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AVIATION MAINTENANCE ALERTS



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**SEPTEMBER
2006**

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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

CESSNA

Cessna: S550; Burned Blower Motor Resistor; ATA 2150

"The pilot reported (*the aircraft's*) Freon air conditioning system circuit breaker tripped when the system was turned on," states this repair station technician. "*(I)* found the aft evaporator blower inoperative in the low (*speed*) position and excessively noisy in the high position. I removed the floorboard for investigation and found the blower motor resistor assembly (*P/N JBS240-2*) burned and the adjacent plastic blower motor housing melted. (*The system is a...*) Keith Products L.P. Freon Air Conditioning System installed under Supplemental Type Certificate SA2698SW (*with*) 809.7 hours time. (*There are...*) no records of component replacements since (*the original system was...*) installed. I replaced the blower assembly and resistor—the operational checks were satisfactory." (*Blower assembly P/N given as JBS237-1*)

Part Total Time: 809.7 hours.

Cessna: 560XL; Frayed Elevator Trim Cable; ATA 2731

A technician for a repair station states, "During a phase 1-4 inspection the elevator trim cable assembly (*P/N 6660001-34*) was found to be frayed where it passes through the horizontal stabilizer. The cable appears to have been installed properly and it does not look as if it was damaged during installation. A report has been submitted to Cessna..." (*A search of the SDRS data base yields 33 responses to the base number 6660001—almost all Cessna cables. At least 5 additional reports of frayed elevator trim cables can be found on this same type aircraft. Their times ranged quite close: from 5,253 to 5,558 averaging 5,427 hours for six aircraft. Additional inquiry confirms the second cable shown—P/N 6660001-33—has also been found frayed. Both of these cables are of stainless steel composition. The following two photos have been slightly compressed in the vertical dimension. Greatly appreciated, they provide all necessary arguments for preemptive cable replacement!*)



Part Total Time: 5,389.0 hours.

Cessna: 750; Chafed Hydraulic Hose; ATA 2910

A technician writes, “A flexible hydraulic hose (P/N AE5435E 0235-332) chafed through, allowing hydraulic fluid to be lost in the ‘B’ system. This hose was contacting the L/H elevator power control unit. (I) replaced the hose and verified its routing to prevent chafing. Cessna Aircraft is issuing a service letter addressing the inspection of the hydraulic hoses in this area for chafing.”

Part Total Time: 4,666.0 hours.

IAI**IAI: 1124; Air Conditioning Duct Deterioration; ATA 2120**

A technician writes, “During the ‘C’ check inspection on this aircraft, the flexible air conditioning ducts were found badly deteriorated.” (A note indicates a simultaneous fuselage repair also contributed to this defect’s discovery through ease of access.) “The foam on the inside of the ducts was coming loose and some of the ducts were collapsed. These ducts are just plain old. The manufacturer’s time (limitations) do not cover these ducts (nor is there a requirement for their inspection during this 800-hour inspection). These flex ducts connect below the (floor) and run up the side of the fuselage to the lower air conditioning vents. These are hot air ducts and I believe, under an unforeseen circumstance, pose a possible fire hazard if the duct temperatures get (sufficiently) hot. We called the manufacturer to get replacement flex ducts. The part number crossed to a new style duct, P/N BWT10-3080360A. This duct is used on the Astra Jet. I recommend the manufacturer add the inspection of these ducts to their inspection program or issue a Service Bulletin. An airworthiness directive requiring inspection on Falconia (P/N 4783658--519) Flexible Ducts (might also be considered).” (The submitter presents this original duct part number in the following sequence: Falconia 4783658 P/N 519. A search of the SDRS data base only returns this one entry, no matter the number arrangement.)

Part Total Time: 10,907.4 hours.

PIPER**Piper: PA31T; Cracked Main Landing Gear Trunnion; ATA 3211**

A technician writes, “During a 100 hour inspection a crack was found in the web of the R/H aft main landing gear trunnion assembly (P/N 40288-000).” (The SDRS data base records five cracked trunnions and one described as bent. Why publish such a brief description? Here are two good reasons: 1) brevity notwithstanding, it tells the mechanic just what to look for and its location; 2) opening “acts” are suppose to be both short and relevant to the subsequent, “main event.” Read the next report for a class act in analysis.)

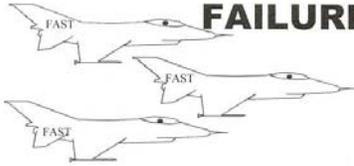
Part (aircraft) Total Time: 10,500.0 hours.

Piper: PA44; Cracked Main Landing Gear Trunnion; ATA 3211

(The following is a rare treat for our “Alerts” publication in that imprimatur—needed permissions for material publication—not only had to be gathered informally and on-the-fly but also from sources “intertwined” with one another’s various functions. First on the list for acknowledgement is my friend and cohort, Chief Inspector James Kelly of Embry-Riddle Aeronautical University. He brought the original defect report to my attention and shared his source for structural analysis. Special appreciation is extended to Mr. George A. Morse of Failure Analysis Service Technology for sharing his work and expertise. Those of us having the good fortune of experiencing a few hours of instruction by a metallurgist have known equal time in fascination. Finally, none of this would have happened had it not been for the most excellent care and persevering eyeballs of mechanic/inspector Jesse Hanson, IA. All of our lives are dependent upon such careful eyes such as his: thank-you!—Ed.)

The original M or D (*malfunction or defect*) report as submitted by the part 145 repair station reads, “During maintenance inspection of the landing gear, the mechanic (*Jesse Hanson*) found the aft (*R/H*) main gear trunnion cracked. Dye penetrant (*chemical testing*) confirmed the crack. The cause is undetermined, (*however*), the aircraft is used in flight training (*Trunnion P/N 67042013*).”





FAILURE ANALYSIS SERVICE TECHNOLOGY

2305 St. Bernard Drive
 P.O. Box 5489
 Pine Mountain, CA 93222-5489
 (800)657-5664 International (661)242-0902
 FAX(661)242-4910 E-mail: george@fod.com

24 August 2006

TO: Ken Masser/Pat Kelly
 Embry-Riddle Aeronautical University
 3700 Willow Creek Road
 Prescott, AZ 86301

FROM: George A. Morse

SUBJECT: SEMINOLE MLG TRUNNION CRACK

BACKGROUND

This report summarizes the investigation of a crack discovered on the main landing gear (MLG) trunnion of a Piper Seminole aircraft. The trunnion assembly was removed from the aircraft and submitted to Failure Analysis Service Technology, Inc. (FAST) for investigation. The following information is applicable:

Type AC: PA-44	AC SN:	TT: 3394.2
Failure Location:	MLG Aft trunnion assembly	PN: 67042-13

CONCLUSION

The fracture surface features indicate that the crack was initiated in impact overload.

DISCUSSION

A crack was found on the MLG aft trunnion assembly of a Piper Seminole aircraft, Figure 1. The aft trunnion is item #7 in the New Piper Aircraft Airplane Parts Catalog, Figure 2. The trunnion assembly is shown "as received" by FAST in Figures 3 - 5. The crack is widest at the top surface (arrow in Figure 5.) This is the crack initiation point.

It was necessary to cut the trunnion assembly to expose the fracture surface. Cuts were made as shown in Figure 6. The crack initiated at the top of the inverted "T" section of the trunnion, and traveled to the main thickness of the trunnion. Notice the lighter color in the main thickness of the trunnion, below the red arrow in Figure 6. The lighter colored area is the freshly exposed crack surface that was impact overloaded by FAST. The other side of the fracture, which was

the section used for analysis in the scanning electron microscope (SEM), is shown in Figure 7. There are three distinct zones of coloration as indicated by the arrows. These are areas crack growth stoppage. There is also a void at the origin of the crack. The features on this surface are a mirror image of those shown in Figure 6.

The trunnion is made of cast aluminum, Figure 8. A 20X SEM photo of the trunnion shows the crack origin and a line of coloration change, Figure 9. The initial crack growth traveled from the tip of the trunnion to this line. There is a void at the top which is the initiation point for the crack. An 80X SEM photo of the origin shows the void to be roughly spherical with a diameter of approximately 0.5 mm, Figure 10.

The light colored zone of the fracture surface at the bottom in the thick section of the trunnion (shown in Figures 6 & 7) was created by FAST after making the cuts as shown. The trunnion was then hit with a hammer, breaking it completely. The hammer blow is clearly an impact overload, and the resultant fracture surface serves as a control for this mode of failure. 500X SEM photos of areas typical of the impact overload are shown in Figures 11 & 12. These same features are found on the fracture surfaces of the original crack, Figures 13 - 15.

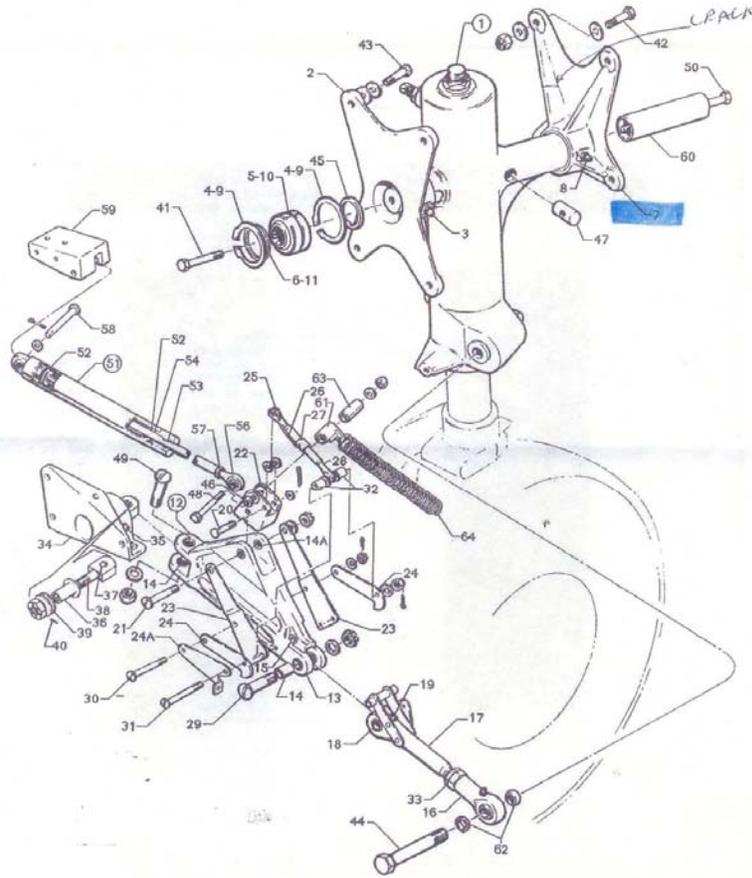
SUMMARY

The physical evidence is conclusive for impact overload. The crack initiated at a void in the thinnest section of the trunnion. There were two more impact overloads (color changes in the fracture surface) to the trunnion which took the crack growth slightly into the trunnion where the trunnion thickens. One item of note is that the submitted trunnion has the grease nipple in a location different from that indicated in the Airplane Parts Catalog. (Compare Figures 2 and 4.) Please contact me if further assistance is required.

George A. Morse
Failure Analysis Service Technology, Inc.



Figure 1. A crack was found on this MLG trunnion assembly. The dye penetrant highlights the crack.



AA44

AIRCRAFT
TOTAL TIME 3394.2

Figure 25. Main Gear Installation

1E23

Issued: July 12, 1995

Figure 2. Illustration of the aft trunnion as shown in the Airplane Parts Catalog.



Figure 3. The MLG trunnion shown "as received" by FAST.



Figure 4. Interior edge of crack shown "as received". (This edge is enlarged in Figure 5.)



Figure 5. Higher magnification photo of the edge shown in Figure 4.

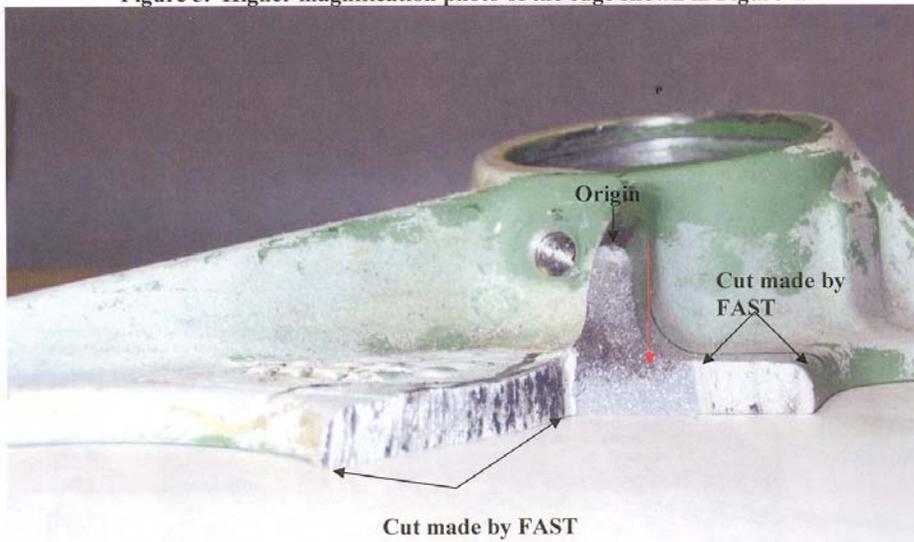


Figure 6. Cuts were made to the trunnion as shown to expose the fracture surface of the crack. The red arrow shows the crack growth direction and distance for which the crack traveled. The area below the red arrow, which is a lighter color, is the freshly exposed surface that was overloaded by FAST.

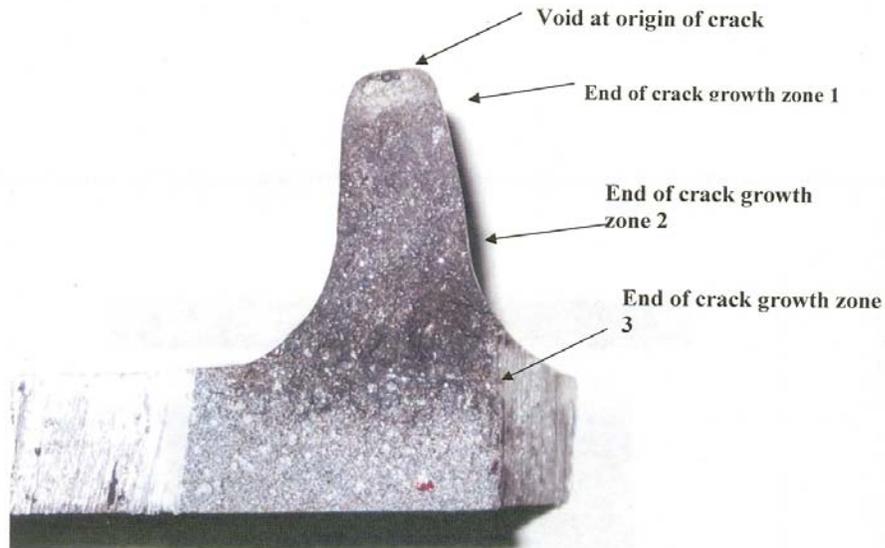


Figure 7. This surface was analyzed in the SEM. Notice the color changes in the crack growth area as indicated by the arrows. There are three separate crack growth areas. Notice the void at the origin.

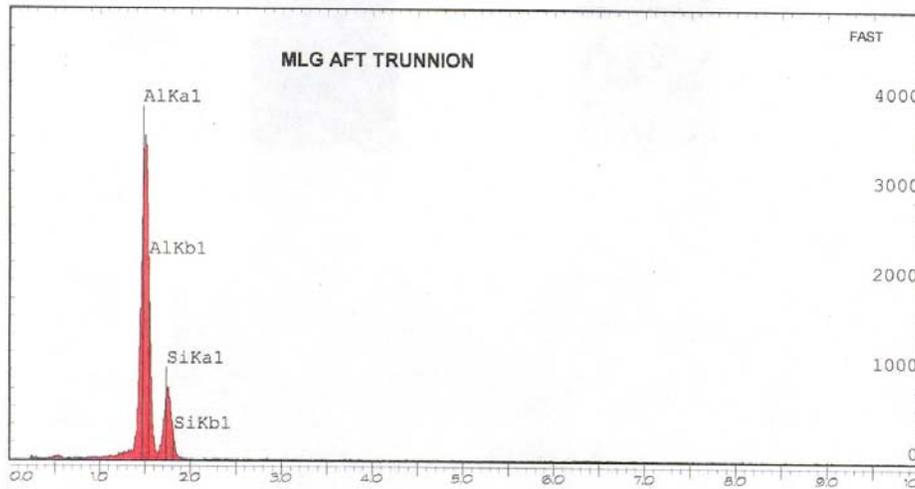


Figure 8. The aft trunnion is made of cast aluminum.

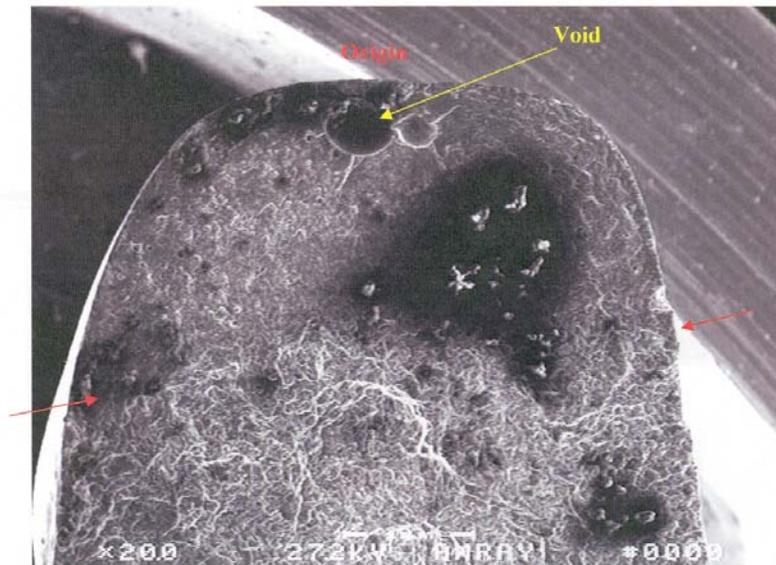


Figure 9. 20X SEM photo of void at the crack origin. Notice the color change on a line between the arrows. The initial crack traveled from the top to this line of discoloration.

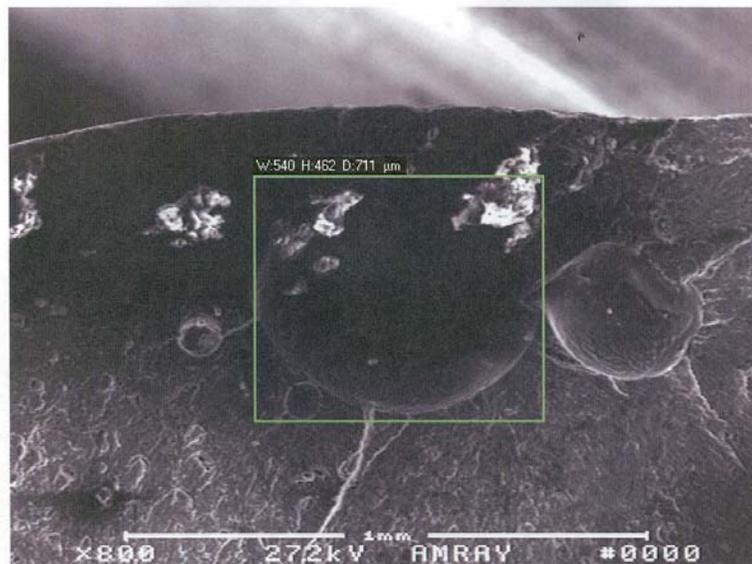


Figure 10. An 80X SEM photo of the void shows it to be roughly spherical with a diameter approximately 0.5 mm.

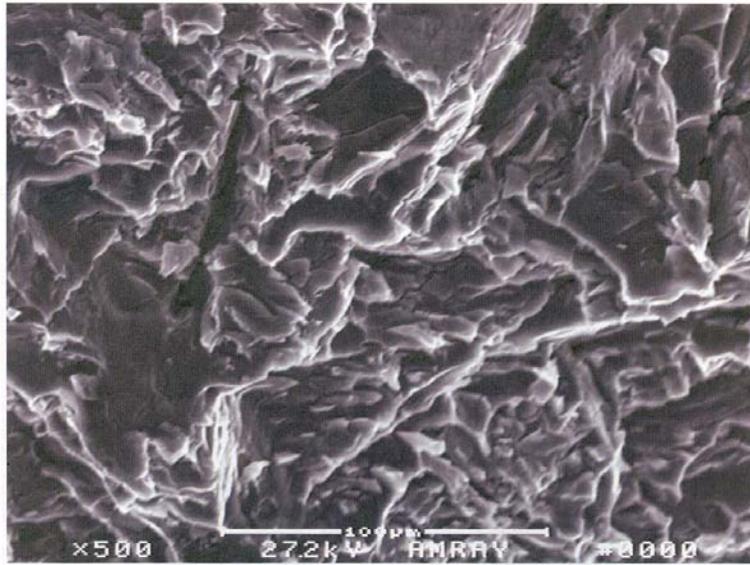


Figure 11. A 500X SEM photo of the fracture surface created by FAST. These are fracture features caused by impact overload.

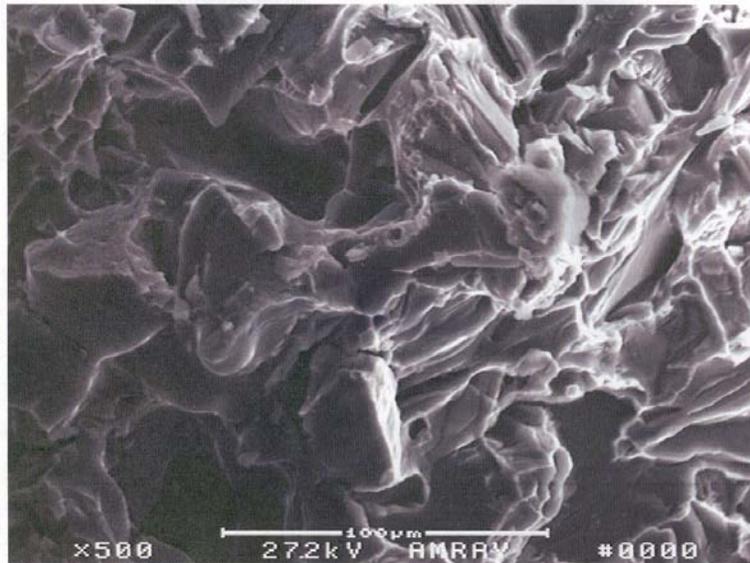


Figure 12. A 500X SEM photo of another area of the fracture surface created by FAST.

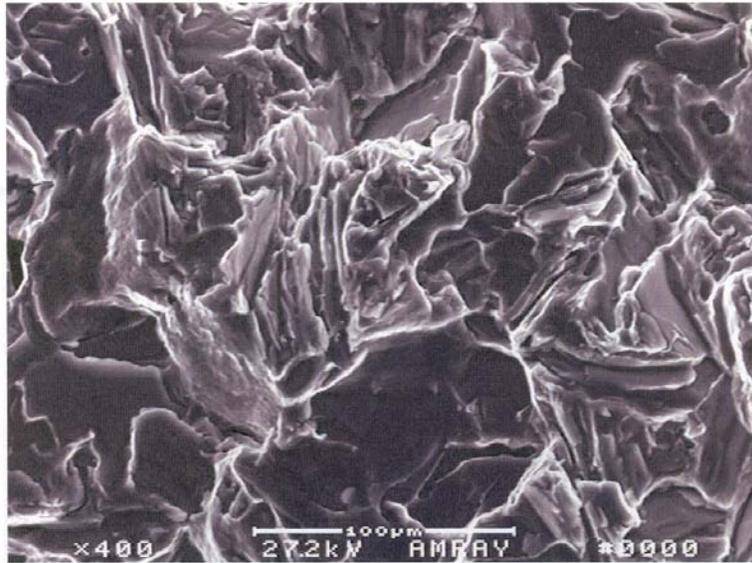


Figure 13. A 400X SEM photo of the initial crack growth area reveals features characteristic of impact overload.

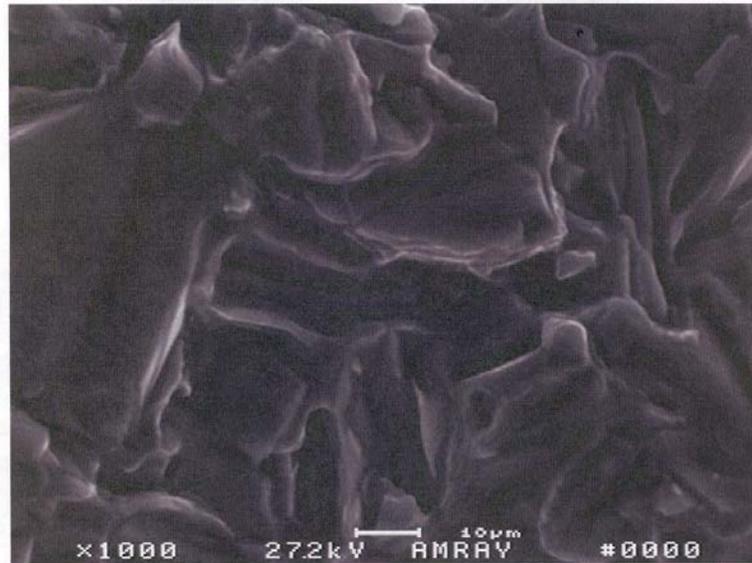


Figure 14. A 1000X SEM photo in crack growth zone three showing features characteristic of brittle overload.



Figure 15. A 1000X SEM photo revealing brittle overload fracture features.

Part Total Time: 3,394.0 hours.

RAYTHEON

Raytheon Hawker: 400A; Confusing APU Switch Panel; ATA 4900

A technician for an air taxi operator states, “The pilot mistakenly tripped the APU fire extinguisher switch instead of the APU start switch. Both switches are of the same style, they are located close together, and both have the same style *(of red guards)*.” *(This switch arrangement must make for many unhappy pilots. Is there no facilitation for copper, break-away wire?)*

Part Total Time: (unknown).

THRUSH

Thrush: S2R; In-flight Door Deformation; ATA 5210

The submitting mechanic writes, “This aircraft was originally equipped with a Pratt & Whitney R-1340, S-3H1 engine and a Hamilton Standard 12D40-6101A-12 propeller. This combination was removed and a Pratt & Whitney R-1340 S3H1G geared engine and a Hamilton Standard 23D40-7035A-9 propeller were installed. Increased airspeed resulting from this combination caused the right cabin door to bulge slightly. Pilot concerns

about carbon monoxide entrance into the cabin were confirmed with the use of CO detectors. The right cabin door was removed and sent to a Thrush service center to be modified to the 2-latch configuration found on turbine aircraft. Additional monitoring for carbon monoxide showed no further problems.”

Part Total Time: (unknown).

HELICOPTERS

BOLKOW (MBB/EUROCOPTER)

Bolkow (MBB/Eurocopter): Broken Sprag Retaining Clip; ATA 6310

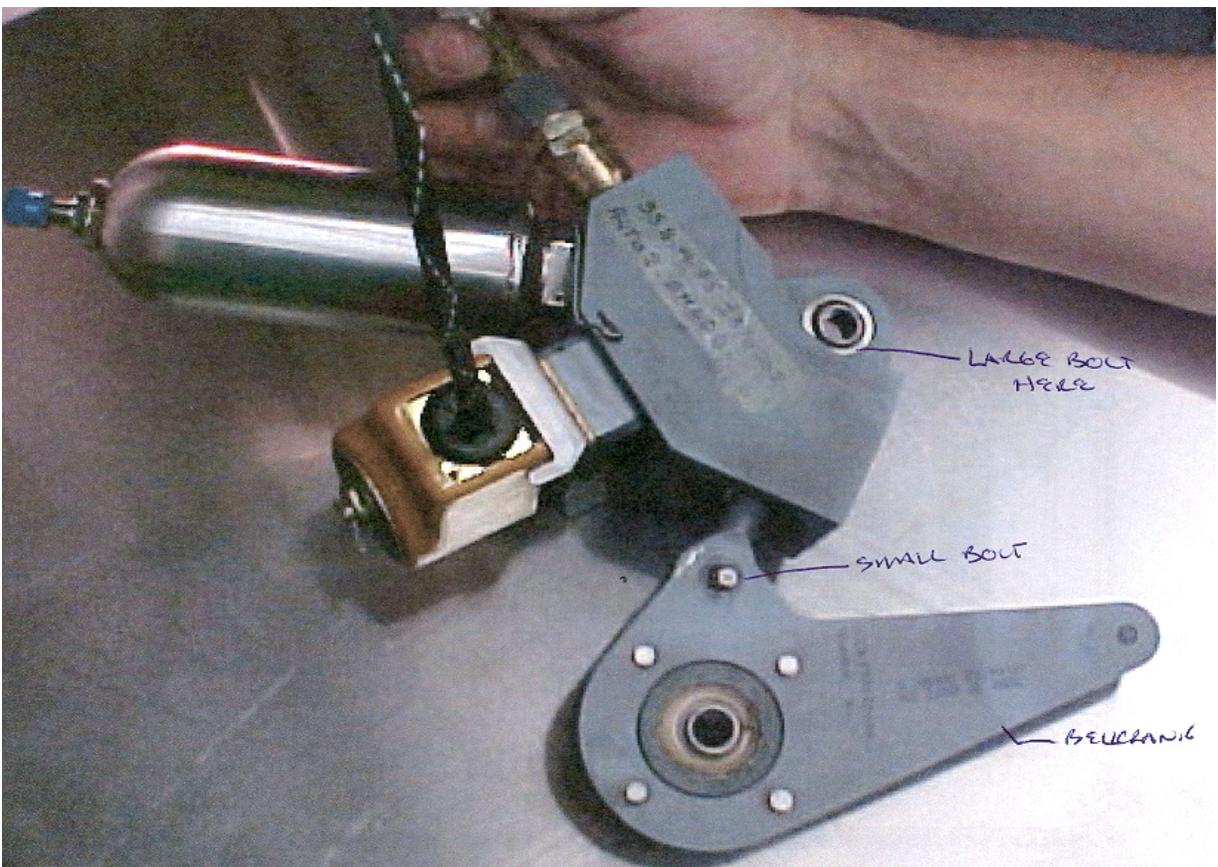
“During daily inspection of this aircraft,” states a technician, “(I) noted the freewheel assembly not functioning properly. The input drive shaft from the number one engine would not freewheel in the counter clockwise direction. I removed the freewheel assembly (P/N 4638202007) and inspected the clutch: the sprag was found turned sideways. The metal clip which keeps the sprag in alignment was broken. No recommendations (are provided).” (The SDRS data base reflects 38 clutch related entries on this base number since 1995.)

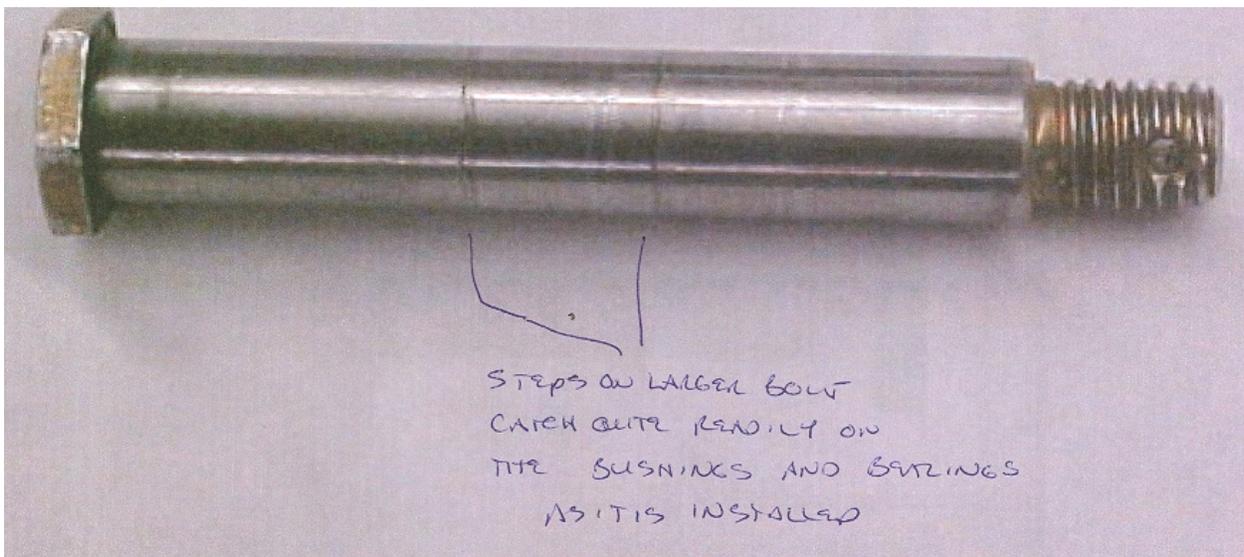
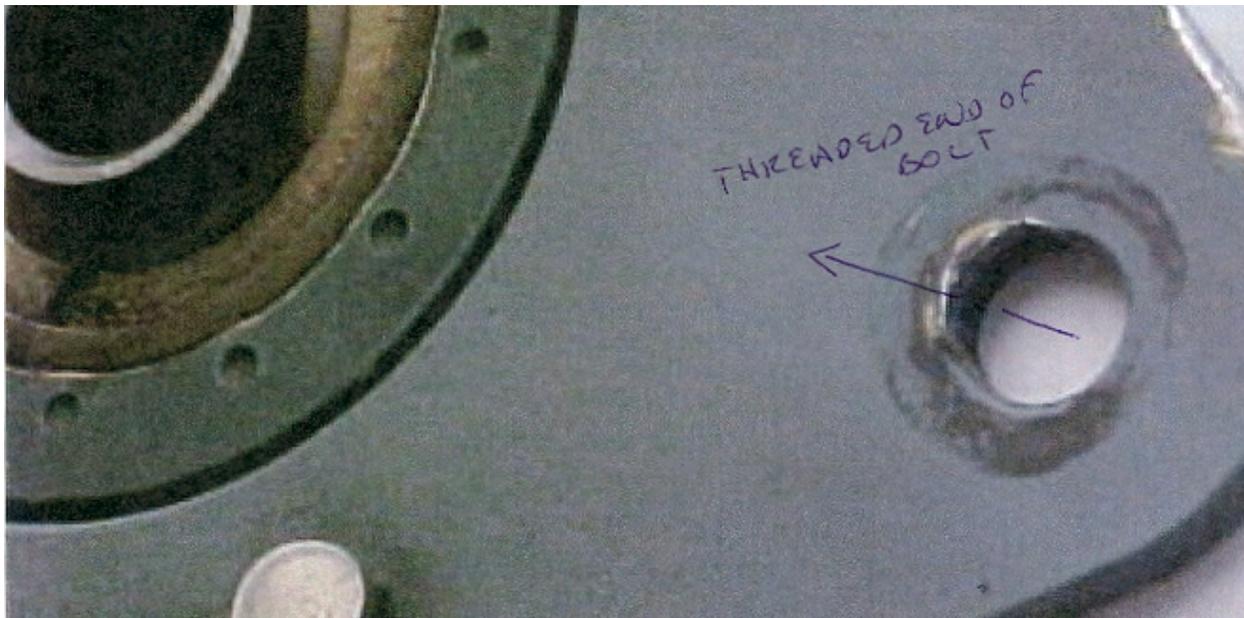
Part Total Time: 426.4 hours.

EUROCOPTER

Eurocopter: AS350B2; Tail Rotor Servo Damage; ATA 6720

A repair station mechanic describes damage found to the tail rotor’s servo mounting structure. “During a 500 hour inspection and (subsequent) removal of the tail rotor over-center mechanism, it was discovered the main support bolt and the bell crank pivot bolt were obviously hammered in—evidenced by the raised metal (a deformed edge) and elongated hole—see photos. (I) replaced the bell crank (P/N 355A27.00720001) and both bolts.” (Four of seven submitted pictures are shown here, slightly cropped and/or vertically compressed. Meaningful effort is obvious in the care taken to show the negligent damage. The submitter’s documentation makes apparent his conclusions. Thank-you.)





Part Total Time: 518.8 hours.

Eurocopter: AS355N; Failed Oil Cooler Bearing; ATA 6322

"This helicopter was on a normal flight," writes a mechanic. "At the end of the first leg of the flight the pilot (*had just*) shut down the engines...(when) he noticed a noise near the rear of the helicopter. Maintenance personnel were notified and the helicopter was grounded until further notice. (*Inspection*) found the following items: 1) the oil cooler fan was rubbing on the housing, and 2) the drive shaft bearing at the fan was loose. The helicopter was then moved by truck to the hanger...where disassembly continued. The following major parts had to be replaced due to the bearing failure:

1. two each bearings; P/N 6006F442M16AMDTA,
2. shaft; P/N 355A34 1077-20,

3. fan; P/N VT 160-40-21C,
4. fan stator; P/N VT 160-40-22C, and
5. fan; P/N VT 160-40-11C.

“The bearing had locked up and the shaft was turning inside the bearing. The shaft was hot enough to burn off the paint—and had started to twist. I think the shaft would have twisted off and the tail rotor would have stopped turning within a few minutes. I think these bearings should be changed every 1000 hours.”

(The “oil cooler fan bearing” part number is also listed as 6006 F4212M16A MDTA. It is not clear if this was intended to be the same as the above item 1.)

Part Total Time: 2,615.5 hours.

POWERPLANTS

HONEYWELL

Honeywell: TFE-731-4R; Noncontained Turbine Failure; ATA 7550

A submitter describes an incident occurring to a Cessna 650 jet. “The aircraft was level at 38,000 feet when the crew reported they heard an audible ‘thud’. Upon scanning the cockpit instruments the L/H engine was observed to be shutting down (non-commanded). The aircraft landed without *(further)* incident. Initial inspection revealed the L/H engine experienced a non-contained failure in the area of the turbine section. The failed engine was removed from the aircraft and shipped to Honeywell (Phoenix) for an investigative teardown.” *(This part number generates 27 entries from the SDRS data base since 1993.)*

Part Total Time: 1,302.6 hours.

ROLLS ROYCE

Rolls Royce: 250CZOB; Cracked Outer Combustion Can; ATA 7240

A technician states, “During an inspection for high TOT (*turbine outlet*) temperature the outer combustion can (P/N 6870992) was found to be cracked in the left ‘armpit’ (see photo). This unit was replaced.” *(The aircraft is an MD 500D helicopter. The part number returns 27 entries from the SDRS data base for similar discrepancies.)*



Part Total Time: 10,927.3 hours.

TURBOMECA

Turbomeca: Ariel 2B; Turbine Blade Migration; ATA 7250

(This engine is bolted to a Eurocopter, AS350B3.) A mechanic states, "During a routine 600 hour borescope inspection of the gas generator turbine blades (P/N 229226A0A0), two of the blades were found to have moved aft in their 'fir-tree' type mounts in the turbine disk. One blade was found to have moved 1/8-1/4 inch, and the other less than 1/8 inch. The blades had to move past a retaining clip to achieve the amount of movement observed. This type of defect is not listed as a possible defect in the engine maintenance manual (72-00-43-282-001-A01) and small amounts of movement may not be noticeable under the current inspection regime. Due to the potential effects of the failure of blade retention in the high pressure turbine disk, I recommend a borescope inspection of the blade alignment before further flight and at an interval of 300 hours. This engine is being returned to Turbomeca in Grand Prairie, Texas for evaluation." *(Included part number for the high pressure turbine disk—2292260060; for the gas generator—70M032020.)*

Part Total Time: 866.7.

ACCESSORIES

AMERI-KING ELT

Ameri-King ELT: AK450; Intermittent Operation; ATA 2562

An unidentified source writes, “An ELT transmitter was removed (*from a Mooney M20R aircraft*) during an annual (*inspection*) for battery replacement and testing. Upon testing (*with new batteries*) the unit on/off was intermittent and remote operation was (*also*) intermittent. This unit is approximately seven years old. (*I have observed a...*) trend in failures on this make and model of ELT. (*I*) suspect internal deterioration of component security.” (*Two additional and similar discrepancies on this model ELT were provided by the same writer, one with 2 years of service, and the other with 7 years of service. SDRS reveals 40 entries for the AK450 since 1995: or approximately 3.3 per year—as per the data base. How many thousands are and/or have been in use versus real total failures in the same time period would generate some very useful numbers—but that is a dream.*)

Part Total Time: 532.0 hours.

CHALLENGER

Challenger: K&N; Air Filter Missing Mesh Material; ATA 7160

The following defect report from a repair station tech concerns a Cessna 172R hosting a Lycoming IO-360L2A. “This (*product*) is an air filter bearing the ‘K&N’ name and is sold by Challenger aviation products (*who holds the supplemental type certificate*) for installation on this aircraft (*P/N: CPE-1173*). I have removed five of these filters from service (in addition to the one in this report) having the same damage with similar time in service. The wire mesh enclosing the cotton fiber material is tearing and exposing the filter material. Some of the wire mesh and filter material (*has been found*) missing—assumed to have been ingested by the engine. Challenger filters currently eliminate the requirements set forth in AD84-26-02 dealing with ingestion of paper air filters. Judging by the results I have seen from this and other filters I have removed from service, these filters pose a greater risk of ingestion and (*resultant*) engine failure than paper filters.”

Part Total Time: 293.4 hours.

LONE STAR

Lone Star: LS03-05002; DC Converter Failure; ATA 2433

A submission from an air taxi operator pertains to a Piper PA18-150 Super Cub. “A new converter was installed per Lone Star Aviation’s instructions: the diagrams and installation was approved with a 337 (*field approval*). The converter failed in less than 10 seconds. Out of five converters, four in aircraft and one on the test bench, all have failed (*P/N LS03-05002*).”

Part Total Time: 0.003 hours (*nearest thousandth....*).

PEMALL

Pemall: C352TS; Improper Fire Bottle Assembly; ATA 2622

A repair station tech describes a hand fire extinguisher as found in the Hawker 1000 aircraft. “(After) removing the hand held fire extinguisher from the cockpit for routine inspection it was noted the handle did not appear to be correct. Further inspection showed there are tabs on the lower handle that would have prevented the extinguisher from discharging. Numerous attempts at discharging (*this unit*) failed. This extinguisher was removed from service. A check of other fleet aircraft (*and the Raytheon Rapid Parts network*) was performed with no other (*defective units*) found (P/N C352TS).”

Part Total Time: 7,085.4 hours.

PRECISION AIRMOTIVE

Precision Airmotive: MA-3PA; Carburetor Contamination; ATA 7322

A Cessna 152 pulled by a Lycoming O-235 develops carburetor problems. The submitter writes, “The pilot reported partial loss of power. (*He*) executed a precautionary off-field landing—there was no damage to the aircraft. Teardown of the carburetor revealed metal shavings in the accelerator pump circuit. (*I*) suspect (*this metal particulate*) originated from the accelerator pump stem’s rubbing on the housing.” (*Model and P/N listed as MA-3PA and 10-5267, respectively. Time since overhaul noted as 367.9 hours.*)

Part Total Time: (unknown).

UNISON

Unison: UREM40E; Defective Spark Plugs; ATA 7421

(Submitters rightfully are concerned with noting their primary concerns, less so for reading sequence. Changing only the sequence of otherwise unaltered sentences can most certainly effect the meaning and intent of the writer, necessitating lots of punctuation “flies” for proper citation. The alternative method is this preemption by this editor.)

A repair station provided the following description pertaining to a Cessna 172 and Lycoming O-360-A4M combination. “During the installation and operational check of two new Unison/Slick magnetos—plus harness and eight spark plugs—to correct a hard starting discrepancy, the engine had a 200-300 RPM magneto drop on the L/H magneto. (*I*) trouble shot the ignition system using a cold cylinder tester and determined one of the eight new Unison spark plugs (P/N UREM40E) was defective. (*I*) removed the defective plug and replaced it with a known, good plug, and the engine’s operational check was good.

“There seems to be a trend of bad spark plugs being shipped by Unison. This is not the only time this problem has been found with this (*specific*) product. All the spark plugs were replaced at the time of the magneto and harness change to give our customer a long and trouble free service life. For the additional cost of \$127.60 one would expect (*this to be the case*), however, we were faced with lost productivity—having to spend time trouble shooting a system that had all new parts. The customer (*as result*) was delayed. It (*also*) took time and effort to return the part for credit. It cost additional shipping charges to return the part and obtain a replacement—all of this because of poor quality control.

“(I) recommend the FAA conduct an audit of the Unison Spark Plug Division to determine why bad spark plugs are leaving their facility and (for a recall to be initiated) on known lots of bad spark plugs.” (The SDRS search functions work surprisingly well in the ‘wild card’ mode, yet, no matter the amount of truncation—URE to UREM40E—only one entry shows in the data base.)

Part Total Time: 0.0 hours.

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
2006FA0000722				MAGNETO	OUT OF TOLERANCE
7/25/2006				3975	ENGINE
OUT OF TOLERANCE SECONDARY WINDINGS FOUND ON MAGNETO COIL. READINGS INDICATED VERY LOW RESISTANCE, WHICH FLUCTUATED WITH AMBIENT TEMPERATURE CHANGES. NORMAL READINGS FALL CLOSE TO 15,000 OHMS, WHEREAS THIS FAULTY COIL READ BETWEEN 2,000 OHMS, UP TO 5,000 OHMS. 13,000 OHMS IS DESCRIBED AS THE LOWEST READING ALLOWED BY THE MANUFACTURER OF THIS MAGNETO. THIS ISSUE WAS DISCOVERED DURING PREVENTIVE MAINTENANCE, WHICH INCLUDED INSPECTION OF MAGNETO INTERNALS. THE SN DATE CODE SUGGESTS THAT THIS MAGNETO WAS MANUFACTURED IN 1992.					
2006FA0000723			SLICK	COIL	OUT OF TOLERANCE
7/25/2006				3975	MAGNETO
OUT OF TOLERANCE SECONDARY WINDINGS FOUND ON MAGNETO COIL. READINGS INDICATED VERY LOW RESISTANCE, WHICH FLUCTUATED WITH AMBIENT TEMPERATURE CHANGES. NORMAL READINGS FALL CLOSE TO 15,000 OHMS, WHEREAS THIS FAULTY COIL READ BETWEEN 2,000 OHMS, UP TO 5,000 OHMS. 13,000 OHMS IS DESCRIBED AS THE LOWEST READING ALLOWED BY THE MANUFACTURER OF THIS MAGNETO. THIS ISSUE WAS DISCOVERED DURING PREVENTIVE MAINTENANCE, WHICH INCLUDED INSPECTION OF MAGNETO INTERNALS. THE SERIAL NUMBER DATE CODE SUGGESTS THAT THIS MAGNETO WAS MANUFACTURED IN 1992.					
2006FA0000724			SLICK	COIL	OUT OF TOLERANCE
7/25/2006				3975	MAGNETO
OUT OF TOLERANCE SECONDARY WINDINGS FOUND ON MAGNETO COIL. READINGS INDICATED VERY LOW RESISTANCE, WHICH FLUCTUATED WITH AMBIENT TEMPERATURE CHANGES. NORMAL READINGS FALL CLOSE TO 15,000 OHMS, WHEREAS THIS FAULTY COIL READ BETWEEN 2,000 OHMS, UP TO 5,000 OHMS. 13,000 OHMS IS DESCRIBED AS THE LOWEST READING ALLOWED BY THE MANUFACTURER OF THIS MAGNETO. THIS ISSUE WAS DISCOVERED DURING PREVENTIVE MAINTENANCE, WHICH INCLUDED INSPECTION OF MAGNETO INTERNALS. THE SERIAL NUMBER DATE CODE SUGGESTS THAT THIS MAGNETO WAS MANUFACTURED IN 1992. THANK YOU.					
2006FA0000732				NUT	FAILED
7/14/2006				ACA1373	CLAMP
WHEN TORQUING OUTER CLAMP NUT PN ACA1373, NEW OUTER CLAMP NUT THREADS FAILED BEFORE REACHING SPECIFIED TORQUE. PROPELLER WAS BEING REASSEMBLED DURING OVERHAUL. ASSEMBLED USING CALIBRATED TOOLS AND NEW HARDWARE. (K)					
2006FA0000808				GOVERNOR	FAILED
2/7/2006				82100224H	PROPELLER
BETA VALVE STICKING WHEN ENGINE POWER IS REDUCED CAUSING AIRCRAFT TO YAW. GOVERNOR FAILED 222 HOURS OF OPERATION AFTER OVERHAUL. (K)					
2006FA0000799				GOVERNOR	FAILED
8/4/2006				8210024H	PROPELLER
THE GOVERNOR FAILED AFTER 772.1 HOURS OF OPERATION. PROPELLER SYNCHRONIZATION FUNCTION IS INOPERATIVE. COMPONENT WAS OVERHAULED ON WO 39914 ON 07/06/2006. (K)					

2006FA0000810	GOVERNOR	FAILED
6/20/2006	58210007	PROPELLER
PROPELLER GOVERNOR FAILED AFTER 2.5 HOURS OF OPERATION AFTER OVERHAUL. (K)		
2006FA0000805	GOVERNOR	FAILED
6/29/2006	8210406H	PROPELLER
BETA VALVE STICKING CAUSING AIRCRAFT TO YAW DURING ENGINE POWER REDUCTION. GOVERNOR FAILED 302.6 HOURS AFTER INSTALLATION. (K)		
2006FA0000807	GOVERNOR	FAILED
2/7/2006	8210406	PROPELLER
GOVERNOR WOULD NOT PASS TEST AFTER INSTALLATION. PROPELLER RPM DOES NOT DECREASE TO 1150 RPM WHEN TEST SWITCH ACTIVATED. (K)		
2006FA0000809	GOVERNOR	MISMANUFACTURED
5/19/2006	82130391	PROPELLER
COMPONENT RECEIVED WITH INCORRECT ARM INSTALLED ON BETA VALVE. ATTACHMENT HOLE FOR LINKAGE WAS TOO SMALL. (K)		
2006FA0000800	GOVERNOR	UNKNOWN
5/27/2006	210638	PROPELLER
DOCUMENTATION RECEIVED WITH COMPONENT AFTER REPAIR DOES NOT SHOW TIME SINCE OVERHAUL. (K)		
2006FA0000806	GOVERNOR	FAILED
5/2/2006	210638F	PROPELLER
GOVERNOR WOULD NOT ACTIVATE USING TEST SWITCH ON INSTALLATION AFTER OVERHAUL. (K)		
2006FA0000811	GOVERNOR	OUT OF ADJUST
6/16/2006	210638F	PROPELLER
DURING TEST AFTER INSTALLATION, PROPELLER DROPS TO 1800 RPM. GOVERNOR SET TO INCORRECT LIMIT. (K)		
2006FA0000798	GOVERNOR	FAILED
8/2/2006	210638F	PROPELLER
THE GOVERNOR FAILED AFTER 106 HOURS OF OPERATION. THIS UNIT WILL NOT PERFORM THE OVERSPEED TEST. COMPONENT WAS OVERHAULED ON WO 39044 ON 5/18/06. (K)		
2006FA0000802	FASTENER	LOOSE
2/7/2006	210638F	PROP GOVERNOR
COMPONENT RECEIVED FROM OVERHAUL SHOP WITH HARDWARE LOOSE ON CONNECTOR. (K)		
2006FA0000801	GOVERNOR	FAILED
4/13/2006	8210406H	PROPELLER
BETA VALVE STICKING CAUSING AIRCRAFT TO YAW DURING ENGINE POWER REDUCTION. GOVERNOR FAILED 291 HOURS AFTER INSTALLATION. (K)		
2006FA0000803	GOVERNOR	FAILED
2/21/2006	8210406	PROPELLER
GOVERNOR WOULD NOT PASS TEST AFTER INSTALLATION. PROPELLER RPM DOES NOT DECREASE TO 1150 RPM WHEN TEST SWITCH ACTIVATED. UNIT WILL ALSO NOT PASS PY SHIFT TEST. (K)		
2006FA0000812	GOVERNOR	FAILED

6/13/2006		8210406H	PROPELLER
BETA VALVE STICKING CAUSING AIRCRAFT TO YAW DURING ENGINE POWER REDUCTION. GOVERNOR FAILED 36 HOURS AFTER INSTALLATION. (K)			
2006FA0000804		GOVERNOR	FAILED
6/20/2006		8210406H	PROPELLER
BETA VALVE STICKING, CAUSING AIRCRAFT TO YAW DURING ENGINE POWER REDUCTION. GOVERNOR FAILED 171 HOURS AFTER INSTALLATION. (K)			
FAA200608001		TIRE	SEPARATED
6/9/2006		0398561	MLG
LOUD BANG REPORTED BY PILOTS RESULTING IN REJECTED TAKE-OFF. MAINT FOUND DAMAGE TO ENGINE FROM TIRE. SHOP INVESTIGATION REVEALED, TIRE TREAD SEPARATED FROM CARCASS. NO LEAKAGE FROM WHEEL. PASSED AIR RETENTION AFTER 167 HOURS WITH ACCEPTABLE AIR LOSS FROM WHEEL SERIAL NUMBER 01466. CAUSE IS UNDETERMINED TO WHY TREAD SEPARATED, TIRE TO BE SENT TO MICHELIN FOR TIRE INVESTIGATION.			
0823061	MCAULY	HUB	CRACKED
8/23/2006	D2A34C98NO	D2A34C98NO	PROPELLER
CRACKED IN BLADE SOCKET.			
2006FA0000839	RAYTHN	BRACE	MISDRILLED
8/22/2006		3581525115	MLG STRUT
THIS IS A NEW PART PURCHASED THRU MFG (RAPID). BRACE ASSEMBLY HAS 4 BOLT HOLES THAT ARE NOT DRILLED TO THE REQUIRED SIZE TO ACCOMMODATE THE BOLT THAT IS TO BE INSTALLED. HOLE I.D. SIZE IS 0.185. BOLT O.D. SIZE IS 0.310.			
2006FA0000772	ALLSN	COUPLING	FAILED
7/31/2006	250C30P		ENGINE
NR 2 COUPLING FAILURE, WHICH CAUSED A NI FAILURE, AND INNER SHAFT FAILURE, POWER TURBINE ROTOR DECOUPLING AND GAS PRODUCER OVERTEMP. (K)			
2006FA0000470	CONT	BEARING	FAILED
4/4/2006	TSIO520C	X13041	STARTER
WHILE REMOVING THE STARTER FOR MAINTENANCE, THE STARTER ADAPTER WORM SHAFT ROLLER BEARING RETAINER CAGE HALF WAS FOUND STUCK TO THE STARTER FLANGE. ALL THE ROLLER BEARING BALLS WERE STILL IN THEIR RACES BUT BLUISH IN COLOR. AFTER DISASSEMBLING THE ADAPTER, THE INNER HALF AND SMALLER PIECES OF THE CAGE WERE FOUND IN THE LOWER RECESSES OF THE ADAPTER HOUSING. FORTUNATELY, NONE WAS SUSPECTED TO HAVE ENTERED THE ENGINE SUMP. IT WAS SUSPECTED THAT THE STARTER RELAY REMAINED ENGAGED AND THE STARTER WAS ENERGIZED DURING ONE OR MORE GROUND RUNS.			
2006FA0000771	LYC	CRANKSHAFT	FAILED
11/15/2005	IO540E1B5		NR 5 ROD JOURNAL
APPROX 5 MILES INTO FLIGHT, FELT A SURGE FROM RT ENG, AC STARTS YAWING TO RT. PROCEEDED TO FEATHER PROP WHICH WAS SUCCESSFUL AT THIS TIME, NOTICED ENGINE STOPPED TURNING. ADVISED PASSENGERS OF SITUATION IN PREP FOR AN EMERGENCY LANDING. ON GROUND MAINT WAS ADVISED OF INCIDENT. PROP WAS DIFFICULT TO ROTATE BY HAND. SPARK PLUGS WERE REMOVED FOR INTERNAL INSP OF CYL. NR 6 CYL PISTON WAS FOUND STUCK IN BDC POSITION AND WAS INOPERATIVE ON ROTATION OF THE PROPELLER WHILE THE OTHER WAS OPERATIVE. NO PHYSICAL EXTERNAL DAMAGE OR SIGNIFICANT OIL LEAK WERE NOTED. SUSPECT POSSIBLE NR 6 CONNECTING ROD OR CRANKSHAFT DAMAGE. THE ENGINES WILL BE REMOVED AND RETURNED TO OVERHAULER FOR FURTHER EVALUATION. (K)			
CA060706003	PWA	CONNECTING ROD	WORN

7/4/2006		JT15D1	310562601	BLEED VALVE
(CAN) PRATT & WHITNEY CANADA OVERHAUL MANUAL 3037323 REV.22, SECTION 72-30-07, PARAGRAPH 88-4 MISTAKENLY CALLS FOR NICKEL PLATING IN ACCORDANCE WITH SPOP 62. SPOP 62 IS A FLORESCENT PENETRANT INSPECTION PROCEDURE. IT IS UNDERSTOOD THAT THE MANUAL SHOULD RATHER CALL FOR SPOP 26 WHICH IS A NICKEL PLATING SPEC. (TC# 20060706003)				
CA060711001		PWA	CASE	CRACKED
7/11/2006		JT15D1A		GAS GENERATOR
(CAN) CRACKED GAS GENERATOR CASE WAS FOUND CRACKED AT THE LONGITUDINAL WELD AND CIRCUMFERENTIAL WELD. SB7240 IS AVAILABLE AND WILL REPLACE THE GAS GENERATOR CASE WITH A CASE WITH NO LONGITUDINAL WELDS. (TC NR 20060711001)				
CA060705002		PWA	COMPRESSOR	BIRD INGESTION
7/5/2006		PT6A135		ENGINE
(CAN) DAMAGE TO ENGINE COMPRESSOR CAUSED BY BIRDSTRIKE. COMPRESSOR DAMAGE WAS REPAIRED AND ENGINE RETURNED TO SERVICE. (TC# 20060705002)				
CA060628004	AEROSP	PWA	SOCKET	OVERHEATED
6/28/2006	ATR42300	PW120	BVO320204114	RT WINDOW LIGHT
(CAN) LAMP SOCKET P/N BVO3202-04-114 OVERHEATED AND SMOKE SMELL NOTED AT R/H CABIN SIDE WINDOW LIGHT. LAMP SOCKET REPLACED. TESTED SERVICEABLE. (TC# 20060628004)				
CA060629001	AEROSP	PWA	UPLOCK	FAILED
6/26/2006	ATR42300	PW120		MLG
(CAN) WHEN THE CREW SELECTED GEAR UP ALL POSITIONS FAILED TO SHOW UP AND LOCKED. THE CREW RETURNED TO POINT OF DEPARTURE AND LANDED WITHOUT INCIDENT. MAINTENANCE REPLACED THE RIGHT HAND MAIN LANDING GEAR UPLOCK BOX ASSY. AND THE WEIGHT ON WHEELS UPPER WIRING HARNESS. THE LANDING GEAR WAS FUNCTION CHECKED AND THE AIRCRAFT RETURNED TO SERVICE. (TC# 20060629001)				
CA060629002	AEROSP	PWA	CONTACT	FOULED
6/19/2006	ATR42300	PW120		MLG
(CAN) DEPARTING THE LANDING GEAR LEVER WOULD SELECT TO THE UP POSITION. THE AIRCRAFT RETURNED TO POINT OF DEPARTURE AND LANDED WITHOUT FURTHER INCIDENT. MAINTENANCE DETERMINED THE GROUND CONTACT FOR THE GEAR LEVER LOCKOUT SOLENOID WAS FOULED. THE CONTACT WAS CLEANED AND A FUNCTION CHECKED PERFORMED PRIOR TO THE AIRCRAFT BEING RETURNED TO SERVICE.				
CA060704013	AEROSP	PWA	ENGINE	MALFUNCTIONED
6/19/2006	ATR72	PW127		
(CAN) IN CRUISE THE ENGINE WAS REPORTED TO EXHIBIT TORQUE AND POWER TURBINE SPEED FLUCTUATIONS. THE ENGINE WAS SHUT DOWN IN FLIGHT AND THE AIRCRAFT DIVERTED TO POINT OF DEPARTURE. P&WC WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC# 20060704013)				
CA060704003	AEROSP	PWA	ENGINE	LEAKING
5/30/2006	ATR72212A	PW127		
(CAN) DURING CLIMB THE ENGINE WAS REPORTED TO LOSE OIL PRESSURE. THE ENGINE WAS SHUT DOWN IN FLIGHT AND THE AIRCRAFT DIVERTED TO POINT OF DEPARTURE. P&WC WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE DETERMINED. (TC# 20060704003)				
CA060731012	AEROSP	PWA	DIFFUSER	FRACTURED
7/10/2006	ATR72212A	PW127		LOW COMPRESSOR
(CAN) DURING TAKEOFF ROLL, ENGINE TEMPERATURE WAS SEEN EXCEEDING LIMITS AND THE TAKE-OFF WAS ABORTED. SUBSEQUENT INSPECTION REVEALED A FRACTURED LOW PRESSURE DIFFUSER TUBE. THE TUBE				

WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. (TC NR 20060731012)

CA060704001	AIRTRC	PWA	FUEL CONTROL	MALFUNCTIONED
5/6/2006	AT802	PT6A67		ENGINE

(CAN) DURING FORMATION FLIGHT THE PILOT REDUCED POWER. WHEN POWER WAS RE-APPLIED THE ENGINE WOULD NOT RESPOND INITIALLY TO THROTTLE INPUT. POWER INCREASED AFTER 7 TO 8 SECONDS. THE FUEL CONTROL UNIT WAS SUBSEQUENTLY REPLACED. PWC WILL INVESTIGATE THE INCIDENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

CA060710006	AIRTRC	PWA	LINE	CRACKED
7/6/2006	AT802	PT6A67A	3031829	P3

(CAN) DURING THE APPROACH TO THE AIRPORT, THE ENGINE LOST POWER. THE AIRCRAFT WAS DAMAGED ON LANDING. DURING PRELIMINARY INVESTIGATION, IT IS SUSPECTED THAT THE P3 LINE CRACKED CAUSING THE ENGINE TO GO INTO FLIGHT IDLE. THE ENGINE HAS BEEN REMOVED FROM THE AIRCRAFT AND HAS BEEN SHIPPED FOR FURTHER INVESTIGATION AND EVALUATION. UPON RECEIPT OF FINDINGS, WILL ADVISE. (TC NR 20060710006)

CA060731006	AIRTRC	PWA	LINE	FRACTURED
6/28/2006	AT802	PT6A67A	3031829	P3 AIR TUBE

(CAN) THE ENGINE WAS REPORTED TO FLAME OUT DURING APPROACH RESULTING IN THE AIRCRAFT LANDING SHORT OF THE RUNWAY. SUBSEQUENT INSPECTION REVEALED A FRACTURED P3 PNEUMATIC LINE TO THE FUEL CONTROL. MFG WILL MONITOR INVESTIGATION AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20060731006)

2006FA0000752	AMTR		SAFETY WIRE	MISINSTALLED
7/20/2006	LC41550FG			NR 4 ENG MOUNT

ALL 4 ENGINE VIBRATION ISOLATOR MOUNT BOLTS WERE SAFETY WIRED BACKWARDS. NO EVIDENCE OF DAMAGE. (K)

2006FA0000829	AMTR	CONT	SLICK	POINTS	BROKEN
8/9/2006	LC41550FG	TSIO550C		6320	MAGNETO

MAGNETO FAILURE, ON ECR ON INSP RT MAGNETO POINT HAD BROKEN IN HALF. (K)

2006FA0000762	AMTR	LYC	CRANKSHAFT	SEPARATED
5/20/2006	SISU1A	IO360A1A	MIOP	ENGINE

CRANKSHAFT FLANGE SEPARATED FROM CRANK AT THE LIGHTENING HOLES. AVOID GYROSCOPIC AEROBATICS USING A CRANKSHAFT FLANGE WITH LIGHTENING HOLES. (K)

CA060717001	AYRES	PWA	PUSHROD	LOOSE
7/1/2006	S2RHGT65	AWASP	11876	ENGINE

(CAN) THE BALL END ON THE NR 5 EXHAUST VALVE PUSHROD WAS LOOSE. THIS CAUSED THE PUSHROD TO LENGTHEN REMOVING ANY VALVE CLEARANCE. THIS CAUSED AN OPEN EXHAUST VALVE SITUATION WHICH ALLOWED EXHAUST FLAME TO ENTER THE NR 5 CYLINDER. WHEN THE NR 5 INTAKE VALVE OPENED THIS ALLOWED THE FLAME TO BURN THE AIR/FUEL MIXTURE THROUGHOUT THE ENTIRE BLOWER AND MANIFOLD CAUSING THE ENGINE TO LOSE POWER AND THEN STOP. (TC NR 20060717001)

CA060731018	AYRES	PWA	ENGINE	VIBRATES
7/11/2006	S2RT34NORMAL	PT6A34AG		

(CAN) DURING FLIGHT THE ENGINE WAS REPORTED TO LOSE POWER ACCOMPANIED BY HEAVY VIBRATIONS. A FORCED LANDING WAS CARRIED OUT RESULTING IN AIRFRAME DAMAGE. MFG WILL INVESTIGATE THE EVENT AND WILL ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20060731018)

CA060731009	AYRES	PWA	TURBINE BLADES	FRACTURED
7/4/2006	STRT34	PT6A34AG		ENGINE

(CAN) THE ENGINE WAS REPORTED TO LOSE ALL POWER IN CRUISE. A DEAD-STICK LANDING WAS PERFORMED IN A FIELD RESULTING IN AIRFRAME DAMAGE. SUBSEQUENT INSPECTION REVEALED FRACTURED POWER TURBINE BLADES. MFG WILL INVESTIGATE AND ADVISE OF ROOT CAUSE ONCE DETERMINED. (TC NR 20060731009)

CA060616006	BAG	GARRTT	CONNECTOR	DAMAGED
6/15/2006	JETSTM3101	TPE33110UG		ENGINE

(CAN) AFTER DEPARTURE CLIMBING THROUGH 7500FT THE RIGHT ENGINE TORQUE STARTED TO FLUCTUATE. CREW PULLED THE QRH AND FOLLOWED THE DRILLS AND WERE GETTING 10-20% FLUCTUATION CAUSING THE A/C TO YAW RADICALLY LEFT AND RIGHT AT ALL POWER SETTINGS WITH TTL ON OR OFF SO A PRECAUTIONARY SHUTDOWN WAS PERFORMED AND RETURNED TO BASE WITHOUT INCIDENT. MTCE ENGINE RUNUPS CONFIRMED THE TQ FLUCTUATIONS AND TROUBLESHOOTING FOUND A LOOSE PIN CONNECTION ON THE RT ENGINE STRAIN GAUGE CONNECTOR. THE CONNECTION WAS REPAIRED AND THE A/C WAS RUN UP AND RETURNED TO SERVICE.

CA060626005	BAG		SEAL	LEAKING
6/22/2006	JETSTM3212			RT PROP

(CAN) DURING THE WALK AROUND, THE PILOTS NOTICED OIL DRIPPING DOWN ONE BLADE OF THE RT PROPELLER. MAINTENANCE WAS NOTIFIED AND THE AME WAS DISPATCHED TO ASSESS. IT WAS DETERMINED THAT A BLADE SEAL HAD FAILED. THE PROPELLER WAS REMOVED FROM THE AIRCRAFT AND SENT TO WESTERN PROPELLER IN EDMONTON FOR REPAIRS. A VERBAL REPORT INDICATED THAT THERE WAS NO DAMAGE OR OBVIOUS CAUSE. ALL SEALS WERE REPLACED. THE PROPELLER WAS RE-INSTALLED AND RETURNED TO BASE THE FOLLOWING DAY.

2006FA0000819	BBAVIA	CONT	EXHAUST VALVE	BROKEN
7/9/2006	7EC	C9012F	656612	NR 4 CYLINDER

WHEN THE NR 4 CYLINDER WAS REMOVED, THE EXHAUST VALVE HEAD WAS FOUND TO BE BROKEN OFF, ABOUT .5 INCH FROM THE FACE OF THE VALVE, CAUSING FAILURE OF THE PISTON AND FAILURE OF THE INTAKE VALVE. THE CIRCUMSTANCES OF THE FAILURE CAUSED A LOSS OF ENGINE POWER AND A FORCED LANDING IN A FIELD. THE PILOT WAS UNHARMED. (K)

2006FA0000756	BBAVIA	LYC	WIRE	SHORTED
7/21/2006	7ECA	O235*	112	FIREWALL

WHILE IN FLIGHT, THE PILOT REPORTED HE COULD SMELL SOMETHING BURNING, LANDED AS SOON AS PRACTICAL. INVESTIGATION REVEALED THAT THE WIRE FROM THE ALTERNATOR TO THE AMMETER, PN 112 HAD SHORTED AGAINST THE FIREWALL, WHERE IT GOES THROUGH THE FIRE WALL. WIRES 112, 114, MASTER RELAY, STARTER RELAY, AMMETER, VOLTAGE REGULATOR AND ALTERNATOR WERE ALL REPLACED. (K)

2006FA0000790	BBAVIA	LYC	SPAR	CRACKED
8/1/2006	7HC	O290	5262L	WING

LONGITUDINAL CRACK FROM STRUT BOLT HOLE OB. PROBABLE CAUSE: WING DAMAGE FROM PAST GROUND LOOPING PROPAGATING OVERTIME. TIME OF INCIDENT IN LOGS, 7/17/72. (K)

CA060619012	BEECH	PWA	FRAME	CRACKED
5/30/2006	100BEECH	PT6A28	FS227	FUSELAGE

(CAN) FRAME, F.S. 227 LOWER FLANGE CRACKED AT RADIUS. CRACK WAS APPROX 4.5 INCHES LEFT AND RIGHT OF A/C CENTRELINE. (TC# 20060619012)

CA060623002	BEECH	PWA	BEECH	FASTENER	LOOSE
6/19/2006	1900C	PT6A65B		1015000573	RUDDER SHAFT

(CAN) RUDDER QUADRANT P/N 101-500057-3 FOUND LOOSE ON INSPECTION. THREE MONEL BLIND RIVETS ATTACHING QUADRANT TO SHAFT ASSY. P/N 114-524025-1 WERE FOUND LOOSE AND DETERMINED TO BE THE CAUSE OF THE QUADRANT LOOSNESS. (TC# 20060623002)

CA060731013	BEECH	PWA	COMPRESSOR	SEIZED
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7/12/2006	1900C	PT6A65B		ENGINE
(CAN) DURING FLIGHT AN OIL SMELL WAS REPORTED IN THE COCKPIT. THE ENGINE SUBSEQUENTLY SURGED ACCOMPANIED BY A LOW OIL PRESSURE WARNING AND WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED OIL LEAKAGE AND A PARTIALLY SEIZED HIGH PRESSURE COMPRESSOR. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20060731013)				
CA060731022	BEECH	PWA		TURBINE BLADES FRACTURED
7/20/2006	1900C	PT6A65B		ENGINE
(CAN) FOLLOWING TAKEOFF THE ENGINE EMITTED A NOISE ACCOMPANIED BY AN UNCOMMANDED REDUCTION IN POWER. THE ENGINE WAS SHUT DOWN IN FLIGHT AND THE AIRCRAFT DIVERTED TO POINT OF DEPARTURE. SUBSEQUENT INSPECTION REVEALED FRACTURED POWER TURBINE BLADES. MFG WILL MONITOR INVESTIGATION OF THE EVENT AND WILL ADVISE OF ROOT CAUSE ONCE DETERMINED. (TC NR 20060731022)				
2006FA0000837	BEECH	PWA		FIRE LOOP BROKEN
6/7/2006	1900C	PT6A65B	22412886	RT NACELLE
PILOT EXPERIENCED A FIRE WARNING ANNUNCIATION DURING TAKEOFF ROLL. PILOT ABORTED TAKEOFF. MAINTENANCE FOUND THAT ONE FIRELOOP HAD FAILED AND CAUSED THE FALSE FIRE INDICATION. (K)				
CA060704008	BEECH	PWA		ELBOW FRACTURED
6/9/2006	1900D	PT6A67D	310047001	OIL SYSTEM
(CAN) DURING CRUISE THE ENGINE LOW OIL PRESSURE WARNING ANNUNCIATED. THE ENGINE WAS SHUT DOWN IN FLIGHT AND THE AIRCRAFT DIVERTED FOR AN UNSCHEDULED LANDING. SUBSEQUENT INSPECTION REVEALED THE REDUCTION GEARBOX PRESSURE OIL ELBOW IMPROPERLY SECURED AND FRACTURED. P&WC WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE DETERMINED. (TC# 20060704008)				
CA060718002	BEECH	PWA	HARTZL	THRUST PLATE DAMAGED
7/14/2006	200BEECH	PT642A	HCE4N3G	C459 PROPELLER
(CAN) UPON DISASSEMBLY OF THE PROPELLER, IT WAS FOUND TO HAVE A BROKEN THRUST PLATE SCREW (PN A3204). THE THRUST PLATE SCREW WAS FOUND JAMMED BETWEEN THE THRUST PLATE AND THE BLADE BUTT. AS A RESULT OF THIS BROKEN SCREW IT ALSO DAMAGED THE BETA PICKUP PLATE (PN C459) AND GOUGED THE BETA ROD (PN C453). THE THRUST PLATE, BETA PICKUP PLATE, BETA ROD, ALL FOUR THRUST PLATE SCREWS, ALL SEALS, LUBRICANTS AND HUB NUTS WERE REPLACED, PROPELLER WAS ASSEMBLED, LOCKED AND THE PROPELLER RETURNED TO CUSTOMER. (TC NR 20060718002)				
CA060629007	BEECH	PWA		OUTFLOW VALVE FAILED
6/20/2006	200BEECH	PT6A41	10138001313	CABIN PRESSURE
(CAN) THE AIRCRAFT EXPERIENCED A LEAK DOWN OF CABIN PRESSURE. THE TROUBLE WAS TRACED TO THE FLOW CONTROL PACK UNITS. BOTH CONTROL UNITS WERE REPLACED WITH OVERHAULED UNITS. THE UNITS THAT WERE INSTALLED NEVER PROVIDED ENOUGH FLOW FOR PRESURIZATION, HEATING AND COOLING. WHEN THE OVERHAULER OF THE UNITS WAS CONTACTED, THEY INFORMED US THAT THEY HAD PROBLEMS WITH THEIR CALIBRATION SYSTEM WHICH MADE THE FLOW PACKS PUT OUT MINIMUM AIR. THEY HAD KNOWN ABOUT THIS PROBLEM FOR TWO MONTHS OR MORE HOWEVER THEY CONTINUED TO PRODUCE AND SELL OVERHAULED UNITS. OUR COMPANY RECEIVED TWO OVERHAULED UNITS TO REPLACE THESE THAT WERE OVERHAULED IMPROPERLY ALSO. THE COMPANY SPECIFIED THAT ANY PACKS OVERHAULED BEFORE MAY 19 WERE SUSPECT HOWEVER THEY STILL SHIPPED US TWO PACKS THAT WERE OVERHAULED PRIOR TO THAT DATE.				
2006F00024	BEECH			CANISTER OPEN
5/5/2006	300BEECH			COWL
SMOKING ON SHUT DOWN. OPENED RIGHT SIDE COWLING AND FOUND THE END OF THE EPA CAN COMPLETELY OPEN. END PLATE FOUND IN BOTTOM OF COWLING. TT PRESUMED TO BE ORIGINAL.				
FCPR20060030	BEECH			TRANSMITTER FAILED
8/22/2006	300BEECH		1013890237	LT ENGINE
LT ENGINE OIL PRESSURE TRANSMITTER FAILED, GIVING A LOW OIL PRESSURE INDICATION.				

2006FA0000869	BEECH	CONT	FITTING	CRACKED
3/15/2006	35BEECH	E185*	35405130	STABILIZER

STABILIZER FITTING REMOVED FROM AC TO BE CHECKED IAW AD76-05-04. DYE PENETRANT INSPECTION REVEALED (2) CRACKS RADIATING FROM THE LOWER BOLT HOLE ATTACHMENT POINTS AS DEPICTED IN DWG. PROBABLE CAUSE COULD BE FROM IMPROPER TORQUE OF ATTACHMENT BOLTS AT PREVIOUS INSPECTION. THIS PART IS TO BE INSPECTED EACH 1,000 HRS TIME IN SERVICE. SUGGEST PROPER TORQUE BE APPLIED DURING INSTALLATION OR UPGRADE OLD FITTING TO THE NEW STYLE FITTING PN 35405130. (K)

2006FA0000833	BEECH		BRAKE	SEIZED
7/18/2006	400A		5010614	MLG

DURING INITIAL TAKEOFF ROLL, FOLLOWING POSITIVE PARKING BRAKE RELEASE CHECK, LT MAIN WHEEL BRAKE LOCKED-UP. TAKEOFF ABORTED DUE TO SLOW ACCELERATION, POOR DIRECTIONAL CONTROL. UNABLE TO MOVE AIRCRAFT UNTIL RT BRAKE APPLIED AND RELEASED, THEN TAXI-IN NORMAL. REPLACED LT MAIN WHEEL BRAKE. ALSO REPLACED PN 4500A2 PARKING BRAKE VALVE ASSY. AS A PRECAUTION IAW OPERATOR REQUEST. REPLACED LT MAIN WHEEL ASSY. DUE TO FLAT-SPOTTED TIRE. AT THIS TIME SUSPECTED FAULT IS IN LT BRAKE ASSY, BRAKE ASSY. QUARANTINED BY OPERATOR FOR FURTHER EVALUATION. (K)

2006FA0000832	BEECH		SWITCH	DAMAGED
7/26/2006	400A		1SX1T	MLG SELECTOR

DURING SCHEDULED INSPECTION, FOUND LANDING GEAR WARNING HORN WOULD NOT OPERATE WITH LT POWER LEVER RETARDED. FOUND THROTTLE QUADRANT SWITCHES S25 AND S26 TO HAVE HIGH INTERNAL RESISTANCE. REPLACED SWITCHES AND ADJUSTED AS REQUIRED IAW MM. LANDING GEAR WARNING SYSTEM TESTS NORMAL. TYPICAL FAILURE MODE FOR THIS TYPE SWITCH USED ON THROTTLE LEVERS FOR VARIOUS FUNCTIONS. RECOMMEND A MORE EXTENDED LIFE SWITCH BEING UTILIZED, OR ESTABLISH A SCHEDULED 2600 HR REPLACEMENT SCHEDULE (IN CONJUNCTION WITH REPLACEMENT SCHEDULE (IN CONJUNCTION WITH ADDITIONAL C-INSPECTION/COMPONENT REPLACEMENT ITEMS). (K)

CA060704012	BEECH	PWA	ENGINE	FLAMED OUT
6/15/2006	400A	JT15D5		

(CAN) DURING CRUISE AT FL380 (AND APPROACHING CLOUD TOP) BOTH ENGINES WERE THROTTLED BACK IN POWER BY THE CREW PRIOR TO ENGAGING ANTI-ICE. BOTH ENGINES FLAMED OUT. THE ENGINES WERE SUBSEQUENTLY RE-STARTED IN FLIGHT AND THE AIRCRAFT DIVERTED. POST-EVENT INSPECTION REVEALED NO ENGINE ANOMOLIES. P&WC WILL INVESTIGATE THE EVENT AND WILL REPORT ON ROOT CAUSE ONCE ESTABLISHED.

2006FA0000789	BEECH	CONT	CYLINDER	DAMAGED
8/9/2006	58	IO520*		ENGINE

ON ANNUAL INSPECTION, WORK WAS BEING PERFORMED TO REPAIR OIL LEAK ON PUSH ROD TUBE SEALS, WHEN PUSHRODS WERE REMOVED, THEY WERE FOUND TO BE BENT AND GREATER THAN 50 PERCENT OF TOTAL TUBE WORN THROUGH. FURTHER INVESTIGATION FOUND THAT SEVERAL TUBES WERE FOUND IN SAME CODITION AND THAT ALL EXHAUST RODS WERE BENT. THERE WERE ALSO SIGNS ON 5 PISTONS OF VALVE CONTACT. FIREWALL FWD RECONDITIONED CYLINDERS AND STATED THAT VALVE GUIDES HAD COAKING ON THEM AND THAT THE PISTON RINGS HAD LOST THEIR TEMPER. OWNER IS SUSPECT OF BAD PARTS FROM MFG. (K)

CA060704002	BEECH	PWA	GEARBOX	SPALLED
5/27/2006	99	PT6A28		ENGINE

(CAN) THE ENGINE CHIP DETECTOR WARNING ANNUNCIATED IN FLIGHT. THE ENGINE WAS SHUT DOWN AND THE AIRCRAFT DIVERTED TO AN ALTERNATE AIRPORT. SUBSEQUENT INSPECTION REVEALED SPALLING OF THE FIRST STAGE REDUCTION GEARBOX GEARING. (TC# 20060704002)

CA060622002	BEECH	PWA	DRAIN	BROKEN
6/20/2006	99	PT6A28	CCA1550	FUEL SYS

(CAN) AFTER FUELING THE AIRCRAFT THE FIRST OFFICER HEARD A SPLASH AND FOUND FUEL LEAKING FROM

UNDER THE LEFT WING. THE T PORTION OF THE FUEL DRAIN HAD FALLEN OUT AND THERE WAS NO WAY TO SHUT THE QUICK DRAIN VALVE OFF. THE TOP PART OF THE VALVE AND ORING WERE RECOVERED WHEN THE DRAIN VALVE WAS REPLACED. (TC# 20060622002)

2006FA0000734	BEECH	CONT	LANDING GEAR	COLLAPSED
7/27/2006	A35	E185*		NLG

NOSE GEAR COLLAPSED.

2006FA0000840	BEECH		ANGLE	CRACKED
8/22/2006	A36		3511513022	MLG DOOR

DURING A ROUTINE ANNUAL INSPECTION IT WAS FOUND THAT BOTH THE LT AND RT IB GEAR DOOR AFT HINGE ANGLES (P/N'S 35-115130-22, -24, 35-115070-16 AND -18 WERE CRACKED. IT IS MY OPINION THAT THIS IS DUE TO THE FACT THAT MFG HAS CHANGED THE DESIGN OF THE INBOARD GEAR DOOR FROM A STAMPED ASSY TO A MILLED PART. THIS CONDITION OBVIOUSLY IS PRESENT IN OTHER LIKE MODELS AND BEECH HAS ACKNOWLEDGED THE PROBLEM IN THEIR PARTS BOOK AS THEY GIVE INSTRUCTIONS FOR ORDERING DIFFERENT PART NUMBERS. THE NEW PART NUMBER PARTS ARE MADE FROM .050" ALUMINUM WHILE THE ORIGINAL PARTS WERE MADE FROM .032 INCHES ALUMINUM. THE CRACKS COULD EASILY GO UNDETECTED AND A SB IS NEEDED TO HELP OTHERS FIND AND ELIMINATE THESE CRACKS.

2006FA0000841	BEECH		ANGLE	CRACKED
8/22/2006	A36		3511513022	MLG DOOR

DURING A ROUTINE ANNUAL INSPECTION IT WAS FOUND THAT BOTH LT AND RT IB GEAR DOOR AFT HINGE ANGLES (P/N'S 35-115130-22, -24, 35-115070-16 AND -18 WERE CRACKED. IT IS MY OPINION THAT THIS IS DUE TO FACT THAT MFG HAS CHANGED DESIGN OF THE IB GEAR DOOR FROM A STAMPED ASSY TO A MILLED PART. THIS CONDITION OBVIOUSLY IS PRESENT IN OTHER LIKE MODELS AND MFG HAS ACKNOWLEDGED THE PROBLEM IN THEIR PARTS BOOK AS THEY GIVE INSTRUCTIONS FOR ORDERING DIFFERENT PN. THE NEW PN PARTS ARE MADE FROM .050 INCH ALUMINUM WHILE ORIGINAL PARTS WERE MADE FROM .032 INCH ALUMINUM. THE CRACKS COULD EASILY GO UNDETECTED AND A SB IS NEEDED TO HELP OTHERS FIND AND ELIMINATE THESE CRACKS.

2006FA0000842	BEECH		ANGLE	CRACKED
8/22/2006	A36		3511513022	MLG DOOR

DURING A ROUTINE ANNUAL INSPECTION IT WAS FOUND THAT BOTH THE LT AND RT IB GEAR DOOR AFT HINGE ANGLES (P/N'S 35-115130-22, -24, 35-115070-16 AND -18 WERE CRACKED. IT IS MY OPINION THAT THIS IS DUE TO THE FACT THAT MFG HAS CHANGED THE DESIGN OF THE IB GEAR DOOR FROM A STAMPED ASSY TO A MILLED PART. THIS CONDITION OBVIOUSLY IS PRESENT IN OTHER LIKE MODELS AND MFG HAS ACKNOWLEDGED THE PROBLEM IN THEIR PARTS BOOK AS THEY GIVE INSTRUCTIONS FOR ORDERING DIFFERENT PART NUMBERS. THE NEW PN PARTS ARE MADE FROM .050 INCH ALUMINUM WHILE THE ORIGINAL PARTS WERE MADE FROM .032 INCH ALUMINUM. THE CRACKS COULD EASILY GO UNDETECTED AND A SB IS NEEDED TO HELP OTHERS FIND AND ELIMINATE THESE CRACKS.

2006FA0000843	BEECH		ANGLE	CRACKED
8/22/2006	A36		3511513022	MLG DOOR

DURING A ROUTINE ANNUAL INSPECTION IT WAS FOUND THAT BOTH THE LT AND RT IB GEAR DOOR AFT HINGE ANGLES (P/N'S 35-115130-22, -24, 35-115070-16 AND -18 WERE CRACKED. IT IS MY OPINION THAT THIS IS DUE TO THE FACT THAT MFG HAS CHANGED THE DESIGN OF THE IB GEAR DOOR FROM A STAMPED ASSY TO A MILLED PART. THIS CONDITION OBVIOUSLY IS PRESENT IN OTHER LIKE MODELS AND MFG HAS ACKNOWLEDGED THE PROBLEM IN THEIR PARTS BOOK AS THEY GIVE INSTRUCTIONS FOR ORDERING DIFFERENT PN. THE NEW PN PARTS ARE MADE FROM .050 INCH ALUMINUM WHILE THE ORIGINAL PARTS WERE MADE FROM .032 INCH ALUMINUM. THE CRACKS COULD EASILY GO UNDETECTED AND A SB IS NEEDED TO HELP OTHERS FIND AND ELIMINATE THESE CRACKS.

2006FA0000847	BEECH		ANGLE	CRACKED
8/22/2006	A36		3511513022	MLG DOOR

DURING A ROUTINE ANNUAL INSPECTION IT WAS FOUND THAT BOTH THE LT AND RT IB GEAR DOOR AFT HINGE ANGLES (P/N'S 35-115130-22, -24, 35-115070-16 AND -18 WERE CRACKED. IT IS MY OPINION THAT THIS IS DUE TO

THE FACT THAT MFG HAS CHANGED THE DESIGN OF THE IB GEAR DOOR FROM A STAMPED ASSY TO A MILLED PART. THIS CONDITION OBVIOUSLY IS PRESENT IN OTHER LIKE MODELS AND BEECH HAS ACKNOWLEDGED THE PROBLEM IN THEIR PARTS BOOK AS THEY GIVE INSTRUCTIONS FOR ORDERING DIFFERENT PN. THE NEW PN PARTS ARE MADE FROM .050 INCH ALUMINUM WHILE THE ORIGINAL PARTS WERE MADE FROM .032 INCH ALUMINUM. THE CRACKS COULD EASILY GO UNDETECTED AND A SB IS NEEDED TO HELP OTHERS FIND AND ELIMINATE THESE CRACKS.

2006FA0000848	BEECH	ANGLE	CRACKED
8/22/2006	A36	3511513022	MLG DOOR

DURING A ROUTINE ANNUAL INSPECTION IT WAS FOUND THAT BOTH THE LT AND RT IB GEAR DOOR AFT HINGE ANGLES (P/N'S 35-115130-22, -24, 35-115070-16 AND -18 WERE CRACKED. IT IS MY OPINION THAT THIS IS DUE TO THE FACT THAT MFG HAS CHANGED THE DESIGN OF THE IB GEAR DOOR FROM A STAMPED ASSY TO A MILLED PART. THIS CONDITION OBVIOUSLY IS PRESENT IN OTHER LIKE MODELS AND MFG HAS ACKNOWLEDGED THE PROBLEM IN THEIR PARTS BOOK AS THEY GIVE INSTRUCTIONS FOR ORDERING DIFFERENT PN. THE NEW PN PARTS ARE MADE FROM .050 INCH ALUMINUM WHILE THE ORIGINAL PARTS WERE MADE FROM .032 INCH ALUMINUM. THE CRACKS COULD EASILY GO UNDETECTED AND A SB IS NEEDED TO HELP OTHERS FIND AND ELIMINATE THESE CRACKS.

2006FA0000849	BEECH	ANGLE	CRACKED
8/22/2006	A36	3511513022	MLG DOOR

DURING A ROUTINE ANNUAL INSPECTION IT WAS FOUND THAT BOTH THE LT AND RT IB GEAR DOOR AFT HINGE ANGLES (P/N'S 35-115130-22, -24, 35-115070-16 AND -18 WERE CRACKED. IT IS MY OPINION THAT THIS IS DUE TO THE FACT THAT MFG HAS CHANGED THE DESIGN OF THE IB GEAR DOOR FROM A STAMPED ASSY TO A MILLED PART. THIS CONDITION OBVIOUSLY IS PRESENT IN OTHER LIKE MODELS AND MFG HAS ACKNOWLEDGED THE PROBLEM IN THEIR PARTS BOOK AS THEY GIVE INSTRUCTIONS FOR ORDERING DIFFERENT PN. THE NEW PN PARTS ARE MADE FROM .050 INCH ALUMINUM WHILE THE ORIGINAL PARTS WERE MADE FROM .032 INCH ALUMINUM. THE CRACKS COULD EASILY GO UNDETECTED AND A SB IS NEEDED TO HELP OTHERS FIND AND ELIMINATE THESE CRACKS.

080106	BEECH	TUBE	DAMAGED
8/1/2006	B200	1015802181	HYD SYSTEM

DURING ROUTINE INSPECTION IT WAS DISCOVERED THAT THE PILOT SIDE RUDDER CABLE HAD BEEN RUBBING ON THE PILOTS SIDE RT BRAKE TUBE ASSY P/N 101-580218-1 NEAR THE FORWARD END OF THE TUBE ASSY CAUSING IT TO BECOME NOTCHED. THE DAMAGE IS TO THE EXTENT THAT REPLACEMENT WAS REQUIRED. THIS DAMAGE WAS FOUND UNDER THE PILOTS SEAT FLOOR INSPECTION PANEL ADJACENT TO THE BUSS FEEDER DIODE ASSY. THE CAUSE APPEARS TO BE IMPROPER TUBE ASSY ROUTING BY NOT ALLOWING FOR PROPER CONTROL CABLE CLEARANCE. RECOMMEND INSPECTION OF THE AFFECTED AREA AND REROUTING AND OR REPLACEMENT OF BRAKE TUBE ASSY.

2006FA0000715	BEECH	CAPACITOR	EXPLODED
6/19/2006	B24R	TVA209	GLARE SHLD FWD

OPERATOR HAD DRAWN THE BATTERY CHARGE DOWN CONSIDERABLY TRYING TO START THE AIRCRAFT. PILOT REPORTED HEARING A POP AND REPORTED SMOKE ING CABIN. TAKEOFF WAS ABORTED AND AN EMERGENCY (GEAR UP) LANDING WAS MADE RESULTING IN SUBSTANTIAL DAMAGE TO AC. ON INSPECTION A CAPACITOR WAS FOUND SECURED TO THE REAR OF THE AUDIO CONTROL PANEL, THIS CAPACITOR WAS INSTALLED IN THE KN 4 CB WIRE. CAPACITOR HAD END BLOWN OUT AND ALL ITS CONTENTS SPLATTERED ON WINSHIELD AIR DUCT. LOW BATTERY CHARGE COUPLED WITH THE HIGH IN RUSH CURRENT DEMAND OF THE GEAR MOTOR OVER AND ABOVE THE NORMAL DEMANDS OF THE AVIONICS MOST LIKELY RESULTED IN AN OVER VOLTAGE CONDITION THAT CAUSED THE CAPACITOR TO EXPLODE. (K)

2006FA0000825	BEECH	TURNBUCKLE	MISMANUFACTURED
8/4/2006	B300	MS21251B6L	ELEVATOR

WHEN THE PART WAS MFG, THE SAFETY SLOT DID NOT LIME UP WITH THE END SLOTS. THIS DID NOT CAUSE A PROBLEM EITHER OPERATIONALLY, OR IN THE PROCESS OF SAFETYING THE TURNBUCKLE. (K)

CA060705008	BEECH	PWA	MOTOR	MALFUNCTIONED
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6/28/2006 B300 PT6A60A M710501 HYD SYSTEM
(CAN) DURING APPROACH LANDING GEAR WOULD NOT EXTEND NORMALLY AND 2 AMP CONTROL CIRCUIT BREAKER HAD OPENED. LANDING GEAR WAS LOWERED USING MANUAL SYSTEM AND UNEVENTFUL LANDING CARRIED OUT. MAINTENANCE FOUND 60 AMP LANDING GEAR CIRCUIT BREAKER OPEN (IN LH WING). REPLACED LANDING GEAR MOTOR (RIGHT POWER PACK) WITH OVERHAULED SPARE. RESET CIRCUIT BREAKERS AND GROUND TESTED LANDING GEAR OPERATIONS. EXPERIENCE HAS SHOWN THAT THESE MOTORS ARE PRONE TO PREMATURE FAILURE OR EXCESSIVE CURRENT DRAW.

[2006FA0000781](#) BEECH BRACKET UNSECURE
8/3/2006 C90 905000377 RUDDER

DURING THE INITIAL 200 HOUR PHASE 1 INSPECTION ON THIS AIRCRAFT, THE MOUNT BRACKETS THAT SECURE THE RUDDER SERVO BRIDLE CABLES AND PULLEYS WERE FOUND TO BE UNSECURED AT THE AFT ATTACH POINTS (FS 364.00) BOTH LT AND RDT BRACKETS WERE NOT ATTACHED. THE ASSOCIATED FUSELAGE (2 EACH BOLTS IAW SIDE WAS LOCATED IN THE AFT FUSELAGE COMPARTMENT. REVIEWED OF THE AIRFRAME LOGBOOKS DETERMINE NO DOCUMENTED WORK HAD BEEN PERFORMED IN THE AREA OR ON THE AFFECTED COMPONENTS. RAYTHEON FIELD TECHNICAL SUPPORT IS CONDUCTING AN INVESTIGATION.

[CA060704004](#) BEECH PWA TURBINE BLADES FRACTURED
5/15/2006 C90 PT6A21 TURBINE SECTION

(CAN) DURING CLIMB THE ENGINE EMITTED A LOUD NOISE AND WAS SHUT DOWN IN FLIGHT. THE AIRCRAFT DIVERTED FOR AN UNSCHEDULED LANDING WHICH RESULTED IN AIRFRAME DAMAGE. SUBSEQUENT INSPECTION REVEALED FRACTURED COMPRESSOR TURBINE BLADES. P&WC WILL MONITOR INVESTIGATION OF THE BLADES AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC# 20060704004)

[CA060627001](#) BEECH PWA SNAP RING MISSING
6/23/2006 C90 PT6A21 310427801 ENGINE BEARING

(CAN) WHILE TURNING PROPELLER DURING MAINTENANCE, A METAL-ON-METAL GRINDING NOISE WAS COMING FROM INSIDE L/H ENGINE EXHAUST DUCT. MAINTENANCE REACHED IN THRU EXHAUST STACK OPENING AND TAPPED EXHAUST DUCT "SKI SLOPE" AREA AND HEARD A RATTLE SOUND. ENGINE SPLIT, PT DISC REMOVED AND FOUND BEARING COVER SNAP RING MISSING. THE ENGINE HAS SB1389 COMPLIED WITH AT LAST ENGINE O/H. THIS SB CUTS SLOTS TO KEEP BEARING COVER FROM ROTATING. THE SLOTS IN THE PT SHAFT HOUSING WERE FOUND WORN, WHICH ALLOWS BEARING COVER TO SHIFT CAUSING WEAR IN SNAP RING WHICH RETAINS COVER. OVER THE PERIOD OF ENGINE OPERATION FROM O/H `TILL NOW WE SUSPECT THIS HAS CAUSED THE FAILURE OF THE SNAP RING. THIS IN TURN ALLOWED THE BEARING COVER TO COME IN CONTACT WITH THE POWER TURBINE DISC FACE CAUSING THE METAL ON METAL GRINDING NOISE. THE OTHER ENGINE WAS SPLIT FOR A PRECAUTIONARY LOOK. (BOTH ENGINES HAVE THE SAME O/H DATE & SAME FACILITY AND SB STATUS). THE SNAP RING ON THIS ENGINE WAS STILL RETAINING THE COVER AND SHOWED WEAR FROM COVER MOVEMENT. THE EXHAUST DUCTS WERE UPGRADED TO POST SB1430.

[CA060704007](#) BEECH PWA COMPRESSOR DAMAGED
6/11/2006 C90 PT6A34 ENGINE

(CAN) IN CRUISE, THE ENGINE WAS REPORTED TO EMIT A NOISE FOLLOWED BY A LOSS IN POWER. THE ENGINE WAS SHUT DOWN IN FLIGHT AND THE AIRCRAFT DIVERTED. POST FLIGHT INSPECTION REVEALED COMPRESSOR DAMAGE. P&WC WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC# 20060704007)

[CA060619002](#) BEECH PWA TAB CRACKED
6/12/2006 C90A PT6A21 5061001736 ELEVATOR TRIM

(CAN) CRACK DISCOVERED ON LOWER TAB SURFACE SKIN ADJACENT TO TAB HORN ATTACH RIB. SEE PICTURES ATTACHED. TRIM TAB ASSEMBLY P/N 50-610017-36 REPLACED WITH NEW. ELEVATOR AND TAB ASSEMBLY BALANCED (21.33 IN LBS TAIL HEAVY) AND REINSTALLED. INDEPENDENT CHECK ON R/H TAB AND ELEVATOR INSTALLATION CARRIED OUT - TAB TRAVELS 9.5 DEG NOSE DOWN AND 20.5 DEG NOSE UP. (TC# 20060619002)

[CA060619004](#) BEECH PWA CHANNEL CRACKED
6/15/2006 C90A PT6A21 1099100531516 COWL

(CAN) THE P/N 109-910053-15 AND -16 COWL SUPPORT CHANNELS WERE FOUND CRACKED IN THE LOWER FLANGE AREA, AND SUBSEQUENTLY REPAIRED. MANY OF THE REPAIRS HAVE ALSO FAILED. IT APPEARS THAT A SUBSTANTIAL AMOUNT OF COWLING WEIGHT RESTS ON THESE CHANNELS. THE REPEAT DAMAGED SUGGESTS THAT THIS AREA IS UNDER DESIGNED. SEVERAL OTHER OPERATOR C90A AIRCRAFT HAVE SHOWN SIMILAR FAULTS. (TC# 20060619004)

CA060626002	BEECH	PWA	MAGNETO	FAILED
6/20/2006	D18S	R985AN14B	SB9RU3	ENGINE

(CAN) INTERNAL FAILURE OF MAGNETO - VISUAL DAMAGE TO GEAR. THIS IS THE SECOND MAGNETO TO FAIL ON THIS OVERHAULED ENGINE (PURCHASED FROM TULSA AERO ENGINE). FIRST MAGNETO FAILED AT 30.3 HOURS FROM TSO. SECOND MAGNETO FAILED AT 36.2 HOURS TSO. S/N ON 1ST MAGNETO IS B33715. BOTH MAGNETOS APPEAR TO HAVE THE SAME INTERNAL PRT FAILURE. (TC# 20060626002)

CA060628007	BEECH	PWA	COVER	CORRODED
6/8/2006	D18S	R985AN14B	282992	PUSHRODS

(CAN) DURING ENGINE DIS-ASSEMBLY FOR CYLINDER REPAIRS, THE PUSHROD COVERS (TUBES) WERE FOUND TO BE HEAVILY DAMAGED UNDER THE CONTACT AREA OF THE SEAL PACKINGS. THESE PUSHROD COVERS HAD BEEN CHROME PLATED AT THE PREVIOUS OVERHAUL, AND THIS CHROME WAS FOUND TO HAVE BONDED TO THE PACKINGS AND HAD LIFTED AWAY FROM THE PARENT MATERIAL, CAUSING A SERIOUS POTENTIAL LEAK PATH AND/OR BREAKAGE POINT. I AM NOT AWARE OF ANY APPROVED PROCESS TO CHROME THESE TUBES. ALL TUBES WERE REPLACED WITH NEW. (TC# 20060628007)

2006FA0000793	BEECH	PWA	SPAR	CORRODED
6/28/2006	E18S	R985*		LT WING

THE DEFECT IS SEVERE CORROSION IN SPAR TUBE LT SIDE UPPER AT WING STA 90. PROBABLE CAUSE IS EXPOSURE TO MOISTURE OVER AN EXTENDED PERIOD OF TIME. RECOMMENDATION TO PREVENT RECURRENCE WOULD BE TO SEAL AND FILL WITH LIN SEED OIL. FURTHER RECOMMENDATION WOULD BE TO ADD A SPLICE TO SPARE SECTION TO PROVIDE STRUCTURE INTEGRITY. FURTHER RECOMMENDATION WOULD BE TO VISUAL INSPECT AND DYE PENETRANT INSPECT THIS AREA AT 25 HOUR INTERVALS UP TO 1ST 100 HOURS. IF NO FATIGUE OR CRACKS ARE NOTED THEN EXTEND VISUAL AND PENETRANT INSP TO EVERY 100 HOURS OR EACH YEAR WHICH EVER OCCURS FIRST. SEE ATTACHED XRAY, PENETRANT REPORT AND ADDITIONAL AREAS OF CONCERN FOR NOTED DEFECT. (K)

2006FA0000817	BEECH	CONT	MAGNETO	SEPARATED
8/16/2006	E55	IO520C	6310	LT ENGINE

LT ENGINE OB MAGNETO IMPULSE COUPLING FROZE UP, CAUSING MAGNETO HOUSING TO COMPLETELY SEPARATE FROM ENGINE.

2006FA0000791	BEECH	CONT	HINGE	CRACKED
7/8/2006	P35	IO470*	35660033	RUDDERVATOR

FAIRLEADS IN RUDDERVATOR TRIM TAB CNTRL CABLE SYS ARE CRACKING UPON INSTALLATION, POSSIBLY DURING FLIGHT. BUTTON-HEAD RIVETS ARE INTERFERING WITH INSTALLATION, CAUSING CRACKS TO FORM IN (TANG) OF FAIRLEADS. CABLE TENSION USED IN RUDDERVATOR TRIM TAB CABLES IS A FACTOR IN CRACKING. A LOOSENING OF RUDDERVATOR TRIM TAB CNTRL CABLES IS NECESSARY DURING INSTALL, FOLLOWED BY RIGGING TO VERIFY PROPER CABLE TENSION. A SMALL AMOUNT OF FILING ON BACK OF (TANG) OF FAIRLEAD FOR CLOSE TOLERANCE OF RIVETS THAT HOLD NUTPLATE FOR MOUNTING OF FAIRLEAD. EITHER A NEW MATERIAL NEEDS TO BE EXPLORED FOR MAKING FAIRLEADS MORE DURABLE, OR A MAINT NOTE NEEDS TO BE MADE ON PROPER INSTALLATION OF FAIRLEADS TO PREVENT CRACKING. (K)

CA060622005	BELL	LYC	CABLE	MELTED
6/21/2006	205A1	T5313B	206075265103	STARTER GEN

(CAN) DURING TURN AROUND CHECK BY THE AME, THE WIRES TO THE STARTER GENERATOR WERE FOUND TO BE SUBJECTED TO HEAT DAMAGE. THERE WAS NO INDICATION TO THE PILOT OF ANY DEFECT. FURTHER INVESTIGATION FOUND THE STARTER GENERATOR WIRE BUNDLE BELOW THE ENGINE DECK TO BE BURNT. CAUSE OF THE DEFECT IS NOT KNOWN AT THIS TIME.

CA060706002	BELL	LYC		BLADE	CRACKED
7/4/2006	205A1	T5313B		204011250001	MAIN ROTOR
(CAN) CRACK ON BOTH SIDES OF BLADE BOLT BORE. TRAVELLING IN CHORDWISE DIRECTION. THE LEADING EDGE CRACK TRAVELS RIGHT TO THE LEADING EDGE AND THE TRAILING EDGE CRACK IS APPROXIMATELY 6 INCHES LONG. IT APPEARS ALL DOUBLERS ON THE LOWER PART OF THE BLADE ARE CRACKED. (TC# 20060706002)					
CA060622003	BELL			SUPPORT	CORRODED
6/21/2006	206B			206031418001	TAIL BOOM
(CAN) FIN ATTACH POINTS WERE BEING INSPECTED AS PER ASB 206-06-107, CF2006-12. A LARGE CORROSION PIT WAS FOUND ON THE BOTTOM BOLT HOLE. THE SUPPORT INSTALLATION IS TO BE REPLACED AS PER THE ASB WITH A ONE-PIECE CASTING. (TC# 20060622003)					
CA060725006	BELL	ALLSN		GOVERNOR	INOPERATIVE
7/24/2006	206B	250C20		23076061	
(CAN) UNIT HAD ABOUT 25.0 HOURS THIS INSTALL. PILOT REPORTED THAT GOVERNOR WOULD BLEED OFF IN FLIGHT BY 4 TO 5 PERCENT THEN COME BACK TO NORMAL AFTER A FEW SECOND 10 TO 15 SECONDS. THEN IT WOULD BE FINE FOR SOME TIME. UPON REPORTING THIS THE AIRCRAFT WAS REMOVED FROM SERVICE AND A NEW GOVERNOR WAS INSTALLED. (TC NR 20060725006)					
2006FA0000716	BELL	ALLSN		EXTINGUISHER	EXPLODED
3/7/2006	206B	250C30		344	COCKPIT
A NEW 1.25 LB EXTINGUISHER MODEL 344, SN W-968052 CLASSIFICATION 2-B; C WAS INSTALLED IN THE AIRCRAFT ON MARCH 6, 2006. IT WAS REMOVED OVERNIGHT AND REINSTALLED AT 8:50 AM ON MARCH 7, 2006. AS THE HELICOPTER WAS STARTING, THE END EXPLODED OUT OF THE EXTINGUISHER, FIRING IT INTO THE CONSOLE. THE TEMPERATURE IN THE COCKPIT WAS APPROXIMATELY 36 DEGREES C AND THE EXTINGUISHER WAS IN THE SHADE. THE PRESSURE GAUGE WAS IN THE GREEN WHEN INSTALLED. (K)					
CA060731019	BELL	PWA		ENGINE	FLAMED OUT
7/22/2006	212	PT6T3B			
(CAN) FOLLOWING TAKE-OFF THE ENGINE EMITTED A NOISE AND FLAMED OUT. SUBSEQUENT GROUND INSPECTION REVEALED EXERNAL OIL LEAKAGE. MFG WILL MONITOR INVESTIGATION OF THE EVENT AND WILL ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20060731019).					
CA060731017	BELL	PWA		ENGINE	MAKING METAL
7/19/2006	212	PT6T3B			
(CAN) THE ENGINE EMITTED A NOISE IN FLIGHT ACCOMPANIED BY A RISE IN ITT TEMPERATURE. THE ENGINE WAS SHUTDOWN AND AN UNSCHEDULED LANDING CARRIED OUT. SUBSEQUENT INSPECTION REVEALED METAL DEBRIS IN THE EXHAUST. MFG WILL MONITOR THE INVESTIGATION OF THE EVENT AND WILL ADVISE OF ROOT CAUSE ONCE DETERMINED. (TC NR 20060731017)					
CA060627003	BELL	LYC		SPINDLE	BROKEN
6/25/2006	214B1	T5508D		214030606005	M/R GEARBOX
(CAN) TRANSMISSION SPINDLE ASSY P/N 214-040-606-005 S/N A12-01304 BROKE IN HALF DURING FLIGHT, AND THE PILOT HEARD A LOUD BANG AND BEGAN A EMERGENCY LANDING. APON SUCSESSFULL LANDING THE ENGINEER FOUND THE SPINDLE CRACKED IN HALF. DURING THE SHORT TIME IN THE AIR FOR LANDING THE MAIN DRIVESHAFT OVERTEMPED, ONE OF THE TAIL ROTOR DRIVESHAFTS SCRAPED HALF THE WAY THROUGH, AND THE FORWARD DRIVESHAFT COUPLING WAS REMOVED FOR INSPECTION. NEW SPINDLES, LEFT AND RIGHT, AND DRIVESHAFTS WERE INSTALLED AND AIRCRAFT WAS RETURNED TO SERVICE. THIS IS THE SECOND SPINDLE FALURE WE HAVE HAD THIS MONTH. THE TWO SPINDLES HAVE BEEN REQUESTED TO BE SENT TO BELL IN TEXAS BY BELL HELICOPTER AND WILL BE SENT OUT THIS WEEK. (TC# 20060627003)					
CA060712001	BELL	ALLSN	BELL	BEARING	SEPARATED
7/10/2006	407	250C47B		407310101101	MAIN ROTOR

(CAN) AIRCRAFT DEVELOPED A VERTICIAL VIBRATION, VISUAL INSPECTION REVEALED A SEPERATED SHEAR BEARING. (TC NR 20060712001)

CA060731010	BELL	PWA	ENGINE	MAKING METAL
7/5/2006	412	PT6T3		

(CAN) THE ENGINE WAS REPORTED TO LOSE POWER IN HOVER ACCOMPANIED BY A CHIP DETECTOR INDICATION. SUBSEQUENT INSPECTION REVEALED LOSS OF DRIVE TO THE ACCESSORY GEARBOX. MFG WILL MONITOR INVESTIGATION AND ADVISE OF ROOT CAUSE ONCE DETERMINED. (TC NR 20060731010)

2006FA0000759	BELL	LYC	LYC	CAPACITOR	FAILED
8/2/2006	47G4A	VO540B1B3		10357281L	MAGNETO

LOADED HELICOPTER SAFELY LANDED AFTER MAGNETO FAILURE. WIRE FROM CAPACITOR TO POINTS OPEN WITHIN INSULATION. NO VISIBLE DAMAGE, HOWEVER, MOVEMENT OF WIRE AGAINST CAPACITOR RESTORES CONTACT. YOU CAN FEEL IT. OPEN LOCATED WHERE WIRE ENTERS CAPACITOR. NO RECOMMENDATIONS. (K)

CA060702001	BNORM	LYC	WHEEL	CRACKED
6/13/2006	BN2A26	O540E4C5	16103000	MLG

(CAN) ON TAXI AFTER LDG, A VIBRATION WAS NOTED ORIGINATION ON THE LH LDG GEAR. IT WAS ORIGINALLY THOUGHT TO BE A WHEEL OUT OF BALANCE. ON INSPECTION, A CRACK WAS OBSERVED ON THE INNER WHEEL 1/2 OUTBOARD ASSEMBLY. THE CRACKED RIM WAS REPLACED WITH NEW CLEVELAND INNER WHEEL 1/2 PN 161-03000. (TC# 20060702001)

CA060801001	BOEING	RROYCE	TURBINE BLADES	DAMAGED
6/4/2006	717200	BR700715A130		ENGINE

(CAN) ON INITIAL TAKEOFF ROLL, ENGINE 13266ON A/C 477-1 SURGED AND EXPERIENCED A BRIEF OVER TEMPERATURE. MAX TGT WAS 903 DEG C FOR LESS THAN A FEW SECONDS. METAL IN TAIL PIPE WAS FOUND AS WELL AS A HOLE IN THE HP T CASE. ENGINE IS UNDER INVESTIGATION AT RRC. FURTHER DETAIL WILL BE SUBMITTED WHEN AVAILABLE. (TC NR 20060801001)

2006FA0000814	BOEING	PWA	FRAME	DAMAGED
1/11/2005	72721	JT8D1	65176626	BS 950 S9-10R

DURING SCHEDULE INSP REQUIRED BY AD, FOUND 8.5 WEB SEPARATION AT FUSELAGE BS 950, RT BETWEEN STRINGER S-9 AND S-10. PARTIAL FRAME REPLACEMENT BETWEEN S-9 AND S-12 WAS ACCOMPLISHED. INSTALLED KIT NR 65C35283-2. ALL WORK DONE IAW DWG, SRM, SB, AND AD. (K)

CA060714001	BOEING	PWA	LINE	LOOSE
7/5/2006	727223	JT8D15	793651	ENGINE OIL SYS

(CAN) CREW OBSERVED LOSS OF OIL QUANTITY NR 1 ENGINE. ENGINE SHUTDOWN PRIOR TO LOW OIL PRESSURE WARNING LIGHT ILLUMINATING. MAINTENANCE DETERMINED UPON THE JUST COMPLETED NR6 OIL BEARING REPLACEMENT THE FORWARD END OF THE PRESSURE TUBE WAS NOT SECURED AND LOCK WIRED CAUSING LEAK. LINE SECURED AND LEAK CHECK CARRIED OUT SERVICEABLE. (TC NR 20060714001)

CA060630003	BOEING		ACTUATOR	INOPERATIVE
6/29/2006	727225		1U109592	SLAT

(CAN) SHORTLY AFTER TAKEOFF, CREW NOTICED THAT THE #8 LEADING EDGE SLAT WAS NOT INDICATING THAT IT WAS RETRACTED. THE CREW REQUESTED FUEL DUMP AND TURN BACK TO DEPARTURE. MAINTENANCE TESTED THE SLAT AND FOUND THE INDICATION SWITCH IN THE ACTUATOR WAS AT FAULT. MAINTENANCE INSTALLED THE INLINE SLAT JUMPER P/N B2T-27-001-01 AND THE SYSTEM TESTED SERVICEABLE. THE AIRCRAFT WAS DISPATCHED WITHOUT FURTHER FAULTS. ACTUATOR TO BE REPLACED ON THE WEEKEND LAYOVER. (TC# 20060630003)

CA060626001	BOEING		RIB	CRACKED
6/21/2006	727225		66191042	WING

(CAN) DURING SCHEDULED INSPECTION, MAINTENANCE FOUND THE NR 1 LEADING EDGE SLAT ACTUATOR WING

RIB ATTACH POINT CRACKED. CRACKED MOUNT SUPPORT REPLACED.

CA060621004	BOEING	PWA	TRANSMITTER	MALFUNCTIONED
6/19/2006	727227	JT8D9A	9660022001	TE FLAPS

(CAN) AFTER DEPARTURE, CREW OBSERVED AN OUTBOARD FLAP ASYMMETRY INDICATION. A/C RETURNED TO BASE WHERE MAINTENANCE DISCOVERED A FAULTY POSITION TRANSMITTER. PART WAS REPLACED AND A/C RETURNED TO SERVICE.

CA060706004	BOEING	PWA	TRU	SMOKE
7/2/2006	727243	JT8D9A	1032573	NR 2

(CAN) WHILE AIRCRAFT WAITING ON THE GATE TO BOARD PASSENGERS FOR DEPARTURE, SMOKE WAS OBSERVED IN THE COCKPIT. CAUSE OF SMOKE WAS DETERMINED TO BE THE NR 2 TRANSFORMER RECTIFIER. UNIT REPLACED WITH NO FURTHER DEFECTS. (TC# 20060706004)

CA060619010	BOEING	CFMINT	WIRE HARNESS	DAMAGED
6/18/2006	737	CFM567B22	286A1062002	NR 2 ENGINE

(CAN) ON 18 JUNE 06 DURING TROUBLESHOOTING OF A RECURRING NR 2 SOURCE OFF LIGHT ILLUMINATED SNAG, WIRE CHAFFING CAUSING ARCING WAS FOUND BETWEEN FEEDER WIRE HARNESS PART NUMBER 286A1062-002 BOEING IPC 24-11-51-01A ITEM NR 35 AND THE COWLING HINGE PART NUMBER 314-2241-1 BOEING IPC 71-11-02-10 ITEM 76. INVESTIGATION ALSO REVEALED SOME MINOR CHAFFING ON THE WIRE SHIELDING OF THE NUMBER ONE ENGINE HARNESS IN THE SIMILAR AREA. A FLEET CAMPAIGN IS RAISED TO INSPECT THE FLEET AND CONFIRM IF THIS IS AN ISOLATED EVENT. BOEING HAS BEEN INFORMED AND WILL BE KEPT ADVISED OF ALL FINDINGS AS THEY COME TO LIGHT. THIS SDR WILL BE UPDATED WITH ADDITIONAL INFORMATION WHEN AVAILABLE.

TL9R200600001	BOEING		WHEEL	FRACTURED
8/9/2006	737*		26123111	MLG

OPERATOR STATES THAT SMOKE WAS REPORTED COMING FROM A WHEEL/BRAKE ASSEMBLY. TECHNICIANS DISCOVERED THAT THE HUB ON THE IB WHEEL HAD A COMPLETE CIRCUMFERENTIAL FRACTURE. THE COMPLETE WHEEL ASSEMBLY IS BEING SENT TO MFG FOR EVALUATION.

TL9R200600002	BOEING		WHEEL	FRACTURED
8/9/2006	737*		26123111	ZONE 700

OPERATOR STATES THAT SMOKE WAS REPORTED COMING FROM A WHEEL/BRAKE ASSEMBLY. TECHNICIANS DISCOVERED THAT THE HUB ON THE IB WHEEL HAD A COMPLETE CIRCUMFERENTIAL FRACTURE. THE COMPLETE WHEEL ASSEMBLY IS BEING SENT TO HONEYWELL IN SOUTH BEND, INDIANA FOR EVALUATION.

CA060725002	BOEING	PWA	FUEL CONTROL	MALFUNCTIONED
7/21/2006	737242C	JT8D9A	7436024	ENGINE

(CAN) ENROUTE THE CREW ELECTED TO RETURN TO POINT OF DEPARTURE DUE TO A SUSPECTED ENGINE VIBRATION. AFTER ARRIVING, THE MAINTENANCE PERSONNEL INITIALLY REPLACED THE FORWARD ENGINE MOUNT ISOLATORS WITH NO APPARENT REMEDY OF THE PROBLEM. THE FCU WAS REPLACED AND THE ENGINE RUN UP WITH NO FURTHER VIBRATION INDICATION. THE AIRCRAFT WAS RETURNED TO SERVICE WITH NO FURTHER PROBLEMS. (TC NR 20060725002)

2006FA0000733	BOEING	CFMINT	TUBE	DAMAGED
6/7/2006	737300	CFM563B2	9387M34G01	FUEL DRAIN

(REF: MDR NR MDR002/06) STRIP OF CORE ASSEMBLY NOTED FRETAGE DAMAGE TO 3 LOCATIONS ON THE NR 3 POSITION FUEL NOZZLE DRAIN TUBE. THE DEEPEST WAS TO A DEPTH OF .016 INCH. THE ROUTE CAUSE OF THE FRETAGE HAD BEEN DETERMINED AS CONTACT WITH RIVETS ON THE DEFLECTOR ASSY. THE MODULE (41X24410) WAS REFURBISHED IAW BA REFURBISH SPECIFICATION AND IAW 72-41-XX AT LAST SHOP VISIT. (K)

PIDR2006013	BOEING		STRINGER	DAMAGED
8/26/2006	737330			FUSELAGE

STRINGER 19 LT AT BS 967 HAS TWO REPAIRS NOT PER THE SRM. REPLACED SECTION OF STRINGER PER SRM 53-00-03 FIG 201, REPAIR 1 AND 51-40-2.

PIDR2006012	BOEING		SKIN	DENTED
8/26/2006	737330			FUSELAGE

FUSELAGE SKIN DENTED FROM BS 867 TO BS 947 BETWEEN STR 21 RT AND 22 RT. REPAIRED PER EA 53-220.

PIDR2006014	BOEING		STRUCTURE	DAMAGED
8/24/2006	737330			FUSELAGE

DOUBLER UNDER THE L-2 DOOR AT BS 975 HAS NO DOCUMENTATION. REPLACED EXISTING DOUBLER PER EA 53-221.

PIDR2006011	BOEING		SKIN	CRACKED
8/24/2006	737330			L/E SLAT

NUMBER THREE SLAT LOWER SKIN IS CRACKED AT THE ACTUATOR. REPAIRED PER SRM 57-43-01.

CA060706001	BOEING	CFMINT	LINE	CRACKED
7/3/2006	737522	CFM563C1	65C268091131	HYDRAULIC SYS

(CAN) #1 ENGINE HYDRAULIC PUMP CONTROL LIGHT ILLUMINATED IN FLIGHT ON CLIMB FROM LA GUARDIA. AIRCRAFT CONTINUED THE FLIGHT. UPON INVESTIGATION IT WAS FOUND THAT A HYDRAULIC LINE FOR THE "A" SYSTEM PRESSURE MODULE WAS CRACKED. LINE REPLACED AND FLUID LEVEL SERVICED. AIRCRAFT RELEASED FOR SERVICE. TIMES: 37201:46 CYCLES: 22712 (TC# 20060706001)

CA060620003	BOEING	CFMINT	STATIC INVERTER	FAILED
6/20/2006	7377CG	CFM567B22	100201022	E & E BAY

(CAN) ON THE 20 JUNE 06 WHILE CONDUCTING A SCHEDULED PHASE 3 CHECK. MAINTENANCE FOUND ELEC LIGHT ILLUMINATED ON THE OVERHEAD PANEL. DURING THE TROUBLESHOOTING AN ODOR OF SMOKE WAS NOTICED IN THE E & E BAY. A BITE CHECK WAS CARRIED OUT AND FOUND THE STATIC INVERTER PN 1-002-0102-2090 SN CJ003551 AT FAULT. THE UNIT WAS REPLACED IAW AMM 24-34-21 AND TESTED SERVICEABLE. PREVIOUS HISTORY: ON 03 MAY 06 THE UNIT WAS SENT OUT ON REPAIR ORDER 64509 TO GET ALERT SB 737-24-1165 CARRIED OUT. THIS MODIFIES THE UNIT FROM A S282T004-10 TO A 1-002-0102-2090. THIS SERVICE BULLETIN GIVES INSTRUCTIONS TO REPLACE THE STATIC INVERTER WITH A NEW OR CHANGED STATIC INVERTER. BOEING AND FEDERAL AVIATION ADMINISTRATION (FAA) RECEIVED REPORTS THAT THE STATIC INVERTERS CAN BECOME TOO HOT ON MANY BOEING AIRPLANES. THIS CHANGE WILL PREVENT A POSSIBLE UNWANTED SMOKE AND FIRE CONDITIONS CAUSED BY A RESISTOR IN THE STATIC INVERTER. WHEN THE UNIT WAS RETURNED FROM THE REPAIR SHOP, IT WAS INSTALLED ON 04 JUNE 06. IT LASTED 149 FLIGHT HOURS BEFORE CAUSING THE ELEC LIGHT TO ILLUMINATE AND THE ODOR OR SMOKE IN THE E & E BAY. THE SUSPECT UNIT WILL BE SENT OUT FOR REPAIR AND A DETAILED REPORT ON ALL THE FINDINGS WILL BE REQUESTED FROM AVIONIC INSTRUMENTS INC. BOEING HAS BEEN INFORMED PER BOEING MSG # 1-204043130-1 AND WILL BE KEPT ADVISED OF ALL FINDINGS AS THEY COME TO LIGHT. (TC# 20060620003)

2006FA0000728	BOEING		HOSE	MISINSTALLED
7/3/2006	7572Q8		AE70577756	HYDRAULIC SYSTEM

NR 1 ENGINE HYDRAULIC PUMP SUCTION/SUPPLY DISCONNECT. DURING THE REPLACEMENT OF NR 1, ENGINE EDP DUE TO NO OFFLOAD, IT NOTED THAT THE SUPPLY DISCONNECT WAS FITTED WITH THE PUMP UNION AT THE WRONG END OF THE DISCONNECT, AND ON REMOVAL IT WAS NOTED THAT THE INTERVAL S/OFF MECHANISM HAD BEEN REMOVED. THE VALVE, UNION AND SEALS WERE SUBSEQUENTLY REPLACED. (K)

2006FA0000768	BOEING		ALTIMETER	INOPERATIVE
8/13/2006	777			

CAPTAIN ALTIMETER INOPERATIVE.

PNC2006004	BOMBDR		TIRE	BULGED
8/14/2006	BD1001A10		269K431	ZONE 700

BULGE IN TIRE ON SIDEWALL THAT EXTENDS ONTO THE TREAD.

PNC20064	BOMBDR		TIRE	BULGED
8/14/2006	BD1001A10		269K431	

BULGE IN TIRE ON SIDEWALL THAT EXTENDS ONTO THE TREAD.

CA060421022	BOMBDR	PWC	TIRE	DAMAGED
4/13/2006	DHC8400	PW150A	PNDR0231T	MLG

(CAN) FOUND DURING DAILY CHECK 1 MAIN WHEEL WITH TIRE BEAD WIRE MIGRATION. LOOKS LIKE LOCKING WIRE PROTRUDING FROM TIRE SIDE WALL. WHEEL ASSY HAS BEEN REMOVED. NO TIRE PRESSURE WAS LOST. INVESTIGATION SHOWN THAT THE MIGRATING BEADWIRE HAS DAMAGED THE WHEEL HUB, THE DAMAGED WAS SO DEEP THAT WE HAD TO SCRAP THE AFT WHEEL. DUNLOP IS AWARE OF THIS MIGRATING BEADWIRE ISSUE CONDITION AND HAS SEEN THIS WIRE COME OUT OF THE TIRE IN THE PAST (SIMILAR TO THIS CONDITION AND IT SEEMS TO BE AN INCREASING PROBLEM).

CA060731014	BOMBDR	PWC	METERING UNIT	MALFUNCTIONED
7/14/2006	DHC8400	PW150A	312241908	ENGINE

(CAN) DURING CRUISE, THE AIRCRAFT YAWED ACCOMPANIED BY A LOSS IN ENGINE TORQUE. THE ENGINE WAS SHUTDOWN IN FLIGHT. THE FUEL METERING UNIT WAS SUBSEQUENTLY DETERMINED TO BE UNSERVICEABLE AND WAS REPLACED. (TC NR 20060731014)

CA060704017	BOMBDR	PWC	PRESSURE SWITCH FAILED	
6/25/2006	DHC8402	PW150A	312244801	OIL SYS

(CAN) IN FLIGHT, THE CREW OBSERVED A LOSS OF ENGINE OIL PRESSURE INDICATION AND THE ENGINE WAS SHUTDOWN. THE ENGINE OIL PRESSURE SWITCH WAS SUBSEQUENTLY REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. (TC# 20060704017)

2006FA0000757	CESSNA	CONT	ELT	INOPERATIVE
8/4/2006	150K	O200*	AK450	CABIN

THIS IS ONE OF THE ELT'S THAT USES DATED FLASHLIGHT BATTERIES. THE BATTERIES ARE STILL IN DATE BUT OFTEN WE FIND THAT THE BATTERIES ARE LEAKING OR DEAD BEFORE THE EXPIRATION DATE. RECOMMEND THAT THE BATTERIES ARE CHANGED AT EACH ANNUAL TO CORRECT THIS PROBLEM. BATTERIES ARE CHEAP ENOUGH. (K)

CA060707005	CESSNA	CONT	FITTING	CORRODED
7/4/2006	150M	O200A	04310093	VERTICAL FIN

(CAN) DURING 100 HOUR INSPECTION AME FOUND WHAT APPEARED TO BE A CRACK IN THE RADIUS OF THE LT FLANGE OF THE LT FITTING ATTACHING THE VERTICAL FIN TO THE HORIZONTAL STABILIZER. WHEN THE PART WAS REMOVED FROM THE AIRCRAFT THE LT FLANGE WAS FOUND TO BE BENT TOWARDS THE RT FLANGE, AND WHEN MOVED AWAY FROM THE RT SIDE, IT BROKE FROM THE BASE OF THE FITTING REVEALING INTERGRANULAR CORROSION. (TC NR 20060707005)

CA060726006	CESSNA	LYC	PRESTOLITE	DRIVE ASSY	BROKEN
7/26/2006	152	O235L2C		EBB124A	STARTER

(CAN) PILOT TRIED TO START ENGINE BUT THE STARTER WOULD NOT ENGAGE. AIRCRAFT BROUGHT INTO HANGER AND STARTER WAS REMOVED FROM ENGINE. IT WAS DISCOVERED THAT THE TEETH ON THE BENDIX DRIVE THAT ENGAGE THE RING GEAR HAD SHEARED OFF. (TC NR 20060726006)

CA060717002	CESSNA	CONT		HEATER	CRACKED
7/10/2006	172	O300A		05501579	MUFFLER

(CAN) LT MUFFLER CRACKING, BURNING THROUGH. RT MUFFLER CRACKED. STACK CRACKED. NOTE: CRACKS NOT VISIBLE WITH ATTACHMENTS (SCROUNDS) ON. MUFFLER HEATER - LT P/N 0550157-9, RT P/N 0550157-32 (TC NR 20060717002)

2006FA0000747	CESSNA	LYC		FUEL LINE	CHAFED
7/17/2006	172K	O320*		050011842	ENGINE

DURING AN ANNUAL INSPECTION, BOTH ENGINE FUEL SUPPLY LINES WERE FOUND TO BE CHAFFING THE FWD BULKHEAD OF THE LANDING GEAR BOX STRUCTURE AT BS 56.70. MDG HAS INSTALLED A THIN PLASTIC SLEEVE OVER THE LINES IN THE AREA OF THE CHAFE BUT, AFTER 2564 HOURS, THE SLEEVE IS CHAFFED TO THE EXTENT THAT THE TUBES WILL NO LONGER BE PROTECTED. FEEL THAT THE TUBE INTEGRITY WOULD BE COMPROMISED IN THE FUTURE. ADDITIONAL CHAFE PROTECTION AND LINE SECURING IS REQUIRED. ILLUSTRATION SHOWS A HEAVIER CHAFE BARRIER INSTALLED ON THE TUBES IN THE AREA NOTED ABOVE. SUGGEST BONDING A LENGTH OF MIL .3750 INCH ID TUBING OVER THE MFG LINE IN THE CHAFE ARREARS. ADDITIONAL ADJUSTMENT OF THE EXISTING LINE CLAMPS MAY ALSO BE REQUIRED.

CA060711002	CESSNA	LYC	FORD	WIRE	BURNED
7/10/2006	172M	O320E2D		D4FF10316GA	VOLT REGULATOR

(CAN) WHILE ON A LOCAL VFR FLIGHT OVER, THE PILOT SMELLED FUMES AND SAW SMOKE COMING FROM BEHIND THE INSTRUMENT PANEL. THE PILOT ALSO NOTICED THAT THE HIGH VOLTAGE WARNING LIGHT WAS ON AND THE AMMETER SHOWING A DISCHARGE. THE PILOT REPORTED THE SITUATION TO THE FSS OPERATOR AND SUBSEQUENTLY TURNED OFF THE MASTER SWITCH, LANDING WITHOUT FURTHER INCIDENT. MAINTENANCE PERSONNEL DISCOVERED A BURNED WIRE FROM THE VOLTAGE REGULATOR TO THE HIGH VOLTAGE LIGHT. PARTS OF THE REGULATOR CIRCUIT BOARD SHOWED HEAT DAMAGE. THE VOLTAGE REGULATOR, HIGH VOLTAGE SENSOR HIGH VOLTAGE LIGHT AND BURNED WIRE WERE REPLACED. AIRCRAFT WAS RETURNED TO SERVICE WITHOUT FURTHER INCIDENT. (TC NR 20060711002)

CA060711008	CESSNA	LYC		BULKHEAD	CRACKED
7/10/2006	172N	O320D2J		05503214	SPINNER

(CAN) THE SPINNER FORWARD BULKHEAD WAS INSTALLED NEW ONE YEAR EARLIER, WITH THE NEW HEAVIER MATERIAL SPINNER IAW SNL03-9 (ALTERNATE PROPELLER SPINNER INSTALATION) THE FWD BULKHEAD HAS CRACKS OF APPROXIMATLY 1.5 INCHES EACH COMING ACROSS EACH PROP BOLT HOLE AT THE TOP OF AND JUST OUTSIDE OF THE BOLT WASHER CONTACT AREA, BUT NOT DIRECTLY INTERFACING WITH THE HOLE ITSELF. (TC NR 20060711008)

2006FA0000785	CESSNA	LYC		MOTOR	SHORTED
8/4/2006	172P	O320*			STARTER

LIGHT WEIGHT STARTER MOTOR FAILED (SHORTED INTERNALLY) AFTER 1.5 YEARS SERVICE. (K)

CA060711005	CESSNA	LYC	LYC	CYLINDER HEAD	CRACKED
7/6/2006	172P	O320D2J		SLC36005F	ENGINE

(CAN) THIS THE 3RD CYLINDER IN 100 HOURS IS CRACKED THE SAME AS THE PREVIOUS 2. CRACKED APPROXIMATLY 30 PERCENT AROUND THE CYLINDER HEAD. CRACKED FROM THE OUTER MOST EXHAUST FLANGE STUD ROUGHLY 2 OR 3 INCHES TO THE EXHAUST VALVE SEAT. THEN CRACK CONTINUING FROM 180 DEGREE ACROSS THE EXHAUST VALVE SEAT TO THE SPARK PLUG HOLE (TC NR 20060711005).

CA060711006	CESSNA	LYC	LYC	CYLINDER HEAD	CRACKED
7/6/2006	172P	O320D2J		SLC36005F	ENGINE

(CAN) THIS IS CYL NR 4 IN 100HRS. THE PREVIOUS 3 CYLINDERS EXHIBITED THE SAME TYPE AND LOCAL OF CRACKS. THIS CYLINDER HAS A ONE AND A HALF INCH LONG CRACK AT THE OUTER MOST EXHAUST FLANGE STUD MOVING TOWARDS THE EXHAUST VALVE SEAT. ALSO A CRACK BEGINNING AT THE EXHAUST VALVE SEAT AND MOVING TOWARDS THE SPARK PLUG HOLE (TC NR 20060711006)

CA060711007	CESSNA	LYC	CESSNA	BULKHEAD	CRACKED
7/7/2006	172P	O320D2J		05503214	SPINNER

(CAN) THIS FORWARD SPINNER BULKHEAD HAS BEEN IN SERVICE WITH THE ORIGINAL (THIN MATERIAL) SPINNER. THE BULKHEAD HAS CRACKS TO 1.25 INCHES ACROSS EACH/ALL 6 PROP BOLD HOLES. (TC NR 20060711007)

CA060630004	CESSNA	LYC		SEAT	CRACKED
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6/30/2006	172P	O320D2J	05141823	COCKPIT
(CAN) INSPECTION OF SEAT FRAME ASS`Y DURING SCHEDULED MAINTENANCE REVEALED A CRACKED SUPPORT LEG. SAFETY OF SEAT ASS`Y MAY BE COMPROMISED DUE TO THE WEAKENED SUPPORT LEG. (TC# 20060630004)				
CA060630002	CESSNA	LYC	STOP	CRACKED
6/29/2006	172P	O320D2J	05112421	SEAT TRACK
(CAN) DURING A ROUTINE SEAT REMOVAL PROCEDURE IT WAS NOTICED THAT THE SEAT STOP WAS BROKEN APART AROUND THE FASTENING SCREW HOLE. THERE IS NOT MUCH MATERIAL BETWEEN THE SCREW HOLE AND THE EDGE OF THE STOP WHICH COULD HAVE LED TO A FAILURE OF THIS AFT POSITIONED SEAT STOP. (TC# 20060630002)				
2006FA0000786	CESSNA	LYC	DRIVE GEAR	BROKEN
8/4/2006	172R	IO360B1E	85034007	STARTER
BENDIX DRIVE GEAR BROKE INTO PIECES AFTER 1 YEAR OF SERVICE. (K)				
2006FA0000796	CESSNA		HYDRAULIC LINE	FAILED
7/21/2006	172RG		S217840105	HYDRAULIC SYS
NOSE GEAR HYDRAULIC ACTUATOR HOSE BLEW OUT OF CRIMP IN FLIGHT CAUSING LOSS OF ALL HYDRAULIC FLUID AND GEAR WOULD NOT GO UP OR DOWN, EVEN WITH HAND PUMP. THE MFG HOSE WAS NOT THE AEROQUIP TYPE WITH STEEL BRADING OR THE SCREW ON ENDS. RECOMMEND THE AEROQUIP 303 HIGH PRESSURE HOSE COULD NOT FIND A TT ON HOSE OR A DATE CODE. (K)				
2006FA0000792	CESSNA	LYC	BUNGEE CYLINDER	BROKEN
7/28/2006	172RG	O360*	24670036	NLG STEERING
THE NOSE GEAR STEERING BUNGEE PN 2467003-6, BROKE WHILE TAXIING IN AFTER LANDING. THE AIRCRAFT STOPPED WITHOUT INCIDENT. THE BREAK OCCURRED IN THE THEADED AREA OF THE SHAFT THAT CONTAINS THE CHAIN SPROCKET. NOTE THAT THIS SHAFT HAS THREADS ON BOTH ENDS. THE END THAT BROKE HAS THE SMALLER THREADS (.3125 INCHES) NAD IS ON THE OPPOSITE END FROM THE SPROCKET. THIS FAILURE IS SIGNIFICANT BECAUSE WHEN THE BUNGEE BREAKS THE BODY, WILL PIVOT DOWN AROUND THE ATTACHMENT POINT AND FOUL THE ELEVATOR CONTROLS. BUNGEE WAS REPLACED AT TACH 532 AS A RESULT OF THE AD. THE AC HAS 8070 HRS ON IT SO THE REPLACEMENT PART HAS 7538 HOURS ON IT. (K)				
2006FA0000750	CESSNA	LYC	HOUSING	CRACKED
6/4/2006	172RG	O360F1A6	98820152	ACTUATOR
RT MAINT GEAR ACTUATOR HOUSING CRACKED THROUGH THE BOLT HOLES OF CASTING , CAUSING RACK TO DISENGAGE FROM PIVOT GEAR.				
2006FA0000784	CESSNA		ELT	FAILED
8/14/2006	172S		300011	CABIN
ELT REMOTE SWITCH FOUND TO BE INOP. ELT SENT TO SHOP FOR REPAIR, SYSTEM OPS CKD NORMAL AFTER REPAIR. THIS IS THE 4 OCCURRENCE OF THIS ON THIS TYPE AIRCRAFT IN THE LAST 3 MONTHS. ALL REPAIRS ARE THE SAME REPLACE FUSE F1.				
2006FA0000828	CESSNA		CONTROL CABLE	FRAYED
7/27/2006	172S		05010105365	RT AILERON
DURING AN ANNUAL INSPECTION OF THE AIRFRAME IT WAS FOUND THAT THE RT AILERON CROSSOVER CABLE WAS FRAYED AT THE FAIRLEAD ASSY. THE PROBABLE CAUSE IS THE CABLE RUBBING AGAINST THE FAIRLEAD ASSY. A POSSIBLE SOLUTION IS TO MAKE THE FAIRLEAD ASSY OUT OF A SOFTER MATERIAL. (K)				
2006FA0000826	CESSNA	LYC	CONTROL CABLE	FRAYED
7/27/2006	172S	IO360A1A	05010105364	LT AILERON
DURING AN ANNUAL INSPECTION OF THE AIRFRAME IT WAS FOUND THAT THE LT AILERON CROSSOVER CABLE WAS FRAYED AT THE ABRASSION STRIP. THE PROBABLE CAUSE IS THE CABLE RUBBING AGAINST THE				

ABBRASION BLOCK. A POSSIBLE SOLUTION IS TO MAKE THE ABBRASION BLOCK OUT OF A SOFTER MATERIAL. (K)

2006FA0000827	CESSNA	LYC	CONTROL CABLE	UNSERVICEABLE
7/27/2006	172S	IO360A1A	05010105362	RT WING

DURING AN ANNUAL INSPECTION OF THE AIRFRAME IT WAS FOUND THAT THE RT AILERON DIRECT CABLE WAS FRAYED AT THE FAIRLEAD ASSEMBLY. THE PROBABLE CAUSE IS THE CABLE RUBBING AGAINST THE FAIRLEAD ASSY. A POSSIBLE SOLUTION IS TO MAKE THE FAIRLEAD ASSY OUT OF A SOFTER MATERIAL. (K)

25869	CESSNA	LYC	MCAULY	STRUCTURE	CRACKED
7/25/2006	172S	IO360A1A			PILOT BORE

PROPELLER PILOT BORE FOUND CRACKED BY PENETRANT INSPECTION BEING PERFORMED DURING OVERHAUL

2006FA0000725	CESSNA	LYC	CONTROL CABLE	FRAYED
7/11/2006	172S	IO360L2A	0510105365	AILERON

DURING AN ANNUAL INSPECTION OF THE RT WING, THE AILERON CROSSOVER CABLE WAS FOUND TO BE FRAYED AT THE WEAR BLOCK. PROBABLE CAUSE IS THAT THE WEAR BLOCK IS CAUSING FRICTION AND WEAR ON THE CABLE. A RECOMMENDED SOLUTION IS TO REMOVE THE WEAR BLOCK. (K)

2006FA0000761	CESSNA	LYC	CIRCUIT BREAKER	MALFUNCTIONED
8/2/2006	177RG	IO360A1B6	110230102	MLG

LANDING GEAR CIRCUIT BREAKER MALFUNCTIONED. AIRCRAFT WAS JACKED AND GEAR CYCLED SEVERAL TIMES. COULD NOT GET THE CIRCUIT BREAKER TO MALFUNCTION ON JACKS. RECOMMEND THAT CIRCUIT BREAKER BE REPLACED WITH NEW. (K)

2006FA0000816	CESSNA		O-RING	SPLIT
8/15/2006	182D			FUEL CAP

THE RT FUEL TANK CAP O-RING SPLIT AND FUEL SIPHONED OUT OF THE RT TANK DURING FLIGHT.

2006FA0000783	CESSNA		SEAT	BROKEN
7/25/2006	182R		07140593	COCKPIT

INSPECTED SEATS IAW AD. FOUND PILOTS SEAT BOTTOM ASSY BROKEN AT LT FWD ATTACH POINT AND RT FWD CRACKED. (K)

CA060629008	CESSNA	JACOBP	ACK	CONTACT	DEFECTIVE
6/20/2006	195A	R755B2			ELT BATTERY

(CAN) THE GOLD PLATING ON THE BATTERY CONTACT IS FLAKING OFF. THE EXPOSED METAL IS NON-CONDUCTIVE AND THEREFORE THE UNIT NO LONGER FUNCTIONS. (TC# 20060629008)

CA060704018	CESSNA	PWA	ADAPTER	FRACTURED
6/27/2006	208	PT6A114	3007389	OIL SYS

(CAN) AT TOP OF CLIMB, ENGINE TORQUE WAS SEEN TO FLUCTUATE FOLLOWED BY AN ENGINE LOW OIL PRESSURE WARNING. THE ENGINE WAS SHUT DOWN IN FLIGHT AND A DEAD-STICK LANDING ACCOMPLISHED. SUBSEQUENT INSPECTION REVEALED EXTERNAL OIL LEAKAGE ASSOCIATED WITH A FRACTURED REDUCTION GEARBOX PRESSURE OIL ADAPTER. P&WC WILL INVESTIGATE THE EVENT AND WILL ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC# 20060704018)

CA060731016	CESSNA	PWA	TURBINE BLADES	FRACTURED
5/25/2006	208B	PT6A114A		ENGINE

(CAN) DURING CRUISE THE ENGINE EMITTED A NOISE ACCOMPANIED BY AN UNCOMMANDED REDUCTION IN POWER. THE AIRCRAFT DIVERTED TO POINT OF DEPARTURE. SUBSEQUENT INSPECTION REVEALED A FRACTURED POWER TURBINE BLADE. MFG WILL INVESTIGATE THE EVENT AND WILL ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20060731016)

2006FA0000760	CESSNA	CONT	SNAP RING	FAILED
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8/2/2006 210M IO520* PROP BLADES

2 SNAP RINGS FAILED ON PROPELLAR BLADES. (K)

[2006FA0000753](#) CESSNA TORQUE TUBE DAMAGED

7/18/2006 310Q 081301316 RUDDER

RT RUDDER TORQUE TUBE RIPPED AT RUDDER CABLE BRACKET. INSPECT THIS AREA NEXT TO WELD. (K)

[2006FA0000719](#) CESSNA CONT EXHAUST VALVE STUCK

6/1/2006 337B IO360CONT NR 6 CYLINDER

ENGINE RUNNING ROUGH. COLD COMPRESSION CHECK SHOWED -0- COMPRESSION ON NR 6 CYLINDER. AIR LEAKING PAST EXHAUST VALVE. DISASSEMBLY REVEALED EXHAUST VALVE STUCK IN OPEN POSITION. EVIDENCE OF PISTON STICKING EXHAUST VALVE. THIS IS THE SECOND OCCURANCE OF THIS CONDITION ON THIS ENGINE. (K)

[2006FA0000720](#) CESSNA CONT EXHAUST VALVE STUCK

5/15/2006 337B IO360CONT NR 4

ENGINE RUNNING ROUGH. PERFORMED COLD COMPRESSION CHECK. COMPRESSION WAS ZERO. AIR LOOKING PAST EXHAUST VALVE. REMOVED ROCKER ARM COVER, NOTED EXHAUST VALVE STICKING IN OPEN POSITION. REMOVED CYLINDER. PISTON HAD STRUCK EXHAUST VALVE. REPLACED CYLINDER AND PISTON. PISTON WAS DIFFERENT THAN ORIGINAL PN WAS THE SAME, TOP OF PISTON WAS CONCAVE WHERE AS ORIGINAL PISTON WAS FLAT. (K)

[2006FA0000780](#) CESSNA CESSNA BOLT SHEARED

8/8/2006 340A NAS464P426 BELL CRANK

FAILURE OF THE PIVOT BOLT ON THE RT MLG DOWNLOCK BELLCRANK (BOOMERANG) APPEARS TO HAVE RESULTED FROM SHEAR FORCES DURING LANDING. FORCES OF THIS NATURE EXCEEDED DESIGN LIMITS OF THIS SEGMENT OF THE LANDING GEAR SYSTEM. THE EXACT CAUSE COULD NOT BE DETERMINED BUT MAY HAVE RESULTED FROM IMPROPER RIGGING TO THE SYSTEM DURING RECENT MAINTENANCE OF THE LANDING GEAR COMPONENTS.

[2006FA0000821](#) CESSNA CONT HINGE CORRODED

7/26/2006 421C GTSIO520* DOOR

TO FIND USED SERVICEABLE HINGES AND HINGE SUPPORT FITTINGS FROM AC SALVAGE COMPANIES, EVERY HINGE THAT WAS RECEIVED, SAME TYPE OF CORROSION, BEARING AND BUSHINGS WERE RUSTED TO HINGE BOLT. BUSHINGS AND BEARING ARE PRESS FIT INTO HINGE SO AS TO ALLOW HINGE ASSY TO ROTATE ON BOLT. WHEN BOLT FREEZES TO BEARING AND BUSHINGS, BOLT THEN ROTATES IN SOFT ALUMINUM SUPPORT FITTING WHICH ALLOWS HOLES IN FITTING TO ELONGATE. IT WOULD APPEAR THAT THIS IS A CHRONIC PROBLEM. AS NOTED IN ORIGINAL MD PROBLEM SEEMS TO BE RELATED TO FACT THAT SUPPORT FITTINGS CAN RETAIN WATER. THERE IS NO SPECIFIC INSPECTION REQUIREMENT TO CHECK THESE HINGES FOR CORROSION AND SO CONDITION REMAINS UNDETECTED UNTIL BOLTS HAVE TO BE REMOVED.

[2006FA0000820](#) CESSNA TUBE FAILED

7/6/2006 425 511700712 HYD SYSTEM

TUBE FAILED ON LOWER ATTACHMENT, ALL FLUID LOST, CAUSE UNKNOWN. (K)

[2006FA0000721](#) CESSNA SEAT CRACKED

6/19/2006 501 5514551169 CABIN

UPPER CHAIR BASE ASSEMBLY CRACKED AT CHAIR BACK ATTACH POINTS. ALSO, PREVIOUS INAPPROPRIATE REPAIR. CHAIR WAS REPAIRED IAW STC, STRUCTURAL SEAT REPAIR. (K)

[2006FA0000867](#) CESSNA WILINT SUPPORT BRACKET CRACKED

8/18/2006 525 FJ44 635A050 ATTENUATOR

FOUND THE LT AND RT ATTENUATOR ACTUATOR LOWER SUPPORT BRACKETS TO BE CRACKED. THESE BRACKETS HAVE BEEN REPLACED BY ACCOMPLISHMENT OF SB AT PRIOR DATE. WE HAVE REPEATEDLY FOUND THESE BRACKETS. CRACKED AGAIN AND AGAIN AFTER THEY ARE REPLACED BY THE SB. CUSTOMERS OF HAVEING CHANGE THE BRACKETS OVER AND OVER WHEN THE SB WAS SUPPOSED TO BE ADDRESSING THE PROBLEM WITH NEWER, IMPROVED BRACKETS. RECOMMEND THE OEM STRENGTHEN THE REPLACEMENT BRACKETS. (K)

2006FA0000859	CESSNA	WILINT	SERVO	MALFUNCTIONED
8/17/2006	525	FJ44		RUDDER TRIM

TECH WAS IN TAILCONE AREA AND NOTICED METAL SHAVINGS UNDER RUDDER SERVO ASSY. INVESTIGATION REVEALED THAT THE SERVO DRUM CABLE WAS CUTTING THROUGH THE DRUM GROOVES ARE TO SEVERE SIDE LOADING ON THE CABLE. SUSPECT THAT THE SEVERE SIDE LOAD CONDITION RESULTED FROM IMPROPER PLACEMENT OF SERVO CABLE TO MAIN SYSTEM CABLE CLAMP. ROTATION OF THE CLAMP ON THE MAIN RUDDER SYSTEM CABLE INDUCED THE SIDE LOAD. THIS AC WAS NOT IN FOR AN INSPECTION AND THE TECH FOUND THIS CONDITION BY CHANCE. (K)

CA060629003	CESSNA	PWA	FLANGE	DEBONDED
6/28/2006	550	JT15D4	24538400	TUBE

(CAN) WELDED TUBE ASSEMBLY REMOVED FROM AIRCRAFT TO GAIN ACCESS FOR INSPECTION. WELDED TUBE ASSEMBLY INSPECTED - FLANGE ATTACHED APPEARED TO BE BONDED TO TUBE. UPON INSTALLATION ON AIRCRAFT - WHEN CLAMP ATTACHING WELDED TUBE ASSEMBLY TO CABIN VENTILATION JUNCTION BOX WAS TORQUED. THE WELDED TUBE ASSY WAS FREE TO PULL OUT OF FLANGE. INSERTED WELDED TUBE ASSY BACK INTO FLANGE AND RELEASE THE CLAMP. FOUND FLANGE HAD A TIGHT METAL TO METAL FIT. ABLE TO PULL OFF FLANGE WITH SOME FORCE. FLANGE IS BONDED TO WELDED TUBE ASSEMBLY WITH ADHESIVE.

CA060731001	CESSNA	PWA	GUARD	DELAMINATED
7/27/2006	550	JT15D4	656530129	RUDDER CONTROL

(CAN) WHEN MOVING THE RUDDER WITH HAND PRESSURE OF APPROXIMATELY 10 DEGREES EITHER SIDE OF CENTER A NOISE ALONG WITH A ROUGH SNAGGING FEEL NOTICED. TRACING THE NOISE DOWN THROUGH THE TAIL INTO THE CABIN BETWEEN FLIGHT STATION 166 TO 180. THE CABLE GUARD PN 6565301-29 FOUND TO BE DISPLACED FORWARD OUT OF REAR CLAMP AND CABLE END CONTACTING THE END OF THE CABLE GUARD. THE CABLE GUARD WAS REMOVED AND INSPECTED, FOUND INNER LAMINATE OF THE PHENOLIC DELAMINATED WITH WHAT LOOKED LIKE A CONTACT POINT FROM CONTACT WITH THE CABLE END OR TURN BARREL NEAR THE FWD END AND THE GUARD WAS DAMAGED ON THE AFT END FROM CONTACT WITH THE CABLE END. (TC NR 20060731001)

CA060712006	CESSNA	PWA	WHEEL	CORRODED
7/7/2006	550	JT15D4	95442077	NLG

(CAN) AFTER ONLY ONE TIRE CHANGE AND 9 MONTHS IN SERVICE THE NOSE WHEEL WAS REMOVED AND FOUND EXCESSIVE CORROSION THE BOLT HOLES AND SURFACE CORROSION ON THE INNER WHEEL HALVES. (TC NR20060712006)

CA060719003	CESSNA	PWA	POTENTIOMETER	SEPARATED
7/18/2006	550	JT15D4	7020362	ELEVATOR

(CAN) VISUAL INSPECTION CARRIED OUT ON ELEVATOR FDR SYSTEM DUE TO A FAILURE OF THE FDR CORRELATION FLIGHT TEST. FLIGHT TEST RECORDER SHOWED ELAVATOR SYSTEM NO RESPONSE TO SIGNAL. VISUAL INSPECTION REVEALED FAILED POTENTIOMETER SHAFT. REPLACED WITH NEW PART IAW MM. FLIGHT TEST TO BE CONDUCTED (TC NR 20060719003)

CA060731008	CESSNA	PWA	FUEL CONTROL	UNSERVICEABLE
7/5/2006	550	PW530A		ENGINE

(CAN) THE ENGINE WAS REPORTED TO FLAME OUT ON APPROACH. THE FUEL CONTROL UNIT WAS SUBSEQUENTLY REPLACED. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20060731008)

[2006FA0000853](#) CESSNA TORQUE TUBE CRACKED
7/18/2006 560CESSNA 55421029 NLG DOOR
THE NOSE LANDING GEAR DOOR TORQUE TUBE IS CRACKED AT THE WELD THAT ATTACHES THE MOUNTING BRACKET. (K)

[CWQR200619](#) CESSNA CABLE ASSY FRAYED
8/9/2006 560XL 666000133 ELEVATOR TRIM

DURING A PHASE B INSPECTION, OPERATOR REQUESTED WE INSPECT THE AFT ELEVATOR TRIM CABLES. UPON INSPECTION WE FOUND BROKEN WIRES, TOOK CABLE TENSIONS, FOUND TO BE WITHIN LIMITS AND CABLE WAS CENTERED IN PULLEY. THE CABLE WAS REMOVED AND LOOP TEST SHOWED MORE BROKEN WIRES. THE WEAR ON THE CABLE APPEARS TO BE IN THE SAME LOCATION THAT WE FOUND ON THE PREVIOUS SDRS SUBMITTED. THAT BEING 0 TO 2 DEGREES TAB DOWN AND FRAYED AREA CENTERED ON PULLEY. AN SCR HAS BEEN SUBMITTED TO UNDER NR 248556.

[CWQR200617](#) CESSNA CONTROL CABLE FRAYED
7/31/2006 560XL 666015011 ELEVATOR TRIM

DURING PHASE B INSPECTION, IAW OPERATOR REQUEST, INSPECTED THE AFT ELEVATOR TRIM CABLES. UPON INSPECTION WE FOUND 3 BROKEN WIRES. REMOVED CABLE AND PREFORMED LOOP TEST AND FOUND SEVERAL BROKEN WIRES IN EACH STRAND. THE BROKEN WIRES WERE FOUND IN THE AREA AS IT CROSSES THE PULLEY, WITH TAB NEUTRAL TO 1-2 DEGREES DOWN. PRIOR TO DISASSEMBLY THE CABLE TENSION WAS CHECKED, WAS WITHIN MM LIMITS. INSPECTED CABLE ROUTING AND PULLEYS, ALL CHECKED GOOD. AN SDR HAS BEEN SUBMITTED TO MFG UNDER NR 246824.

[CWQR200623](#) CESSNA CONTROL CABLE FRAYED
8/21/2006 560XL 666000228 RUDDER

THE CABLE ASSEMBLY WAS RECEIVED FROM MFG, WITH AN 8130 SHOWING IT TO BE NEW. THE CABLE HAS SEVERAL BROKEN WIRES THAT APPEARS TO BE A MANUFACTURING DEFECT. THIS REPORT AND PICTURES WILL BE FORWARDED TO THE OPERATOR AND MFG. AN SCR HAS BEEN SUBMITTED TO MFG UNDER NR 250181.

[CWQR200620](#) CESSNA CONTROL CABLE FRAYED
8/14/2006 560XL 666000133 ELEVATOR TRIM

DURING A PHASE B-INSPECTION, OPERATOR REQUESTED WE INSPECT THE AFT ELEVATOR TRIM CABLES. UPON INSPECTION WE FOUND BROKEN WIRES, TOOK CABLE TENSIONS, FOUND TO BE WITHIN LIMITS AND CABLE WAS CENTERED IN PULLEY. THE CABLE WAS REMOVED AND LOOP TEST SHOWED MORE BROKEN WIRES. THE WEAR ON THE CABLE APPEARS TO BE IN THE SAME LOCATION THAT WE FOUND ON THE PREVIOUS SDRS SUBMITTED. THAT BEING 0 TO 2 DEGREES TAB DOWN AND FRAYED AREA CENTERED ON PULLEY. AN SCR HAS BEEN SUBMITTED TO UNDER NR 249122.

[CWQR200621](#) CESSNA CONTROL CABLE FRAYED
8/21/2006 560XL 666000133 ELEVATOR TRIM

DURING A PHASE B-INSPECTION, OPERATOR REQUESTED WE INSPECT THE AFT ELEVATOR TRIM CABLES. UPON INSPECTION WE FOUND BROKEN WIRES, TOOK CABLE TENSIONS, FOUND TO BE WITHIN LIMITS AND CABLE WAS CENTERED IN PULLEY. THE CABLE WAS REMOVED AND LOOP TEST SHOWED MORE BROKEN WIRES. THE WEAR ON THE CABLE APPEARS TO BE IN THE SAME LOCATION THAT WE FOUND ON THE PREVIOUS SDRS SUBMITTED. THAT BEING 0 TO 2 DEGREES TAB DOWN AND FRAYED AREA CENTERED ON PULLEY. AN SCR HAS BEEN SUBMITTED TO MFG UNDER NR 250170.

[CWQR200618](#) CESSNA CABLE ASSY FRAYED
8/7/2006 560XL 666000133 ELEVATOR TRIM

DURING A PHASE B INSPECTION, OPERATOR REQUESTED WE INSPECT THE AFT ELEVATOR TRIM CABLES. UPON INSPECTION WE FOUND BROKEN WIRES, TOOK CABLE TENSIONS, FOUND TO BE WITHIN LIMITS AND CABLE WAS CENTERED IN PULLEY. THE CABLE WAS REMOVED AND LOOP TEST SHOWED MORE BROKEN WIRES. THE WEAR ON THE CABLE APPEARS TO BE IN THE SAME LOCATION THAT WE FOUND ON THE PREVIOUS SIRS SUBMITTED. THAT BEING 0 TO 2 DEGREES TAB DOWN AND FRAYED AREA CENTERED ON PULLEY. AN SCAR HAS BEEN

SUBMITTED TO MFG UNDER NR 248175.

CWQR200622	CESSNA		CONTROL CABLE	FRAYED
8/21/2006	560XL		666000134	ELEVATOR TRIM

DURING A PHASE B-INSPECTION, OPERATOR REQUESTED, INSPECT THE AFT ELEVATOR TRIM CABLES. UPON INSPECTION FOUND BROKEN WIRES, TOOK CABLE TENSIONS, FOUND TO BE WITHIN LIMITS AND CABLE WAS CENTERED IN PULLEY. THE CABLE WAS REMOVED AND LOOP TEST SHOWED MORE BROKEN WIRES. THE WEAR ON THE CABLE APPEARS TO BE IN THE SAME LOCATION THAT WE FOUND ON THE PREVIOUS SDRS SUBMITTED. THAT BEING 0 TO 2 DEGREES TAB DOWN AND FRAYED AREA CENTERED ON PULLEY. AN SCR HAS BEEN SUBMITTED TO MFG UNDER NR 250168.

CWQR2006016	CESSNA		CONTROL CABLE	FRAYED
7/28/2006	560XL		666015021	ELEVATORS

DURING PHASE 1-4 INSPECTION, IAW OPERATOR REQUEST WE INSPECTED THE AFT ELEVATOR TRIM CABLES. UPON INSPECTION WE FOUND A SINGLE BROKEN WIRE. REMOVED CABLE AND PREFORMED LOOP TEST AND FOUND SEVERAL MORE BROKEN WIRES. PRIOR TO DISASSEMBLY THE CABLE TENSION, WAS WITHIN MM LIMITS. INSPECTED CABLE ROUTING AND PULLEYS, ALL CHECKED GOOD. AN SCR HAS BEEN SUBMITTED UNDER NR 246824.

CA060704014	CESSNA	PWA	FUEL CONTROL	MALFUNCTIONED
6/18/2006	560XL	PW545A	8237002	ENGINE

(CAN) DURING DESCENT, THE ENGINE WOULD NOT RESPOND TO THROTTLE INPUTS FOR POWER REDUCTION. THE ENGINE WAS SHUT DOWN ON FINAL APPROACH. THE FUEL CONTROL UNIT WAS SUBSEQUENTLY REPLACED. (TC# 20060704014)

2006FA0000766	CESSNA		WIRE HARNESS	DAMAGED
7/31/2006	650		311601	

DUAL TRANSPONDER FAILURE IN HEAVY PRECIPITATION. NO FAILURE INDICATION ON SPZ8000 SYSTEM. CENTER REQUESTED RESET OF TRANSPONDER, AND DIRECTED OUT OF RVSM AIRSPACE WHEN UNSUCCESSFUL. HANGAR TESTS OF POWER OUTPUT SHOWED 40WATTS BEFORE CABLES REPLACED, AND 400 WATTS AFTER.

2006FA0000767	CESSNA		WIRE HARNESS	DAMAGED
7/31/2006	650		311601	

DUAL TRANSPONDER FAILURE IN HEAVY PRECIPITATION. NO FAILURE INDICATION ON SPZ8000 SYSTEM. CENTER REQUESTED RESET OF TRANSPONDER, AND DIRECTED OUT OF RVSM AIRSPACE WHEN UNSUCCESSFUL. HANGAR TESTS OF POWER OUTPUT SHOWED 40WATTS BEFORE CABLES REPLACED, AND 400 WATTS AFTER.

CA060705005	CESSNA	CONT	RHEOSTAT	MALFUNCTIONED
7/5/2006	A185E	IO520D	S18802	CABIN LIGHTS

(CAN) AIRWORTHINESS DIRECTIVE SEARCH ON TRANSPORT CANADA'S WEB SITE DID NOT SHOW 93-24-15 APPLYING TO THIS AIRCRAFT. IT APPEARS THAT THE MODEL APPLICABILITY SECTION OF THE FAA AIRWORTHINESS DIRECTIVE IS INCORRECT. (TC# 20060705005)

CA060717003	CESSNA	CONT	MOUNT	CRACKED
7/6/2006	A185F	IO520D	075100331	ENGINE

(CAN) DURING ROUTINE INSPECTION, IT WAS DISCOVERED THAT THE FWD LT MOUNT PAD WAS CRACKED. THIS ENGINE MOUNT WAS INSTALLED 44.8 HRS AGO. REPLACED ENGINE MOUNT WITH SERVICEABLE P/N 075-1003-31, AIRCRAFT WAS RETURNED TO SERVICE. (TC NR 20060717003)

2006FA0000769	CESSNA	LYC	HOSE	LEAKING
3/20/2006	R182	O540J3C5	1560016D0155	FUEL SYSTEM

DURING AN ANNUAL INSPECTION THE HOSE ASSEMBLY FROM THE ELECTRIC PUMP TO THE ENGINE DRIVEN FUEL PUMP WAS FOUND TO BE LEAKING. HOSE WAS INSTALLED 5-12-03 AND REMOVED 3-20-06.

2006FA0000770	CESSNA	LYC	HOSE	LEAKING
3/20/2006	R182	O540J3C5	AE3663819B0190	FUEL SYS

DURING AN ANNUAL INSPECTION THE HOSE ASSEMBLY FROM THE TEE FITTING AT CARBURETOR TO THE FIREWALL FITTING FOR FUEL PSI WAS FOUND TO BE LEAKING. HOSE WAS INSTALLED 5-12-03.

2006FA0000727	CESSNA	LYC	GUARD	OUT OF RIG
7/14/2006	T182T	TIO540*	07600261	FUEL SYSTEM

PROTECTIVE GUARDS ARE CALLED OUT BY IPL ORIGINALLY, IPL REV 7 DOES, REV 8 DOES NOT. CURRENT REVISION 12, CALLS FOR THE GUARDS TO BE INSTALLED REV 13 IS IN TRANSIT BUT SHOULD INCLUDE THE CALL OUT. THIS AIRCRAFT HAS INDICATIONS THAT ELEVATOR CONTROL LINES HAVE MADE LIGHT CONTACT WITH FUEL LINES. BUT THERE IS NO DAMAGE. PARTS ORDERED. AIRCRAFT TT 159 HOURS (FIRST ANNUAL INSPECTION). (K)

2006FA0000718	CESSNA		ELT	INOPERATIVE
7/13/2006	T210N		DMELT6	CABIN

FOUND ELT TOTALLY INOPERATIVE DURING ANNUAL INSPECTION, BATTERY VOLTAGE OK. UNABLE TO DETERMINE IF IMPACT SWITCH WAS ALSO INOPERATIVE. (K)

CA060710003	CESSNA	CONT	THROTTLE CONTROL	SEPARATED
7/7/2006	U206B	IO520D	S122210	

(CAN) DURING A SCHEDULED 50 HOUR INSPECTION THE THROTTLE CONTROL WAS FOUND TO BE SEPARATED AT THE SWAGE AREA JUST AFTER THE CLAMP AREA ON THE ROD END END ALLOWING THE CONTROL GUIDE TO MOVE ALONG WITH THE CONTROL END POSSIBLY RESULTING IN CONTROL JAMMING. (TC NR 20060710003)

CA060714007	CESSNA	CONT	HARTZL	SUPPORT	CRACKED
7/13/2006	U206F	IO520F		C35325P	SPINNER

(CAN) DURING 100 HR INSP REMOVED SPINNER AND FOUND THE INNER SUPPORT CRACKED. (TC NR 20060714007)

CA060629004	CESSNA	CONT	DOOR FRAME	CRACKED
6/29/2006	U206G	IO550F	12139881	FUSELAGE

(CAN) FORWARD DOOR POST BULKHEAD CRACK DETECTED DURING ACCOMPLISHMENT OF SEB 93-5 CESSNA SERVICE KIT SK206-42 LOWER FORWARD DOORPOST BULKHEAD AND WING STRUT FITTING REINFORCEMENT TO BE INSTALLED. (TC# 20060629004)

CA060627006	CNDAIR		DOOR	SEPARATED
6/25/2006	CL2151A10		2153300688	LT ACCESSORY

(CAN) AIRCRAFT WAS COMPLETING A SCOOPING RUN WHEN THE LT HAND DOOR ASSEMBLY PN 215-33006-882 OPENED AND DEPARTED THE AIRCRAFT. CREW WERE ABLE TO LIFT AIRCRAFT OFF WATER AND RETURNED TO BASE WITHOUT FURTHER INCIDENT. INVESTIGATION TO FOLLOW TO DETERMINE THE CAUSE OF DOOR OPENING.

CA060626004	CNDAIR		GOVERNOR	OVERSPEED
6/22/2006	CL2151A10		4V1827	PROPELLER

(CAN) AFTER WATER SCOOP, THE LEFT PROP WENT TO OVERSPEED, PROP WAS CONTROLABLE WITH THROTTLE AND POWER LEVER AT 2800 RPM. ENGINE WAS SHUT DOWN AND SECURED. THE A/C RETURNED FOR MAINTENANCE. THE PROP GOVERNOR WAS REPLACED AND THE A/C RETURNED TO SERVICE.

CA060704020	CNDAIR		CHECK VALVE	CRACKED
7/3/2006	CL2151A10		AN62498	HYD SYSTEM

(CAN) DURING FIRE FIGHTING OPERATIONS WATERDROP , HYDRAULIC FAILURE OCCURRED. AIRCRAFT LANDED AFTER EMERGENCY LANDING GEAR EXTENSION WITH BOMB DOORS OPEN AND WAS TOWED OFF RUNWAY. THIS

IS THE SECOND FAILURE ON THE SAME AIRCRAFT IN THE SAME POSITION WE HAVE HAD THIS SUMMER FROM CHECK VALVE FAILURE. NEW STAINLESS VALVES HAVE BEEN ORDERED TO COMPLY WITH SUGGESTED CANADAIR SERVICE BULLETIN BUT HAVE NOT ARRIVED. WE HAD TO USE THE OLD STYLE ALUMINUM CHECKVALVE WHEN IT WAS REPLACED EARLIER IN THE SPRING. SEE REFERENCE PREVIOUS SDR #20060427007 DATED MAY 12, 2006. (TC# 20060704020)

CA060706008	CNDAIR	PWA	PUMP	BROKEN
6/20/2006	CL2151A10	CA3	66WA300	HYD SYSTEM

(CAN) AIRCRAFT SUFFERED HYDAULIC FAILURE. PERFORMED EMERGENCY GEAR EXTENSION AND LANDED SAFELY. HYDRAULIC LEAK FOUND ON ENGINE DRIVEN HYDRAULIC PUMP. THE END CAP FACEPLATE HAD A BROKEN BOLT AND THE BOLT IT WAS LOCKWIRED TO BESIDE IT HAD BACKED OFF. WITH BOTH BOLTS INEFFECTIVE, THE SEAL BLEW OUT BEHIND THE FACE PLATE AND ALL OF THE HYDRAULIC FLUID WAS PUMPED OVERBOARD. SUSPECTED PREVIOUS OVERTORQUING OF BOLT MAY HAVE CAUSED THE FAILURE (TC# 20060706008)

CA060713003	CNDAIR	PWA	CYLINDER	CRACKED
7/3/2006	CL2151A10	R2800CA3	327628	ENGINE

(CAN) ON CLIMB AFTER SCOOP PILOT NOTICED FLICKER IN THE MANIFOLD PRESSURE GAUGE. ANOTHER A/C ADVISED PILOT OF A SMOKE TRAIL. THE LOAD WAS PITCHED AND THE A/C WAS RETURNING WHEN ANOTHER A/C CONFIRMED THE SMOKE BUT NO FIRE. THE A/C RETURNED TO BASE AND A CRACKED CYLINDER WAS FOUND AND CHANGED. THE A/C WAS RETURED TO SERVICE. (TC NR 20060713003)

CA060713004	CNDAIR	PWA	FUEL CELL	LEAKING
7/11/2006	CL2156B11215	PW123	21564075	LT WING

(CAN) AC 2032 DEVELOPED A FUEL LEAK IN THE LT WING ON JULY 10/2006. ALL LT FUEL CELLS WERE REMOVED AND TESTED. CELLS NR 8 PT NR 215-64075, NR 6 PT NR 215-64002-2, NR 4 PT NR 215-64002-4, NR 3 PT NR 215-64006-6 WERE FOUND TO BE LEAKING UPON TESTING. LEAKING CELLS WERE REPLACED. (TC NR 20060713004)

CA060717005	CNDAIR	GE	WINDOW	FAILED
7/15/2006	CL600*	CF348C1	NP1393229	COCKPIT

(CAN) CAPTAIN SIDE FLIGHT DECK WINDOW OUTSIDE PANE SHATTERED ON TAKEOFF. A/C RETURNED. 721377 HAVE INSPECTED THE A/C AND FOUND TO BE SAFE FOR FERRY FLIGHT WITH ZERO STOPS IAW THE RESTRICTIONS CONTAINED IN THE ATTACHED FLIGHT PERMIT. CAPT. SIDE WINDOW REPLACED, WINDOW HEAT AND PRESSURIZATION LEAK CHECKS COMPLETED AND CHECKED SERVICEABLE. (TC NR 20060717005)

2006FA0000835	CNDAIR	GE	INVERTER	MISINSTALLED
8/11/2006	CL6002B16	CF341A	SPH1606B3	STATIC FREQUENCY

THIS STATIC FREQUENCY INVERTER WAS INSTALLED IN THE STATED AIRCRAFT ON JUNE 2, 2006. AT THE TIME OF INSTALLATION, THE PART HAD BEEN OVERHAULED BY CONSOLIDATED AC SUPPLY CO, INC. UNDER WO NR 7314, DATED MAR 14,2006. THE STATIC FREQUENCY INVERTER FAILED ON AUGUST 8, 2006.

CA060728004	CNDAIR	GE	FAN BLADE	DISAPPEARED
7/27/2006	CL6002B19	CF343B1		ENGINE

(CAN) DURING CLIMB OUT AT 18,000FT, THE COCKPIT CREW HEARD A LOUD BANG, FOLLOWED BY HIGH VIBES ON THE NR 1 ENGINE. FIRE WARNING CAME UP, PILOT DISCHARGED THE FIRE BOTTLES AND SHUTDOWN THE ENGINE. EMERGENCY WAS DECLARED AND AIRCRAFT RETURNED TO BARCELONA, WHERE IT PERFORMED AN UNEVENTFULL SINGLE-ENGINE LANDING. INITIAL REPORT SAYS ONE FAN BLADES DISAPPEARED, JET PIPE IS BURNED AND CRACKED. FURTHER INFORMATION WILL BE PROVIDED ONCE THE ENGINE STRIP REPORT IS AVAIALBLE. (TC NR 20060728004)

CA060712000	CNDAIR		WINDOW	FAILED
5/1/2006	CL6002C10		NP13932114	COCKPIT

(CAN) THE RT SIDE WINDOW SHATTERED IN FLIGHT AT FL320, OUTER SECTION. WINDOW IS POST SB (TC NR 20060712000)

CA060708001	CNDAIR		ACM	FAILED
6/24/2006	CL6002C10		GG670950099	RIGHT
(CAN) CREW NOTED THAT THEY GOT RT PACK AUTO FAIL CAUTION AND THEN HAD A STRONG ELECTRICAL BURNING SMELL /SMOKE IN REAR SECTION OF CABIN. THE PACK WAS REMOVE AND REPLACED IAW AMM. PLEASE ADD THE MFG IN THE MANUFACTURER MENU. THANK YOU (TC 20060708001)				
CA060729001	CNDAIR	GE	WINDOW	CRACKED
7/24/2006	CL6002C10	CF348C1	NP1393226	COCKPIT
(CAN) DESENDING THROUGH 13000 FT - F/O SIDE WINDOW CRACKED. TAXING TO GATE WINDOW (F/O SIDE WINDOW) CRACKED MORE. WINDOW WAS REPLACED IAW AMM. SIDE WINDOW IS PRE SB NP139322-001 (TC NR 20060729001)				
CA060705001	CNDAIR	GE	TRANSDUCER	MALFUNCTIONED
7/2/2006	CL6002D24	CF348E5	4120T16P01	OIL PRESSURE
(CAN) DURING RIGHT ENGINE WINDMILL RELIGHT, RIGHT ENGINE OIL PRESSURE AT 0 PSI UNTIL 24% N2. AT 34% N2, RIGHT OIL PRESSURE AT 3 PSI. ENGINE SHUT DOWN AND RTB SINGLE ENGINE. NOTE: DURING CRUISE PRIOR TO ENGINE SHUTDOWN, RIGHT ENGINE OIL PRESSURE WAS CONSTANTLY 10 PSI BELOW LEFT ENGINE OIL PRESSURE. (TC# 20060705001)				
CA060728006	CNDAIR	GE	ENGINE	OIL CONSUMPTION
7/22/2006	CL6012A12	CF343B1		RIGHT
(CAN) AIRCRAFT HAD TO SHUTDOWN THE RT ENGINE DURING FLIGHT, DUE TO LOW OIL PRESSURE. APPROX 3 HOURS INTO THE FLIGHT, THE PILOT REPORTED THE OIL PRESSURE WAS FLUCUTATING BETWEEN 45 AND 65 PSI, THEN DROPPED AGAIN TO 35 AND 55 PSI, AND FINALLY GOT A STEADY LOW OIL PRESSURE LIGHT. THIS IS WHEN THE PILOT SHUTDOWN THE RT ENGINE, AND DIVERTED. AN INSPECTION REVEALED THE RT ENGINE WAS 4 QTS LOW ON OIL. THE PILOTS HAD ALREADY SERVICED THIS ENGINE WITH 2 QTS, PRIOR TO LEAVING. APPEARS THE AIRCRAFT USED 4 QTS OF OIL IN THAT 3 HOUR PERIOD. AN OIL CONSUMPTION CHECK WAS PERFORMED, AND WAS FOUND TO BE WITHIN LIMITS. THE AIRCRAFT IS UNDERGOING FURTHER TROUBLESHOOTING. (TC NR 20060728006)				
CA060704009	CNDAIR		STALL WARNING	FALSE ACTIVATION
6/13/2006	CL6013A			
(CAN) THE FOLLOWING WAS REPORTED BY THE PILOT; "THE STALL WARNING HORN SOUNDED, STICK SHAKER ACTIVATED FOLLOWED BY THE PUSHER AT FL320 DURING CLIMB. R AFCS WAS ENGAGED AND COUPLED TO CO-PILOT'S FD AT THE TIME. WHEN THE PILOT GRABBED THE YOKE THE SHAKER ACTIVATED ONE MORE TIME. THE AFCS WAS DISENGAGED AND THE NOSE WAS LEVELLED. THE STALL HORN AND STALL LIGHTS REMAINED ON. AN EMERGENCY WAS DECLARED AND THE AIRCRAFT RETURNED TO OWN BASE. LANDING WAS UNEVENTFUL." THE FOLLOWING FLIGHT TO THE SERVICE CENTRE WAS UNEVENTFUL AND THE STALL PROTECTION SYSTEM WAS TROUBLESHOT WITH NO FAULT FOUND. THE FDR DATA WAS ANALYSED AND SHOWED THAT, DURING CLIMB OUT, AT FL327 THE AIRSPEED HAD SLOWED TO 155 KIAS, A SPEED CONSISTENT WITH SHAKER ACTIVATION AND AUTOPILOT DISCONNECT. THERE IS NO EVIDENCE OF ABNORMAL AIRCRAFT BEHAVIOUR DURING THIS INCIDENT. THEREFORE WE BELIEVE THE AIRCRAFT HAS PERFORMED AS DESIGNED. (TC# 20060704009)				
CA060712003	CNDAIR	GE	FEEDER CABLE	ARCED
7/2/2006	CL6013A	CF343A	WIRE2XA80ABBLU	FS 625.30
(CAN) RT GEN TRIPPED OFFLINE DURING APPROACH. GEN OFF ANNUNCIATOR CAME ON, PWR AUTO TRANSFERRED FROM GEN 1. NO LOSS OF PWR ON ANY AC BUSES. AC FERRIED WITH GENERATOR 2 SELECTED OFF. ON 3RD ENGINE RUN, PROBLEM WAS DUPLICATED. PROBLEM WAS ISOLATED TO A WIRING PROBLEM. MAIN GEN FEED WIRES AWG 8 WERE INSPECTED. AT FS 625.30 JUST AFT OF AFT PRESURE BULKHEAD, EVIDENCE OF ARCING FROM FEEDER WIRE TO AC STRUCTURE WAS FOUND. ARCING REMOVED APPROX 0.780 SQUARE INCH OF MATERIAL. PROBLEM APPEARED TO BE INCORRECT INSTALLATION OF FEEDER WIRES DURING ORIGINAL AC BUILD. INADEQUATE CLEARANCE BETWEEN WIRING AND STRUCTURE. OPPOSITE SIDE WAS INSPECTED AND FOUND WIRING HAD A SAFE CLEARANCE TO STRUCTURE. (TC NR 20060712003)				
2006FA0000836	CNDAIR	GE	UNKNOWN	UNKNOWN

8/11/2006 CL604 CF34* CABIN PRESSURE

REASON REMOVED, PRESSURIZATION CLIMBS AFTER T/O UP TO 2000 FPM. THEN CATCHES AND WORKS DURING FLIGHT. PRIOR TO INSTALLATION IN THE AIRCRAFT, THIS COMPONENT WAS INSPECTED, UNDER WO NR U22732, DATED MAR 30, 2006. COMPONENT WAS INSTALLED ON 06/09/2006. (K)

CA060619008	DHAV	PWA	ADAPTER	CRACKED
4/25/2006	DHC2MKI	R985AN14B	C2L293A	ENGINE OIL

(CAN) AIRCRAFT STATICALLY LEAKING ABOVE AVERAGE AMOUNT OF OIL ON HANGAR FLOOR. LOWER BELLY FAIRING/PANEL REMOVED BELOW RUDDER PEDALS, OIL ADAPTER BETWEEN OIL SHUT OFF AND FIREWALL NOTED TO BE SEVERE OF LEAK. ADAPTER REMOVED AND SILVER SOLDER JOINT FOUND CRACKED/LOSS OF ADHESION TO BASE METAL. ADAPTER REPLACED WITH NEW. (TC# 20060619008)

CA060619007	DHAV	PWA	LIGHT	SHORTED
4/25/2006	DHC2MKI	R985AN14B	10128	EXTERIOR

(CAN) PILOT REPORTED STROBE CIRCUIT BREAKER (C/B) POPPED DURING FLIGHT, TROUBLESHOOTING REVEALED INCORRECT C/B INSTALLED (5AMP INSTEAD OF 7.5AMP). NEW C/B INSTALLED AT THAT TIME AND GROUND CHECKED SERVICEABLE. SEVERAL MONTHS LATER PROBLEM RE-OCCURRED DURING FLIGHT BUT GROUND CHECKED OK. WING TIPS REMOVED AND NOTED EVIDENCE OF ARCING FROM TANK INBOARD WALL/RIB AND WING TIP BOSS TERMINAL STRIP STUDS, STATICALLY THERE WAS NO CONTACT, WITH TANKS FULL DURING FLIGHT CONTACT OCCURRED. THE STUDS ON BOSS BAR HAS SUFFICIENT LENGTH TO TRIM 0.25" AND REMAIN IN SAFETY. TIPS RE-INSTALLED WITH PUTTY ON STUDS AND REMOVED TO REVEAL APPROXIMATELY 0.3" CLEARANCE. (TC# 20060619007)

CA060615005	DHAV		BOLT	FAILED
6/13/2006	DHC3		C3US1563	MLG WHEEL

(CAN) WHILE PERFORMING MAIN LANDING GEAR (MLG) WHEEL/SKI REMOVAL AND CHANGE TO WHEELS ONLY, MAINTENANCE FOUND THE RIGHT HAND WHEEL/SKI ATTACH BOLT P/N: C3US156-3 TO BE BROKEN. THE BOLT ATTACHES THE SKI BRACKET ASSEMBLY LINK P/N: C3US108-34 TO THE MLG STRUT AND AXLE. THE BOLT HAS FAILED AT THE START OF THE RADIUS WHERE THE DIAMETER OF THE BOLT CHANGES FROM .500" DIAMETER, TO .750" DIAMETER. IT APPEARS THAT THE BOLT FAILURE OCCURRED ON THE TOOLING MARK. THIS IS OUR SECOND OCCURRENCE WITHIN 59.4 HOURS AND 115 CYCLES. (TC# 20060615005)

CA060728007	DHAV	GARRTT	ENGINE	VIBRATES
7/27/2006	DHC3	TPE33110R		

(CAN) DURING DESCENT FOR FLOAT LANDING ON WATER, PILOT NOTICED VIBRATION IN ENGINE . ENGINE SHUTDOWN, PROP FEATHERED. AIRCRAFT LANDED WITHOUT INCIDENT. ENGINE REMOVED SENT TO REPAIR FACILITY. (TC NR 20060728007)

CA051219001	DHAV		FRAME	CRACKED
12/12/2005	DHC5A		C5WM126238	NACELLE

(CAN) DURING NOV 26/04 SB 5/316 INSPECTION 4 CRACKS WERE FOUND, 1 CRACK RT OB, 2 CRACKS LT OB AND 1 CRACK LT IB FRAMES AT STA 123.10 IN THE NACELLE. RD5-54-017 WAS INCORPORATED TO ALL 3 AFFECTED AREAS. DURING DEC 11/05 SB 5/316 INSPECTION THE NR OF CRACKS HAD RISEN TO 11 WITH 2 CRACKS RT IB, 2 CRACKS RT OB, 5 CRACKS LT IB AND 2 CRACKS LT OB. RD5-54-017 HAS NOT BEEN INCORPORATED INTO THE NEW CRACKED AREA YET. WE ARE ATTEMPTING TO GATHER INFORMATION AS TO HOW MANY CRACKS ARE ALLOWABLE BEFORE THE FRAMES MUST BE CHANGED OUT. (TC NR 20051219001)

CA060704005	DHAV	PWA	FUEL CONTROL	MALFUNCTIONED
6/6/2006	DHC6	PT6A27		ENGINE

(CAN) THE ENGINE WAS REPORTED TO EXHIBIT TORQUE FLUCTUATIONS IN CLIMB AND WAS SHUT DOWN IN FLIGHT. THE FUEL CONTROL UNIT WAS SUBSEQUENTLY REMOVED FOR INVESTIGATION. P&WC WILL MONITOR INVESTIGATION OF THE EVENT AND WILL ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC# 20060704005)

CA060731007	DHAV	PWA	OIL SYSTEM	LEAKING
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6/29/2006	DHC6300	PT6A27		ENGINE
(CAN) DURING CLIMB, ENGINE OIL PRESSURE WAS REPORTED TO FLUCTUATE FOLLOWED BY A LOSS IN OIL PRESSURE. THE ENGINE WAS SHUTDOWN IN FLIGHT AND THE AIRCRAFT RETURNED TO POINT OF DEPARTURE. SUBSEQUENT INSPECTION REVEALED INTERNAL OIL LEAKAGE. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20060731007)				
CA060712005	DHAV	PWA		ENGINE FAILED
7/4/2006	DHC7103	PT6A50		3031300 NR 3
(CAN) ABORTED TAKEOFF DUE TO NR 3 ENGINE FAILURE. DURING TAKEOFF ROLL AIRCRAFT REACHED APPROXIMATELY 45 KNOTS WHEN A JOLT WAS FELT. THE PILOT NOTICED ABNORMAL READINGS ON THE NR 3 ENGINE GAUGES & LARGE AMOUNTS OF SMOKE COMING OUT OF THE NR 3 ENGINE. EMERGENCY SHUT DOWN INCLUDING ACTIVATION OF NR 3 FIRE BOTTLE. THE AIRCRAFT CAME TO A SUCCESSFUL HALT ON THE RUNWAY. UPON ARRIVING AT THE SIGHT OF THE INCIDENT & NOTICED OIL HAD BLOWN OUT THROUGH BOTH OF THE OPENINGS FROM THE BLEED AIR VALVES. INSPECTION REVEALED THAT THE COMPRESSOR HAD FAILED AND THROWN ONE BLADE. AS THE BLADE EXITED THE COMPRESSOR INTAKE IT RUPTURED ONE OF THE OIL TRANSFER TUBES ON THE RIGHT HAND SIDE OF THE ENGINE AND LARGE AMOUNT OF OIL CAME THROUGH THE BLEED VALVE OPENINGS OF THE ENGINE NACELLE. A DETAILED INSPECTION FOUND EVIDENCE OF A SMALL FIRE IN THE AREA BETWEEN THE REAR AND MID FIRE WALL AREA. THIS WAS THE RESULT FROM THE OIL FROM THE RUPTURED OIL LINE SPRAYING OIL ON TO THE BLEED AIR LINES WHICH ARE SEVERAL HUNDRED DEGREES IN TEMPERATURE. PREPARATIONS ARE BEING MADE FOR THE NR 3 ENGINE OF UN451 TO BE REPLACED. (TC 20060712005)				
CA060731011	DHAV	PWA		ENGINE MALFUNCTIONED
7/4/2006	DHC7103	PT6A50		
(CAN) ON TAKEOFF ROLL THE ENGINE EMITTED A LOUD NOISE AND SMOKE WAS SEEN EMERGING FROM THE EXHAUST. TAKEOFF WAS ABORTED AND THE ENGINE SECURED. MFG WILL MONITOR INVESTIGATION OF THE EVENT AND WILL ADVISE OF ROOT CAUSE ONCE DETERMINED. (TC NR 20060731011)				
2006FA0000744	DHAV		TRW	WIRE BROKEN
7/6/2006	DHC8*			AC GENERATOR
EXCITER ROTOR LEAD WIRES BROKEN AT CONNECTION TO DIODES, INCORRECTLY SOLDERED TO DIODE. (K)				
2006FA0000742	DHAV		TRW	WIRE BROKEN
7/6/2006	DHC8*			AC GENERATOR
EXCITER ROTOR LEAD WIRES BROKEN AT DIODE CONNECTION WIRES WERE INCORRECTLY SOLDERED. (K)				
2006FA0000745	DHAV		TRW	WIRE BROKEN
7/6/2006	DHC8*			AC GENERATOR
EXCITER ROTOR LEAD WIRES BROKEN AT CONNECTION BETWEEN DIODE AND RESISTOR. (K)				
2006FA0000741	DHAV		TRW	WIRE BROKEN
6/26/2006	DHC8*			AC GENERATOR
EXCITER ROTOR LEADWIRE BROKEN AT SOLDER CONNECTION TO DIODE. (K)				
2006FA0000743	DHAV			WIRE BROKEN
7/6/2006	DHC8*			31708301 AC GENERATOR
EXCITER ROTOR LEAD WIRES BROKEN AT CONNECTION TO DIODE. (K)				
CA060731020	DHAV	PWA		HMU MALFUNCTIONED
7/22/2006	DHC8102	PW120A		ENGIEN
(CAN) DURING TAKE-OFF ROLL THE ENGINE MASTER CAUTION WARNING ANNUNCIATED. IN CLIMB, ENGINE TORQUE REDUCED UNCOMMANDED AND THE ENGINE WAS SHUTDOWN IN FLIGHT. THE AIRCRAFT DIVERTED TO POINT OF DEPARTURE. THE ELECTRONIC AND HYDROMECHANICAL FUEL CONTROLS WERE SUBSEQUENTLY				

REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20060731020)

CA060705004	DHAV	PWA	SHAFT	BROKEN
7/4/2006	DHC8301	PW123	87620130101	NR 1 PROPELLER

(CAN) LOSS OF PROPELLER CONTROL DUE TO BROKEN ENGINE CONTROL SPRING STRUT; THE FAILURE OCCURRED DURING FLIGHT AND DISABLED CONTROL OF THE NO 1 PROPELLER. THE EMERGENCY FUEL SHUT-OFF HAD TO BE OPERATED TO SHUT THE ENGINE DOWN AFTER LANDING. AT THE TIME OF THE INCIDENT, THE AIRCRAFT HAD ATTAINED 20301:00 HOURS AND 39275 CYCLES. THE OPERATOR IS PRESENTLY CARRYING OUT A CAMPAIGN OF THEIR FLEET IN AN EFFORT TO AVOID ANY RECURRENCE. (TC# 20060705004)

CA060704021	DHAV	PWA	LINE	LEAKING
7/2/2006	DHC8311	PW123	82970009325	HYD SYSTEM

(CAN) ENROUTE AIRCRAFT REPORTED LOSS OF NR 2 HYDRAULIC SYSTEM QUANTITY. ALTERNATE GEAR EXTENSION SELECTED FOR ARRIVAL , NORMAL LANDING. MAINTENANCE INSPECTION FOUND NR 2 ENGINE DRIVEN HYDRAULIC PUMP PRESSURE LINE LEAKING, LINE REPLACED. HYD PUMP REPLACED DUE TO UNKNOWN TIME OPERATING WITHOUT FLUID. AIRCRAFT RETURNED TO SERVICE.

CA060626006	DHAV	PWA	SELECTOR PANEL	UNKNOWN
6/22/2006	DHC8311	PW123	1305221	CABIN PRESSURE

(CAN) DURING FLIGHT CABIN PRESSURE WARNING LIGHT ILLUMINATED AT FLT LVL 230, F/A REPORTED MAIN CABIN DOOR SEAL LEAKING. AIRCRAFT COMMENCED RAPID DESCENT AT 3000'/MIN . AFTER NORMAL LANDING AT DESTINATION , AIRCRAFT DEPARTED UNDER MEL FOR UNPRESSURIZED FLIGHT. AFTER ARRIVAL AT MAINTENANCE BASE, MAINTENANCE INSPECTED MAIN CABIN DOOR SEAL AND FOUND SERVICEABLE. CABIN PRESSURE SELECTOR PANEL REPLACED, AIRCRAFT GROUND RUN AND ABLE TO OBTAIN AND MAINTAIN MAXIMUM DIFFERENTIAL. AIRCRAFT RETURNED TO SERVICE. AIRCRAFT HAD PREVIOUS HISTORY OF PRESSURIZATION ISSUES IN AUTO MODE, CABIN PRESSURE COMPUTER PREVIOUSLY REPLACED, (TC# 20060626006)

2006FA0000776	DIAMON		ELEC CONNECTOR	SHORTED
8/4/2006	DA40			MICROPHONE

ADJACENT MIC AND PHONE JACKS SHORTED TOGETHER CAUSING SQUEAL IN AUDIO SYSTEM.

2006ADP08001	DIAMON		ELEC CONNECTOR	SHORTED
8/4/2006	DA40			

ADJACENT MIC AND PHONE JACKS SHORTED TOGETHER CAUSING SQUEAL IN AUDIO SYSTEM.

CA060704015	DORNER	PWA	SMOKE	DETECTED
6/19/2006	DO328300	PW306B		CABIN

(CAN) ON DESCENT THE CREW REPORTED SMOKE IN THE CABIN AIR. AN EMERGENCY WAS DECLARED AND THE AIRCRAFT LANDED AT POINT OF DESTINATION. P&WC WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE DETERMINED. (TC# 20060704015)

CA060629005	DOUG	PWA	CYLINDER	CRACKED
6/28/2006	DC6B	CB3	356996	ENGINE

(CAN) DURING CRUISE, NR 1 ENGINE BMEP INDICATION WAS FLUCTUATING, AIRCRAFT HAD A SLIGHT YAW. THE RETARDANT LOAD WAS JETTISONED AND THE ENGINE WAS SHUT DOWN AND PROP FEATHERED. THE AIRCRAFT RETURNED TO BASE. UPON INVESTIGATION NR 15 CYLINDER EAR WAS FOUND CRACKED. THE CYLINDER WAS REPLACED, ENGINE WAS GROUND RUN AND LEAK CHECKED AND THE AIRCRAFT WAS RETURNED TO SERVICE.

CA060607004	EMB	PWA	BLOWER	BURNED OUT
6/6/2006	EMB110P1	PT6A34	C180559A	VENT

(CAN) SHORTLY AFTER START UP, THE GROUND VENTILATION FAN WAS TURNED ON AND SMOKE STARTED TO ENTER THE AIRCRAFT CABIN. MAINTENANCE FOUND THE GROUND VENT BLOWER TO BE AT FAULT. THE GROUND

VENT BLOWER WAS REMOVED AND DEFERRED. THE AIRCRAFT WAS THEN RETURNED TO SERVICE. THE BLOWER WILL BE SENT OUT FOR A STRIP REPORT. (TC# 20060607004)

CA060720001	EMB	PWA	ATTACH BRACKET	CRACKED
6/21/2006	EMB110P1	PT6A34	4A314003	ELEVATOR

(CAN) DURING ROUTINE MAINTENANCE 2 CRACKS WERE DISCOVERED ON THE RT OB ELEVATOR HINGE ATTACH BRACKET. THE CRACKS WERE LOCATED ON THE LOWER FORWARD PORTION OF THE BRACKET IN THE MOST FORWARD PORTION OF A 90 DEGREE BEND AND WERE APPROX .7500 OF AN INCH IN LENGTH EACH. THE BRACKET WAS REPLACED AND THE AIRCRAFT WAS RETURNED TO SERVICE. (TC NR 20060720001)

CA060627002	EMB	ALLSN	OIL TANK	RUPTURED
6/18/2006	EMB145ER	AE3007A	23070328	ENGINE

(CAN) A/C N14930/145011, ENGINE NR 2 S/N CAE312063 SUFFERED A COMMANDED IN-FLIGHT SHUTDOWN (CIFSD) DUE TO AN OIL TANK RUPTURE THAT LED TO OIL LEAKAGE AND SUBSEQUENT FIRE. THE ENGINE WAS SHUT DOWN BY THE CREW AFTER LAV SMOKE, ENGINE FIRE, LOW OIL QUANTITY AND HIGH OIL TEMPERATURE INDICATIONS WERE OBSERVED ENROUTE FROM CRP TO IAH. THE AIRCRAFT DIVERTED TO VCT SAFELY W/O INCIDENT WHERE THE ENGINE IS BEING REMOVED. METAL DEBRIS WAS FOUND IN THE EXPOSED OIL TANK THAT APPEARS TO BE FROM INTERNAL WEAR. ENGINE IS PRESENTLY AT ROLLS-ROYCE CANADA UNDER INVESTIGATION.

2006FA0000782	FOUND	LYC	FITTING	UNDERTORQUED
8/2/2006	FBA2C	IO540*	G201G202	FUEL SYSTEM

AS REPORTED FROM THE PILOT, THE MAINTENANCE VENDOR FOUND NUMEROUS FUEL FITTINGS WHICH CONNECT THE FUEL LINES TO THE HEADER TANKS TO BE SEEPING FUEL. APPROXIMATE TIME OF SERVICE 532 HOURS. PIPE THREADED FITTINGS HAD NO THREAD LUBE/SEALANT. THE VENDOR NOTED THAT THE FUEL FITTINGS WERE NOT PROPERLY TORQUED. THIS MAY REPRESENT A QUALITY CONTROL ISSUE AT THE FOUND AIRCRAFT PRODUCTION FACILITY. AT PRESENT THE USDOJ, AVIATION MANAGEMENT DIRECTORATE, IS INVESTIGATING THIS EVENT WITHIN ITS FLEET.

2006FA0000794	GRUMAN	PWA	LEG ASSY	FAILED
7/8/2006	G64	PT6A20	A153034	RT MLG

THE RT MAIN GEAR LEG (SPRING GEAR STYLE) FAILED AT THE UPPER END, JUST OB OF THE CLAMP BAV. THIS IS AN AREA OF MAJOR FLEX OF THE GEAR LEG AND IT IS THE THICKEST PART OF THE LEG. IN 25 YEARS WORKING ON THIS TYPE OF AIRCRAFT, I HAVE NEVER SEEN A FAILURE OF THE MAIN GEAR LEGS. THIS SET OF GEAR WAS INSTALLED ON THE AIRCRAFT 4/22/02 AND WAS MAGNAFLUXED, SANDBLASTED, AND PAINTED PRIOR TO INSTALLATION. THE GEAR LEGS WERE A USED SET AT THAT TIME AND THE TT ON THE PAIR IS UNKNOWN. THE TIME SINCE MAGNAFLUX AND INSTALLATION (4/22/02) IS 1687.1 HRS. THIS IS NOT A COMMON FAILURE AND I DO NOT BELIEVE THAT THERE IS A NEED FOR AN AD NOTE OR OTHER ACTION. (K)

CA060621002	GRUMAN	LYC	ACTUATOR	WORN
6/10/2006	G73T	O320D1D	7LM1025013	MLG

(CAN) ON THE LT MAIN LANDING GEAR ACTUATOR, THE DOWN LOCK PISTON PIN CIRCLIP HAS A LID OVER ITS GROOVE LEAVING THE ACTUATOR UNLOCKED WHEN THE GEAR IS DOWN. ALSO, BECAUSE THE PISTON PIN HAS EXCEEDED ITS LIMIT, THE SWITCH HAS BEEN DAMAGE LEAVING THE LT INDICATING GREEN LIGHT UNILLUMINATED. THE AIRCRAFT LANDED WITH NO OTHER INCIDENT. AFTER INVESTIGATION: THE SIDE GROVE RETAINING THE CIRCLIP HAS BEEN FOUND WORN, THE ACTUATOR BODY HAS BEEN REPLACED. (TC# 20060621002)

CA060706007	GRUMAN	WRIGHT	LINE	CHAFED
7/5/2006	TS2ACALFORST	982C9HE2	89H1014738LGD4	AT BEND

(CAN) DURING ROUTINE MAINTENANCE IT WAS NOTED THAT THE RH MLG DOOR ACTUATOR OPEN LINE WAS FOUND CHAFED BEYOND LIMITS. THE LINE WAS CHAFED BY AN ADJACENT FLEX LINE. THE AFFECTED LINE WAS REPLACED AND A GEAR SWING WAS COMPLETED. THE AIRCRAFT WAS RETURNED TO SERVICE. (TC# 20060706007)

2006FA0000740	GRUMAV	PWA	EXHAUST DUCT	CRACKED
8/4/2006	G21A	PT6A41	3022406	LT ENGINE

EXHAUST DUCT ASSY CRACKED AND MISSING PARTS.

CA060714002	GULSTM	GARRTT	BLOWER	BURNED
6/5/2006	690D	TPE3315	EM6081	CABIN

(CAN) DURING DESCENT FLIGHT CREW NOTED A STRONG ODOR FROM THE HEATER OUTLETS. CREW SELECTED RECIRCULATION BLOWER SWITCH OFF AND LANDED AIRCRAFT. GROUND OPERATION CHECK OF THE ENVIRO SYSTEM FOUND RT RECIRCULATION BLOWER INOPERATIVE. FURTHER INSPECTION OF THE BLOWER ASSEMBLY FOUND SIGNS OF MOTOR OVERHEATING AND ROUGHNESS. BLOWER ASSEMBLY REPLACED WITH OVERHAULED ITEM. RECIRCULATION BLOWER NOT IN MAINTENANCE LIMITS SCHEDULE. PART IS ON CONDITION. (TC NR 20060714002)

CA060714003	GULSTM	GARRTT	TIMER	FAILED
7/4/2006	690D	TPE3315	3D249503	DEICE SYSTEM

(CAN) DURING CLIMB FLIGHT CREW NOTED VISUALLY THAT WING DE-ICER BOOTS WERE INFLATED AND WOULD NOT DEFLATE. FLIGHT CREW SELECTED BLEED AIR CLOSED RESULTING IN BOOTS DEFLATING AND RETURNED TO DEPARTURE BASE. MAINTENANCE FOUND THE DE-ICE TIMER TO BE CAUSE OF FAULT. TIMER REPLACED WITH OVERHAULED ITEM AND SYSTEM CHECKED OKAY. (TC 20060714003)

2006FA0000735	GULSTM	ELDEC	CAPACITOR	BURNED
7/26/2006	GULFSTREAMGV			BATTERY CHARGER

AFTER LANDING AIRCRAFT TAXIED TO HANGAR. WHEN AIRCRAFT STOPPED GROUND CREW NOTICED SMOKE COMING FROM TAIL COMPARTMENT. INVESTIGATION FOUND SMOKE AND FLAMES COMING FROM RT BATTERY CHARGER. ELECTRICAL POWER REMOVED FROM AIRCRAFT. FLAMES SELF EXTINGUISHED AND CHARGER WAS THEN REMOVED FROM AIRCRAFT. NO DAMAGE TO SURROUNDING AIRCRAFT STRUCTURE. REPLACEMENT CHARGER INSTALLED OPS CHECK OK.

SJ3R020511	INLAND	LYC	HARTZL	HUB	DAMAGED
8/9/2006	S300	AEIO540*		D32511R	PROPELLER

PROPELLER MOUNTING FLANGE HAS EXCESSIVE FRETTING DAMAGE. HUB IS SCRAP.

2006FA0000746	LEAR	GARRTT	ADC	DEFECTIVE
11/23/2005	35A	TFE731*	7024900	LT AVIONICS BAY

THE PILOTS ALTIMETER AND ALTITUDE ALERTER WERE FLAGGED AND THE OVERSPEED HORN WAS GOING OFF. THE ADC WAS FOUND TO BE DEFECTIVE AND REPLACED. THE SYSTEM WAS TESTED AND INSPECTED IAW MFG AND FOUND TO COMPLY WITH FAR 91 AND TO REMAIN RVSM COMPLIANT. THERE HAS BEEN ONE PRIOR REPORT OF THE ADC FALLING ON THIS AIRCRAFT. (K)

2006FA0000754	LEAR	GARRTT	ADC	DEFECTIVE
11/21/2005	35LEAR	TFE73122B		

THE PILOTS ALTIMETER AND ALTITUDE ALERTER WERE FLAGGED AND THE OVERSPEED WARNINGS WERE GOING OFF WHILE ON THE GROUND. THE ADC WAS FOUND TO BE DEFECTIVE AND REPLACED. THE SYSTEM WAS TESTED AND INSPECTED AND FOUND TO COMPLY AND TO REMAIN RVSM COMPLIANT. THERE HAVE BEEN NO PRIOR REPORTS OF PROBLEMS WITH THIS SYSTEM IN THIS AIRCRAFT. (K)

2006FA0000730	LEAR	GARRTT	IGNITER	SEPARATED
7/2/2006	45LEAR	TFE731*	3046342	APU

PART OF IGNITER PLUG THAT SURROUNDS ELECTRODE SEPARATES AND SHORTS AGAINST THE ELECTRODE CAUSING THE APU NOT TO START. PART COULD POSSIBLY ENTER THE COMBUSTION AREA OF THE APU. (NOTE: APU HAS ONE IGNITER, HAD 2 RECENT FAILURES).

2006FA0000731	LEAR	GARRTT	IGNITER	BROKEN
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7/2/2006 45LEAR TFE73160 3046342 APU
PART OF IGNITER PLUG THAT SURROUNDS ELECTRODE SEPARATES AND SHORTS AGAINST THE ELECTRODE CAUSING THE APU NOT TO START. PART COULD POSSIBLY ENTER THE COMBUSTION AREA OF THE APU. (NOTE: APU HAS ONE IGNITER, WE HAVE HAD 2 RECENT FAILURES). (K)

[CA060704010](#) LEAR PWA ENGINE MALFUNCTIONED

6/13/2006 60LEAR PW305A
(CAN) IN CLIMB THE CREW REPORTED SMOKE AND OIL SMELL IN THE CABIN ACCOMPANIED BY AN ENGINE CHIP DETECTOR WARNING. THE CREW DECLARED AN EMERGENCY AND THE FLIGHT WAS DIVERTED TO POINT OF ORIGIN. PWC WILL INVESTIGATE THE EVENT AND WILL ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC# 20060704010)

[CA060704006](#) LEAR PWA EEC FAILED

6/7/2006 60LEAR PW305A ENGINE
(CAN) THE ENGINE FLAMED OUT IN DESCENT. THE EVENT WAS LATER DUPLICATED DURING FLIGHT TEST. THE EEC WAS EXCHANGED AND THE PROBLEM COULD NOT BE DUPLICATED. THE AIRCRAFT WAS RETURNED TO SERVICE. P&WC WILL INVESTIGATE THE INCIDENT AND ADVISE OF ROOT CAUSE ONCE DETERMINED. (TC# 20060704006)

[CA060613003](#) LKHEED ALLSN SEAL LEAKING

6/11/2006 188A 501D13 6844716 NR 2 ENGINE
(CAN) AFTER A WATER BOMBING RUN CLIMB OUT NR 2 ENGINE WAS SHOWING TWO GALLONS LOW ON OIL. THERE WAS NO OTHER ABNORMAL INDICATIONS, THE CREW DID A PRECAUTIONARY SHUT DOWN. MAINTENANCE FOUND THE SCAVENGE PUMP SEAL TO BE LEAKING OIL BY, THE SEAL WAS REPLACED AND THE ENGINE RUN CHECKED TO BE SERVICABLE.

[2006FA0000773](#) MICCO SPRING FRACTURED
8/6/2006 MAC145A TAILWHEEL ASSY

TAILWHEEL SPRING FAILED ON LANDING. BROKEN IN MULTIPLE LOCATIONS. ONE BREAK POINT SHOWS EVIDENCE OF CORROSION, THE OTHER DOES NOT. CRYSTALLIZATION PRESENT AT BOTH BREAK POINTS. CRACKS APPEAR TO HAVE BEEN COVERED BY PAINT.

[2006FA0000774](#) MICCO SPRING FRACTURED
8/6/2006 MAC145A TAILWHEEL ASSY

TAILWHEEL SPRING FAILED ON LANDING. BROKEN IN MULTIPLE LOCATIONS. ONE BREAK POINT SHOWS EVIDENCE OF CORROSION, THE OTHER DOES NOT. CRYSTALLIZATION PRESENT AT BOTH BREAK POINTS. CRACKS APPEAR TO HAVE BEEN COVERED BY PAINT.

[2006FA0000736](#) MTSBSI HIRTH CYLINDER HEAD STRIPPED
5/25/2006 MU2B20 2706* ENGINE

NOTE: THIS AIRCRAFT WAS BUILT UNDER FAA EXPERIMENTAL AMATURE BUILT GUIDANCE. THIS AIRCRAFT IS NOT A LIGHT SPORT AIRCRAFT. IT WAS BUILT FROM A KIT AND CERTIFIED AS AN EXPERIMENTAL AMATURE BUILT AIRCRAFT. LOST ENGINE POWER AFTER TAKE-OFF AND MADE EMERGENCY LANDING WITH EXPERIMENTAL AMATURE BUILT AIRCRAFT: (HORNET)DETAILS: 2 CYLINDER,2 CYCLE ENGINE. 2 SPARK PLUGS IN EACH CYLINDER. AFT SPARK PLUG SEPARATED FROM AFT CYLINDER. THREADS THAT WERE MILLED INTO CYLINDER HEAD FAILED TO HOLD SPARK PLUG CAUSING DEPARTURE OF PLUG, LOSS OF COMPRESSION AND POWER LOSS CAUSING AN EMERGENCY LANDING. REPAIR WAS MADE BY INSTALLING A HELI-COIL INTO CYLINDER HEAD & REINSTALLING A SPARK PLUG.

[2006FA0000714](#) PIAGIO PWA ATTACH FITTING CRACKED
7/13/2006 P180 PT6A6 80483205801 RUDDER TRIM

ON POST MAINTENANCE WALKAROUND INSPECTION, FOUND RUDDER TRIM TAB LOWER CONTROL ROD ATTACH LUG RADIALY CRACKED. UNKNOWN CAUSE, NO OTHER DAMAGE OR DEFECTS NOTED. (K)

CA060704016	PIAGIO	PWA	TUBE	FRACTURED
6/21/2006	P180	PT6A66	3031829	FUEL SYS
(CAN) THE ENGINE FLAMED OUT IN CRUISE. SUBSEQUENT INSPECTION REVEALED A FRACTURED FUEL SYSTEM P3 AIR TUBE. (TC# 20060704016)				
CA060704019	PILATS	PWA	BLEED VALVE	DIRTY
6/27/2006	PC12	PT6A67B		ENGINE
(CAN) DURING CRUISE, THE ENGINE EMITTED A LOUD NOISE ACCOMPANIED BY FLAMES FROM THE EXHAUST AND POWER FLUCTUATIONS. THE PILOT REDUCED ENGINE POWER AND ACCOMPLISHED AN UNSCHEDULED LANDING. SUBSEQUENT INSPECTION FOUND THE ENGINE COMPRESSOR BLEED VALVE TO BE STIFF AND FULL OF SAND, THE BOV WAS CLEANED AND THE ENGINE RAN NORMALLY. (TC# 20060704019)				
CA060706005	PILATS	PWA	A/C PACK	FAILED
6/22/2006	PC1245	PT6A67B	9599060114	
(CAN) PILOT REPORTED THAT ECS WAS SELECTED ON AT PREFLIGHT CHECK. NO PROBLEM NOTICED. SOON AFTER ROUTINE TAKEOFF AN ODOUR WAS PREVALENT IN COCKPIT. ECS SYSTEM WAS DEACTIVATED AND ODOUR DISSIPATED ALMOST IMMEDIATELY. AIRCRAFT RETURNED TO PLACE OF DEPARTURE WITH NO FURTHER FAULTS. PASSENGERS DEBOARDED AND CAPTAIN PERFORMED GROUND RUN TO TEST ECS. ODOUR RETURNED AS SOON AS ECS SELECTED ON. ECS SYSTEM WAS AGAIN DEACTIVATED AND AIRCRAFT RETURNED TO BASE UNPRESSURIZED AND TROUBLESHOT SYSTEMS INDICATING COLD AIR UNIT WAS AT FAULT. UNIT WAS REPLACED WITH SERVICEABLE PART. GROUND RUN PERFORMED WITH NO FAULT FOUND. AIRCRAFT RETURNED TO SERVICE. (TC# 20060706005)				
CA060706006	PILATS	PWA	RELAY	FAILED
7/6/2006	PC1245	PT6A67B	9740926112	HYD POWER
(CAN) LANDING GEAR WOULD NOT RETRACT FULLY AND HYDRAULIC LIGHT CAME ON AFTER LANDING GEAR WAS SELECTED UP IN CLIMB. CREW CHECK HYDRAULIC CONTROL CB AND IT WAS IN. CREW FOLLOWED CHECK LIST AND SELECTED GEAR DOWN AND HAND PUMPED LANDING GEAR DOWN AND LOCKED. A/C WAS FLOWN TO MAINTENANCE BASE WITH GEAR DOWN AND LANDED WITHOUT INCIDENT. HYDRAULIC SYSTEM TROUBLESHOOTING CARRIED OUT AND HYDRAULIC POWER CONTROL RELAY K601 FOUND TO BE AT FAULT. RELAY REPLACED AND LANDING GEAR/HYDRAULIC SYSTEMS FUNCTION CHECKED SERVICEABLE (TC# 20060706006)				
CA060731015	PILATS	PWA	LIMITER	MALFUNCTIONED
7/16/2006	PC1245	PT6A67B	311629401A	TORQUE
(CAN) IN DESCENT THE ENGINE WOULD NOT RESPOND TO THROTTLE INPUT. THE MANUAL FUEL CONTROL OVERRIDE WAS ENGAGED, AN EMERGENCY DECLARED AND THE AIRCRAFT LANDED WITHOUT INCIDENT. THE ENGINE TORQUE LIMITER WAS SUBSEQUENTLY DETERMINED TO BE FAULTY AND WAS REPLACED. (TC NR 20060731015)				
CA060724003	PILATS	PWA	BURNER CAN	FAILED
7/15/2006	PC1245	PT6A67B	311583501	ENGINE
(CAN) BRIGHT FLASHES COMING FROM EXHAUST STACKS, NO CHANGE TO INDICATIONS. 15 FLASHES IN 2 HOUR PERIOD. ENGINE OUTER BURNER CAN FOUND INOPERATIVE, CERAMIC COATING FLAKING OFF AND IGNITING. REPLACED WITH OVERHAULED UNIT. GROUND RUN AND RELEASED SERVICEABLE. P/N - ON/OFF 3115835-01 S/N OFF A0006973, S/N ON 2K962. (TC NR 20060724003)				
CA060724004	PILATS	PWA	LIMITER	FAILED
7/17/2006	PC1245	PT6A67B	32448821	ENGINE
(CAN) PILOT SNAG: ENGINE POWER LOST IN FLIGHT HAD TO USE MANUAL OVERRIDE. RECTIFICATION: REPLACED TORQUE LIMITER P/N 3244882-1, S/N C50254 WITH REMOVED SERVICEABLE UNIT FROM ENGINE S/N PR0116 P/N 3244882-1 S/N C50621. ALL APPLICABLE ENGINE RUNS COMPLETED AND CHECKS SERVICEABLE. (TC NR 20060724004)				
CA060719002	PILATS	PWA	ACTUATOR	LEAKING

7/17/2006 PC1245 PT6A67B 9693001105 MLG

(CAN) ORIGINAL MAIN LANDING GEAR ACTUATOR REPLACED WITH AN OVERHAULED UNIT. (ORIGINAL ACTUATOR HAD AN INTERNAL LEAK) HYDRAULIC SYSTEM FLUSHED BEFORE OVERHAULED ACTUATOR WAS INSTALLED. INTERNAL LEAK DEVELOPED IN TSO 153.3. HYDRAULIC SYSTEM FLUSHED AGAIN AND A REPAIRED ACTUATOR INSTALLED. NO CONTAMINATION NOTED IN FLUID AFTER EACH SYSTEM FLUSH. HYDRAULIC SYSTEM LEAK CHECKED SERVICEABLE (TC NR 20060719002)

[2006FA0000764](#) PIPER CYLINDER HEAD SEPARATED

7/1/2006 PA18A AEL65102 ENGINE

DURING NORMAL CRUISE FLIGHT, PILOT EXPERIENCED ENGINE ROUGHNESS AND A LOSS OF ENGINE OIL OUT OF THE SIDE COWLING, CAUSING AN UNEVENTFUL OFF AIRPORT LANDING. ROUGHNESS AND OIL LOSS WERE DUE TO NR 3 CYL HEAD SEPARATING FROM THE CYLINDER BARREL AT THE 3RD COOLING FIN FROM BOTTOM OF THE HEAD. ALTHOUGH THIS CYLINDER ECI PN IS SAME PN LISTED IN AD, THIS WAS TITAN STYLE CYL, NOT CLASSIC CAST AS INDICATED BY NR CAST INTO CYL HEAD. THESE LATER TITAN CYL UNAFFECTED BY AD, MAY BE EXPERIENCING SAME FAILURES THAT THE EARLIER CAST CYL THAT ARE AFFECTED BY AD WERE EXPERIENCING. (K)

[2006FA0000726](#) PIPER LYC DRAG LINK FAILED

7/20/2006 PA23160 O320* RT MLG

DURING THE INVESTIGATION, IT WAS DISCOVERED THAT THE RT MLG UPPER DRAG LINK ASSY HAD FAILED AT THE ATTACHMENT POINT FOR THE MLG DOWNLOCK LATCH ASSY. A VISUAL INSPECTION OF THE BROKEN DRAG LINK SHOWED THAT THE ASSY HAD A METAL FATIGUE CRACK ALONG THE CIRCUMFERENCE OF THE COMPONENT. THE CRACKED AREAS SHOWED EVIDENCE OF CORROSION THAT APPEARS TO HAVE BEEN THERE FOR A LONG PERIOD OF TIME. (K)

[PAI52006S4248](#) PIPER CONTROL CABLE BROKEN

7/26/2006 PA23250 FUEL SELECTOR

PILOT REPORTED LT ENGINE QUIT IN FLIGHT. FOUND LT OB FUEL TANK EMPTY, LT IB FUEL TANK HAD FUEL. FOUND FUEL SELECTOR CONTROL CABLE BROKEN AT SELECTOR VALVE IN LT NACELLE. WHEN SELECTED TO LT IB TANK THE ENGINE RAN NORMALLY.

[2006FA0000861](#) PIPER LYC HYDRAULIC LINE CHAFED

7/29/2006 PA23250 IO540* HYDRAULIC SYS

AIRCRAFT SUFFERED HYDRAULIC PRESSURE LOSS, FOUND LT RUDDER CABLE CHAFED THRU PRESSURE LINE BEHIND PILOTS LT SIDE WALL, AREA IS DIFFICULT TO INSPECT DUE TO SIDE WALL/INSULATION. LINE REPLACE, SYSTEM SERVICED OPERATES NORMAL. PLEASE FIND BELOW ADDITIONAL ITEMS DISCUSSED IAW TELECOM DATED 8/15/2006. PROBLEM WITH THE CABLE CHAFING THROUGH THE PRESSURE LINE HAS BEEN IDENTIFIED ONE TIME PREVIOUS TO THIS INCIDENT. BOTH OCCURRENCES HAPPENED BETWEEN 6000-7000 AC HOURS. PROBLEM IN BOTH CASES WAS NOT IDENTIFIED UNTIL HYDRAULIC LEAK WAS DETECTED. MECHANIC REPOSITIONED THE NEW LINE TO ALLEVIATE THE PROBLEM. (K)

[CA060712002](#) PIPER LYC TUBE CRACKED

7/4/2006 PA23250 IO540C4B5 1582102 RUDDER

(CAN) DUE TO HIGH WINDS THAT HIT THE RUDDER (WITHOUT CONTROL LOCKS INSTALLED) INSTALLED THE AIRCRAFT FOR DAMAGE. THE RUDDER PEDAL TUBE WAS FOUND CRACKED. THE PART WAS REPLACED. (TC NR 20060712002)

[2006FA0000758](#) PIPER LYC CYLINDER HEAD SEPARATED

7/25/2006 PA25 O360C2A TISN12OCA RT ENGINE

THIS WAS A NEW CYLINDER INSTALLED APRIL 05, AT ENGINE OVERHAUL. THE CYLINDER COMPLETELY SEPARATED BETWEEN THE HEAD AND BARREL, IN FLIGHT. THE AIRCRAFT WAS SAFELY LANDED AT HOME AIRPORT. PN STAMPED ON CLY BASE: AEL65102, SN12.0F. (K)

[ZB0R20060001](#) PIPER BRAKE DISC BROKEN

7/25/2006	PA28236		16402000	RT MLG
ON LANDING ROLLOUT, PILOT LOST RIGHT BRAKING. MAINT DISCOVERED RIGHT BRAKE DISK BROKEN AT WELD COMPLETELY AROUND CIRCUMFERENCE. SUSPECT CORROSION ATTRIBUTED TO WELD FAILURE. PART REPLACED BY MAINT.				
2006FA0000775	PIPER		SPAR	CRACKED
8/10/2006	PA28R180		6707003	RT WING
DURING COMPLIANCE, A CRACK WAS FOUND ON THE MAIN SPAR DIRECTLY BEHIND THE SWIVEL BOLT BRACKET AT THE IB MOUNTING NUTPLATE. THE CRACK IS 3 INCHES IN LENGTH AND CURVES UPWARD ON BOTH ENDS. THE CRACK WAS NOT VISIBLE UNTIL THE AREA WAS CLEANED. IT IS RECOMMENDED THAT THIS AREA OF THE SPAR BE CLEANED AND INSPECTED DURING COMPLIANCE OF SB. A CRACK WAS ALSO FOUND ON ANOTHER PA28R-180 NEAR THE SAME LOCATION ON THE SPAR. THIS INFORMATION AND PICTURES WERE SENT TO FOR EVALUATION.				
CA060726005	PIPER	LYC	OIL FILTER	LEAKING
7/24/2006	PA31	TIO540A2B	ES48110	ENGINE
(CAN) DURING POST RUN UP INSPECTION OF REGULAR INSPECTION APPROXIMATE ONE FLUID OZ OF OIL WAS NOTED LEAKING FROM THE NEWLY INSTALLED OIL FILTER. IT IS SUSPECTED THAT A SIMILAR DEFECT BUT OF LESSER DEGREE MAY NOT BE PICKUP BY POST RUN UP INSPECTION AND MAY CAUSE A FINE OIL MIST ON HOT TURBO CHARGER AND EXHAUST PARTS ON THIS AND SIMILAR ENGINE INSTALLATIONS. (TC NR 20060726005)				
CA060731003	PIPER	LYC	CRANKCASE	CRACKED
7/28/2006	PA31350	TIO540J2BD	13828	ENGINE
(CAN) DURING A ROUTINE INSPECTION AN AME VISUALLY DISCOVERED A CRACK 2-3 INCHES IN LENGTH. THE CRACK IS LOCATED BETWEEN CYLINDERS 3 AND 5 IN THE VICINITY OF THE LOWER RIB. PREVIOUSLY NO DISCREPANCIES HAD BEEN NOTED. THE ENGINE WAS SUBSEQUENTLY REMOVED FOR REPAIR AT AN APPROVED ENGINE OVERHAUL SHOP. THE TTSN FOR THIS CASE COULD NOT BE OBTAINED. THIS CASE WAS INSTALLED 516.8 HRS EARLIER BECAUSE OF ANOTHER INCIDENT OF CRACKED CASE.				
CA060623001	PIPER	LYC	DRIVE ASSY	SHEARED
6/20/2006	PA31350	TIO540J2BD	1216001	FLAP XMSN
(CAN) DURING PRE-DEPARTURE CHECK PILOTS NOTED THAT THE RH FLAP WAS NOT RESPONDING TO DOWN SELECTION, LH FLAP MOVEMENT WAS NORMAL. MAINTENANCE CONFIRMED THE SNAG AND T/S REVEALED THE RH FLAP TRANSMISSION WAS NOT DRIVING THE FLAP, FLAP MOTOR AND DRIVE CABLES WERE CHECKED SERVICEABLE. REPLACED RH FLAP TRANSMISSION, FLAPS RIGGED PER PIPER MM AND AIRCRAFT DISPATCHED.				
CA060710002	PIPER	LYC	SEAL	CUT
7/7/2006	PA31350	TIO540J2BD	MS28775335	MLG
(CAN) ON THE RAMP AFTER REFUELLING, PILOTS NOTED THE LT MLG OLEO WAS LEAKING FLUID AND DEFLATING. MAINTENANCE FOUND THE LT OLEO COMPLETELY DEFLATED AND APPROX. 1 LITRE OF HYDRAULIC FLUID ON THE RAMP UNDER THE LT OLEO. AFTER OLEO REMOVAL, FOUND THE LOWER OLEO BEARING INNER O-RING SEAL SPIRAL CUT APPROX. 1 INCH ALONG THE SEAL. REPLACED SEAL AND OLEO SERVICED BY AMO 128-94. (TC NR 20060710002)				
2006FA0000755	PIPER	LYC	RING GEAR	FAILED
7/31/2006	PA31350	TIO540N2BD		STARTER
TRIED TO START ENGINE WOULD NOT START VISUAL BENDIX TO RING GEAR TEETH IN BOTTOM OF STARTER HOUSING. (K)				
2006FA0000748	PIPER	LYC	SHAFT	MISREPAIRED
4/7/2006	PA32300	IO540*	6282905	RUDDER
RUDDER TRIM BUNGEE SHAFT ASSY PN 6282905, HAD BEEN IMPROPERLY REPAIRED BY PERSONS UNKNOWN CAUSING BUNGEE TO BOTTOM OUT WHEN RUDDER PEDAL DEFLECTED TO LIMIT WHICH IN TURN CAUSED UNDO PRESSURE ON RUDDER CONTROL ARM, PN 6345703, EVENTUALLY CAUSING ARM TO BREAK. (K)				

[2006FA0000824](#) PIPER BUSHING BROKEN
3/3/2006 PA34200 9506189 NLG DOWLOCK
INSPECTION REVEALED END OF BUSHING HAD BROKE OFF. REPLACE WITH NEW. THIS CONTRIBUTED TO SLOP IN NOSE GEAR DOWNLOCK MECHANISM AND GEAR COLLAPSE. (K)

[2006FA0000822](#) PIPER LYC SPRING UNKNOWN
3/3/2006 PA34200 IO360A1A 9617800 NLG
WHEN COMPARING THE NEW SPRING TO OLD SPRING, USING A FISH SCALE, THE NEW TOOK 12 LBS TO OFFSET THE COILS THE OLD ONLY TOOK 7LBS. THIS IS BELIEVED TO CONTRIBUTE TO NOSE GEAR COLLAPSE. (K)

[2006FA0000823](#) PIPER LYC BOLT BENT
3/3/2006 PA34200 IO360A1A 400890AN2340A NLG DOWNLOCK
THIS WITH OTHER PROBLEMS LEAD TO SLOP IN THE DOWNLOCK OF THE NOSE GEAR. THIS CONTRIBUTED TO THE COLLAPSE OF THE NOSE GEAR. BOLT REPLACED WITH NEW. (K)

[2006FA0000717](#) PIPER CONT RIB CRACKED
3/11/2006 PA34220T TSIO360* LEFT & RIGHT
DURING COMPLIANCE WITH SB, LT AND RT RIBS FOUND CRACKED AS SUSPECTED. INSTALLED REPAIR KITS. LT DRAG BRACE PIVOT, PN 39479002, ALSO FOUND CORRODED AND CRACKED. THIS IS NOT PART OF SB INSPECTION. (K)

[RX8R2006003](#) PIPER PWA STRUCTURE CRACKED
8/7/2006 PA42720 PT6A61 4579411AND12 NLG DOOR
FOUND CRACK IN LT NOSE LANDING GEAR DOOR ON RADIUS OF FRONT STIFFENER SECTION. ALSO FOUND CRACK IN RT NOSE LANDING GEAR DOOR AT FORWARD HINGE ATTACH POINT. HAVE PREVIOUSLY FOUND CRACKS IN THE NOSE LANDING GEAR DOORS ON 4 OTHER PA-42'S. THE CRACKS ARE USUALLY IN THE DOOR HINGE ATTACH AREA. WE BELIEVE THE CRACKS ARE BEING CAUSED BY IN FLIGHT TURBULENCE, CAUSING THE DOORS TO VIBRATE IN FLIGHT.

[2006FA0000765](#) PIPER TRUNNION CRACKED
8/8/2006 PA44180 67042013 MLG
DURING MAINTENANCE INSPECTION OF THE GEAR, THE MECHANIC FOUND THE AFT MAIN GEAR TRUNNION CRACKED. DYE PENETRANT CONFIRMED CRACK. CAUSE IS UNDETERMINED BUT THE AIRCRAFT IS USED FOR FLIGHT TRAINING.

[2006FA0000778](#) PIPER LYC TRANSMITTER UNRELIABLE
8/1/2006 PA46350P TIO540AE2A FUEL SYSTEM
NEW-STYLE FUEL SENDERS UNRELIABLE. HAVE REPLACED 3 TIMES SO FAR.

[2006FA0000779](#) PIPER LYC TRANSMISSION UNRELIABLE
8/1/2006 PA46350P TIO540AE2A ZONE 500
NEW-STYLE FUEL SENDERS UNRELIABLE. HAVE REPLACED 3 TIMES SO FAR.

[2006FA0000830](#) RAYTHN WASHER MISINSTALLED
8/7/2006 390 MS20002C6 MLG WHEEL
DURING WHEEL DISASSEMBLY FOR TIRE REPLACEMENT FOUND WHEEL TIE BOLT CHAMFERED WASHERS INSTALLED INCORRECTLY, WITH CHAMFERED SIDES TOWARDS WHEEL HALF. NOTED WASHERS TO BE BENT, WHEEL TIE BOLT HEADS UNDERSIDE RADIUSES DAMAGED. SUSPECT TECHNICIAN ASSEMBLING WHEELS AT PREVIOUS TIRE CHANGE AT ANOTHER FACILITY DID NTO FULLY FOLLOW COMPONENT MM AND WAS NOT FAMILIAR WITH INSTALLATION OF MS20002 SERIES CHAMFERED WASHERS. (K)

[2006FA0000831](#) RAYTHN WASHER MISINSTALLED

8/7/2006	390		MS20002C6	WHEEL
DURING WHEEL DISASSEMBLY FOR TIRE REPLACEMENT FOUND WHEEL TIE BOLT CHAMFERED WASHERS INSTALLED INCORRECTLY, WITH CHAMFERED SIDES TOWARDS WHEEL HALF. NOTED WASHERS TO BE BENT, WHEEL TIE BOLT HEADS UNDERSIDE RADIUSES DAMAGED. SUSPECT TECHNICIAN ASSEMBLY WHEELS AT PREVIOUS TIRE CHANGE AT ANOTHER FACILITY DID NOT FULLY FOLLOW COMPONENT MM AND WAS NOT FAMILIAR WITH INSTALLATION OF MS20002 SERIES CHAMFERED WASHERS. (K)				
CA060712004	ROBSIN	LYC	RETAINER	BROKEN
7/6/2006	R22BETA	O320B2C	A4871	NR2 CYL BAFFLE
(CAN) NR 2 AND NR 4 CYLINDER LOWER BAFFLE IB RETAINER BROKE CAUSING BAFFLE CONTACTING NR 2 CYLINDER`S OIL RETURN LINE THUS CHAFED OIL LINE AND OIL SEEPAGE EVIDENT DURING DAILY CHECK. NR 2 AND NR 4 CYLINDER BAFFLE RETAINER P/N A4871 (TC NR 20060712004)				
2006FA0000729	ROBSIN	LYC	ADAPTER	BROKEN
7/14/2006	R22BETA	O320B2C		ENGINE
WHILE CHANGING OIL FILTER DURING ROUTINE 100 HR INSPECTION, OIL FILTER ADAPTER CENTER THREADED SHAFT BROKE OFF LEAVING HALF SHAFT INSIDE ADAPTER AND OTHER HALF THREADED INTO OIL FILTER. THIS OCCURRED WITH MINIMAL ROTATIONAL TORQUE BEING APPLIED. INSPECTION OF SHAFT REVEALED THAT MACHINED CENTER SECTION OF SHAFT AT SHEAR POINT WAS MACHINED TO DEEP LEAVING ONLY A MAXIMUM WALL THICKNESS OF .020, AND PROBABLY MUCH LESS AT SHEAR LINE JUDGING BY KNIFE EDGE CONDITION OF BREAK POINT. RECOMMENDATION: FURTHER INVESTIGATION AT MFG LEVEL POSSIBLE AD GENERATION TO DETERMINE IF OTHER UNITS CURRENTLY IN SERVICE HAVE SAME DEFECT CONDITION.				
CA060711004	ROBSIN	LYC	CONT	DISTRIBUTOR GEAR DAMAGED
7/10/2006	R44	O540F1B5		MAGNETO
(CAN) AC WAS ON FINAL APPROACH WHEN PILOT HEARD A CHANGE IN ENGINE NOISE FOLLOWED BY LOW ROTOR HORN. INITIATED AN AUTOROTATION, NOTICED THAT ENGINE, M/R RPM`S RETURNED TO NORMAL. CONTINUED HIS APPROACH AS INITIALLY PLANED, LANDED HELICOPTER WITHOUT FURTHER INCIDENT. ONCE ON GROUND, PILOT DID A MAG CHECK WHEN LT MAGNETO WAS SELECTED, ENGINE QUIT. LT MAGNETO WAS REPLACED, AC RETURNED TO SERVICE. UPON REMOVAL OF MAGNETO, DISTRIBUTOR GEAR IN MAGNETO WAS FOUND TO HAVE SEVERAL TEETH WORN OR BROKEN OFF. HAVE DECIDED TO HAVE MAGNETOS O/H EVERY 500 HRS. O/H WILL INCLUDE REPLACING DISTRIBUTOR GEAR, EVENTHOUGH MANUAL DOES NOT CALL FOR IT. (TC NR 20060711004)				
CA060622004	ROBSIN	LYC	SWITCH	STUCK
6/22/2006	R44RAVENII	IO540AE1A5	A0582	OVERTEMP
(CAN) MAIN ROTOR TRANSMISSION OVER TEMP LIGHT CAME ON. PILOT LANDED AND LET THE AIRCRAFT COOL DOWN. LIGHT STAYED ON. TRANSMISSION WAS INSPECTED FOR SIGNS OF OVER TEMP, AND NO DEFECTS WERE FOUND. OVERTEMP SWITCH WAS FOUND TO BE STUCK IN THE CLOSED POSTION. (TC# 20060622004)				
CA060623003	ROBSIN	LYC	SERVO	LEAKING
5/28/2006	R44RAVENII	IO540AE1A5	D2121	HYDRAULIC SYS
(CAN) UPON INSPECTION THE AFT SERVO WAS FOUND TO BE LEAKING FROM THE PILOT VALVE. SERVO REPLACED WITH A SERVICEABLE UNIT. (TC# 20060623003)				
CA060628002	ROBSIN	LYC	HEAT SHIELD	CRACKED
6/21/2006	R44RAVENII	IO540AE1A5	D3171	EXHAUST
(CAN) DURING A ROUTINE 50 HR ENGINE INSPECTION, IT WAS NOTED THAT THE SUBJECT HEAT SHIELD, THAT IS INSTALLED ON THE EXHAUST TAILPIPE, WAS FOUND CRACKED. THE CRACK ORIGINATED IN A DOUBLER AREA WHERE THE FORWARD CLAMP IS ATTACHED. THE CRACK LOOKS AS THOUGH IT STARTED FROM A RIVET WHICH ATTACHES THE DOUBLER AND BRACKET, WHICH PROVIDES A MEANS TO ATTACH THE CLAMP TO THE EXHAUST TAIL PIPE. THE PART IN QUESTION HAS 140.3 HRS TIME SINCE NEW. THE AIRCRAFT IN QUESTION HAS 343.5 HOURS SINCE NEW. THE PART HAS BEEN SUBMITTED TO ROBINSON HELICOPTER FOR WARRANTY. (TC#				

20060628002)

CA060628003	ROBSIN	LYC	COLLECTOR RING	BENT
6/21/2006	R44RAVENII	IO540AE1A5	C1695	EXHAUST

(CAN) DURING A ROUTINE 50 HOUR ENGINE INSPECTION, IT WAS NOTED THAT THE L/H EXHAUST COLLECTOR WAS BENT AT THE AFT DOWNPIPE CREASE AREA. DURING FURTHER INVESTIGATION, IT WAS NOTED THAT A CRACK HAD FORMED IN THE SUBJECT AREA. DURING REMOVAL OF THE SUBJECT PART, IT WAS ALSO NOTED THAT THE OUTLET FLANGE THAT FITS INTO THE MUFFLER, WAS DEFORMED AND CRACKED AS WELL. THE SUBJECT PART HAS NOT BEEN REMOVED OR ALTERED SINCE NEW. THE PART HAS BEEN RETURNED TO MANUFACTURER FOR WARRANTY. CONSIDERATION IS BEING MADE THAT THE PART MAY HAVE BEEN PUT IN A STRESSFUL CONDITION WHEN INSTALLED AT THE FACTORY. THE AIRCRAFT HAS 343.5 HOURS SINCE NEW.

CA060707002	ROBSIN	LYC	ROBSIN	MOTOR	FAILED
6/26/2006	R44RAVENII	IO540AE1A5		8187B	FUEL PUMP

(CAN) PILOT WAS UNABLE TO USE THE ELECTRIC PUMP TO PRIME THE ENGINE. TROUBLESHOOTING REVEALED THE PUMP WAS GETTING POWER. FUEL PUMP ASSEMBLY WAS REPLACED, AND NO FURTHER DEFECTS FOUND. (TC NR 20060707002)

2006FA0000834	ROBSIN	LYC	ROBSIN	LINK	SEPARATED
7/28/2006	R44RAVENII	IO540AE1A5		D8531	THROTTLE ARM

ON 7/26/06 PILOT REPORTED THAT WHILE FLYING THROTTLE CONTROL BECAME INEFFECTIVE. AIRCRAFT LANDED SAFELY AT AIRFIELD AND PUSHED TO HANGAR. INSPECTED THROTTLE CONTROL ATTACHMENT AT ENGINE THROTTLE BODY AND FOUND UPPER ROD END OF LINK, PN D8531 SEPARATED. PHOTOGRAPH TAKEN AND SENT OT MFG, IAW INSTRUCTION , LINK PN B5642 ORDERED AND RETURNED THE SEPARATED LINK PN D8531 TO MFG FOR FURTHER INVESTIGATION. (K)

2006FA0000795	SKRSKY	PWA	SPAR	CRACKED
5/24/2006	S64E	JFTD12A4A	6516100001043	T/R BLADE

(REF NR: MDR06-088) IB SIDE OF SPAR ON TRAILING EDGE HAS A CRACK. THE CRACK IS APPROX .482 INCH LONG AND RUNS FROM TIP END OF BLADE, DOWN INTO THE SCREW HOLE COUNTERSINK. BLADE HAS ACCUMULATED 660.4 HOURS SINCE LAST REPAIR. (K)

CA060704011	SKRSKY	PWA	FUEL CONTROL	FAILED
6/28/2006	S64E	JFTD12A4A	7045402L2	ENGINE

(CAN) AFTER SETTING A TURN OF LOGS DOWN ON LOG LANDING WITH A LT CROSS WIND, ACFT TURNED FULLY INTO WIND & BEGAN A CLIMB BACK UP HILL TO LOGGING UNIT WITH APPROXIMATELY 60% TORQUE INDICATED. AFTER ABOUT 7-10 SECONDS INTO CLIMB, N1 UNDERSPEED WARNING HORN SOUNDED. FLT CREW REDUCED POWER & OBSERVED N2 NEEDLE FOR NR 2 ENG DECREASING ON TRIPLE TACH. CO-PILOT NOTICED NR 2 ENG N1 SPEED AT 35% & T5 TEMP STABLE AT 465 DEGREES C. CREW ELECTED TO SHUTDOWN NR 2 ENG & MOTOR TO COOL T5. AN ATTEMPT TO RESTART ENG MADE & THEN ABORTED DUE TO ENG NOT ACCELERATING PAST 35% N1. ACFT LANDED WITHOUT FURTHER INCIDENT. A COMPLETE INSPECTION REVEALED NOTHING ABNORMAL. AN ENGINE START ATTEMPTED & ABORTED DUE TO ENG NOT BEING ABLE TO ACCELERATE PAST 35% N1. FCU REPLACED. ENG FUEL PRESSURIZING & DUMP VALVE ALSO REPLACED AS A PRECAUTION.

CA060210007	SKRSKY	GE	ENGINE	MAKING METAL
2/3/2006	S92A	CT79B		NR 2

(CAN) AFTER TAKE-OFF, ENGINE NR 2 CHIP LIGHT STARTED TO FLICKER. AC WAS TURNED AROUND TOWARDS PLACE OF DEPARTURE. EMERGENCY CHECKLIST WAS FOLLOWED, ENG NR 2 WAS BROUGHT BACK TO IDLE. DURING A LONG FINAL ON DESCENT, ENGINE WAS BROUGHT BACK ON LINE FOR LANDING. AC LANDED WITHOUT FURTHER INCIDENT, RETURNED TO HANGAR FOR INSP. AFTER INVESTIGATION, TECH REPS WERE CONTACTED, RECOMMENDED A GROUND RUN AS OUTLINED IN MM. THIS GROUND RUN WAS CARRIED OUT, THERE WAS NO CHIP LIGHT BUT UPON FURTHER INVESTIGATION SOME METAL CONTAMINATION WAS FOUND ON THE CHIP PLUG, IT WAS UPON THE ADVICE OF THE MANUFACTURER TO REPLACE THE ENGINE. THE ENGINE WAS REPLACED AND THE A/C WAS RETURNED TO SERVICE.

CA060710005	SNIAS	TMECA	SHIM	MISINSTALLED
6/22/2006	AS350B2	ARRIEL1D	350A75111720	TAIL ROTOR

(CAN) DURING A 100 HR INSPECTION OF AN A-STAR IN THE FIELD, THE ENGINEER PERFORMING THE INSPECTION FOUND THAT THE T/R SERVO FRICTION/GUIDE SHIM (PAD) WAS INSTALLED ON THE FORWARD BOLT AND NOT ON THE AFT ONE. WHEN RT PEDAL IS APPLIED THE SERVO FRICTION/GUIDE SHIM (PAD) SLIDES .7500 PERCENT OF THE WAY OUT OF THE FIXED GUIDE TAILBOOM). THIS CONDITION COULD POTENTIALLY CAUSE THE SERVO TO JAM. THE FRICTION/GUIDE SHIM (PAD) WAS RELOCATED THE THE AFT BOLT IAW THE MM AND THE SERVO WAS CHECKED FOR CORRECT OPERATION. (TC NR 20060710005)

2006FA0000813	SNIAS	TMECA	MODULE	UNKNOWN
5/19/2005	AS350B2	ARRIEL1D1	70BMO35420	ENGINE

MO2 AND MO3 WERE REPLACED. GROUND RUNS WERE PERFORMED. OIL FLOW AT REAR BRG WAS MEASURED AT 180 MI. NO FUEL OR OIL LEAKS NOTED. DURING PWR CHECK, AT APPROX 1000 FT AGL, (ENG CHIP) LIGHT ILLUMINATED, AFTER PILOT INITIATED LANDING. DURING DESCENT, BURNING ODOR WAS NOTED IN COCKPIT, AT APPROX 70 FT AGL (FIRE) CAUTION LIGHT ILLUMINATED. PILOT EXITED AC WITH FIRE EXTING, SMOKE WAS COMING FROM ENG COWLING, NO INDICATIONS OF FLAMES OR FIRE. INSP PRIOR TO TEARDOWN REVEALED OIL WAS EVIDENT AT REAR BRG AREA, ON OUTSIDE OF MO4. NOISE CAME FROM REAR BRG AREA. METAL CHIPS FOUND AT REAR BRG SCAVENGE CHIP DETECTOR, IN SCREEN. TEARDOWN COULD NOT BE COMPLETED BECAUSE REAR BRG HSG COULD NOT BE SEPARATED FROM MO3. (K)

2006FA0000751	SNIAS	TMECA	SPRING	BROKEN
7/13/2006	AS350B2	ARRIEL1D1	350A310033KIT7	VIBRATION ABSORB

PILOT REPORTED EXCESSIVE CABIN VIBRATION AT FULL POWER WHILE ON THE GROUND. VIBRATION SUBSIDED IN A HOUR AND THROUGHOUT THE FLIGHT ENVELOPE. DISASSEMBLY AND INSPECTION REVEALED 1 OF 3 SPRINGS IN VIBRATION ABSORBER OF MAIN ROTOR CRACKED ALL THE WAY THROUGH. COMPLIED WITH 2500 HR INSPECTION OF VIBRATION ABSORBER JAW MFG MAINT WORK CARDS AND SERVICING RECORDS. REPLACED ALL 3 SPRINGS AND PN EN2023R12L. BEARINGS WHICH HAD EXCESSIVE PLAY. REINSTALLED AN AIRCRAFT AND VIBRATION WAS ELIMINATED. (K)

CA060802002	SNIAS	TMECA	TURBINE BLADES	FAILED
7/11/2006	AS350B2	ARRIEL1D1	2292253850	GAS GENERATOR

(CAN) THE PILOT SHUTDOWN THE AIRCRAFT TO HOOK UP HIS WATER BUCKET, AFTER A SHORT TIME PERIOD OF APPROXIMATELY 8 TO 10 MINUTES HE ATTEMPT TO RESTART THE AIRCRAFT. THE STARTER WOULD NOT TURN THE ENGINE. A BORESCOPE WAS USED TO LOOK INSIDE THE ENGINE AND FOUND THAT THE 1ST STAGE TURBINE BLADE HAD RUBBED. THE M03 WAS THEN REPLACED AND THE AIRCRAFT RETURN TO SERVICE. (TC NR 20060802002)

CA060726002	SNIAS	TMECA	TURBINE BLADES	FAILED
7/11/2006	AS350B2	ARRIEL1D1	2292253850	1ST STAGE

(CAN) THE PILOT SHUTDOWN THE AIRCRAFT TO HOOK UP HIS WATER BUCKET, AFTER A SHORT TIME PERIOD OF APPROXIMATE 8 TO 10 MINUTES HE ATTEMPTED TO RESTART THE AIRCRAFT. THE STARTER WOULD NOT TURN THE ENGINE, A BORESCOPE WAS USED TO LOOK INSIDE THE ENGINE AND FOUND THAT THE 1ST STAGE TURBINE BLADE HAD RUBBED. THE M03 WAS THEN REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. (TC NR 20060726002)

CA060726001	SNIAS	TMECA	IGNITER	LOOSE
7/20/2006	AS350BA	ARRIEL1B	955075400	ENGINE

(CAN) INSULATION WITHIN IGNITOR FOUND LOSE. IN LIGHT OF PAST INCIDENCE OF ENGINE FOD, IGNITORS WERE CHANGED. IGNITOR P/N 955075400/CH34745 (TC NR 20060726001)

CA060630006	SNIAS	TMECA	GEARBOX	FAILED
6/27/2006	AS350BA	ARRIEL1B	350A33020005	TAIL ROTOR

(CAN) TAIL ROTOR GEARBOX CHIP LIGHT ILLUMINATED IN FLIGHT. AIRCRAFT LANDED AND CHIP DETECTOR EXAMINED, MALL AMOUNT OF FERROUS MATERIAL ON DETECTOR. DETECTOR CLEANED AND SERVICEABILITY

CHECK CARRIED OUT. ON RETURN TO LANDING SITE, SMALL AMOUNT OF FINE HAIR LIKE PARTICLES DISCOVERED. TAIL ROTOR GEARBOX REMOVED AND SENT TO OVERHAUL FACILITY FOR TEARDOWN AND REPAIR. SERVICABLE GEARBOX INSTALLED, AIRCARFT RETURNED TO SERVICE.

2006FA0000749	SOCATA	LYC	LYC	SPRING	BROKEN
7/20/2006	TB21	TIO540AB1A		LW14995	CYLINDER

THE PUSH ROD HOUSING TUBE RETAINING SPRINGS WERE BROKEN AT THE BEND JUST OB OF THE MOUNT HOLE. THE UNBROKEN SPRINGS HAD A TOOL LINE AT THE POINT OF THE BEND. THERE WERE 2 BROKEN SPRINGS, LOCATED ON NR 3 AND NR 4 CYLINDERS. ONE SPRING HAD ONE SIDE BROKEN OFF THE OTHER BOTH SIDES WERE BROKEN. BELIEVE THE TOOL MARKS ARE CAUSING THE PROBLEM. ALL 6 SPRINGS WERE REPLACED WITH NEW MFG PARTS AND SOME ALSO CONTAINED THE TOOL MARKS AT THE BEND. (K)

CA060627004	SWRNGN	GARRTT		BEARING	FAILED
6/27/2006	SA226TC	TPE33110UA		31035851	TORQUE SENSOR

(CAN) THE FRONT SCAVENGE PUMP DRIVE GEAR SHAFT SHEARED IN THE SCAVENGE PUMP, DUE TO THE SCAVENGE PUMP BUSHING THAT SEIZED FROM OIL STARVATION AND METAL CONTAMINATION CAUSED BY THE TORQUE SENSOR BEARING. THE OIL PRESSURE PUMP SHAFT AND BUSHING ALSO HAVE WEAR ON THEM DUE TO OIL STARVATION. THE TORQUE SENSOR BEARING PART NUMBER 3103585-1 FAILED JAMMING UP THE GEAR CAUSING THE BEARING OUTER RETAINER TO HAVE EXCESSIVE WEAR ON IT. THE INNER AND OUTER BEARING RACES AND BALLS HAVE WEAR DAMAGE ON THEM ALSO DUE TO THE FAILED BEARING.

2006FA0000788	SWRNGN			FRAME	CRACKED
8/11/2006	SA227AC			2722019046	WING

DURING REPAIR OF WING SPAR SHEAR WEB IAW AD AND SRM, IT WAS FOUND THAT THE LT AND RT BELT FRAMES WERE CRACKED AT THE STRINGER 11 CUTOUT. THE CRAKED BELT FRAMES WILL BE REPLACED WITH NEW UPON COMPLETION OF THE SPAR REPAIR. AIRCRAFT IS OPERATING ONT HE SPANISH REGISTER AS ECIXL. (K)

2006FA0000787	SWRNGN			FRAME	CRACKED
8/11/2006	SA227AC			2722019045	FUSLEAGE

DURING REPAIR OF WING SPAR SHEAR WEB IAW AD AND SRM, IT WAS FOUND THAT THE LT AND RT BELT FRAMES WERE CRACKED AT THE STRINGER 11 CUTOUT. THE CRACKED BELT FRAMES WILL BE REPLACED WITH NEW COMPLETION OF THE SPAR REPAIR. AIRCRAFT IS OPERATING ON THE SPANISH REGISTER. (K)

CA060426001	SYMPHO	LYC		MOUNT	DAMAGED
4/5/2006	SA160	O320D2A		7120000101	ENGINE

(CAN) INSPECTION FOR ISSUANCE OF A C OF A AIRCRAFT TOTAL TIME: 2.8 HRS DURING THE INSPECITON OF THIS AIRCRAFT BY CIVIL AVIATION INSPECTOR, IT WAS NOTED THAT AN ENGINE CONTROL SUPPORT BRACKET WAS CONTACTING THE LOWER TUBE OF THE ENGINE MOUNT. NO DAMAGE TO THE ENGINE MOUNT WAS NOTICED BUT THE PAINT FINISH WAS MARKED BY CHAFFING. ACTION TAKEN; ENGINE MOUNT BRACKET 760-02043-01 WAS SLIGHTLY RELOCATED ON 760-02041-01 CONTROL SUPPORT BRACKET TO ADD CLEARANCE FOR ENGINE VIBRATIONS AND MOVEMENTS. (TC# 20060426001)

CA060731021	UROCOP	PWA		ROTOR	SEIZED
7/27/2006	EC135P1	PW206B			ENGINE

(CAN) DURING CLIMB THE ENGINE ELECTRONIC CONTROL REVERTED TO MANUAL AND THE PILOT ELECTED TO LAND. ON DESCENT THE AIRCRAFT BEGAN TO VIBRATE AND THE PILOT AUTOROTATED. SUBSEQUENT INSPECTION REVEALED DAMAGE TO ENGINE REAR MOUNT AND ROTOR SEIZURE. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20060731021)

[CA060628001](#)

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4/11/2006

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DISTRIBUTER

(CAN) DURING POST REMOVAL TEARDOWN INSPECTION OF MAGNETO ELECTRODE FINGER FOUND BROKEN OFF OF THE DISTRIBUTER GEAR.

END OF REPORTS