION	CRACKED
12/11/2007	PA44180		67042013	RT MLG

RT AFT MAIN TRUNNION CASTING, P/N 67042-013, FOUND TO BE CRACKED DURING INSPECTION. THIS IS A NEARLY IDENTICAL CRACK TO ONE FOUND AUGUST 2006 ON A SISTER SHIP.

LJER12102007	PIPER	ROTAX	CONTACTOR	DEBONDED
12/6/2007	PA44180	ROTAX*	106825515	MAGNETO

CONTACT POINT MATERIAL DEBONDED, POINTS WILL NOT CLOSE.

2007FA0001095	PIPER	GARRTT	DISPLAY	MISREPAIRED
12/18/2007	PA46500TP	TPE33111U	70000006003	COCKPIT

WE SENT IN BOTH AIRCRAFT PFD'S FOR REPAIR AND SB COMPLIANCE. BOTH UNITS WERE REPAIRED AND REINSTALLED. WE TRIED TO CALIBRATE THE ADHRS AND THE PILOT PFD CONTINUED TO GIVE AN ERROR. WE SPOKE WITH ANOTHER SHOP AND WERE TOLD THEY HAVE HAD THE SAME PROBLEM. IN FACT, WE WERE TOLD THEY NORMALLY HAVE PROBLEMS WITH REPAIRED UNITS (ABOUT 50 PERCENT OF THE TIME).

2008FA0000011	RAYTHN	WILINT	STRUT	LEAKING
1/4/2008	390	FJ442A	390810001	RT MLG

PILOT REPORTED LT AND RT MAIN LANDING GEAR STRUTS LEAKING HYDRAULIC FLUID. DISASSEMBLY LOWER LT MAIN LANDING GEAR STRUT, FOUND PAINT CHIPS CONTAMINATING SEALS. DISASSEMBLED RT LOWER MAIN LANDING GEAR STRUT, FOUND PAINT CHIPS CONTAMINATING SEALS AND METAL FILLINGS IN INNER BARREL OF STRUT.

2008FA0000010	RAYTHN	WILINT	STRUT	LEAKING
1/4/2008	390	FJ442A	390810001	LT MLG

PILOT REPORTED LT AND RT MAIN LANDING GEAR STRUTS LEAKING HYDRAULIC FLUID. DISASSEMBLY LOWER LT MAIN LANDING GEAR STRUT, FOUND PAINT CHIPS CONTAMINATING SEALS. DISASSEMBLED RT LOWER MAIN LANDING GEAR STRUT, FOUND PAINT CHIPS CONTAMINATING SEALS AND METAL FILLINGS IN INNER BARREL OF STRUT.

ODAA121907001	RAYTHN	GARRTT	ACCESS PANEL	OUT OF ADJUST
12/19/2007	HAWKER800XP	TFE731*		

PILOT REPORTED RUDDER PEDALS BINDING FOUND DURING PREFLIGHT, WITH RT PEDAL FORWARD AND LT PEDAL AFT. AFTER APPLYING PRESSURE TO PEDALS WITH FEET, PEDALS BECAME UNBOUND WITH POPPING NOISE HEARD. INSPECTED RUDDER SYSTEM. FOUND RUDDER BINDING AT PANEL SCREW FOR LOWER CONTROL COLUMN ACCESS, FORWARD, DUE TO BEND IN PANEL. REMOVED SCREWS AND ADJUSTED PANEL FOR BETTER CLEARANCE. REPLACED SCREWS WITH SHORTER VERSION OF SAME. RUDDER SYSTEM OPERATED NORMALLY. REFERENCE MM, CHAPTER 27.

CA070927004	RAYTHN	GARRTT	LINE	CHAFED
9/26/2007	HAWKER850XP	TFE7315BR	307481812	ENGINE

(CAN) DURING SCHEDULE INSPECTION FOUND 2 OIL LINES CHAFING. THE SAME PROBLEM WAS ON BOTH ENGINES. THE PROBLEM COMES FROM THE FACTORY SINCE THE AIRCRAFT IS NEW AND LOW TIME. THE AIRCRAFT HISTORY DOES NOT SHOW ANY MAINTENANCE ACTION BEING PERFORMED IN THAT AREA SINCE THE AIRCRAFT WAS DELIVERED NEW AND IS STILL UNDER WARRANTY. LINE PN 3074818-1 AND PN 3072083-2 (BOTH ENGINES ARE TFE731-5BR SERIES) (TC NR 20070927004)

2007FA0001081	ROBSIN	LYC	OIL COOLER	CRACKED
9/26/2007	R22ALPHA	O320B2C	20006A	

AT A 100 HR INSPECTION ON HELICOPTER, INSTALLED A NEW OIL COOLER REPLACING THE ORIGINAL OIL COOLER. (NOVEMBER 5, 2007, HOUR METER 1042) WHILE FLYING, NOTICED THE OIL TEMPERATURE RISING AND THE OIL PRESSURE DROPPING. MADE AN UNSCHEDULED LANDING AND DISCOVERED THE TAILBOOM COVER WITH ENGINE OIL. TRACED THE OIL BACK TO THE OIL COOLER, REMOVED OIL COOLER AND PRESSURE TESTED IT AND FOUND A .7500 INCH CRACK IN THE COOLER CORE. (TT 16.8 HOURS) (K)

CA070704006	ROBSIN	LYC	FRAME	CRACKED
6/27/2007	R22BETA	O320B2C	R2210152	RT DOOR

(CAN) DURING VISUAL INSPECTION TO COMPLY WITH AWD 2005-16-05 RT DOOR ASSY WAS FOUND CRACKED. FURTHER INSPECTION OF THE TECH-TOOL DOOR AND FRAME ASSY REVEALED ADDITIONAL CRACKS. DOOR FOUND TO BE UNSERVICEABLE AND REMOVED FROM A/C. (TC NR 20070704006)

CA071018002	ROBSIN	LYC	ELT	FAILED
11/13/2006	R22BETA	O360J2A	AK450	CABIN

(CAN) SENT 2 ELTS TO INLAND COMMUNICATIONS FOR SERVICING, BOTH ELTS HAD FAULTY G-SWITCHES AND COULD NOT BE REPAIRED. SENT CORE IN FOR NEW AK-450 S/N 485068 THAT WAS INSTALLED ON NOV 13/06, WENT OFF ON LANDING AND AGAIN IN FLIGHT. REMOVED ELT ON HOV 14/06. INSTALLED NEW AK-450-1 ELT S/N 485603 JAN 11/07, FAILED ON MAR 4/07 AND REMOVED. INSTALLED ANOTHER NEW AK-450-1 ELT S/N 484979 ON MAY 30/07 AND IS STILL SERVICE. (TC NR 20071018002)

CA070829002	ROBSIN	LYC	GOVERNOR	INTERMITTENT
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7/14/2007	R44	O540F1B5	D2781	ENGINE
(CAN) DURING CRUISE, THE GOVERNOR CONTROL SETTING BECAME HIGHER. MAINTENANCE INVESTIGATED AND NO ISSUES COULD BE FOUND. GOVERNOR WAS REPLACED AND NO ISSUES WERE NOTED. (TC NR 20070829002)				
CA071109011	ROBSIN	LYC	CYLINDER	INOPERATIVE
11/8/2007	R44	O540F1B5	LW13870	ENGINE
(CAN) DURING A 50 HOUR INSPECTION, BOTTOM SPARK PLUG ON CYLINDER NR 5 REVEALED UNUSUAL AMOUNT OF OIL. A COMPRESSION TEST WAS CARRIED OUT AND CYLINDER NR 5 WAS NOTED TO HAVE 18 OVER 80 PSI COMPRESSION. TSO WILL HAVE TO BE VERIFIED. (TC NR 20071109011)				
CA071109008	ROBSIN	LYC	PUMP	WEAK
11/3/2007	R44RAVENII	IO540AE1A5	LW15473	FUEL SYSTEM
(CAN) ENGINE DRIVEN PUMP FOUND TO BE WEAK WILL NOT SUSTAIN ENGINE IDLE ON IT'S OWN. (TC NR 20071109008)				
CA071109009	ROBSIN	LYC	PUMP	WEAK
11/3/2007	R44RAVENII	IO540AE1A5	D7431	FUEL SYSTEM
(CAN) ELECTRIC AUX FUEL PUMP WEAK, MOTOR SOUNDED LIKE IT WAS OVERWORKING. (TC NR 20071109009)				
CA071109010	ROBSIN	LYC	FUEL CONTROL	INOPERATIVE
11/3/2007	R44RAVENII	IO540AE1A5	25766304	ENGINE
(CAN) DURING MAINTENANCE GROUND RUN, THE ENGINE WAS HESITATING AT 70 PERCENT AND THEN DROOPS TO 65 PERCENT OR LESS. FUEL CONTROL NOT RESPONDING TO THROTTLE INPUT CORRECTLY. (TC NR 20071109010)				
CA070829001	ROBSIN	LYC	STARTER GEN	INTERMITTENT
8/19/2007	R44RAVENII	IO540AE1A5	BC3151004	ENGINE
(CAN) DURING AN ATTEMPTED START THE STARTER FUNCTION WAS INTERMITTENT. STARTER WAS REPLACED AND NO FURTHER ISSUES WERE NOTED. (TC NR 20070829001)				
CA071022007	ROBSIN	LYC	CLUTCH	SLIPPED
9/9/2007	R44RAVENII	IO540AE1A5	C0183	MAIN ROTOR
(CAN) CLUTCH REMOVED DUE TO PROBLEMS AT HIGH POWER SETTINGS. POSSIBLE CLUTCH SLIPPAGE. (TC NR 20071022007)				
CA071022008	ROBSIN	LYC	ARM	BINDING
10/9/2007	R44RAVENII	IO540AE1A5	25766304	FUEL CONTROL
(CAN) INTERMITTENT ROTOR DROOP. FOUND BINDING ARM ON FUEL CONTROL CAUSING ERRATIC GOVERNOR OPERATION. (TC NR 20071022008)				
CA071022009	ROBSIN	LYC	LINE	LEAKING
9/12/2007	R44RAVENII	IO540AE1A5		HYD PUMP
(CAN) PUMP REPLACED DURING TROUBLESHOOTING SMALL LEAK AT SPLIT LINE ON PUMP. (TC NR 20071022009)				
CA071022010	ROBSIN	LYC	RESERVOIR	VENTING
9/12/2007	R44RAVENII	IO540AE1A5	D2112	HYD SYSTEM
(CAN) HYDRAULIC RESERVOIR VENTING. (TC NR 20071022010)				
CA071030009	ROBSIN	LYC	PUMP	LEAKING
10/29/2007	R44RAVENII	IO540AE1A5	LW15473	FUEL SYS
(CAN) DURING AN INSPECTION, THE ENGINEER NOTED THAT THE ENGINE DRIVEN FUEL PUMP HAD EVIDENCE OF OIL LEAKAGE AROUND THE SEAL AREA (BODY). PUMP WAS REMOVED, REPLACED AND NO FURTHER ISSUES				

WERE NOTED. THERE HAS BEEN MANY OF THE THESE PUMPS LATELY WITH VARIOUS HRS OF FAILURE. (TC NR 20071030009)

CA071030011	ROBSIN	LYC	LYC	DIAPHRAGM	LEAKING
10/8/2007	R44RAVENII	IO540AE1A5			FUEL PUMP

(CAN) DURING INSPECTION, ENGINEER DISCOVERED OIL LEAKAGE FROM VENT. SUSPECT DAMAGED DIAPHRAGM. (TC NR 20071030011)

CA071004005	ROBSIN	LYC		SERVO	LEAKING
9/18/2007	R44RAVENII	IO540AE1A5		D2121	HYDRAULIC SYS

(CAN) DURING 50/100 HOUR INSPECTION HYDRAULIC SERVO FOUND LEAKING FROM PILOT VALVE.

CA071019001	ROBSIN	LYC		SIGHT GLASS	LOOSE
10/17/2007	R44RAVENII	IO540AE1A5		B5631	TAIL ROTOR

(CAN) DURING INSPECTION, IT WAS NOTED THAT THERE WAS FLUID LEAKING AROUND THE TAIL ROTOR GEARBOX SIGHT GLASS. THE PART WAS REMOVED AND REPLACED WITH A NEW PART. IT WAS FURTHER EXAMINED AND NOTED THE GLASS COULD ROTATE IN THE HOUSING, NO LONGER SECURE ALLOWING FLUID TO BYPASS AND LEAKING. THERE IS NO ISSUE OF THE GLASS DEPARTING THE AIRCRAFT AND POSSIBLY STRIKING THE T/R BLADES. (TC NR 20071019001)

CA071024003	ROBSIN	LYC	LYC	DIAPHRAGM	TORN
10/23/2007	R44RAVENII	IO540AE1A5			FUEL PUMP

(CAN) FUEL PUMP CHANGED DUE TO EXTERNAL OIL LEAKAGE. THIS USER HAS HAD 14 OF THESE FUEL PUMPS FAIL OVER THE LAST 8 MONTHS. THIS WAS THE FIRST PUMP DIASSEMBLED. IT WAS QUITE EVIDENT THAT THE UPPER DIAPHRAM HAD RUPTURED. THE SIDE OF UPPER DIAPHRAM MATERIAL EXPOSED TO THE ENGINE OIL SHOWED A DEFINITE INDICATION OF DETERIORATION AND THE RUBBER MATERIAL BREAKING DOWN. WHEREAS THE MATERIAL ON THE FUEL SIDE SHOWS NO DETERIORATION, EXCEPT WHERE THE DIAPHRAM HAD TORN. THIS LEADS US TO WONDER IF THE FUEL COMPATIBLE DIAPHRAM MATERIAL IS NOT COMPATIBLE WITH THE W80 ENGINE OIL USED. (TC NR 20071024003)

CA070914019	SKRSKY	GE		BLADE	LEAKING
9/11/2007	S61N	CT581401		6117020201	MAIN ROTOR

(CAN) BIM WARNING LIGHT ILLUMINATED IN FLIGHT. SPAR PRESSURE WAS FOUND TO BE .25 LBS BELOW MINIMUM CHECKING PRESSURE. SPAR PRESSURE WAS SERVICED APPROXIMATELY 80 DAYS PREVIOUS. (TC NR 20070914019)

CA071016020	SKRSKY	ALLSN		HOSE	COLLAPSED
10/14/2007	S76A	250C30S		7630700701041	FUEL DIST

(CAN) FUEL HOSE INTERNAL COLLAPSE (TC NR 20071016020)

CA071024007	SKRSKY	GE		BEACON	FAILED
10/22/2007	S92A	CT78A		50316	

(CAN) DURING FERRY FLIGHT (CRASH POSITION INDICATOR) DEPARTED AIRCRAFT FOR NO APPARENT REASON. UNIT DID NOT TRANSMIT. THE DEPLOYABLE BEACON WAS INSTALLED IAW MFG DWG NR 92604-40331. (TC NR 20071024007)

CA070316001	SNIAS	TMECA		SWITCH	INTERMITTENT
3/15/2007	AS350B2	ARRIEL1D1		MS2771923	LOW ROTOR

(CAN) LOW ROTOR HORN NOT WORKING BUT LIGHT ON 4ALPHA PANEL WOULD COME ON. SYSTEM TROUBLESHOT AND FOUND SWITCH TO BE INTERMITENT. A/C GROUNDED TILL NEW SWITCH HAD BEEN REPLACED. THE POTENTIAL FOR GIVING A FALSE READ TO THE PILOT DURING FLIGHT MAY HAVE OCCURED. AIRCRAFT WAS GROUNDED. SWITCH HAS BEEN REPACED AND A/C RETURN TO SERVICE. (TC NR 20070316001)

CA071115009	SNIAS	TMECA		TAIL ROTOR	UNBALANCED
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11/15/2007	AS350B2	ARRIEL1D1	355A12004008	
(CAN) EXCESSIVE AMOUNT OF TIP BALANCE WEIGHT TO BALANCE TAIL ROTOR. (TC NR 20071115009)				
CA070917009	SNIAS	TMECA	SERVO CONTROL	LEAKING
9/1/2007	AS350B3	ARRIEL2B	SC5083	MAIN ROTOR
(CAN) M/R SERVO REMOVED FROM RT POSITION DUE TO LEAKAGE. (TC NR 20070917009)				
CA071022004	SNIAS	TMECA	SWITCH	MALFUNCTIONED
10/18/2007	AS350B3	ARRIEL2B		HMU
(CAN) DURING GROUND RUN THE FORCED IDLE FUNCTION OF THE TWIST GRIP WAS BEING TESTED WHEN IT WAS OBSERVED TO NOT ACCELERATE BACK TO FLIGHT IDLE WHEN RETURNED TO THE (VOL) POSITION. THIS FUNCTION IS USED TO SIMULATE ENGINE FAILURE DURING PRACTICE AUTOROTATION. SUCCESSIVE ATTEMPTS OF ROLLING THE THROTTLE FROM (VOL) TO (MIN) TO (VOL) PRODUCED ERRATIC RESULTS, THE ENGINE EITHER STAGNATED AT IDLE NG OR WAS SLOW TO RESPOND BACK TO FLIGHT IDLE, (NO ERROR CODES WERE RECORDED ON THE VEMD). THE FORCED IDLE MICRO SWITCH WAS TESTED IAW MFG ALERT SB NR 05.00.49, NO ANOMALIES WERE FOUND. THE SWITCH IN QUESTION PN DHS772-400.30 WAS REPLACED AS A TROUBLESHOOTING MEASURE. MFG MANDATORY SB A292 73 2814, INSPECTION AND LUBRICATION OF THE HMU ACCELERATION CONTROLLER AXEL WAS CARRIED OUT. A SECOND SET OF GROUND RUNS PRODUCED SIMILAR RESULTS, MFG WAS CONTACTED AND A REPLACEMENT HMU WAS INSTALLED RECTIFYING THE PROBLEM. (TC NR 20071022004)				
CA071116001	SWRNGN	GARRTT	SENSOR	OVERHEATED
11/14/2007	SA226TC	TPE33110UA		WINDSHIELD TEMP
(CAN) THE FOLLOWING WAS REPORTED BY THE FLIGHT CREW FOLLOWING THE CO-PILOTS HEATED WINDSHIELD FAILURE: (WHILE ON THE ILS FO MENTIONED A BURNING SMELL, AND NOTICED IT AS WELL.) TOOK MY FLASHLIGHT OUT BUT COULD NOT NOTICE ANY DETECTABLE SMOKE IN THE CABIN OR COCKPIT. CONTINUED THE APPROACH WITH BLEED HEAT OFF AND FRESH AIR FAN RUNNING. BY THE TIME WE LANDED, THE SMELL WAS STRONGER BUT COULD NOT SEE ANY SMOKE. ON THE GROUND WE SHUTDOWN THE ELECTRONICS AS SOON AS POSSIBLE AND THEN SHUT DOWN THE AIRCRAFT. PASSENGERS NOTICED THE SMELL IN THE BACK AS WELL. IT WAS OBVIOUS THAT IT WAS AN ELECTRICAL SMELL, AND THERE WAS SMOKE EVIDENT WHEN WE TOOK OUT OUR FLASHLIGHTS AGAIN ON THE GROUND. UPON INSPECTION BY MAINTENANCE IT WAS DETERMINED THAT THE WINDSHIELD HEAT SENSOR HAD FAILED AND TERMINAL ENDS AND WIRES WERE FOUND BURNED/DAMAGED FROM OVERHEATING. THE WINDSHIELD HEAT WAS NO LONGER FUNCTIONAL. THE WINDOW IS UNDERGOING REPLACEMENT BY MAINTENANCE. (TC NR 20071116001)				
CA071108001	SWRNGN		ELECTRICAL SYS	FAILED
11/5/2007	SA227AC			
(CAN) A/C ENROUTE AT 6000 FT, EXPERIENCED TURBULENCE AND ST.ELMO`S FIRE. AFTER SOME TIME, LIGHTNING APPEARED AS A BLUE LIGHT (AS REPORTED BY PASSENGER. IMMEDIATELY AFTER, ALL ELECTRICAL POWER (BOTH BATTERIES AND GENERATORS) WAS LOST. AIRCREW RESET THE BATTERIES AFTER ESTABLISHING A SAFE FLIGHT ATTITUDE WITH THEIR PERSONAL FLASH LIGHTS. POWER WAS RESTORED AS SOON AS BATTERY RESET WAS ATTEMPTED. FLIGHT CONTINUED. MAINTENANCE WAS CONTACTED. AS THERE WAS NO OBVIOUS DAMAGE, ENTRIES WERE MADE IN THE JOURNEY LOG AND THE AIRCRAFT WAS RETURNED TO SERVICE. (TC NR 20071108001)				
CA071018003	SWRNGN	GARRTT	ACCUMULATOR	INOPERATIVE
10/17/2007	SA227AC	TPE331*	223003	HYD SYSTEM
(CAN) ACCUMULATOR WAS REMOVED FOR TROUBLESHOOTING HYDRAULIC LEAKS IN SYSTEM. IT WAS SUSPECTED THAT THE ACCUMULATOR WAS NOT DOING ITS JOB OF ABSORBING THE HYDRAULIC SHOCKS. UPON REMOVAL IT WAS NOTED THAT THE INTERNAL PISTON WAS INSTALLED BACKWARDS. THE -3 ACCUMULATOR DOES NOT SHOW UP IN THE PRESENT IPC. THE ACCUMULATOR WAS INSTALLED IN 2002 AND CAME INTO INVENTORY IN 1999 AND WAS CERTIFIED IN 1997. (TC NR 20071018003)				
CA071106010	SWRNGN	GARRTT	FUEL NOZZLE	CRACKED
10/30/2007	SA227AC	TPE3311	31032359	ENGINE

(CAN) FUEL NOTICED IN ENGINE COWL DURING INSPECTION. NOZZLE IN NR 3 POSITION FOUND CRACKED WHERE PRIMARY/SECONDARY LINES HOOK UP TO NOZZLE. CRACK WAS 95 PERCENT THROUGH CIRCUMFERENCE. (TC NR 20071106010)

CA071106009	SWRNGN	GARRTT	ARM	CRACKED
10/26/2007	SA227AC	TPE33111U	2752530001	NLG CENTER

(CAN) ROLLER BEARING OUTER CASE FOUND CRACKED COMPLETELY THROUGH. REPLACED AND RETURNED TO SERVICE (TC NR 20071106009)

2007FA0001104	UNIVAR		SKIN	CORRODED
12/19/2007	415C			FUSELAGE

IAW AD2002-26-02,- CORROSION FROM WATER, DIRT AND ACID FROM BATTERY ATE THROUGH BOTTOM SKINS 415-13058-1,415-13047L AND R, RIBS 415-13016L AND R AND BOTTOMS OF SERVICE ASSEMBLY NR 5. AIRCRAFT HAD SAT SINCE 1977.

2008FA0000020	UROCOP	TMECA	ENGINE	MAKING METAL
10/15/2007	EC120B	ARRIU2F		

ON GROUND RUN, ENGINE CHIP DETECTOR ILLUMINATED. BOTH DETECTORS HAD METAL SLIVERS. SAMPLES TAKEN, AND MFG CONDEMNED ENGINE. ENGINE REMOVED FROM SERVICE, AND RETURNED TO MFG FOR REPAIR.

2008FA0000029	UROCOP	TMECA	WARNING LIGHT	FALSE ACTIVATION
12/30/2007	EC120B	ARRIU2F		CHIP DETECTOR

ENGINE CHIP LIGHT IN CRUISE FLIGHT. INSPECTED BOTH MAGNETIC PLUGS FOR FOREIGN MATERIAL, NONE WAS NOTED. INSPECTED AND TESTED MAGNETIC PLUG HEADS IAW 79-38-00-750-801, INSPECTION AND OPS CHECKS WERE GOOD. REMOVED AND REPLACED ENGINE OIL AND RETURN FILTER IAW 79-24-05-901-801-A01. OPS AND LEAK CHECKS GOOD. (K)

CA071130012	UROCOP	TMECA	BRAKE	DAMAGED
11/30/2007	EC120B	ARRIU2F	C762C1004103	ROTOR

(CAN) MECHANICAL DAMAGE TO ROTOR BRAKE GRID ASSEMBLY, DUE TO IMPROPER OPERATION. TRIGGER WAS NOT DEPRESSED PRIOR TO ENGAGING ROTOR BRAKE HANDLE CAUSING MECHANICAL DAMAGE TO GRID ASSEMBLY. NEW GRID ASSEMBLY INSTALLED (TC NR 20071130012)

2008FA0000024	UROCOP	TMECA	ENGINE	MAKING METAL
10/19/2007	EC120B	ARRIUS2F		

ENGINE CHIP DETECTOR ILLUMINATED. BOTH CHIP DETECTORS HAD METAL CONTAMINATION. SAMPLES TAKEN, AND MFG CONDEMNED ENGINE. ENGINE REMOVED FROM SERVICE, AND RETURNED TO MFG FOR REPAIR.

2008FA0000022	UROCOP	TMECA	OIL JET	LEAKING
12/21/2007	EC120B	ARRIUS2F		ENGINE

ENGINE EXPERIENCING INTERNAL OIL LEAKAGE. MFG CONDEMNED ENGINE. ENGINE REMOVED SERVICE, AND RETURNED TO MFG FOR REPAIR.

2008FA0000058	UROCOP	TMECA	ENGINE	MAKING METAL
1/23/2008	EC120B	ARRIUS2F	0319008000	

ON 10, OCT. 2007 THE PILOT REPORTED THE ENGINE CHIP WARNING LAMP ILLUMINATED. THE AIRCRAFT WAS LANDED WITHOUT INCIDENT. THIS WAS THE FOURTH OCCURRENCE IN 10.9 HOURS. THE ENGINE WAS REMOVED AND RETURNED TO MFG FOR EVALUATION AND REPAIR.

CA071109003	ZLIN	LYC	BAFFLE	CRACKED
11/9/2007	Z242L	AEIO360A1B6	L24266710000	EXHAUST SILENCER

(CAN) DURING A 100 HOUR INSPECTION, ONE INTERNAL BAFFLE OF THE PRIMARY EXHAUST SILENCER WAS

FOUND TO BE CRACKED 25 PERCENT OF THE ATTACHING WELD. SILENCER WAS SUBSEQUENTLY REPLACED. (TC NR 20071109003)

END OF REPORTS