



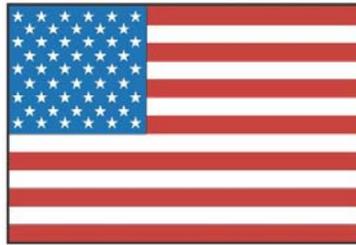
U.S. Department
of Transportation
**Federal Aviation
Administration**

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Regulatory Support Division

ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



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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 and thereby cooperate 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 which 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 Malfunction or Defect Reports. 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.

AIRPLANES

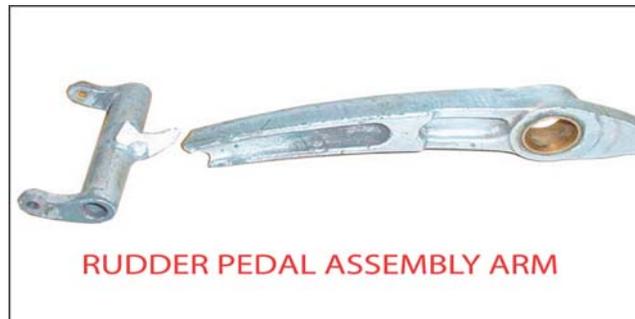
BEECH

Beech; Model T-44A (C90); King Air; Cracked Rudder Pedal Arm Assembly; ATA 2720

While conducting a dye-testing inspection, the technician discovered a crack in the pilot's side right rudder pedal arm assembly (P/N 50-524326-25). He stated that the failed rudder pedal arm assembly was made of magnesium, but the replacement part was aluminum. (Refer to the illustration.)

The dye-testing inspection was performed as part of a Navy T-44A fleet-wide inspection after four rudder pedal assembly arms failed in a 3-month period. The inspections revealed 16 failures in a fleet of 54 aircraft.

Part total time: 14,459 hours.



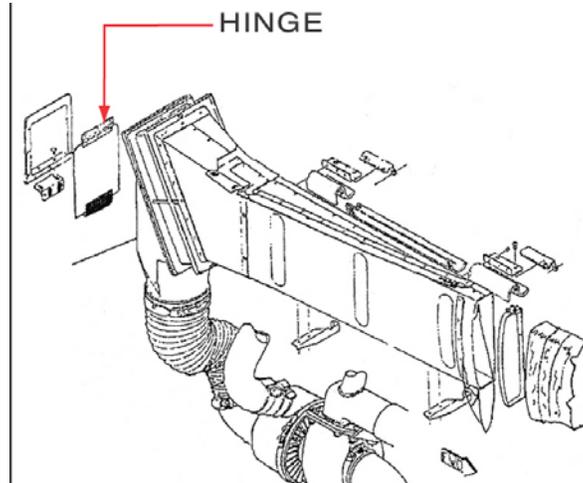
CESSNA

Cessna; Model T-210J; Centurion II; Failure of the Alternate Air Door Hinge Pin; ATA 7160

The submitter reported the original alternate air door hinge pin (P/N 1250839-12) was made out of aluminum. The pin had worn and dropped pieces into the intake system causing damage to the turbo charger. (Refer to the illustration.)

According to the submitter, the new hinge pin is made of stainless steel and secured in the hinge by crimping. He recommended routine inspections of this area and changing the aluminum pins to stainless steel pins.

Part total time: 2,230 hours.



Cessna; Model 402B; Cracked Aft Bulkhead Assembly on the Wingtip Fuel Tanks; ATA 2810

During an inspection of the right and left wingtip fuel tanks aft bulkhead support assembly (P/N 0823400-109 left and 0823400-110 right), which holds the aft end of the tip tank to the wing, the technician discovered they were cracked. The bulkheads are cracking at the inboard radius above the area that is bolted to the wing.

A search of the FAA Service Difficulty Reporting Program data base revealed 11 additional reports citing failure of the fuel tip tanks aft bulkhead support assembly on the Cessna Models 414, 402, 340, and 310 aircraft.

Part total time: 6,500 hours.

Cessna; Model; 402C II; Businessliner; Frozen Main Landing Gear Up-Lock Actuator; ATA 3230

On approach to the airport, the pilot selected gear down and did not get an indication that the right gear was down-and-locked. After cycling the gear several times without seeing a down-and-locked light, he was forced to land with the right main gear still in the wheel well.

After the aircraft was ferried to a maintenance facility, the technician performed gear swings and the systems was OK. Upon further inspection, he found water in the hydraulic system, primarily in the up-lock actuator (P/N 5727110-9). He tested the fluid from the up-lock actuator and determined that it would freeze. The day of the accident, the outside air temperature on the ground was minus 40 degrees F. He determined that the fluid in the up-lock actuator froze and did not allow the up-lock actuator to release.

According to the submitter, this system's up-lock actuator is a one-way cylinder, and the fluid does not circulate. Since the fluid does not circulate with normal operation of the system, he recommended changing the aircraft hydraulic fluid at least once a year with the up-lock removed and drained.

Part total time: 13,949 hours.

PIPER

Piper; Model PA-28R-201; Arrow III; Failure of the Main Landing Gear Down-Lock System; ATA 3230

During a preflight walkaround, the pilot noticed the main landing gear down-lock spring (P/N 67203-00) was hanging down by one end.

Further investigation revealed the spring attach bracket (P/N 67753-000) had broken and the main gear down-lock spring was not attached to the trunnion. (Refer to the illustration.) The spring attach bracket is mounted to the trunnion underneath the squat switch and is attached by two bolts. The bracket failed at the attach point for the down-lock spring.

According to the submitter, the spring is the emergency-extension system backup if the hydraulic system fails.

A search of the FAA Service Difficulty Reporting Program data base revealed two additional reports citing failure of the main landing gear down-lock spring attach bracket.

Part total time: 11,129 hours.



Piper; PA-46-500TP; Malibu Meridian; Failure of the Nose Landing Gear Door Hinge; ATA 5280

The FAA received a Malfunction or Defect Report citing failure of the nose landing gear door forward hinge pin (P/N 102156-002). The report stated that the hinge pin migrated aft due to improper securing. The loss of the hinge pin would result in significant damage to the nose gear door and aircraft.

The submitter suggests drilling a hole in the hinge to enable the use of safety wire or a cotter pin to prevent hinge pin migration.

Part total time: 228 hours.

AMATEUR, EXPERIMENTAL AND SPORT AIRCRAFT

THE IMPORTANCE OF PROPER USE OF SAFETY EQUIPMENT

Applicable to all homebuilt aircraft; equipment/furnishings, flight compartment equipment (shoulder harness); ATA 2510

The National Transportation Safety Board, Northwest Region, located in Seattle, Washington, submitted the following article. *(This article is published as it was received.)*

The standard RV-4 aircraft kit was equipped with a 4-point restraint system (lap belt and two shoulder harness straps) and the accident aircraft was observed to have the complete system installed and functional at the accident site.

On the afternoon of June 20, 2003, after conducting taxi tests and power checks for several days before the accident, the pilot departed his home airport and on downwind radioed that he was "having engine

problems” and was “going to try to make it back to the field.” The aircraft crashed in a lightly wooded area approximately 3,300 feet short of the threshold of runway 30 and close to the extended centerline.

According to local law enforcement personnel who arrived on scene immediately following the accident, the pilot was secured by his seat belt in the aircraft. The shoulder harness, however, was found unclipped and behind the pilot. An examination of the cockpit area determined that the cockpit interior space had not suffered any deformation or reduction and the instrument panel was intact with no broken/cracked instrument glass. The aft edge of the instrument glare shield cover, an aluminum cover above the instrument panel, was observed deformed in a forward direction consistent with an object impacting in forward motion.

This unnecessarily fatal accident serves to remind all pilot/owner/builders of the dangers of modifying or failing to properly use appropriate safety equipment.

Part (shoulder harness): time unknown.

THE EFFECTS OF MODIFYING SAFETY EQUIPMENT

Applicable to all homebuilt aircraft with roll bar installation; fuselage, miscellaneous structure (roll bar); ATA 2560

The National Transportation Safety Board, Northwest Region, located in Seattle, Washington, submitted the following article. (*This article is published as it was received.*)

The standard RV-4 aircraft kit was equipped with a roll bar which was to be installed directly aft of the forward pilot’s seat. The roll bar conformed closely to the inside dimensions of the canopy just aft of the forward pilot’s seat and was designed to protect the forward seat occupant in the event of a rollover/nose over occurrence. The owner/builder modified the roll bar in his RV-4 aircraft from the original “elliptical” design to a shortened, inverted “U” (refer to graphic image). The top of the modified roll bar reached only to the approximate height of the pilot’s shoulders rather than to the upper inside radius of the canopy.

On the evening of June 28, 2003, while the pilot was en route from Idaho to his home airstrip, the engine suffered a total loss of power and the pilot executed a forced landing to a field consisting of slightly rough terrain covered with 3 to 5 foot high grass. During the landing roll the tailwheel-equipped aircraft nosed over. Post mortem examination of the pilot revealed the cause of death as “multiple blunt force head and neck injuries” and “probably positional asphyxia as [a] contributing factor.” The pilot would very likely have sustained only minor injuries had the non-modified roll bar been installed.

This unnecessarily fatal accident serves to remind all pilot/owner/builders of the dangers of modifying or failing to properly use appropriate safety equipment.

Part (modified roll bar): time unknown.



AIR NOTES

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

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

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

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

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

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

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

SERVICE DIFFICULTY REPORTING PROGRAM

The objective of the Service Difficulty Reporting (SDR) Program is to achieve prompt and appropriate correction of conditions adversely affecting continued airworthiness of aeronautical products fleet wide. The SDR program is an exchange of information and a method of communication between the FAA and the aviation community concerning inservice problems.

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 which may impair its future function, it is considered defective and should be reported under the program.

These reports are known by a variety of names: Service Difficulty Reports (SDR), Malfunction or Defect Reports (M or D) and Maintenance Difficulty Reports (MDR).

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 of this review, 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 (AD's) to address a specific problem.

The primary source of SDR's are certificate holders operating under Parts 121, 125, 135, 145 of the Federal Aviation Regulations, and the general aviation community which voluntarily submit records. FAA Aviation Safety Inspectors may also report service difficulty information when they conduct routine aircraft and maintenance surveillance as well as accident and incident investigations.

The SDR data base contains records dating back to 1974. Reports may be submitted on the Internet through an active data entry form or on hard copy. The electronic data entry form is in the Flight Standards Aviation web site. The URL is: <http://av-info.faa.gov/>.

A public search/query tool is also available on this same web site. This tool has provisions for printing reports or downloading data.

At the current time we are receiving approximately 45,000 records per year.

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

E-mail: <mailto: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: Isaac Williams (405) 954-6488
FAX: (405) 954-4570 or (405) 954-4655

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 between January 22, 2004, and February 17, 2004, 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 |
| <u>CA031103005</u> | | PWA | | ENGINE | LIGHTNING STRIKE |
| 10/7/2003 | | PT6A50 | | | |
| <p>(CAN) AC WAS HIT BY LIGHTNING STRIKE. REVIEWED ENG ON GROUND AND RESIDUAL MAGNETISM WAS FOUND ON PROP SHAFT. IT WAS CONFIRMED THAT ENG DID SUFFER FROM LIGHTNING STRIKE, PARTS FOUND WITH HIGH MAGNETISM ON THEM. PRESENCE OF ARCING ON FRONT RED GB MAIN BEARINGS ARE TYPICAL RESULTS FROM LIGHTNING STIKES. ONE 1ST STG PLANET GEARS WAS FOUND WITH SPALLING ON ONE GEAR TOOTH. DETERMINED THAT THIS DAMAGE DID NOT COME FROM LIGHTNING STRIKE. NO OTHER MATING GEAR WAS FOUND WITH MATCHING DAM. THAT WOULD BE PRESENT IF SPALLING FROM AN ELEC DISCHARGE ARC. DAMAGE INDICATES IMPACT ON TIP OF TOOTH CAUSING MATERIAL DISPLACEMENT TOWARDS SPALLED SIDE. DISPLACEMENT INCREASED SURFACE STRESS CAUSING SURFACE TO FRACTURE AND SPALL.</p> | | | | | |
| <u>CA031127006</u> | | RROYCE | | PLATE | MISMANUFACTURED |
| 11/20/2003 | | TAY6118 | | EU13933 | BLEED VALVE |
| <p>(CAN) A REQUEST CAME FROM MFG TO VERIFY A POSSIBLE MANUFACTURING PROBLEM ON PLATE EU13933. MFG FOUND THEIR STOCK OF EU13933 WRONGLY MANUFACTURED. RADIUS OF PLATE WAS MACHINED ON WRONG SIDE OF PLATE BY MANUFACTURER IN SPAIN. HAVING NO RADIUS IN CORRECT AREA COULD CAUSE A POTENTIAL STRESS TO THE TAY HP COMPRESSOR BLEED VALVE STRAP WHICH COULD CAUSE A POTENTIAL FAILURE OF BLEED VALVE. DEFECTIVE PLATES HAVE BEEN REMOVED FROM USAGE AN PLACED IN QUARANTINE AND PROBLEM REPORTED TO MFG IAW THEIR REQUEST. MFG ARE PRESENTLY INVESTIGATING PROBLEM AND POTENTIAL SAFETY HAZARD. MEANWHILE MFG INSTALLING USED SERVICEABLE PLATE UNDER TECHNICAL VARIANCES FROM MFG. CONTAINMENT ACTIONS ARE PRESENTLY UNDERGOING BY MFGS.</p> | | | | | |
| <u>CA031114007</u> | AEROSP | ALLSN | | CONNECTOR | BURNED |
| 10/16/2003 | AS355F1 | 250C20F | | | FUEL PUMP |
| <p>(CAN) WHILE THE AIRCRAFT WAS IN CRUISE FLIGHT, A BURNING ODOR WAS NOTICED IN THE CABIN. THE PILOT LANDED THE AIRCRAFT UNEVENTFULLY. THE BURNING ODOR WAS TRACED TO THE OVERHEAD LT FUEL PUMP SWITCH. WHEN THE OVERHEAD PANELS WERE REMOVED A BURNED PUMP SWITCH CONNECTOR WAS SEEN. CONNECTOR WAS REPLACED. THE RT SIDE WAS ALSO CHECKED AND IT WAS NOTED THAT THE CONNECTOR IS SHOWING SIGNS OF OVER HEAT. TWO SEPARATE D.C. BUSES, PUMP SWITCHES AND PUMPS AFFECTED.</p> | | | | | |
| <u>AUS20031132</u> | AEROSP | TMECA | | PIN | FAILED |
| 11/5/2003 | AS365N2 | ARRIEL2B | | 24045 | TORQUEMETER |
| <p>(AUS) ENGINE TORQUEMETER PIN FAILED. PIN COULD NOT BE FOUND AND IT WAS SUSPECTED THAT THE PIN WAS SOMEWHERE IN THE ENGINE. ENGINE WAS REMOVED FOR REPAIR.</p> | | | | | |
| <u>CA031202005</u> | AIRBUS | IAE | | WIRE | DAMAGED |
| 12/1/2003 | A321211 | V2530A5 | | | BUFFET/GALLEYS |
| <p>(CAN) WIRE DAMAGE IN COMPARTMENT 2411, DAMAGED OVEN WIRES IN GALLEY 5, COMPARTMENT 2408. WIRES FOR ALL OVENS IN GALLEY 5 ARE COLLECTED TOGETHER AND ROUTED THROUGH THIS COMPARTMENT 2408. O/NIGHT CREWS PERFORM AN OVEN FIT CHECK IN COMPARTMENT 2411 WITH SIMULATED 0.5 INCH THICK X 3 INCH LONG X 1 INCH WIDE RUBSTRIP MOUNTED TO SIDE WALL OF THIS COMPT JUST IN FRONT OF WIRE BUNDLE IN THIS COMPT. BECAUSE IN LATEST PROPOSED REVISION OF MFG SB THEY ARE PROPOSING TO INSTALL RUB STRIPS IN BOTH COMPARTMENTS 2408 AND 2411. ONLY VALIDATED THE RUBSTIP FIT CHECK IN COMPARTMENT</p> | | | | | |

2408, WHERE PROBLEMS ARE OCCURRING.

| | | | | |
|--|--------|---------|----------------|-----------------|
| <u>CA031210005</u> | AIRTRC | PWA | ATTACH FITTING | CRACKED |
| 12/8/2003 | AT802 | PT6A67A | | HORIZONTAL STAB |
| <p>(CAN) DURING ANNUAL INSPECTION THE RT HORIZONTAL STABILIZER AUX FIN WAS FOUND TO BE LOOSE. UPON INVESTIGATION BY MAINTENANCE PERSONNEL THE FORWARD STABILIZER BRACE AND AUX FIN ATTACH PLATE P/N 30653-2 WAS FOUND CRACKED COMPLETELY THROUGH AND AFT STABILIZER BRACE AND THE AUX FIN ATTACH PLATE WAS CRACKED APPROXIMATELY 1 INCH. THE CRACKS STARTED AT THE RADIUS OF EACH PLATE. THE ATTACH PLATES WERE REPLACED WITH NEW PARTS.</p> | | | | |
| <u>CA031121003</u> | BBAVIA | LYC | SPRING | BROKEN |
| 11/13/2003 | 7ECA | O235K2C | 21525 | TAIL STEERING |
| <p>(CAN) BROKEN TAILWHEEL SPRING DISCOVERED DURING GROUND HANDLING. HOOK HAD BROKEN OFF ONE END. BREAK APPEARED TO HAVE STARTED AT BEND WHERE HOOK IS FORMED FROM SPRING COIL.</p> | | | | |
| <u>CA031203005</u> | BBAVIA | LYC | LINE | LOOSE |
| 11/19/2003 | 7GCBC | O320A2B | O320A2B | OIL PRESS |
| <p>(CAN) PILOT REPORTED LOW OIL PRESSURE AND SMOKE. LANDED OFF AIRPORT TO MINIMIZE POSSIBLE DAMAGE TO ENGINE. NO LOSS OF POWER. INSPECTION REVEALED A LOOSE OIL PRESSURE LINE AT ENGINE. THE TECHNICAL RECORDS SHOWED NO INDICATION OF WORK BEING CARRIED OUT IN THAT AREA. THE LINE WAS REMOVED AND INSPECTED NO DAMAGE WAS FOUND. RE-INSTALLATION AND CLEANING OF THE ENGINE COMPARTMENT WAS CARRIED OUT. BOTH OIL FILTER AND SUCTION SCREEN REMOVED AND INSPECTED NO PROBLEM FOUND. ENGINE FILLED WITH AEROSHELL 15W50 AND GROUND RUN CARRIED OUT NO LEAKS AIRCRAFT RETURNED TO SERVICE. SUBSEQUENT OIL FILTER AND SUCTION SCREEN INSPECTION CARRIED OUT TWICE IN 10 HRS WITH NO PROBLEM FOUND.</p> | | | | |
| <u>CA031201003</u> | BBAVIA | LYC | WIRE | CHAFED |
| 12/1/2003 | 8GCBC | O360C2A | 33 | NAV LIGHTS |
| <p>(CAN) NAV WIRE IN LT WING FOUND ATTACHED WITH MASKING TAPE TO COMPRESSION TUBE. WIRE WAS CHAFING ON TUBE AND EXPOSED WIRE CAUSING SHORT AGAINST COMPRESSION TUBE, BLOWING FUSE.</p> | | | | |
| <u>CA031201004</u> | BBAVIA | LYC | WIRE | CHAFED |
| 12/1/2003 | 8GCBC | O360C2E | 3359 | NAV LIGHTS |
| <p>(CAN) NAV WIRE IN LT WING FOUND ATTACHED WITH MASKING TAPE TO 2ND AND 3RD COMPRESSION TUBES FROM OB, AND RT WING FOUND ATTACHED WITH MASKING TAPE TO 3RD (FROM OB) COMPRESSION TUBE. WIRES CHAFFING ON TUBE AND EXPOSED WIRE CAUSING SHORT AGAINST COMPRESSION TUBE, BLOWING FUSE.</p> | | | | |
| <u>CA031203001</u> | BBAVIA | LYC | TUBE | BROKEN |
| 12/2/2003 | 8GCBC | O360C2E | 71470209L | LT MLG |
| <p>(CAN) VERTICAL FRAME TUBE JUST ABOVE AND ATTACHING TO MLG TRUSS FITTING BROKEN JUST ABOVE WELD AT MLG FITTING. CRACK TRAVELS COMPLETELY AROUND AND SECOND CRACK GOES VERTICAL 2 INCHES FROM FIRST LOWER CRACK, THEN AROUND THE TUBE AGAIN APPROX 75 PERCENT.</p> | | | | |
| <u>CA031203002</u> | BBAVIA | LYC | SUPPORT | CRACKED |
| 12/2/2003 | 8GCBC | O360C2E | 4149641497 | FUEL TANK |
| <p>(CAN) FUEL TANK SUPPORT BRACKETS CRACKED AT ENDS DIRECTLY OFF OF WELDS. 5 OUT OF 6 BRACKETS CRACKED IN LT WING AND ONLY 1 FOUND CRACKED IN RT WING.</p> | | | | |
| <u>CA031203003</u> | BBAVIA | LYC | SUPPORT | CRACKED |
| 12/2/2003 | 8GCBC | O360C2E | 4149641497 | FUEL TANK |
| <p>(CAN) FUEL TANK SUPPORT BRACKETS FOUND CRACKED AT ENDS DIRECTLY OFF OF WELDS. 3 IB BRACKETS CRACKED IN RT WING NONE IN LT WING. NUMBER OF CRACKS VARY FROM 2 TO ALL 4 POINTS OF EACH BRACKET.</p> | | | | |

| | | | | |
|--------------------|--------|---------|-----------|---------------|
| <u>CA031128003</u> | BBAVIA | LYC | WIRE | MISROUTED |
| 11/27/2003 | 8GCBC | O360C2E | 186187192 | STROBE LIGHTS |

(CAN) DURING COMPANY STRUCTURAL INSPECTION AND REPAIR PROGRAM (SIRP), FABRIC WAS REMOVED FROM THE WINGS. ON INSPECTION OF THE WIRES, IT WAS DISCOVERED THAT THE POWER WIRES FOR THE NAV AND STROBE LIGHTS WERE INCORRECTLY ROUTED ALLOWING THE WIRES TO RUB ON A RIB. FURTHER INSPECTION FOUND THAT THESE WIRES WERE NOT SUPPORTED OVER A COMPRESSION STRUT ALLOWING THE WIRE TO RUB IN THIS AREA. ON INSPECTION OF THE WIRE ROUTING DOWN THE LEADING EDGE NOW INCLUDING THE STALL WARNING WIRES, 2 GROMMETS ON THE NOSE RIBS WERE FOUND DETERIORATED AND SPLIT ALLOWING WIRES TO RUB ON THE NOSE RIBS. 2 OTHER GROMMETS WERE FOUND PARTIALLY SPLIT AND DETERIORATING.

| | | | | |
|--------------------|--------|---------|-------|---------|
| <u>CA031128005</u> | BBAVIA | LYC | MOUNT | CRACKED |
| 11/28/2003 | 8GCBC | O360C2E | 21583 | TE FLAP |

(CAN) ON THE COMPANY STRUCTURAL INSPECTION AND REPAIR PROGRAM (SIRP), FLAP MOUNT (LEFT WING ROOT POSITION) WAS INSPECTED AND CRACKS WERE FOUND ON THE MOUNTING FACE BOTTOM BOLT HOLE.

| | | | | |
|--------------------|--------|---------|------|------------|
| <u>CA031201002</u> | BBAVIA | LYC | WIRE | CHAFED |
| 12/1/2003 | 8GCBC | O360C2E | 33 | NAV LIGHTS |

(CAN) NAV WIRE IN LT WING FOUND ATTACHED WITH MASKING TAPE TO COMPRESSION TUBE. WIRE WAS CHAFING ON TUBE AND EXPOSED WIRE CAUSING SHORT AGAINST COMPRESSION TUBE, BLOWING FUSE.

| | | | | |
|--------------------|--------|---------|---------------|-------------|
| <u>CA031217001</u> | BBAVIA | LYC | CONTROL CABLE | FRAYED |
| 12/15/2003 | 8GCBC | O360C2E | 21903 | FLAP HANDLE |

(CAN) DURING THE COMPANIES STRUCTURAL INSPECTION AND REPAIR PROGRAM (SIRP), THE FLAP CABLE ATTACHED TO THE FLAP HANDLE WAS FOUND FRAYED AS IT STARTS TO ENTER AND TURN AROUND THE SECTOR (P/N 3-1128). THERE WAS NO INDICATION OF FRAYING UNTIL THE CABLE WAS REMOVED AND INSPECTED. IT WAS ESTIMATED THAT THE CABLE WAS FRAYED 70 PERCENT.

| | | | | |
|--------------------|----------|--------|---------|---------------|
| <u>CA031105004</u> | BEECH | PWA | LEVER | CRACKED |
| 11/5/2003 | 100BEECH | PT6A28 | 3011543 | ENGINE CONROL |

(CAN) UPON INSPECTION OF THE REVERSING LEVER GUIDE PIN BRACKET FOR WEAR DURING AN ENGINE BUILD UP IT WAS NOTICED THAT THE BRACKET PLATE THAT THE GUIDE PIN IS WELDED TO WAS CRACKED. THE CRACK WAS ADJACENT TO THE PIN WELD AND ON THE FORWARD SIDE OF THE PLATE. TOTAL FAILURE OF THE PLATE WOULD CAUSE THE PIN TO DISLodge ALLOWING THE BETA ARM TO ROTATE OUT OF THE PROPELLER REVERSING ARM SLIP RING. SEE PT6A-27/2 8 ILLUSTRATED PARTS MANUAL CHAPTER 76-10-00 FIGURE 2 ITEM 390

END OF REPORTS
