



ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



ALERT NUMBER 404



MARCH 2012

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

AVIATION MAINTENANCE ALERTS

The Aviation Maintenance Alerts provides the aviation community with an economical means to exchange service experiences and to assist the FAA in improving aeronautical product durability, reliability, and safety. We prepare this publication from information operators and maintenance personnel who maintain civil aeronautical products pertaining to significant events or items of interest. At the time we prepared this document, we have not fully evaluated the material. As we identify additional facts such as cause and corrective action, we may publish additional data in subsequent issues of the Alerts. This procedure gives Alerts' readers prompt notice of conditions reported to the FAA Service Difficulty Reporting System (SDRS). We welcome your participation, comments, and suggestions for improvement. Send to: FAA; ATTN: Aviation Data Systems Branch (AFS-620); P.O. Box 25082; Oklahoma City, OK 73125-5029.

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

AIRPLANES

Cessna: 208B; Cracked Bulkhead; ATA 5312

This submitter states, "The aft canted bulkhead (P/N 2612060-5) at station 474.40 has two cracks, each approximately 1.5 inches in length. During removal of this part, other damage was found. Both vertical stabilizer webs (P/N's 2631021-15 and 2631022-2) were replaced because of significant fretting, (so too) the aft bulkhead assembly (P/N 2612059-1)."





Part Total Time: 18,405.0 hours

Cessna: 750; Bent Speed Brake Push Pushrod; ATA 2701

"When deploying speed brakes, the handle must be continuously held in position or the air load will stow the panels," says a corporate defect report. "A visual inspection revealed the speed brake pushrod to be installed upside down and bent—causing it to rub against the thrust reverser solenoid and preventing full travel of the speed brake handle. It was confirmed with Cessna Engineering that the pushrod should be installed with adjustable end up—and the rod should be straight, not bent. The pushrod was replaced with new (P/N 6760270-36). Operational checks were satisfactory."



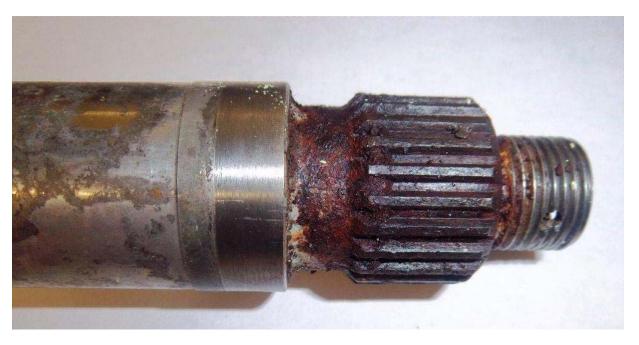


Part Total Time: (unknown)

de Havilland: DHC8103; Corroded Aileron Control Shaft; ATA 2710

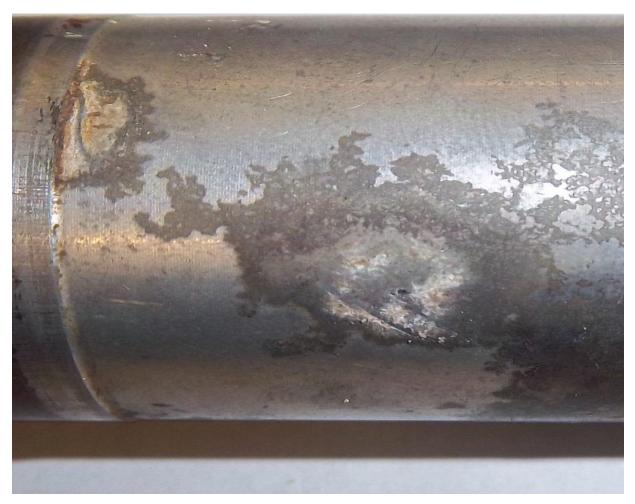
An air carrier operation writes, "Roll control was very stiff. (*We checked*) the tension of the aileron fuselage cables and lubricated the aileron quadrant bearings externally for (*initial*) troubleshooting." "We replaced the L/H and R/H bearings in the aileron quadrant IAW Mod Kit 8MK0930-001 instructions and the AMM 27-12-31. The control cable tensions (and their safeties) were not disturbed. The L/H aileron control shaft (P/N 82740083-101) was replaced due to corrosion."









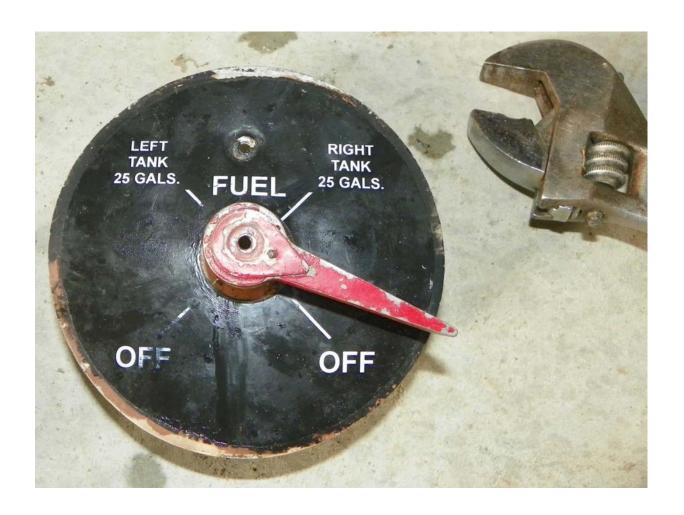


Part Total Time: 50,244.0 hours

Piper: PA28-180; Worn Fuel-select Valve; ATA 2823

A general aviation mechanic writes, "When the fuel tank selector valve (*P/N 756645*) was rotated it was stiff to move, and the detents could not be felt at each position. A teardown showed the valve was very dirty inside, and the detent ring was worn. A review of Airworthiness Directives (AD's) and Service Bulletins (SB's) revealed two bulletins that directly involve problems with this valve. This defect (*worn and dirty*) led to improper fuel selection (*position*), greatly reducing fuel flow and causing stoppage of the engine.

- "1. SB 0355: Fuel Selector Valve Lubrication. I was unable to locate a sign-off in the maintenance records of *(compliance)* with this bulletin.
- "2. SB 0840: Fuel Selector Valve Cover Replacement. I was unable to locate a sign-off in the maintenance records of *(compliance)* with this bulletin. This bulletin deals directly with preventing the pilot from inadvertently moving the valve to the 'off' position. Piper considers this SB to be mandatory. No AD was found."







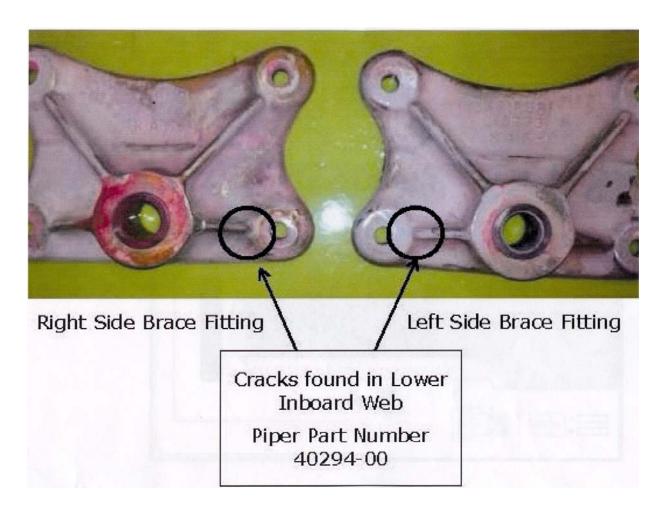
(Note: the last photo was stretched horizontally to fit the page—and my sense of "symmetry"—Ed.)

Part Total Time: 6,961.0 hours

Piper: PA31-350; Cracked Main Gear Fittings; ATA 3211

(A technician for an air carrier operation provides the following report. His reference can be found at: http://www.niar.twsu.edu/researchlabs/aa overview.asp .)

"(*Topic:*) Cracks in the Aft Main Gear Side Brace Fitting Assembly (P/N 40294-00). The Aging Aircraft Lab at the National Institute for Aviation Research (NIAR) in Wichita, Kansas recently produced a report titled, 'The Aging Airplane Study: Piper Navajo Chieftain.' Based on their findings, we initiated a dye penetrant inspection program on the forward and aft main gear Side Brace fitting assemblies on our Piper Chieftain Navajo fleet. The inspection of our aircraft revealed several of the aft fitting assemblies on both the left and right landing gear have cracks located in the lower inboard web of the Side Brace (Piper P/N 40294-00). As a result of finding these cracks, we have added a 1,000 hour Special Inspection to our PA31-350 AAIP (*Aging Airplane Inspection Program*) to monitor and replace any assemblies exhibiting the cracking found in the fitting assemblies. It is interesting to note these cracks have only been found in the aft assemblies on our aircraft."



 $(Thanks\ for\ sharing\ this\ "heads-up"-and\ appreciation\ for\ NIAR\ at\ Wichita\ State-Ed.)$

Part Total Time: (unknown)

Piper: PA34-200T; Frozen Aileron/gap Seals; ATA 2710

A general aviation pilot says, "I recently had the 'Knots 2U' aileron gap seals (Supplemental Type Certificate SA729GL) installed on my PA34. In February I departed (my airport) and climbed through moderate to heavy precipitation for 10 to 15 minutes, leveling off at 9,000 feet. This altitude was below freezing. I set my autopilot for straight and level flight, (but) after ten minutes I noticed the airplane was veering off heading and beginning to enter a slight bank. I shut off the autopilot and leveled the airplane, noticing the aileron control seemed very stiff. I then pulled the circuit breaker for the autopilot and the electric trim to ensure they were disengaged. After four to five more minutes in level flight the ailerons went from being very stiff to completely frozen. I was forced to control the airplane with only rudder and elevator inputs. Later in the flight I descended to above freezing temperatures and the aileron control slowly returned. Subsequent inspection on the ground revealed no aileron control abnormalities. I believe the precipitation encountered during the climb froze the ailerons to the gap seals when the airplane entered below freezing temperatures. I called the STC holder to discuss this issue.... "This safety hazard could easily lead to a complete loss of aircraft control (and fatalities) if not addressed (in) the STC or by an AD (Airworthiness Directive)."

Part Total Time: 50.0 hours

POWERPLANTS

AEC Piston: AEC646263; Blown Piston; ATA 8530

An engine mechanic states, "(*After*) approximately 300 hours of (*operation*) the number five cylinder on this Continental O-470R engine experienced piston failure—appearing at first impression to be caused by detonation. However, (*I*) believe this piston (*P/N AEC646263*) to have failed due to a flaw in its manufacture—or (*it may have*) experienced damage (*such as a fall to the floor*) prior to installation in the engine. It is my belief this failure occurred over a period of several hours by combustion gasses slowly eroding the edge of the piston...."





(Very nice photos of a very ugly piston. Thanks for your submission—Ed.)

Part Total Time: 300.0 hours (approximate)

Continental: GTSIO520L; Broken Camshaft Gear; ATA 8520

"(*I*) was complying with AD 07-05-15 and performing an Annual Inspection," states this submitter, "when I found one broken tooth on the camshaft gear. No other indications were found of related defects or damage, internally or externally, after the engine was disassembled. And no metal (or the gear tooth) was found in the oil filter or internal to the engine. (*Note:*) The camshaft gear P/N 656914 supersedes P/N 537432."







(*Nice camera—even better eyeballs; thank-you for the effort—Ed.*)

Part Total Time: 1,828.0 hours

ACCESSORIES

Continental Magneto: S6RSC-25P; Failed Distributor Gear; ATA 7414

(This report—and the following report—comes to us from Hungary by way of the European Aviation Safety Agency. Both reports reference the same Cirrus SR22 airplane and Continental IO550N engine, but different magnetos.)

A mechanic writes, "The crew reported severe engine vibration and raised EGT (*exhaust gas temperature*) at the same time in cylinder number three. A quick inspection on the ground revealed the R/H magneto to be inoperative. The operator decided to replace the magneto (P/N 10-500556-101) with a brand new one. After replacement was accomplished, further investigations followed: cylinder differential compression check; spark plug check. During this additional (*inspection*) we also found the ceramic on the upper spark plug of number three cylinder to be broken. It was replaced, and a test flight conducted. We climbed to 18,000 feet—everything reported normal.

"During disassembly of the magneto, the distributor gear (was found to have failed). This (defect) might have caused an engine in-flight shut down that could lead to a loss of control. This magneto was replaced...."





(Thank-you for this report and its photos. Readers should note the next report, especially the magneto service times—Ed.)

Part Total Time: 673.0 hours

Continental Magneto: S6RSC-25P; Failed Distributor Gear; ATA 7414

(Please note the preamble in the previous report. This report is "scene two"—less than two hours later....)

Again our mechanic says, "The crew reported severe engine vibration during takeoff. Quick inspection on the ground revealed the L/H magneto was inoperative. (As before...) the operator decided to replace the magneto with a brand new one. Disassembly of the magneto (P/N 10-500556-101) found the distributor gear to have failed."

"We (note) the magneto overhaul manual does not include mandatory replacement of the distributor gear. We would highly recommend this (suggestion) to the manufacturer...."





Part Total Time: 674.0 hours

AIR NOTES

INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE

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

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

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

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

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

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

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

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

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

Oklahoma City, OK 73125 Telephone: (405) 954-5313

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

IF YOU WANT TO CONTACT US

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

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

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

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

AVIATION SERVICE DIFFICULTY REPORTS

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

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

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

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

Federal Aviation Administration

Service Difficulty Report Data

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

Control Number	Aircraft Make	Engine Make	Component Make	Part Name	Part Condition
Difficulty Date	Aircraft Model	Engine Model	Component Model	Part Number	Part Location
2011FA0000747				TIRE	MISMANUFACTURED
11/17/2011					MLG

MIXED RUBBER COMPOUND WITH POOR SULPHUR DISPERSION WAS DETECTED BY MFG DURING PRODUCTION.

<u>2011FA0000753</u> INDICATOR FAILED 11/9/2011 5473032101 LOX

LOX INDICATOR FAILED INSPECTION IAW APPROVED ICA. THESE INDICATORS ARE NOT INSTALLED ON AN ACFT. PROBABLE CAUSE IS EXCEEDED ITS LIFE LIMIT BEFORE TESTING. REPAIR STATION IS IN CONTACT WITH THE MFG TO DETERMINE ROOT CAUSE.

<u>2011FA0000754</u> WIRE DAMAGED 11/2/2011 CONTACTOR

DURING DISASSEMBLY OF THE GENERATOR, ON THE START CONTACTOR REPAIR EVALUATION, FOUND THE 2 RED WIRES CONNECTING THE FRONT AUXILLIARY SWITCH TO TERMINAL POSTS 13 AND 14 HAD BLACK SHRINK TUBING INSTALLED. WHEN THE SHRINK TUBING WAS REMOVED FOR INSPECTION, THE CONDITION OF THE WIRES WERE FOUND TO BE UNACCEPTABLE. THE INSULATION WAS MELTED AND THE WIRES WERE HARD TEMPERED FROM EXCESSIVE HEAT AND CURRENT.

2011FA0000756	O-RING	WRONG PART
11/21/2011	M202331	FIRE EXTING

THE PART IS A FAA-PMA APPROVED PART USED ON WATER PORTABLE SOLUTION FIRE EXTINGUISHER, PN 892480, CMM 26-20-20. O-RING PN M202331 IS USED TO CREATE A SEAL BETWEEN THE CO2 CARTRIDGE AND IT'S PIERCING ASSY, THE O-RING IS SEATED IN AN INTERNAL GROOVE ON THE PIERCER ASSY. THE O-RING IS NOT THE CORRECT SIZE, IN BEING IT IS TOO LARGE, THE PART CREATES A SEAL. WHEN YOU TURN THE ACTUATION HANDLE, WHICH IN TURN BY MEANS OF A SPRING PROVIDES PRESSURE AGAINST THE C02 CARTRIDGE AS THE HANDLE IS TURNED TOWARDS THE CHARGING POSITION AND IS PIERCED BY A SMALL HOLLOW PIN, THIS ALLOWS THE CO2 TO CHARGE THE EXTINGUISHER READY FOR USE. THE EXTINGUISHER IS FIRED BY DEPRESSING THE OPERATING TRIGGER. THE O-RING HELPS TO CREATE A SEAL TO ALLOW THE ENTIRE CONTENTS OF THE CO2 CARTRIDGE TO EMPTY INTO THE EXTINGUISHER CYLINDER.

<u>Z2KR2011FA0000761</u> COFFEEMAKER SHORTED 11/28/2011 400179402 ZONE 900

REPAIR STATION HAS RECEIVED A LIMITED NUMBER OF COMPLAINTS OF 400-1794-02 BREWERS CAUSING ELECTRICAL SHOCK TO F/A. IN-HOUSE GROUND TESTING OF THE POWERED BREWER SITTING ON A METAL SURFACE, WITH A STEADY STREAM OF WATER DIRECTLY ONTO THE POWER SWITCH INDICATED THAT THE WET COFFEE BREWER SWITCH CAN CAUSE ELECTRICAL SHOCK TO THE OPERATOR. IF THE BREWER IS OPERATED IAW STANDARD OPERATING PROCEDURES, THERE ARE NO HAZARDS.

2012FA0000090	CONNECTOR	MISMARKED
1/27/2012	R015S10GEX	

RECEIVED A CONNECTOR IN A KIT FOR A QUICK DISCONNECT TO BE USED IN A SATELLITE PHONE SYS IN THE CABIN. ALL CONNECTIONS WERE MADE ACCORDING TO THE PRINT. SYS CHECK OUT WAS STARTED AND FOUND

THAT 1 OF THE NEWLY INSTALLED CABIN PHONES DID NOT WORK. DURING TROUBLESHOOTING, FOUND THE PIN HOLE NUMBERING SYS DIFFERENT WHEN COMPARING THE 2 DIFFERENT SIDES. BECAUSE OF THIS MISNUMBERING, IT CAUSED THE PHONE TO BECOME INTERNALLY DAMAGED AND UNUSUABLE. TO PREVENT THIS INCIDENT FROM HAPPENING AGAIN, ALL" IN STOCK" SPAR CONNECTORS WERE VERIFIED FOR PROPER NUMBERING AND 4 ADDITIONAL CONNECTORS WERE FOUND PURCHASED FROM A DIFFERENT VENDOR. THESE 4 CONNECTORS WERE PURGED FROM STOCK.

LIFE VEST FAILED
PO723E105P
LIFE VEST NO TEST
PO723103W
CAPACITOR FAILED
AB51676 MAGNETO
ON ON 1/20/2012. ON FIST FLIGHT DATE 1/21/2012 RPM APPROXIMATELY 45 MINUTES INTO FLIGHT. THIS DUND THAT THE NYLON POINT'S FOLLOWER WAS FOR WITH THE SAME BATCH NUMBER / DATE CODE OF FAILED DURING FINAL TEST INSPECTION.
LIFE VEST FAILED
PO201105
LIFE VEST FAILED
PO201105
1 0201100
1 0201100
LIFE VEST FAILED
LIFE VEST FAILED
LIFE VEST FAILED
LIFE VEST FAILED S213506300
LIFE VEST FAILED S213506300 DIAPHRAGM DETERIORATED
LIFE VEST FAILED S213506300 DIAPHRAGM DETERIORATED FLOW DIVIDER LANDING AND COULD NOT BE RESTARTED. PROBLEM NE'S FLOW DIVIDER. THE DIAPHRAGM WAS SO NOT BE OPENED NO MATTER HOW MUCH FUEL DER. THE DATE CODE ON THE DIAPHRAGM WAS FROM LE FUEL CONTAMINATION OR ADDITIVE CAUSING A
LIFE VEST FAILED S213506300 T DIAPHRAGM DETERIORATED FLOW DIVIDER LANDING AND COULD NOT BE RESTARTED. PROBLEM NE'S FLOW DIVIDER. THE DIAPHRAGM WAS SO NOT BE OPENED NO MATTER HOW MUCH FUEL DER. THE DATE CODE ON THE DIAPHRAGM WAS FROM LE FUEL CONTAMINATION OR ADDITIVE CAUSING A SUSPECT.
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LIFE VEST FAILED \$213506300 T DIAPHRAGM DETERIORATED FLOW DIVIDER LANDING AND COULD NOT BE RESTARTED. PROBLEM NE'S FLOW DIVIDER. THE DIAPHRAGM WAS SO NOT BE OPENED NO MATTER HOW MUCH FUEL DER. THE DATE CODE ON THE DIAPHRAGM WAS FROM LE FUEL CONTAMINATION OR ADDITIVE CAUSING A SUSPECT. SEAL DISCOVERED 109036001185 PAX DOOR WINDOW O HAVE ADHEASIVE/SEALANT APPLIED. APPLIED
ו

PILOT AND CO-PILOT DOOR WINDOW SEALS FOUND NOT TO HAVE ADHEASIVE/SEALANT APPLIED. APPLIED SEALANT RTV 732 TO COCKPIT DOOR WINDOWS IAW TEMPORARY MAINTENANCE INSTRUCTION NR 109-244.

<u>2011FA0000759</u> AGUSTA RFDAVIATION TUBE MISSING 11/26/2011 AW139 LIFE RAFT

DURING FIRST SCHEDULED INSPECTION SINCE MFG OF LIFERAFT, FOUND THAT SURVIVAL KIT CONTAINED AN INCORRECT MANUAL INFLATION PUMP. CORRECT PUMP HAS AN INTEGRAL HOSE. INSTALLED PUMP HAD NO HOSE, A FITTING INCOMPATIBLE WITH THE TOP BUOYANCY TUBE MANUAL INFLATION RECEPTACLE AND UNABLE TO REACH THE LOWER MANUAL INFLATION RECEPTACLE. IF LIFERAFT NEEDED TO BE DEPLOYED, THE INSTALLED MANUAL INFLATION PUMP COULD NOT BE USED.

<u>2012FA0000006</u> AMD CONNECTOR SHORTED

12/13/2011 FALCON LIGHT

LIGHT ASSY, UNIT SUPPLIES 28VDC AISLE MARKER LIGHTING AND 6VDC AISLE PATH EMERGENCY LIGHTING. THE LIGHT ASSY ON THIS ACFT WAS MOUNTED AT THE INBD BOTTOM CUT OUT OF THE AFT RT DIVAN ARM REST. THE ARM REST HAD 2 MARKED AREAS, 1 ON FWD FACE OF ARM REST NEAR LIGHT ASSY, AND 1 NEAR CTR TOP FWD EDGE. BOTH MARKED AREAS WERE AT LOCATIONS OF INSERTS. TECHS PERFORMED A CONTINUITY ON THE REMOVED LIGHT ASSY AND NOTED THE ASSY CASE HAD CONTINUITY TO PIN "1" OF THE CONNECTOR. PIN "1" IS THE 28VDC SUPPLY INTO THE ASSY. THE CABINET HAS BEEN REPAIRED AND THE LIGHT ASSY WAS REPLACED WITH A NEW UNIT.

2012FA0000041 AMD HOSE OBSTRUCTED

1/19/2012 FALCON10 FAL1007 ZONE 500

POST FLIGHT INSP REVELED ICE BUILD UP ON LT OTBD WING SLAT. PERFORMED ACFT RUN-UP TO TEST THE SLAT ANTI-ICE SYS AND USING A TEMPERATURE GUN FOUND THE SLAT TEMPERATURE ON THE OTBD SECTION TO BE HALF OF THE OTHER 3 SECTIONS. INSPECTION FOUND THAT THE HOT AIR SUPPLY HOSE TO THE OTBD SLAT WAS PARTIALLY BLOCKED BECAUSE OF A SEPARATION OF THE INNER LINER OF THE HOSE WHEN IT GETS WARM. WE REPLACED THE HOSE AND LEAK CHECKED THE SYS AND RETURNED THE ACFT TO SERVICE. NO FURTHER ISSUES.

DXTR20120207001 AMD RETAINING CLIP MISSING

2/7/2012 FALCON2000 SEAT BELT

PASSENGER SEAT BELT) FOUND WITH RETAINING CLIP MISSING. R & R SEAT BELT.

2012FA0000000 AMRGEN STRUT DEBONDED

8/18/2011 AA5A NLG

NOSE STRUT DISBONDED AT NOSE FORK BEARING SPINDLE. SPINDLE AND STRUT ARE BONDED VIA A HOT BOND AGENT WHILE IN AUTOCLAVE. SUSPECT DISBONDING OCCURED DUE TO UNREPORTED HARD LANDINGS AND EXTREME STRESS DUE TO IMPROPER GROUND HANDLING.

2011FA0000803 BEECH MOUNT CRACKED

12/7/2011 400A 45A34361005 LT ENGINE

DURING THE REMOVAL OF THE LT ENGINE, IT WAS NOTICED THAT THE LT ENGINE MOUNT HAD A LARGE CRACK.

<u>2012F00030</u> BEECH PWC ROLL SERVO BINDING 12/26/2011 400A JT15D5D 6225027002 ZONE 100

UPON LANDING YOKE WOULD NOT TURN TO THE RIGHT. HAD NO CONTROL.

2012FA0000104 BEECH WILINT SHUTOFF VALVE FAILED

1/18/2012 400A FJ443A 5915001 BLEED AIR SYS

DURING FLIGHT, LEFT HIGH FLOW PRESSURE RELIEF/SHUTOFF VALVE FAILED TO REGULATE LT ENGINE BLEED AIR RESULTING IN DOWN STREAM OVER PRESSURE CONDITION CAUSING THE OVER PRESSURE RELIEF VALVE TO OPEN PREVENTING WHICH FURTHER DAMAGED TO DOWN STREAM COMPONENTS. FAILING VALVE WAS RETURNED TO MFG ON 17 JAN 2012 FOR EVALUATION. MFG FAILURE ANALYSIS DETERMINED THE PISTON RETURN SPRING FRACTURED.

<u>2011FA0000804</u> BEECH WILINT BEARING FAILED

12/9/2011 400A FJ443A RT ENGINE

WHILE PERFORMING A 200 HR A INSPECTION ON THE RT ENGINE OF ACFT, THE MAGNETIC CHIP COLLECTORS WERE REMOVED FROM THE GEAR BOX AND OIL TANK. METAL PARTICLES WERE FOUND ON BOTH COLLECTORS. OIL SOAP SAMPLES WERE SENT TO FOR EVALUATION. THE OIL FILTER ANALYSIS REPORT SHOWS HIGH IRON DEBRIS CONTENT. THE MAJOR SOURCES OF THE IRON ARE FROM M50 AND SAE 52100. THIS INDICATES BEARING ISSUES HAVE DEVELOPED WHICH REQUIRE THE ENGINE TO BE REMOVED AND RETURNED TO REPAIR STATION.

<u>2012FA0000008</u> BEECH SCREW MISINSTALLED

1/5/2012 58 MS27039109 ZONE 600

DURING ANNUAL INSPECTION FOR IMPORTATION TO US, THE RT AILERON WAS OBSERVED TO BE MISALIGNED WITH THE WING. INSPECTION REVEALED BOTH UPPER OTBD AILERON MOUNTING SCREWS WERE NOT ENGAGING HINGE NUTPLATES. THIS ALLOWED THE AILERON TO MOVE AFT AND DOWN WITH POTENTIAL FOR INFLIGHT SEPARATION. AILERON WAS REMOVED, INSPECTED AND REINSTALLED IAW THE MM USING NEW HARDWARE. ACFT HAS 1 HR FLIGHT TIME SINCE ANNUAL INSPECTION WAS COMPLETED.

2012FA0000009 BEECH HANDLE WORN

1/5/2012 58 364200151 ZONE 800

DURING ANNUAL INSPECTION FOR IMPORT TO US, THE INTERIOR CABIN DOOR HANDLE WAS FOUND SEVERELY WORN. THE HANDLE COULD BE RELEASED WITHOUT PUSHING THE LOCKING BUTTON WITH THE POTENTIAL FOR ACCIDENTAL OPENING OF THE CABIN DOOR. AD 97-14-16 AND SB 2693 ADDRESSES THIS ISSUE AND HAD BEEN COMPLIED LONG AGO. THE AD AND & SB ONLY REQUIRES REINSPECTION IF DOOR HANDLE IS REMOVED. RECOMMEND THE AD BE REVISED TO INSPECT AT 100 HR/ANNUAL INSPECTIONS. A NEW REVISED DESIGN HANDLE WAS INSTALLED. NOTE, ACFT HAS 1 HR SINCE ANNUAL INSPECTION WAS COMPLETED.

 FCPR20121121001
 BEECH
 BRACKET
 CRACKED

 11/21/2011
 58
 969100501
 ZONE 400

WHILE PERFORMING OTHER MX, FOUND RT ENGINE FUEL FLOW TRANSDUCER BRACKET CRACKED. REPLACED BRACKET WITH NEW.

<u>W59R2011112930999</u> BEECH CONT MCAULY HUB CRACKED
11/29/2011 58 IO520C PROPELLER

PROPELLER SUBMITTED FOR INSPECTION FOR THE CAUSE OF RED OIL LEAK IAW AD 91-15-04. PROPELLER WAS DISASSEMBLED AND BLADE RETENTION THREADS OF THE HUB SN 723369 WERE EDDY CURRENT INSPECTED. THE HUB WAS FOUND CRACKED IN THE RETENTION THREADS. THE BLADE COUNTERWEIGHTS WERE ALSO FOUND UNDERTORQUED AND 1 HAD ROTATED OUT OF PROPER ALIGNMENT WHICH WAS FOUND TO BE CONTRIBUTING TO A LOW STATIC RPM CONDITION.

<u>2012FA0000107</u> BEECH CONT ARM FAILED 1/27/2012 58 IO550C 9581001723 NLG

LANDING GEAR ACTUATOR ARM, FOR THE NLG RETRACTION FAILED, ALLOWING THE NLG TO COLLAPSE UPON LANDING.

 2012FA0000102
 BEECH
 CONT
 CYLINDER
 CRACKED

 2/9/2012
 58P
 TSIO520WB
 ENGINE

LT ENGINE CYLINDER FOUND TO BE CRACKED AT FUEL INJECTOR NOZZLE HOLE. NEW CYLINDERS WERE INSTALLED AT ENGINE O/H.

<u>2012FA0000046</u> BEECH HINGE FITTING CRACKED
1/13/2012 77 CREW DOOR

DURING AN ANNUAL, DISCOVERED A WELDED REPAIR TO A CRACK ON THE PILOT-SIDE DOOR ON THE INNER SKIN BELOW THE RIVETS THAT FASTEN THE LOWER HINGE TO THE DOOR. WHILE THIS DOOR IS SERVICEABLE, THE SAME CRACK EXISTED ON ANOTHER ACFT SERVICED EARLIER. THE CRACK WAS APPROX 3-4" LONG AND THE

PREVIOUS MECHANIC HAD TRIED TO (UNSUCCESSFULLY) DRILL-STOP IT. IT IS UNCLEAR HOW FAR THE CRACK EXTENDED. THIS CRACK DID NOT EXIST ON THE CO-PILOT DOOR ON EITHER AIRPLANE, LIKELY DUE TO HEAVIER WEAR ON THE PILOT SIDE. PROBABLE CAUSE IS LIKELY BOTH THE OPERATOR USING EXCESSIVE FORCE AND INADEQUATE REINFORCEMENT FOR THE DOOR HINGE. A REPAIR CAN LIKELY BE MADE WITH MULTIPLE METHODS IAW AC 43.13-1B, CHAP 4, SEC 4. RECOMMEND THAT THE AFFECTED AREA OF THE DOOR BE INSPECTED EVERY 100 HRS OR DURING ANNUAL, WHICHEVER COMES FIRST. UNCLEAR AT THIS TIME IF DRILL-STOPPING DURING THE EARLY DEVELOPMENT OF A CRACK WILL BE SUCCESSFUL.

2011FA0000787	BEECH	PWA	PITOT TUBE	MISMARKED
12/9/2011	A200	PT6A41	PH5023	ZONE 100

DURING ALTIMETER AND PITOT STATIC SYSTEM RE-CERTIFICATION, THE TECH OBSERVED THAT THE LT PITOT TUBE WAS INCORRECT AND WAS ACTUALLY A RT PITOT TUBE. UPON FURTHER INVESTIGATION, THE PN WAS MISIDENTIFIED AS A LT PITOT TUBE PN PH502-3 WHEN ACTUALLY THE DRAIN HOLE AND IMBOSSED "TOP" MARK WERE CONSISTENT WITH A RT PITOT TUBE PN PH502-5. THESE PARTS ARE ALSO SOLD UNDER THE PN 50-384040-3 (LT) AND 50-384040-5 (RT).

2012FA0000005	BEECH	CONT	ADAPTER	BROKEN
12/7/2011	A36	IO550R		STARTER

ENGINE FAILS TO START, PROP WAS LOCKED SOLID. STARTER ADAPTER REMOVED TO FIND 2 GEAR TEETH MISSING. EMERGENCY AD 2011-25-51 SEEMS TO BE RELEVANT TO THIS FAILURE BUT DOES NOT COVER THIS ENGINE TYPE AND STARTER PN. UNABLE TO ASCERTAIN ENGINE HOURS, BUT BELIEVE THEM TO BE IN THE REGION OF 100-200 HOURS.

2012FA0000098	BEECH	GARRTT	BEARING	FAILED
2/7/2012	B100	TPE3315	31080981	TURBINE SECTION

PILOT REPORTED DURING CLIMB OUT OF FL200 FOR FL210 NOTICED THE RT ENGINE EGT RISING. FELT A VIBRATION AND NOTICED THE OIL PRESSURE INDICATOR FLUCTUATING FROM GREEN TO YELLOW AND NOTICED THE TORQUE INDICATOR FLUCTUATING IN 400 FT/LBS INCREMENTS. CONDUCTED AN ENGINE SHUTDOWN, DECLARED AN EMERGENCY, RAN THE APPROPRIATE PRECAUTIONARY ENGINE SHUTDOWN CHECKLIST, AND RETURNED TO DEPARTURE. DURING ENGINE TEARDOWN, FOUND THE REAR TURBINE BEARING APPEARED TO HAVE FAILED, WHICH CAUSED INTERNAL TURBINE AND COMPRESSOR SHIFT AND RUB.

HSRR2011122800001	BEECH	STRUCTURE	CRACKED		
12/28/2011	B200		PAX DOOR		
CRACKS INSIDE DOOR STRUCTURE FOUND.					
J8UR20111219001	BEECH	CONNECTOR	CHAFED		

12/19/2011

B300C

RT FUEL SHUT-OFF VALVE ELECTRICAL CONNECTOR IS COMING IN CONTACT WITH ACCESS PANEL NUTPLATE ON RT NACELLE (PANEL NR 5RH). THE CLOSE PROXIMITY OF THE FIREWALL ELECTRICAL CONNECTOR AND THE ACCESS PANEL NUTPLATE CAUSED WIRING TO BECOME CHAFED. NUTPLATE PROTRUDES INTO ELECTRICAL CONNECTOR AND BACKSHELL CAUSING INTERMITTENT SHORTING IN TURN CAUSING RT FIREWALL SHUT-OFF VALVE CAUTION LIGHT TO FLICKER IN-FLIGHT.

MS3456L16S

ZONE 400

J8UR20120118001	BEECH	PWA	PRESSURE SWITC	^H FAILED
1/18/2012	B300C	PT6A60A	5038912129	AUTOFEATHER SYS

PROPELLER AUTO-FEATHER DOES NOT TEST DURING GROUND AND PRE-FLIGHT ENGINE RUNS. GROUND IDLE SOLENOID FAILS TO OPERATE PROPERLY.

VJ3S2011FA0000766	BEECH	CONT	CIRCUIT BREAKER	FAILED
12/1/2011	F33A	IO520*	35380132203	ZONE 100

PILOT REPORTED LANDING LIGHT INOPERATIVE. ON TROUBLESHOOTING TECH FOUND CIRCUIR BREAKER TO BE AT FAULT. CIRCUIT BREAKER HAD BEEN REPLACED, 1303 FLIGHT HOURS PRIOR AND ESTIMATED CYCLES 5212.

NOTIFIED NEW CIRCUIT BREAKER MANUFACTURER.

VJ3R2012FA0000028	BEECH	CONT	CIRCUIT BREAKER	BROKEN
1/13/2012	F33A	IO520*	35380132101	TAXI LIGHTS

PILOT REPORTED TAXI LIGHT INOPERATIVE. ON TROUBLESHOOTING THE TECH FOUND THE CIRCUIT BREAKER AT FAULT. INSTALLED NEW CIRCUIT BREAKER. OPS CHECKED OK. SWITCH THAT FAILED WAS INSTALLED TO COMPLY WITH AD 2008-13-17. THIS ACFT HAS HAD 4 OF THE IMPROVED CIRCUIT BREAKERS FAIL IN THE LAST 830 HRS OF OPERATION.

VJ3R2012FA0000027	BEECH	CONT	CIRCUIT BREAKER	BROKEN
1/13/2012	F33A	IO520BB	35380132101	NAVIGATION LIGHT

PILOT REPORTED NAVIGATION LIGHTS INOPERATIVE. ON TROUBLESHOOTING, FOUND THE CIRCUIT BREAKER AT FAULT. INSTALLED NEW CIRCUIT BREAKER. OPS CHECKED OK. SWITCH THAT FAILED WAS INSTALLED TO COMPLY WITH AD 2008-13-17. THIS ACFT HAS HAD 6 OF THE IMPROVED CIRCUIT BREAKERS FAIL IN THE LAST 1400HRS OF OPERATION.

2012FA0000014	BEECH	CONT	CIRCUIT BREAKER	FAILED
1/8/2012	F33A	IO520BB	35380132103	LANDING LIGHT

PILOT REPORTED LANDING LIGHT INOPERATIVE. ON TROUBLESHOOTING, FOUND THE LANDING LIGHT CIRCUIT BREAKER AT FAULT. INSTALLED NEW LANDING LIGHT CIRCUIT BREAKER. OPS CHECKED OK.

2012FA0000015	BEECH	CONT	CIRCUIT BREAKER FAILI		
1/8/2012	F33A	IO520BB	35380132103	BEACON	

PILOT REPORTED BEACON LIGHT INOPERATIVE. ON TROUBLESHOOTING, THE TECH FOUND THE BEACON LIGHT CIRCUIT BREAKER AT FAULT. INSTALLED NEW BEACON LIGHT CIRCUIT BREAKER. OPS CHECKED OK.

2012FA0000016	BEECH	CONT	CIRCUIT BREAKER	FAILED
1/8/2012	F33A	IO520BB	35380132103	BEACON

PILOT REPORTED BEACON LIGHT INOP. ON TROUBLESHOOTING THE TECH FOUND THE BEACON LIGHT CIRCUIT BREAKER AT FAULT. INSTALLED NEW BEACON LIGHT CIRCUIT BREAKER. OPS CHECKED OK.

2012FA0000095	BEECH	CONT	CIRCUIT BREAKER	FAILED
2/3/2012	F33A	IO520BB	3538013263	PITOT HEAT

PILOT REPORTED PITOT HEAT SWITCH WOULD NOT STAY IN THE ON POSITION. ON TROUBLESHOOTING TECH FOUND CIRCUIT BREAKER/SWITCH TO BE AT FAULT. AD 2008-13-17 HAD BEEN COMPLETED 2427 FLIGHT HOURS PRIOR. RECOMMEND MFG DEVELOP A MORE DURABLE CIRCUIT BREAKER OR ACFT MFG LOOK FOR A DIFFERENT MANUFACTURER FOR ITS CIRCUIT BREAKERS.

2011FA0000801	BEECH	CONT	CIRCUIT BREAKER	R FAILED
12/24/2011	F33A	IO520BB	35380132101	NAVAGATION LIGHT

PILOT REPORTED NAVAGATION LIGHTS INOPERATIVE. ON TROUBLESHOOTING, TECH FOUND CIRCUIT BREAKER TO BE AT FAULT, AD 2008-13-17 HAD BEEN COMPLETED, 2160 FLIGHT HOURS PRIOR AND ESTIMATED CYCLES 8640.

2011FA0000751	BEECH	CONT	CIRCUIT BREAKER	UNSERVICEABLE
11/17/2011	F33A	IO520BB	35380132103	TAXI LIGHT

PILOT REPORTED TAXI LIGHT INOPERATIVE. FOUND THE CIRCUIT BREAKER AT FAULT. INSTALLED NEW CIRCUIT BREAKER. OPS CHECKED OK. CIRCUIT BREAKERS ARE A POOR DESIGN AND REQUIRE FREQUENT REPLACMENT.

2011FA0000783	BEECH	CONT	CIRCUIT BREAKER	FAILED
12/9/2011	F33A	IO520BB	35380132101	NAVAGATION LIGHT
PILOT REPORTED NA	V LIGHTS INOPE	RATIVE. ON TROUBLESHOOTING, T	ECH FOUND CIRCUI	T BREAKER TO BE AT
FAULT AD 2008-13-17	HAD BEEN COMP	PLETED.		

2011FA0000785 BEECH CONT CIRCUIT BREAKER FAILED

12/10/2011 F33A IO520BB 3538013263 PITOT HEAT

PILOT REPORTED THAT THE PITOT HEAT STAYED ON WHILE THE SWITCH WAS IN THE OFF POSITION. DURING TROUBLESHOOTING, TECH FOUND THAT THE PITOT CIRCUIT BREAKER WAS AT FAULT. THE PITOT CIRCUIT BREAKER WAS REPLACED.

<u>2012FA0000040</u> BEECH CONT CIRCUIT BREAKER FAILED

1/19/2012 F33A IO520BB 35380132103 ZONE 100

PILOT REPORTED TAXI LIGHT INOP. ON TROUBLESHOOTING, TECH FOUND CIRCUIT BREAKER TO BE AT FAULT. AD 2008-13-17 HAD BEEN COMPLETED 2593 FLIGHT HOURS PRIOR AND ESTIMATED CYCLES 10372. RECOMMEND MFG IMPROVE DESIGN FOR A MORE DURABLE CIRCUIT BREAKER OR ACFT MFG SEARCH FOR A MFG WITH A MORE DURABLE CIRCUIT BREAKER.

<u>2012FA0000082</u> BEECH CONT SWITCH BROKEN 2/1/2012 F33A IO520BB 3538013273 STROBE

PILOT REPORTED STROBE LIGHT SWITCH INOP. ON TROUBLESHOOTING, THE TECH FOUND THE CIRCUIT BREAKER/SWITCH AT FAULT. INSTALLED NEW CIRCUIT BREAKER/SWITCH. OPS CHECK OK. SWITCH THAT FAILED WAS INSTALLED TO COMPLY WITH AD 2008-13-17. THIS ACFT HAS HAD 6 OF THE IMPROVED SWITCHES FAIL IN THE LAST 2000 OF OPERATION.

<u>2012FA0000083</u> BEECH CONT SWITCH BROKEN 2/1/2012 F33A IO520BB 3538013273 ALTERNATOR

PILOT REPORTED ALTERNATOR SWITCH INOPERATIVE. ON TROUBLESHOOTING, THE TECH FOUND THE CIRCUIT BREAKER/SWITCH AT FAULT. INSTALLED NEW CIRCUIT BREAKER/SWITCH. OPS CHECK OK. SWITCH THAT FAILED WAS INSTALLED TO COMPLY WITH AD 2008-13-17. THIS ACFT HAS HAD 6 OF THE IMPROVED SWITCHES FAIL IN THE LAST 2000 OF OPERATION.

VJ3R2011FA0000777 BEECH CONT SWITCH FAILED

12/7/2011 F33C IO520BB 35380132103 BEACON LIGHT

PILOT REPORTED THE BEACON LIGHT INOP. DURING TROUBLESHOOTING, TECH FOUND BEACON LIGHT BREAKER/SWITCH TO BE AT FAULT. THE BEACON BREAKER/SWITCH WAS LAST REPLACED 1074.8 FLIGHT HOURS PRIOR WITH AN ESTIMATED 4299.2 CYCLES. EARLY FAILURE REASON IS UNKNOWN NO RECOMMENDATIONS AT THIS TIME.

<u>VJ3S2011FA0000767</u> BEECH CONT MOTOR FAILED 12/1/2011 F33C IO520BB 583800901 MLG

PILOT REPORTED LANDING GEAR WOULDN'T EXTEND WHEN GEAR WAS SELECTED IN THE DOWN POSITION, PILOT MANUALLY EXTENDED THE GEAR AND RETURNED TO BASE. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

<u>ZD4R20111201001</u> BELL ALLSN BEARING CAGE LOOSE 11/28/2011 407 250C47B 23035272 GEARBOX

DURING INSPECTION OF GEARBOX FOR METAL IN OIL, IT WAS NOTED THAT 5 OF THE 6 STUDS THAT SECURE THE 2.5 BEARING CAGE TO THE GEARBOX COVER ASSY HAD BACKED OUT ALLOWING MOVEMENT OF THE CAGE INSIDE THE GEARBOX. WHILE LOOSENING HARD WEAR THAT RETAINS THE BEARING CAGE IN THE COVER ASSY, THE STUDS BACKED OUT OF THE COVER INSTEAD OF THE NUTS BACKING OFF OF THE STUDS.

HN6R201201250001 BOEING SCREW DISLODGED

1/25/2012 737 LIGHT TRANFORMER

FOUND ONE TRANSFORMER MOUNTING SCREW DISLODGED AND FLOATING LOOSE IN UNIT CAUSING SHORT TO GROUND. SOCKET WORN. REFLECTOR FINISH WORN.

<u>DU4R20111119020</u> BOEING FLOORBEAM CORRODED

11/19/2011 737524 **BS 344** DURING SCHEDULED INSPECTION, FOUND CORROSION ON FLOORBEAM AT BS 344, RBL 12, LBL-11. SKIN DU4R2011019 **BOEING** DENTED 11/24/2011 737524 **CARGO DOOR** DENT/GOUGE AFT CARGO DOOR AT BS 820.5 AND 2.5" ABOVE STR 23R. DU4R2011021 **BOEING FLOORBEAM** CORRODED 11/20/2011 737524 BS 986 DURING SCHEDULED INSPECTION, FOUND CORROSION ON AFT CABIN FLOORBEAM AT BS 986, LBL 27 - 46. 2012FA0000007 **BOEING** COIL COLLAR **FAILED** 7/12/2011 747400 CATHODE RAY TUBE DURING MX, A NEW CATHODE RAY TUBE (CRT) HAD BEEN FITTED TO A DISPLAY UNIT. UNDER TEST, THE UNIT FAILED (DISPLAY WENT BLANK). THE FAILURE MODE WAS THAT THE POWER SUPPLY FAILED HALF WAY THROUGH THE TEST. THE NEW CRT WAS FOUND TO BE THE CAUSE. IT FOUND THAT THE DEFLECTION COIL COLLAR SECURING BOLT ON THE CTR HAD PIERCED AN ADJACENT BLACK PROTECTIVE SLEEVE AND SHORTED TO THE DEFLECTION COIL WIRES CAUSING THE POWER SUPPLY TO TRIP. 2011FA0000758 **BOEING AUTOBRAKE SYS** INTERMITTENT 11/22/2011 747SP31 26700011 MLG DURING LANDING, AUTO BRAKE WAS SELECTED. UPON TOUCHDOWN ALL SIXTEEN (16) MLG WHEELS WERE LOCKED. CAUSING ELEVEN (11) MAIN TIRES TO BLOW. THE CAPTAIN IMMEDIATELY DE-SELECTED AUTO BRAKE UPON RECOGNITION OF FAILURE. ABXR2011122200053 BOEING STRINGER **CRACKED** 4/18/2011 767200 146T3001178 **ZONE 100** STRINGER 33RT HAS APPROX 2" CRACK AT BS 1081 IN AFT LOWER CARGO. REPAIRED STRINGER 33RT AT STA 1081 IAW SRM 53-00-03. ABXR2011122200054 BOEING ANGLE CORRODED 4/21/2011 767200 146T005126 **ZONE 100** LARGE AREA OF CORROSION BENEATH R2 DOOR THRESHOLD DRAIN CHANNEL. REPLACED ANGLE IAW SRM 51-40-02. ABXR2011122200052 BOEING GE MOUNT CORRODED 4/16/2011 767200 CF680C2B4 310U20202 NR 2 ENGINE NR 2 ENGINE AFT MOUNT CORRODED. INSTALLED NEW MOUNT IAW AMM 71-21-02. ABXR2012020400019 BOEING STRUCTURE CRACKED 2/4/2012 767231 141T293816 **ZONE 100** DURING INSPECTION, FOUND RT VERICAL STRUCTURE AT STA 287, WL 159 CRACKED. REPAIRED STRUCTURE IAW SRM. ABXR2012020400020 BOEING **CHANNEL CRACKED ZONE 400** 2/4/2012 767231 313T3380459 DURING INSPECTION, FOUND LT AND RT CHANNELS CRACKED ON T/E OF NR 2 PYLON. REPAIRED IAW SRM. ABXR2012020400021 BOEING SKIN **GOUGED** 2/4/2012 767231 112T41022 **ZONE 600** DURING INSPECTION, FOUND RT WING FUEL PANEL CUTOUT AT WS 520 GOUGED. REPAIRED IAW REA 657-59643-

MR.

ABXR2012020400022		SKIN	CRACKED
2/4/2012	767231	148T73212	ZONE 100
DURING INSPECTION 1730 S20R IAW SRM.	I, FOUND RT FUSELAGE SKIN CRACKED AT STA 173	30, S20R. R & R FUSE	ELAGE SKIN AT STA
ABXR2012020400023	BOEING	SKIN	CHAFED
2/4/2012	767231	148T73214	ZONE 100
DURING INSPECTION	I, FOUND RT FUSELAGE SKIN AT STA 1730 CHAFED	. REPLACED SKIN IA	W SRM.
ABXR2012020400024	BOEING	WIRE	SHORTED
2/4/2012	767231		EXTERIOR LIGHT
	I, FOUND WING ANTI-COLLISION LIGHTS POPS CIRC EED SWITCH IAW SWPM.	CUIT BREAKER. REP	AIRED SHORTED
ABXR2012020400026	BOEING	ACCESS PANEL	CRACKED
2/4/2012	767231	311T157085	ZONE 400
DURING INSPECTION REA B564-59630 AND	I, FOUND NR 2 PYLON ACCESS PANEL 446 BL CRAC SRM.	CKED AROUND NUT I	PLATES. REPAIRED IAW
ABXR2012020400025	BOEING	SKIN	CRACKED
2/4/2012	767231	311T345021	ZONE 400
	I, FOUND NR2 PYLON ACCESS PANEL 446AL FLANG TACH FLANGE IAW REA B654-59629.	E CRACKED AT NUT	PLATE HOLE.
ABXR2011122200581	BOEING	STIFFENER	CORRODED
6/6/2011	76725D	14T831317	ZONE 200
PANEL MARKED FWD IAW SRM 51-40-02.	R1 SCUFF, LOWER STIFFENER CORRODED. R & R	LOWER STIFFENER	ON R1 SCUFF PLATE
ABXR2011122200058	BOEING	ACOUSTIC LINER	CORRODED
6/7/2011	76725D	2242101543	ZONE 400
	COWL INNER BARREL ACOUSTIC LINER CORRODED RREL PANEL ON CWO 23052-0001 IAW ROHR MM 71		
ABXR2011122200055	BOEING	STIFFENER	CORRODED
4/19/2011	76725D	143T820019	ZONE 200
STIFFENER ON WEB	HAS CORROSION AT STA 610, STRINGER 16 RT. R &	R STIFFENER IAW	SRM 51-40-02.
ABXR2011122200056	BOEING	WIRE	CHAFED
4/21/2011	76725D		EMERGENCY LIGHT
	RY DOOR EMERGENCY LIGHT, DAMAGED AT FWD L EMERGENCY LIGHT L309.	JPPER DOOR TRACK	K. REPAIRED WIRING
2012F00021	BOEING	POWER SUPPLY	FAULTY
12/2/2011	767300	PAC5005	ZONE 200
OVERWING EMERGE POWER SUPPLY FAU	NCY EXIT SIGNS 4EA AND SEAT MOUNTED EMERG LTY.	ENCY MARKERS WO	OULDN'T TEST. FOUND
FWTA2011FA0000792	BOEING	DRAIN LINE	LEAKING
12/13/2011	767316F		FUEL SYSTEM
DURING REFUELING	OPERATION, FUEL LEAK DISCOVERED AT LEFT TAI	NK CANISTER DRAIN	TUBE HOUSING.
	·		

DEDEOD1455	TEL 1000 101	/ DED 415 OF	D D A IN I TI I D E	OL AT TD 4 OLG 1100 AID 0
PERFORME) IEMPORAR'	REPAIR OF	DRAIN TUBE	SLAT TRACK HSG NR2

2012FA0000063	BOMBDR	TIRE	BULGED
1/5/2012	BD1001A10	269K432	ZONE 700

BULGE ON NR 2 TIRE (PN 269K43-2) OUTER SIDEWALL CONSISTANT WITH PREVIOUS BULGES FOUND ON PN 269K43-1 TIRES. TIRE IS BEING SENT TO MFG FOR EVALUATION.

LC1R201202011501 CESSNA CESSNA SKIN CORRODED

2/1/2012 150G 0432001550432001 HORIZONTAL STAB

DURING A PRE-PURCHASE INSPECTION, HEAVY CORROSION WAS FOUND AT THE JOINT BETWEEN THE LT STABILIZER SKIN, PN 0432001-55 AND THE RT STABILIZER SKIN, PN 0432001-54 AT THE LOWER CENTER RIVET LINE WHICH HAD EATEN AWAY NUMEROUS RIVETS, LOOSENED THE SKIN JOINT AND BEGAN TO EAT AWAY THE SKIN. THIS WILL REQUIRE REMOVAL OF THE SURFACE, A THOROUGH INSP FOR ADDITIONAL CORROSION AND PROBABLE REPLACEMENT OF BOTH SKINS.

 2012FA0000012
 CESSNA
 LYC
 SLICK
 ROTOR
 LOOSE

 1/6/2012
 152
 O235N2C
 K3008
 DISTRIBUTOR GEAR

FOUND DURING A 500HR MAG AND IMPULSE COUPLING INSPECTION, A DEFECTIVE DISTRIBUTOR GEAR FINGER. THIS FINGER HAD WORKED LOOSE FROM ITS PLASTIC SEAT ALLOWING SOME MOVEMENT BOTH SIDE TO SIDE AS WELL AS UP AND DOWN THE SHAFT. PARTS WERE STILL FUNCTIONING WHEN DISCOVERED. THIS WAS A PROBLEM FOR BOTH THE LT AND RT MAGS OF THE SAME ENGINE.

 2012FA0000067
 CESSNA
 ATTACH BOLT
 CORRODED

 1/15/2012
 170B
 ZONE 200

DURING INSPECTION OF THE WING ATTACH BOLTS, THE HEADS AND NUTS WERE FOUND CORRODED. INSTALLED NEW BOLTS AND FOUND THAT THE REMOVED BOLTS HAD SOME CORROSION ON THE SHANK. 3 OF THESE BOLTS WERE SEVERELY CORRODED WITH MAJOR PITTING ON THE SHANKS. THESE BOLTS APPEAR TO BE ORIGINAL. INSPECTED THE HOLES FOR CORROSION WITH BORESCOPE, FOUND OK.

 FK8R201110240001
 CESSNA
 BULKHEAD
 CRACKED

 10/24/2011
 172M
 055032110
 SPINNER

AFT SPINNER BULKHEAD CRACKED.

 FK8R201107190004
 CESSNA
 LYC
 SUPPORT BRACKET
 CRACKED

 7/19/2011
 172M
 O320*
 055521616
 AIR BOX

AIRBOX FRONT SUPPORT BRACKET WAS FOUND CRACKED AT THE STARTER. THIS PART WAS REPLACED AT THE ANNUAL INSPECTION IN 2010.

 2011FA0000776
 CESSNA
 LYC
 BATTERY
 EXPLODED

 12/6/2011
 172P
 O320*
 G243
 ZONE 100

ON ENGINE START-UP A LOUD POP WAS HEARD FROM UNDER THE COWL. INVESTIGATION SHOWED THAT THE BATTERY, A 24 VOLT, MODEL 243 INSTALLED IN 2007, HAD EXPLODED UPWARD. THIS BATTERY IS EQUIPPED WITH A CAST ALUMINUM SEALING COVER THAT IS HELD IN PLACE OVER THE CELLS BY THE BATTERY HOLD DOWN BOLTS. THE ALUMINUM SEALING COVER WAS DEFORMED UPWARD AND THE 2 LUGS ON ITS SIDES WERE BROKEN AWAY FROM THEIR POSITIONS. 1 CELL VENT CAP WAS FOUND BROKEN. THERE HAD OBVIOUSLY BEEN A HYDROGEN EXPLOSION WITHIN THE UPPER VENT AREA OF THE BATTERY. THE BATTERY VENT SYSTEM WAS FOUND PROPERLY CONNECTED AND OPEN. THE MAIN POST CONNECTIONS AND ALL SURROUNDING CONNECTIONS WERE FOUND TIGHT. THERE WAS MINOR DEFORMATION OF THE RIVETED SHEET ALUMINUM BATTERY HOLD DOWN CLAMP, WITH NO DAMAGE TO THE BATTERY TRAY OR SURROUNDING EQUIPMENT.

FK8R201110050002 CESSNA LYC BEARING RACE WORN

10/5/2011 172P 0320D2J NLG WHEEL

NOSE WHEEL BEARING RACE WAS FOUND SPINNING INSIDE WHEEL ASSEMBLY.

FK8R201112110006	CESSNA	LYC		CYLINDER	INFLT SEPARATION
12/11/2011	172P	O320D2J		AEL65102	ENGINE
	ETED VISUAL IN	SP OF ENGINE,	FOUND NR 3 CYLIN	IDER HEAD SEPARA	RGENCY LANDING WAS TED FROM CYLINDER R ASSY PN AEL65102.
2011FA0000750	CESSNA	LYC		SHAFT	BROKEN
11/8/2011	172RG	O360F1A6		24411001	MLG ACTUATOR
RIGHT MAIN GEAR WAS DOWN BUT NOT LOCKED. PILOT PERFORMED GEAR UP LANDING. ON INSPECTION, THE RT PIVOT ASSY WAS PROTRUDING APPROX .5" OUT OF ACTUATOR. AFTER RAISING ACFT ON JACKS, HYD APPEARED TO BE WORKING PROPERLY AND POWER PACK WAS FULL OF FLUID. REMOVED RT ACTUATOR AND PIVOT ASSY. SHAFT WAS FOUND TO BE BROKEN IN 2 PIECES					
2012FA0000043	CESSNA	LYC		ARM	DETACHED
1/20/2012	172S	IO360L2A			FUEL PUMP
LOST FUEL PRESSUR	RE IN FLIGHT. FO	UND FUEL PUM	P ARM DETACHED	FROM PUMP DIAPHE	RAGM.
2012FA0000080	CESSNA			CONTROL CABLE	BROKEN
1/27/2012	177			S488567	TE FLAPS
FLAPS, 10 SELECTED	AND FLAPS WE	NT TO FULL DO	WN. FOUND CONTR	OL WIRE BROKEN.	
2012FA0000025	CESSNA	CONT		CYLINDER	PEELING
1/5/2012	182L	O520*			NR 5
	EMOVED AND INS ON AND RINGS W	SPECTED. FOUN VERE SCUFFING	ND NR 5 CYLINDER THE PEELING ARE	NICKLE PLATING PE EA CREATING PARTIO	
2012FA0000124	CESSNA	CONT		PISTON	FAILED
2/20/2012	182M	O470R		AEC646263	NR 5 CYLINDER
NUMBER 5 CYLINDER ON O-470 ENGINE WITH APPROXIMATELY 300 HOURS EXPERIENCED PISTON FAILURE DUE TO WHAT APPEARS AT FIRST IMPRESSION DETONATION. HOWEVER, PISTON IS BELIEVE TO HAVE FAILED DUE TO FLAW IN MANUFACTURE OR EXPERIENCE DAMAGE SUCH AS DROPPING PRIOR TO INSTALLATION IN ENGINE. IT IS MY BELIEF THAT THIS FAILURE OCCURED OVER A PERIOD OF SEVERAL HOURS BY COMBUSTION GASES SLOWLY ERRODING EDGE OF PISTON TO THE POINT OF FAILURE OF PISTON TO OPERATE NORMALLY WITHOUT PASSING OIL AND GASOLINE INTO INDUCTION SYSTEM THEREBY AFFECTING OTHER CYLINDERS.					
RJWR20111130003	CESSNA			BUNGEE	SEIZED
11/30/2011	208			26430651	NLG STEERING
DURING PREFLIGHT F SEIZED. REPLACED A			•	SE STEERING BUNG	EE/SPRING ASSY
2011FA0000806	CESSNA		ARTEX	G SWITCH	NO TEST
4/15/2011	208B				ELT
ELT G-SWITCH FAILEI	D TEST.				
2011FA0000807	CESSNA	PWA	ARTEX	G SWITCH	NO TEST
12/27/2011	208B	PT6A114A			ELT
ELT FAILED G-SWITCI					

ARTEX

G SWITCH

NO TEST

ELT

2011FA0000808

12/27/2011

CESSNA

208B

PWA

PT6A114A

ELT FAILED G-SWITCH TEST.

2/2/2012

2011FA0000809	CESSNA	PWA	ARTEX	G SWITCH	INOPERATIVE
12/27/2011	208B	PT6A114A			ELT
ELT FAILED G-SWITC	CH TEST.				
2012FA0000079	CESSNA			PUMP	MISREPAIRED
1/27/2012	340A			A8150B	FUEL BOOST

FOLLOWING INSTALLATION OF A FRESHLY OVERHAULED AUX PUMP INTO THE AIRCRAFT, A FUNCTIONAL AND PRESSURE TEST WAS PERFORMED. THE PUMP WOULD RUN PUT ONLY PUT OUT 3 PSI. REQUIRED PSI IS 5. FURTHER TROUBLESHOOTING PERFORMED AND THEN PUMP WOULD ONLY PUT OUT 0.5 PSI. WHEN THE PUMP WAS REMOVED FOR INSPECTION 2 SCEWS FELL OUT OF THE PUMP INLET FITTING, AND A 1 WAS LOOSE INSIDE. THE FOURTH SCEW OF THE SET WAS THE ONLY SCEW STILL INSTALLED. THE PUMP WAS A A8150-B SN 63853. 8130-3 FORM TRACKING NR 15535. THE PUMP HAD ZERO RUN TIME ON IT, ONLY WAS FUNCTION CHECKED FOLLOWING INSTALLATION AND FOUND THAT IT APPEARED TO HAVE NOT BEEN ASSEMBLED PROPERLY.

2011FA0000790	CESSNA	CONT	CYLINDER	CRACKED	
11/29/2011	414A	TSIO520NB	SA52006A1	ZONE 400	
THE CYLINDER HEAD SEPARATED FROM THE BARREL ONE COOLING FIN BELOW THE CYLINDER HEAD.					
2012FA0000113	CESSNA	CONT	GEAR	BROKEN	

DURING ANNUAL INSPECTION, WHILE COMPLYING WITH AD-07-05-15 (DATED 04/16/07), STARTER ADAPTER 400-HOUR INSPECTION IAW MSB 94-4G, FOUND ONE BROKEN TOOTH ON CAMSHAFT GEAR. ENGINE DISASSEMBLED WITH NO OTHER INDICATIONS FOUND OF RELATED DEFECTS OR DAMAGE INTERNALLY OR EXTERNALLY. NO METAL FOUND IN OIL FILTER OR INTERNAL TO THE ENGINE. BROKEN TOOTH NOT FOUND. CAMSHAFT GEAR PN

656914

CAMSHAFT

GTSIO520L

421C

656914 SUPERCEDES PN 537432.

<u>2012FA0000045</u> CESSNA TUBE CHAFED
1/9/2012 525 631700353 HYD SYSTEM

DURING INSPECTION, FOUND 2 HYD PRESSURE LINES RUBBING AND WORN 50 TO 80 PERCENT THROUGH. PRESSURE LINES WERE LOCATED AT THE FWD SIDE OF THE AFT ENGINE CARR THRU BEAM BETWEEN THE LT AND RT HYD PRESSURE FILTERS. IMPROPER INSTALLATION OF 90 DEGREE FITTIN IN LEFT FILTER ASSY. ASSURE PROPER INSTALLATION OF ALL FITTINGS AND RIGID LINE CLEARANCE.

2012FA0000010	CESSNA	WILINT	COMPUTER	FAILED
1/5/2012	525	FJ44	8221137001	IAPS

FLIGHT INSTRUMENT COMPARATOR WARNING INDICATOR ILLUMINATED. ACFT LANDED WITHOUT INCIDENT. REPLACED IAPS. SYSTEM TESTED WITH NEW PART INSTALLED CONFIRMED SYS NOW FUNCTIONS CORRECTLY.

AMCR201201180002	CESSNA	COAX	MISINSTALLED
1/18/2012	525C	5001688105	TCAS

CREW REPORTED THAT THE TCAS DISPLAY WAS INCORRECTLY PAINTING TARGETS AT 45 DEG TO THE LT OF WHERE IT SHOULD HAVE BEEN, BASED ON VISUAL AND ATC VERIFICATION. CREW EXPERIENCED SIMILAR PROBLEM ON AN EARLIER SN ACFT (0049, 19 HRS TT) A FEW MONTHS PRIOR. MX FOUND THE TWO COAX CABLES THAT CONNECT THE BELLY ANTENNA TO THE FUSELAGE BULKHEAD WERE INCORRECTLY INSTALLED. THE YELLOW (PY1001B) AND THE BLACK (PY1002B) CABLES WERE SWAPPED. THERE WERE NO COLOR MARKINGS ON THE BULKHEAD. SINCE THESE TWO ACFT ARE NEW AND THE FLOOR PANELS HAVE NEVER BEEN REMOVED, IT'S APPARENT THIS CAME FROM THE MFG IN THIS CONDITIONS, AND WERE NOTIFIED OF THE PROBLEM.

2012FA0000002	CESSNA	CONT	THROTTLE ARM	SEIZED	
12/20/2011	550	TSIO550C	6567852	POWERPLANT	
PILOT REPORTED THROTTLE VERY HARD TO MOVE. UPON INSPECTION, THE THROTTLE ARM WAS FOUND TO BE					
SEIZED AFTER THE THROTTLE CONTROL WAS REMOVED. THROTTLE ASSY WAS REMOVED FROM THE ENGINE					

AND THE THROTTLE AREM COULD NOT BE MOVED. NO VISIBLE SIGNS OF ANY OTHER DAMAGE TO UNIT. THE ADDITION OF LUBRICATION TO THROTTLE SHAFT MADE NO DIFFERENCE.

	CATION TO THRO	1122 01711 1 1777 182 110 211 1 2112111	JL.		
2012FA0000011	CESSNA	PWA	STATOR	CRACKED	
12/21/2011	550	JT15D4	1338932	MLG BRAKE DISK	
ON LANDING ROLLOUT, LT MAIN GEAR BRAKE LOCKED UP. UPON DISASSEMBLY AND INSP OF MALFUNCTIONING BRAKE BY MECHANIC, IT WAS DISCOVERED THAT THE STATOR DISK (1 OF THE 2 ON THE BRAKE ASSY) CLOSEST TO THE INBD SIDE HAD CRACKED AND SHATTERED INTO 4 LARGE SEGMENT PIECES. THE BROKEN PIECES OF THE DISK HAD JAMMED UP AND PREVENTED THE WHEEL FROM TURNING. SUSPECT FATIGUE OR THERMAL SHOCK COULD BE THE CAUSE OF FAILURE.					
DXTR20120117003	CESSNA		FUEL LINE	CHAFED	
1/17/2012	560CESSNA		65264404	ZONE 100	
RT REFUEL/DEFUEL	FLOW TUBE ASS	Y IS CHAFED BEYOND LIMITS.			
DXTR20120131010	CESSNA		AXLE	CORRODED	
1/31/2012	560CESSNA			ZONE 700	
CORROSION FOUND	ON LT MLG WHE	EL AXLE.			
VIB82012020700001	CESSNA		CONTROL CABLE	MISROUTED	
2/7/2012	560CESSNA			ZONE 200	
LEFT ELEVATOR TRI OF PULLEY.	M TAB CABLE, SA	WING INTO BULKHEAD AT FS 448.	5. CABLE ROUTED IN	NCORRECTLY ON SIDE	
DXTR20120124008	CESSNA		LINE	CHAFED	
1/24/2012	560CESSNA		652640061	FUEL TRANSFER	
FUEL TRANSFER LIN	E, PN 6526400-61	, IS CHAFING THE FUSELAGE UND	DER PANEL 161AB.		
DXTR2012009	CESSNA	PWA	INLET	CRACKED	
1/31/2012	560CESSNA	JT15D1	65528001	ZONE 400	
LT ENGINE INLET FAN FLANGE CRACKED APPROX AT 9 OCLOCK POSITION, CRACK IS 4" IN LENGTH.					
LT ENGINE INLET FA	N FLANGE CRAC	KED APPROX AT 9 OCLOCK POSIT	ION, CRACK IS 4" IN I	LENGTH.	
LT ENGINE INLET FA DXTR20120206001	N FLANGE CRACE CESSNA	KED APPROX AT 9 OCLOCK POSIT	RIB	CRACKED	
		KED APPROX AT 9 OCLOCK POSIT			
DXTR20120206001 2/6/2012	CESSNA 560XL	KED APPROX AT 9 OCLOCK POSIT	RIB	CRACKED	
DXTR20120206001 2/6/2012	CESSNA 560XL		RIB	CRACKED	
DXTR20120206001 2/6/2012 RT WING T/E RIB CR	CESSNA 560XL ACKED AT WS 16		RIB 652206544	CRACKED RT WING	
DXTR20120206001 2/6/2012 RT WING T/E RIB CRA DXTR20120125008 1/25/2012	CESSNA 560XL ACKED AT WS 16 CESSNA 560XL		RIB 652206544 PIVOT ASSY 663110215	CRACKED RT WING LOOSE ZONE 300	
DXTR20120206001 2/6/2012 RT WING T/E RIB CRA DXTR20120125008 1/25/2012	CESSNA 560XL ACKED AT WS 16 CESSNA 560XL	7.07. R & R RT T/E RIB.	RIB 652206544 PIVOT ASSY 663110215	CRACKED RT WING LOOSE ZONE 300	
DXTR20120206001 2/6/2012 RT WING T/E RIB CR. DXTR20120125008 1/25/2012 AFT HORIZONTAL PI	CESSNA 560XL ACKED AT WS 16 CESSNA 560XL VOT FITTING, LOC	7.07. R & R RT T/E RIB.	RIB 652206544 PIVOT ASSY 663110215 FASTENERS AND LOG	CRACKED RT WING LOOSE ZONE 300 OSE ATTACH BOLTS.	
DXTR20120206001 2/6/2012 RT WING T/E RIB CRA DXTR20120125008 1/25/2012 AFT HORIZONTAL PI DXTR20120209001 2/9/2012	CESSNA 560XL ACKED AT WS 16 CESSNA 560XL VOT FITTING, LOC CESSNA 560XL TACH BOLTS ARE	7.07. R & R RT T/E RIB. DSE (HAND TURN) ATTACH LOCK F LOOSE AT THE VERTICAL STAB A	RIB 652206544 PIVOT ASSY 663110215 FASTENERS AND LOG BOLT	CRACKED RT WING LOOSE ZONE 300 OSE ATTACH BOLTS. LOOSE VERTICAL STAB	
DXTR20120206001 2/6/2012 RT WING T/E RIB CR. DXTR20120125008 1/25/2012 AFT HORIZONTAL PI DXTR20120209001 2/9/2012 FOUR VERTICAL ATT	CESSNA 560XL ACKED AT WS 16 CESSNA 560XL VOT FITTING, LOC CESSNA 560XL TACH BOLTS ARE	7.07. R & R RT T/E RIB. DSE (HAND TURN) ATTACH LOCK F LOOSE AT THE VERTICAL STAB A	RIB 652206544 PIVOT ASSY 663110215 FASTENERS AND LOG BOLT	CRACKED RT WING LOOSE ZONE 300 OSE ATTACH BOLTS. LOOSE VERTICAL STAB	
DXTR20120206001 2/6/2012 RT WING T/E RIB CRA DXTR20120125008 1/25/2012 AFT HORIZONTAL PI DXTR20120209001 2/9/2012 FOUR VERTICAL ATT WL161.5. RETORQUE	CESSNA 560XL ACKED AT WS 16 CESSNA 560XL VOT FITTING, LOC CESSNA 560XL TACH BOLTS ARE	7.07. R & R RT T/E RIB. DSE (HAND TURN) ATTACH LOCK F LOOSE AT THE VERTICAL STAB A	RIB 652206544 PIVOT ASSY 663110215 FASTENERS AND LOG BOLT FT SPAR ASSY TO W	CRACKED RT WING LOOSE ZONE 300 OSE ATTACH BOLTS. LOOSE VERTICAL STAB VEB/RIB ASSY FS 588 -	
DXTR20120206001 2/6/2012 RT WING T/E RIB CR. DXTR20120125008 1/25/2012 AFT HORIZONTAL PI DXTR20120209001 2/9/2012 FOUR VERTICAL ATT WL161.5. RETORQUE DXTR2012004	CESSNA 560XL ACKED AT WS 16 CESSNA 560XL VOT FITTING, LOC CESSNA 560XL TACH BOLTS ARE ED TO STANDARD CESSNA 560XL	7.07. R & R RT T/E RIB. DSE (HAND TURN) ATTACH LOCK F LOOSE AT THE VERTICAL STAB A PRACTICES.	RIB 652206544 PIVOT ASSY 663110215 FASTENERS AND LOG BOLT FT SPAR ASSY TO W	CRACKED RT WING LOOSE ZONE 300 OSE ATTACH BOLTS. LOOSE VERTICAL STAB VEB/RIB ASSY FS 588 - CRACKED	
DXTR20120206001 2/6/2012 RT WING T/E RIB CR. DXTR20120125008 1/25/2012 AFT HORIZONTAL PI DXTR20120209001 2/9/2012 FOUR VERTICAL ATT WL161.5. RETORQUE DXTR2012004 1/19/2012	CESSNA 560XL ACKED AT WS 16 CESSNA 560XL VOT FITTING, LOC CESSNA 560XL TACH BOLTS ARE ED TO STANDARD CESSNA 560XL	7.07. R & R RT T/E RIB. DSE (HAND TURN) ATTACH LOCK F LOOSE AT THE VERTICAL STAB A PRACTICES.	RIB 652206544 PIVOT ASSY 663110215 FASTENERS AND LOG BOLT FT SPAR ASSY TO W	CRACKED RT WING LOOSE ZONE 300 OSE ATTACH BOLTS. LOOSE VERTICAL STAB VEB/RIB ASSY FS 588 - CRACKED	
DXTR20120206001 2/6/2012 RT WING T/E RIB CR. DXTR20120125008 1/25/2012 AFT HORIZONTAL PI DXTR20120209001 2/9/2012 FOUR VERTICAL ATT WL161.5. RETORQUE DXTR2012004 1/19/2012 LEFT WING FLAPWE	CESSNA 560XL ACKED AT WS 16 CESSNA 560XL VOT FITTING, LOC CESSNA 560XL FACH BOLTS ARE ED TO STANDARD CESSNA 560XL LL T/E RIB AT WS	7.07. R & R RT T/E RIB. DSE (HAND TURN) ATTACH LOCK F LOOSE AT THE VERTICAL STAB A PRACTICES.	RIB 652206544 PIVOT ASSY 663110215 FASTENERS AND LOG BOLT FT SPAR ASSY TO W RIB	CRACKED RT WING LOOSE ZONE 300 OSE ATTACH BOLTS. LOOSE VERTICAL STAB VEB/RIB ASSY FS 588 - CRACKED LT WING	

DXTR20120119006 **CESSNA RIB** CRACKED 1/19/2012 560XL **RT WING** RIGHT WING FLAPWELL T/E RIB AT WS 143.07 IS CRACKED. DXTR20120119007 **CESSNA BRACKET** CRACKED 1/19/2012 560XL 66611542 ZONE 100 RUDDER AUTOPILOT CABLE BRACKET IS CRACKED AT AFT CANTED BULKHEAD. DXTR2011121400000 CESSNA HYDRAULIC LINE CHAFED 12/14/2011 560XL **ZONE 100** COPILOTS RT RUDDER PEDAL IS CHAFING ON LT HYDRAULIC BRAKE LINE AT FORWARD BULKHEAD. DXTR20111214401 **CESSNA** ATTACH FITTING WORN 12/14/2011 560XL HORIZONTAL STAB THE FWD AND AFT HORIZONTAL STAB ATTACH POINTS ARE WORN, ALLOWING HORIZONTAL STAB MOVEMENT BOTH RADIALLY AND UP AND DOWN. THIS MOVEMENT HAS PLAY IN THE HORIZONTAL, SEEMS TO HAVE STARTED TO LOOSEN UP ANOTHER AREA. THE LT SIDE OF THE AFT VERTICAL SPAR HAS AN AREA THAT IS GAPPING BETWEEN THE SPAR AND THAT FRAME STATION. THE GAP IS AROUND 0.002" WHEN PRESSURE IS BEING PLACED ON THE UPPER OTBD SIDE OF THE HORIZONTAL. THE GAP IS CLOSED IN THE STATIC POSITION OR WHEN PRESSURE IS APPLIED ON THE LOWER SIDE OF THE STAB. **CESSNA** 2011FA0000778 BRACKET CRACKED 12/8/2011 560XL 6661152 **ZONE 200** DURING A ROUTINE PHASE A/B INSPECTION, TECHS DISCOVERED THAT THE AUTOPILOT RUDDER CABLE BRACKET LOCATED AFT OF THE CANTED BULKHEAD HAS A 1" CRACK AT THE BASE OF THE BRACKET PASSING THROUGH THE TOP MOUNT HOLE. JEMA2012FA0000029 CESSNA PWA MOUNT DAMAGED 1/16/2012 560XL PW545A 99124802 RT ENGINE RT ENGINE AFT MOUNT ASSY FOUND TO BE DAMAGED. CENTER BOLT BENT. DEEP CHECK CUTS IN ENDS OF RUBBER INSERT MATERIAL. ATTACHING ARMS SIEZED TOGETHER AT CENTER BEARING, PN 6651602-4. PART REPLACEMENT RECOMMENDED AT SECOND ENGINE CHANGE (APPROX 10,000 HRS). CURRENT LIMITER FAILED WAIA2012FA0000030 CESSNA TE FLAPS SYSTEM 650 1/12/2012 AFTER TAKEOFF, SELECTED "FLAPS UP", FLAPS RETRACTED AS INDICATED. NOTICED "FLAP INOP" ANNUNCIATOR ILLUMINATED. FOLLOWED CHECKLIST TO RESET FLAP SYS BUT COULD NOT RESET THE FLAPS. RETURNED AND PERFORMED A ZERO FLAP LANDING. MX INSPECTED FLAP CONTROLLER BITE INDICATIONS, CONTROLLER INDICATED BITE NR 5. IAW THE MM, MAIN J-BOX WAS OPENED AND FOUND THE FL23 CURRENT LIMITER TO BE BLOWN. INSTALLED A NEW CURRENT LIMITER AND PERFORMED OPS CHECK OF THE FLAP SYS. OPS CHECKED GOOD, ACFT WAS RELEASED BACK TO SERVICE. CF4R20120213001 **CESSNA FITTING** CUT 2/13/2012 A185F AN8334D **FUEL LINE** IN PREPARING FOR A ENGINE CHANGE THE INSPECTOR WAS CHECKING ALL FITTINGS LOCATED ON THE FIREWALL. THE FUEL CONTROL, FUEL RETURN LINE BULKHEAD FITTING AN833-4D WAS NOTED TO BE LOOSE. WHEN THE FITTING WAS REMOVED IT WAS DISCOVERED TO BE CUT ALMOST IN HALF, DUE TO THE STAINLESS MATERIAL OF THE FIREWALL CUTTING INTO THE FITTING WHILE THE FITTING WAS LOOSE. 2012FA0000099 **CESSNA PWA BEARING** CRACKED STC500CESSNA JT15D4 2/7/2012 ADL16 **ZONE 600**

GEAR WAS REMOVED FOR OTHER MX AND RT FORWARD MAIN LANDING TRUNNION PIN WING FITTING BEARING

ASSY WAS REMOVED DUE TO PHENOLIC LINING DAMAGE. TECH WAS INSPECTING BEARING AND FOUND BEARING CRACKED.

2011FA0000797	CESSNA	CESSNA	HOUSING	WORN
12/8/2011	T210M		171400033	COCKPIT SEAT
COPILOT SEAT ROL	LER HOUSING	TANG LENGTH WORN BELOV	V LIMIT OF AD 2011-10-09.	
2012FA0000068	CESSNA	CONT	GOVERNOR	DISINTEGRATED
1/25/2012	TU206G	TSIO520M	C290D4KT2	
PROP GOVERNOR	BEARING IN TH	E IDLER PART OF THE OIL PU	IMP DISINTEGRATED.	
2012FA0000024	CESSNA	CONT	HOUSING	GALLED
1/2/2012	U206F	IO520F		FUEL PUMP

ENGINE DIED ON INITIAL RUN-UP DUE TO FUEL STARVATION. FOUND GALLING BETWEEN FUEL PUMP DRIVE GEAR AND HOUSING. CAUSE UNDETERMINED. SENT BOTH PARTS OUT FOR O/H.

<u>ODAR201112220011</u> CIRRUS CABLE BINDING
12/12/2011 SR20 RT MLG BRAKE

SHORTLY AFTER THE ANNUAL INSP, THE OWNER REPORTED THAT OCCASIONALLY AFTER APPLYING RUDDER DURING TAXI, THE RT WHEEL BRAKE WOULD BE APPLIED, CAUSING THE ACFT TO STEER IN THAT DIRECTION BECAUSE OF THE CASTER TYPE NOSE WHEEL. UPON INVESTIGATION BY MX, IT WAS DISCOVERED THAT THE PARK BRAKE CABLE WAS ROUTED NEAR THE RUDDER PEDAL RETURN SPRING. WHEN RUDDDER WAS APPLIED, THE SPRING STRETCHED, ALLOWING A GAP FOR THE PARK BRAKE CABLE TO FALL INTO. WHEN THE RUDDER WAS RELEASED, THE SPRING CAPTURED THE PARK BRAKE CABLE WHICH ESSENTIALLY APPLIED THE BRAKE TO THAT SIDE. THERE WAS NO INCIDENT OR ACCIDENT INVOLVED WITH THIS EVENT. MX REPORTED THAT THIS CABLE, SPRING AND PANEL HAD NOT BEEN DISTURBED DURING THE ANNUAL INSPECTION.

<u>2012FA0000033</u> CIRRUS CONT EXHAUST VALVE BINDING 11/8/2011 SR20 IO360ES 655866 NR 2

DURING A ROUTINE PRE-INSPECTION ENGINE RUN-UP, THE MX TECH DISCOVERED THAT THE ENGINE WAS RUNNING ROUGH AND WAS UNABLE TO REACH STATIC RPM. THE TECH ALSO NOTED LOW EGT ON CYLINDER NR 2. THE CYLINDER NR 2 EXHAUST VALVE ROCKER COVER AND EXHAUST VALVE SPRING WERE REMOVED. AT WHICH POINT IT WAS DISCOVERED THAT THE NR 2 EXHAUST VALVE WAS SEIZED AND COULD NOT BE MOVED BY HAND. A BORESCOPE INSP WAS PERFORMED ON CYLINDER NR 2 AND NO EVIDENCE OF CONTACT BETWEEN THE EXHAUST VALVE AND PISTON WAS FOUND. AFTER PERFORMING A BORESCOPE INSP ON THE REMAINING CYLINDERS, IT WAS DISCOVERED THAT THE EDGE OF THE CYLINDER NR 6 EXHAUST VALVE HAD CONTACTED THE TOP OF THE PISTON, LEAVING A SHALLOW EYEBROW SHAPED MARK. NO EVIDENCE OF CONTACT BETWEEN THE EXHAUST VALVE AND PISTON WAS FOUND ON THE REMAINING CYLINDERS. THE CYLINDER NR 6 EXHAUST VALVE ROCKER COVER AND EXHAUST VALVE SPRING WERE REMOVED AND IT WAS DISCOVERED THAT THE NR 6 EXHAUST VALVE WAS BINDING AND COULD NOT BE MOVED FREELY BY HAND. THE EXHAUST VALVE ROCKER COVERS AND EXHAUST VALVE SPRINGS WERE REMOVED FROM THE REMAINING CYLINDERS AND ALL OF THE REMAINING EXHAUST VALVES MOVED FREELY. IAW TECH SUPPORT INSTRUCTIONS, CYLINDER NR 2 (S/N: AC10BA845) AND NR 6 (S/N: AC10BA893) WERE REMOVED AND SENT TO AUTHORIZED SERVICE CENTER FOR WARRANTY REPAIR. SERVICEABLE REPAIRED REPLACEMENT CYLINDER ASSEMBLIES AND NEW CYLINDER NR 6 PISTON WERE SUBSEQUENTLY INSTALLED.

<u>2012FA0000036</u> CIRRUS CONT CONT EXHAUST VALVE BINDING 9/29/2011 SR20 IO360ES 655866

DURING A ROUTINE PRE-INSPECTION ENGINE RUN-UP, THE MX TECH DISCOVERED THAT THE ENGINE WAS RUNNING ROUGH AND WAS UNABLE TO REACH STATIC RPM. THE TECH ALSO NOTED LOW EGT ON CYLINDERS NR 1 AND NR 5. THE CYLINDER NR 1 AND NR 5 EXHAUST VALVE ROCKER COVERS AND EXHAUST VALVE SPRINGS WERE REMOVED, AT WHICH POINT IT WAS DISCOVERED THAT THE NR 1 AND NR 5 EXHAUST VALVES WERE BINDING AND COULD NOT BE MOVED FREELY BY HAND. A BORESCOPE INSP WAS PERFORMED ON CYLINDERS NR 1 AND NR 5 AND NO EVIDENCE OF CONTACT BETWEEN THE EXHAUST VALVE AND PISTON WAS FOUND. A BORESCOPE INSP WAS THEN PERFORMED ON THE REMAINING CYLINDERS AND NO FURTHER EVIDENCE OF

CONTACT BETWEEN THE EXHAUST VALVES AND PISTONS WERE FOUND. THE EXHAUST VALVE ROCKER COVERS AND EXHAUST VALVE SPRINGS WERE REMOVED FROM THE REMAINING CYLINDERS AND ALL OF THE REMAINING EXHAUST VALVES MOVED FREELY. IAW TECH SUPPORT INSTRUCTIONS, CYLINDER NR 1 (S/N: AC10EA128) AND NR 5 (S/N: AC10EA124) WERE REMOVED, SENT TO AN AUTHORIZED SERVICE CENTER FOR WARRANTY REPAIR, AND REINSTALLED.

<u>2012FA0000037</u> CIRRUS CONT CONT EXHAUST VALVE BINDING 10/18/2011 SR20 IO360ES 655866

DURING A ROUTINE PRE-INSPECTION ENGINE RUN-UP, THE MX TECH DISCOVERED THAT THE ENGINE WAS RUNNING ROUGH AND WAS UNABLE TO REACH STATIC RPM. THE TECH ALSO NOTED LOW EGT ON CYLINDER NR 5. THE CYLINDER NR 5 EXHAUST VALVE ROCKER COVER AND EXHAUST VALVE SPRING WERE REMOVED, AT WHICH POINT IT WAS DISCOVERED THAT THE NR 5 EXHAUST VALVE WAS BINDING AND COULD NOT BE MOVED FREELY BY HAND. AFTER PERFORMING A BORESCOPE INSPECTION ON CYLINDER NR 5, IT WAS DISCOVERED THAT THE EDGE OF THE EXHAUST VALVE HAD CONTACTED THE TOP OF THE PISTON, LEAVING A SHALLOW EYEBROW SHAPED MARK. A BORESCOPE INSP WAS THEN PERFORMED ON THE REMAINING CYLINDERS AND NO FURTHER EVIDENCE OF CONTACT BETWEEN THE EXHAUST VALVES AND PISTONS WERE FOUND. AFTER REMOVING THE EXHAUST VALVE ROCKER COVERS AND EXHAUST VALVE SPRINGS FROM THE REMAINING CYLINDERS, IT WAS DISCOVERED THAT THE CYLINDER NR 3 EXHAUST VALVE WAS ALSO BINDING AND COULD NOT BE MOVED FREELY BY HAND. ALL OF THE REMAINING EXHAUST VALVES COULD BE MOVED FREELY BY HAND. IAW TECHNICAL SUPPORT INSTRUCTIONS, CYLINDER NR 3 (S/N: AC10EA236) AND NR 5 (S/N: AC10EA503) WERE REMOVED AND SENT TO AN AUTHORIZED SERVICE CENTER FOR WARRANTY REPAIR. NEW REPLACEMENT CYLINDER ASSEMBLIES AND NEW CYLINDER NR 5 PISTON WERE SUBSEQUENTLY INSTALLED.

<u>2012FA0000038</u> CIRRUS CONT CONT EXHAUST VALVE BINDING 10/31/2011 SR20 IO360ES 655866

DURING A ROUTINE PRE-INSPECTION ENGINE RUN-UP, THE MX TECH DISCOVERED THAT THE ENGINE WAS RUNNING ROUGH AND WAS UNABLE TO REACH STATIC RPM. THE TECH ALSO NOTED LOW EGT ON CYLINDERS NR 3, NR 4, AND NR 5. THE CYLINDER NR 3, NR 4, AND NR 5 EXHAUST VALVE ROCKER COVERS AND EXHAUST VALVE SPRINGS WERE REMOVED, AT WHICH POINT IT WAS DISCOVERED THAT THE NR 3, NR 4, AND NR 5 EXHAUST VALVES WERE BINDING AND COULD NOT BE MOVED FREELY BY HAND. AFTER PERFORMING A BORESCOPE INSP ON CYLINDERS NR 3, NR 4, AND NR 5, IT WAS DISCOVERED THAT THE EDGE OF EACH EXHAUST VALVE HAD CONTACTED THE TOP OF EACH PISTON, LEAVING A SHALLOW EYEBROW SHAPED MARK. A BORESCOPE INSP WAS THEN PERFORMED ON THE REMAINING CYLINDERS AND NO FURTHER EVIDENCE OF CONTACT BETWEEN THE EXHAUST VALVES AND PISTONS WERE FOUND. THE EXHAUST VALVE ROCKER COVERS AND EXHAUST VALVE SPRINGS WERE REMOVED FROM THE REMAINING CYLINDERS AND ALL OF THE REMAINING EXHAUST VALVES MOVED FREELY. IAW TECH SUPPORT INSTRUCTIONS, CYLINDER NR 3 (S/N: AC10EA225), NR 4 (S/N: AC10EA143), AND NR 5 (S/N: AC10EA161) WERE REMOVED, SENT TO AN AUTHORIZED SERVICE CENTER FOR WARRANTY REPAIR, AND REINSTALLED WITH NEW PISTONS.

<u>2012FA0000039</u> CIRRUS CONT CONT EXHAUST VALVE BINDING 11/30/2011 SR20 IO360ES 655866

AFTER NOTICING THAT THE ENGINE RAN ROUGH DURING TAXI PRIOR TO TAKEOFF, THE PILOT RETURNED TO THE RAMP AND REPORTED THE PROBLEM TO A MX TECH. THE MX TECH VERIFIED THAT THE ENGINE WAS RUNNING ROUGH AND WAS UNABLE TO MAKE TAKEOFF POWER. THE TECH ALSO NOTED LOW EGT ON CYLINDER NR 4. THE CYLINDER NR 4 EXHAUST VALVE ROCKER COVER AND EXHAUST VALVE SPRING WERE REMOVED, AT WHICH POINT IT WAS DISCOVERED THAT THE NR 4 EXHAUST VALVE WAS BINDING AND COULD NOT BE MOVED FREELY BY HAND. AFTER PERFORMING A BORESCOPE INSP ON CYLINDER NR 4, IT WAS DISCOVERED THAT THE EDGE OF THE EXHAUST VALVE HAD CONTACTED THE TOP OF THE PISTON, LEAVING A SHALLOW EYEBROW SHAPED MARK. THE EXHAUST VALVE ROCKER COVERS AND EXHAUST VALVE SPRINGS WERE REMOVED FROM THE REMAINING CYLINDERS AND IT WAS DISCOVERED THAT THE EXHAUST VALVES ON CYLINDERS NR 1, NR 3, AND NR 5 WERE ALSO BINDING. AFTER PERFORMING A BORESCOPE INSPECTION ON THE REMAINING CYLINDERS, IT WAS DISCOVERED THAT THE EDGE OF THE CYLINDER NR 3 EXHAUST VALVE HAD ALSO MADE CONTACT WITH THE PISTON, LEAVING A SHALLOW EYEBROW SHAPED MARK. NO EVIDENCE OF EXHAUST VALVE CONTACT WAS FOUND ON THE REMAINING CYLINDERS. IAW TECH SUPPORT INSTRUCTIONS. CYLINDER NR 1 (S/N: AC10FA220), NR 3 (S/N: AC10FA240), NR 4 (S/N: AC10FA217), AND NR 5 (S/N: AC10FA446) WERE REMOVED AND SENT TO AN AUTHORIZED SERVICE CENTER FOR WARRANTY REPAIR. NEW REPLACEMENT CYLINDER ASSEMBLIES AND NEW CYLINDER NR 3 AND NR 4 PISTONS WERE SUBSEQUENTLY INSTALLED.

2012FA0000072 CIRRUS TUBE FAILED

12/22/2011 SR22 G156006 MAIN TIRE

MAIN TIRE BLOWOUT ON RUNWAY DURING A TURN. MX REPLACED THE TIRE AND TUBE STATED, REPLACED A FEW OF THESE TYPES (BUTYL RUBBER) TUBES IN THE PAST DUE TO HOLES IN VARIOUS PLACES FOR NO APPARENT REASONS.

2012FA0000108 CIRRUS ADAPTER FAILED

1/30/2012 SR22 642083A2 STARTER

REMOVED STARTER ADAPTER, INSTALLED REBUILT STARTER ADAPTER, REBUILT STARTER ADAPTER FAILED ON INITIAL STARTUP. REMOVED STARTER ADAPTER. PERFORMED 500 HR INSPECTION ON MAGNETOS, FINDING OIL SEAL FROM MAGNETO HAD PREVENTED THE IMPULSE COUPLING PAWLS FROM ENGAGING THE IMPULSE COUPLING. INSTALLED REPLACEMENT REBUILT STARTER ADAPTER, OPS CHECK PERFORMED WITH NO DISCREPANCIES NOTED.

LC1R2011120700001 CIRRUS AIR FILTER SPLIT

12/7/2011 SR22 BA24 ENGINE

DURING AN ANNUAL INSPECTION, THE AIR FILTER WAS DISCOVERED TO BE SPLIT OPEN AT THE SEAM. THIS SAME CONDITION HAS BEEN FOUND ON SEVERAL OTHER AIR FILTERS OF THE SAME PN. WHILE NOT AN IMMEDIATE SAFTEY OF FLIGHT ISSUE, THIS CONDITION ALLOWS UNFILTERED AIR TO ENTER THE INDUCTION SYSTEM WHICH IF ALLOWED TO CONTINUE FOR ANY GREAT LENGTH OF TIME CAN CAUSE PREMATURE WEAR AND POSSIBLE EARLY FAILURE OF THE ENGINE.

2012FA0000106 CIRRUS CONT WASHER LOOSE

1/31/2012 SR22 IO550* MAG OIL SEAL

DURING A 500 HR INSPECTION, IT WAS DISCOVERED THAT THE OIL SEAL WASHER IN A MAGNETO HAD MOVED OUT ON THE SHAFT AND WAS HOLDING THE IMPULSE COUPLING PAWLS IN RUNNING POSITION, CAUSING ADVANCED TIMING FOR START. AT 15 HRS AFTER 500 HR INSPECTION, CONDITION OCCURRED AGAIN. MAGNETO REPAIR SHOP SAYS THIS IS THE 8TH OCCURRENCE OF THIS CONDITION THEY HAVE SEEN IN THE LAST 12 MONTHS.

2012FA0000100 CIRRUS CONT BENDIX DISTRIBUTOR GEAR FAILED

1/24/2012 SR22 IO550N RT MAGNETO

CREW REPORTED SEVERE ENGINE VIBRATION DURING TAKEOFF. QUICK INSPECTION ON GROUND REVEALED THAT LT WAS INOPERATIVE. OPERATOR DECIDED TO REPLACE MAGNETO WITH A BRAND NEW ONE. DURING THE DISASSEMBLING OF THE MAGNETO THE DISTRIBUTOR GEAR'S FAILURE WERE FOUND. IT MIGHT CAUSE AN ENGINE IN-FLIGHT SHUTDOWN, WHICH COULD LEAD TO A LOSS OF CONTROL. MAGNETO DEFECT. MAGNETO REPLACED.

2012FA0000101 CIRRUS CONT DISTRIBUTOR GEAR FAILED

1/23/2012 SR22 IO550N MAGNETO

CREW REPORTED SEVERE ENGINE VIBRATION AND EGT RAISED AT THE SAME TIME IN CYLINDER NR 3. QUICK INSPECTION ON GROUND REVEALED THAT RT MAGNETO IS INOPERATIVE. OPERATOR DECIDED TO REPLACE MAGNETO WITH A BRAND NEW ONE. AFTER REPLACEMENT WAS ACCOMPLISHED, PERFORMED A CYLINDERS DIFFERENTIAL COMPRESSION CHECK, & SPARK PLUG CHECK. DURING THIS ADDITIONAL INVESTIGATION, FOUND CYLINDER NR 3 UPPER SPARK PLUG'S CERAMIC WAS BROKEN & IT WAS REPLACED. DURING TEST-FLIGHT, CLIMBED TO FL180, EVERYTHING REPORTED NORMAL. DURING THE DISASSEMBLY OF THE MAGNETO, FOUND DISTRIBUTOR GEAR FAILED. MAGNETO REPLACED, SPARK PLUGS REPLACED TO MASSIVE TYPE.

 FCPR20121214002
 CIRRUS
 CONT
 HOUSING
 LEAKING

 12/14/2011
 SR22
 IO550N
 ETISR22212
 FUEL PUMP

WHILE PERFORMING AN OIL CHANGE, FOUND ENGINE DRIVEN FUEL PUMP LEAKING FUEL AT ANEROID HOUSING FLANGE. REMOVED FUEL PUMP AND SENT TO MFG FOR REPAIRS.

FCPR20121223003	CIRRUS	CONT	HOUSING	LEAKING
12/23/2011	SR22	IO550N	ETISR22212	FUEL PUMP
		CTION, FOUND ENGINE DRIVEN FU UMP AND SENT TO MFG FOR REP		FUEL AT ANDROID
2012FA0000076	CNDAIR		HANDLE	CRACKED
1/10/2012	CL6002B16		600318873	MAIN CABIN DOOR
EXTENDING DOWN T	HE HANDLE, ALL	ING HANDLE IS CRACKED AT THE THE WAY THROUGH. SUSPECT CASTRIMMED OUT. SUGGEST OEM R	AUSE IS DUE TO FLE	XING OF HANDLE AT
2012FA0000088	CNDAIR		LINE	CHAFED
2/2/2012	CL6002B16		604752383	HYDRAULIC SYS
FOLLOWED, UNSCHE	EDULED LANDING ORY COMPARTM	OW FLUID INDICATION, LOW PRES WITHOUT INCIDENT. MX EVALUATENT CHAFED THROUGH BY SUPPO	TION FOUND NR1 HY	D SYSTEM PRESSURE
JR2R2011122900690	CNDAIR		FLOORBEAM	CORRODED
12/29/2011	CL6002C10		CC67033292135	ZONE 100
FLOOR PANEL SUPP SRM 51-42-06 AND 51		HE FWD SIDE OF THE 280 CROSSE	BEAM CORRODED. R	REPLACED ANGLE IAW
JR2R2011122900691	CNDAIR		FLOORBEAM	CORRODED
12/29/2011	CL6002C10		CC670341757	ZONE 100
LEFT SIDE OF THE F	S 280 CROSSBEA	M CORRODED. REPLACED CROSS	BEAM IAW RO CRJ7	-53-0490.
JR2R2011122900693	CNDAIR		STEP	CRACKED
12/29/2011	CL6002C10			PAX DOOR
PAX DOOR TOP STEE	P CRACKED. REP.	AIRED IAW RO CRJ7-52-0265.		
JR2R2011122900694	CNDAIR		SKIN	CHAFED
12/29/2011	CL6002C10		CC670392511	ZONE 100
AFT FUSELAGE CHAI IS670538200021IAW I		INE AND FS 970. REMOVED CHAFE	E AND COMPLETED N	MOD SUM
JR2R2011123100695	CNDAIR		STRINGER	CORRODED
12/31/2011	CL6002D24			ZONE 100
STRINGER 23R CORE	RODED FROM FS	280 TO 333. REPLACED STRINGER	IAW SRM 51-42-06 A	AND 51-41- 21.
JR2R2011123100696	CNDAIR		STRINGER	CORRODED
12/31/2011	CL6002D24		SH670312102	ZONE 100
STRINGER 22R CORE	RODED FROM FS	280 TO 333. REPLACED STRINGER	IAW SRM 51-42-06 A	AND 51-41- 21.
JR2R2011123100697	CNDAIR		STRINGER	CORRODED
12/31/2011	CL6002D24		SH670313831	ZONE 100
STRINGER 21R CORE	RODED FROM FS	280 TO 333. REPLACED STRINGER	IAW SRM 51-42-06 A	AND 51-41-21.
JR2R2011123100698	CNDAIR		STRINGER	CORRODED

12/31/2011 CL6002D24

SH670313801 ZONE 100

STRINGER 23R CORF	RODED FROM FS 349 TO 379. REPLACED STRINGER	R IAW SRM 51-42-06 /	AND 51-41- 21.
JR2R2011123100699	CNDAIR	STRINGER	CORRODED
12/31/2011	CL6002D24	SH670313801	ZONE 100
STRINGER 18R CORF	RODED FROM FS 280 TO 310. REPLACED STRINGER	R IAW SRM 51-42-06 /	AND 51-41- 21.
JR2R2011123100700	CNDAIR	STRINGER	CORRODED
12/31/2011	CL6002D24	SH670313801	ZONE 100
STRINGER 19R CORF	RODED FROM FS 295 TO 310. REPLACED STRINGER	R IAW SRM 51-42-06 /	AND 51-41- 21.
JR2R2011123100701	CNDAIR	STRINGER	CORRODED
12/31/2011	CL6002D24	SH670312081	ZONE 100
STRINGER 20R CORF	RODED FROM FS 280 TO 295. REPLACED STRINGER	R IAW SRM 51-42-06	AND 51-41- 21.
JR2R2011123100702	CNDAIR	STRINGER	CORRODED
12/31/2011	CL6002D24	SH670316361	ZONE 100
STRINGER 21R CORF	RODED FROM FS 280 TO 333. REPLACED STRINGER	R IAW SRM 51-42-06	AND 51-41- 21.
JR2R2011122100654	CNDAIR	FLOORBEAM	CORRODED
12/21/2011	CL6002D24	CC670341757	ZONE 100
LEFT SIDE OF 280 FL IAW RO CRJ 9-53-088	OORBEAM CORRODED NEAR THE INBD DRIP TRAY 9.	. REPLACED LT SIDE	OF 280 FLOORBEAM
JR2R2011122100655	CNDAIR	FLOORBEAM	CORRODED
12/21/2011	CL6002D24	CC670341757	ZONE 100
RIGHT SIDE OF 280 F	FLOORBEAM CORRODED. REPLACED RT SIDE OF 28	80 FLOORBEAM IAW	RO CRJ9-53-0890.
JR2R2011122100653	CNDAIR	SKIN	CORRODED
12/21/2011	CL6002D24	SH69037142	ZONE 100
CENTER FUSELAGE	SKIN CHAFED AT FS 920. BLENDED CHAFE TO .030	WITH IN LIMITS IAW	RO CRJ9-53-0897.
JR2R2011122200656	CNDAIR	FITTING	CHAFED
12/22/2011	CL6002D24	AV67023120	ZONE 300
HORIZ STAB LT AND 55-0152.	RT ANTI-ROTATION FITTINGS DAMAGED. TEMP REI	PAIRED LT AND RT F	FITTINGS IAW RO CRJ9-
JR2R2011122200657	CNDAIR	SEAT TRACK	CORRODED
12/22/2011	CL6002D24	SH690334041	ZONE 100
RIGHT FLOOR SEAT	TRACK STICK NR 3 CORRODED OUT OD LIMITS. RE	PLACED SEAT TRAC	CK IAW MM 53-00-49.
JR2R2011122200658	CNDAIR	SEAT TRACK	CORRODED
12/22/2011	CL6002D24	SH690334041	ZONE 100
RIGHT FLOOR SEAT	TRACK STICK NR 1 CORRODED OUT OD LIMITS. RE	PLACED SEAT TRAC	CK IAW MM 53-00-50.
JR2R2011122200659	CNDAIR	STRINGER	CORRODED
12/22/2011	CL6002D24	SH670322333	ZONE 100
STRINGER 26R CORF	RODED BETWEEN FS 280 TO 333. REPLACED STRIN	IGER IAW SRM 51-42	-06 AND 51-42-21.
JR2R2011122200660	CNDAIR	STRINGER	CORRODED
12/22/2011	CL6002D24	SH670313724	ZONE 100

ID2D2044422200664	CNDAIR	STRINGER SPLICE	CORRODED
JR2R2011122200661 12/22/2011	CL6002D24	SH670324293	ZONE 100
	SR CORRODED AT FS 333. REPLACED STRINGER SF		
JR2R2011122200662	CNDAIR	FLOORBEAM	CORRODED
12/22/2011	CL6002D24	CC67033292135	ZONE 100
42-06 AND 51-42-10.	R LANDING AT 280 FLOORBEAM CORRODED. REPLA	CED FLOORBEAM LA	ANDING IAW SKIVI 51-
JR2R2011122300663	CNDAIR	STRINGER	CORRODED
12/23/2011	CL6002D24	SH670316341	ZONE 100
STRINGER 26L CORR AND 51-42-21.	ODED BEWEEN FS 319 AND 333. REPLACED STRING	GER FROM 280 TO 33	33 IAW SRM 51-42-06
JR2R2011122300664	CNDAIR	STRINGER	CORRODED
12/23/2011	CL6002D24	SH670316341	ZONE 100
STRINGER 25L CORR AND 51-42-21.	ODED BEWEEN FS 319 AND 333. REPLACED STRING	GER FROM 280 TO 33	33 IAW SRM 51-42-06
JR2R2011122300665	CNDAIR	BULKHEAD WEB	CORRODED
12/23/2011	CL6002D24	CC670341706	ZONE 100
FS 280 LOWER RT BU	JLKHEAD CORRODED. REPLACED WEB IAW SRM 51	-42-06, 51-42-10, AND	O 51-42-21.
JR2R2011122300666	CNDAIR	BULKHEAD WEB	CORRODED
12/23/2011	CL6002D24	CC670341703	ZONE 100
FS 280 LOWER LT BU	ILKHEAD CORRODED. REPLACED WEB IAW SRM 51-	-42-06, 51-42-10, AND	51-42-21.
			-
JR2R2011122300667	CNDAIR	SKIN	CORRODED
JR2R2011122300667 12/23/2011	CNDAIR CL6002D24	SKIN SH690313513	CORRODED ZONE 100
12/23/2011		SH690313513	ZONE 100
12/23/2011	CL6002D24	SH690313513	ZONE 100
12/23/2011 LIGHTNING STRIKE D	CL6002D24 DAMAGE NEXT TO POTABLE WATER SERVICE DOOR	SH690313513 R. REPAIRED IAW SR	ZONE 100 M 53-00-00.
12/23/2011 LIGHTNING STRIKE D JR2R2011122300668 12/23/2011	CL6002D24 DAMAGE NEXT TO POTABLE WATER SERVICE DOOR CNDAIR	SH690313513 R. REPAIRED IAW SR SKIN SH690313513	ZONE 100 M 53-00-00. CORRODED ZONE 100
12/23/2011 LIGHTNING STRIKE D JR2R2011122300668 12/23/2011 LIGHTNING STRIKE D	CL6002D24 DAMAGE NEXT TO POTABLE WATER SERVICE DOOR CNDAIR CL6002D24 DAMAGE AT LWR FWD CORNER OF FORWARD TOILE	SH690313513 R. REPAIRED IAW SR SKIN SH690313513	ZONE 100 M 53-00-00. CORRODED ZONE 100
12/23/2011 LIGHTNING STRIKE D JR2R2011122300668 12/23/2011 LIGHTNING STRIKE D 00-00.	CL6002D24 DAMAGE NEXT TO POTABLE WATER SERVICE DOOR CNDAIR CL6002D24 DAMAGE AT LWR FWD CORNER OF FORWARD TOILE	SH690313513 R. REPAIRED IAW SR SKIN SH690313513 ET SERVICE DOOR. F	ZONE 100 M 53-00-00. CORRODED ZONE 100 REPAIRED IAW SRM 53-
12/23/2011 LIGHTNING STRIKE D JR2R2011122300668 12/23/2011 LIGHTNING STRIKE D 00-00. JR2R2011122300669 12/23/2011	CL6002D24 DAMAGE NEXT TO POTABLE WATER SERVICE DOOR CNDAIR CL6002D24 DAMAGE AT LWR FWD CORNER OF FORWARD TOILE CNDAIR	SH690313513 R. REPAIRED IAW SRI SKIN SH690313513 ET SERVICE DOOR. F SKIN SH670331061	ZONE 100 M 53-00-00. CORRODED ZONE 100 REPAIRED IAW SRM 53- DAMAGED ZONE 100
12/23/2011 LIGHTNING STRIKE D JR2R2011122300668 12/23/2011 LIGHTNING STRIKE D 00-00. JR2R2011122300669 12/23/2011	CL6002D24 DAMAGE NEXT TO POTABLE WATER SERVICE DOOR CNDAIR CL6002D24 DAMAGE AT LWR FWD CORNER OF FORWARD TOILE CNDAIR CL6002D24 DAMAGE AT LT SIDE OF NOSE RADOME FS 202. REP	SH690313513 R. REPAIRED IAW SRI SKIN SH690313513 ET SERVICE DOOR. F SKIN SH670331061	ZONE 100 M 53-00-00. CORRODED ZONE 100 REPAIRED IAW SRM 53- DAMAGED ZONE 100
12/23/2011 LIGHTNING STRIKE D JR2R2011122300668 12/23/2011 LIGHTNING STRIKE D 00-00. JR2R2011122300669 12/23/2011 LIGHTNING STRIKE D	CL6002D24 DAMAGE NEXT TO POTABLE WATER SERVICE DOOR CNDAIR CL6002D24 DAMAGE AT LWR FWD CORNER OF FORWARD TOILE CNDAIR CL6002D24 DAMAGE AT LT SIDE OF NOSE RADOME FS 202. REP	SH690313513 R. REPAIRED IAW SRI SKIN SH690313513 ET SERVICE DOOR. F SKIN SH670331061 AIRED IAW SRM 53-0	ZONE 100 M 53-00-00. CORRODED ZONE 100 REPAIRED IAW SRM 53- DAMAGED ZONE 100 00-00.
12/23/2011 LIGHTNING STRIKE D JR2R2011122300668 12/23/2011 LIGHTNING STRIKE D 00-00. JR2R2011122300669 12/23/2011 LIGHTNING STRIKE D JR2R2011122300670 12/23/2011	CL6002D24 DAMAGE NEXT TO POTABLE WATER SERVICE DOOR CNDAIR CL6002D24 DAMAGE AT LWR FWD CORNER OF FORWARD TOILE CNDAIR CL6002D24 DAMAGE AT LT SIDE OF NOSE RADOME FS 202. REP	SH690313513 R. REPAIRED IAW SRI SKIN SH690313513 ET SERVICE DOOR. F SKIN SH670331061 AIRED IAW SRM 53-0 SKIN SH670331031	ZONE 100 M 53-00-00. CORRODED ZONE 100 REPAIRED IAW SRM 53- DAMAGED ZONE 100 00-00. DAMAGED ZONE 100
12/23/2011 LIGHTNING STRIKE D JR2R2011122300668 12/23/2011 LIGHTNING STRIKE D 00-00. JR2R2011122300669 12/23/2011 LIGHTNING STRIKE D JR2R2011122300670 12/23/2011	CL6002D24 DAMAGE NEXT TO POTABLE WATER SERVICE DOOR CNDAIR CL6002D24 DAMAGE AT LWR FWD CORNER OF FORWARD TOILE CNDAIR CL6002D24 DAMAGE AT LT SIDE OF NOSE RADOME FS 202. REP CNDAIR CL6002D24 DAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F	SH690313513 R. REPAIRED IAW SRI SKIN SH690313513 ET SERVICE DOOR. F SKIN SH670331061 AIRED IAW SRM 53-0 SKIN SH670331031	ZONE 100 M 53-00-00. CORRODED ZONE 100 REPAIRED IAW SRM 53- DAMAGED ZONE 100 00-00. DAMAGED ZONE 100
12/23/2011 LIGHTNING STRIKE D JR2R2011122300668 12/23/2011 LIGHTNING STRIKE D 00-00. JR2R2011122300669 12/23/2011 LIGHTNING STRIKE D JR2R2011122300670 12/23/2011 LIGHTNING STRIKE D	CL6002D24 DAMAGE NEXT TO POTABLE WATER SERVICE DOOR CNDAIR CL6002D24 DAMAGE AT LWR FWD CORNER OF FORWARD TOILE CNDAIR CL6002D24 DAMAGE AT LT SIDE OF NOSE RADOME FS 202. REP CNDAIR CL6002D24 DAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F	SH690313513 R. REPAIRED IAW SRI SKIN SH690313513 ET SERVICE DOOR. F SKIN SH670331061 AIRED IAW SRM 53-0 SKIN SH670331031 REPAIRED IAW SRM 8	ZONE 100 M 53-00-00. CORRODED ZONE 100 REPAIRED IAW SRM 53- DAMAGED ZONE 100 00-00. DAMAGED ZONE 100 53-00-00.
12/23/2011 LIGHTNING STRIKE D JR2R2011122300668 12/23/2011 LIGHTNING STRIKE D 00-00. JR2R2011122300669 12/23/2011 LIGHTNING STRIKE D JR2R2011122300670 12/23/2011 LIGHTNING STRIKE D JR2R2011122300671 12/23/2011 LIGHTNING STRIKE D JR2R2011122300671 12/23/2011	CL6002D24 DAMAGE NEXT TO POTABLE WATER SERVICE DOOR CNDAIR CL6002D24 DAMAGE AT LWR FWD CORNER OF FORWARD TOILE CNDAIR CL6002D24 DAMAGE AT LT SIDE OF NOSE RADOME FS 202. REP CNDAIR CL6002D24 DAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DERNAL CHANNEL CORRODED. REMOVED CORROSIO	SH690313513 R. REPAIRED IAW SRI SKIN SH690313513 ET SERVICE DOOR. F SKIN SH670331061 AIRED IAW SRM 53-0 SKIN SH670331031 REPAIRED IAW SRM SRM SRI CHANNEL SH670323647	ZONE 100 M 53-00-00. CORRODED ZONE 100 REPAIRED IAW SRM 53- DAMAGED ZONE 100 00-00. DAMAGED ZONE 100 53-00-00. CORRODED ZONE 100
12/23/2011 LIGHTNING STRIKE D JR2R2011122300668 12/23/2011 LIGHTNING STRIKE D 00-00. JR2R2011122300669 12/23/2011 LIGHTNING STRIKE D JR2R2011122300670 12/23/2011 LIGHTNING STRIKE D JR2R2011122300671 12/23/2011 TCAS ANTENNA INTE	CL6002D24 DAMAGE NEXT TO POTABLE WATER SERVICE DOOR CNDAIR CL6002D24 DAMAGE AT LWR FWD CORNER OF FORWARD TOILE CNDAIR CL6002D24 DAMAGE AT LT SIDE OF NOSE RADOME FS 202. REP CNDAIR CL6002D24 DAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DRAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DRAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DRAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DRAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DRAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DRAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24	SH690313513 R. REPAIRED IAW SRI SKIN SH690313513 ET SERVICE DOOR. F SKIN SH670331061 AIRED IAW SRM 53-0 SKIN SH670331031 REPAIRED IAW SRM SRM SRI CHANNEL SH670323647	ZONE 100 M 53-00-00. CORRODED ZONE 100 REPAIRED IAW SRM 53- DAMAGED ZONE 100 00-00. DAMAGED ZONE 100 53-00-00. CORRODED ZONE 100
12/23/2011 LIGHTNING STRIKE D JR2R2011122300668 12/23/2011 LIGHTNING STRIKE D 00-00. JR2R2011122300669 12/23/2011 LIGHTNING STRIKE D JR2R2011122300670 12/23/2011 LIGHTNING STRIKE D JR2R2011122300671 12/23/2011 TCAS ANTENNA INTELIMITS IAW SRM 51-2	CL6002D24 DAMAGE NEXT TO POTABLE WATER SERVICE DOOR CNDAIR CL6002D24 DAMAGE AT LWR FWD CORNER OF FORWARD TOILE CNDAIR CL6002D24 DAMAGE AT LT SIDE OF NOSE RADOME FS 202. REP CNDAIR CL6002D24 DAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DRAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DRAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DRAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DRAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DRAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24 DRAMAGE AT AFT EDGE OF RT NLG DOOR CUTOUT. F CNDAIR CL6002D24	SH690313513 R. REPAIRED IAW SRI SKIN SH690313513 ET SERVICE DOOR. F SKIN SH670331061 AIRED IAW SRM 53-0 SKIN SH670331031 REPAIRED IAW SRM SRM SRI CHANNEL SH670323647 DN REMAINING MATE	ZONE 100 M 53-00-00. CORRODED ZONE 100 REPAIRED IAW SRM 53- DAMAGED ZONE 100 D0-00. DAMAGED ZONE 100 53-00-00. CORRODED ZONE 100 ERIAL IS .048 WITH IN

LIGHTING STRIKE DAMAGE ON RIVETS BETWEEN FS 409 AND 442 BETWEEN STRINGER 22R AND 23R. REPLACED	
RIVETS IAW SRM.	

RIVETS IAW SRM.				
JR2R2011122300674	CNDAIR	SKIN	DAMAGED	
12/23/2011	CL6002D24	SH690316337	ZONE 100	
LIGHTING STRIKE DA RIVETS IAW SRM.	AMAGE ON RIVETS BETWEEN FS 312 AND 318 BETW	/EEN STRINGER 22R	AND 23R. REPLACED	
JR2R2011122300675	CNDAIR	SKIN	DAMAGED	
12/23/2011	CL6002D24	CC670381573	ZONE 100	
GALLEY SERVICE DO	OOR HAS 1 EA RIVET WITH LIGHTNING DAMAGE. RE	PLACED RIVET IAW	SRM.	
JR2R2011122700676	CNDAIR	SEAT TRACK	CORRODED	
12/27/2011	CL6002D24	SH690334071	ZONE 100	
RIGHT FLOOR SEAT	TRACK NR 2 CORRODED OUT OF LIMITS. REPLACE	D SEAT TRACK IAW A	AMM 53-00-49.	
JR2R2011122700677	CNDAIR	SEAT TRACK	CORRODED	
12/27/2011	CL6002D24	SH690334071	ZONE 100	
LEFT FLOOR SEAT T	RACK NR 2 CORRODED OUT OF LIMITS. REPLACED	SEAT TRACK IAW AI	MM 53-00-49.	
JR2R2011122700678	CNDAIR	SEAT TRACK	CORRODED	
12/27/2011	CL6002D24	SH690362821	ZONE 100	
RIGHT SIDEWALL SE	AT TRACK NR 2 CORRODED OUT OF LIMITS. REPLA	CED SEAT TRACK IA	W AMM 53-00-49.	
JR2R2011122800679	CNDAIR	LUG	DAMAGED	
12/28/2011	CL6002D24	521005	NLG TORQUE LINK	
NLG LOWER TORQUE LINK ATTACHMENT LUGS DAMMAGED FROM ROTATING BUSHINGS. REMOVED DAMAGE AND REBUSHED LUGS IAW RO CRJ9-32-0099.				
		ATING BUSHINGS. R		
		TATING BUSHINGS. R		
REBUSHED LUGS IAV	N RO CRJ9-32-0099.		EMOVED DAMAGE AND	
REBUSHED LUGS IAV JR2R2011122800680 12/28/2011	W RO CRJ9-32-0099. CNDAIR	SILL	EMOVED DAMAGE AND CORRODED ZONE 100	
REBUSHED LUGS IAV JR2R2011122800680 12/28/2011	W RO CRJ9-32-0099. CNDAIR CL6002D24	SILL	EMOVED DAMAGE AND CORRODED ZONE 100	
REBUSHED LUGS IAV JR2R2011122800680 12/28/2011 AFT CARGO DOOR S	W RO CRJ9-32-0099. CNDAIR CL6002D24 ILL CORRODED BETWEEN FS 1015 AND 1031. REPA	SILL AIRED IAW RO CRJ9-5	EMOVED DAMAGE AND CORRODED ZONE 100 53-0918.	
REBUSHED LUGS IAV JR2R2011122800680 12/28/2011 AFT CARGO DOOR S JR2R2011122800681 12/28/2011	W RO CRJ9-32-0099. CNDAIR CL6002D24 ILL CORRODED BETWEEN FS 1015 AND 1031. REPA	SILL MRED IAW RO CRJ9-5 WEB MM67035340001	CORRODED ZONE 100 53-0918. CORRODED ZONE 100	
REBUSHED LUGS IAV JR2R2011122800680 12/28/2011 AFT CARGO DOOR S JR2R2011122800681 12/28/2011	W RO CRJ9-32-0099. CNDAIR CL6002D24 ILL CORRODED BETWEEN FS 1015 AND 1031. REPA CNDAIR CL6002D24 RGO BAY, WEB CORRODED AT FS 1098 -1092. REPA	SILL MRED IAW RO CRJ9-5 WEB MM67035340001	CORRODED ZONE 100 53-0918. CORRODED ZONE 100	
REBUSHED LUGS IAN JR2R2011122800680 12/28/2011 AFT CARGO DOOR S JR2R2011122800681 12/28/2011 RIGHT SIDE AFT CAR	W RO CRJ9-32-0099. CNDAIR CL6002D24 ILL CORRODED BETWEEN FS 1015 AND 1031. REPA CNDAIR CL6002D24 RGO BAY, WEB CORRODED AT FS 1098 -1092. REPA	SILL AIRED IAW RO CRJ9-5 WEB MM67035340001 IRED IAW RO CRJ9-5	CORRODED ZONE 100 53-0918. CORRODED ZONE 100 3-0922.	
REBUSHED LUGS IAN JR2R2011122800680 12/28/2011 AFT CARGO DOOR S JR2R2011122800681 12/28/2011 RIGHT SIDE AFT CAR JR2R2011122800682 12/28/2011	W RO CRJ9-32-0099. CNDAIR CL6002D24 ILL CORRODED BETWEEN FS 1015 AND 1031. REPA CNDAIR CL6002D24 RGO BAY, WEB CORRODED AT FS 1098 -1092. REPA CNDAIR	SILL MRED IAW RO CRJ9-5 WEB MM67035340001 IRED IAW RO CRJ9-5 HINGE FITTING CC67013013	CORRODED ZONE 100 53-0918. CORRODED ZONE 100 3-0922. GOUGED ZONE 500	
REBUSHED LUGS IAN JR2R2011122800680 12/28/2011 AFT CARGO DOOR S JR2R2011122800681 12/28/2011 RIGHT SIDE AFT CAR JR2R2011122800682 12/28/2011	W RO CRJ9-32-0099. CNDAIR CL6002D24 ILL CORRODED BETWEEN FS 1015 AND 1031. REPA CNDAIR CL6002D24 RGO BAY, WEB CORRODED AT FS 1098 -1092. REPA CNDAIR CL6002D24 AND OTBD INNER LUGS (HINGE FITTING) GOUGED.	SILL MRED IAW RO CRJ9-5 WEB MM67035340001 IRED IAW RO CRJ9-5 HINGE FITTING CC67013013	CORRODED ZONE 100 53-0918. CORRODED ZONE 100 3-0922. GOUGED ZONE 500 W RO CRJ9-57-0351.	
REBUSHED LUGS IAN JR2R2011122800680 12/28/2011 AFT CARGO DOOR S JR2R2011122800681 12/28/2011 RIGHT SIDE AFT CAR JR2R2011122800682 12/28/2011 LEFT AILERON INBD	W RO CRJ9-32-0099. CNDAIR CL6002D24 ILL CORRODED BETWEEN FS 1015 AND 1031. REPA CNDAIR CL6002D24 RGO BAY, WEB CORRODED AT FS 1098 -1092. REPA CNDAIR CL6002D24 AND OTBD INNER LUGS (HINGE FITTING) GOUGED.	SILL MRED IAW RO CRJ9-5 WEB MM67035340001 IRED IAW RO CRJ9-5 HINGE FITTING CC67013013 REPAIRED LUGS IAN	CORRODED ZONE 100 53-0918. CORRODED ZONE 100 3-0922. GOUGED ZONE 500 W RO CRJ9-57-0351.	
REBUSHED LUGS IAN JR2R2011122800680 12/28/2011 AFT CARGO DOOR S JR2R2011122800681 12/28/2011 RIGHT SIDE AFT CAR JR2R2011122800682 12/28/2011 LEFT AILERON INBD JR2R2011122800683 12/28/2011	CNDAIR CL6002D24 ILL CORRODED BETWEEN FS 1015 AND 1031. REPARAGO BAY, WEB CORRODED AT FS 1098 -1092. REPARAGO BAY, WEB CORRODED AT FITTING GOUGED. CNDAIR CL6002D24 RINGER 22L AND 23L BULKHEAD SUPPORT FITTING	SILL MIRED IAW RO CRJ9-5 WEB MM67035340001 IRED IAW RO CRJ9-5 HINGE FITTING CC67013013 REPAIRED LUGS IAV SUPPORT FITTING SH670340653	CORRODED ZONE 100 53-0918. CORRODED ZONE 100 3-0922. GOUGED ZONE 500 W RO CRJ9-57-0351. DAMAGED ZONE 100	
REBUSHED LUGS IAN JR2R2011122800680 12/28/2011 AFT CARGO DOOR S JR2R2011122800681 12/28/2011 RIGHT SIDE AFT CAR JR2R2011122800682 12/28/2011 LEFT AILERON INBD JR2R2011122800683 12/28/2011 FS 453 BETWEEN ST	CNDAIR CL6002D24 ILL CORRODED BETWEEN FS 1015 AND 1031. REPARAGE CNDAIR CL6002D24 RGO BAY, WEB CORRODED AT FS 1098 -1092. REPARAGE CNDAIR CL6002D24 AND OTBD INNER LUGS (HINGE FITTING) GOUGED. CNDAIR CL6002D24 RINGER 22L AND 23L BULKHEAD SUPPORT FITTING-42-20.	SILL MIRED IAW RO CRJ9-5 WEB MM67035340001 IRED IAW RO CRJ9-5 HINGE FITTING CC67013013 REPAIRED LUGS IAV SUPPORT FITTING SH670340653	CORRODED ZONE 100 53-0918. CORRODED ZONE 100 3-0922. GOUGED ZONE 500 W RO CRJ9-57-0351. DAMAGED ZONE 100	
REBUSHED LUGS IAN JR2R2011122800680 12/28/2011 AFT CARGO DOOR S JR2R2011122800681 12/28/2011 RIGHT SIDE AFT CAR JR2R2011122800682 12/28/2011 LEFT AILERON INBD JR2R2011122800683 12/28/2011 FS 453 BETWEEN ST FITTING IAW SRM 515	CNDAIR CL6002D24 ILL CORRODED BETWEEN FS 1015 AND 1031. REPARAGE CNDAIR CL6002D24 RGO BAY, WEB CORRODED AT FS 1098 -1092. REPARAGE CNDAIR CL6002D24 AND OTBD INNER LUGS (HINGE FITTING) GOUGED. CNDAIR CL6002D24 RINGER 22L AND 23L BULKHEAD SUPPORT FITTING-42-20.	SILL MIRED IAW RO CRJ9-5 WEB MM67035340001 IRED IAW RO CRJ9-5 HINGE FITTING CC67013013 REPAIRED LUGS IAV SUPPORT FITTING SH670340653 HAS DOUBLE DRILL	CORRODED ZONE 100 53-0918. CORRODED ZONE 100 3-0922. GOUGED ZONE 500 W RO CRJ9-57-0351. DAMAGED ZONE 100 LED HOLE. REPLACED	
REBUSHED LUGS IAN JR2R2011122800680 12/28/2011 AFT CARGO DOOR S JR2R2011122800681 12/28/2011 RIGHT SIDE AFT CAR JR2R2011122800682 12/28/2011 LEFT AILERON INBD JR2R2011122800683 12/28/2011 FS 453 BETWEEN ST FITTING IAW SRM 51- JR2R2011122800684 12/28/2011	CNDAIR CL6002D24 ILL CORRODED BETWEEN FS 1015 AND 1031. REPARATION OF THE PROPERTY OF THE PRO	SILL AIRED IAW RO CRJ9-5 WEB MM67035340001 IRED IAW RO CRJ9-5 HINGE FITTING CC67013013 REPAIRED LUGS IAV SUPPORT FITTING SH670340653 HAS DOUBLE DRILL SILL SH670315181	CORRODED ZONE 100 53-0918. CORRODED ZONE 100 3-0922. GOUGED ZONE 500 W RO CRJ9-57-0351. DAMAGED ZONE 100 LED HOLE. REPLACED CORRODED ZONE 100	

ZONE 100 12/28/2011 CL6002D24 MM67035401001 AFT CARGO RT FLOOR SILL CORRODED BETWEEN 985 AND 1000. REPAIRED IAW RO CRJ9-53-0919. JR2R2011122800686 CNDAIR SILL **CORRODED** 12/28/2011 CL6002D24 MM67035402001 **ZONE 100** AFT CARGO RT FLOOR SILL CORRODED BETWEEN 1000 AND 1015. REPAIRED IAW RO CRJ9-53-0917. JR2R2011122900688 CNDAIR SKIN DAMAGED 12/29/2011 CL6002D24 CC670331051 **ZONE 200** 2 EA LIGHTNING STRIKES AT LT FWD FUSELAGE FS 212 AND 236. REPAIRED IAW RO CRJ9-53-0923. JR2R2011122900689 CNDAIR INTERCOSTAL **CORRODED** 12/29/2011 SH670335985 **ZONE 100** CL6002D24 INTERCOSTAL AT STRINGER 24R CORRODED FS 645 TO 661. REPLACED INTERCOSTAL IAW SRM 51-42-06 AND 51-42-21. 2011FA0000794 **COLUMB** CONT SPARK PLUG **DEFECTIVE** 12/16/2011 LC40550FG300 TSIO550C RHB32S **CYLINDER** PILOT REPORTED HIGH MAGNETO DROP DURING PRE-RUN CHECK, NR 3 CYLINDER BOTTOM SPARK PLUG WAS FOUND TO HAVE ENTIRE CERAMIC MISSING, BORESCOPE OF CYLINDER REVEALED NO INTERNAL DAMAGE. UE5R201202020012 **DHAV** PLANETARY GEAR MISALIGNED 2/2/2012 DHC6 PT6A27 E310145502 **REDUCTION GEAR** IN THE PROCESS OF REPLACING 1ST STAGE SUN GEAR AND PLANETARY GEAR SET. A DEFECT IN THE BEARINGS INSTALLED IN ALL 3 PLANET GEARS WAS FOUND. THE BRONZE SLEEVE PORTION OF THE BEARING HAD ROTATED CAUSING MISALIGNMENT OF BEARING SCALLOPS. THE BRONZE SLEEVE SHOULD NOT MOVE DURING A TYPICAL SERVICE LIFE OF 1ST STAGE PLANET GEAR. SUN GEAR AND PLANET GEAR SET WERE BEING REPLACED TO COMPLY WITH AD2011-25-12. REF SB-804, REV B. THIS IS THE 4TH INSTANCE OF BRONZE SLEEVE ROTATION WE HAVE SEEN FOR THIS PART. UE5R201201030012 DHAV **PWA GEAR SET** MISALIGNED 1/3/2012 DHC6 PT6A27 PT6A27 E310145502Q **REDUCTION GEAR** IN THE PROCESS OF REPLACING 1ST STAGE SUNGEAR AND PLANET GEAR SET. A DEFECT IN THE BEARINGS INSTALLED IN ALL 3 PLANET GEARS WERE FOUND. THE BRONZE SLEEVE PORTION OF THE BEARING HAD ROTATED CAUSING MISALIGNMENT OF BEARING SCALLOPS. THE BRONZE SLEEVE SHOULD NOT MOVE DURING A TYPICAL SERVICE LIFE OF 1ST STAGE PLANET GEAR. SUNGEAR AND PLANET GEAR SET WERE BEING REPLACED TO COMPLY WITH AD2011-25-12. REF SB-804, REV B. THIS IS THE SECOND INSTANCE OF BRONZE SLEEVE ROTATION WE HAVE SEEN FOR THIS PART. **PWA GEAR SET** UE5R201201170001 DHAV **MISALIGNED** 1/17/2012 DHC6* PT6A27 E310145502 **REDUCTION G/B** WHILE REPLACING THE 1ST STAGE SUN GEAR AND PLANET GEAR SET TO COMPLY WITH AD 2011-25-12 AND SB-804 REV B, A DEFECT WAS FOUND IN THE BEARINGS INSTALLED IN THE REMOVED PLANET GEARS. THE BRONZE SLEEVE OF THE BEARINGS HAD ROTATED AND ALSO STARTED TO MOVE OUT OF THE GEAR. IN ONE OF THE GEAR BEARINGS, THE BRONZE SLEEVE HAD MOVED OUT APPROX .1250". THE BRONZE SLEEVE OF THE BEARING SHOULD NOT MOVE DURING A TYPICAL SERVICE LIFE OF A FIRST STAGE PLANET GEAR. LC1R2011120900002 DIAMON **PUMP** NOISY

PILOTS HAVE BEEN COMPLAINING ABOUT EXCESSIVE NOISE IN THE HEADSETS GENERATED BY THE ELECTRIC FUEL PUMP. AT 104.8 HOURS OF OPERATION PER RECOMMENDATIONS FROM TECH SUPPORT, THE GROUNDS WERE CHECKED AND CLEANED AND A NEW PUMP WAS INSTALLED. THIS SOLVED THE PROBLEM BUT 147 HOURS LATER, THE SAME PROBLEM RE-OCCURED. AGAIN AT THE RECOMMENDATION OF TECH SUPPORT, THE SAME

5100009

FUEL SYSTEM

12/9/2011

DA40

ACTIONS WERE TAKEN, GROUNDS CLEANED AND NEW PUMP INSTALLED. THIS, AS BEFORE, SOLVED THE PROBLEM BUT 60.8 HOURS LATER THE PROBLEM OCCURED AGAIN. ONCE AGAIN, THE GROUNDS WERE CLEANED AND A NEW PUMP WAS INSTALLED. THIS ONE LASTED FOR 194 HOURS AND ONCE AGAIN AT THE RECOMMENDATION OF TECH SUPPORT A OVERHAULED PUMP WAS INSTALLED AND THE GROUNDS WERE CLEANED. DURING TROUBLESHOOTING, A FERRITE BEAD WAS INSTALLED OVER THE POWER WIRE AND THE NOISE WAS ELIMINATED BUT SINCE THIS WAS NOT AN APPROVED, INSTALLATION WAS REMOVED. TECH SUPPORT WAS INFORMED OF THIS PROPOSED FIX BUT WOULD/COULD NOT APPROVE THIS. WE CAN ONLY SPECULATE THAT IN TIME, THIS HEADSET NOISE WILL RETURN.

2012FA0000094 DIAMON LINE COLLAPSED

2/3/2012 DA42 STATIC

PILOT REPORTED THAT ON TAKEOFF AIRSPEED, ALTITUDE AND ROC SECTION OF G1000 X'D OUT. TAKEOFF ABORTED WITH NO PROBLEMS. ON INVESTIGATION OF THE STATIC LINE FROM INSTRUMENT PANEL TO THE AIR DATA COMPUTER (ADC) HAD COLLAPSED. THE STATIC LINE WAS COLLAPSED DUE TO CONTACT WITH DEFROST HOSE. STATIC LINE REPLACED, SYSTEM OPERATED NORMALLY.

FOTR2118614580 DOUG VANE CORRODED

11/14/2011 DC982 RT WING TE FLAP

RIGHT WING OTBD FLAP OTBD FIXED VANE HAS SURFACE CORROSION ON VANE SUPPORT LWR SURFACE. REPAIRED ON FASI WO 21186, NR 14580.

 FOTR2118615227
 DOUG
 CUSP WEB
 CORRODED

 11/14/2011
 DC982
 BS 655-674

RIGHT MAIN DECK CUSP WEB EXFOLIATED FS 655-674. REPAIRED ON FASI WO 21186, NR 15227.

 FOTR2118614935
 DOUG
 WEB
 CHAFED

 11/14/2011
 DC982
 ZONE 200

LEFT MAIN DECK FLOOR WEB CHAFED, LBL 44-52, FS 864. REPAIRED ON FASI WO 21186, NR 14935.

FOTR2118615292 DOUG SHEAR TIE CORRODED

11/17/2011 DC982 ZONE 100

BS 1174 AT LONGERON 29R SHEAR TIE IS CORRODED ON FWD AND AFT SIDE. REPAIRED ON FASI WO21182, NR15292.

FOTR2118615084 DOUG LONGERON CORRODED

11/16/2011 DC982 ZONE 100

CORROSION AFT CARGO PIT BILGE AREA STA 1297 IN LONGERON CHANNEL AT LONGERON 28L. REPAIRED ON FASI WO21182, NR15084.

FOTR2118615372 DOUG FLOORBOARD DAMAGED

11/17/2011 DC982 ZONE 100

BS 875, RBL 44, FLOORBOARD COVERING CENTER FUEL TANK ACCESS PANEL IS DAMAGED. REPAIRED ON FASI WO21186, NR15372.

 FOTR2118614938
 DOUG
 FLOORBOARD
 CRACKED

 11/18/2011
 DC982
 ZONE 200

LEFT MAIN DECK METAL FLOORBOARD LOWER SURFACE SUPPORTS CRACKED AND DISBONDING, LBL 44-52, FS 927-1003. REPAIRED ON FASI WO21186, NR 14938.

 FOTR2118615052
 DOUG
 SHEAR TIE
 CORRODED

 11/18/2011
 DC982
 ZONE 100

CORROSION AFT CARGO PIT BILGE SHEAR TIE FWD AND AFT SIDE STA 1250, RBL 3 BETWEEN LONGERON 30 AND LONGERON 29R. REPAIRED ON FASI WO21186, NR 15052.

FOTR2118614968 DOUG CARGO TRACK DAMAGED 11/19/2011 DC982 **ZONE 100** AFT CARGO PIT RT FLOOR TRACK HAS A DOUBLE DRILLED HOLE AT STA 1195, RBL 17. REPAIRED ON FASI WO 21186, NR 14968. FOTR2118615312 **DOUG WEB** CORRODED 10/25/2011 DC982 **ZONE 200** SUPPORT WEB BENEATH FLOOR FS207. LBL-44-45 HAS LARGE AREA OF EXFOLIATION AND A HOLE WHERE IT MEETS SEAT TRACK. REPAIRED ON FASI WO 21186 MR15312. **DOUG CUSP WEB CORRODED** FOTR2118615234 11/11/2011 DC982 **ZONE 200** RIGHT MAIN DECK CUSP WEB SHOWS CORROSION ON TOP OF SURFACE FS 1287-1309, REPAIRED ON FASI WO21186. NR15234. FOTR2118615251 **DOUG CUSP WEB** CORRODED 11/11/2011 DC982 **ZONE 200** LEFT MAIN DECK CUSP WEB SHOWS MULTIPLE AREAS OF CORROSION AT LIGHTNING HOLE AND AIR GRILL ATTACH ANGLE FS 541-560. REPAIRED ON FASI WO21186. NR15251. FOTR2118614774 **DOUG** SKIN DENTED DC982 11/13/2011 **ZONE 100** DEEP CREASE IN LOWER FUSELAGE SKIN- AFT OF AFT CARGO DOOR- STA 1256 BETWEEN LONGERONS 28R-27R. REPAIRED ON FASI WO 21186, NR 14774. **DOUG** FOTR2118614934 **WEB** CORRODED 11/8/2011 DC982 **ZONE 100** LEFT MAIN DECK WEB CHAFED IN MULTIPLE LOCATIONS ON UPPER SURFACE LBL-44 TO LBL-52, FS 807-845. REPAIRED ON FASI WO 21186, NR 14934. FOTR2011112315020 DOUG **SPAR** CORRODED 11/23/2011 DC982 **ZONE 500** LT WING T/E LOWER AFT SPAR CAP CORRODED OTBD OF AILERON. REPAIRED ON FASI WO 21186, NR 15020. FOTR2011110821186 DOUG **WEB** CORRODED 11/8/2011 **ZONE 200** LEFT MAIN DECK WEB CHAFED IN MULTIPLE LOCATIONS ON UPPER SURFACE LBL 44 TO LBL 52, FS 807 - 845. REPAIRED ON FASI WO 21186 AT 14934. FOTR20111111815056 DOUG FRAME CORRODED 11/18/2011 DC982 **ZONE 100** CORROSION AND BARE METAL AFT CARGO PIT BILGE AREA ON LWR AFT SIDE OF FRAME STA 1250 BETWEEN LONGERON 28L AND 29R. REPAIRED ON FASI WO21186, NR15056. CARGO TRACK FOTR20111111814871 DOUG DAMAGED 11/18/2011 DC982 ZONE 100 AFT CARGO PIT LEFT CARGO TRACK HAS BLOWN OUT HOLES WITH NO EDGE DISTANCE DRILLED IN THE INBD

 FOTR2011111715314
 DOUG
 FLOORBOARD
 CRACKED

 11/17/2011
 DC982
 ZONE 200

SIDE OF SCALLOP LBL 15 BETWEEN STA 1098 AND 1117. REPAIRED ON FASI WO 21186, NR 14871.

FWD ENTRY MAIN DE 15314.	ECK FLOORBOARD IS CRACKED FS 157-200, L	BL 12-LBL 50. REPAIRED	ON FASI WO 21186, NR
FOTR2011111915243	DOUG	FLOORBOARD	DELAMINATED
11/19/2011	DC982		ZONE 200
MAIN CABIN FLOORE REPAIRED ON FASI V	OARD IS VERY SPONGEY AND APPEARS DEL VO 21186, NR 15243.	AMINATED, FS 1022-1041	, LBL 22 TO RBL 22.
FOTR2011111915313	DOUG	FLOORBOARD	CRACKED
11/19/2011	DC982		ZONE 200
FWD ENTRY, MAIN D 15313.	ECK FLOORBOARD IS CRACKED FS 120-148, E	BLO TO LBL24.5. REPAIRE	D ON FASI WO 21186, NF
FOTR2011111915315	DOUG	FLOORBOARD	CRACKED
11/19/2011	DC982		ZONE 200
FWD ENTRY MAIN DE NR 15315.	ECK FLOORBOARD IS CRACKED FS 120-148, R	BL48 TO RBL 62.5. REPAI	IRED ON FASI WO 21186,
FOTR2011111815077	DOUG	FRAME	CORRODED
11/18/2011	DC982		ZONE 100
CORROSION AFT CA REPAIRED ON FASI V	RGO PIT BILGE AREA LWR AND AFT SURFACE VO21186, NR 15077.	E OF FRAME 1309 FROM L	LONGERON 29L TO 28R.
FOTR2011111814760	DOUG	TORQUE BOX	CORRODED
11/18/2011	DC982		ZONE 100
	UTOUT LOWER TORQUE BOX INTERNAL CHO OF CORROSION. REPAIRED ON FASI WO 2118		S MULTIPLE TOOLING
FOTR2011112015030	DOUG	FLOORBOARD	DAMAGED
11/20/2011	DC982		ZONE 200
	LOORBOARD LOWER SURFACE SUPPORTS A ON FASI WO 21186, NR 15030.	RE CRUSHED IN MULTIPI	LE AREAS RBL 44-52, FS
FOTR2011112014801	DOUG	SUPPORT	GOUGED
11/20/2011	DC982		ZONE 100
FWD E & E DOOR CU	TOUT SUPPORT HAS A GOUGE ON FWD SIDE	. REPAIRED ON FASI WO	21186, NR14801.
FOTR2011111915351	DOUG	FLOOR PANEL	DAMAGED
11/19/2011	DC982		ZONE 200
MAIN CABIN FLOOR I 15351.	PANEL CENTER SECTION FROM FS 1338-1039	IS DAMAGED. REPAIRED	ON FASI WO 21186, NR
FOTR2011111915013	DOUG	FLOOR PANEL	DAMAGED
11/19/2011	DC982		ZONE 200
SCREW EMBEDDED NR 15013.	IN LOWER SURFACE OF CABIN FLOOR PANEL	STA656 LBL30. REPAIRE	D ON FASI WO 21186,
FOTR2011112015007	DOUG	FLOORBOARD	PUNCTURED

MAIN CABIN FLOORBOARD HAS MULTIPLE PUNCTURES AND DAMAGED INSERTS ON UPPER AND LOWER

SURFACE FS 769-807, RBL54 TO LBL 62. REPAIRED ON FASI WO 21186, NR 15007.

ZONE 200

CORRODED

SPAR

11/20/2011

FOTR2011112315114 DOUG

DC982

11/23/2011 DC982 **ZONE 500** LT WING STA XRS 454 APPROX REAR SPAR LOWER SPAR CHORD HAS CORROSION. REPAIRED ON FASI WO 21186, NR15114. FOTR2118614933 **DOUG** FLOOR SKIN CRACKED DC983 11/13/2011 **ZONE 200** LEFT MAIN DECK FLOOR DOUBLER CRACKED ALL THE WAY THRU AT LIGHTNING HOLE. INBD SIDE. LBL 44-52 BETWEEN FS 788-807. REPAIRED ON FASI WO 21186, NR 14933. FOTR2118615371 **DOUG FLOORBOARD DAMAGED** 11/17/2011 DC983 **ZONE 100** BS 875, LBL 44, FLOORBOARD COVERING CENTER FUEL TANK ACCESS PANEL IS DAMAGED. REPAIRED ON FASI WO21186, NR15371. 2012FA0000019 **EMB** SKIN CRACKED 1/12/2012 EMB500 50011540406 **ZONE 600** THE RT WING LOWER WING SKIN, AFT OF THE RT MLG, WAS FOUND CRACKED AT THE FORWARD RIVET HOLE FOR THE SKIN ATTACHMENT TO THE MIDDLE RIB DURING A VISUAL INSPECTION. 2012FA0000017 **EMB** PITOT TUBE **ERODED** 1/12/2012 EMB500 0851LP **ZONE 100** EROSION OF THE "PLATING MATERIAL" ON THE FACE/INLET OF THE TUBE WHICH THEN PROCEEDS TO MIGRATE DOWN THE BARREL OF THE TUBE. PITOT TUBE HAS THEN BEEN INSTALLED AND THE CORRESPONDING RECONNECT/LEAK AND CERTIFICATION CHECKS HAVE BEEN PERFORMED TO RETURN THE ACFT TO SERVICE. **GULSTM PWC STRUCTURE CRACKED** 2011FA0000772 11/7/2011 200 PW306A LT AILERON DURING A POST FLIGHT INSPECTION, FOUND LT AILERON CRACKED AND DELAMINATED AT THE INBD END CAP OF AILERON. LT AILERON WAS R & R WITH NEW AILERON. 2011FA0000773 GULSTM **PWC STRUCTURE** CRACKED 11/7/2011 200 PW306A RT AILERON DURING A POST FLIGHT INSPECTION FOUND LT AILERON CRACKED AND DELAMINATED AT THE INBD END CAP OF AILERON. LT AILERON WAS R & R WITH NEW AILERON. GR4D20120125012 **GULSTM VOUGHT** WINGLET **CORRODED** 1/25/2012 **GIV** 1159W407015 **ZONE 500** LT WINGLET CORRODED. ZI3R025M012720121 **RROYCE SWIRLER** GULSTM MISSING BR700710A110 1/24/2012 GVSPG550 6934408 **FUEL NOZZLE TIP** ZI3R RECEIVED 3 EA, BR710 FUEL NOZZLES FROM MFG. ONE (1) OF THE THREE (3) NOZZLES HAD A MISSING COMPONENT; THE INNER AIR SWIRLER. THE MISSING COMPONENT WAS DISCOVERED DURING AN CUSTOMER REQUIRED X-RAY INSPECTION PERFORMED BY OEM, AND THE MISSING PART WAS VERIFIED AT REPAIR STATION DURING THE RECEIVING INSPECTION. THE PO THAT WAS RECEIVED WITH THE PARTS DID NOT INDICATE ANY ISSUE WITH THE NOZZLES OR WITH THE ENGINE THAT THEY WERE REMOVED FROM. THE CUSTOMER INDICATED IN A FOLLOWING EMAIL: "THIS ENGINE WAS SUBJECT TO OIL CONTAMINATION WHICH APPEARS TO HAVE FROM HEAVY FRETTAGE AND FAILURE IN THE INTERMEDIATE CASE MODULE." THERE IS NO PREVIOUS RECORD OF THIS SN FOR MX; EITHER THE NOZZLE HAS BEEN IN SERVICE SINCE NEW, OR THE NOZZLE HAS BEEN SERVICED BY OTHER REPAIR STATIONS.

PISTON

FAILED

2012FA0000070

HUGHES

LYC

1/14/2012 269C1 HIO360G1A NR 4 CYLINDER

NORMAL TAKEOFF, HOVER, AND STEADY LEVEL FLIGHT. 30 MINUTES ENROUTE, SUDDEN VIBRATIONS FOLLOWED BY LOW RPM WARNING LIGHT & HORN. VERIFIED DROPPING NEEDLES AND LOWERED COLLECTIVE FOR AUTOROTATION. CHECKING AIRSPEED GAUGE AT 40KTS, ADJUSTED FORWARD CYCLIC FOR MORE AIRSPEED. VIBRATIONS STOPPED AND ENGINE QUIT. ESTABLISHED AUTOROTATION, LOOKED FOR LANDING SPOT, AIRSPEED 60-70KTS, FLARED AND LANDED. UPON VISUAL INSPECTION OF ENGINE, CATASTROPHIC FAILURE OF NR 4 CYLINDER, PISTON.

2011FA0000802 ISRAEL GARRTT SHAFT SEPARATED

12/7/2011 ASTRASPX TFE731* 30603663 HP COMPRESSOR

ENGINE REMOVED FOR SCHEDULED 2500 HR, MAJOR PERIODIC INSPECTION AND 5000 HR COMPRESSOR ZONE INSPECTION. DISASSEMBLY FINDINGS REVEALED SEPARATION OF THE SHAFT ADJACENT TO THE HIGH PRESSURE COMPRESSOR AFT CURVIC TEETH.

<u>2012FA0000103</u> LANCAR CONT SPARK PLUG CRACKED 2/9/2012 LC41550FG TSIO550C RHB32S ENGINE

RT B32S SPARK PLUGS HAVE CRACKED PORCELAIN, QTY 6 OUT OF 12, FOUND DURING ANNUAL INSPECTION.

JKIR2012010619587 LEAR LINE CORRODED

1/6/2012 35A 2307003 HYDRAULIC SYS

NLG EXTEND ALUMINUM HYD LINE AT FRAME 9L, STRINGER 19, RUPTURED DUE TO INTERNAL CORROSION. THIS CAUSED ACFT TO LOSE HYD PRESSURE IN-FLIGHT. ACFT LANDED WITHOUT INCIDENT.

 2011FA0000798
 LEAR
 CONTROL VALVE
 INOPERATIVE

 12/8/2011
 45LEAR
 32912221
 COCKPIT HEAT

FOLLOWING INITIAL DESCENT FROM FL430 AND WHEN PASSING THROUGH FL400 THE FLIGHT CREW NOTICED FUMES AND SMOKE ACCUMULATING IN THE COCKPIT AND CABIN. AN EMERGENCY DESCENT WAS INITIATED AND AFTER PASSING THROUGH FL200 THE SMOKE AND FUMES RAPIDLY DISSIPATED. A NORMAL LANDING WAS MADE. MX PERSONNEL FOUND THE COCKPIT HEAT TEMP EXCESSIVELY HIGH WHEN RUNNING IN MANUAL MODE. FURTHER TROUBLESHOOTING FOUND THE COCKPIT HEAT CONTROL VALVE NOT RESPONDING TO INPUTS IN MANUAL OR AUTO MODE. THE COCKPIT HEAT TEMP CONTROL VALVE ALONG WITH THE ECS TEMP CONTROLLER WAS REPLACED AND OPS CHECKS WERE SATISFACTORY.

UVVR2012012000020 LEAR CHECK VALVE FOD

1/20/2012 45LEAR HTE460072 RT WING

WHEN ACFT PARKED ON UNLEVEL SURFACE FUEL WOULD MIGRATE FROM RT WING TO LT WING. FOD WAS FOUND LODGED IN THE RT WING FUELING TRANSFER CHECK VALVE. REPLACED RT TRANSFER CHECK VALVE ASSY. REMOVED LT TRANSFER CHECK VALVE ASSY, INSPECTED, AND REINSTALLED WITH NO DEFECTS NOTED. REFUELED ACFT AND PERFORMED SATISFACTORY LEAK AND OPS CHECK. FOD SAMPLE APPEARED TO BE FUEL TANK SEALANT MATERIAL.

<u>2011FA0000799</u> LEAR GARRTT MUFFLER CRACKED 12/16/2011 45LEAR TFE731* 12945096001 COCKPIT AIR

CREW REPORTED LOW AIRFLOW TO THE COCKPIT. INSPECTION FOUND INSULATION MATERIAL BLOWN FROM THE COCKPIT ESC MUFFLER. VISUAL INSP OF THE MUFFLER REVEALED 3.5 INCH CRACK AT THE LOWER WELD SEAM. THE DEFECT WAS REPORTED TO FIELD SERVICE AND THE MUFFLER WAS REPLACED WITH A NEW UNIT.

2012FA0000086 LET CONTROL CABLE FRAYED

2/2/2012 L23SUPERBLAN A740255N RUDDER

FRAYED RUDDER CABLE FOUND DURING 500 HOUR. CHRONIC PROBLEM.

NI6R20120131002 LKHEED SPAR BROKEN

1/27/2012 SP2H ZONE 500

AT WING STATION 40, LT SIDE, A CRACK JUST OTBD OF THE FUSELAGE SKIN APPROX 20-24 INCHES LONG WAS DISCOVERED DURING PSE EDDY CURRENT INSPECTION. THE BREAK STARTS AT THE FRONT SPAR NR 22 RUNNING AFT ALONG WITH THE NEXT STRINGER NR 21 AFT OF THE SPAR, WHICH HAD NOT COMPLETELY SEVERED. THE FORWARD SPAR WEB IS ALSO CRACKED FROM THE TOP OF THE SPAR RUNNING UPWARDS AND EVENTUALLY DISAPPEARING BEHIND AN EXISTING DOUBLER APPROX 18 INCHES IN LENGTH.

FK8R201010080005	MOONEY	LYC	BRACKET	CRACKED
10/8/2010	M20C	O360A1D	650017000	OIL COOLER
OIL COOLER MOUNT	ING BRACKET WA	AS FOUND CRACKED.		
2012FA0000003	MOONEY	LYC	SPINNER	CRACKED
12/14/2011	M20F	IO360A1A	103937P	PROPELLER

INSTALLED A NEW STC PROPELLER WITH A NEW SPINNER AND ADAPTER PLATE SUPPLIED IAW STC SA02414CH-D. AFTER 30 HOURS OF OPERATION, WHILE DOING A WALK AROUND INSPECTION, NOTICED THE SPINNER WAS CRACKED AT A SCREW HOLE. REMOVED SPINNER AND FOUND ADAPTER PLATE CRACKED. THE PILOT FELT NO UNUSUAL VIBRATIONS AND OPERATED. THE ENGINE & PROPELLER IAW FLIGHT MANUAL AND STC INSTRUCTIONS. CAUSE OF CRACKING IS UNDETERMNED. MFG HAS FOUND THAT THERE HAVE BEEN A HIGH NUMBER OF SPINNER CRACKING WHICH IS STILL UNDER INVESTIGATION, MFG HAS OBSERVED THAT IT CAN BE UNPREDICTABLE, WITH CUSTOMERS PREVIOUSLY EXPERIENCING THIS CRACKING PARTICULARLY SUSCEPTIBLE TO ADDITIONAL CRACKING INCIDENTS ON LONGER METAL SPINNERS.

2012FA0000004	MOONEY	LYC	ADAPTER	CRACKED
12/14/2011	M20F	IO360A1A	1101186	PROP SPINNER

INSTALLED A NEW STC PROPELLER WITH A NEW SPINNER AND ADAPTER PLATE SUPPLIED IAW STC SA02414CH-D. AFTER 30 HOURS OF OPERATION, WHILE DOING A WALK AROUND INSP, NOTICED THE SPINNER WAS CRACKED AT A SCREW HOLE. REMOVED SPINNER AND FOUND ADAPTER PLATE CRACKED. THE OWNER/PILOT STATED HE FELT NO UNUSUAL VIBRATIONS AND OPERATED THE ENGINE/PROP IAW FLIGHT MANUAL AND STC INSTRUCTIONS. CAUSE OF CRACKING IS UNDETERMNED. MFG HAS FOUND THAT THERE HAVE BEEN A HIGH NUMBER OF SPINNER CRACKING WHICH IS STILL UNDER INVESTIGATION, MFG HAS OBSERVED THAT IT CAN BE UNPREDICTABLE, WITH CUSTOMERS PREVIOUSLY EXPERIENCING THIS CRACKING PARTICULARLY SUSCEPTIBLE TO ADDITIONAL CRACKING INCIDENTS ON LONGER METAL SPINNERS. RECOMMEND MECHANICS AND OPERATORS INSPECT SPINNER AND ADAPTER PLATE MORE FREQUENTLY. RECOMMEND A CLOSER INSP BEFORE AND AFTER EACH FLIGHT.

FK8R201104210003	MOONEY	LYC	PANEL	CRACKED
4/21/2011	M20J	IO360A3B6D		SEAT BACK
PILOT SEAT BACK RE	FAR PANEL WAS	FOUND CRACKED ON BOTH SIDES		

PILOT SEAT BACK REAR PANEL WAS FOUND CRACKED ON BOTH SIDES

2012F00029 PIAGIO HYDRAULIC SYSTEM MALFUNCTIONED

12/22/2011 P180

HYDRAULIC PRESSURE READS 0 AFTER LOWERING GEAR, HYD PRESSURE READS 0 DURING GEAR EXTENSION AND RETRACTION, NO HYD PRESSURE LIGHT.

<u>2012F00010</u> PIAGIO PWA ENGINE OVERSPEED 11/16/2011 P180 PT6A66 NR 1

NR 1 ENGINE EXPERIENCED OVERSPEED CONDITION, ENGINE SECURED.

2011FA0000810 PIAGIO PWA AUTOFEATHER SYS MALFUNCTIONED

12/27/2011 P180 PT6A66

UNCOMMANDED AUTOFEATHER IN FLIGHT/APPROACH.

<u>LF1R2011082300001</u> PILATS HONEYWELL PIN UNSECURE

8/23/2011 PC1245 TERMINAL BLOCK

ACFT OPERATOR TAXIED TO RUN UP AREA AND PERFORMED PREFLIGHT CHECKS. NOTED AUTOPILOT WOULD NOT PASS PREFLIGHT TEST. RETURNED ACFT TO SERVICE HANGAR. DURING TROUBLESHOOTING PROCESS, FOUND THAT PIN F AT TERMINAL BLOCK 290-02 WAS NOT FULLY SEATED. THIS CAUSED AN OPEN CIRCUIT FOR AUTOPILOT DISCONNECT LINE AND FAILED THE TEST. AFTER INFORMING OPERATOR, THEY MENTIONED THAT THEY HAVE HAD SOME INSTANCES OF CLEAR AIR AUTOPILOT DISCONNECTS AS WELL PREVIOUSLY. RESEATED THIS PIN AND AUTOPILOT PASSED PREFLIGHT TEST SATISFACTORILY. WE HAVE FOUND INSTANCES OF LOOSE PINS IN TERMINAL BLOCKS (VARIOUS SYS) OCCASIONALLY ON OTHER ACFT. THIS AREA SHOULD BE CHECKED CLOSELY WHEN TROUBLESHOOTING HARD TO FIND PROBLEMS.

5APR0201210377103 PILATS PWA DISPLAY FAULTY

1/3/2012 PC1245 PT6A67B 066031252500 EFIS

THE COPILOTS EADI WAS REPORTED AS INOPERATIVE. THE COPILOTS EAD, WAS R & R USING A SERVICEABLE UNIT IAW AMM 12-A-34-26-03-00A-920A-A. THE SYS OPERATIONALLY CHECKED GOOD IAW AMM 12-A-34-26-00-00A-903A-A.

<u>5APR20120117105</u> PILATS PWA CONTROLLER FAULTY

1/17/2012 PC1245 PT6A67B 065000860017 AUTO PILOT

THE FLIGHT CREW REPORTED THE AUTO PILOT SYSTEM AS BEING INOP. THE AUTO PILOT MODE CONTROLLER, PN 065-00086-0017 WAS FOUND TO BE FAULTY. IT WAS R & R USING A SERVICEABLE UNIT OF THE SAME PN IAW AMM 12-A-22-10-05-00A-920A-A. THE SYS OPERATIONALLY TESTED GOOD IAW AMM 12-A-22-10-00-00A-903A-A.

<u>5APR20120119106</u> PILATS PWA EADI FAILED 1/19/2012 PC1245 PT6A67B 066031252500 NR 2

THE NR 2 EADI WAS FOUND TO BE BLOOMING DURING OTHER MX AND NEEDING REPLACEMENT. THE NR 2 EADI PN 066-03125-2500 WAS R & R USING A SERVICEABLE UNIT OF THE SAME PN 066-03125-2500 IAW AMM 12-A-34-26-03-00A-920A-A, OPS CHECKED GOOD IAW AMM 12-A-34-26-00-00A-903A-A.

<u>5APR20120120107</u> PILATS PWA DISPLAY FAULTY 1/20/2012 PC1245 PT6A67B 066031252500 EHSI

THE EHSI WAS REPORTED AS INOPERATIVE. THE EHSI DISPLAY WAS FOUND TO BE FAULTY. THE EHSI DISPLAY WAS R & R USING A SERVICEABLE UNIT OF THE SAME PN IAW AMM12-A-34-26-02-00A-920A-A. THE SYS OPERATIONALLY CHECKED GOOD IAW AMM 12-A-34-26-00-00A-903A-A.

 K5SR2012012823151
 PILATS
 COMPUTER
 MALFUNCTIONED

 1/28/2012
 PC1247
 9754423104
 STICK PUSHER

ACFT WAS ENROUTE WHEN AT FL200 WITH AN OAT OF -18, THE COMPUTER WAS PUSHER CAUTION LIGHT ILLUMINATED 5 TO 10 SECONDS AFTER THE INITIAL SEPARATOR AND PROP DE-ICE WAS TURNED ON DUE TO ICE. THE ACFT RETURNED TO DEPARTURE FOR REPAIRS. PERFORMED TROUBLESHOOTING OF THE STICK PUSHER SYS. FOUND STICK PUSHER COMPUTER PN 975.44.23.104, SN 9368 FAILED PUSHER CHECK IAW PC12 AMM 12-A-22-20-00-00A-903A-A. INSTALLED INSPECTED STICK PUSHER COMPUTER WITH SATISFACTORY RESULTS. ACFT WAS RETURNED TO SERVICE.

<u>5APR20120208108</u> PILATS PWA ROTOR CRACKED 2/5/2012 PC1247 PT6A67 244759C BRAKE ASSY

THE LEFT BRAKE ASSY WAS INSPECTED DURING A LINE CHECK AND FOUND TO HAVE A CRACKED ROTOR. THE LT BRAKE ASSY R & R IAW MM 12-B-32-40-03-00A-920A-A.

<u>5APR2012010577104</u> PILATS PWA RELAY FAULTY
1/5/2012 PC1247 PT6A67 9742001221 PITCH TRIM

THE CREW REPORTED THAT THE PITCH TRIM CB FOUND POPPED UPON LANDING. THE STAB TRIM RELAY K161E2 WAS FOUND TO BE INOPERATIVE. REMOVED BOTH STAB TRIM RELAYS K161E2 AND K161D2, AND INSTALLED NEW

RELAYS. THE HORIZONTAL PITCH TRIM SYS OPERATIONALLY CHECKED GOOD. ALL WORK ACCONPLISHED IAW AMM 12-B-27-40-00-00A-903A-A AND WDM 91-10-01.

<u>5APR2012010177102</u>	PILATS	PWA	RELAY	FAULTY
1/1/2012	PC1247	PT6A67B	9742001212	STAB TRIM

PILOTS REPORTED ENROUTE: STAB TRIM FAILURE WHEN MANUALLY TRIMMING UP FROM THE CAPTAINS SEAT AN AURAL WARNING FOLLOWED BY RUNAWAY TRIM. THE STABILIZER TRIM RELAY K022, PN 974.20.01.212 WAS FOUND FAULTY. IT WAS R & R USING A SERVICEABLE RELAY OF THE SAME PN. THE SYSTEM OPS CHECKED GOOD IAW AMM 12-A-27-40-00-00A-903A-A.

5APR2011122877100	PILATS	PWA	FITTING	OUT OF ALIGNMENT
12/28/2011	PC1247	PT6A67B	5551012150	ZONE 300

THE HORIZONTAL STABILIZER ATTACHMENT FITTING, WHERE THE PITCH TRIM ACTUATOR IS SECURED TO THE STABILIZER. LUGS ARE SEPARATING. THE GAP WAS MEASURED WITH A FEELER GUAGE, AND FOUND TO BE .635MM. THERE IS NO EVIDENCE OF DAMAGE TO THE STABILIZER.

5APR2011122977101	PILATS	PWA	RELAY	FAULTY
12/29/2011	PC1247	PT6A67B	9742001212	STAB TRIM

CREW REPORTED STAB TRIM FAILURE, RUNAWAY NOSE DOWN ENROUTE TO GMU, THE ACFT LANDED SAFELY. THE STAB TRIM DOWN RELAY WAS FOUND FAULTY, R & R USING A NEW RELAY IAW WDM 27-40-00. THE SYS OPERATIONALLY TESTED GOOD IAW AMM 12-A-27-40-00-00A-903A-A.

5APR2011121557799	PILATS	PWA	SKIN	DAMAGED
12/15/2011	PC1247	PT6A67B	5570512131	LT WING

THE ACFT LEFT WING L/E WAS DAMAGED BY A BIRDSTRIKE. THE DAMAGE WAS OUTSIDE THE GUIDANCE OF THE SRM FOR "ALLOWABLE DAMAGE". TECHNICAL SUPPORT WAS CONTACTED, AN ENGINERING REPAIR MEMO AND "STATEMENT OF APPROVED DESIGN DATA" ECC-12-RM-11-249 WAS ISSED. THE ACFT WAS REPAIRED USING THOSE INSTRUCTIONS, UTILIZING A FLUSH PATCH AND DOUBLERS FOR THE REPAIR OF THE EXISTING L/E SKIN AND RIBS. AN FAA FORM 337 DATED 12-15-2011 WAS SUBMITTED.

5APR2011111557797	PILATS	PWA	DISPLAY	FAULTY
11/15/2011	PC1247	PT6A67B	066031252500	EFIS

DURING AHRS SWING CHECKS THE NR 2 EHSI WAS FOUND FUZZY AND NEEDING REPLACEMENT. THE NR 2 EHSI WAS R & R WITH A SERVICEABLE UNIT OF THE SAME PN 066-03125-2500 IAW AMM 12-A-34-26-02-00A-920A-A AND TESTED SATISFACTORY IAW AMM 12-A-34-26-00-00A-903A-A.

5APR2011120557798	PILATS	PWA	DISPLAY	FAULTY
12/5/2011	PC1247	PT6A67B	066031252500	EADI

PILOT REPORTED THAT THE PILOTS SIDE EADI, IS FUZZY AND FLICKERS OFF WHEN COLD. PILOTS SIDE EADI WAS R & R USING A SERVICEABLE UNIT IAW AMM 12-A-34-26-03-00A-920A-A AND OPS CHECKED GOOD IAW AMM 12-A-34-26-00-00A-903A-A.

2012FA0000110	PIPER	PIPER	AXLE	CORRODED
2/10/2012	J3C65		314721	RT MLG

DURING CLEANING IN PREPARATION FOR RECOVERING OF THE RT LANDING GEAR IT WAS NOTED THAT WOOD PLUG, PN 30941, WAS MISSING. SEVERE CORROSION WAS NOTICED INSIDE LOWER RADIUS OF THE AXLE TUBE. ESTIMATE THE LOWER PORTION OF TUBE WAS CORRODED MORE THEN 50 PERCENT OF WALL THICKNESS. NORMALLY 10 PERCENT IS CONSDERED EXCESSIVE LIMIT. IT APPEARS WATER SAT IN AXLE TUBE. THIS ACFT HAS BEEN OUT OF SERVICE FOR SOME TIME & IN NEED OF RECOVERING. CORROSION PROTECTION WITH PREVENTATIVE COMPOUND WOULD HELP PREVENT THIS CONDITION. THIS LANDING GEAR ASSY WAS REPLACED.

BQVR20120204	PIPER	BRAKE	LOCKED
2/4/2012	PA22150		LEFT

AT THE BEGINNING OF THE TAKEOFF ROLL, THE NOSE OF THE ACFT SUDDENLY LOWERED AND THE PROPELLER MADE CONTACT WITH THE GROUND. MX ARRIVED AT THE ACFT AND DISCOVERED THE LT BRAKE LOCKED AND THE LT WHEEL UNABLE TO ROLL. THE RT WHEEL WAS FREE TO MOVE. THE LT BRAKE GRADUALLY FREED UP BUT NOT COMPLETELY WITH REPEATED APPLICATION AND RELEASE OF THE BRAKE. THE ACFT HAD BEEN STORED IN AN UNHEATED HANGER THE NIGHT BEFORE. TEMPERATURE APPARENTLY WAS AT OR BELOW FREEZING WHEN THE PROBLEM OCCURRED. ACFT WAS MOVED INTO A HEATED MX HANGER AND AFTER A WHILE, NORMAL BRAKE RELEASE WAS OBSERVED.

 2011FA0000812
 PIPER
 LINK ASSY
 FAILED

 12/9/2011
 PA23160
 1904300
 LT MLG

DURING ROLLOUT, AFTER LANDING, ACFT STARTED TO LEAN TO THE LEFT. PILOTS USED RT RUDDER AND BRAKES TO MAINTAIN CONTROL OF THE ACFT ON THE RUNWAY. ACFT CAME TO COMPLETE STOP ON RUNWAY. FURTHER INVESTIGATION, NOTED THAT THE LT MLG TO PASS CENTER AND FALL AFT. LINK ASSY HAD FAILED AT A DRILLED BOLT HOLE BY THE MFG. SLIGHT RUST WAS NOTED INSIDE THE TUBE. THE WELD ON THE LINK TUBE, FOR THE ROD END, ENDS AT THE POINT WHERE THE MFG DRILLS A HOLE TO MOUNT THE LOCK. HEAT TREATING OF THIS AREA MIGHT BE AN ISSUE. WATER/MOISTURE CAN GET INTO THIS TUBE THROUGH THE BOLT HOLE. LINK COULD BE MADE FROM A BETTER MATERIAL AND POSSIBLE CORROSION TREATMENT INTERNALLY IN THE TUBE TO PREVENT CORROSION.

<u>2012FA0000001</u> PIPER LYC KEY BROKEN 12/9/2011 PA28151 O320D3G ENGINE

WHILE TROUBLESHOOTING A ROUGH RUNNING ENGINE, DISCOVERED A DEFORMED ROCKER COVER. WHEN THE COVER WAS REMOVED THE SPRING SEAT LOOSE ON FLANGE PIECES AND THE VALVE KEYS WERE FOUND IN THE ROCKER COVER.

2012FA0000109 PIPER LYC BENDIX DISTRIBUTOR DAMAGED

2/6/2012 PA28151 O320E3D RT MAGNETO

PILOT REPORTED A NORMAL RUN-UP BEFORE TAKEOFF. DURING CLIMB-OUT POWER LOSS WAS EXPERIENCED. ON LANDING ANOTHER RUN UP SHOWED THE RT MAGNETO WAS INOPERATIVE. REMOVED THE RT MAGNETO AND FOUND THE PLASTIC DISTRIBUTOR GEAR WAS MISSING TEETH .2500 OF THE WAY AROUND THE GEAR.

<u>2011FA0000811</u> PIPER LYC PIPER AXLE CRACKED 12/12/2011 PA28161 O320B2B 78738003 MLG

CRACK FOUND IN EAR OF RT AXLE STUB DURING ANNUAL INSPECTION. UNKNOWN IF IT HAS EVER BEEN CHANGED BEFORE. UNKNOWN IF CRACK IS RESULT OF HARD LANDING OR FATIGUE (OR BOTH). ACFT IS INVOLVED IN A FLIGHT SCHOOL OPERATION. R & R PART, RESEALED STRUT. ACFT RELEASED FOR SERVICE.

 C41R201112130107
 PIPER
 CONTACTOR
 CORRODED

 12/12/2011
 PA28181
 455151
 ELECTRICAL

PILOT REPORTED BATTERY WOULD LOOSE CHARGE RAPIDLY. ALSO, RANDOMLY HAD STARTING PROBLEMS. TROUBLESHOT ELECTRICAL AND STARTING SYSTEM. FOUND MASTER CONTACTOR TO HAVE EXCESS RESISTANCE INTERNALLY CAUSING EXCESS AMPERAGE TO BE DRAWN DURING ENGINE START. 149 AMPS DC - SHOULD BE 12-18 AMPS. REPLACED MASTER CONTACTOR AND ALL SYS, OPS CHECKED NORMAL.

<u>2012FA0000031</u> PIPER LYC LYC PLUG DISINTEGRATED
1/18/2012 PA28181 O360A4M LW12892 ROCKER SHAFT

ON RECENT REPLACEMENT OF VALVE COVER GASKETS, DISCOVERED THE ROCKER SHAFT PLUGS HAVE BROKEN INTO SMALL PIECES. IT APPEARS THAT DUE TO THE HIGH INTERNAL HEAT ASSOCIATED WITH THIS PART OF THE ENGINE, THAT THE PLUGS HAVE LIKELY SEIZED INTO PLACE AND OR BECOME SO BRITTLE THAT WHEN THEY DO SEIZE INTO PLACE THEY BREAK. DO NOT BELIEVE ANY PLASTIC WITH THIS PART HAS CAUSED ANY DAMAGE AND THE OIL FILTER SHOULD STOP ANY PROBLEMS, HOWEVER WE HAVE SEEN SO MANY OF THESE PROBLEMS RECENTLY I WOULD QUESTION THE MATERIAL BEING USED IN THE DESIGN OF THE PART.

2012FA0000065 PIPER LYC HOOF O-RING TORN

1/23/2012 PA28R200 AEIO360* MS28775006 ZONE 100

A DEFECTIVE EMERGENCY LANDING GEAR EXTENSION VALVE. SPECIFICALLY THE INTERNAL O-RING SEALS WERE FOUND TORN AND DAMAGED. THIS CONDITION WAS DETERMINED TO BE CAUSING THE LANDING GEAR EMERGENCY EXTEND LEVER FROM PROPERLY FUNCTIONING, AS WELL, IT CAUSES THE LANDING GEAR PUMP HYD PRESSURE TO BYPASS IN THE RETRACT FUNCTION. THIS CONDITION ALONG WITH AN INOPERATIVE ALTERNATOR/ELECTRICAL FAILURE IN FLIGHT. CAUSED A GEAR UP LANDING.

2011FA0000793 PIPER ATTACH FITTING CHAFED

12/16/2011 PA28R201 63900174 FLAP CONTROL

UPON INSPECTION OF FLAP CONTROL CABLE TO FLAP HANDLE ATTACHMENT FOUND BUSHING (PN 63900-174) CLEVIS BOLT (PN AN23-11), AND FLAP HANDLE (PN 63781-008) HAD BEEN "SAWING" THROUGH EACH OTHER. THIS CONDITION WAS ADDRESSED ON OLDER MODEL ACFT BY AD96-10-03 "FLAP LEVER HANDLE AND BOLT". THIS IS A TRAINING FLEET ACFT. FOUND THE PROBLEM TO BE THAT THE BUSHING WAS NOT FREE TO ROTATE DUE TO EITHER EXCESSIVE LENTH OR BEING TIGHTENED DOWN TOO MUCH AT THE FACTORY.

MV1R2011121400000 PIPER PUMP FAILED

12/14/2011 PA31350 1213HBG310 HYD SYSTEM

DURING TRAINING FLIGHT, AFTER 2ND TOUCH & GO LANDING, GEAR UNSAFE LIGHT STAYED ON AFTER THE GEAR WAS RETRACTED. LANDING GEAR TOOK MUCH LONGER TO EXTEND & LOCK THAN NORMAL. ACFT LANDED WITHOUT INCIDENT. UPON INSPECTION, MX FOUND HYD FLUID ON THE LT FLAP AREA. THE HYD RESERVIOR WAS EMPTY & HYD FLUID DRIPPING FROM THE LT HYD PUMP DRAIN. HYD FILTERS WERE CHECKED AND THE LT FILTER HAD PIECES OF SEAL MATERIAL IN IT. REPLACED FILTER, SERVICED & BLED HYD SYS IAW MM. OPS CHECK WITH RUNING ENGINES SHOWED LT PUMP FAILED PRESSURE CHECK AND HYD FLIUD COMING OUT OF LT PUMP DRAIN. PUMP TO BE REPLACED.

2012FA0000111 PIPER CONNECTOR BURNED

2/14/2012 PA31350

DURING INSPECTION FOR COMPLIANCE WITH SB1004 THE E303 CONNECTOR WAS FOUND TO BE BADLY BURNED. THE CONNECTION WAS REPAIRED IAW THE SB. INSPECTOR NOTES THAT THE INITIAL INSP OF EVERY ACFT HAS SHOWN NO COMPLIANCE WITH THIS SB AND ALL SHOW THE SAME BURNING OF THE CONNECTOR.

2012F00031 PIPER LYC LIFTER BROKEN

12/19/2011 PA31350 TIO540J2B 15B26064 EXHAUST VALVE

DURING ANNUAL INSP, A PIECE OF METAL (APP .2500" SQUARE) WAS FOUND IN THE SUCTION SCREEN. INSPECTION REVEALED NR 6 EXHAUST LIFTER BODY WAS MISSING A PIECE WHERE THE HYD TAPPET PLUNGER ASSY INSERTS INTO THE LIFTER BODY. NO REPORTS OF LOSS IN ENGINE PERFORMANCE.

<u>2011FA0000774</u> PIPER LYC LYC B-NUT BACKED OUT 12/2/2011 PA32260 O540E4B5 NR 4 CYLINDER

PILOT REPORTED SMOKE IN THE COCKPIT AFTER LANDING. AFTER AN INSPECTION OF THE ENGINE, IT WAS FOUND THAT NR4 CYLINDER HEAD OIL RETURN LINE "B" NUT HAD BACKED OFF CAUSING OIL TO DRIP ONTO THE EXHAUST STACK WHICH CAUSED THE SMOKE IN THE COCKPIT. THE MECHANIC INSTALLED AND TIGHTENED THE LOOSE "B" NUT AND INSPECTED ALL OTHER CYLINDERS FOR ANY OTHER LOOSE "B" NUTS. NO OTHER LOOSE OIL RETURN "B" NUTS WERE FOUND TO BE LOOSE. THE ACFT WAS RETURNED TO SERVICE AND THE PROPER PAPERWORK WAS COMPLETED.

<u>1SMA2012FA0000032</u> PIPER LYC TIRE DEFECTIVE 1/18/2012 PA32300 IO540K1A5 60066RTM ZONE 700

WHILE SECURING ACFT AFTER FLIGHT, PILOT REPORTED RT MAIN TIRE WAS FLAT. INVESTIGATION REVEALED THAT ONE COMPLETE SECTION OF TREAD HAD DEBONDED AND COME OFF OF TIRE AND WRAPPED AROUND MAIN WHEEL FAIRING SUPPORT CAP ON AXLE END, CAUSING DAMAGE TO THE TUBE VALVE STEM RESULTING IN THE FLAT TIRE. THE PILOT INDICATED THAT THERE WAS NO INDICATION OF THE TIRE BEING FLAT DURING LANDING AND SUBSEQUENT TAXI AND BELIEVES THAT IT DEFLATED AFTER PARKING. THERE IS NO INDICATION OF DAMAGE TO THE ACFT. TIRE WAS A MONSTER RETREAD AND HAD APPROX 20 LANDINGS SINCE

INSTALLATION. REPORT INCLUDING PICTURES HAS BEEN EMAILED TO THE MFG TO SEE IF OTHER SIMILAR REPORTS HAVE BEEN MADE.

C41R201112290108	PIPER	LYC	TRANSDUCER	CONTAMINATED
12/28/2011	PA32301T	TIO540*	84522003	FUEL PRESSURE

PILOT REPORTED NO FUEL PRESSURE INDICATION ON DISPLAY. FOUND FUEL PRESSURE TRANSDUCER MOUNTED UNDER LT MAGNETO WITH WIRING FACING UP. INSPECTION REVEALED UNIT TO BE OIL-SOAKED DUE TO PRIOR MAGNETO REPLACEMENT. SUSPECT OIL MIGRATED INTO WIRING AND SHORTING OUT UNIT. REPLACED TRANDUCER WITH NEW AND OPS CK GOOD. NEW UNIT WIRING EXTERNALLY SEALED WITH RTV TO PREVENT FUTURE PROBLEMS.

<u>2012FA0000089</u> PIPER CONT SEAL FROZEN 2/1/2012 PA34200T TSIO360EB AILERONS GAP

DEPARTED AND CLIMBED THROUGH MODERATE TO HEAVY PARTICIPATION FOR 10-15 MINUTES, LEVELED OFF AT 9,000 FT WHICH WAS AN ALTITUDE THAT WAS BELOW FREEZING. SET AUTOPILOT FOR STRAIGHT AND LEVEL FLIGHT AND AFTER ABOUT 10 MINUTES, NOTICED THAT THE AIRPLANE WAS VEERING OFF THE HEADING AND BEGINNING TO ENTER A SLIGHT BANK. SHUT OFF THE AUTOPILOT AND LEVELED THE PLANE BUT NOTICED THAT THE AILERON CONTROL SEEM VERY STIFF. PULLED THE CIRCUIT BREAKER FOR THE AUTOPILOT AND ELECTRIC TRIM TO ENSURE THAT THEY WERE DISENGAGED. AFTER ABOUT 4 TO 5 MORE MINUTES IN LEVEL FLIGHT THE AILERONS WENT FROM BEING VERY STIFF TO COMPLETELY FROZEN. FORCED TO CONTROL THE AIRPLANE WITH RUDDER AND ELEVATOR INPUTS ONLY. LATER IN THE FLIGHT, DURING DESCENT TO ABOVE FREEZING TEMPERATURES THE AILERON CONTROLS SLOWLY RETURNED AND A SUBSEQUENT INSPECTION ON THE GROUND REVEALED NO AILERON CONTROL ABNORMALITIES. BELIEVE THAT THE PRECIPITATION ENCOUNTERED DURING THE CLIMB FROZE THE AILERON TO THE GAP SEALS WHEN THE AIRPLANE ENTERED BELOW FREEZING TEMPERATURES. CALLED THE STC HOLDER TO DISCUSS THIS ISSUE AND THEY ACKNOWLEDGED NOTIFICATION OF THE SAME PROBLEM WITH THEIR GAP SEALS UNDER RAIN AND FREEZING CONDITIONS. THIS SAFETY HAZARD COULD EASILY LEAD TO A COMPLETE LOSS OF ACFT CONTROL AND FATALITIES IF NOT ADDRESSED WITH THE STC HOLDER OR IN AN AD.

<u>2012FA0000053</u> PIPER ANGLE CRACKED 1/4/2012 PA44180 RT NACELLE

DURING A SCHEDULED INSPECTION, A CRACK WAS FOUND IN THE NACELLE ANGLE. UPON FURTHER INVESTIGATION, IT WAS FOUND THAT THE CRACK WAS BETWEEN THE 2 RIVETS THAT EXTENDED THRU THE WING SKIN INTO CAP (P/N 67097-002 OR -003 DEPENDENT ON SIDE) WHICH IS ATTACHED TO A WEB (PN 67079-000 OR 001 DEPENDENT ON SIDE) THAT THE MAIN GEAR AFT ATTACH POINT IS MOUNTED. IT IS SUSPECTED THAT THIS IS A FAILURE DUE TO FATIGUE.

 2012FA0000056
 PIPER
 ANGLE
 CRACKED

 1/4/2012
 PA44180
 RT NACELLE

DURING A SCHEDULED INSPECTION, A CRACK WAS FOUND IN THE NACELLE ANGLE. UPON FURTHER INVESTIGATION, IT WAS FOUND THAT THE CRACK WAS BETWEEN THE 2 RIVETS THAT EXTENDED THRU THE WING SKIN INTO CAP (P/N 67097-002 OR -003 DEPENDENT ON SIDE) WHICH IS ATTACHED TO A WEB (PN 67079-000 OR 001 DEPENDENT ON SIDE) THAT THE MAIN GEAR AFT ATTACH POINT IS MOUNTED. IT IS SUSPECTED THAT THIS IS A FAILURE DUE TO FATIGUE.

 2012FA0000057
 PIPER
 ANGLE
 CRACKED

 1/4/2012
 PA44180
 86331003
 LT NACELLE

DURING A SCHEDULED INSPECTION, A CRACK WAS FOUND IN THE NACELLE ANGLE. UPON FURTHER INVESTIGATION, IT WAS FOUND THAT THE CRACK WAS BETWEEN THE 2 RIVETS THAT EXTENDED THRU THE WING SKIN INTO CAP (P/N 67097-002 OR -003 DEPENDENT ON SIDE) WHICH IS ATTACHED TO A WEB (PN 67079-000 OR 001 DEPENDENT ON SIDE) THAT THE MAIN GEAR AFT ATTACH POINT IS MOUNTED. IT IS SUSPECTED THAT THIS IS A FAILURE DUE TO FATIGUE.

2012FA0000058	PIPER	ANGLE	CRACKED
1/4/2012	PA44180	86331003	LT NACELLE

DURING A SCHEDULED INSPECTION, A CRACK WAS FOUND IN THE NACELLE ANGLE. UPON FURTHER INVESTIGATION, IT WAS FOUND THAT THE CRACK WAS BETWEEN THE 2 RIVETS THAT EXTENDED THRU THE WING SKIN INTO CAP (P/N 67097-002 OR -003 DEPENDENT ON SIDE) WHICH IS ATTACHED TO A WEB (PN 67079-000 OR 001 DEPENDENT ON SIDE) THAT THE MAIN GEAR AFT ATTACH POINT IS MOUNTED. IT IS SUSPECTED THAT THIS IS A FAILURE DUE TO FATIGUE.

<u>2012FA0000059</u> PIPER ANGLE CRACKED 1/4/2012 PA44180 86331002 RT NACELLE

DURING A SCHEDULED INSPECTION, A CRACK WAS FOUND IN THE NACELLE ANGLE. UPON FURTHER INVESTIGATION, IT WAS FOUND THAT THE CRACK WAS BETWEEN THE 2 RIVETS THAT EXTENDED THRU THE WING SKIN INTO CAP (P/N 67097-002 OR -003 DEPENDENT ON SIDE) WHICH IS ATTACHED TO A WEB (PN 67079-000 OR 001 DEPENDENT ON SIDE) THAT THE MAIN GEAR AFT ATTACH POINT IS MOUNTED. IT IS SUSPECTED THAT THIS IS A FAILURE DUE TO FATIGUE.

 2012FA0000048
 PIPER
 ANGLE
 CRACKED

 1/4/2012
 PA44180
 RT NACELLE

DURING A SCHEDULED INSPECTION, A CRACK WAS FOUND IN THE NACELLE ANGLE. UPON FURTHER INVESTIGATION, IT WAS FOUND THAT THE CRACK WAS BETWEEN THE 2 RIVETS THAT EXTENDED THRU THE WING SKIN INTO CAP (P/N 67097-002 OR -003 DEPENDENT ON SIDE) WHICH IS ATTACHED TO A WEB (PN 67079-000 OR 001 DEPENDENT ON SIDE) THAT THE MAIN GEAR AFT ATTACH POINT IS MOUNTED. IT IS SUSPECTED THAT THIS IS A FAILURE DUE TO FATIGUE.

<u>2012FA0000049</u> PIPER ANGLE CRACKED 1/4/2012 PA44180 RT NACELLE

DURING A SCHEDULED INSPECTION, A CRACK WAS FOUND IN THE NACELLE ANGLE. UPON FURTHER INVESTIGATION, IT WAS FOUND THAT THE CRACK WAS BETWEEN THE 2 RIVETS THAT EXTENDED THRU THE WING SKIN INTO CAP (P/N 67097-002 OR -003 DEPENDENT ON SIDE) WHICH IS ATTACHED TO A WEB (PN 67079-000 OR 001 DEPENDENT ON SIDE) THAT THE MAIN GEAR AFT ATTACH POINT IS MOUNTED. IT IS SUSPECTED THAT THIS IS A FAILURE DUE TO FATIGUE.

<u>2012FA0000050</u> PIPER ANGLE CRACKED 1/4/2012 PA44180 LT NACELLE

DURING A SCHEDULED INSPECTION, A CRACK WAS FOUND IN THE NACELLE ANGLE. UPON FURTHER INVESTIGATION, IT WAS FOUND THAT THE CRACK WAS BETWEEN THE 2 RIVETS THAT EXTENDED THRU THE WING SKIN INTO CAP (P/N 67097-002 OR -003 DEPENDENT ON SIDE) WHICH IS ATTACHED TO A WEB (PN 67079-000 OR 001 DEPENDENT ON SIDE) THAT THE MAIN GEAR AFT ATTACH POINT IS MOUNTED. IT IS SUSPECTED THAT THIS IS A FAILURE DUE TO FATIGUE.

<u>2012FA0000051</u> PIPER ANGLE CRACKED 1/4/2012 PA44180 RT NACELLE

DURING A SCHEDULED INSPECTION, A CRACK WAS FOUND IN THE NACELLE ANGLE. UPON FURTHER INVESTIGATION, IT WAS FOUND THAT THE CRACK WAS BETWEEN THE 2 RIVETS THAT EXTENDED THRU THE WING SKIN INTO CAP (P/N 67097-002 OR -003 DEPENDENT ON SIDE) WHICH IS ATTACHED TO A WEB (PN 67079-000 OR 001 DEPENDENT ON SIDE) THAT THE MAIN GEAR AFT ATTACH POINT IS MOUNTED. IT IS SUSPECTED THAT THIS IS A FAILURE DUE TO FATIGUE.

 2012FA0000052
 PIPER
 ANGLE
 CRACKED

 1/4/2012
 PA44180
 LT NACELLE

DURING A SCHEDULED INSPECTION, A CRACK WAS FOUND IN THE NACELLE ANGLE. UPON FURTHER INVESTIGATION, IT WAS FOUND THAT THE CRACK WAS BETWEEN THE 2 RIVETS THAT EXTENDED THRU THE WING SKIN INTO CAP (P/N 67097-002 OR -003 DEPENDENT ON SIDE) WHICH IS ATTACHED TO A WEB (PN 67079-000 OR 001 DEPENDENT ON SIDE) THAT THE MAIN GEAR AFT ATTACH POINT IS MOUNTED. IT IS SUSPECTED THAT THIS IS A FAILURE DUE TO FATIGUE.

MASTER CYLINDER DAMAGED

C41R201201240101 PIPER CONT

1/23/2012 PA46310P TSIO520* 82805002 BRAKES

ON LANDING ROLLOUT, PILOT HAD NO LT BRAKE. MX REMOVED LT MASTER CYLINDER AND DISCOVERED MASTER CYLINDER END GLAND HAD UNSCREWED ALL BUT 2 THREADS CAUSING FLUID AND PRESSURE LOSS FROM MASTER CYLINDER. REPLACED INTERNAL SEALS AND REASSEMBLED. REINSTALLED AND OPS CHECKED OK.

2012FA0000071 PIPER CONNECTOR CORRODED

1/22/2012 PA46500TP ELT

WATER IN ELT CONNECTOR CAUSING CORROSION BETWEEN PINS, CAUSING ELT TO TURN ON, COULD NOT

RESET.

E81R2012011700001 RAYTHN KEELBEAM CORRODED

1/17/2012 390 3904200700001 COCKPIT

DURING SCHEDULED "A" AND "B" INSPECTIONS, VISUAL INSPECTION OF COCKPIT UNDERFLOOR AREA SHOWED FLUID SPILLAGE. FURTHER INVESTIGATION FOUND SURFACE CORROSION AND DEEP CORROSION PITS ON LBL 8.10 KEEL BEAM CAP FROM FS 121.2 TO FS 148.4 AREA. AFFECTED STRUCTURAL MEMBER ATTACHES LT SIDE OF LOWER FWD FUSELAGE KEEL BEAM UNDER PEDESTAL TO FUSELAGE EXTERIOR, FROM AFT OF FORWARD PRESSURE BULKHEAD TO AFT END OF PEDESTAL AREA. DAMAGE REQUIRED REPLACEMENT OF KEEL CAP IAW MFG REPAIR DESIGN OFFICE. OPERATOR REPORTS NO KNOWN FLUID SPILLAGE. LEAK CHECKS OF FLIGHT COMPARTMENT RELIEF TUBE AND PLUMBING SATISFACTORY. RECOMMEND MFG CONSIDER ADDING A RECURRING 12-MONTH INTERVAL VISUAL INSP OF UNDERFLOOR AREAS IN ZONES WHERE CORROSIVE FLUID SPILLAGE OR COLLECTION POSSIBLE.

 2011FA0000748
 RAYTHN
 WILINT
 ENGINE
 FAILED

 11/13/2011
 390
 FJ44
 FJ44
 ZONE 400

DURING CRUISE AT 25,000 FEET, DETECTED SMOKE IN THE COCKPIT. SHORTLY AFTER THE LEFT ENGINE INDICATORS SHOWED LOW OIL PRESSURE (IN THE RED) AND THE LOW OIL PRESSURE ANNUNCIATOR. SHUTDOWN ENGINE, AND DIVERTED TO THE NEAREST MAJOR AIRPORT. ON LANDING, OBSERVED A LOT OF BLACK OIL ON THE EXTERIOR UNDERSIDE OF THE LT ENGINE COWLING.

2012FA0000105 RAYTHN SNAP RING MISSING

1/30/2012 C90GT HYD POWERPACK

DURING APPROACH, SELECTED MLG DOWN & IT FAILED TO RESPOND. TRIED SEVERAL TIME TO EXTEND GEAR WITH NO RESULTS. PROCEEDED TO PUMP GEAR DOWN & RECEIVED 3 DOWN & LOCK LIGHTS WITHOUT FURTHER INCIDENT. FOUND 60 AMP CIRCUIT TRIPPED. NO OTHER DEFECTS NOTICED ON INITIAL INSPECTION. A RETRACTION WAS PERFORMED IAW MANUAL & GEAR RETRACTED WITH NO DEFECTS NOTED. WHEN GEAR DOWN SELECTED, RETRACT MOTOR BOGGED DOWN & TRIPPED THE 60 AMP CIRCUIT BREAKER. ON CLOSER INSPECTION, HYD FLUID OBSERVED LEAKING FROM AREA WHERE RETRACT MOTOR CONNECTS TO HYD POWER PACK. REMOVED HYD POWER PACK & RETRACT MOTOR ASSY. SOURCE OF HYD LEAK FOUND TO BE HYD POWER PACK GARLOCK SEAL OR SHAFT SEAL. SNAP RING TO RETAIN THE GARLOCK SEAL WAS MISSING. RETAINING SNAP RING PREVENTS GARLOCK SEAL FROM MOVING AND ALLOWING HYD FLUID TO LEAK INTO RETRACT MOTOR.

2012FA0000077 RAYTHN SEAL LEAKING

1/12/2012 HAWKER800XP WING FITTING

SEVERE CORROSION FOUND IN CASTING LUG DURING WING TO FUSELAGE ATTACHMENT LINKS, BRACKETS & BOLT INSPECTION AT LT LOWER WING TO FUSELAGE LINK AND BEARING JUNCTION. EXPOSURE TO CONSTANT MOISTURE DUE TO IMPROPER FUSELAGE-TO WING FAIRING SEALING PRACTICES THAT MAY HAVE LET TO SYS LEAKS. PROPER SEALING METHODS USED WHEN ATTACHING WING-TO-FUSELAGE FAIRINGS; PROPER PLUMBING PRACTICES WHEN PERFORMING MX ON WING ANTI-ICING SYSTEMS.

 2011FA0000762
 RAYTHN
 SPIGOT
 BROKEN

 11/28/2011
 HAWKER800XP
 25FC6244A
 ZONE 800

DURING MX PRE-FLIGHT INSPECTION, TECH NOTICED THAT UPPER AFT DOOR ALIGNMENT SPIGOT WAS CRACKED AROUND THE FULL CIRCUMFERENCE OF THE BASE. THE SPIGOT BROKE COMPLETELY OFF WITH A VERY LIGHT TOUCH. IT IS SPECULATED THAT SPIGOT MAY HAVE AT ONE TIME BEEN HIT TO CAUSE CRACK AND THEN SUBSEQUENT DOOR CLOSINGS PROPAGATED THE CRACK AS SPIGOT PENETRATED DOOR ALIGNMENT CHANNEL.

2012FA0000092 RAYTHN LEVER CORRODED

1/26/2012 HAWKER800XP 25UM1080A MLG

NOTED DEFECTS IN 2 LOCATIONS. BOTH DEFECTS HAVE BEEN PREVIOUSLY NOTED BY TECHS AT OTHER TIME ON OTHER ACFT. 1 DEFECT, CORROSION FOUND AROUND THE PERIMETER OF THE BOSS CONNECTION POINT OF THE LEVER ASSY TO THE CHANNEL SUPPORT. THE INSTALLATION CALLS FOR A THRUST WASHER (DUA7) ON 1 SIDE AND ANOTHER WASHER (SP125D) ON THE OTHER SIDE. THERE IS SOME EVIDENCE OF CORROSION ON THE STEEL WASHERS AND OBVIOUS CORROSION IS THE RESULT OF BOTH DRYNESS AND DISSIMILAR METAL CONTACT. SUGGEST MORE FREQUENT LUBRICATION OR LUBRICATION SUBSTITUTION FROM THE MFG. ANOTHER NOTED DEFECT PERTAINS TO THE GOUGING ON THE CORNER OF 1 ARM OF THE LEVER. IT IS SUSPECTED THAT THE DEFECT MAY BE A RESULT OF USING PRY BARS ON THE ARM WHEN PERFORMING MX REQUIRING THE ARMS TO BE MOVED FOR GEAR OVER-CENTERING AND ADJUSTMENT PURPOSES. SUGGEST USING A COMPOSITE PRY BAR IF OVER CENTER IS REQUIRED.

2012FA0000093 RAYTHN SEAT UNLOCKED

1/24/2012 HAWKER800XP 3037081CS CABIN

FOUND NR 1 AND NR 2 LT SEAT DID NOT HAVE "SPRING-LOADED TRACK FITTING" PROPERLY ENGAGED INTO THE SEAT TRACK. THIS IS THE 2ND ACFT FOUND TO HAVE THIS CONDITION. DUPLICATE PROBLEMS SUGGEST THE DESIGN OF THE SAFETY LOCKING DEVICE THAT SHOULD PREVENT THE SEAT FROM DISENGAGING FROM THE SEAT TRACK SYS IN CASE THE OTHER 4 FITTINGS (FEET) HAPPEN TO ALIGN WITH THE SEAT TRACK OPENINGS. MM STATES THAT INSTALLING TECH NEEDS TO "ACCESS THE SPRING LOADED CHAIR FITTING IN THE CHAIR INBD BASE. ROTATE THE FITTING DOWN AND EXTEND WITH A SCREWDRIVER TO ENGAGE THE TRACKS. THEMM ADDS TO THE FOLLOWING CHECK: "TRACK THE SEAT FORE AND AFT TO CHECK THE OPERATION", WHICH WITH ENSURE PROPER OPERATION BUT THE ADDITIONAL RECOMMENDATION WOULD BE TO DO AN ADDITIONAL VISUAL INSPECTION FOR VERIFICATION OF PROPER FITTING ENGAGEMENT.

2012FA0000042 ROBSIN LYC RADIO SMOKE

1/16/2012 R44 O540F1B5 064105360 COCKPIT

SMOKE EMITTED FROM COMMUNICATIONS RADIO IN FLIGHT, RESULTING IN PRECAUTIONARY LANDING.

2012FA0000078 SNIAS CONNECTOR MISINSTALLED

1/19/2012 AS350B3 14803190 EXTERIOR LIGHT

LIGHT FOUND TO BE INOPERATIVE. FOUND PINS AT CONNECTOR TO NOT BE CRIMPED AND WIRES LOOSE. RECOMMEND IMPROVEMENT IN QC DURING INSTALLATION.

<u>2012FA0000075</u> SNIAS LIGHT MISINSTALLED

1/19/2012 AS350B3 14803180 HORIZONTAL STAB

LIGHT FOUND TO BE INOPERATIVE. FOUND PINS AT CONNECTOR TO NOT BE CRIMPED AND WIRES LOOSE.

RECOMMEND IMPROVEMENT IN QC DURING INSTALLATION.

QMLD201201180821 SNIAS STRUCTURE CHAFED

1/18/2012 AS350B3 TAIL BOOM

THE NEGATIVE BATTERY CABLE WAS FOUND TO HAVE RUBBED THE (INSIDE) TAIL BOOM BEYOND LIMITS.

<u>2012FA0000073</u> SNIAS TMECA MAGNETIC SEAL LEAKING

1/19/2012 AS350B3 ARRIEL2B1 9560134100 FREEWHEEL SHAFT

OIL FOUND ON ENGINE DECK DURING ALF CHECK. LEAK WAS DETERMINED TO COME FROM THE FRONT MAGNETIC SEAL OF THE FREEWHEEL SHAFT. LEAK RATE WAS MEASURED AT 11.94 ML/H. MAX LEAK RATE ALLOWED IS 10 ML/H AS SPECIFIED IN MFG TROUBLESHOOTING BOOK 71-00-06-816-804-B01. SUSPECT CAUSE TO

BE INCORRECT INSTALLATION DURING ASSY OR DEFECT IN THE MAGNETIC SEAL. RECOMMEND MONITORING INSTALLATION PRACTICES AND MAKING NECESSARY CHANGES OR A DESIGN CHANGE TO THE SEAL FOR IMPROVED SEALING CHARACTERISTICS.

2012FA0000074 SNIAS TMECA GROUND WIRE BROKEN

1/19/2012 AS350B3 ARRIEL2B1 TB1N CAUTION PANEL

PITOT LIGHT ON CAUTION PANEL NOT FUNCTIONING. FOUND GROUND WIRE FOR THE PITOT LIGHT CIRCUIT TO BE BROKEN. WIRE DID NOT HAVE THE SLACK REQUIRED WHEN INSTALLED, PLACING A STRAIN ON THE WIRE WHICH BROKE DURING OPERATION OF THE ACFT. RECOMMEDN IMPROVEMENTS IN QC OF ELECTRONICS INSTALLATIONS AND FOLLOWING RECOMMENDATIONS OF MFG AND AC43.13-1B/2B CHANGE 1.

LC1R2012020292GT SOCATA LYC CLAMP WORN

2/2/2012 TB21 TIO540AB1A 66M19385 MAGNETO

DURING AN ANNUAL INSP, THE DUAL MAGNETO WAS REMOVED TO FACILITATE REPLACEMENT OF A LEAKY MOUNTING GASKET. WHEN REMOVED IT WAS NOTICED THAT THE UPPER MOUNTING CLAMP, HAD WORN INTO THE UPPER MAG BASE FLANGE BY GREATER THAN .020". THE NUT SECURING THE MOUNTING CLAMP WAS FOUND TO BE TIGHT. THIS MAG HAD BEEN O/H 377 HOURS AGO AND WAS REMOVED FOR AN UNKNOWN REPAIR 198 HOURS AGO. THE FLANGE UNDER THE LOWER CLAMP WAS HEAVILY MARKED BUT NOT WORN TO ANY GREAT DEGREE.

<u>2012FA0000081</u> SOCATA PWA FUEL CONTROL FAILED 1/31/2012 TBM700 PT6A64 8063055REVNEW ENGINE

DURING RUNUP, PROP FEATHER CHECK CONDUCTED NORMALLY. WHEN ADVANCING POWER LEVER TO DO A PROP OVERSPEED TEST, COULD NOT REACH 1900 RPM WITH POWER LEVER FORWARD. HIGHEST RPM ACHIEVED WAS 1700. SHUTDOWN AND RESTART. DURING THE START, AT LOW IDLE, FLAMES SHOT OUT OF THE EXHAUST. SHUTDOWN AND MOTORED STARTER FOR A MINUTE. ON A SUBSEQUENT START UP, FLAMES SHOT OUT AGAIN. A NEW FCU WAS INSTALLED. ENGINE PERFORMED NORMALLY. ENG MFG IS EXAMINING THE FAILED FCU IN THEIR LAB

<u>HKGR20120207442</u> SWRNGN WIRE BURNED 2/7/2012 SA227AC STARTER

DURING ENGINE START, 4/0 WIRES FROM NR 1 START CONTROL RELAY TO NR 1 START/GEN OVERHEATED AND SEPARATED COMPLETELY. 1 WIRE WAS SPLICED IAW MM AT BLO. THE SPLICE APPEARS TO HAVE FAILED VIOLENTLY, AND THE WIRE THAT WAS NOT SPLICED OVERHEATED AND PARTED. POST INCIDENT INSPECTION CANNOT DETERMINE WHICH WIRE FAILED FIRST, BUT THE OTHER CONDUCTOR WAS NOT ABLE TO CARRY THE ENTIRE INRUSH LOAD. REPLACE CABLES ENTIRELY FROM START CONTROL TO STARTER GENERATOR, NO SPLICES USED.