



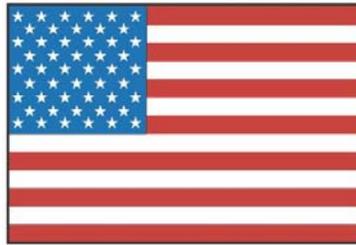
U.S. Department
of Transportation
**Federal Aviation
Administration**

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Regulatory Support Division

ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



**ALERT
NUMBER
329**



**DECEMBER
2005**

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

AVIATION MAINTENANCE ALERTS

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

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

AIRPLANES

AERONCA

Aeronca: 7AC; Cracked Wing Spar; ATA 5711

The submitter states, "The aft R/H spar has a longitudinal crack on the lower end. The crack is located at the strut attach point. *(This) spar also shows signs of rotting—inboard of the crack area.*" *(No description of this crack or dimensions was provided, nor was there an included part number for the spar.)*

Part Total Time: 4,138.1 hours.

BEECHCRAFT

Beechcraft: A-36; Imploded Tip-Tank; ATA 2810

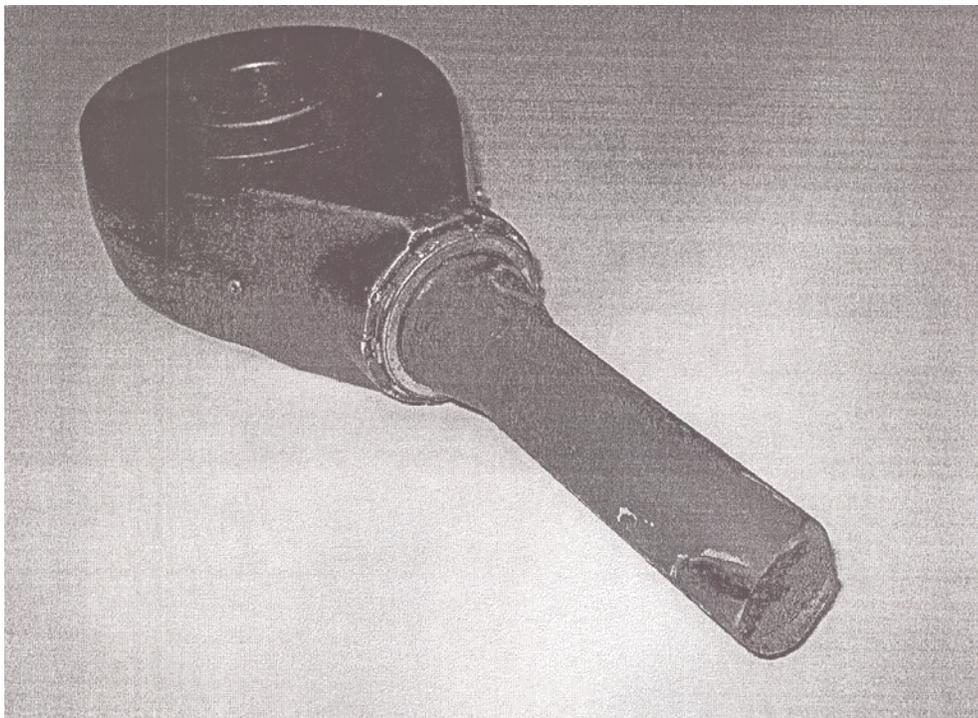
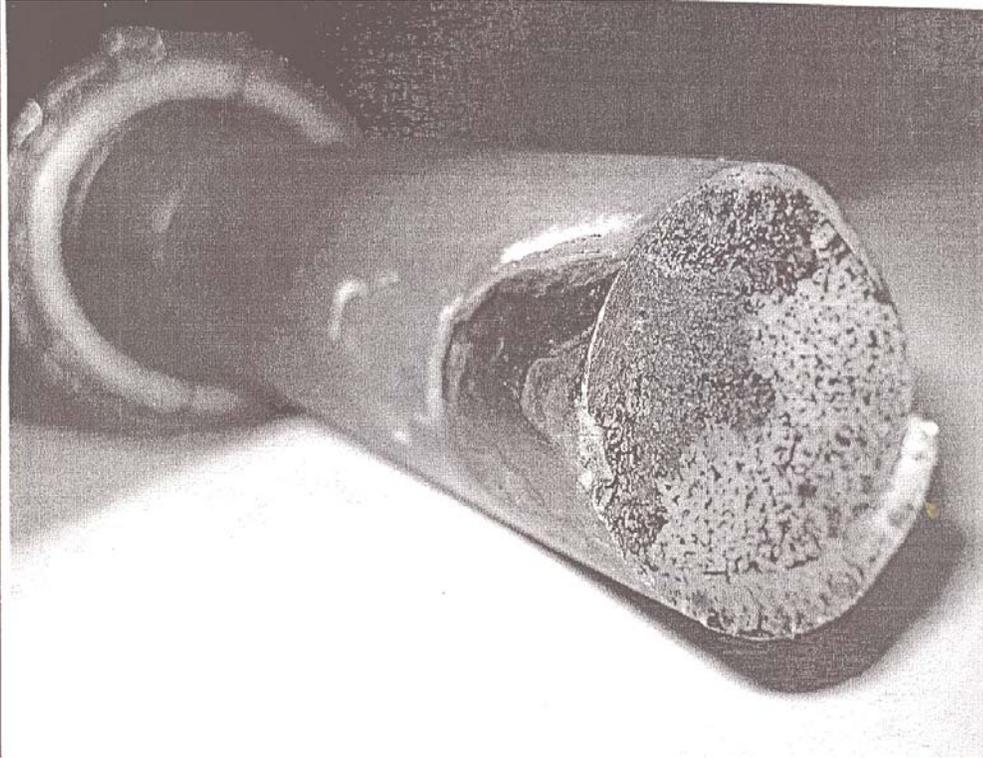
"(This aircraft's...) R/H Osborne Inc. auxiliary fuel tip tank imploded," states the technician (P/N 55000-105). *"(It has been...)* determined the probable cause was a plugged vent. Guidance suggests: (1) when parked, keep the vent capped with a pitot-like cover, (2) during preflight...open the gas cap, connect a tube to the ¼ inch vent tube and blow, *(verifying)* the vent is not plugged." Obviously, a restricted vent should be cleared before flight. *(The SDRS data base reflects one specific entry of insects clogging this vent.)*

Part Total Time: unknown.

BOEING

Boeing: 747 SP-21; Broken Aileron Power Control Rod; ATA 2710

"On August 5th, during the flight control rigging operation, the L/H aileron power control unit's rod-end was found broken," states the submitter. "This rod-end is part of the Bendix PCU (P/N 317012-1) assembly. Evidence of corrosion is apparent at the cracked location. See the attached photo's of the PCU rod end..." *(The part's total time and/or time since last overhaul was not provided. The attached photographs are low resolution, but clearly show the consequences of undetected corrosion.)*



Part Total Time: unknown.

CESSNA

Cessna: 152; Sinking Carburetor-Floats; ATA 7322

This respondent describes practicing touch-and-go landings. He had reduced power and turned base when the engine suddenly quit. "An uneventful landing was made, and after climbing out of the aircraft, fuel could be seen coming out of the cowling. Further investigation found one of the fuel bowl floats to be $\frac{3}{4}$ full of fuel, and the other was $\frac{1}{4}$ full. This caused the float to sink and fuel/air mixture to be rich at reduced power settings. *(These two events...)* caused the engine to flood out and quit on the approach to land." *(Carburetor listed as a Precision. No part numbers were provided. The SDRS data base records three other float related defects.)*

Part Total Time: 509.5 hours.

Cessna: 172 RG; Cracked Landing Gear Actuators; ATA 3233

(The following is a composite of three separate defect reports from the same technician on the same model—but different aircraft.)

The first submission states, "The pilot *(for this aircraft)* reported a side load on landing. On a subsequent take-off the R/H main landing gear would not fully retract. *(Inspection...)* found the R/H actuator *(P/N 9882015-2)* cracked at the forward bolt hole." Another aircraft produced a similar defect during a 100-hour inspection for the L/H retraction actuator (same part number): it was not only cracked but the upper forward bolt was found sheared. The third defect report again describes failure of another 172 aircraft's L/H main gear to retract...and the same "...actuator cracked at the forward bolt hole..." as the above discrepancy. *(The reported part times on each aircraft's failed actuator were 2,893.6, unknown, and 1,407.2 hours, respectively. The SDRS data base records 28 entries related to this ATA code since 1995.)*

Part Total *(averaged)* Time: 2,150.4 hours.

Cessna: 172RG; Frayed Elevator Cables; ATA 2730

(The following is a composite of three separate defect reports from the same technician on the same model—but different aircraft.)

During the months of April, May, and July of this year a technician at a repair station finds and reports the exact same defect on the same type aircraft; all in the same location; all within the same approximate (part) time frames. A 100-hour inspection on each aircraft found broken elevator cable strands approximately two feet from the aft end. The elevator cable part number listed is 0510105-391. Part times ranged 694.2 -- 886.1 hours. No anecdotal observations as to cause were provided.

Part Total Time *(averaged)*: 822.1 hours.

Cessna: U206F; Corroded Fuselage Skins; ATA 5330

This aircraft was undergoing extensive avionics upgrade installations. During some of the antenna installations "...a technician noticed corrosion under factory installed dampening/installation material," writes the submitter. This corrosion was found on the lower fuselage skins only beneath those pieces of insulating material that were apparently coming loose. He describes removing the minor corrosion and treating the affected areas. *(I)* suggest close inspection of this area in all aircraft. *(This)* problem is more than likely caused by age and moisture accumulation." *(There are two additional internal skin corrosion reports in the SDRS data base.)*

M&D REPORT 7.21.2005



INSULATION STILL
INSTALLED

POST REPAIR AREA



Part Total Time: 5,757.0 hours.

Cessna: 401A; Main Gear: Torque-Link Attach Points Cracked; ATA 3222

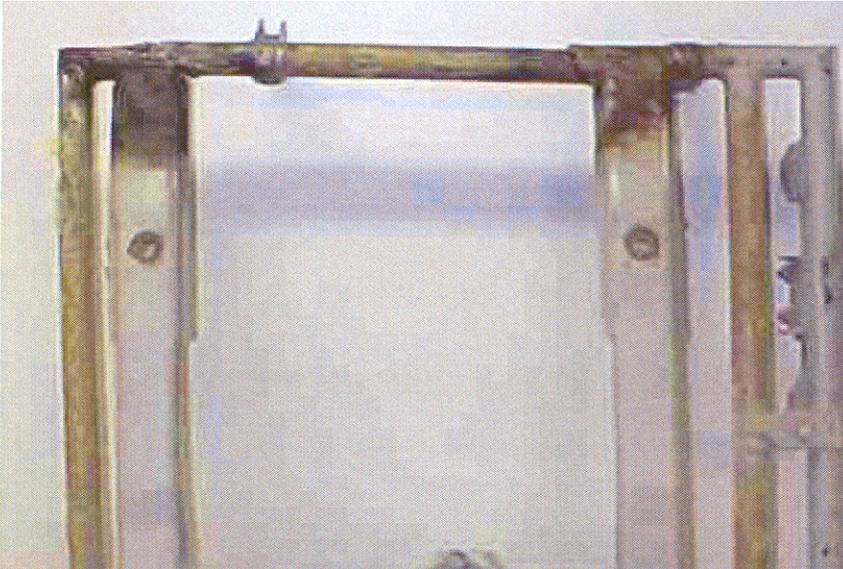
The submitter states, "The left and right main landing gear had cracks on the boss area where the torque links attach. These cracks were about 1/4 inch long and located next to where the boss connects to the tube (*strut housing*)."
(Main landing gear part number as provided: 509410.)

Part Total Time: 8,875.0 hours.

Cessna: 550; Cracked Seat Frames; ATA 2510

(The following combines two submissions from the same repair station describing identical discrepancies on two different Cessna 550 aircraft. Ten photographs were included, two of which are duplicated here.)

“The upper chair base assembly(s) are cracked at the chair back attach points.” These discrepancies include notations that these assemblies both show previous, inappropriate repairs. The technician references Aviation Fabricators STC (*supplemental type certificate*) ST01042WI structural seat repair as proper guidance. Part numbers for the left and right assemblies were noted as 5519015-13 and -14. *(See also the Alerts for July, September, and November for almost identical reports. From 2002 to the present, the SDRS data base records 19 reports related to this ATA code, 15 of which specifically reference cracks.)*



Part Total Times: unknown.

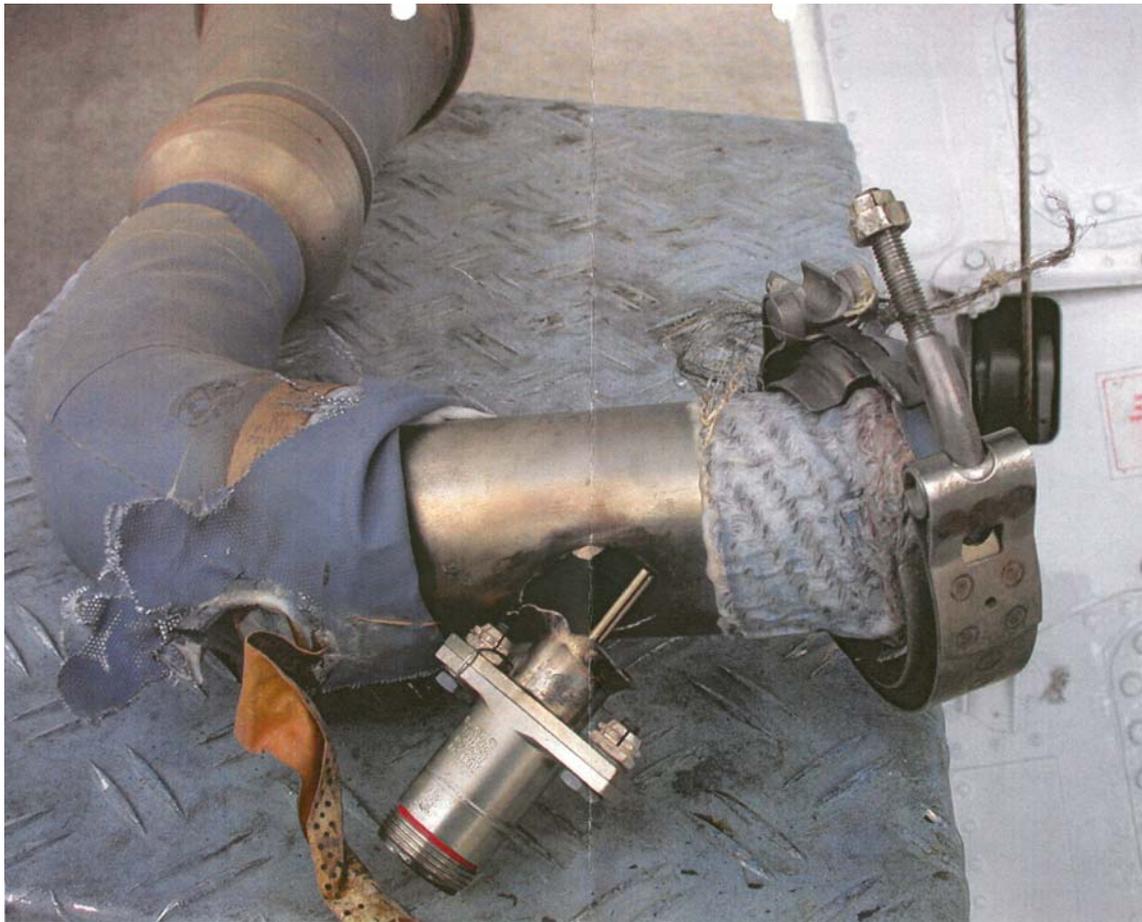
Cessna: 650; Broken Wheel Bolts; ATA 3246

This respondent describes conducting a weekly inspection of the aircraft, during which one broken through-bolt was discovered in the L/H main landing gear's number one wheel, and two broken through-bolts in the number two wheel (for the same gear). He indicates these bolts have been retained for further investigation, but does not offer speculation as to cause of their failure. The main wheel part number provided as 3-1399-6.

Part Total Time: unknown.

DASSAULT**Dassault: 900B; Bleed Air Temperature Probe Support Cracked; ATA 7500**

A mechanic's investigation into a problem with an oil pressure transmitter for this aircraft's number one engine led to the discovery of a hot air leak from the supporting pylon. Further observation revealed a large crack in a bleed-air duct around a temperature probe. No secondary damage was found as result of the cracked duct, or speculation offered for its cause. *(One of two photographs is shown below.)*



Part Total Time: 3,844.4 hours

ISRAEL AIRCRAFT

Israel Aircraft: 1124; Failed Hydraulic O-Ring; ATA 2910

A mechanic describes troubleshooting the cause for this aircraft's emptied hydraulic system. A hydraulic line "...was found to have a defective o-ring just aft of the hydraulic reservoir at a T-fitting location. The defective o-ring depleted the hydraulic reservoir—running the hydraulic system out of fluid. This caused the R/H engine driven hydraulic pump to cavitate, which damaged the pump internally. The o-ring was replaced with a new o-ring (P/N NAS 1612-4), and the engine driven hydraulic pump was also replaced. The system was serviced and operationally function and leak checked with no other discrepancies noted." "At this time I have no recommendations to prevent recurrence, except for maintenance care when working with hydraulic o-rings. I suspect this o-ring failure was due to normal deterioration and or improper installation at the time of the last maintenance function performed to that fitting." (*The SDRS data base references two additional hydraulic O-ring failures.*)

Part Total Time: unknown.

PIPER

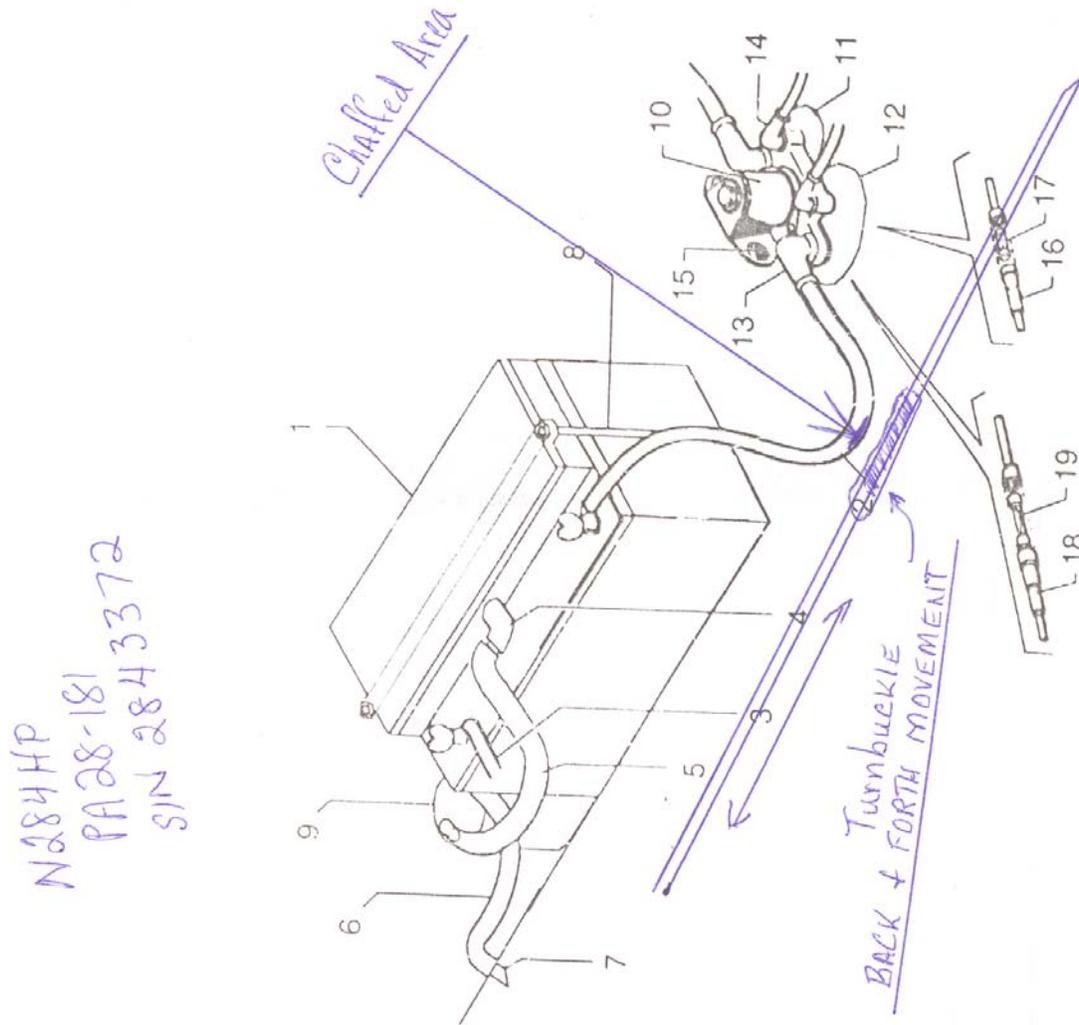
Piper: PA-24-180; Failed Landing Gear Extension; ATA 3230

The submitter states, "The landing gear retraction system would not extend the gear to a down and locked position. Several attempts to cycle the gear popped the gear motor circuit breaker. The transmission de-coupler released when the emergency gear extension was attempted, however, the gear would not go to the down and locked position. The pilot's attempt to recycle the gear to the retracted position, and then back to the extended position--*after the emergency gear extension was actuated*--more than likely exacerbated the problem...." "(The) transmission de-coupler was now in direct contact with the gear through-bolt, making extension improbable." The writer suggest a flight manual supplement or a revised emergency gear extension placard advising pilots against normal gear retraction after an emergency extension attempt. (*The transmission assembly part number listed is Piper 25720-00.*)

Part Total Time: unknown.

Piper: PA 28-181; Chaffed Battery Cable; ATA 2432

Routine maintenance found this aircraft's positive battery cable (P/N 78140-39) progressively chaffed by a control cable's turnbuckle. "This sawing motion of the turnbuckle almost wore through the battery cable insulation jacket," says a mechanic. "This battery cable was repositioned during the last 100 hour inspection for the same reason. Apparently the cable has taken a 'set'—it keeps returning to its original bend configuration. (My) recommendation is to shorten the cable and to crimp the terminal ends 90 degrees to the lay of the cable."



Part Total Time: 1794.8 hours.

RAYTHEON

Raytheon: B36TC; Failed Alternator; ATA 2421

A mechanic describes a sequence of events resulting from a failed alternator. This aircraft was in flight, engine running, and the alternator switch “on.” At some point the alternator’s red annunciator *fail* light illuminated, followed by the load meter registering zero. As battery voltage began to drop below 24 volts, so too oil temperature and pressure indications. In preparation for landing, gear and flaps were selected to the down position, but they failed to respond due to the low battery voltage and the dead alternator. He states the aircraft was forced to land gear-up. (*The Continental alternator part number given is TCM 649304.*)

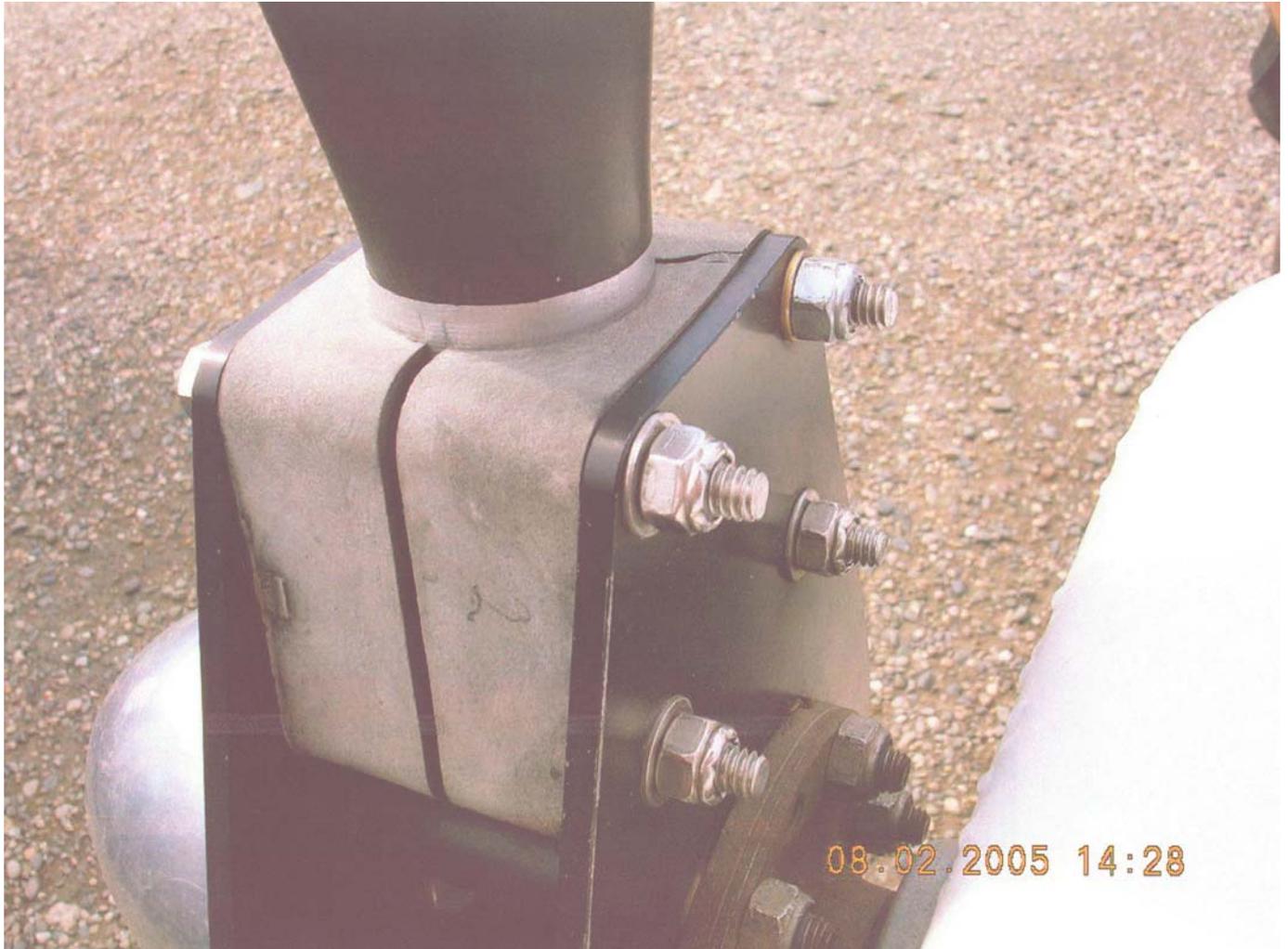
Part Total Time: 709.4 hours.

ZENAIR

Zenair: CH-701; Cracked Warp Drive Propeller Hub; ATA 6114

“During an inspection,” states the submitter, “it was noted the Warp Drive, 2 bladed propeller (WD-2B-68) had a crack in the hub (*extending*) from the base of the blade to one of the outer flange bolts. This is the flange that lashes (*mates*) up to the reduction gear box hub on the Rotax 582 installed on this aircraft.” (*At the time of this writing, requisite permissions have not yet been extended for other source references. More on this propeller issue will hopefully follow next month. Relevant discussions may be read at the “www.ultralightnews.ca” website. Look under “advisories”, and then “Warp Drive”.*)





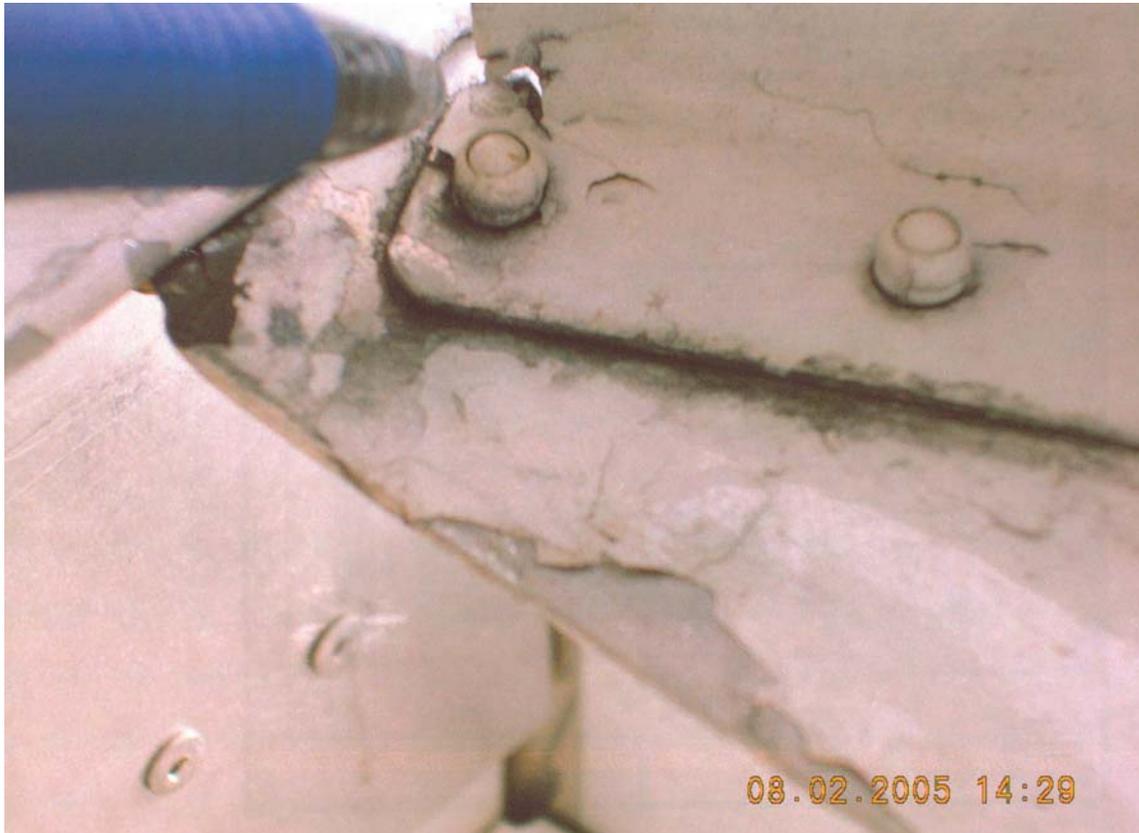


Part Total Time: unknown.

Zenair: CH-701; Cracked Elevator Hinge Bracket; ATA 5552

The submitter describes finding the elevator's forward hinge attach bracket "...cracked at the aft bend in the radius near the aft attach rivet. The owner stated this was a common occurrence on these model aircraft and that...*(he knew of two other planes having the same defect).*" No part numbers were provided with this report.





Part Total Time: unknown.

Zenair: CH-701; Loose Rudder Hinge Fitting; ATA 5554

The same submitter from the preceding report found another significant structural defect on the same aircraft and during the same inspection. The rudder lower hinge attach fitting's aft two attach rivets were found pulling free from the reinforcing channels. "It should be noted the rudder is also the vertical fin on this aircraft. (I) recommend these pop-rivet type fastener be removed and aircraft hardware be installed, either bolts or MS screws. Aircraft owners should also consider installing doubler channels on the bottom side of this attach point." No part numbers were provided with this report.



Part Total Time: unknown.

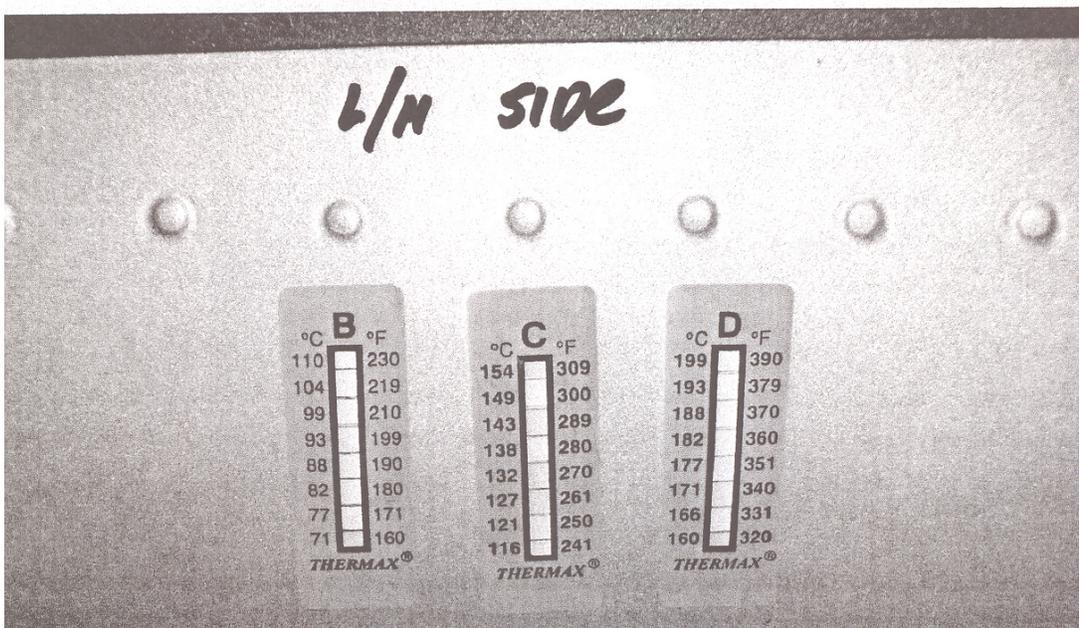
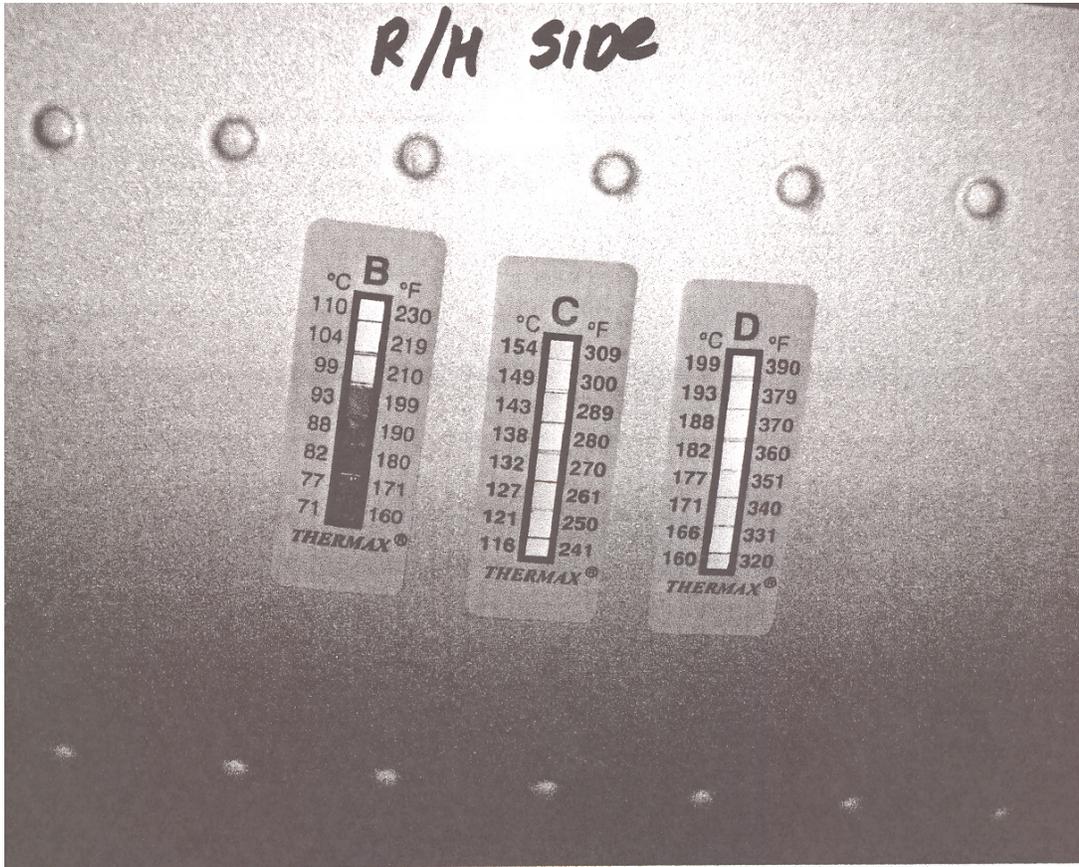
HELICOPTERS

AUGUSTA

Augusta: A109E; Flawed Antenna Placement; ATA 3454

A technician describes having difficulties with the placement of this aircraft's navigation antennas. "Over the past 24 months this aircraft has had four sets of navigation antennas installed. The failure mode of the antenna is 'right hand element becomes extremely weak', which causes navigation indicator display errors of up to 5 degrees. Visual inspection indicates the R/H antenna element is exposed to a much higher temperature than the L/H element. A recent flight performed with temperature strips affixed to the aircraft proved this as fact. The temperature strips on the R/H side of the aircraft indicate an 'in flight' temperature in excess of 199 degrees F. The design limit for this antenna is 185 degrees F (*according to*) the manufacturer. (*My*) recommendations include either using an antenna suitable for higher temperature exposure or re-locating the antennas (*to fuselage positions*) away from the exhaust. (*Antenna part number is DMN48-1.*)





Part Total Time: unknown.

BELL

Bell: 206L-1; Broken Throttle Cable; ATA 7321

A technician states, "Upon landing for cargo transport, the throttle was reduced to flight idle but the engine RPM stayed the same. The throttle was opened and closed several times with no effect on engine RPM. Finally the pilot shut the engine off by turning the main fuel shut-off...*(then he)* notified maintenance. The mechanic discovered the inner cable was severed two feet *(back)* from the throttle *(mechanism)* in the cockpit. He removed and replaced the cable and the aircraft was returned to service after completion of function checks in accordance with the maintenance manual." *(Throttle cable part number is given as 04638C80Z38-2. No speculation as to cause was provided.)*

Part Total Time: unknown.

AIR NOTES

ELECTRONIC VERSION OF FAA FORM 8010-4, MALFUNCTION OR DEFECT REPORT

One of the recent improvements to the Flight Standards Service Aviation Information Internet web site is the inclusion of FAA Form 8010-4, Malfunction or Defect Report. This web site is still under construction and further changes will be made; however, the site is now active, usable, and contains a great deal of information.

Various electronic versions of this form have been used in the past; however, this new electronic version is more user friendly and replaces all other versions. You can complete the form online and submit the information electronically. The form is used for all aircraft except certificated air carriers who are provided a different electronic form. The Internet address is: <http://av-info.faa.gov/SDRX>

When the page opens, select "M or D Submission Form" and, when complete, use the "Add Service Difficulty Report" button at the top left to send the form. Many of you have inquired about this service. It is now available, and we encourage everyone to use this format when submitting aviation, service-related information.

PAPER COPY OF FAA FORM 8010-4, MALFUNCTION OR DEFECT REPORT

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.

INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE

The Federal Aviation Administration (FAA) Internet Service Difficulty Reporting (iSDR) web site is the front-end for the Service Difficulty Reporting System (SDRS) data base that is maintained by the Aviation Data Systems Branch, AFS-620, in Oklahoma City, Oklahoma. The iSDR web site supports the Flight Standards Service (AFS), Service Difficulty Program by providing the aviation community with a voluntary and electronic means to conveniently submit in-service reports of failures, malfunctions, or defects on aeronautical products. The objective of the Service Difficulty Program is to achieve prompt correction of conditions adversely affecting continued airworthiness of aeronautical products. To accomplish this, Mechanical Reliability Reports (MRRs),

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>.

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

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

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

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

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

The SDRS and iSDR web site point of contact is:

John Jackson
Service Difficulty Reporting System, Program Manager
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125
Telephone: (405) 954-6486
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 submitted for the previous month, which have been entered into the FAA Service Difficulty Reporting (SDR) System data base. This is not an all-inclusive listing of Service Difficulty Reports. For more information, contact the FAA, Regulatory Support Division, Aviation Data Systems Branch, AFS-620, located in Oklahoma City, Oklahoma. The mailing address is:

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

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

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

Federal Aviation Administration

Service Difficulty Report Data

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

| Control Number | Aircraft Make | Engine Make | Component Make | Part Name | Part Condition |
|--|----------------|--------------|-----------------|---------------|-----------------|
| Difficulty Date | Aircraft Model | Engine Model | Component Model | Part Number | Part Location |
| MDR02BO2005 | | | | NUT | CRACKED |
| 1/10/2005 | | | | 10514104119 | MAIN ROTOR HEAD |
| UPON INSPECTION AND MAINTENANCE OF MAIN ROTOR HEAD ASSY, SUBCOMPONENT (UPPER QUAD NUT) WAS SENT TO VENDOR FOR MAG PARTICLE INSPECTION AND SUBSEQUENTLY WAS REJECTED. THIS CONDITION HAS BEEN REPORTED TO MFG FOR INVESTIGATION AND ANALYSIS OF CAUSE. (K) | | | | | |
| 2005FA0001492 | | | | BEARING | CORRODED |
| 11/1/2005 | | | | 3661RSP5 | HORIZ STAB ACT |
| TAILPLANE ACTUATOR EXCEEDED SCREW/CASING END PLAY LIMIT OF 0.25 MM AS LISTED IN MM. DISASSEMBLED UNIT AND FOUND PRESENCE OF WATER CONTAMINATION AND INTERNAL BALL BEARINGS RUSTED. DATE DISCOVERED 17 AUG 2005. UNIT SHOULD BE CHECKED INTERNALLY FOR CONDITION OF BALL BEARINGS AND PROPER LUBRICATION. AT PRESENT MM PROVIDES NO SCHEDULED INTERVALS TO MONITOR BEARING CONDITIONS. (K) | | | | | |
| 2005FA0001491 | | AMD | | BEARING | CORRODED |
| 9/1/2005 | | | | EX405RC | HORIZONTAL STAB |
| TAILPLANE ACTUATOR EXCEEDED SCREW CASING END PLAY LIMIT OF 0.25 MM AS LISTED IN MM. DISASSEMBLED UNIT AND FOUND PRESENCE OF WATER CONTAMINATION AND INTERNAL BALL BEARINGS RUSTED. DATE DISCOVERED 17 AUG 2005. UNIT SHOULD BE CHECKED INTERNALLY FOR CONDITION OF BALL BEARINGS AND PROPER LUBRICATION. AT PRESENT, MFG MM PROVIDE NO SCHEDULED INTERVALS TO MONITOR BEARING CONDITIONS. (K) | | | | | |
| CA051007002 | | | | MANUAL | INACCURATE |
| 9/30/2005 | | | | | MAINTENANCE |
| AFTER REVIEWING PRODUCTION FLT TEST PROCEDURE, IT WAS FOUND THAT NO MENTION OF PROP BOLTS TQ CHECK AFTER FIRST FLT AS RECOMMENDED BY MT PROPELLER DOCUMENT. AFTER REVIEWING MM, IT WAS FOUND THAT PROP BOLTS TQ CHECK AFTER FIRST 25HRS OF OP AS RECOMMENDED BY MT PROPELLER WAS MISSING IN SPECIAL INSPECT SECTION. AS PRECAUTIONARY MEASURE OWNERS OF MDL SA160 S/N S-0001, S-0002, S-0003, S-0004S-0005, S-0006 WERE CONTACTED BY PHONE AND ADVISED TO CARRY OUT PROP BOLTS TQ CHECK AS PER MT PROP, BEFORE NEXT FLT IF A/C HAD ACCUMULATED LESS THAN 100 HRS ON TACH IND SINCE DELIVERY, FOR A/C THAT HAD ACCUMULATED MORE THAN 100 HRS, RE-TQ SHOULD HAVE BEEN CARRIED OUT AS PER ANNUAL/100 HRS INSPECTION AS INCORPORATED IN MM INSPECTION PROGRAM. | | | | | |
| CA051017010 | | ALLSN | ALLSN | IDLER GEAR | FRACTURED |
| 9/29/2005 | | 250C20B | | 6845867 | SCAVENGE PUMP |
| AIRCRAFT NOTED AS SMOKING ON TAXI BY TOWER. TAKEOFF WAS ABORTED AND INSUFFICIENT OIL PUMP SCAVENGE NOTED AS SOURCE OF TURBINE SMOKING PROBLEM. WHEN DISMANTLED FOR REPAIR AND INSPECTION, FOUND ONE SCAVENGE ELEMENT GEAR HAD A BROKEN TOOTH. PART IS 3812.7 HOURS SINCE LAST NDT INSPECTION. OEM NOTIFIED OF PROBLEM AND PROVIDED PICTURES OF NONCONFORMANCE. | | | | | |
| 2005FA0001396 | | CONT | | CYLINDER HEAD | CRACKED |

7/5/2005 IO520BA 1691111 ENGINE
CYLINDER 16911-11 BLEW A HOLE IN THE SIDE. CYLINDER 16757-25 CRACKED. TSN 71.2 ACA
CYLINDERS. (K)

[2005FA0001389](#) PWA COMPRESSOR WHEEL CORRODED

10/3/2005 JT12* 725008 ENGINE

THESE PARTS WERE REMOVED FROM SERVICE AT ENGINE TSO OF 2824.2 HOURS. THE FOLLOWING PARTS (COMPRESSOR DISKS) WERE DEEMED SCRAP DUE TO NOT BEING ABLE TO READ PN AND/OR SN BECAUSE OF CORROSION. WE SUSPECT THAT THE CAUSE OF EXCESSIVE CORROSION IS THE WINDAGE TABS NOT BEING ADEQUATELY COATED. (NOTE: DUE TO PN AND SN OF PARTS BEING NOT LEGIBLE, THE PN AND SN WERE OBTAINED FROM PREVIOUS RECORDS/DISK SHEETS). (K)

[2005FA0001390](#) PWA COMPRESSOR WHEEL CORRODED

10/3/2005 JT12* 701409 ENGINE

THESE PARTS WERE REMOVED FROM SERVICE AT ENGINE TSO OF 2824.2 HOURS. THE FOLLOWING PARTS (COMPRESSOR DISK) WERE DEEMED SCRAP DUE TO NOT BEING ABLE TO READ PN AND/OR SN BECAUSE OF CORROSION. WE SUSPECT THAT THE CAUSE OF EXCESSIVE CORROSION IS THE WINDAGE TABS NOT BEING ADEQUATELY COATED. (NOTE: DUE TO PN AND SN OF PARTS BEING NOT LEGIBLE, THE PN AND SN WERE OBTAINED FROM PREVIOUS RECORDS/DISK SHEETS). (K)

[2005FA0001391](#) PWA COMPRESSOR WHEEL CORRODED

10/3/2005 JT12* 725008 ENGINE

THESE PARTS WERE REMOVED FROM SERVICE AT ENGINE TSO OF 160.5 HOURS (PRIOR TO THE ENGINE TBO OF 3000 HOURS). THE FOLLOWING PARTS (COMPRESSOR DISK) WERE DEEMED SCRAP DUE TO NOT BEING ABLE TO READ PN AND/OR SN BECAUSE OF CORROSION. SUSPECT THAT THE CAUSE OF EXCESSIVE CORROSION IS THE WINDAGE TABS NOT BEING ADEQUATELY COATED. (NOTE: DUE TO PN AND SN OF PARTS BEING NOT LEGIBLE, THE PN AND SN WERE OBTAINED FROM PREVIOUS RECORDS/DISK SHEETS). (K)

[2005FA0001388](#) PWA COMPRESSOR WHEEL CORRODED

10/3/2005 JT12* 496706 ENGINE

THESE PARTS WERE REMOVED FROM SERVICE AT ENGINE TSO OF 2824.2 HOURS. THE FOLLOWING PARTS (COMPRESSOR DISK) WERE DEEMED SCRAP DUE TO NOT BEING ABLE TO READ PN AND/OR SN BECAUSE OF CORROSION. SUSPECT THAT THE CAUSE OF EXCESSIVE CORROSION IS THE WINDAGE TABS NOT BEING ADEQUATELY COATED. (NOTE: DUE TO PN AND SN OF PARTS BE NOT LEGIBLE, THE PN AND SN WERE OBTAINED FROM PREVIOUS RECORDS/DISK SHEETS). (K)

[2005FA0001383](#) PWA COMPRESSOR WHEEL CORRODED

10/3/2005 JT12* 701106E ENGINE

THESE PARTS WERE REMOVED FROM SERVICE AT ENGINE TSO OF 1493.7 HOURS (PRIOR TO THE ENGINE TBO OF 3000 HOURS). THE FOLLOWING PARTS (COMPRESSOR DISKS) WERE DEEMED SCRAP DUE TO NOT BEING ABLE TO READ PN AND/OR SN BECAUSE OF CORROSION. WE SUSPECT THAT THE CAUSE OF EXCESSIVE CORROSION IS THE WINDAGE TABS NOT BEING ADEQUATELY COATED. (NOTE: DUE TO PN AND SN OF PARTS BEING NOT LEGIBLE, THE PN AND SN WERE OBTAINED FROM PREVIOUS RECORDS/DISK SHEETS). (K)

[2005FA0001384](#) PWA COMPRESSOR WHEEL CORRODED

10/3/2005 JT12* 725008F ENGINE

THESE PARTS WERE REMOVED FROM SERVICE AT ENGINE TSO OF 1493.7 HOURS (PRIOR TO THE ENGINE TBO OF 3000 HOURS). THE FOLLOWING PARTS (COMPRESSOR DISK) WERE DEEMED SCRAP DUE TO NOT BEING ABLE TO READ PN AND/OR SN BECAUSE OF CORROSION. WE SUSPECT THAT THE CAUSE OF EXCESSIVE CORROSION IS THE WINDAGE TABS NOT BEING ADEQUATELY COATED. (NOTE: DUE TO PN AND SN OF PARTS BEING NOT LEGIBLE, THE PN AND SN WERE OBTAINED FROM PREVIOUS RECORDS/DISK SHEETS). (K)

| | | | | |
|-------------------------------|--|--------|------|-------------|
| 2005FA0001450 | | PWA | SEAL | WRONG PART |
| 10/12/2005 | | JT8D15 | | FUEL NOZZLE |

INCORRECT SEAL INSTALLED ON PRE-ASB6169 FUEL NOZZLES, PT NR 809137-01, SEAL NR 814352 INSTALLED, CORRECT SEAL FOR PRE ASB6169 IS NR 775723. (K)

| | | | | |
|-----------------------------|----------|-------|---------|---------------|
| CA051017001 | AEROSP | PWA | SENSOR | MALFUNCTIONED |
| 10/11/2005 | ATR42300 | PW120 | 1030032 | HALL EFFECT |

THE NR 2 DC GENERATING SYSTEM WENT OFF LINE AFTER DEPARTING YFB. THE AIRCRAFT RETURNED TO POINT OF DEPARTURE WHERE MAINTENANCE DETERMINED THE NR 2 HALL EFFECT SENSOR HAD FAILED. THE SENSOR WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE.

| | | | | |
|-----------------------------|----------|-------|-----------|-----------------|
| CA051005003 | AEROSP | PWA | GENERATOR | MALFUNCTIONED |
| 10/3/2005 | ATR42300 | PW120 | 200322 | NR 2 A/C SYSTEM |

(CAN) APPROXIMATELY 30 MINUTES ENROUTE THE AIRCRAFT HAD NR 2 AC WILD FAULT INDICATION. THE AIRCRAFT RETURNED WHERE MAINTENANCE REPLACED THE UNIT AND RETURNED THE AIRCRAFT TO SERVICE.

| | | | | |
|-----------------------------|----------|-------|-----------|-------------|
| CA051005005 | AEROSP | PWA | GENERATOR | INOPERATIVE |
| 10/3/2005 | ATR42300 | PW120 | 200322 | NR 2 A/C |

(CAN) APPROXIMATELY 30 MINUTES AFTER DEPARTING THE AIRCRAFT HAD A NR 2 AC WILD FAULT INDICATION. THE CREW RETURNED THE AIRCRAFT, WHERE MAINTENANCE REPLACED THE NR 2 AC GENERATOR AND RETURNED THE AIRCRAFT TO SERVICE.

| | | | | |
|-----------------------------|----------|-------|-------------|---------------|
| CA051006012 | AEROSP | PWA | TSCU | UNSERVICEABLE |
| 9/19/2005 | ATR42300 | PW121 | 30005000044 | ENGINE |

(CAN) FOLLOWING TAKE-OFF, THE ENGINE EXPERIENCED AN UNCOMMANDED TORQUE REDUCTION ACCOMPANIED BY A REDUCTION IN PROPELLER SPEED. THE ENGINE WAS SHUT DOWN IN FLIGHT AND THE AIRCRAFT DIVERTED TO POINT OF DEPARTURE. SUBSEQUENT INSPECTION REVEALED AN UNSERVICEABLE TORQUE SIGNAL CONTROL UNIT (TSCU).

| | | | | |
|-----------------------------|----------|-------|------------|---------|
| CA051006002 | AEROSP | PWA | COMPRESSOR | LEAKING |
| 9/7/2005 | ATR42300 | PW121 | | ENGINE |

(CAN) DURING CLIMB, SMOKE BECAME EVIDENT IN THE CABIN AIR ACCOMPANIED BY AN DECREASE IN ENGINE OIL PRESSURE AND AN INCREASE IN TEMPERATURE. THE ENGINE WAS SHUTDOWN IN FLIGHT AND THE AIRCRAFT DIVERTED TO POINT OF DEPARTURE. SUBSEQUENT INSPECTION REVEALED SEIZURE OF THE PROP SHAFT AND OIL LEAKING FROM THE COMPRESSOR SECTION. MFG WILL MONITOR INVESTIGATION OF THE INCIDENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

| | | | | |
|-----------------------------|----------|-------|--------|---------------|
| CA051005010 | AEROSP | PWA | ENGINE | MALFUNCTIONED |
| 9/3/2005 | ATR42320 | PW121 | | |

(CAN) IN DESCENT THE ENGINE EXPERIENCED AN UNCOMMANDED POWER ROLL-BACK. THE ENGINE WAS SHUT DOWN IN FLIGHT AND A SINGLE ENGINE LANDING ACCOMPLISHED AT POINT OF DESTINATION. THE ENGINE FUEL CONTROL WAS SUBSEQUENTLY REPLACED. MFG WILL MONITOR INVESTIGATION OF THE EVENT AND ADVISE OF ROOT CAUSE ONCE DETERMINED.

| | | | | |
|-------------------------------|--------|--|----------------|---------|
| 2005FA0001462 | AEROSP | | PIPE | CRACKED |
| 10/11/2005 | ATR72 | | S7811200000200 | ENGINE |

JET PIPE, CRACK IN BASE METAL PARALLEL TO ATTACH FLANGE, FROM VIBRATION. (K)

| | | | | |
|-----------------------------|--------|--------|--------|------------|
| CA051006004 | AEROSP | PWA | ENGINE | POWER LOSS |
| 9/7/2005 | ATR72 | PW124B | | |

(CAN) DURING CLIMB, THE ENGINE EXPERIENCED AN UNCOMMANDED DECREASE IN TORQUE ACCOMPANIED BY AN INCREASE IN TEMPERATURE. THE ENGINE WAS REPORTED TO EMIT A LOUD NOISE. THE AIRCRAFT DIVERTED TO POINT OF DEPARTURE. MFG WILL MONITOR INVESTIGATION OF THE EVENT AND WILL ADVISE OF ROOT CAUSE ONCE DETERMINED.

| | | | | |
|-------------------------------|----------|--|--------------|---------------|
| 2005FA0001485 | AEROSP | | FEEDER CABLE | CHAFED |
| 9/23/2005 | ATR72202 | | | RT CABIN AREA |

DURING INDUCTION INSPECTION FOR PASSENGER TO FREIGHTER CONVERSION MODIFICATION, INSPECTION REVEALED 2 AREAS OF SEVERE CHAFING RESULTING IN EXPOSURE OF CONDUCTOR WIRES FOR AC WILD FEEDERS AT RT SIDE CABIN AREA BETWEEN FRAMES 15-17 APPROXIMATELY STRINGER 5R. (K)

| | | | | |
|-------------------------------|----------|--|--------------|---------------|
| 2005FA0001486 | AEROSP | | FEEDER CABLE | CHAFED |
| 9/23/2005 | ATR72212 | | | RT CABIN AREA |

DURING INDUCTION INSPECTION FOR PASSENGER TO FREIGHTER CONVERSION MODIFICATION, INSPECTION REVEALED 2 AREAS OF SEVERE CHAFING RESULTING IN EXPOSURE OF CONDUCTOR WIRES FOR AC WILD FEEDERS AT RT SIDE CABIN AREA BETWEEN FRAMES 15-17 APPROXIMATELY STINGER 5R. (SW17200603842) (K)

| | | | | |
|-------------------------------|---------|---------|---------------|----------|
| 2005FA0001515 | AEROSP | TMECA | FLOOR PANEL | CORRODED |
| 10/18/2005 | SA365N1 | ARRIEL1 | 3652100590501 | COCKPIT |

DURING A PRE-BUY INSPECTION, THE LONCOIN RUBBER MATS WERE PULLED UP FROM THE COCKPIT FLOORS. UNDER THE PILOTS SIDE OF THE MATS, MAJOR CORROSION ACCUMULATION WAS DISCOVERED. THESE MATS WERE STILL DAMP UNDERNEATH WHICH SHOWED WHY THIS CORROSION EXISTED. SUSPECT THAT SALT LADEN WATER FROM THE PILOTS FEET DURING WINTER OPERATIONAS CONTRIBUTED TO THIS CORROSION. THE RUBBER MATS ALLOWED THE MOISTURE TO PENETRATE BUT WOULD NOT LET IT DRY. THIS FLOOR PANEL IS COMPLETELY DESTROYED AND MUST BE REPLACED. MORE STRIGENT CLEANING AND INSPECTION PRACTICES MUST BE PRACTICED IN ENVIROMENTS SUCH AS THIS. (K)

| | | | | |
|-------------------------------|--------|----------|--------|-----------|
| 2005FA0001493 | AIRTRC | PWA | SPAR | SEPARATED |
| 10/20/2005 | AT402 | PT6A15AG | 450001 | WING |

THE MAIN SPARS (PN 4500-01 AND 4500-02, RT AND LT) WERE BROKEN AWAY FROM THE WINGLET. WINGLETS AND SPAR ARE PART OF STC INSTALLATION. SPAR IS ATTACHED TO INSIDE WINGLET WITH FIBERGLASS CLOTH. CLOTH WAS TORN AND DELAMINATED. SPAR WAS COMPLETELY SEPARATED FROM WINGLET ON RT SIDE AND MOSTLY SEPARATED ON THE LT SIDE. DISCOVERED DURING INSPECTION.

| | | | | |
|-----------------------------|--------|---------|----------------|----------|
| CA050909004 | AIRTRC | PWA | ATTACH BRACKET | CRACKED |
| 9/8/2005 | AT802A | PT6A67A | | FUSELAGE |

(CAN) DURING ACCOMPLISHMENT OF A 200 HOUR INSPECTION, A CRACK WAS OBSERVED IN THE ATTACH BRACKET WELD THAT SECURED THE RT UPPER AUX FINLET TO THE HORIZONTAL STABILIZER. THE FINLET WAS REMOVED FROM THE AIRCRAFT FOR REPAIR. UPON COMPLETION OF THE REPAIR THE FINLET WILL BE RE-INSTALLED ON THE AIRCRAFT.

| | | | | |
|-------------------------------|---------|-------|--------------|------------|
| 2005FA0001484 | AMTR | LYC | NEEDLE VALVE | FAILED |
| 10/19/2005 | GLASTAR | O320* | | CARBURETOR |

DURING CRUISE FLIGHT ENGINE QUIT SUDDENLY. PILOT APPLIED CARBURETOR HEAT, CHECKED HIS FUEL GAUGE, WHICH SHOWED 5 PSI AND TURNED ON THE ELECTRIC FUEL PUMP AND SWITCHED TO ANOTHER FUEL TANK. ALL HAD NO EFFECT. PILOT WAS ABLE TO MAINTAIN 2000 RPM ON ENGINE BY

PUMPING THE PRIMER HANDLE IN AND OUT. PILOT LANDED THE AIRCRAFT AND WAS UNABLE TO STOP THE AIRCRAFT, IT FLIPPED OVER. CARBURETOR WAS DISASSEMBLED AND THE FLOAT ACTUATED AND RELEASED, NEEDLE VALVE STUCK IN THE CLOSED POSITION. BLACK PARTICLES WERE FOUND IN THE FLOAT BOWL. ACTUATION OF THE NEEDLE SEVERAL TIMES APPEARED TO CORRECT THE PROBLEM. IT IS STILL A LITTLE STICKY BUT DOES NOT REMAIN CLOSED WHEN THE FLOAT IS RELEASED. (K)

| | | | | |
|-----------------------------|---------|----------|--------|------------|
| CA051006003 | AYRES | PWA | ENGINE | FLAMED OUT |
| 9/5/2005 | S2RT660 | PT6A65AG | | |

(CAN) THE ENGINE WAS REPORTED TO HAVE FLAMED OUT ON FINAL APPROACH RESULTING IN THE AIRCRAFT LANDING SHORT OF THE RUNWAY. MFG WILL INVESTIGATE THE INCIDENT AND ADVISE OF ROOT CAUSE ONCE DETERMINED.

| | | | | |
|-----------------------------|-----|--------|--------|----------|
| CA051006010 | BAG | PWA | COOLER | DAMAGED |
| 9/12/2005 | ATP | PW126A | | FUEL/OIL |

(CAN) THE ENGINE LOW OIL PRESSURE WARNING ANNUNCIATED AND THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED THE PRESENCE OF FUEL IN THE ENGINE OIL TANK. THE ENGINE FCOC WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE.

| | | | | |
|-----------------------------|------------|------------|-----------|-----------|
| CA051011005 | BAG | GARRTT | GENERATOR | SEPARATED |
| 9/21/2005 | JETSTM3212 | TPE33110UG | 230790069 | DC SYSTEM |

(CAN) GENERATOR WENT OFF LINE IN CLIMB OUT. AIRCRAFT RETURNED TO BASE. GENERATOR REPLACED WITH OVERHAULED UNIT. SYSTEM TESTED SATISFACTORY.

| | | | | | |
|-----------------------------|------------|------------|----------|-----------|-------------|
| CA051003009 | BAG | GARRTT | LUCAS | BRUSHES | FRAYED |
| 9/11/2005 | JETSTM3212 | TPE33110UG | 23079009 | 230791281 | STARTER GEN |

(CAN) FOUND WIRES NOT FASTENED TO STARTER GENERATOR BRUSHES, DUE TO RIVET BEING LOOSE, WHICH THEN CAUSED ARCING OF WIRE AND RIVET TO CAUSE THE TEMPOR OUT OF THE RIVET

| | | | | |
|-----------------------------|--------|---------|---------------|----------|
| CA050927002 | BBAVIA | LYC | CONTROL CABLE | FRAYED |
| 9/27/2005 | 8GCBC | O360C2E | 31072 | ELEVATOR |

(CAN) ELEVATOR UP CONTROL CABLED FRAYED AT AFT PULLEY.

| | | | | |
|-----------------------------|-------|---------|------|----------|
| CA050922005 | BEECH | PWA | SKIN | DAMAGED |
| 9/12/2005 | 1900C | PT6A65B | | ELEVATOR |

(CAN) DURING INSPECTION OF THE ELEVATOR IAW AD 2005-18-21 AND COMMUNIQUE NO. 261, SMOKING RIVETS WERE DISCOVERED IN THE LOWER SKIN OF BOTH ELEVATORS (2 IN THE LT, 4 IN THE RT). REQUIRED REPAIRS WERE CARRIED OUT.

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|-----------------------------|-------|---------|----------|-----------|
| CA050926003 | BEECH | PWA | GOVERNOR | FAULTY |
| 9/20/2005 | 1900C | PT6A65B | 8210212E | PROPELLER |

(CAN) DURING CRUISE, THE RT PROPELLER RPM OCCASIONALLY FLUCTUATED 100 RPM WITH NO INPUT FROM THE CREW. THE DEFECT WAS CONFIRMED ON THE GROUND BY MAINTENANCE AND THE PROPELLER GOVERNOR WAS REPLACED.

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|-----------------------------|-------|---------|--------|---------------|
| CA051005008 | BEECH | PWA | ENGINE | MALFUNCTIONED |
| 9/1/2005 | 1900D | PT6A67D | | |

(CAN) DURING FLIGHT, SMOKE CONTAMINATED CABIN AIR AND MAIN OIL PRESSURE DECREASED TO UNACCEPTABLE LEVELS. THE ENGINE WAS SHUTDOWN IN FLIGHT AND A SINGLE ENGINE LANDING CARRIED OUT. WILL MONITOR INVESTIGATION OF THE EVENT AND WILL ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (SEE ALSO: US #2005090900013)

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|-----------------------------|-------|-----|------------|--------|
| CA051005002 | BEECH | PWA | WINDSHIELD | FAILED |
|-----------------------------|-------|-----|------------|--------|

10/2/2005 200BEECH PT6A41 10138402521 COCKPIT

(CAN) ENROUTE, WHEN THE AC EXPERIENCED A CRACKED WINDSHIELD AND THE CREW REQUESTED IMMEDIATE DESCENT TO COMPLY WITH INSTRUCTIONS IN THE PILOTS HANDBOOK P/N101-590010-5, PAGE 3-16. SITUATION DID NOT REQUIRE THE DECLARATION OF AN EMERGENCY. UPON ARRIVAL OF AIRCRAFT, MAINTENANCE PERSONNEL INSPECTED THE WINDOW AND FOUND THE INSIDE PANE OF THE LT WINDSHIELD TO BE BROKEN. THE WINDOW WAS FOUND TO BE INSTALLED CORRECTLY USING THE CORRECT PARTS. ALSO NOTED WAS THAT THE WINDSHIELD HEAT WAS WORKING CORRECTLY AT THE TIME OF THIS INCIDENT. THE WINDSHIELD WAS THEN REPLACED IAW THE MFG MM. THE PN REMOVED WAS 101-384025-21.

[CA051013009](#) BEECH PWA ACTUATOR LEAKING
10/11/2005 200BEECH PT6A41 ADI79990033 MLG

ON DESCENT, CREW WAS UNABLE TO GET THE NOSE GEAR DOWN INDICATION. EMERGENCY EXTENSION WAS COMPLETED AND A/C LANDED SAFELY. FERRY PERMIT WAS ISSUED AND A/C RETURNED TO YYC MAINTENANCE BASE WITH GEAR DOWN. RT MAIN GEAR ACTUATOR FOUND TO HAVE THE SEAL FOR THE PISTON ROD FAIL, CAUSING THE LOSS OF HYDRAULIC FLUID.

[CA051009001](#) BEECH PWA PPG WINDSHIELD BROKEN
10/2/2005 300BEECH PT6A60A 1013840252 1013840252 COCKPIT

(CAN) ON CLIMB OUT, THE CREW HEARD A LOUD BANG AND THE PILOTS WINDSHIELD INNER PANE HAD BROKEN. THE CREW RETURNED WITHOUT A PROBLEM.

[2005FA0001457](#) BEECH PWA TRANSMITTER OUT OF ADJUST
10/10/2005 400A JT15D1 TE FLAPS

FLAP ASYMMETRY ANNUNCIATOR ILLUMINATED DURING APPROACH. FOUND MIDBOARD ASYMMETRY DETECTOR READING 5.7 VOLTS. FOUND IB ASYMMETRY DETECTOR READING 7.8 VOLTS. ADJUSTED LT AND RT FLAP POSITION TRANSMITTERS AS REQUIRED IAW MM TO BRING VOLTAGES TO 5.8 VOLTS 0.2 VOLTS. FLAP SYSTEM FUNCTIONAL CHECKS SATISFACTORY, NO ASYMMETRY FAULTS INDICATED AFTER 20 CYCLES. (K)

[2005FA0001482](#) BEECH CONT CRANKSHAFT CRACKED
10/14/2005 50 IO470* 633620 ENGINE

CRANKSHAFT DEVELOPED CRACK BEHIND PROP FLANGE .3333 - .5 AROUND SHAFT IN FLIGHT, LEAKED OIL STEADY ON GROUND RUN. (EA21200603317) (K)

[2005FA0001480](#) BEECH CONT CLAMP LOOSE
10/18/2005 58P TSIO520WB INTERCOOLER DUCT

IN CRUISE FLIGHT, 2500 RPM, 35 HG, PILOT NOTED L/ENGINE LOST POWER. PILOT FEATHERED PROPELLER AND POWERED ENGINE. MAINT NOTED INTERCOOLER DUCT, PN 102-389003-3 LOOSE AT DUCT SERV CLAMP WAS LOOSE, DUCT WAS PARTIALLY DETACHED. REPLACED DUCT, RUNUP OK. (K)

[CA051013007](#) BEECH PWA BULKHEAD CRACKED
10/12/2005 A100 PT6A28 FUSELAGE

DURING A SPECIAL INSPECTION AFTER FINDING DAMAGE ON TWO OTHER AIRCRAFT, (SDR 20050829003 AND 20050928001) AFT PRESSURE BULKHEAD WAS FOUND CHAFFED BY THE CENTER INTERCOSTALS ADJACENT TO THE TAIL ACCESS DOOR. NDT WAS COMPLETED AND A CRACK FOUND.

[CA050928001](#) BEECH PWA BULKHEAD CRACKED
9/23/2005 A100 PT6A28 FUSELAGE

(CAN) DURING A SPECIAL INSPECTION AFTER FINDING DAMAGE ON ANOTHER AIRCRAFT, (SDR 20050829003) THE SAME TWO AREAS OF THE AFT PRESSURE BULKHEAD WERE FOUND CHAFED BY THE TWO INTERCOSTALS ADJACENT TO THE TAIL ACCESS DOOR. NDT WAS COMPLETED AND THERE WERE NO CRACKS FOUND. THE INTERCOSTALS WERE TRIMMED BACK TO MAINTAIN A CLEARANCE

WHEN THE AIRCRAFT IS PRESSURIZED AND PREVENT FURTHER CHAFING AND POSSIBLE CRACKING. WE HAVE SET UP A FLEET CAMPAIGN TO INSPECT ALL OF OUR AIRCRAFT AS THEY COME DUE FOR THEIR NEXT PHASE INSPECTION.

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|-----------------------------|-------|--------|-------|------------|-------------|
| CA050912001 | BEECH | PWA | BEECH | SUPPORT | CRACKED |
| 9/9/2005 | A100 | PT6A28 | | 1156100151 | TORQUE TUBE |

(CAN) DURING ACCOMPLISHMENT OF SB 2145 CRACK WAS DETECTED ON TORQUE TUBE ASSEMBLIES (P/N 115-610015-325). FOUND AT IB SUPPORT (P/N 115-610015-1). TORQUE TUBE REPLACED.

| | | | | | |
|-----------------------------|-------|--|-------|-------------|----------|
| CA051019004 | BEECH | | BEECH | TRIM TAB | DEBONDED |
| 10/17/2005 | B100 | | | 96630000335 | RUDDER |

(CAN) DURING COMPLIANCE WITH RAYTHEON S/B 55-2365 REV.2 ISS. OCT 2005 MAINTENANCE FOUND THE RUDDER TAB DISBONDED ON LOWER END. MAINTENANCE REPLACED THE RUDDER TAB AND RELEASED THE AIRCRAFT. RESEARCH ON THIS AIRCRAFT DISCOVERED THAT RAYTHEON S/B 2 365R1 (A/D 92-07-05) HAD BEEN COMPLIED WITH IN 1992. THIS AREA IS CALLED UP IN THE MAINTENANCE SCHEDULE TO BE INSPECTED EVERY PHASE 2 AND 4. SUGGEST ALL OPERATORS INSPECT THIS AREA CLOSELY FOR DISBONDING NOT JUST THE DRAIN HOLE ITSELF.

| | | | | | |
|-----------------------------|-------|-------------|--|-------------|----------|
| CA050921001 | BEECH | GARRTT | | DOOR FRAME | CRACKED |
| 9/16/2005 | B100 | TPE3316252B | | 50430043BG5 | FUSELAGE |

(CAN) DURING A DAILY INSPECTION 2 CRACKS WERE DETECTED ON EACH SIDE OF THE UPPER ATTACHMENT FOR THE REAR DOOR. THE PART WAS REPLACED.

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|-----------------------------|-------|-------------|--|---------------|------------|
| CA051004006 | BEECH | GARRTT | | FIRE DETECTOR | FAILED |
| 9/26/2005 | B100 | TPE3316252B | | 30215B | ENGINE BAY |

(CAN) AFTER TAKE OFF AN (ENGINE FIRE) INDICATION FOR THE RT ENGINE ILLUMINATED. PILOT SHUT DOWN THE ENGINE AND LANDED ON ONE ENGINE. AFTER INSPECTION OF THE SYSTEM, NO FAULT FOUND, SYSTEM NORMAL. AIRCRAFT RETURNED TO SERVICE.

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|-------------------------------|-------|------|--|-------------|-------------|
| 2005FA0001409 | BEECH | PWA | | TORQUE TUBE | FAILED |
| 10/5/2005 | B200 | PT6* | | 1016100195 | LT ELEVATOR |

FOUND LT ELEVATOR TORQUE TUBE MOUNTING FLANGE FROM TUBE ASSY TO ELEVATOR RIVETS WORKING LOOSE, ALLOWING THE LT ELEVATOR TO HAVE 1.5 INCHES OF PLAY. THIS WAS FOUND DURING A 400 HOUR LUBRICATION AND INSPECTION. RECOMMENDATION TO PREVENT RECURRENCE, USE SOLID RIVET NOT BLIND RIVET. (K)

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|-----------------------------|-------|--------|--|-------|--------|
| CA051003007 | BEECH | PWA | | MOTOR | FAILED |
| 9/13/2005 | B200 | PT6A42 | | 481 | MLG |

(CAN) UPON SELECTION OF GEAR DOWN, PILOT NOTICED THAT GEAR WOULD NOT EXTEND AND THAT THE CIRCUIT BREAKER HAD POPPED. HE RESET IT AND SELECTED GEAR DOWN AGAIN WITHOUT ANY SUCCESS. PILOT USED EMERGENCY EXTENSION AND LANDED WITHOUT INCIDENT. UPON INSPECTION OF LANDING GEARPOWER PACK MOTOR BY ENGINEER, IT WAS FOUND TO BE SHORTED OUT. MOTOR WAS REPLACED AND EXTENSION/RETRACTION SYSTEM FUNCTIONALLY CHECKED SERVICEABLE.

| | | | | | |
|-----------------------------|-------|--------|--|----------------|----------------|
| CA050912006 | BEECH | PWA | | PRESSURE VALVE | WORN |
| 9/8/2005 | B200 | PT6A42 | | 5038017027 | CABIN PRESSURE |

(CAN) REMOVED LT PNEUMATIC CHECK VALVE TO INSPECT INTERNAL HINGE OPERATIONS. FOUND HINGE PIN DISLODGED (WORKED) TO ONE SIDE, RESULTING IN OFFSET FLAPPER DOOR MOVEMENT, WEAR AND POOR OPERATION. A LONGER HINGE PIN OR STAKING THE ORIGINAL PIN MAY PREVENT THIS TYPE OF MALFUNCTION.

| | | | | | |
|-----------------------------|-------|-----|--|------------|-----------|
| CA051003002 | BEECH | PWA | | WINDSHIELD | FRACTURED |
|-----------------------------|-------|-----|--|------------|-----------|

9/29/2005 B300B350C PT6A60A 10138402515 COCKPIT

(CAN) WHILE ON ROUTE, AT 23,000 FEET AT 12 NOON, OAT -25 C, WINDSHIELD HEAT ON. THE PILOTS (LT) INNER LAYER OF WINDSHIELD FRACTURED WITHOUT WARNING DURING FLIGHT. NO LOSS OF CABIN PRESSURE OR OTHER EFFECTS FROM WINDSHIELD DELAMINATING. EMERGENCY WAS DECLARED AND THE AC WAS LANDED WITH OUT FURTHER INCIDENT.

[CA051005011](#) BEECH PWA ENGINE FAILED

8/29/2005 C90 PT6A21

(CAN) DURING CRUISE THE ENGINE EXPERIENCED AN UNCOMMANDED INCREASE IN TORQUE AND TEMPERATURE AND WAS SHUTDOWN IN FLIGHT. A SUBSEQUENT RESTART ATTEMPT WAS UNSUCCESSFUL AND A SINGLE ENGINE LANDING WAS ACCOMPLISHED AT POINT OF DESTINATION. WILL MONITOR INVESTIGATION OF THE EVENT AND WILL ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

[CA050915004](#) BEECH PWA BOLT BROKEN

9/15/2005 C90A PT6A21 AN3H32A VANE

(CAN) CREW ENTERED DEFECT IN JOURNEY LOGBOOK, (RT ANTI-ICE LIGHT ON. VISUAL INSPECTION INDICATES BY-PASS DOOR FULLY DOWN, DEFLECTOR DOOR HALF WAY DOWN). MAINTENANCE CREW FOUND A BOKEN BOLT IN LINKAGE P/N AN3H-32A. (REFER TO IPC 30-20-02 PAGE 0 ITEM 35) RT ENGINE COMPRESSOR CHECKED FOR FOD DAMAGE. NO DEFECTS FOUND. THE BOLT WAS REPLACED, SYSTEM CHECKED AND AIRCRAFT RETURNED TO SERVICE.

[2005FA0001440](#) BEECH CONT RELAY INTERFERENCE

10/6/2005 F33A IO520* SM50D7 DYNAMIC BREAKER

PILOT REPORTED AFTER PUTTING THE GEAR SELECTOR IN THE DOWN POSITION, THE GEAR WOULD NOT EXTEND, AFTER CYCLING GEAR SELECTOR GEAR WENT DOWN, AC RETURNED TO BASE. ON TROUBLESHOOTING, THE MECHANIC SELECTED DOWN AND IT FAILED TO EXTEND, AFTER TAPPING ON TOP OF RELAY THE GEAR WENT DOWN. PROBABLE CAUSE AT THIS TIME IS UNKNOWN. INSTALLED NEW AND IMPROVED RELAY IAW DATE CODE. (K)

[CA051001001](#) BELL LYC CROSSTUBE CRACKED

9/30/2005 205A1 T5313B 212321103 MLG

(CAN) HIGH SKID GEAR. UPON LANDING THE FRONT CROSS TUBE CRACKED IN THE MIDDLE OF THE TUBE, BETWEEN THE MOUNTING SADDLES. FROM THE INFORMATION WE HAVE AT THIS TIME, THE AIRCRAFT WAS NOT HARD LANDED.

[CA050916003](#) BELL ALLSN FILTER INCORRECT

9/14/2005 206B 250C20 500751 ENGINE OIL

(CAN) A PHYSICAL DIFFERENCE WAS NOTICED ON FILTERS 50-075-1. A SCREEN HOLE PATTERN WAS FOUND TO BE OUT OF SPECIFICATION.

[CA050912002](#) BELL ALLSN BUSHING CRACKED

8/31/2005 206B 250C20 C4264145 TRUNNION

(CAN) AFTER DISASSEMBLY THIS ITEM WAS SENT FOR NDT AND WAS RETURNED WITH CRACK INDICATIONS.

[CA050914003](#) BELL ALLSN BELL BEARING RACE BRINELLED

9/14/2005 206B 250C20 047641175001 T/R HUB

(CAN) TAIL ROTOR HUB ASSY WAS REMOVED TO REPLACE TX BLADES. TO ALLOW A PROPER STATIC BALANCE THE YOKE WAS TAKEN APART AND CLEANED. ONE INNER RACE ON THE YOKE WAS SERVICEABLE, THE OTHER RACE WAS FOUND BADLY BRINELLED. THE ASSEMBLY LOOKED TO BE PROPERLY GREASED AT TIME OF DISASSEMBLY, HOWEVER THE GREASE ON THE BRINELLED SIDE WAS SLIGHTLY REDDISH BROWN. NO SIGN OF CORROSION IN THE ASSEMBLY. BOTH INNER RACES WERE REPLACED AT THIS TIME.

[CA050919003](#) BELL ALLSN GOVERNOR MALFUNCTIONED
8/19/2005 206B 250C20 25491701 ENGINE

(CAN) DROOPING NR, AND WOULD NOT RECOVER. GOVERNOR REPLACED, NO FURTHER DEFECTS.

[CA050919005](#) BELL ALLSN SERVO LEAKING
8/18/2005 206B 250C20 41103750017 MAIN ROTOR

(CAN) HYDRAULIC LEAK WAS NOTED DURING MAINTENANCE. SERVO REPLACED, NO FURTHER DEFECTS NOTED.

[CA051017007](#) BELL ALLSN GOVERNOR UNSERVICEABLE
9/1/2005 206B 250C20 252476914 ENGINE

NR WAS REPORTED AS SURGING WITH EVERY COLLECTIVE MOVEMENT. LINEAR ACTUATOR DISCONNECTED FROM GOVERNOR LEVER AND LEVER WAS FOUND TO BE VERY DIFFICULT TO ROTATE. WHEN FORCED TO ROTATE THE ARM WOULD RELEASE AND BIND INTERMITTENTLY. GOVERNOR REPLACED AND A/C RETURNED TO SERVICE.

[CA051017008](#) BELL ALLSN BELL FITTING UNSERVICEABLE
8/30/2005 206B 250C20 STABILIZER

RT HORIZONTAL STABILIZER MOUNT FITTING FOUND CRACKED. THE STABILIZER SPAR WAS FOUND DAMAGED AS A RESULT OF THE FITTING DAMAGE AND WAS REPLACED ALONG WITH THE STABILIZER.

[CA051003008](#) BELL ALLSN ALLSN LABYRINTH SEAL LEAKING
5/27/2005 206B 250C20B 250C20B 23038241 RT EXHAUST

(CAN) SUBJECT ENGINE WAS REMOVED FROM A/C FOR EXCESSIVE OIL VENTING FROM EXHAUST. THE DIFFUSER VENT ORIFICE HAD BEEN PREVIOUSLY ADJUSTED TO REDUCE VENTING, BUT WAS UNSUCCESSFUL. THE ENGINE WAS SENT BACK TO ENGINE SHOP FOR REPAIR. THE TURBINE WAS DISMANTLED BY THE ENGINE SHOP, AND THE POWER TURBINE LABYRINTH SEALS WERE ADJUSTED AS REQUIRED. THEY ALSO REPAIRED CRACKS FOUND IN COMBUSTION SECTION, TO ALLEVIATE EXCESS VENTING. THE ENGINE WAS INSTALLED IN THE TEST CELL AND RUN UP. THE ENGINE SHOP REPORTED NO OIL VENTING FOUND DURING THE RUNUP. THE ENGINE WAS RETURNED AND REINSTALLED IN THE AIRCRAFT. THE AIRCRAFT WAS RUNUP AND RETURNED TO SERVICE.

[CA051012007](#) BELL ALLSN HINGE BROKEN
9/27/2005 206L 250C20R2 206033111023 BATTERY DOOR

ON APPROACH WITH A SLING LOAD THE BATTERY DOOR OPEN AT A SPEED OF 60 MPH AND THE DOOR HINGE BROKE. THE DOOR STAYED ATTACH TO THE AIRCRAFT BY THE SPRING P/N 206-031-155-005. NO OTHER DAMAGES HAVE BEEN FOUND ON THE AIRCRAFT. AFTER INVESTIGATION, THE HINGE P/N 206-033-111-023 HAVE BEEN FOUND THAT IT WAS PARTIALLY BROKEN BEFORE THE INCIDENT. ALSO, THE D2U5 FASTENER USED TO KEEP THE DOOR IN CLOSE POSITION WHERE A DASH TOO LONG WITH THE RESULT THAT YOU COULD CLOSE THEM TO FAR OUT OF THE LOCK POSITION IN A WAY THAT IT NEEDED JUST A WEAK FORCE TO MOVE THEM IN THE OPEN POSITION. AFTER HINGE REPLACEMENT THE USE OF PROPER D2U5 LENGTH ALONG WITH RED LINE FOR LOCK POSITION FOR PREVENTION.

[CA051018006](#) BELL ALLSN BELL RESTRAINT DELAMINATED
10/12/2005 206L1 250C28 206033506101 XMSN MOUNT

DELAMINATION FOUND ON AFT TRANSMISSIN MOUNT ELASTOMERIC. MOUNT CHANGED.

[CA051004004](#) BELL ALLSN CONTACTOR BURNED
9/6/2005 206L1 250C28 SM20ACD200A21 BATTERY

(CAN) DURING CRUISE PORTION OF A SHORT (15 MIN) CREW TRANSFER FLIGHT, THE PILOT AND 2 PASSENGERS ABOARD SMELLED/SAW FUMES/SMOKE IN COCKPIT. ELECTRICAL SYSTEMS WERE SHUTDOWN AND AN UNEVENTFUL LANDING WAS CARRIED OUT NEAR CAMP SITE. UPON INVESTIGATI

ON, IT WAS DISCOVERED THAT THE FORWARD BODY RETENTION SCREW AND INSERT HAD BECOME DISBONDED AND WORKED UP INTO CONTACTS SHORTING THE POSITIVE TERMINAL TO GROUND, VAPOURIZING THE INSERT AND PORTION OF SCREW AND BURNING THE SURROUNDING AREA. BETTER INTERNAL BONDING AND/OR COVERING OF THE INSERT COULD HAVE PREVENTED SAID MALFUNCTION.

| | | | | | |
|-----------------------------|-------|---------|--|-------------|---------------|
| CA051003003 | BELL | ALLSN | | BLEED VALVE | MALFUNCTIONED |
| 9/11/2005 | 206L1 | 250C28B | | 23005367 | COMPRESSOR |

(CAN) TOT RUNNING TO WARM. BLEED VALVE STICKING OPEN. BLEED VALVE CHANGE PROBLEM GOES AWAY.

| | | | | | |
|-----------------------------|-------|---------|--|--------------|----------|
| CA051005004 | BELL | ALLSN | | FITTING | CRACKED |
| 10/4/2005 | 206L1 | 250C28B | | 206031403005 | TAILBOOM |

(CAN) CRACKED FITTING ON TAILBOOM PN 206-033-004-045 AFMA FITTING P/N 206-031-403-005

| | | | | | |
|-----------------------------|-------|--------|--|-----------|---------------|
| CA050920005 | BELL | ALLSN | | PUMP | WORN |
| 9/15/2005 | 206L1 | 250C30 | | 206076050 | HYDRAULIC SYS |

(CAN) PUMP SPLINES INSPECTED DURING ROUTINE 1200 HOUR INSPECTION AND FOUND SPLINE TEETH WORN. THERE IS NO SET INSPECTION TIME CALLED UP IN THE MFG MM AND REPORTS FROM OTHER OPERATORS INDICATE THAT THIS SPLINE SHOULD BE INSPECTED APROX. EVERY 600 HOURS.

| | | | | | |
|-----------------------------|-------|--|--|--------|---------------|
| CA050916004 | BELL | | | FILTER | IMPROPER PART |
| 9/14/2005 | 206L4 | | | 500751 | TRANSMISSION |

(CAN) A PHYSICAL DIFFERENCE WAS NOTICED ON FILTERS 50-075-1. A SCREEN HOLE PATTERN WAS FOUND TO BE OUT OF SPECIFICATION. ATTACHED PICTURE SHOWING DIFFERENCES BETWEEN ACCEPTABLE AND NON-CONFORMING PARTS.

| | | | | | |
|-----------------------------|------|-------|--------------|--------------|----------|
| CA051006011 | BELL | PWA | BELL | PANEL | DEBONDED |
| 10/4/2005 | 212 | PT6T3 | 212030100067 | 205032813041 | TAILBOOM |

(CAN) DEBONDED BEYOND LIMITS ON LT SIDE BETWEEN STATION 241.22 AND 324.51.

| | | | | | |
|-----------------------------|------|-------|--|-------------|---------------|
| CA051017009 | BELL | PWA | | FUEL HEATER | UNSERVICEABLE |
| 9/9/2005 | 212 | PT6T3 | | 10544E | NR 2 ENGINE |

NR 2 ENGINE FUEL HEATER FOUND TOO HOT TO TOUCH FOLLOWING SHUTDOWN. HEATER REPLACED AND A/C RETURNED TO SERVICE.

| | | | | | |
|-----------------------------|------|--|--|------------|--------------|
| MDR01KH2005 | BELL | | | BOLT | SHEARED |
| 10/10/2005 | 222 | | | 200571045D | M/R CONTROLS |

UPON INSPECTION AND MAINTENANCE OF MAIN ROTOR CONTROLS, INSPECTION REVEALED SHEARED BOLT (PN 20-057-10-45D) AT BOLT HEAD AT THE M/R SWASH PLATE COLLECTIVE LEVER IDLER LINK. (ATTACH BOLTS) MFG A- NR 28 BOLT, MFG U-NR 28 BOLT. THIS CONDITION HAS BEEN REPORTED TO MFG FOR INVESTIGATION AND ANALYSIS OF CAUSE. ALL REMAINING COMPANY HELICOPTERS HAVE BEEN INSPECTED FOR LIKE CONDITION AND FOUND AIRWORTHY. (K)

| | | | | | |
|-----------------------------|------|--|--|--------|--------------|
| CA050919002 | BELL | | | FILTER | WRONG PART |
| 9/14/2005 | 407 | | | 500751 | TRANSMISSION |

(CAN) A PHYSICAL DIFFERENCE WAS NOTICED ON FILTERS 50-075-1. A SCREEN HOLE PATTERN WAS FOUND TO BE OUT OF SPECIFICATION. PICTURE SHOWING DIFFERENCES BETWEEN ACCEPTABLE AND NON-CONFORMING PARTS.

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|-----------------------------|------|---------|--|--------------|----------------|
| CA050913007 | BELL | ALLSN | | BEARING | SHEARED |
| 9/9/2005 | 407 | 250C47B | | 407310101101 | CENTER SUPPORT |

(CAN) BEARING SHEARED FROM THE CENTER SUPPORT.

| | | | | |
|-----------------------------|------|---------|----------|---------------|
| CA051004007 | BELL | ALLSN | BLADE | DAMAGED |
| 9/8/2005 | 407 | 250C47B | 23053299 | TURBINE WHEEL |

(CAN) AIRCRAFT LIFTED OFF STAGING AREA WITH SLING LOAD. LOUD NOISE HEARD 2 MINUTES INTO FLIGHT. NO CAUTION LIGHTS OR OTHER INDICATION OF PROBLEM OTHER THAN LOUD AND HIGH-PITCHED NOISE. AIRCRAFT TURNED BACK AND MADE A NORMAL LANDING AND SHUT-DOWN. TURBINE WAS REMOVED AND SENT FOR INSPECTION. ONE BLADE FOUND MISSING FROM FIRST STAGE TURBINE WHEEL. SUSPECT CAUSED BY TIP RUB. INFORMATION AND PHOTOS FORWARDED TO MFG.

| | | | | |
|-------------------------------|------|---------|--------------|--------------|
| 2005FA0001504 | BELL | ALLSN | SKIN | DEBONDED |
| 11/2/2005 | 407 | 250C47B | 206020113223 | VERTICAL FIN |

LESS THAN 10 HOURS FLIGHT TIME AFTER REPAIR FOR LEADING EDGE DISBONDING THE BONDING FAILED AND TAIL ROTOR WASH DISPLACED THE LEADING EDGE. (K)

| | | | | |
|-----------------------------|-------|--------------|------------|-------------|
| CA050927001 | BELL | BELL | PACKING | FAILED |
| 9/22/2005 | 412EP | 212076007003 | MS28775212 | ACCUMULATOR |

(CAN) DURING FTP'S, MS28775-212 PACKING FAILED CAUSING LOSS OF HYDRAULIC FLUID FROM ACCUMULATOR ASSY, 212-076-007-003.

| | | | |
|-------------------------------|------|----------|----------------|
| 2005FA0001531 | BELL | SOLENOID | STUCK |
| 10/12/2005 | 430 | 3136171 | DIVERTER VALVE |

SOLENOID FAILED IN ENERGIZED POSITION. THIS UNIT IS IN THE DUCTING DIVERTER VALVE MAKING IT SUBJECT TO MOISTURE. THIS CORRODES THE UNIT OVER TIME. IT FAILED ON, THUS DIVERTING AIR IN THE WRONG DIRECTION. HEAT WILL COME OUT OF OVERHEAD CABIN DUCTS.

| | | | | |
|-----------------------------|---------|---------|-----------|----------|
| CA051007003 | BOEING | CFMINT | BELLCRANK | CORRODED |
| 10/4/2005 | 737500* | CFM563C | 65C308461 | TE FLAPS |

(CAN) DURING A ROUTINE DAILY CHECK, IT WAS NOTED THAT THE LT OB T/E FLAP HAD EXCESSIVE PLAY WHEN HAND FORCE WAS APPLIED TO THE TRAILING EDGE FLAP. UPON FURTHER INVESTIGATION IT WAS DISCOVERED THAT THE CLEVIS BOLT AND THE BELLCRANK WERE WORN AND CORRODED. BELLCRANK AND CLEVIS REPLACED.

| | | | | |
|-----------------------------|--------|----------|--------------|---------|
| CA051003001 | BOEING | CFMINT | SCREW | DAMAGED |
| 10/1/2005 | 737522 | CFM563C1 | BACB30NN4K12 | RT WING |

(CAN) AFTER LANDING, AFTER THE AIRCRAFT WAS REFUELED, FUEL WAS OBSERVED COMING FROM THE RIGHT WING FORWARD OF THE IB FLAP TRACK. THE FUEL ACCESS PANEL DIRECTLY AFT OF THE RT WING NACELLE WAS FOUND LEAKING. ON INVESTIGATION SEVERAL SCREWS WERE FOUND TO BE STRIPPED AND LOOSE. AFTER RESEALING THE ANCHOR NUTS AND REPLACING THE SCREWS, THE TANK WAS LEAK CHECKED SERVICEABLE. THE ACCESS PANEL HAD LAST BEEN REMOVED, DURING A PRE-LEASE C-CHECK.

| | | | | | |
|-----------------------------|--------|-----------|--------|-------------|---------------|
| CA051007006 | BOEING | CFMINT | BOEING | DISPLAY | FAILED |
| 10/6/2005 | 7377CG | CFM567B22 | | 50401100003 | SEAT 13B, VDU |

(CAN) A/C WAS ON THE GROUND WHEN A BURNING ELECTRICAL SMELL WAS NOTICED AT ROW 13. SEAT 13B WAS DEACTIVATED. MAINTENANCE REPLACED THE VDU AND THE SYSTEM WAS TESTED SERVICEABLE. THIS COMPONENT WILL BE RETURNED TO THE MANUFACTURER AND A COMPLETE TEAR DOWN REPORT WILL BE REQUESTED. THIS SDR WILL BE UPDATED ONCE THAT INFORMATION IS AVAILABLE.

| | | | | |
|-------------------------------|---------|--------|------|---------------|
| 2005FA0001479 | BOEING | GE | WIRE | CROSSED |
| 10/26/2005 | 737800* | CFM56* | | CONTROL VALVE |

DURING TROUBLESHOOTING FOLLOWING PTU TEST FIRE, THE PTU CONTROL VALVE AS FOUND FAILED IN CLOSED POSITION WITH 28 VDC ON PIN: 2 OF VALVE CONNECTOR. AN INVESTIGATION REVEALED WIRES WERE CROSSED AT MFG. WIRING REMADE IAW WDM2911 AND NEW VALVE FIT.

(SW15200606366) (K)

| | | | | | |
|-----------------------------|---------|--------|--------|-------|---------------|
| CA051006009 | BOMBDR | PWC | PWC | FADAC | MALFUNCTIONED |
| 9/14/2005 | DHC8400 | PW150A | PW150A | | ENGINE |

(CAN) AFTER TAKE-OFF THE ENGINE (FADEC FAIL) WARNING ANNUNCIATED. THE ENGINE WAS SHUTDOWN IN FLIGHT AND THE AIRCRAFT DIVERTED TO POINT OF DEPARTURE. INSPECTION REVEALED FAULT CODES ON BOTH FADEC CHANNELS. THE FADEC, FUEL CONTROL UNIT AND BLEED VALVES WERE SUBSEQUENTLY REMOVED FOR INVESTIGATION. MFG WILL INVESTIGATE THE INCIDENT AND ADVISE OF ROOT CAUSE, ONCE ESTABLISHED.

| | | | | | |
|-----------------------------|---------|--------|-----------|-----------------|-----------------|
| CA051017002 | BOMBDR | PWC | | PRESSURE SWITCH | DEFECTIVE |
| 10/7/2005 | DHC8400 | PW150A | 312242902 | 1030032 | NR 2 ENGINE OIL |

IN-FLIGHT SHUTDOWN OF THE NR 2 ENGINE DUE TO LOW OIL PRESSURE CAUTION LIGHT, OIL PRESSURE INDICATION WAS NORMAL. PILOTS INITIATED CHECKLIST AND PERFORMED SHUTDOWN AND RETURNED TO BASE. ENGINE IS A MODIFIED CIS ENGINE. THE PROBLEM WAS FOUND TO BE A DEFECTIVE LOW OIL PRESSURE SWITCH. THE OIL WAS A NORMAL COLOR AND PROPER QUANTITY, THE FILTERS WERE CLEAR. LOW OIL PRESSURE SWITCH REPLACED, SYSTEMS CHECKED, A/C RETURNED TO SERVICE.

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|-----------------------------|---------|--------|--------------|---------|---------------|
| CA051011011 | BOMBDR | PWC | PARKERHANFIN | SHAFT | SHEARED |
| 10/7/2005 | DHC8400 | PW150A | | 6617302 | NR 2 OIL PUMP |

AIRCRAFT SUFFERED A NR 2 EDP FAILURE DURING APPROACH. ON INVESTIGATION, THE QUILL DRIVE WAS FOUND SHEARED AND THE CASE DRAIN DPI HAD ACTIVATED, THE FILTER WAS FULL OF BRASS. NR 2 EDP REPLACED.

| | | | | | |
|-------------------------------|-------------|-------|--|-----------|----------|
| 2005FA0001481 | BRAERO | PWA | | DRAIN | CHAFED |
| 10/4/2005 | BAE1251000A | PW305 | | 259SF3325 | HYD PUMP |

RT HYDRAULIC PUMP CASE DRAIN HYDRAULIC LINE RUPTURED IN FLIGHT, DRAINING HYDRAULIC FLUID FROM THE AIRCRAFT SYSTEM. FOUND RT HYDRAULIC PUMP CASE DRAIN LINE CRACKED WHERE LINE HAS BEEN CHAFING. INSPECTED AIRCRAFT AND FOUND SIMILAR CHAFE IN SAME LINE IN SAME LOCATION IN AFT EQUIPMENT BAY. THIS APPEARS TO BE A COMMON PROBLEM IN THE 1000 SERIES AIRCRAFT WITH THE PROXIMITY OF THE AFT BAY HYDRAULIC LINE RUNS. (K)

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|-------------------------------|------------|---------|--|---------|----------------|
| 2005FA0001474 | BRAERO | GARRTT | | BULB | IMPROPER PART |
| 10/12/2005 | BAE125800A | TFE731* | | 6335110 | CABIN LIGHTING |

A SELA FLORESCENT BULB WAS FOUND IN THE CABIN LIGHTING SYSTEM. THIS SYSTEM IS AN ALC SYSTEM. THE SELA BULB HAD IMPROPER CONNECTORS ON IT AS WELL. WE CHANGED OUT THE SELA BULB WITH AN ALC BULB AND USED THE PROPER CONNECTORS WHEN INSTALLING IAW AD 95-22-01 AND IB 90-001. (K)

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|-------------------------------|------------|-------|--|--------------|-----------|
| 2005FA0001528 | BRAERO | PWA | | EXTINGUISHER | INCORRECT |
| 11/8/2005 | HAWKER1000 | PW305 | | C352TS | COCKPIT |

REMOVING HAND HELD FIRE EXTINGUISHER FROM THE COCKPIT FOR ROUTINE INSPECTION IT WAS NOTED THAT THE HANDLE DID NOT APPEAR TO BE CORRECT. FURTHER INSPECTION SHOWED THAT THERE ARE TABS ON THE LOWER HANDLE THAT WOULD HAVE PREVENTED THE EXTINGUISHER FROM DISCHARGING. NUMEROUS ATTEMPTS AT DISCHARGING FAILED. IT APPEARS THAT AN INCORRECT HEAD WAS INSTALLED. SUBJECT FIRE EXTINGUISHER WAS REMOVED FROM SERVICE. (K)

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|-----------------------------|-----------|--------|--|--------|---------|
| CA051006008 | BRAERO | PWA | | ENGINE | LEAKING |
| 9/13/2005 | HS125700A | PW305B | | | |

(CAN) DURING CLIMB, THE CABIN AIR BECAME CONTAMINATED WITH SMOKE. ECS WAS SELECTED OFF AND AN EMERGENCY DECLARED. SUBSEQUENT INSPECTION FOUND EXTERNAL ENGINE OIL LEAKAGE. MFG WILL INVESTIGATE THE INCIDENT AND ADVISE OF ROOT CAUSE, ONCE DETERMINED.

[2005FA0001494](#) CESSNA CESSNA SCREW CORRODED
10/21/2005 AN5158R26 TRIM TAB

THERE ARE 4 SCREWS WHICH HOLD THE ELEVATOR TRIM TAB HORN TO THE TRIM TAB. HAVE STARTED TO REMOVE THESE SCREWS ON EVERY ANNUAL WE DO ON 300/400 SERIES. HAVE FOUND NUMEROUS SCREWS CORRODED ALMOST IN HALF. THERE IS NOT A WAY TO INSPECT THESE SCREWS WITHOUT REMOVAL. DUE TO THE CRITICAL NATURE OF THESE SCREWS AND THE AGEING FLEET. RECOMMEND MANDATORY REMOVAL AND INSPECTION AT EACH ANNUAL INSPECTION. (K)

[CA050926002](#) CESSNA CONT ROCKER BOSS FAILED
9/26/2005 150M O200A CYLINDER

(CAN) ON INSPECTION, BRASS AND ALUMINUM PARTICLES FOUND IN FILTER. ROCKER BOSSES AND BUSHINGS FOUND WORN. THIS SHOWS UP AT ABOUT 200 HRS IN SERVICE AND HAS HAPPENED TO ALL CYLINDERS THAT ARE FACTORY NEW IN THE LAST COUPLE OF YEARS. ACCORDING TO THE FACTORY WE ARE THE ONLY OPERATOR THAT THIS HAS HAPPENED TO, THEIR FIX IS TO BUSH THE BOSSES WHICH THEY WILL DO UNDER WARRANTY BUT THEY WILL NOT DO IT RT FROM THE FACTORY WHICH CAUSES A GREAT DEAL OF DOWN TIME COST.

[2005FA0001520](#) CESSNA LYC FLOORBOARD CRACKED
11/1/2005 152 O235L2C FUSELAGE

FOUND FLOORBOARD SKIN ABOVE THE LT AND RT GEAR BOXES, CRACKED AT THE INSPECTION HOLES. CRACKS RAN FROM THE EDGE OF THE HOLE TO THE SCREW HOLE FOR THE INSPECTION PLATE. INSTALLED A REINFORCEMENT UNDER THE DOUBLER AND STOP DRILLED THE CRACKS. (K)

[CA051011007](#) CESSNA LYC SKIN CRACKED
10/4/2005 172L O320E2D 052300710 TE FLAP

SEVERAL CRACKS IN SKIN THROUGH RIVET HOLES IN TRAILING EDGE. THIS SKIN IS IN THE FLAP BAY. SUSPECT FAILURE IS DUE TO FLEXING OF TRAILING EDGE, CAUSED BY TURBULENCE IN SLOW FLIGHT WITH FLAPS LOWERED. AIRCRAFT IS USED SOLELY FOR FLIGHT TRAINING.

[05308](#) CESSNA LYC LYC SEAL LEAKING
11/4/2005 172M O320E2D STD-2217 VAC PUMP DR ASSY

DURING 100 HOUR INSPECTION, FOUND ENGINE VACUUM PUMP DRIVE LEAKING OIL AND CONTAMINATING VACUUM PUMP. REMOVED VACUUM PUMP AND ENGINE VACUUM PUMP ADAPTOR DRIVE ASSEMBLY. FOUND SEAL P/N STD-1774 NOT FULLY INSTALLED IN DRIVE ASSY. REPLACED SEAL AND VACUUM PUMP, OPERATIONAL AND LEAK CHECK SAT. ENGINE HAS 168.7 HOURS SINCE OVERHAUL BY MFG. THIS IS THE SECOND OVERHAULED ENGINE WITH THIS DISCREPANCY.

[CA051004005](#) CESSNA LYC MOUNT BROKEN
9/23/2005 172M O320E2D 05510171 ENGINE

(CAN) DURING A 200 HOUR INSPECTION, DISCOVERED THIS TUBE WAS BROKEN. A REPLACEMENT MOUNT WAS INSTALLED.

[CA051003004](#) CESSNA LYC CYLINDER CRACKED
9/29/2005 172N O320D2J 05K21100 ENGINE

(CAN) CYLINDER HEAD SEPARATED FROM CYLINDER BARREL WHILE IN FLIGHT.

[053006](#) CESSNA LYC ELECTROSYS DRIVE ASSY FAILED
11/2/2005 172P O320D2J 480379 01 C1 STARTER

ON ENGINE START, STARTER DRIVE DID NOT DISENGAGE AND THE DRIVE GEARS SHEARED OFF, DAMAGING THE ENGINE RING GEAR. THE PILOT DID NOT DETECT THE FAILURE UNTIL LANDING AND TRYING TO RESTART THE ENGINE.

[2005FA0001519](#) CESSNA LYC LAMAR COMMUTATOR DESTROYED

11/1/2005 172R IO320* STARTER

A SEGMENT OF THE COMMUTATOR CAME OFF DURING STARTING, COMPLETELY DESTROYING THE BRUSES AND THE INSIDE OF THE STARTER. (K)

[2005FA0001496](#) CESSNA LYC ACTUATOR CRACKED

10/20/2005 172RG O360* 98820152 MLG DOOR

COMPLYING WITH SB, FOUND BFE BORE CRACKED IAW ILLUSTRATION OF ACCOMPLISHMENT OF INSTRUCTION OF SEB. (K)

[2005FA0001395](#) CESSNA CONT CYLINDER FAILED

8/22/2005 175 GO300A 654004 EXHAUST VALVE

CYLINDER WAS REBUILT 5/12/05 USING CURRENT PRODUCTION MFG EXHAUST VALVE AND GUIDE. THE EXHAUST VALVE STRUCK (17 HOURS IN SERVICE) RESULTING IN A BROKEN EXHAUST ROCKER ARM, AS A RESULT AN EMERGENCY LANDING WAS SUCCESSFULLY MADE. (K)

[2005FA0001514](#) CESSNA LYC BULKHEAD CRACKED

11/8/2005 177RG IO360A1B 17121042 ZONE 200

BULKHEAD CRACKED AROUND BOTH VERTICAL FIN FORWARD ATTACH BOLTS.

[2005FA0001513](#) CESSNA LYC BULKHEAD CRACKED

11/8/2005 177RG IO360A1B6 17121042 BS 263

BULKHEAD CRACKED AROUND BOTH VERTICAL FIN FORWARD ATTACH BOLTS.

[2005FA0001477](#) CESSNA CONT SUPPORT BRACKET CRACKED

10/10/2005 182P O470* BEND RADIUS

WING T/E SKIN SUPPT BRKT CRACKED CAUSED FLAP INTERFERENCE AND FAILURE. BRKT IS ATTACHED TO EACH FLAP TRACK RIB INSIDE T/E OF WING, SUPPT T/E WING SKIN IN FLAP BAY. PART CRACKED, ALLOWED FLAP SUPPT TO GET CAUGHT DURING FLAP RETRACTION, BINDING FLAP. FLAP STRUCTURE FAILED BEFORE FLAP MOTOR CAUSED CB TO TRIP. RESULTING CONFIGURATION OF FLAP CAUSED YAW IN FLT. VERY LITTLE CLEARANCE BTWN THESE BRKTS AND/OR CRACKED WING SKINS AT BRKT ATTACH POINT, FLAP SUPPT RAILS BY DESIGN. BRKTS REST FIRMLY AGAINST UPPER PORTION OF FLAP SUPPT RAILS WHEN FLAPS ARE FULLY RETRACTED, PROPERLY RIGGED. BRKT APPEARS TO BE A SUB-PART OF WHOLE RIB ASSY. IRREGULARITY OF RIVET HOLES IN BRKTS, FLAP TRACK RIB, HAND DRILLED AT FACTORY.

[2005FA0001429](#) CESSNA LYC WIRE CHAFED

7/6/2005 182T IO540* TRANSPONDER

TRANSPONDER CIRCUIT BREAKER POPPED AND PILOTS NOTED SMOKE IN CABIN. FLIGHT WAS DISCONTINUED AND DISCREPENCY WAS NOTED. AFTER INSPECTION, CHAFFED WIRE WAS FOUND NEAR THE AVIONICS RACK THAT HAD SHORTED ON THE AIRFRAME. THE WIRES WERE REPAIRED IAW MFG RECOMMENDATION. MFG ALSO RECOMMENDED ANTI-CHAFE BE INSTALLED ON AIRFRAME AT THE LOCATION OF CHAFFING. (WP13200510948) (K)

[CA050926005](#) CESSNA PWA CONNECTOR MELTED

9/26/2005 208B PT6A114A 2601048200 PROP HEAT

(CAN) APPROXIMATELY 5 TO 10 MIN BEFORE LANDING THE PILOT NOTICED A FAINT SMELL OF SMOKE OR SOMETHING BURNING. EVERYTHING WAS OPERATING NORMALLY AND HE LANDED WITHOUT MISHAP. UPON INSPECTION, THE PROP HEAT WIRE CONNECTOR BETWEEN THE CIRCUIT BREAKER AND PROP DE-ICE TIMER WAS FOUND TO BE MELTED AND BURNED. THE WIRE TERMINAL ENDS AND CONNECTOR WERE REPLACED AND THE PROP HEAT SYSTEM FUNCTION CHECKED SERVICEABLE. THE CONNECTOR IS LOCATED ON THE LT SIDE OF THE COCKPIT JUST IN FRONT OF THE CIRCUIT BREAKER PANEL.

[CA051027005](#) CESSNA CONT BENDIX IGNITION LEAD DETERIORATED
10/14/2005 337G IO360G S6LSG25T IO8216743 MAGNETO CAP

(CAN) ON GROUND RUN, LT MAGNETO ON FRONT ENGINE HAD A 200 RPM DROP. DURING TROUBLESHOOTING FOUND NR 4 CYLINDER TOP LEAD SHORTING FROM INNER COIL THROUGH INSULATOR TO CAP. LEAD REPAIRED, AIRCRAFT RELEASED INTO SERVICE. AFTER A FEW HOURS OF FLIGHT, THE PROBLEM RE-OCCURRED ON RT MAGNETO FRONT ENGINE. REPLACED IGNITION HARNESSSES WITH NEW. MAGNETO RT PN S6LSG-25T, SN D03GA258R, LT P/N S6LSG-25, SN D03GA179R.

[CA051014003](#) CESSNA CONT WASHER MISSING
10/13/2005 414 TSIO520N S14505H12063 MLG SCISSORS

AFTER LANDING, THE A/C SUDDENLY VEERED OFF THE RUNWAY. THE RT MAIN LANDING GEAR SCISSORS CAME APART AT THE CENTER. THE WHEEL THEN TURNED AND PULLED THE AIRCRAFT OFF THE RUNWAY. ON EACH SIDE OF THE CENTER BOLT HOLDING THE SCISSORS TOGETHER TWO P/N S1450-5H12-063 WASHERS WERE MISSING. AN WASHERS WERE USED IN THEIR PLACE. THE PROPER WASHERS WERE INSTALLED AND THE AIRCRAFT WAS RETURNED TO SERVICE.

[2005FA0001357](#) CESSNA CONT MOTOR MALFUNCTIONED
9/23/2005 414A TSIO520* HE812933 BLOWER

RT AIR CONDITIONER BLOWER MOTOR LOCATED UNDER CO-PILOTS SEAT MALFUNCTIONED AND PRODUCED SMOKE WHICH WAS DRAWN THROUGH THE RT SIDE VENTILATION DUCTS. PILOT FOLLOWED EMERGENCY PROCEDURES AND LANDED SAFELY. (EA09200505819) (K)

[CA051006013](#) CESSNA PWA GEARBOX SEIZED
9/23/2005 425 PT6A112 ACCESSORY

(CAN) DURING CRUISE, THE ENGINE EMITTED A LOUD NOISE ACCOMPANIED BY FLAMES FROM THE EXHAUST AND VIBRATION. THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED THE ACCESSORY GEARBOX TO BE SEIZED. MFG WILL INVESTIGATE THE INCIDENT AND WILL ADVISE OF ROOT CAUSE, ONCE ESTABLISHED.

[2005FA0001400](#) CESSNA GARRTT RIB CRACKED
9/13/2005 441 TPE331* 57222061 WINGS

WHILE ACCOMPLISHING MFG CQB 03-1 EDDY CURRENT INSPECTION THE CANTED RIB CAPS WERE FOUND CRACKED ON THE LT AND RT WINGS. THE AIRCRAFT WILL REQUIRE SERVICE KIT SK441-110-1 REPAIR KIT IAW CQB 03-1 BEFORE FURTHER FLIGHT. (K)

[CA051011008](#) CESSNA PWA SUPPORT BRACKET CRACKED
10/7/2005 550 JT15D4 RUDDER

PILOT REPORTED THAT WHEN BRAKES WERE APPLIED FROM CAPTS POSITION, THE CO-PILOTS INSTRUMENTS LIGHTS WOULD GO OUT. MAINTENANCE WAS ABLE TO DUPLICATE THE SNAG. INVESTIGATION REVEALED CAPTS RUDDER SUPPORT BRACKET CRACKED AND BROKEN AT TOP AND BOTTOM ATTACH CHANNELS. THREE CHANNELS BEING REPLACED (P/N'S 5565609-6, 5565609-7, 5565609-14). CO-PILOTS LIGHTS AFFECTED DUE TO THE POSITIONING OF A RHEOSTAT LOCATED IMMEDIATELY ABOVE RUDDER SUPPORT. WHEN BRAKES WERE APPLIED, FLEXING IN THE SUPPORT ALLOWED IT TO COME INTO CONTACT WITH THE RHEOSTAT. A FLEET WIDE CAMPAIGN WAS CARRIED OUT WITH NO OTHER DEFECTS OF THIS TYPE NOTED

[CA051011010](#) CESSNA PWA LONGERON CRACKED
10/6/2005 550 JT15D4 202001551 THRUST REVERSER

DURING SCHEDULED INSPECTION, MAINTENANCE FOUND A CRACK ON THE LT THRUST REVERSER LT INNER UPPER LONGERON TAB. THE CRACK STARTED IN FASTENER HOLE AND PROPAGATED TO THE EDGE OF THE TAB. THE CRACK WAS REPAIRED BY FABRICATING AND INSTALLING REPAIR DOUBLER IAW NORDAM STANDARD REPAIR PROCEDURE. MAJOR MOD/REPAIR REPORT FILED WITH T.C.

[CA051007005](#) CESSNA PWA CESSNA SEGMENT COLLAPSED
10/6/2005 560CESSNA JT15D5 651532636 651532629 COOLING SYSTEM

(CAN) DURING CLIMBOUT THE PILOTS HEARD A POP AND THE CABIN ALTITUDE BEGAN TO CLIMB BECAUSE OF LOSS OF PRESSURIZATION. THEY COMMENCED AN EMERGENCY DESCENT AND LANDED SAFELY. ON INVESTIGATION, FOUND THAT THE INLET END OF THE WYE ASSEMBLY OF THE FLOOD COOLING SYSTEM HAD DETERIORATED OVER TIME AND HAD COLLAPSED ENOUGH TO ALLOW THE END TO BE BLOWN OUT OF THE CLAMP. THE WYE ASSEMBLY WAS REPAIRED AND THE SYSTEM REASSEMBLED. THE AIRCRAFT WAS TEST FLOWN AND FUNCTION PERFECTLY.

[2005FA0001402](#) CESSNA PWA CONTROL VALVE SHORTED
1/24/2005 560CESSNA PW535A OA553191 HYD SYSTEM

FLAP CONTROL VALVE PN 2710970 TO BE MAKING CONTACT WITH DUMP VALVE PN OA55319-1 CAUSING SUBSTANTIAL DAMAGE. BY SHORTING THE STAND OFF ON THE BOTTOM SIDE OF THE DUMP VALVE BY APPROX .1250 OF AN INCH A CLEARANCE OF APPROX .0625 OF AN INCH WAS OBTAINED. (K)

[CA051018001](#) CESSNA GARRTT TURNBUCKLE CHAFED
10/17/2005 650 TFE7313C MS21251B5S AILERON CONTROL

DURING PHASE 1-5 INSPECTION ON AIRCRAFT, TECHNICIANS DISCOVERED THAT THE LT AND RT AILERON CABLES WERE FOULING. THE RESULT WAS THAT THE LT TURNBUCKLE WAS CHAFED AND THE RT SIDE THE SAFETY CLIP WAS GONE AND THE TURNBUCKLE WAS ALSO CHAFED.

[2005FA0001522](#) CESSNA ALLSN HINGE BRACKET CORRODED
10/24/2005 750 AE3007C 67240204 OB AILERON

DURING RECENT INSPECTION CORRODED HARDWARE WAS FOUND ON AILERON. AFTER AILERON WAS REMOVED HEAVY GALLING WAS FOUND ON OUTBOARD HINGE SUPPORT AND AILERON FITTING. SEVERAL OTHER AIRCRAFT WERE INSPECTED AND 3 OTHERS AND IDENTICAL GALLING. MFG WAS NOTIFIED AND REPAIRS MADE, INCLUDING BLENDING AND NDT. AILERON ARE NOT REMOVED DURALAY INSPECTIONS. BUT CLOSE VISUAL INSPECTIONS SHOULD FIND DEFECTS. AIRCRAFT ARE DAMAGE TOLERANT AND PART IS CONSIDERED. PSE. (K)

[2005FA0001498](#) CESSNA ENCODER FAILED
10/20/2005 A185F ALTITUDE

FOLLOWING INSTALLATION OF A NEW GNS480, DURING INITIAL POWER CHECKS, FOUND THE FOLLOWING FAILURE FLAGS DISPLAYED: COM COMMUNICATION FAILURE, NAV COMMUNICATION FAILURE, ALTITUDE ENCODER COMMUNICATION FAILURE. INSTALLATION OF ANOTHER UNIT RESOLVED THE PROBLEMS. (K)

[2005FA0001527](#) CESSNA LYC SLICK CAPACITOR INOPERATIVE
11/3/2005 A188B TIO540A1A M3984 MAGNETO

OPENED PRESSURIZED MAGNETO TO INSPECT FOR CORROSION DURING ANNUAL INSPECTION. DETECTED A LARGE AMOUNT OF OIL IN AFT CASE OF MAGNETO. FURTHER INVESTIGATION REVEALED THAT IT IS DIELECTRIC FLUID FROM CAPACITOR. TESTED CAPACITOR WITH A SIMPSON METER AND WAS FOUND TO HAVE FAILED. SUBMITTER FEELS THAT MAGNETO FAILURE WAS EMINENT DUE TO OIL CONTAMINATION TO POINTS AND DISTRIBUTOR. SUBMITTER SUGGESTS INSPECTION OF ALL MAGNETOS CONTAINING THIS PN CONDENSOR BEFORE FURTHER FLIGHT. (K)

[2005FA0001499](#) CESSNA CONT MOUNT CRACKED
10/5/2005 U206F IO520* FUEL TRANSDUCER

DURING A ROUTINE INSPECTION FOUND THE FUEL FLOW TRANSDUCER MOUNT BRACKET CRACKED. (K)

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| CA051007008 | CESSNA | CONT | MCAULY | HUB | LEAKING |
| 10/6/2005 | U206F | IO520F | | | PROPELLER |

(CAN) DURING AN ROUTINE INSPECTION, THE PROPELLER WAS FOUND LEAKING. PART OF THE INSPECTION CALLS OUT TO ENSURE THERE IS NO RED DYE LEAKING FROM THE PROP HUB ASSEMBLY. THE PROP HAS BEEN REMOVED FROM THE AIRCRAFT AND SENT TO THE OVERHAUL FACILITY. THIS IS THE SECOND TIME THE PROPELLER HAS LEAKED. HAVE ASKED FOR THE HUB ASSEMBLY TO BE NDT TO ENSURE THERE IS NO CRACKS. INSTALLED A LOANED PROP AND THE AIRCRAFT RETURNED TO THE FLIGHT LINE.

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| 2005FA0001398 | CESSNA | CONT | | ATTACH BRACKET | CRACKED |
| 4/16/2005 | U206G | IO520* | | 12346251 | LT ELEVATOR |

DURING AN ANNUAL INSPECTION, THE LT ELEVATOR OB ATTACH HINGE WAS FOUND TO BE CRACKED AT WELD. UPON FURTHER INSPECTION, IT WAS NOTED THAT WELD WAS IN FACT ONLY A SPOT WELD. THIS PART IS SUPPOSED TO BE WELDED THE FULL LENGTH OF THE HINGE. PART APPEARS TO BE THE ORIGINAL FACTORY INSTALLED PART. (K)

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| CA051003016 | CIRRUS | CONT | | EXHAUST HEADER | CRACKED |
| 10/29/2004 | SR20 | IO360ES | | 10351002 | ENGINE |

(CAN) NR5 EXHAUST HEADER FOUND CRACKED 75 PERCENT OF THE WAY AROUND JUST BELOW FLANGE WELD.

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| CA051003017 | CIRRUS | CONT | CIRRUS | NUT | MISSING |
| 10/3/2005 | SR20 | IO360ES | 10353002 | 22022 | EXHAUST HEADER |

(CAN) SOUND OF BACK FIRE WAS HEARD ON LANDING APPROACH. INSPECTION FOUND NR 2 CYLINDER EXHAUST HEADER PIPE HAD DROPS DOWN .1875 DUE TO MISSING EXHAUST NUTS.

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| 2005FA0001507 | CIRRUS | CONT | | EXHAUST HEADER | CRACKED |
| 10/19/2005 | SR22 | IO550N | | 15070001 | NR 5 |

NR 5 EXHAUST HEADER CRACKED AT CYLINDER FLANGE JUST BELOW WELD UNDER NORMAL USE. HEADER NEEDS REDESIGN OR SOME SORT OF SUPPORT. IT IS OVER CANTILEVERED FOR STRESSES IMPOSED ON IT. AIRFRAME AND EXHAUST HOURS.

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| 2005FA0001508 | CIRRUS | CONT | | EXHAUST HEADER | CRACKED |
| 10/19/2005 | SR22 | IO550N | | 15070001 | ENGINE |

NR 5 EXHAUST HEADER CRACKED AT CYLINDER FLANGE JUST BELOW WELD UNDER NORMAL USE. HEADER NEEDS REDESIGN OR SOME SORT OF SUPPORT. IT IS OVER CANTILEVERED FOR STRESSES IMPOSED ON IT. AIRFRAME AND EXHAUST HOURS: 33.7

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| 2005FA0001505 | CIRRUS | CONT | | EXHAUST HEADER | CRACKED |
| 10/19/2005 | SR22 | IO550N | | 15074001 | ENGINE |

NR 5 EXHAUST HEADER CRACKED AT CYLINDER JUST BELOW FLANGE ONE HALF THE WAY AROUND HEADER UNDER NORMAL USE. HEADER NEEDS REDESIGN OR SOME SORT OF SUPPORT. IT IS OVER CANTILEVERED FOR STRESSES IMPOSED ON IT. NR 6 HEADER CRACKED THRU THE FLANGE FOR A DISTANCE OF ABOUT 1.5 INCHES RADIUSING OUT ALONG THE FLANGE WELD. AIRFRAME AND EXHAUST HOURS: 25.6 (K)

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| 2005FA0001506 | CIRRUS | CONT | | EXHAUST HEADER | CRACKED |
| 10/19/2005 | SR22 | IO550N | | 15070001 | NR 5 |

NR 5 EXHAUST HEADER CRACKED AT CYLINDER JUST BELOW FLANGE HALF THE WAY AROUND HEADER UNDER NORMAL USE. HEADER NEEDS REDESIGN OR SOME SORT OF SUPPORT. IT IS OVER CANTILEVERED FOR STRESSES IMPOSED ON IT. NR 6 EXHAUST HEADER CRACKED THRU THE FLANGE FOR A DISTANCE OF ABOUT 1.5 INCHES RADIUSING OUT ALONG THE FLANGE WELD. (K)

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| CA051004009 | CNDAIR | PWA | ANGLE | CRACKED |
| 9/30/2005 | CL2151A10 | CA3 | 2153003126 | WING |

(CAN) LT AND RT ANGLES FOUND CRACKED WHEN DOING SB 215-454R3 PART B.

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| CA050920004 | CNDAIR | GE | WIRE | OVERHEATED |
| 9/13/2005 | CL6002B16 | CF343A | | IDG |

(CAN) POST FLIGHT INSPECTION REVEALED EVIDENCE OF OVERHEAT CONDITION FOUND AT 6 O'CLOCK POSITION AT THE COMBUSTOR SECTION FWD FRAME WHEN COWLINGS OPENED TO INVESTIGATE IDG FAILURE. MAINTENANCE PERSONNEL FOUND LOCALIZED AREA WITH OVERHEATED WIRE AND FUEL MANIFOLD INSULATION. NO DAMAGE TO COWLINGS. ENGINE BEING REMOVED AND SENT FOR INVESTIGATION TO OVERHAUL FACILITY.

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| CA051012006 | CNDAIR | GE | CONTROL CABLE | SEVERED |
| 10/10/2005 | CL6002B19 | CF343A1 | 1600980005 | THROTTLE |

WHEN BOTH ENGINES WERE REMOVED FOR INSPECTION ACCESS DURING A HEAVY MAINTENANCE VISIT, THE LT ENGINE AUTO THROTTLE RETARD CABLE (ITEM 220 IN FIGURE 2 ON CANADAIR IPC CHAPTER 76-10-00) WAS FOUND SEVERED BETWEEN THE DRILLED JAM NUT (ITEM 125) AND NUT (ITEM 165) AFT OF THE BELLCRANK (ITEM 85).

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| CA051013001 | CNDAIR | GE | BULKHEAD | CRACKED |
| 10/13/2005 | CL6002B19 | CF343A1 | | BS 621 |

FOUND NUMEROUS CRACKS AT PRESSURE BULKHEAD MARKED BY BLACK MARKING REF 53-61-153 PAGE 9. PRESSURE BULKHEAD CRACKS AT STN 621 REPAIRED IAW REO 601R53-61-1230 AND PROD PERM CRJ-53-21664.

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| CA051013002 | CNDAIR | GE | BULKHEAD | CRACKED |
| 10/13/2005 | CL6002B19 | CF343A1 | | BS 621 |

REAR PRESS BULKHEAD CRACKED AT LBL 27.5, WL97.5, FS 621.11. REPAIRED PER: REO 601R-53-61-1285. INTEL FITTING, REPAIRED PER REO 601R-53-61-1230 UPPER OF TRACK: AS PER REO 601R-53-61-1458.

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| CA051013003 | CNDAIR | GE | BOLT | SHEARED |
| 10/12/2005 | CL6002B19 | CF343A1 | NAS6204L11 | RT PYLON |

WHILE CARRYING OUT CANADAIR SB601R-53-061 PART C, BOLT P/N NAS6204L11 ON THE RT SIDE ENGINE PYLON WAS FOUND SEPARATED IN TWO PARTS. FRACTURE OCCURRED UNDER THE HEAD OF BOLT. BOTH THE HEAD AND SHANK OF THE BOLT LOCATED ARE IN OUR POSSESSION. WILL BE DOING A DETAILED INSPECTION OF THE AREA USING NDT METHOD, SB 601R-54 -005 WHICH WAS NOT PREVIOUSLY DONE WILL BE INCORPORATED IN CONJUNCTION WITH SB601R-53-061. THE ENGINE PYLON BOLTS WILL BE REPLACED.

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| CA051019000 | CNDAIR | GE | EXHAUST PIPE | DETACHED |
| 10/17/2005 | CL6002B19 | CF343B1 | 2285018124 | ENGINE |

EN ROUTE LOST THE LT ENGINE EXHAUST NOZZLE DURING CRUISE. THE FLIGHT CREW REPORTED A SLIGHT YAW WHEN THE EXHAUST NOZZLE DETACHED, AND THE FLIGHT ATTENDANT REPORTED A CHANGE IN ENGINE NOISE. THE EXHAUST NOZZLE HAS NOT BEEN RECOVERED. SHORTS BROTHERS SERVICE BULLETIN CF34-78-NAC-024 IS APPLICABLE TO THIS AIRCRAFT/ENGINE, NO EVIDENCE WHERE FOUND THAT SHOWED THAT THE SHORTS SB HAD BEEN PERFORMED.

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| CA050923001 | CNDAIR | GE | MESSIER | SELECTOR | FAILED |
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| | | | | VALVE | |
| 7/9/2005 | CL6002B19 | CF343B1 | 555405 | 555405 | ACTUATOR |
| <p>(CAN) ON APPROACH THE 3A AND 3B HYD PUMPS WERE TURNED ON. SHORTLY THEREAFTER THE SYSTEM 3 HIGH TEMP MSG CAME ON. QRH FOLLOWED AND TURNED OFF 3A PUMP TO ISOLATE PROBLEM. THE HIGH TEMP WENT OUT. ON SHORT FINAL THE CREW PUT GEAR DOWN, THE GEAR DISAGREE MSG CAME ON ASSOCIATED WITH THE NOSE GEAR. THE CREW FOLLOWED QRH AND PULLED THE LANDING GEAR MANUAL RELEASE, THE NOSE GEAR CAME DOWN FINE. MX REPLACED THE ACTUATOR AND THE SELECTOR VALVE, SWING CHECKS GOOD. PARTS REMOVED: ACTUATOR, P/N 16520-101, VENDOR: MESSIER-DOWTY. SELECTOR VALVE, P/N 55540-5, VENDOR: VICKERS.</p> | | | | | |
| CA050923002 | CNDAIR | GE | | ENGINE | OVERHEATED |
| 5/25/2005 | CL6002B19 | CF343B1 | | 6089T11G01 | NR 2 |
| <p>(CAN) MFG HAS RECEIVED A REPORT WHICH WE FEEL IS A REPORTABLE EVENT. THE FLIGHT CREW REJECTED TAKE-OFF WHEN THEY NOTICED THE AIRCRAFT VEERING TO THE RT ASSOCIATED WITH ENGINE NR 2 OIL PRESSURE AND ITT ABNORMALITIES. TAKE-OFF WAS ABORTED AT APPROXIMATELY 100 KNOTS. RT ENGINE REPLACED.</p> | | | | | |
| CA050923003 | CNDAIR | GE | | PIN | BROKEN |
| 8/4/2005 | CL6002B19 | CF343B1 | | BLC3BC09SL5C | COWL |
| <p>(CAN) FLIGHT CREW HAD TO SHUT DOWN THE LT ENGINE ON FINAL AS THE LT THROTTLE WOULD NOT RETARD BELOW 93 PERCENT. THE THROTTLE WAS ABLE TO ADVANCE TO PROVIDE MORE POWER, BUT WOULD NOT RETARD BELOW 93 PERCENT. FOUND THAT THE UPPER COWL PIN HOLDING THE ROD HAD BROKEN WHICH LET UPPER CORE COWL SUPPORT ROD POSITION ITSELF AT THE THROTTLE MAIN FUEL CONTROL CONNECTION FROM THE THROTTLE CONTROL BOX. THE PIN ITSELF WAS INTACT, BUT THE TWO SPRING LOADED BALLS AT THE END OF THE PIN HAD COME APART ALLOWING THE PIN TO COME OUT. CODE: V84256.(SEE ALSO: US 2005081600047)</p> | | | | | |
| CA051011003 | CNDAIR | GE | MESSIER | LANDING GEAR | MALFUNCTIONED |
| 8/8/2005 | CL6002B19 | CF343B1 | 16040 | | NOSE |
| <p>(CAN) UPON SELECTING THE LDG DOWN, THE NLG DID NOT COME DOWN AND A (GEAR DISAGREE) MESSAGE FOLLOWED. QRH FOLLOWED, NLG FINALLY EXTENDED. AN UNEVENTFUL LANDING FOLLOWED. NUMEROUS TROUBLESHOOTING STEPS WERE PERFORMED DURING THE TROUBLESHOOTING PERIOD THAT FOLLOWED, HOWEVER THE FINAL FINDINGS HAVE STILL NOT BEEN DETERMINED. STILL INVESTIGATING/ANALYSING THE EVENT.</p> | | | | | |
| CA051011001 | CNDAIR | GE | HARTMAN | RELAY | MELTED |
| 10/7/2005 | CL6002B19 | CF343B1 | D7GRZ | | RELAY/CONTACTOR |
| <p>(CAN) THE FLIGHT CREW WAS ON THE GROUND WITH THE APU ON (NO PASSENGERS ON BOARD). JUST AFTER TRANSFERING FROM APU TO EXTERNAL POWER, SMOKE STARTED TO FILL THE COCKPIT. POWER WAS REMOVED FROM THE AIRCRAFT. THE MECHANICS DETERMINED THAT THE SOURCE OF THE SMOKE WAS THE AVIONICS BAY. THE MECHANICS FOUND THAT RELAY (AC SERVICE CONTACTOR) HAD MELTED. IT IS ALSO REPORTED THAT SOME WIRES HAVE SUSTAINED HEAT DAMAGE. THERE WAS NO EVIDENCE OF A WATER LEAK IN THE AREA.</p> | | | | | |
| CA051011002 | CNDAIR | GE | | WINDOW | CRACKED |
| 10/5/2005 | CL6002C10 | CF348C1 | | NP1393226 | COCKPIT |
| <p>(CAN) RT COCKPIT SIDE WINDOW CRACKED ON APPROACH. WINDOW REPLACED IAW AMM, AIRCRAFT RETURNED TO SERVICE.</p> | | | | | |
| CA051003018 | CNDAIR | GE | BOMBDR | DOOR | MISSING |
| 10/3/2005 | CL6002C10 | CF348C1 | | | LT MLG |
| <p>(CAN) DURING INSPECTION OF THE AC DURING TRANSIT STOP THE LT MLG DOOR HAS BEEN FOUND MISSING. REMAINS OF THE BOTH DOOR HINGE FITTINGS AND THE CONNECTING LINK ARE STILL PRESENT ON THE AC. PILOT REPORTED THAT THEY HAD STRONG TURBULENCE IN FLIGHT. THE SB</p> | | | | | |

HAS BEEN PERFORMED ON THE AIRCRAFT ON 03-DEC-2003. BOTH LT AND RT DOORS HAVE BEEN INSPECTED IAW TC AD CF-2003-23R1 ON 26-SEP-2005 WITH NO FAULT FOUND. MLG DOOR P/N CC670-10520-951A NEW DOOR WILL BE INSTALLED.

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| CA051002001 | CNDAIR | GE | WINDSHIELD | CRACKED |
| 9/23/2005 | CL6002C10 | CF348C1 | 601R33033177 | COCKPIT |

(CAN) AT FLT LEVEL 370 CAPT WINDSHIELD CRAKED. THE AIRCRAFT DIVERTED AND LANDED WITHOUT INCIDENT.

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| CA051005001 | CNDAIR | GE | WINDOW | CRACKED |
| 10/3/2005 | CL6002C10 | CF348C1 | NP1393225 | COCKPIT |

(CAN) LT WINDOW CRACKED AT FL410. NO PRESSURE PROBLEM. DIVERTED FLIGH. LT SIDE WINDOW REPLACED ACCORDING AMM. THERE IS NO POST/PRE SB FOR WINDOWS.

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| CA051019001 | CNDAIR | GE | MCU | MALFUNCTIONED |
| 10/7/2005 | CL6002C10 | CF348C1 | 70744 | HORIZONTAL STAB |

IN CRUISE FLIGHT 36000 FT, THE MASTER CAUTION ALERT CAME ON WITH STAB TRIM AND MACH TRIM MESSAGES. FOLLOWED QRH AND DECLARED AN EMERGENCY. LANDED WITHOUT INCIDENT. ACCOMPLISHED TROUBLESHOOTING AND REPLACED THE HORIZONTAL STABILIZER MOTOR CONTROL UNIT. THE VENDOR OF THE HORIZ STAB MCU IS SAGEM, VENDOR CODE: VF6151. NOTE 2: AS STATED IN BOMBARDIER AOM 254. AIRCRAFT EQUIPPED WITH SPOILER STAB CONTROL UNIT (SSCU) P/N C13045BA03 ARE MORE SUSCEPTIBLE TO STAB TRIM CAUTION MESSAGES IN CERTAIN CONDITIONS. THIS AIRCRAFT WAS EQUIPPED WITH SSCU P/N C13045BA03 AT THE TIME OF THE EVENT. VENDOR OF THE SSCU IS THALES AVIONICS, VENDOR CODE: VF9111.

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| CA051017004 | CNDAIR | GE | THERMAL BARRIER | FAILED |
| 10/17/2005 | CL604 | CF34* | | BATTERY |

DURING FINAL TOP CHARGE CELL NR 19 WENT INTO THERMAL BARRIER BREAKDOWN. HIGH TEMPERATURE LIMIT WAS REACHED AND THE CELL HOUSING MELTED.

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| CA051005006 | CNDAIR | GE | PIN | BROKEN |
| 10/5/2005 | CL604 | CF343A1 | 200811620 | NLG UPLOCK |

(CAN) DURING A WALK AROUND THE NLG UPLOCK ROLLER PIN WAS FOUND BROKEN AT THE COTTER PIN HOLE.

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| CA050920002 | CNDAIR | GE | OXYGEN SYSTEM | FAILED |
| 9/20/2005 | CL604 | CF343B1 | 60144101 | PAX |

(CAN) DURING SCHEDULED MM DEPLOYMENT OF THE PASSENGER OXYGEN MASKS WAS ATTEMPTED. THE CONTROLLER WAS SWITCHED TO THE OVERRIDE POSITION BUT ALL OF THE PASSENGER OXYGEN MASKS FAILED TO DEPLOY. UPON FURTHER INVESTIGATION IT WAS DISCOVERED THAT THERE WAS INSUFICIENT PRESSURE AT THE PASSENGER OXYGEN BOX SOLENOIDS TO DEPLOY THE MASKS. THE OXYGEN CONTROLLER WAS REPLACED AND THE SYSTEM WAS TESTED SERVICEABLE.

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| CA051006001 | CVAC | ALLSN | FITTING | CRACKED |
| 10/27/2004 | 440 | 501D13D | MS2190512D | HYD LINE |

(CAN) AIRCRAFT RETURN TO BLOCK AFTER LOSS OF HYDRAULIC FLUID. AFTER INVESTIGATION MAINTENANCE FOUND FROM LT ENGINE DRIVE HYDRAULIC PUMP PRESSURE LINE AND AC HYDRAULIC PUMP, T-FITTING AT FS 319 CRACKED. THE FITTING WAS REPLACED, SYSTEM REPLENISHED AND LEAK CHECK SERVICEABLE. AIRCRAFT RETURN TO SERVICE.

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| 2005FA0001500 | DHAV | | MOUNT | CRACKED |
| 10/1/2005 | DHC2* | | 612826 | ADC |

DURING ANNUAL INSPECTION FOUND THE ADC TRAY CRACKED COMPLETELY ACROSS ONE END. (K)

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| CA051017005 | DHAV | PWA | SERVO | CRACKED |
| 10/14/2005 | DHC3 | PT6A34 | AA112911002 | ELEVATOR TAB |

RIGHT ELEVATOR SERVO TAB FOUND CRACKED DURING ROUTINE INSPECTION.

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| CA051018003 | DHAV | PWA | FRAME | CRACKED |
| 10/10/2005 | DHC6100 | PT6A20 | C6FSM2528S12 | FUSELAGE |

DURING SCHEDULED INSPECTION FOR SB 6/521 AND CF 95-12, A SINGLE CRACK WAS SUSPECTED IN THE WEB AREA OF THE AFT SECTION OF THE RT SIDE FRAME. AN EDDY CURRENT INSPECTION CONFIRMED THE CRACK AS WELL AS SMALLER CRACKS EMANATING FROM THREE ADJACENT RIVETS. THE LARGER CRACK WAS ESTIMATED AT 3/8 INCH IN LENGTH AND ORIGINATED FROM A RIVET HOLE. THERE IS NO RECORD OF THIS PARTICULAR SECTION OF THE SIDE FRAME HAVING BEEN CHANGED PREVIOUSLY. THE A/C REMAINS GROUNDED PENDING DELIVERY OF A SIDEFAME FROM THE MANUFACTURER.

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| CA051012005 | DHAV | DHAV | SKIN | DEBONDED |
| 10/6/2005 | DHC6300 | | | WING BOX |

FOUND LT AND RT WING DISBONDING OF THE UPPER WING SKIN, INBOARD AND OUTBOARD OF NACELLES FROM YW 60 TP YW 150. BOMBARDIER IS IN THE PROCESS OF ISSUING A SB TO COVER INSPECTION OF THE UPPER WING SKINS. DARK AREAS ON THE SKETCHES INDICATE DISBONDING. MODEL P/N C6W1001-25 L/H, S/N 250082, L/H P/N C6W1001-27 R/H, S/N 270083 R/H.

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|-----------------------------|---------|--------|----------|------------|
| CA050928002 | DHAV | PWA | LONGERON | CRACKED |
| 9/27/2005 | DHC6300 | PT6A27 | C6WM1712 | RT NACELLE |

(CAN) WHILE CARRYING OUT THE LOWER LONGERON INSPECTION IAW AD CF 81-07R4 AND SB 6/509, THE LT IB LONGERON ON THE RT NACELLE WAS FOUND CRACKED Laterally across the web. The crack was just aft of the engine mount.

| | | | | |
|-----------------------------|---------|--------|---------|-----------------|
| CA051013005 | DHAV | PWA | BRACKET | CRACKED |
| 10/12/2005 | DHC6300 | PT6A34 | 3012525 | THRUST REVERSER |

UPON VISUAL INSPECTION, TOP PLATE OF AFT REVERSING TELEFLEX BRACKET WAS FOUND CRACKED 70 PERCENT THROUGH. TOTAL FAILURE OF THIS BRACKET WOULD ALLOW THE REVERSING TELEFLEX TO MOVE FORE AND AFT CAUSING DIFFICULTIES IN ENGINE CONTROL DURING REVERSE OPERATIONS. DEFECTIVE PART WAS REPLACED AND AIRCRAFT RETURNED TO SERVICE.

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|-----------------------------|-------|--------|------------|---------|
| CA051006006 | DHAV | PWA | COMPRESSOR | DAMAGED |
| 9/8/2005 | DHC7* | PT6A50 | | ENGINE |

(CAN) THE ENGINE EXPERIENCED AN UNCOMMANDED POWER ROLL-BACK TO IDLE IN CRUISE, AND WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED DAMAGE TO THE 1ST STAGE COMPRESSOR BLADES. WILL MONITOR INVESTIGATION OF THE INCIDENT AND ADVISE OF ROOT CAUSE, ONCE ESTABLISHED.

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|-----------------------------|-------|--------|------------|--------------|------------|
| CA050928003 | DHAV | PWA | BFGOODRICH | BEARING RACE | CRACKED |
| 9/27/2005 | DHC71 | PT6A50 | | L814710 | MAIN WHEEL |

(CAN) DURING A ROUTINE VISUAL INSPECTION THE INNER BEARING RACE OF THE NR 4 MAIN WHEEL ASSY WAS FOUND CRACKED.

| | | | | |
|-------------------------------|---------|--------|--------|--------|
| 2005FA0001475 | DHAV | PWA | ENGINE | SEIZED |
| 10/25/2005 | DHC7102 | PT6A50 | | |

ENGINE INSTALLED ON AIRCRAFT AFTER RETURN FROM REPAIR FACILITY. DURING INITIAL GROUND RUN OF ENGINE THE POWER LEVER SEIZED AND VERY HARD TO MOVE. ENGINE TEMPERATURE AND PRESSURE WERE NORMAL. FEATHERED THE PROPELLER AND SHUTDOWN ENGINE. POST INSPECTION SHOWED NO LEAKS WITH THE PROPELLER VERY HARD TO TURN AND BETA REVERSING LEVER

SEIZED. (K)

| | | | | | |
|-----------------------------|-------|-------|--|--------|--------|
| CA051012001 | DHAV | PWA | | TIRE | FAILED |
| 10/4/2005 | DHC8* | PW121 | | 314353 | MLG |

DURING TAXI FOR TAKEOFF, A LOUD NOISE CAME FROM THE LEFT SIDE. THE AIRCRAFT STOPPED AND AFTER INSPECTION THE LEFT MAIN TIRE WAS FOUND DEFLATED. MAINTENANCE INSPECTION FOUND THE LT MLG INNER TIRE FOUND DEFLATED AND DAMAGED. ALSO FROM INNER SIDE A LARGE METAL PIECE OF WHEEL WAS FOUND MISSING. AFTER DV, INSPECTION OF MLG NOTHING ABNORMAL OBSERVED. THE MLG WHEELS ASSY'S REPLACED BY SERVICEABLE ONES.

| | | | | | |
|-----------------------------|---------|-------|------|-------------|--------------|
| CA050929001 | DHAV | PWA | DHAV | SHAFT | BROKEN |
| 9/28/2005 | DHC8301 | PW123 | | 87620130101 | SPRING STRUT |

(CAN) DURING POST ENGINE CHANGE RIGGING NR 1 ENGINE SPRING STRUT ASSEMBLY WAS REMOVED DUE TO EXCESSIVE PLAY (SLOPPY AT LOOSE). AFTER DISASSEMBLY AND INSPECTION SHAFT P/N87620130 WAS BROKEN AT POINT RIVET P/N MS204170AD3. THE SIZE OF THE RIVET LEAVES MINIMAL MATERIAL AROUND THE HOLE IN THE SHAFT.

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|-------------------------------|--------|--------|--|------------|-----------|
| 2005FA0001444 | DIAMON | CONT | | CANOPY | SEPARATED |
| 10/5/2005 | DA20C1 | IO240A | | 2056000101 | COCKPIT |

GLASS SEPARATING FROM FRAME. (EA07200505548) (K)

| | | | | | |
|-------------------------------|--------|--------|--|------------|---------|
| 2005FA0001521 | DIAMON | CONT | | FUEL TANK | CRACKED |
| 11/4/2005 | DA20C1 | IO240A | | 2228610000 | |

DURING OUTER MAINTENANCE FOUND FUEL TANK CRACKED IN NP SURFACE AT CENTRAL APT SPOT WELD FOR INTERNAL BAFFEL. INSTALLED NEW FUEL TANK TO CORRECT PROBLEM. (K)

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|-------------------------------|--------|--------|--|-------|----------------|
| 2005FA0001483 | DIAMON | CONT | | HINGE | FAILED |
| 10/5/2005 | DA40 | IO360* | | | AFT CABIN DOOR |

UPON INSTALLATION OF A NEW AFT CABIN DOOR SUPPORT STRUT, THE DOOR WAS CLOSED, AND THE AFT CABIN DOOR HINGE FAILED. UPON FURTHER INSPECTION, THE DOOR HINGE WAS FOUND TO HAVE BEEN DELAMINATED WHICH COULD NOT WITHSTAND THE PRESSURE OF THE NEW SUPPORT STUT. THE DOOR HINGE IS BONDED TO THE DOOR ASSY, AND IS NOT REPLACEABLE IN THE FIELD. (SW05200512642) (K)

| | | | | | |
|-----------------------------|----------|-----------|--|--------|------------|
| CA051013008 | DORNER | GARRTT | | ENGINE | POWER LOSS |
| 10/12/2005 | DO228202 | TPE33125D | | | RIGHT |

RT ENGINE WAS REMOVED FOR LOW TORQUE INDICATION AND SENT OUT FOR REPAIR AFTER TESTING PROVED AN INTERNAL PROBLEM. THE ENGINE WAS RE-INSTALLED FROM REPAIR WITH A NEW TORSION SHAFT SN 05P15649 AND TORQUE SENSOR P/N 3101726 AND NTS TEST FLIGHT WAS CARRIED OUT AND FUNCTIONED NORMALLY. THE AIRCRAFT ACCUMULATED LESS THAN 8 HOURS TIS AND SHOWED SIGNS OF TORQUE LOSS. GROUND TESTS WERE CARRIED OUT AND SYSTEMS WERE FUNCTIONING NORMAL, AND NTS TEST FLIGHT WAS THEN CARRIED OUT AND FAILED. ENGINE HAS SINCE BEEN REMOVED AND WILL BE SENT BACK TO THE OVERHAUL SHOP FOR RE-EVALUATION.

| | | | | | |
|-----------------------------|----------|--------|--|--------------|----------------|
| CA050901005 | DORNER | PWA | | WIRE HARNESS | SHORTED |
| 8/29/2005 | DO328100 | PW119C | | | PROPELLER SYNC |

A/C DEPARTED YYC, DURING CLIMB-OUT LIGHTS FLICKERED LT GEN KICKED OFFLINE AND CREW LOST FMS SCREEN AND PROP SYNC CB POPPED. AS DEPARTING MX BASES, ELECTED TO RETURN TO YYC. PAX'S WHERE DISEMBARKED AND A/C RETURNED TO HANGAR. GENERATOR CAME ON LINE DURING STARTUP AND TAXI BACK TO HANGAR ALTHOUGH FMS SCREEN AND PROP SYNC REMAINED INOP. VISUAL CHECK OF START/GEN COMPLETED AND GROUND RUN AND FLT TEST COULD NOT DUPLICATE ANY ELECTRICAL FAULT IN GENERATOR. FMS AND PROP SYNC WHERE DEFERRED AND FLIGHT CONTINUED. ELECTRICAL SHORT OF PROP SYNC SYSTEM SUSPECTED OF INTERFERING WITH START/GEN AND HARMING FMS SCREEN. TROUBLESHOOTING OF PROP SYNC SHORT ONGOING. WILL REPORT FINDINGS.

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|-----------------------------|----------|--------|-------------|---------|
| CA051011006 | EMB | PWA | DRIVE ASSY | SHEARED |
| 10/5/2005 | EMB110P1 | PT6A34 | 02532310103 | EDP |

IN CRUISE FLT AT 7000 FEET, NR 1 ENGINE LOST POWER. FLT CREW SECURED NR 1 ENGINE IAW APPLICABLE FLT MANUAL PROCEDURES AND LANDED A/C AT NEAREST AIRPORT. UPON INVESTIGATION, MX FOUND THAT CAUSE OF ENG FAILURE WAS DUE TO ENG DRIVEN FUEL PUMP. WHEN FUEL PUMP WAS REMOVED IT WAS FOUND THAT SPLINES HAD SHEARED OFF OF DRIVE AS A RESULT OF INTERNAL PUMP FAILURE. THE ACCESSORY DRIVE SECTION, ON THE ENGINE, WAS INSPECTED AND FOUND TO BE DEFECT FREE. THE ENGINE DRIVEN FUEL PUMP ALONG WITH THE FUEL CONTROL UNIT WERE BOTH REPLACED AND THE ENGINE WAS GROUND RUN WHERE ALL PARAMETERS WERE FOUND TO BE NORMAL. THE AIRCRAFT WAS THEN RETURNED TO SERVICE. THE FUEL PUMP HAS BEEN SENT OUT FOR TEAR DOWN AND A STRIP REPORT.

| | | | |
|-------------------------------|----------|---------|---------|
| 2005FA0001464 | EMB | TIRE | LEAKING |
| 10/12/2005 | EMB135BJ | 304K632 | MLG |

DURING LEAK CHECK OF A NEW TIRE, IT WAS DISCOVERED THAT THE SIDEWALL WEEP HOLES WERE LEAKING, THIS CONDITION WAS NOTICED AFTER THE TIRE HAD COMPLETED A 12 HOUR LEAK CHECK. (K)

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|-------------------------------|----------|---------|---------|
| 2005FA0001530 | EMB | TIRE | LEAKING |
| 11/2/2005 | EMB135BJ | 304K632 | MLG |

AFTER COMPLETING THE SPECIFIED LEAK CHECK TIME, THE WEEP HOLES IN THE SIDE WALL OF THE TIRE WERE STILL BUBBLING WHEN CHECKED WITH LEAK DETECTOR FLUID.

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|-------------------------------|----------|--------|-----------|---------------|
| EAHR200500003 | ENSTRM | ALLSN | GCU | MALFUNCTIONED |
| 11/1/2005 | 480/TH28 | 250C20 | VR152811B | DC SYSTEM |

GENERATOR CONTROL UNIT CAUSES GENERATOR RELAY TO CYCLE ON AND OFF.

| | | | | |
|-----------------------------|---------|--------|---------|----------|
| CA051006005 | FOKKER | PWA | PACKING | FAILED |
| 9/1/2005 | F27MK50 | PW125B | | N1 PROBE |

(CAN) ON TAXI, CABIN AIR BECAME CONTAMINATED WITH SMOKE. SUBSEQUENT INSPECTION REVEALED A HARDENED AND BROKEN N1 PROBE O-RING PACKING.

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|-----------------------------|-----------|-----------|------|----------------|
| CA051012009 | FOKKER | RROYCE | SKIN | CRACKED |
| 10/2/2005 | F28MK1000 | SPEY55515 | | EMERGENCY DOOR |

DURING SERVICE CHECK, 13 INCH CRACK DISCOVERED ON EXTERNAL SKIN OF FWD SERVICE/EMERGENCY DOOR. NO REPLACEMENT DOOR WAS IN STOCK. REPAIRS WERE COMPLETED AS PER STRUCTURAL REPAIR MANUAL. THIS AREA IS COVERED BY STRUCTURAL INSPECT PROGRAM WHICH IS COMPLETED EVERY 2000 CYCLES AND WAS DUE WITHIN 70 CYCLES. FOKKER SERVICES HAVE BEEN CONTACTED FOR THEIR RECOMMENDATION REGARDING INSPECTION LVL AND FREQ. ALL INITIAL FINDINGS ON SIP-1 ITEM 52-40-01 ARE FOUND WELL ABOVE INITIAL INSPECT AT 18700 CYCLES. IN MAJORITY OF FINDINGS, CRACK SIZE IS IN BETWEEN 8 AND 11 INCH. CRACK GROWTH CALCULATIONS (50 MM - 250 MM) DO SHOW A RAPID GROWTH. HOWEVER, TAKING INTO ACCOUNT A SCATTER FACTOR OF 3, 3200 CYCLE INTERVAL SHOULD COVER THIS GROWTH. THERE IS NO REASON TO REVISE SIP ITEM SINCE AREA IS DAMAGE TOLERANT AND IS ABLE TO SUSTAIN THESE CRACK LENGTHS W/O HAVING AN ADVERSE EFFECT ON AIRWORTHINESS OF A/C.

| | | | | | |
|-----------------------------|---------|-------------|-------------|---------|-------------|
| CA051027001 | FRCHLD | GARRTT | GARRTT | LINE | CRACKED |
| 10/13/2005 | SA227DC | TPE33112UHR | TPE33112UHR | 3108081 | NR 1 ENGINE |

(CAN) ENROUTE, FLIGHT CREW OBSERVED A LOW OIL PRESSURE INDICATION ON NR 1 ENG. CONFIRMED LOW OIL PRESS ON GAUGE AND CONDUCTED AN IN-FLIGHT SHUTDOWN PROCEDURE. SINGLE ENG FLIGHT CONTINUED TO DESTINATION. CREW CARRIED OUT LANDING, WITH ERS STANDING BY, WITHOUT FURTHER INCIDENT. MAINT INSPECT FOUND CRACK ON RIGID OIL LINE, APPROX 0.125 INCHES AFT OF ONE FLARED END AND CONTINUING HALF WAY AROUND DIAMETER OF

LINE. LINE WAS REPLACED WITH NEW LINE, 5.5 QUARTS OF OIL WAS ADDED, MAG PLUG INSPECTED, FOUND TO BE CLEAN, OIL FILTER INSPECTED, NO METAL PARTICLES NOTED. AC WAS GROUND RUN FOR LEAK CHECKS AND TAKE OFF PERFORMANCE VERIFIED, AC WAS RETURNED TO BASE, SPECTROGRAPHIC OIL ANALYSIS SAMPLES (S.O.A.P.) WASTAKEN.

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|-------------------------------|--------|-----------|------|----------|
| 2005FA0001497 | GULSTM | LYC | SPAR | DAMAGED |
| 9/15/2005 | 112A | TO360A1A6 | | FUSELAGE |

FOUND LT AND RT MAIN SPAR WEBS DAMAGED FROM STATION 50 TO 63. EACH WEB HAD DIAGONAL WRINKLES FROM TOP OF SPAR, JUST IB OF LANDING GEAR ATTACH AREA, DOWN AND IB TO JUST OB OF DRAG BRACE BRACKET AND REINFORCEMENTS. AIRCRAFT HAS BEEN FOUND TO BE IN COMPLIANCE WITH AD. BY REINFORCEMENT KIT INSTALLED IAW SB. NO CRACKS DETECTED AT THIS DATE. (K)

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|-----------------------------|--------|----------|--------|---------|
| CA051014002 | GULSTM | RROYCE | BLADES | DAMAGED |
| 10/12/2005 | G1159 | SPEY5118 | | ENGINE |

GII SERIAL 236 IN NR 1 POSITION HAS EXPERIENCED FOD DAMAGE. THE DAMAGE HAS BEEN FOUND TO THE LPC5 BLADES AND HPC1 BLADES. THE REST OF THE HP COMPRESSOR HAS YET TO BE INSPECTED. THE DAMAGE HAS BEEN CAUSED BY THE RELEASE OF ONE LP OGV INNER BOLT WASHER AND NUT.

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|-------------------------------|--------|----------|------------|------------------|
| 2005FA0001476 | GULSTM | RROYCE | O-RING | LEAKING |
| 9/11/2005 | GIV | SPEY5118 | NAS161210A | HYD SHUTOFF VLVE |

HYD LINE WAS REPLACED DUE TO CRACK IN FLARE AT TEE FITTING. REPLACEMENT OF LINE REQUIRED INSTALL OF NEW O-RING, WHERE TEE FITTING ATTACHES TO FLIGHT CTRL HYD SHUT OFF VALVE. AFTER INSTALL OF HYD LINE AND O-RING, A LEAK CHECK WAS PERFORMED. NO LEAKS WERE NOTED. AC WAS APPROVED FOR RETURN TO SERVICE. AFTER 2.6 HOURS, O-RING FAILED CAUSING LEAKAGE OF HYD FLUID FROM COMBINED HYD SYS. AC MADE PRECAUTIONARY LANDING. MAINT REPLACED DEFECTIVE O-RING AND SERVICED HYDR SYS. LEAK CHECK WAS PERFORMED AND NO DEFECTS WERE NOTED. DEFECTIVE O-RING WAS INSPECTED AND FOUND TO BE CUT. DETERMINATION ALSO COULD NOT BE MADE AS TO WHY O-RING FAILED 2.6 HOURS AFTER INSTALLATION, INITIAL LEAK CHECK SHOWED NO DEFECTS.

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|-------------------------------|--------------------------|--------|-----------|--------------|
| 2005FA0001501 | GULSTM | RROYCE | CONNECTOR | DISCONNECTED |
| 10/26/2005 | GULFSTREAMGVBR700710A110 | | 394A1J1 | CABIN LIGHTS |

DURING SCHEDULED MAINTENANCE, CREW NOTED SEVERAL CABIN LIGHTS WENT INOPERATIVE. WIRE PX601A8 AT CONNECTOR 394A1J1/369A1P1 BEHIND AUX CB PANEL AT RT RADIO RACK WAS FOUND WITH EVIDENCE OF OVERHEATING AND ARCING. SOLDERED CONNECTION TO CORRESPONDING PIN HAD FAILED. CB DID NOT TRIP. REPLACED CONNECTOR, TRIMMED DAMAGED WIRE, INSTALLED NEW PIN. REPLACED 50 AMP CB. INTERNALLY INSPECTED POWER DISTRIBUTION BOX FOR EVIDENCE OF OVERHEATING. TESTED REPAIRED CIRCUIT. (K)

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|-------------------------------|--------------------------|--------|-----------|--------------|
| 2005FA0001502 | GULSTM | RROYCE | CONNECTOR | DISCONNECTED |
| 10/26/2005 | GULFSTREAMGVBR700710A110 | | 394A1P1 | CABIN LIGHTS |

DURING SCHEDULED MAINTENANCE, CREW NOTED SEVERAL CABIN LIGHTS WENT INOPERATIVE. WIRE PX601A8 AT CONNECTORS 394A1J1/394A1P1 BEHIND AUX CB PANEL AT RT RADIO RACK WAS FOUND WITH EVIDENCE OF OVERHEATING AND ARCING. SOLDERED CONNECTION TO CORRESPONDING PIN HAD FAILED. CB DID NOT TRIP. REPLACED CONNECTOR 394A1J1/394A1P1, TRIMMED DAMAGED WIRE, INSTALLED NEW PIN. REPLACED 50 AMP CB. INTERNALLY INSPECTED POWER DISTRIBUTION BOX FOR EVIDENCE OF OVERHEATING. TESTED REPAIRED CIRCUIT. (K)

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|-----------------------------|--------|----------|-----------|---------|
| CA051003015 | HUGHES | LYC | TUBE | CRACKED |
| 9/22/2005 | 269C1 | HO360C1A | 269A21725 | MAST |

(CAN) 1) TUBE ASSEMBLY IS CRACKED ON THE MAST SIDE. 2) REPLACED TUBE ASSEMBLY, P/N

269A2172-5.

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|-----------------------------|--------|----------|------------|--------|
| CA051007004 | HUGHES | LYC | CARBURETOR | FAILED |
| 9/28/2005 | 269C1 | HO360C1A | 1060301 | ENGINE |

(CAN) AIRCRAFT HAVE LOW POWER IN FLIGHT. REPLACED CARBURATOR.

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|-------------------------------|--------|---------|------------|-----------------|
| 2005FA0001337 | HUGHES | ALLSN | MOTOR | INOPERATIVE |
| 8/13/2005 | 369A | 250C20B | 369A717111 | FLIGHT CONTROLS |

ON APPROACH TO LANDING THE LONG TRIM MOTOR QUIT WORKING. REPLACED UNIT. (K)

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|-------------------------------|--------|--|-------------|---------|
| 2005FA0001524 | HUGHES | | SKID | CRACKED |
| 9/4/2005 | 369D | | 369D2921143 | MLG |

UPON LANDING THE MECHANIC SAW THE FORWARD LT SKID TUBE WAS ANGLED UP SEVERAL DEGREES. IT WAS DISCOVERED THAT THE TUBE WAS CRACKED UNDER THE FORWARD FOOT AND SKID PLATE. REPLACED UNIT. (K)

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|-------------------------------|--------|--|------------|-----------------|
| 2005FA0001525 | HUGHES | | BRACKET | MISMANUFACTURED |
| 10/2/2005 | 369D | | 369D256273 | FUSELAGE |

RECEIVED A BLOWN BRACKET FROM THE VENDOR AND FOUND IT IS NOT BUILT TO THE LATEST SPECS, IT WAS BUILT IN 2002 AND REQUIRES MODIFICATIONS CALLED OUT IN AN SB. (K)

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|-------------------------------|--------|--------|--------------|------------|
| 2005FA0001339 | HUGHES | ALLSN | HUB | DAMAGED |
| 8/7/2005 | 369D | 250C20 | 369D21200501 | MAIN ROTOR |

FOUND THE UPPER M/R P/C LINK BEARING HAD WORN INTO THE ATTACH HUB OF THE PITCH HOUSING ABOUT .130 INCH UNTIL THE SPHERICAL PART OF THE BEARING CONTACTED, PREVENTING FURTHER PROGRESSION. (K)

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|-------------------------------|--------|---------|-----------|---------------|
| 2005FA0001338 | HUGHES | ALLSN | MOTOR | INOPERATIVE |
| 8/9/2005 | 369D | 250C20B | 369A20023 | GOVERNOR TRIM |

PILOT BEEPED THE N2 UP AND WAS UNABLE TO BEAP DOWN, THEN LATER GOT IT DOWN WITH NUMEROUS ATTEMPTS AND FLEW IT BACK. UNIT WAS CHANGED. (K)

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|-------------------------------|--------|---------|-----------|--------|
| 2005FA0001336 | HUGHES | ALLSN | GOVERNOR | STIFF |
| 8/15/2005 | 369D | 250C20B | 252476914 | ENGINE |

ON INSPECTION THE GOV LOOKED TO BE OUT OF RIG. WHEN THE ARM WAS REMOVED IT WAS DISCOVERED THAT THE SHAFT WAS EXTREMELY STIFF. REPLACED GOVERNOR. (K)

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|-------------------------------|--------|---------|------|------------|
| 2005FA0001523 | HUGHES | ALLSN | STUD | BROKEN |
| 9/26/2005 | 369D | 250C20B | | COMPRESSOR |

FOUND THE LOWER RT COMPRESSOR STUD BROKEN OFF. DURING INSPECTION PROCESS FOR COMPRESSOR CASE HALVES. IT WAS NOTICED THAT THE RT LOWER COMPRESSOR STUD WAS MISSING (THAT IS THE NUT AND STUD WERE NOT VISABLE ON THE COMPRESSOR FLANGE). REPLACED UNIT. (K)

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|-----------------------------|----------|----------|----------|----------|
| CA050929002 | ISRAEL | GARRTT | CAP | LOOSE |
| 9/23/2005 | ASTRASPX | TFE73140 | 30607493 | OIL TANK |

(CAN) AFTER TAKEOFF, LOSS OF LT ENGINE OIL PRESSURE. SHUT DOWN LT ENGINE, DECLARED EMERGENCY AND RETURNED TO BASE. ENGINE SHOWED SIGNS OF OIL LEAK ON LT COWL. INVESTIGATED OIL LEAK AND FOUND THE OB OIL CAP LOOSE. INSPECTED OIL CAP/DIP STICK O-RING AND LOCKING ASSY SERVICEABLE. CLEAN DOWN ENGINE OIL SPILLAGE AND SERVICED ENGINE WITH MOBIL 254. C/O GND RUNS AND ENGINE PERFORMED SERVICEABLE. NO APPARENT LEAKS ON ENGINE. AIRCRAFT RELEASED FOR RETURN TO SERVICE.

[2005FA0001490](#) LEAR GARRTT CONNECTOR LOOSE
9/29/2005 35LEAR TFE731* ADC

THE PILOTS ALTIMETER FLAGGED WHILE ENROUTE. THE FLIGHT CREW NOTIFIED ATC. SEVERAL MINUTES LATER THE ALTIMETER BEGAN WORKING NORMALLY. THE CONNECTIONS WERE CHECKED AND A BITE TEST WAS PERFORMED ON THE ADC WITH NO DEFECTS NOTED. AC WAS RETURNED TO SERVICE AND CONTINUED FLIGHT. WHILE ON THE GROUND, THE ALTIMETER AND ADC CONNECTIONS WERE RECHECKED. BOTH PRIMARY ALTIMETERY SYSTEMS WERE RUN TO ALTITUDE USING A DPS 500 AND NO DEFECTS WERE NOTED. THERE HAVE BEEN NO PRIOR REPORTS OF ALTIMETERY ERRORS ON THE AIRCRAFT. (K)

[CA051002002](#) LEAR GARRTT GIMBAL JOINT DAMAGED
9/22/2005 45LEAR TFE7312 1457711 FLAP ACTUATOR

(CAN) FOUND LEADING EDGE OF LOWER PANEL COVERING OB FLAP ACTUATOR ON BOTH LT AND RT FLAPS DAMAGED. INVESTIGATION FOUND LOWER PIN P/N 145680-1 AND SNAP RING P/N 9-INI7437A2-70 HAD COME OUT OF THE BOTTOM OF GIMBAL ASSY. P/N 145771-1. PART OF ACTUATOR P/N 6627503000-011. WHEN THE ABOVE PIN CAME LOOSE IF ALSO GOUGED THE LEADING EDGE OF THE FLAP ACTUATOR CUTOUT FRAME. THE ACTUATOR HOUSING ALSO CONTACTED THE LEADING EDGE OF THE COVER PANEL. THE DAMAGED AREAS WERE BLENDED OUT AND TREATED IAW MFG ENGINEERING AND BOTH FLAP ACTUATORS REPLACED.

[2005FA0001469](#) LET DAMPER CRACKED
10/27/2005 L23 A751305N MLG

UPPER HINGE ARM OF GEAR STRUT CRACKED AT WELDS.

[CA050920006](#) MAULE CONTROL CABLE SEPARATED
8/18/2005 M7235B 36320500 CARB HEAT

(CAN) PILOT ACTUATED CARB HEAT AND HANDLE CAME UNSWAGED FROM CABLE. AIRCRAFT HAD TO COME BACK TO BASE PREMATURELY.

[CA050920007](#) MAULE MUFFLER BURNED
8/31/2005 M7235B M7235B ENGINE

(CAN) PILOT COMPLAINED OF ABNORMAL CARB HEAT OPERATION IN FLIGHT AND BACK AT BASE ON GROUND. COWLS REMOVED ONLY TO DISCOVER LARGE FIST SIZE BURN HOLE THROUGH LT MUFFLER AND HEAT MUFF SHROUD. CARB HEAT HOSE WAS TOTALLY BURNED OFF AND INDUCTION AIR BOX SUSTAINED MINOR DAMAGE BUT NOT TO AIR VALVE OR SEAL. CAUSE WAS DETERMINED TO BE THAT THE INTERNAL BAFFLE HAD BROKEN AWAY AT THE TOP TACK WELDS AND FALLEN DOWN CAUSING A HEAT SINK ON THE MUFFLER BOTTOM AND BURNING THROUGH. NEW PARTS WERE INSTALLED AND REPAIRS TO LOWER COWL CARRIED OUT AND AIRCRAFT RELEASED FOR RETURN TO SERVICE.

[2005FA0001361](#) MOONEY LYC COUPLING FAILED
5/28/2005 M20E IO360A1A MLG

SUFFERED A GEAR UP LANDING DUE TO A FAILURE OF THE COUPLING BETWEEN THE ACTUATOR AND GEARBOX. (K)

[2005FA0001431](#) MTSBSI GARRTT DUCT LOOSE
9/15/2005 MU2B40 TPE331* 31018303 ENGINE

ENGINE WAS TORN DOWN, BY AN APPROVED ENGINE SERVICE CENTER, FOR AN AUDIT OF ITS SB AND TBO CONFIGURATION, DUE TO CROSSOVER DUCT/DIFFUSER FAILURE OF ITS SISTER ENGINE ON THE SAME AIRCRAFT. IT WAS FOUND THE MAINTENANCE RECORDS CONCERNING SB STATUS AND TBO STATUS WERE IN ERROR ON THIS ENGINE ALSO AND INSPECTION OF THE CROSSOVER DUCT ASSY IN THIS ENGINE WAS FOUND VERY LOOSE, BUT NOT YET FAILED. FAILURE OF THIS PART WAS IMINENT AND SEALS IN THIS DUCT WERE MOSTLY FAILED, AFFECTING COMPRESSOR AND ENGINE POWER. COMPRESSOR CROSSOVER DUCT/ DIFFUSER POOR CONDITION FOR ENGINE. (K)

[2005FA0001430](#) MTSBSI GARRTT DUCT FAILED
9/15/2005 MU2B40 TPE33110 31018303 ENGINE

ENGINE EGT SUDDENLY ROSE IN FLIGHT AND POWER HAD TO BE REDUCED. SAFE LANDING ACCOMPLISHED AT HOME BASE. TROUBLESHOOTING REVEALED THE COMPRESSOR CROSSOVER DUCT (DIFFUSER) HAD FAILED, CAUSING LOW COMPRESSOR PERFORMANCE. A VANE HAD BROKEN OFF AND LODGED, PREVENTING CATASTROPHIC FAILURE OF COMPONENTS DOWNSTREAM. INVESTIGATION REVEALED THIS PART WAS REQUIRED TO BE REPLACED WITH AN UPGRADED DUCT LESS PRONE TO FAILURE AT THE ENTINE TBO EXTENSION, WHICH WAS RECORDED IN MAINTENANCE RECORDS AS HAVING BEEN ACCOMPLISHED AT AN EARLIER TIME, AND THE ENGINE CERTIFIED TO MEET THE 5400 HOUR TBO. (K)

[CA051006015](#) PILATS PWA WOODWARD FCU FAILED
9/21/2005 PC12 PT6A67B 806304101 806304101 ENGINE

(CAN) IN FLIGHT, THE CREW REPORTED A LOUD NOISE ACCOMPANIED BY AN ENGINE SURGE. ENGINE POWER ROLLED BACK AND RECOVERED WITHOUT PILOT INPUT. THE AIRCRAFT DIVERTED FOR AN UNSCHEDULED LANDING. THE FUEL CONTROL UNIT WAS SUBSEQUENTLY REMOVED FOR INVESTIGATION. MFG WILL MONITOR INVESTIGATION OF THE INCIDENT AND WILL ADVISE OF ROOT CAUSE, ONCE DETERMINED.

[CA050922001](#) PILATS PWA EXCITER FAILED
9/21/2005 PC1245 PT6A67B 103815504 IGNITION

(CAN) ENGINE FAILED TO LIGHT AT REMOTE COMMUNITY AIRPORT. IGNITION EXCITER BOX FOUND TO BE AT FAULT. FAILED UNIT HAD BEEN REPLACED AT ENGINE CHANGE, 17.4 HRS PREVIOUS.

[CA050922002](#) PILATS PWA STRUCTURE CRACKED
9/15/2005 PC1245 PT6A67B 5302412151 INTAKE

(CAN) TRACES OF EXHAUST EMISSIONS WERE NOTICED COMING OUT OF EDGE OF INTAKE LIP. PART WAS REMOVED FROM COWL AND WITH THE TAPE AND INSULATION REMOVED, AN 8 INCH CRACK WAS REVEALED ON THE AFT SIDE OF THE EXHAUST CHAMBER PASSAGE. NEW INTAKE LIP KIT WAS FITTED, RETURNED TO SERVICE.

[CA050922003](#) PILATS PWA ACTUATOR INOPERATIVE
9/15/2005 PC1245 PT6A67B 978731530 PARTICAL SEPARA

(CAN) PARTICLE SEPARATOR ACTUATOR FAILED TO OPERATE. UNIT REPLACED WITH SERVICEABLE UNIT, TESTS SATISFACTORY.

[CA050923005](#) PILATS PWA PILATS BUSHING WORN
8/24/2005 PC1245 PT6A67B 9411412107 RUDDER

(CAN) DURING AN INSPECTION THE TOP RUDDER BUSHING WAS FOUND TO BE WORN BEYOND LIMITS. RUDDER WAS REMOVED AND RUDDER WAS REPAIRED IAW MFG TECH MEMO ECE -12-TM-02-327. RUDDER REINSTALLED AND CHECKED FOR TRAVEL IAW MM.

[CA050930001](#) PILATS PWA TERMINAL BLOCK MELTED
9/20/2005 PC1245 PT6A67B 9714231705 WINDSHIELD HEAT

(CAN) THE WINDSHIELDS DE-ICE SYSTEM WAS SNAGGED AS DEFECTIVE BY THE PILOTS. AFTER INSPECTION OF THE SYSTEM 3 TERMINAL BLOCKS LOCATED IN THE COCKPIT ROOF PORTION WERE FOUND TO HAVE OVERHEATED. ALL (3) TERMINAL BLOCKS AND BOTH WINDSHIELDS HAVE BEEN REPLACED. SYSTEM WAS TESTED AND FOUND SERVICEABLE.

[CA050919004](#) PILATS PWA RADIO ODOR
9/16/2005 PC1245 PT6A67B 069010320101 VHF

(CAN) 15 MINUTES INTO CLIMB TO ALTITUDE, PILOTS SAW AND SMELLED SMOKE EMANATING FROM

LOWER PORTION OF COPILOT'S WINDSHIELD. AIRCRAFT RETURNED TO BASE OF DEPARTURE, MEANWHILE CIRCUIT BREAKERS FOR WHAT APPEARED TO BE CAUSE OF SMOKE WERE PULLED. WINDSHIELD HEAT BREAKERS WERE PULLED. INVESTIGATION ON GROUND REVEALED STRONG BURNED SMELL EMANATING FROM NR 1 VHF NAV/COMM ONCE REMOVED FROM INSTALLATION RACK. BACK OF NAV/COMM IS LOCATED BELOW COPILOT'S WINDSHIELD AND THIS IS WHY SMOKE WAS COMING FROM LOWER PORTION OF WINDSHIELD. NAV/COMM REPLACED WITH SERVICEABLE UNIT.

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|-----------------------------|--------|---------|--------------|----------------|
| CA051011004 | PILATS | PWA | WIRE HARNESS | CHAFED |
| 9/29/2005 | PC1245 | PT6A67B | | NAVIGATION SYS |

THE MODE C FUNCTION OF ENCODING ALTIMETER FAILED, AS WELL THERE WERE INTERMITTENT FAULTS OF THE RADAR ALTIMETER AND OTHER AVIONICS SYSTEMS. DURING TROUBLESHOOTING, THE MAIN WIRE BUNDLE ATTACHED TO THE FORWARD FIREWALL/PRESSURE BULKHEAD BEHIND THE INSTRUMENT PANEL WAS FOUND TO BE CHAFED THROUGH BY THE COOLING/BLAST TUBE FOR THE KLN 90B GPS. BOTH THE WIRE BUNDLE AND BLAST TUBE WERE WELL SECURED BUT IN THE AREA OF THE DAMAGE THERE WAS CONTACT BETWEEN THE TWO. THE DAMAGED WIRING WAS REPAIRED AND SPIRAL WRAP WAS APPLIED TO THE WIRE BUNDLE TO PREVENT FURTHER DAMAGE BY THE COOLING HOSE.

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|-----------------------------|--------|--------|-------------|---------------|
| CA051006014 | PILATS | PWA | BLEED VALVE | OUT OF LIMITS |
| 9/22/2005 | PC7 | PT6A25 | | COMPRESSOR |

(CAN) ON TAKE-OFF ROLL, THE ENGINE SURGED, ACCOMPANIED BY FLAMES EMITTED FROM THE EXHAUST. SUBSEQUENT INVESTIGATION DETERMINED THE COMPRESSOR BLEED VALVE CLOSING POINT TO BE OUT OF LIMITS. THE BOV WAS REPLACED.

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|-------------------------------|---------|-------|--------|--------------|
| 2005FA0001470 | PIPER | LYC | P-LEAD | DETERIORATED |
| 10/28/2005 | PA22150 | O320* | | LT MAGNETO |

DURING RUNUP AFTER ANNUAL INSPECTION, LT MAG WAS NOT WORKING. FOUND INSULATION ON P-LEAD WIRE WAS DETERIORATING AND SHORTING TO SHIELDING CAUSING MAG TO BE CONTINUOUSLY GROUNDED NO MATTER WHAT SWITCH POSITION WAS. REPLACED SECTION OF P-LEAD AS REQUIRED. THIS WIRING IS DIRECTLY ABOVE EXHAUST AND DETERIORATION WAS PROBABLY CAUSED BY HEAT OF EXHAUST SYSTEM OVER TIME.

| | | | | |
|-------------------------------|---------|-------|--------|--------------|
| 2005FA0001471 | PIPER | LYC | P-LEAD | DETERIORATED |
| 10/28/2005 | PA22150 | O320* | | MAGNETO |

DURING RUNUP AFTER ANNUAL INSPECTION, LT MAG WAS NOT WORKING. FOUND INSULATION ON P-LEAD WIRE WAS DETERIORATING AND SHORTING TO SHIELDING CAUSING MAG TO BE CONTINUOUSLY GROUNDED NO MATTER WHAT SWITCH POSITION WAS. REPLACED SECTION OF P-LEAD AS REQUIRED. THIS WIRING IS DIRECTLY ABOVE EXHAUST AND DETERIORATION WAS PROBABLY CAUSED BY HEAT OF EXHAUST SYSTEM OVER TIME.

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|-------------------------------|---------|-------|--------|--------------|
| 2005FA0001472 | PIPER | LYC | P-LEAD | DETERIORATED |
| 10/28/2005 | PA22150 | O320* | | MAGNETO |

DURING RUNUP AFTER ANNUAL INSPECTION, LEFT MAG WAS NOT WORKING. FOUND INSULATION ON P-LEAD WIRE WAS DETERIORATING AND SHORTING TO SHIELDING CAUSING MAG TO BE CONTINUOUSLY GROUNDED NO MATTER WHAT SWITCH POSITION WAS. REPLACED SECTION OF P-LEAD AS REQUIRED. THIS WIRING IS DIRECTLY ABOVE EXHAUST AND DETERIORATION WAS PROBABLY CAUSED BY HEAT OF EXHAUST SYSTEM OVER TIME.

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|-------------------------------|---------|-------|--------|--------------|
| 2005FA0001473 | PIPER | LYC | P-LEAD | DETERIORATED |
| 10/28/2005 | PA22150 | O320* | | MAGNETO |

DURING RUNUP AFTER ANNUAL INSPECTION, LEFT MAG WAS NOT WORKING. FOUND INSULATION ON P-LEAD WIRE WAS DETERIORATING AND SHORTING TO SHIELDING CAUSING MAG TO BE CONTINUOUSLY GROUNDED NO MATTER WHAT SWITCH POSITION WAS. REPLACED SECTION OF P-LEAD AS REQUIRED. THIS WIRING IS DIRECTLY ABOVE EXHAUST AND DETERIORATION WAS PROBABLY CAUSED BY HEAT OF EXHAUST SYSTEM OVER TIME.

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|-------------------------------|---------|--------|--|------|---------|
| 2005FA0001438 | PIPER | LYC | | GEAR | BROKEN |
| 6/22/2005 | PA23250 | IO540* | | | STARTER |

ON RESTART IN THE AIR THE STARTER DRIVE GEAR BROKE. THE PILOT WAS UNABLE TO START THE ENGINE. THE GEAR ALSO DAMAGED THE RING GEAR ON THE ENGINE. (K)

| | | | | | |
|-----------------------------|---------|-------|-------|----------|---------|
| CA051006016 | PIPER | LYC | PIPER | SUPPORT | CRACKED |
| 6/24/2005 | PA28160 | O320* | 66600 | 62102000 | AILERON |

(CAN) AILERON BELLCRANK SUPPORT ASSEMBLY WAS CRACKED AT THE FORWARD ATTACH BOLT HOLE. THE CRACKS WERE APP 1 INCH LONG. PART HAS NOW BEEN REPLACED NEW.

| | | | | | |
|-------------------------------|---------|-----------|--|----------|---------|
| 2005FA0001405 | PIPER | GE | | SKIN | CRACKED |
| 9/22/2005 | PA28161 | CFM567B24 | | 62061002 | WING |

WING WALK STIFFENER PANEL CRACKED UNDER UPPER WING SKIN, YEARS OF WALKING ON PANEL. STIFFENER PANEL SHOULD BE HEAVIER GAUGE METAL. (K)

| | | | | | |
|-------------------------------|---------|-------|--|----------|---------|
| 2005FA0001509 | PIPER | LYC | | SKIN | CRACKED |
| 10/25/2005 | PA28161 | O320* | | 62061002 | WING |

FORWARD WING WALK DOUBLER CRACKED. DOUBLER SHOULD BE HEAVIER GAUGE METAL. (K)

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|-------------------------------|---------|---------|--|-------------------|--------|
| 2005FA0001489 | PIPER | LYC | | THROTTLE CABLE | BROKEN |
| 10/6/2005 | PA28161 | O320D3G | | 455350 | ENGINE |

THE THROTTLE CABLE BROKE IN HALF, INSIDE THE THROTTLE CABLE HOUSING. WHEN THE THROTTLE CABLE BROKE, IT CREATED FREYED ENDS THAT CAUGHT IN THE CABLE HOUSING WHICH RESULTED IN THE THROTTLE BECOMING (STUCK) IN THE FULL POSITION WHICH ENDED IN THE PILOT PULLING THE MIXTURE TO FULL LEAN POSITION AND LANDING (DEAD STICK) AT OTIS ANG BASE. (NE01200505868) (K)

| | | | | | |
|-------------------------------|---------|---------|--|---------------|--------|
| 2005FA0001403 | PIPER | LYC | | CYLINDER HEAD | FAILED |
| 9/20/2005 | PA28180 | O360A4A | | | ENGINE |

NR 3 CYLINDER PRODUCED CRACK FROM LOWER SPARK PLUG TO EXHAUST PORT, ENGINE LOST POWER DURING CLIMB OUT AT APPROX 700 FT ATTEMPT TO RETURN FOR LANDING WAS UNSUCCESSFUL, FAILED. CYLINDER INSTALLED 1/12/00 RECONDITION CYLINDER TIME UNKNOWN - TIME IN SERVICE, APPROX 1300. (K)

| | | | | | |
|-------------------------------|----------|----------|--|----------|----------|
| 2005FA0001360 | PIPER | LYC | | SKIN | CRACKED |
| 9/14/2005 | PA28R200 | IO360A1A | | 62061002 | FUSELAGE |

AT CABIN ENTRANCE, WING WALK, FOUND SUPPORT PANEL UNDER WING WALK CRACKED. FAILURE DUE TO REPEATED WALKING ON. IF FACTORY STAMPED SUPPORT OUT OF HEAVIER, THICKER PANEL, MAY HELP PROLONG FAILURE. (EA21200507814) (K)

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|-------------------------------|----------|--|--|-------|---------------|
| 2005FA0001512 | PIPER | | | LIGHT | MISINSTALLED |
| 11/4/2005 | PA28R201 | | | | MLG INDICATOR |

DURING TRAINING FLIGHT IN APPROACH, PILOT NOTICED, THAT LT LANDING GEAR GREEN LIGHT WAS NOT ON, RED LANDING GEAR UNSAFE LIGHT WAS ON HYD PUMP WAS RUNNING CONSTANTLY. PROBLEM CONTINUED EVEN AFTER EMERGENCY EXTENSION. AFTER FLYBY, ABOVE CONTROL TOWER, GROUND CONTROL SAW LANDING GEAR WAS DOWN, PILOT PROCEEDED WITH SAFE LANDING. TROUBLESHOOTING WAS PERFORMED WITH FOLLOWING RESULTS: THE MLG WARNING LIGHTS WERE INVERTED. LT MAIN GEAR MICROSWITCH OPERATED RT MAIN GEAR GREEN LIGHT, RT MAIN GEAR MICROSWITCH OPERATED LT MAIN GEAR GREEN LIGHT. RT MAIN GEAR MICROSWITCH POSITION WAS ADJUSTED IAW MM, WIRES WERE INSTALLED CORRECT WAY. GEAR SWING WAS PERFORMED WITH SATISFACTORY RESULT.

[2005FA0001495](#) PIPER LYC MOUNT BROKEN
10/18/2005 PA28R201 IO360C1C6 6711957 ENGINE

DURING ROUTING SCHEDULED MAINTENANCE INSPECTION NOTED ENG MOUNT WAS CRACKED JUST ABOVE WELD ON RT LOWER SIDE OF ENGINE MOUNT. JUST ABOVE AFT DRAGLINK MOUNT POINT. ALSO, UPON FURTHER INSPECTION THE LOWER HORIZONTAL TUBE MOST OB WAS ALSO BENT. MOS NOTED TOWARD THE FRONT PART OF THE MOUNT BY THE LANDING GEAR ATTACH POINT. NO HARD LANDING HAD BEEN REPORTED. (K)

[CA051005012](#) PIPER LYC CYLINDER CRACKED
10/4/2005 PA31 TIO540A2B LW13447 LT ENGINE

(CAN) LT ENGINE SPRUNG HUGE OIL LEAK, WAS SHUTDOWN IN FLIGHT. ENGINE FEATHERED. A/C WAS EN-ROUTE. A/C MAINTAINED ALTITUDE, CONTINUED AND LANDED SAFELY. LT ENGINE NR 6 CYLINDER WAS PULLED AND FOUND HAVE ALMOST CRACKED IN HALF AROUND BASE OF CYLINDER. CYLINDER WAS REPLACED WITH NEW CYLINDER.

[CA051003012](#) PIPER LYC TURBOCHARGER FAILED
9/16/2005 PA31 TIO540A2C LW12689 ENGINE

(CAN) SAW SMOKE DURING FLIGHT. RETURN TO BASE.

[CA050913006](#) PIPER LYC HOSE RUPTURED
8/31/2005 PA31325 LTIO540F2BD 1776602 HYD SYSTEM

(CAN) PILOT NOTICE HYDRAULIC FLUID LEAKING FROM RT LOWER FUSELAGE TO WING FAIRING AFT MAIN SPAR. AP ON INSPECTION, FOUND LANDING GEAR HOSE RUPTURED. REPAIRED HOSE ASSY P/N 17766-02 BY REPLACING HOSE.

[77866](#) PIPER FORK CRACKED
11/2/2005 PA31350 C4503L PITCH CHANGE

PITCH CHANGE FORK CRACK FOUND DURING MAG-PARTICLE CHECK AT OVERHAUL (OH).

[CA051011009](#) PIPER LYC BOLT SHEARED
9/29/2005 PA31350 TIO540J2BD AN37A NLG STEERING SYS

(CAN) PILOT COMPLAINED OF NO NOSE WHEEL STEERING WITH RUDDER INPUT. MX FOUND 2 OF 3 BOLTS SHEARED ON STEERING LINKAGE ON TOP OF NLG TRUNNION. MX DRY ASSEMBLED STEERING LINKAGE AND DISCOVERED BOLT GRIP LENGTH INSUFFICIENT. FOUND THAT 12 LENGTH WAS CORRECT LENGTH FOR THE 7 BOLT INDICATED IN IPC. BOLTS WERE FOUND SHEARED WHERE GRIP MEETS THE THREADS. ALL THREE BOLTS REPLACED WITH NEW HARDWARE.

[CA050923006](#) PIPER LYC DOWNLOCK SWITCH STUCK
9/12/2005 PA31350 TIO540J2BD 487862 RT MLG

(CAN) ON APPROACH THE GEAR WAS LOWERED FOR LANDING AND THE RT GEAR DID NOT INDICATE DOWN AND LOCKED. FIGHT CREW NOTIFIED FLIGHT SERVICES THAT THEY WOULD DO A FLY PASS SO MAINTENANCE CREWS COULD CHECK TO SEE IF THE GEAR WAS EXTENDED. THE GEAR WAS DOWN AND APPEARED TO BE LOCKED SO THE AIRCRAFT LANDED WITH NO PROBLEM. THE AIRCRAFT WAS TAKEN TO MAINTENANCE AND PLACED ON JACKS GEAR OPERATION WAS CHECKED AND IT WAS FOUND THE THE RT DOWN SWITCH WAS DIRTY AND STUCK. ALL SWITCHES WERE CLEANED AND THE GEAR OPERATION CHECKED FOR 5 CYCLES. MAINTENANCE/FLIGHT CREWS WERE INFORMED OF THE PROBLEM.

[CA051007007](#) PIPER LYC SHAFT SHEARED
10/6/2005 PA31350 TIO540J2BD PROP GOVERNOR

(CAN) LT ENGINE LOSS OF FUEL PRESSURE IN FLIGHT. ENGINE SHUTDOWN AND FEATHER

COMPLETED. IN CRUISE, ENGINE HAD PARTIAL POWER LOSS. ENGINE WAS FEATHERED AND A/C LANDED SAFELY. TRIED GROUND START, ENGINE WOULD NOT COME OUT OF FEATHER. ENGINEER FOUND FAILED PROP GOVERNOR. ENGINE DID WHAT IT SHOULD GOING TO FEATHER. SERVICEABLE PROP GOVERNOR INSTALLED. ENGINE IS NOW BACK TO SERVICE.

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|-----------------------------|-------|--------|---------|------------|
| CA051012002 | PIPER | PWA | PUMP | DAMAGED |
| 10/6/2005 | PA31T | PT6A28 | 8000420 | HYD SYSTEM |

THE FLIGHT CREW REPORTED THAT THE LANDING GEAR WAS SLOW TO RETRACT/EXTEND. UPON INSPECTION, A RETURN (SUCTION) LINE FOR THE LEFT HYDRAULIC PUMP WAS FOUND CHAFED AND PIERCED INSIDE THE LEFT WING LEADING EDGE. THE HOLE IN THE LINE WAS CAUSED BY THE VOLTAGE REGULATOR WIRE (PF16A), WHICH WAS BARE AND ARCING AGAINST THE PIPE.

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|-----------------------------|-------|--------|-------|--------------|
| CA051012003 | PIPER | PWA | CABLE | JAMMED |
| 10/8/2005 | PA31T | PT6A28 | | ELEVATOR TAB |

THE FLIGHT CREW REPORTED THAT THE ELEVATOR TRIM WAS JAMMED IN THE FORWARD POSITION. UPON INSPECTION, A LOOSE RIVET TAIL WAS FOUND LODGED ON TOP OF THE LEFT ELEVATOR TRIM DRUM AT THE CABLE STOP BOLT.

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|-----------------------------|--------|---------|----------|---------|
| CA051012004 | PIPER | PWA | ARM | CRACKED |
| 10/11/2005 | PA31T2 | PT6A135 | 42042002 | MLG |

WHILE COMPLYING WITH PIPER SL1092, INSPECTION/REPLACEMENT OF MAIN LANDING GEAR RETRACTION ARMS, THE LEFT ARM WAS FOUND CRACKED AT THE INSIDE RADIUS.

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|-------------------------------|-----------|--------|---------|---------|
| 2005FA0001503 | PIPER | LYC | WINDOW | CRACKED |
| 10/19/2005 | PA32RT300 | IO540* | 6971203 | COCKPIT |

LT FORWARD SIDE WINDOW. CRACKED AND BROKEN 2 PLACES AROUND SIDE VENT WINDOW CAUSING LARGE SECTION TO BECOME LOOSE. (K)

| | | | | |
|-------------------------------|---------|----------|----------|---------------|
| 2005FA0001478 | PIPER | LYC | FITTING | UNSERVICEABLE |
| 10/10/2005 | PA34200 | IO360A1A | 67040012 | MLG |

MLG PIVOT CASTING (FWD TRUNNION FITTING ASSY) ATTACH HARDWARE CONTINUALLY COMES LOOSE ALLOWING CHAFFING BETWEEN CASTING, WING SPAR, ENLARGING ATTACH BOLT HOLES IN CASTING AND SPAR. AFFECTED LT CASTING HAD BEEN PREVIOUSLY REMOVED, INSPECTED AND INSTALLED IAW MM FOR THIS REASON ONLY 100 HRS PRIOR TO THIS REOCCURENCE. CONDITION HAD BEEN NOTED ON RT CASTING AT SAME INSPECTION HAD BEEN CORRECTED BY REPLACING CASTING WITH NEW, REAMING ATTACH HOLES IN CASTING, SPAR (UTILIZING APPROVED DATA) TO ACCEPT BOLTS. NUTPLATES ON THE FWD SIDE OF WING SPAR, NOT ADEQUATE TO ACCEPT STRESSES IMPOSED ON THEM, LEADING FACTOR IN CONTINUAL LOOSENING OF FWD PIVOT CASTING ATTACH HARDWARE.

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|-----------------------------|----------|-----------|-------|--------|----------|
| CA050913008 | PIPER | CONT | PIPER | O-RING | WORN |
| 9/1/2005 | PA34200T | TSIO360EB | | 484706 | ACTUATOR |

(CAN) PILOT REPORTED THAT LANDING GEAR FAILED TO RETRACT. AIRCRAFT PLACED ON JACKS, LANDING GEAR SWUNG, FOUND NOSE GEAR ACTUATOR FAILED TO COMPLETELY RETRACT. REMOVED NOSE GEAR ACTUATOR, DISASSEMBLED, FOUND PISTON ORING EXCESSIVELY WORN. INSTALLED NEW ORINGS P/N 484-706 AND BACK UP RING P/N 758-053 AND RE-ASSEMBLED. RE-INSTALLED NOSE GEAR ACTUATOR, SWUNG GEAR WITH NO FAULT FOUND.

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|-------------------------------|--------|--|---------------|---------|
| 2005FA0001488 | RAYTHN | | ACTUATOR | FAILED |
| 10/25/2005 | 390 | | 3903814020018 | TE FLAP |

INSTALLED .0 TIME SINCE FACTORY, MODIFIED NR 1L FLAP ACTUATOR AS PART OF COMPLIANCE WITH MFG MSB. (FLAP FAIL) ANNUNCIATOR ILLUMINATED AFTER INSTALLATION. FLAP SYSTEM TROUBLESHOOTING SHOWED FAULT CODES 2,8 AND THEN 1,2, 8. ANNUNCIATOR NOT ILLUMINATED AFTER REINSTALLING ORIGINAL ACTUATOR. REPLACED ACTUATOR WITH MODIFIED ACTUATOR, NO ADDITIONAL (FLAP FAIL) ANNUNCIATOR INDICATIONS NOTED. (K)

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|---|-------------|----------|-----------|---------------|---------------|
| 2005FA0001487 | RAYTHN | | | ACTUATOR | FAILED |
| 10/25/2005 | 390 | | | 3903814020020 | TE FLAPS |
| <p>INSTALLED .0 TIME SINCE FACTORY MODIFIED NR 2R FLAP ACTUATOR AS PART OF COMPLIANCE WITH MFG MSB. (FLAP FAIL) ANNUNCIATOR ILLUMINATED AFTER INSTALLATION. FLAP SYSTEM TROUBLESHOOTING SHOWED FAULT CODES 3, 8 AND THEN 1,3, 8. ANNUNCIATOR NOT ILLUMINATED AFTER REINSTALLING ORIGINAL ACTUATOR. REPLACED ACTUATOR WITH MODIFIED ACTUATOR, NO ADDITIONAL (FLAP FAIL) ANNUNCIATOR INDICATIONS NOTED. (K)</p> | | | | | |
| 2005FA0001511 | RAYTHN | GARRTT | | NUT | BACKED OUT |
| 8/18/2005 | HAWKER800XP | TFE731* | | A103TGS | MLG DOOR |
| <p>RT OB GEAR DOOR. FOUND THE DOOR TO GEAR STRUT ATTACHMENT BOLT BACKING OUT AND LOOSE. AFTER REMOVING COVER WAS FOUND THAT NUT WAS TO SECURE THE BOLT WAS NOT SAFETIED AND HAD BACKED OFF ABOUT 3 TURNS. THIS HAD COM OFF THE DOOR AND WOULD HAVE DROPPED INTO THE SLIP STREAM. (K)</p> | | | | | |
| CA050929003 | ROBSIN | LYC | | BOLT | CRACKED |
| 9/26/2005 | R44 | O540F1B5 | | A6502 | XMSN MOUNT |
| <p>(CAN) TRANSMISSION MOUNTING BOLT WAS REMOVED FOR 2200 HR AIRCRAFT OVERHAUL. CRACK UNDER HEAD WAS FOUND DURING NDT. THE CRACK CAN NOT BE SEEN WITH VISUAL INSPECTION. THE BOLT HAS ATLEAST 2200 HR. AIRCRAFT HAS 6366.9 HRS.</p> | | | | | |
| CA050913009 | ROBSIN | LYC | | RESERVOIR | INOPERATIVE |
| 9/1/2005 | R44 | O540F1B5 | | D2111 | HYDRAULIC SYS |
| <p>(CAN) HYDRAULIC FLUID FOUND VENTING FROM CAP. ALL FITTINGS AND LINES OF HYDRAULIC SYSTEM CHECKED. NO DEFECTS FOUND. GROUND RUN LEAK CHECK, AND STILL VENTING FROM CAP. HYDRAULIC RESERVOIR ASSEMBLY REPLACED. GROUND RUN AND LEAK CHECK, NO DEFECTS FOUND.</p> | | | | | |
| CA051004008 | ROBSIN | | | DRIVE GEAR | CHIPPED |
| 10/4/2005 | R44RAVENII | | BC3151004 | BC3151004 | STARTER |
| <p>(CAN) AIRCRAFT HAD BEEN HARD TO START. UPON INVESTIGATION THE STARTER BENDIX DRIVE GEAR FOUND TO HAVE A CHIPPED TOOTH. NO PROBLEMS NOTED WITH THE INSTALLATION OF THE STARTER.THERE IS NO SHIMMING PROCEDURE, OR ANY OTHER KIND OF ADJUSTMENT WITH THIS INSTALLATION.</p> | | | | | |
| CA051018002 | ROBSIN | | POINTER | G SWITCH | WEAK |
| 10/16/2005 | R44RAVENII | | | PS400010 | ELT |
| <p>DURING CRUISE FLIGHT PAST AIRPORT, THE ELT WENT OFF IN FLIGHT. NO UNUSUAL FLIGHT CONDITIONS AT THE TIME OF THE INCIDENT. FSS WAS CONTACTED.</p> | | | | | |
| CA050919001 | ROBSIN | LYC | POINTER | G SWITCH | FAILED |
| 9/14/2005 | R44RAVENII | IO540* | | | ELT |
| <p>(CAN) ELT WENT OFF DURING GROUND HANDLING. THE ELT WAS REMOVED FOR FURTHER INVESTIGATION. SUSPECT G-SWITCH.</p> | | | | | |
| CA050916001 | ROBSIN | LYC | | MAGNETO | FAILED |
| 9/15/2005 | R44RAVENII | IO540* | | BL6006163 | ENGINE |
| <p>(CAN) THE MAGNETO WAS REMOVED DUE TO FAILURE (NOT WORKING) UPON DISASSEMBLY THE BRUSH WAS BROKEN AND THE SPARK WAS NOT MAKING IT OUT OF THE COIL TO THE DISTRIBUTOR. ALSO, FOUND COIL CLAMP BROKEN THIS WILL BE REPAIRED HERE ALONG WITH A FRESH 500 HR INSP. DURING THE 500 HR INSPECTION THE COIL FAILED INTERNAL RESISTANCE CHECK. THE COIL IS ALSO BEING REPLACED.</p> | | | | | |
| CA050916002 | ROBSIN | LYC | CONT | BEARING | DAMAGED |

9/15/2005 R44RAVENII IO540* 1081806 MAGNETO
(CAN) MAGNETO WAS REMOVED FOR SCHEDULED 500 HOUR INSPECTION. THE LOWER BEARING LOOKS AS THOUGH IT HAD BEEN SPINNING ON THE SHAFT. THE SPACER WAS ALSO DAMAGED.

[CA050923010](#) ROBSIN LYC STARTER GEN FAILED

9/21/2005 R44RAVENII IO540* BC3151004 ENGINE

(CAN) DURING START UP, THE STARTER WOULD NOT ENGAGE. THE STARTER WAS REMOVED AND REPLACED WITH ANOTHER UNIT AND THE PROBLEM NO LONGER WAS EVIDENT. WE HAVE HAD SEVERAL STARTER PROBLEMS AND ROBINSON ARE TRYING TO SOLVE THE ISSUE.

[CA051004003](#) ROBSIN LYC PUMP LEAKING

10/1/2005 R44RAVENII IO540AE2A LW15473 FUEL SYS

(CAN) ENGINE DRIVEN FUEL PUMP REPLACED BECAUSE OF OIL LEAK. SB548A HAD BEEN COMPLIED WITH.

[CA050930002](#) SKRSKY GE BLADE UNSERVICEABLE

9/21/2005 S61N CT581401 6117020221067 MAIN ROTOR

(CAN) COCKPIT BIM INDICATOR ILLUMINATED ON TAKEOFF. AIRCRAFT RETURNED TO RAMP. VISUAL INDICATION REVELED (BLUE) MAIN ROTOR BLADE BIM INDICATOR IN THE BLACK. MAIN ROTOR BLADE REPLACED.

[CA051004002](#) SKRSKY ALLSN BLADE FRACTURED

9/27/2005 S76A 250C30S TURBINE SECTION

(CAN) DURING IN-CRUISE POWER CHECK OF NR 1 ENGINE, NO 2 ENGINE (CHIP LIGHT) CAME ON, SHORTLY FOLLOWED BY (ENGINE OUT) HORN. THE ENGINE WAS BROUGHT BACK TO FLIGHT IDLE AND EMERGENCY LANDING WAS ACCOMPLISHED. ENGINE WAS SHUTDOWN. UPON PRELIMINARY INSPECTION IT WAS FOUND THAT N1 SYSTEM ROTATED NORMALLY. N2 SYSTEM WAS SEIZED AND PIECES OF 3RD STAGE TURBINE WHEEL SHROUD WERE FOUND IN THE EXHAUST COLLECTOR. DAMAGE TO THE 4TH STAGE TURBINE WHEEL AND EXHAUST COLLECTOR WAS ALSO EVIDENT. ENGINE WAS REPLACED AND A/C RETURNED TO SERVICE.

[2005FA0001510](#) SKRSKY TMECA WIRE CORRODED

8/10/2005 S76C ARRIEL1 STARTER GEN

THE TERMINALS ON THE GENERATOR ARE DESIGNATED A8 TERMINAL D WHICH HAS 2 WIRES. WIRE NR P257A16 GOES TO P708 PIN -3 AND THIS WIRE WAS FOUND TO HAVE BUBBLED UP INSULATION CAUSED BY WIRE CORROSION AND HEAT. THE OTHER WIRE ON TERMINAL D IS P256A16 WHICH GOES TO P708 PIN 4 WHICH THAT WAS PULLED AND IT ALSO WAS FOUND TO HAVE RED CORROSION STARTING ON WIRE SURFACE. THIS WIRE AS WELL AS THE OTHERS SHOWED STARTING SIGNS OF CORROSION. MAINTENANCE HAS REPLACED ALL THE ABOVE CORRODED WIRES. (EA17200603551) (K)

[CA050919007](#) SNIAS TMECA UROCOP SHOCK ABSORBER CRACKED

9/14/2005 AS350B ARRIEL1B 350A31033KIT2 M/R HUB

(CAN) REMOVED FROM AIRCRAFT FOR MANUFACTURER 2500 HOUR INSPECTION AND 2 COILS OF THE SAME PN WERE FOUND TO BE CRACKED.

[CA051003006](#) SNIAS TMECA TURBINE BLADES FAILED

9/13/2005 AS350B2 ARRIEL1D1 0292803080 ENGINE

(CAN) WHILE CARRYING OUT THE ALF INSPECTION, THE ENGINEER NOTICED THAT A PORTION OF A TURBINE BLADE WAS MISSING. A THOROUGH INSPECTION WAS CARRIED OUT UPSTREAM OF THE MO4 UTILIZING A BORESCOPE, NO ANOMALIES WERE NOTED. ANOTHER S/N MO4 WAS INSTALLED WITH NO FURTHER INDICATION OF PROBLEMS.

[CA051017006](#) SNIAS TMECA PUMP UNSERVICEABLE
9/18/2005 AS350B2 ARRIEL1D1 350A35013100 HYDRAULIC SYS

WHILE REPLACING THE PUMP DRIVE ASSEMBLY FOR THE 1200 HOUR INSPECTION, FOUND THE SPLINES ON THE DRIVE WORN OUT.

[CA051018005](#) SNIAS TMECA SERVO LEAKING
10/17/2005 AS350B3 ARRIEL2B SC5083 HYDRAULIC SYS

SERVO WAS REMOVED FROM AIRCRAFT TO REPAIR A LEAK. THE PART WAS SHIPPED TO EUROCOPTER FOR REPAIR. EUROCOPTER HAS CONTACTED US SAYING THAT THE PISTON HAD BEEN PREVIOUSLY DRESSED FOR DAMAGE, AND WAS FOUND TO BE BENT APPROX 0.032

[CA051012011](#) SNIAS TMECA SWITCH INTERMITTENT
10/6/2005 AS350BA ARRIEL1B MS2771923 ON COLLECTIVE

PILOT WAS CARRYING OUT THE HYDRAULIC TEST OF THE ACCUMULATORS AND THE HORN WOULD NOT ACTIVATE. THE A/C WAS SHUT DOWN AND AN ENGINEER STARTED TO TROUBLESHOOT. IT WAS DISCOVERED THAT THE HYDRAULIC CUT-OFF SWITCH WAS OPERATING INTERMITTENTLY. DUE TO HYDRAULIC PROBLEMS IN THE AS350 WORLD A/C GROUNDED UNTIL SERVICEABLE PART ARRIVED.

[CA051019002](#) SNIAS TMECA IGNITER LOOSE
9/2/2005 AS350BA ARRIEL1B CH34745 ENGINE

(CAN) LOOSE CENTER ELECTRODE, REMOVED FOR FEAR OF FODDING ENGINE.

[CA051019003](#) SNIAS TMECA IGNITER LOOSE
9/2/2005 AS350BA ARRIEL1B CH34745 ENGINE

(CAN) LOOSE CENTER ELECTRODE, REMOVED FOR FEAR OF FODDING ENGINE.

[CA050914002](#) SNIAS TMECA PUMP INTERMITTENT
9/3/2005 AS350BA ARRIEL1B P94B12209 FUEL BOOST

(CAN) FUEL BOOST PUMP WAS INTERMITTENT DURING PRE-START CHECKS. PUMP WAS REPLACED WITH AN OVERHAULED UNIT. NO FURTHER DEFECTS. PUMP INSTALLED 35.3 HOURS.

[CA051003013](#) SNIAS TMECA BLADE CRACKED
9/10/2005 AS350BA ARRIEL1B 355A12004008 TAIL ROTOR

(CAN) TAILING EDGE CRACKED. BLADES WERE DESTROYED, ONLY HAD 125 HOURS REMAINING ON THEM. INSTALLED A NEW SET OF BLADES SAME PART NUMBER.

[CA051003014](#) SNIAS TMECA SPHERICAL STOP DELAMINATED
9/9/2005 AS350BA ARRIEL1B 704A33633208 MAIN ROTOR

(CAN) FOUND DELAMINATION ON 2 SPHERICAL BEARINGS, OUT OF LIMITS. REPLACED BY 2 NEW ONES.

[CA051013006](#) SWRNGN GARRTT COOLING TURBINE LEAKING
10/4/2005 SA227AC TPE33111U 20475546 WING ROOT

CREW COMPLAINED OF A SLIGHT OIL SMELL IN CABIN IN ALL FLIGHT STAGES. MAINTENANCE REPLACED LT COOLING TURBINE AND RELEASED AIRCRAFT TO SERVICE. DURING MAINTENANCE GROUND RUN PRIOR TO REPLACEMENT COOLING TURBINE FAILED AND FILLED CABIN WITH SMOKE AND A STRONG SMELL OF OIL.

[2005FA0001461](#) UROCOP FIREWALL CRACKED
10/5/2005 EC135P1 L713M2072104 FUSELAGE

FIREWALL, CRACK IN BASE METAL DUE TO ENGINE VIBRATION. (K)

[CA050913004](#)

UROCOP

TUBE

CRACKED

9/8/2005

EC155B

365A75814012

HYD SYSTEM

(CAN) DURING A POST FLIGHT WALK AROUND PILOT NOTICED HYDRAULIC FLUID DRIPPING FROM LT WHEEL WELL. FURTHER INVESTIAGTION FOUND FLUID ACTUALLY DRIPPING FROM ABOVE IN THE FORWARD LT BAGGAGE AREA WHERE THE HYDRAULIC SYSTEM PIPING RUNS. A SINGLE PIPE GOING INTO A MANIFOLD WAS FOUND CRACKED ABOUT .5 INCH FROM THE FITTING. FURTHER VISUAL INSPECTION FOUND A FLAT SPOT ON THE PIPE WHERE THE CRACK WAS LOCATED. WHEN REMOVED IT WAS FOUND THAT THE PIPE WAS LOADED SLIGHTLY. A NEW PIPE WAS INSTALLED AND NO FURTHER PROBLEMS NOTED. PIPE HAS BEEN RETURNED TO FOR FURTHER INVESTIGATION.

END OF REPORTS