



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

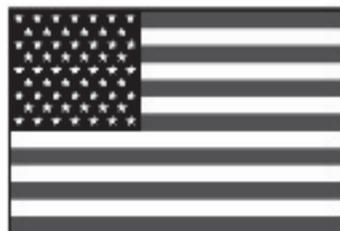
**AFS-600**  
*Regulatory Support Division*

## ADVISORY CIRCULAR 43-16A

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# AVIATION MAINTENANCE ALERTS

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**ALERT  
NUMBER  
295**



**February  
2003**

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

**AVIATION MAINTENANCE ALERTS**

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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.

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**AIRPLANES**

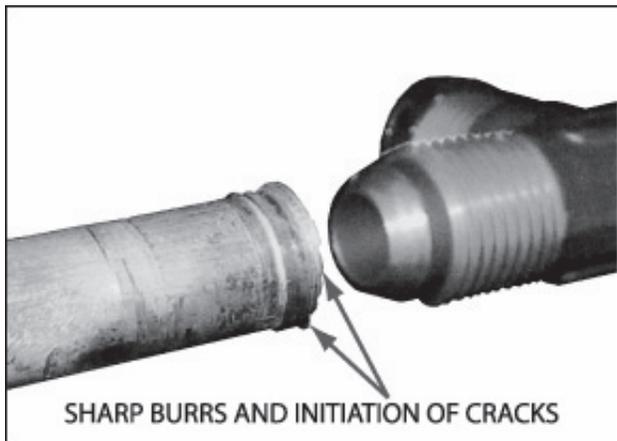
**AMERICAN CHAMPION**

**American Champion; Model 8-KCAB; Decathlon; Fuel Distribution; ATA 2820**

The pilot reported that fuel was leaking from the inverted fuel system header tank.

The technician performed a visual inspection of the inverted fuel system header tank fuel distribution lines and discovered six fuel leaks. He stated the fuel leaks occurred from improper flaring of the 3/8-inch aluminum lines. (Refer to the following illustration.)

Part total time-29 hours.



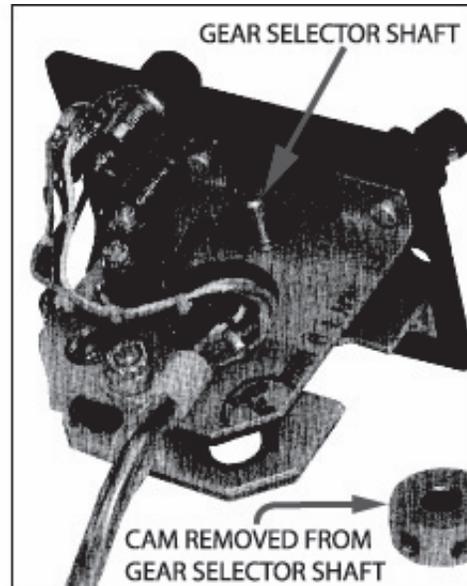
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**BEECH**

**Beech; Model A-36; Bonanza; Landing Gear System; ATA 3230**

The pilot reported the landing gear warning horn was sounding in the cockpit as he taxied the aircraft. During a subsequent takeoff, the landing gear retracted as soon as the aircraft left the ground; however, the landing gear control switch was in the "down" position. He had difficulty getting the landing gear into the "down-and-locked" position.

Electrical troubleshooting established that the landing gear control switch was commanding gear retraction even though the switch was in the “down” position. The landing gear control switch (P/N 36-380050-1) was removed from panel for inspection. The technician discovered the cam that actuates the microswitch to raise and lower the landing gear was loose. The cam is held in place with two setscrews that lock the cam to the gear selector handle shaft. He stated that one setscrew was not making contact with the shaft and the other setscrew was only making light contact. (Refer to the following illustration.)



The submitter suggested the technicians ensure a more positive manner for locking the cam to gear selector switch shaft. A search of the FAA Service Difficulty Reporting (SDR) System data base revealed one additional report on this subject matter.

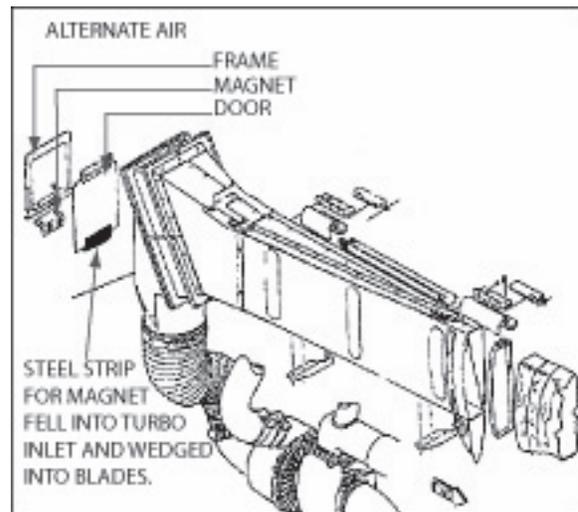
Part total time-529 hours.

### CESSNA

#### Cessna; Model T-210M; Engine Air Intake Section; ATA 7160

The pilot reported that during the takeoff roll, the engine turbocharger failed.

The technician determined the steel strip for the induction alternate air door magnet (P/N 1250839-21) wedged into the turbocharger inlet blades. All the leading edges of the turbocharger inlet blades were damaged. (Refer to the following illustration.)



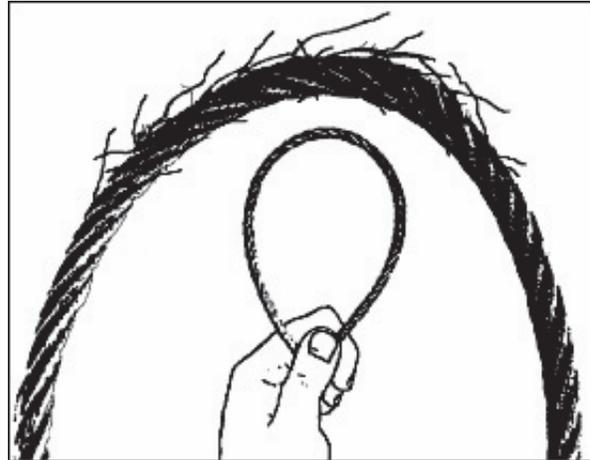
The submitter believed that due to dissimilar metal corrosion between the steel strip and the aluminum attachment rivets, the steel strip separated and was drawn into the turbocharger inlet.

Part total time-3,063 hours.

**Cessna; Models 336/337; Skymaster; Asymmetric Flap Extension; ATA 2750**

This aircraft experienced an asymmetric flap extension as the result of a failed flap cable. Excessive wear at the right hand inboard bellcrank caused this failure. The wear occurred at the tight radius of the bend and was not be noticeable until the cable was removed.

The maintenance manual requires a 100-hour inspection of the flap cable system. It is recommended that maintenance personnel treat this bellcrank and all others in this system as a “critical fatigue area” as defined in AC 43.13-1B, Acceptable Methods, Techniques, and Practices - Aircraft Inspection and Repair, chapter 7, section 8, paragraph 7-149(b). These areas require a close visual inspection, which can only be accomplished by removing the cable from the bellcrank. As recommended in AC 43.13-1B, the suspect cable should be removed and inspected for wear and broken wires. It is recommended that the cable be bent as shown in the following illustration to check for broken wires on the interior of the cable.



The state of the cable should be compared against the requirements of the maintenance manual and/or AC 43.13-1B to determine if the cable should be replaced.

Part total time-2,893 hours.

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**COMMANDER****Commander; Model 114; Landing Gear System; ATA 3230**

Pilot reported losing control of the aircraft during the landing. The left main landing gear collapsed, and the aircraft came to rest off the left side of the runway.

The technician investigated and discovered the left main landing upper side brace (P/N 45304-1) had split in half.

The submitter suspects that impurities and metal fatigue caused this failure.

Part total time-2,610 hours.

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## PIPER

### **Piper; Model PA 31-350; Chieftain; Nose Landing Gear Actuator Attach Bracket; ATA 5320**

During an inspection the technician discovered the upper support bracket (P/N 40987-02) for the nose landing gear actuator was cracked at the radius of the cutout that provides clearance for the powerpack actuating arm.

The submitter suspects the failure occurred as a result of cyclic stress. The FAA, Service Difficulty Program data base contains eight additional reports of a cracked nose landing gear actuator attach bracket. The reported failure occurred at an average total time of 17,628 hours.

Part total time-21,714 hours.

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## RAYTHEON

### **Raytheon; Model 390; Premier I; Pneumatic Distribution System; ATA 3610**

During an inspection, the technician discovered the pneumatic line (P/N 390-974032-0005), which provides a moisture drain point for the pneumatic manifold, regulated air pressure to the hydraulic package, the primary outflow valve, cockpit alternate air valve, and passenger door seal had bulged and split 1-1/4 inches from the lower end.

The submitter speculated the accumulated moisture froze in the line and caused this defect.

Part total time-410 hours.

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## HELICOPTERS

### BELL

### **Bell; Model 206L; Long Ranger; Engine Control; ATA 7603**

While rigging the N1 fuel system, the technician started to adjust the rod-end bearing (P/N REPB3N-2) on the lower end of the control tube (P/N 206-064-702 001) for the fuel control unit. The control tube broke approximately 1 inch from the lower end. He found corrosion in the interior of the tube, which was not visible until the tube broke. The corrosion appeared on top of the stud that is riveted to the control tube and secures the rod-end bearing. (Refer to the following illustration.)

The submitter stated that there was no visible path for the moisture to enter the tube.

Part total time unknown.



## AIRNOTES

### VIGILANT PILOT AVERTS DISASTER

The following article was submitted by Mr. Gregory J. Minarik, an FAA Aviation Safety Inspector (Airworthiness) assigned to the Fresno, California Flight Standards District Office (FSDO).

In November 2002, the old adage of “wake up and smell the roses” took on a completely new meaning for Brandon McCabe, the 34-year old pilot of a Federal Express Feeder aircraft. West Air, Inc., operates the Cessna 208B model aircraft under the provisions of Title 14 of the Code of Federal Aviation Regulations (14 CFR) part 135. Instead of “smelling the roses,” the pilot used his keen sense of smell to avoid a major catastrophe.

While on a takeoff roll, the pilot detected smoke coming from the vent located between the windshield and the magnetic compass. There was no sign of fire; nevertheless, the quick-thinking pilot immediately aborted the takeoff as a precautionary measure. The aircraft was returned to the operator’s maintenance facility without further incident.

Troubleshooting techniques conducted by the operator’s maintenance technicians revealed the clock circuit breaker was tripped. When the aircraft was manufactured, Cessna installed additional wires as part of the original wire bundle. More specifically, the aircraft’s electrical system was designed and built with the provisions of installing an hour meter. On the subject aircraft, an hour meter was not installed; however, the wiring was left in place for the hour meter.

The hour meter circuitry is comprised of two 20-gauge wires. One wire was designated as the ground (negative) and the other was the power (positive) terminal. An indepth examination revealed the hour meter ground wire was attached to the grounding point; the power wire was connected to the battery (via the clock circuit) and was generating electrical energy (i.e., it was “hot”). Upon closer inspection, it was discovered that the end of the power wire was not properly protected (exposed), had not secured with a tiedown strap, and was dangling freely directly behind the radio rack in the cockpit. This wire was hidden and difficult to detect during scheduled inspections.

Since the wire was not capped and was improperly secured during the manufacturing process, the bare wire (approximately .031”) managed to short out (arced) on a metal surface and began to burn. This arcing action tripped the clock circuit breaker and caused the smoke. The heat damage occurred when the exposed wire made contact (arced) with an unknown source behind the instrument panel.

As a corrective action measure, the maintenance technicians disconnected the affected terminal end at the circuit breaker, heat shrunk the terminal end for protection, and properly stowed the wire to ensure it was secure.

West Air, Inc., conducted a fleet campaign on all their Cessna 208B model aircraft and discovered numerous aircraft in their inventory that had the identical defect as previously referenced. This finding made it evident that a systemic problem existed. The operator submitted FAA Form 8010-4, Malfunction or Defect Report (M or D), for the affected aircraft to the Fresno FSDO.

This occurrence prompted the investigating inspector at the Fresno FSDO to initiate a safety recommendation. Furthermore, the manufacturer will issue a Cessna Air Bulletin to address the safety-related concerns mentioned above.

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The objective of the FAA's SDR program is to achieve prompt and appropriate fleet-wide correction of conditions adversely affecting the continued airworthiness of aeronautical products. The SDR program is an exchange of information/data and a method of communication between the FAA and the aviation community concerning inservice problems.

Therefore, an M or D report should be filed whenever a system, component, part, powerplant, propeller, or appliance fails to function in a normal or usual manner. If the foregoing has a flaw or imperfection that impairs (or may impair) future function, it is considered defective and should be reported under the SDR 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.

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

SDRs or M or Ds may be submitted online via the Internet web site at: <<http://av-info.faa.gov/isdr/>>.

By mail to this address:

Federal Aviation Administration  
Aviation Data Systems Branch, AFS-620  
P.O. Box 25082  
Oklahoma City, OK 73125

Or mail to your local FSDO.

You can access current and back issues of Advisory Circular 43-16A, Aviation Maintenance Alerts, from the Internet at: <<http://afs600.faa.gov>>. When the page opens, select "AFS-640" and then "Alerts" from the drop-down menu. The monthly issues of the Alerts are available back to July 1996, with the most recent edition appearing first.

As depicted in this article, it is extremely vital and crucial to submit M or D reports to ensure public safety and eliminate any possible safety-of-flight hazards. One submitted report to the FAA may prevent hazards to property; but most important, it may save lives.

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## **ELECTRONIC VERSION OF MALFUNCTION OR DEFECT REPORT**

One of the recent improvements to the AFS-600 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/isdr/>

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.

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## **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 is 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 and 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 AFS-600 Aviation Information web site under the heading SDR Main Menu. 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 Program Manager  
Aviation Data Systems Branch, AFS-620  
P.O. Box 25082  
Oklahoma City, OK 73125

Telephone: (405)954-6486  
9-AMC-SDR-ProgMgr@mmacmail.jccbi.gov

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### 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://afs600.faa.gov>

When the page opens, select "AFS-640" and then "Alerts" from the drop-down menu. The monthly issues of the Alerts are available back to July 1996, with the most recent edition appearing first.

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### AVIATION SERVICE DIFFICULTY REPORTS

The following are abbreviated reports submitted between December 20, 2002, and January 23, 2003, 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

These reports contain raw data that has not been edited. 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.

ACFTMAKE ACFTMODEL REMARKS	ENG MAKE ENGMODEL	COMPMAKE COMPMODEL	PART NAME PART NUMBER	PART CONDITION PART LOCATION	DIFF-DATE OPER CTRL NO.	T TIME TSO
			HUB 747621	CRACKED PROPELLER	11/07/2002 2003010700097	
CLEANED HUB, PLASTIC MEDIA BLASTED THREADED AREAS, AND EDDY CURRENT INSPECTED. EDDY CURRENT REVEALED CRACK INDICATION IN THREADED AREA NR 2 BLADE SOCKET 3RD THREAD INBOARD AFT SECTION, NO FURTHER ACTION TAKEN.						
		WOODWARD 8210007F	BEARING 180315	FAILED PROP GOVERNOR	12/02/2002 2003011500238	
(CAN) UPON DISASSEMBLY OF THIS GOVERNOR, IT WAS NOTED THAT ONE OF THE FOUR BEARING ASSEMBLIES HAD LOST ITS BALLS. BECAUSE THERE IS NO SCREEN IN THE BASE OF THIS GASKET, ANY OIL CONTAMINATES COULD CHANNEL BACK INTO THE ENGINE. THE GOVERNOR WAS COMPLETELY OVERHAULED, THE BEARINGS REPLACED, AND THE OWNER OF THE AIRCRAFT WAS ADVISED WHAT THE FINDINGS WERE.						
	CONT O200A		VALVE GUIDE 643766	MISINSTALLED CYLINDER HEAD	12/11/2002 2003010700105	
EXHAUST VALVE GUIDE IS A REPLACEMENT GUIDE FOR EXHAUST VALVE GUIDE. IN THE ENGINE CYLINDER ASSEMBLY. WHEN THE EXHAUST VALVE GUIDE IS INSTALLED, THE EXHAUST VALVE SPRING RETAINER WILL NOT SEAT PROPERLY OVER THE INSTALLED VALVE GUIDE. THERE IS NO IDENTIFIED EXHAUST VALVE SPRING RETAINER THAT WILL CORRECT THIS PROBLEM. CONTACTED MFG, NO ANSWER OR SOLUTION.						
	LYC IO540K1A5		PUSHROD	DESTROYED ENGINE	01/12/2002 2003010700119	5927 1395
ENGINE DISMANTLED DUE TO ENGINE FAILURE, FOUND NR 6 PUSHROD FAILED OR BEARING FAILED. PUSHROD COME OFF NR 6 CRANK JOURNAL AND DESTROYED ENGINE.						
	LYC IO720A1B		MAIN BEARING SL13885M03	FAILED ENGINE	12/19/2002 2003011100060	3
AFTER TEST CELL RUN, ENGINE OIL WAS DRAINED AND THE SUCTION SCREEN AND FILTER WAS CHECKED. A ABNORMAL AMOUNT OF ALUMINUM WAS FOUND. UPON DISASSEMBLY, IT WAS FOUND THAT THE FRONT BEARING HAD FAILED AT THE NR 2 JOURNAL. THE METAL APPEARED TO HAVE DELAMINATED AND TRANSFERRED TO THE CRANKSHAFT THRUST AREA AND CRANKCASE THRUST FACE.						
	LYC T5313B		NOZZLE 112000014	UNAPPROVED 2ND GP	10/31/2002 2003011500116	
(CAN) MILITARY PARTS FOUND INSTALLED ON ENGINE S/N LE-07616. INSTALLED PART MANUFACTURER CODE NUMBER IS 81996 (US MILITARY). IT SHOULD BE 91547. (HONEYWELL OEM). ENGINE S/N LE-07616 OVERHAULED ON 31 MARCH 1993 AT ENGINE TSN:2979.051. 2ND GP NOZZLE P/ N 1-120-000-14 S/N: AC102 2) SEAL HOUSING P/N 1-140-190-05 S/N: 01359M3) RETAINING RING P/N 1-100-890-03						
AEROSP A3355*	ALLSN 250C20		LABYRINTH 0292217030	CONTAMINATED ENGINE	12/16/2002 2003010700152	
CARBON BUILD UP IN LABYRINTH SEALS CAUSING BINDING NG.						
AEROSP A3355*	ALLSN 250C20		METERING 0292928540	LEAKING TURBINE	12/16/2002 2003010700153	326
FUEL LEAKING FROM CASE DRAIN OF METERING VALVE.						
AEROSP SA365N			ENCODER 396005241	INACCURATE ALTIMETER	01/03/2003 2003010700148	
ALTIMETER ENCODING INACCURATE. REPLACED WITH SERVICEABLE UNIT.						
AIRBUS A321211	IAE V2530A5	8201110000	OVEN	OVEN	11/19/2002 2003010800110	
(CAN) BURNING SMELL IN VICINITY OF FORWARD GALLEY. STRONGEST ODOR IN MIDDLE OF GALLEY. COMMERCIAL BUTTON PRESSED, SMELL DISAPPEARED.						
AIRBUS A330342	RROYCE RB211TRENT77		BRAKE ASSY 21577	FIRE NR 3	12/13/2002 2003011600106	
(CAN) NR 3 WHEEL OBSERVED SMOKING AS AIRCRAFT TAXIED TO GATE. THEN FLAMES WERE OBSERVED COMING FROM BETWEEN WHEEL HUB SPOKES. CREW LOG REPORT STATED MEDIUM BRAKING AND IDLE REVERSE SELECTED FOR LANDING. DUE INOPERATIVE REVERSER NR 2. AFTER AIRCRAFT STOPPED AT GATE A SMALL BRAKE FIRE OCCURRED. A FIRE EXTINGUISHER WAS DEPLOYED UNTIL NO FURTHER FLAMES WERE VISIBLE. NR 3 BRAKE ASSY AND NR 3 TIRE ASSY REPLACED AND LANDING GEAR WASHED WITH LOW PRESSURE.						
AIRTRC AT502B	PWA PT6A15AG		PLATE 301971	CRACKED VERTICAL STABILI	11/25/2002 2003012200239	
(AUS) VERTICAL FIN FRONT SPAR ATTACHMENT FITTING FAILED. REAR SPAR CRACKED.						
AMTR LANCASTER10	PCKARD 224		SWITCH	FAILED PROP FEATHERING	11/12/2002 2003011600077	
(CAN) AFTER TAKE OFF, PILOT EXPERIENCED DIFFICULTY CONTROLLING NR 4 PROP RPM. AFTER IN FLIGHT SHUT DOWN, PILOT UNABLE TO FEATHER NR 4 PROPELLER. UPON INSPECTION, NR 4 PROP FEATHERING SWITCH WAS FOUND TO HAVE FAILED INTERNALLY IN SUCH A MANNER THAT IT WAS TURNING THE PROP FEATHERING PUMP ON/OFF UNCOMMANDED. THIS SUBSEQUENTLY CAUSED THE RPM CONTROL DIFFICULTY WITH THE GOVERNOR. THE PROP FEATHERING PUMP MOTOR FAILED DUE TO OVER- EXTENDED USE, WHICH CAUSED THE PILOT AN INABILITY TO FEATHER THE ENGINE. BOTH COMPONENTS WERE REPLACED AND AIRCRAFT EXTENSIVELY TESTED PRIOR TO TEST						
AMTR T10	JACOBS R7559		FUEL TANK	BLOCKED MAIN	12/15/2002 2003010700093	163 20
ENGINE FAILURE DURING CRUISE FLIGHT. FAILURE DUE TO RIVETS FROM MAIN FUEL TANK CONSTRUCTION BLOCKING FUEL LINE DOWNSTREAM OF TANK. NO FINGER SCREEN INSTALLED AT TANK OUTLET. RECOMMEND CHECKING OTHER TANKS FOR FINGER SCREENS AND DEBRIS IN TANK.						
BAC 146100A	LYC ALF502R5		ACTUATOR HTE90821	FAULTY LANDING GEAR	12/04/2002 2003012200246	
(AUS) PARK BRAKE ACTUATOR FAULTY. ACTUATOR WAS CONSISTENTLY MOTORING.						

BAC 146200A	LYC ALF502R5	PTU 4204001	FAULTY HYDRAULIC	12/09/2002 2003012200249		
(AUS) YELLOW HYDRAULIC SYSTEM POWER TRANSFER UNIT (PTU) FAULTY.						
BEECH 200BEECH		CHANNEL 504300431329	CRACKED CABIN DOOR	12/30/2002 2003010700092	8276	
WHILE GROUND PRESSURIZING CABIN FOR LEAK CHECK, THE CABIN DOOR WOULD LEAK AT 3 PSI AND APPEARED TO SHIFT WITHIN THE FRAME AS PRESSURE WAS APPLIED. ADJUSTMENTS TO THE LATCHING MECHANISM ALLOWED THE DOOR TO HOLD TILL 5.2 PSI (6 PSI WAS THE TEST TARGET) BUT IT WAS NOTED THAT THE DOOR WAS STILL SHIFTING AFT AT THE UPPER PORTION UNDER PRESSURE. THE DOOR HINGE AFT SECTION HAD EXCESSIVE PLAY. THE DOOR WAS REMOVED AND A CLOSER INSPECTION REVEALED THAT THE DOOR END CHANNEL WAS CRACKED FOR 6 INCHES SPANNING THE AFT 6 RIVETS WHICH ATTACH THE DOOR HINGE TO THE DOOR. REPLACED THE CHANNEL AND HINGE HALF PIECES AND ADJUSTED DOOR LATCHING MECHANISM AS REQUIRED.						
BEECH A100	PWA PT6A28	BEECH 9763000060	SPAR 9763000017	CRACKED NUT PLATE HOLE	12/01/2002 2003010800113	16909
(CAN) THE RUDDER WAS REMOVED DUE TO A DAMAGED SKIN. WHEN THE SKIN WAS REMOVED THE UPPER SPAR WAS FOUND CRACKED AT THE HOLE FOR A NUT PLATE TO ATTACH TO. THIS NUT PLATE IS USED TO HOLD THE UPPER HINGE TO THE RUDDER. SPAR WAS REPLACED						
BEECH A100	PWA PT6A28	BEECH 5011000160	FLAP TRACK 501600183	CRACKED REAR BOTTOM	12/02/2002 2003010800115	16964
(CAN) THE RH OUTBOARD FLAP, INBOARD FLAP TRACK WAS FOUND CRACKED (SEE ATTACHED JPEG) NOTE YOU CANNOT SEE THIS WHEN THE FLAP IS INSTALLED ON THE AIRCRAFT						
BEECH A100	PWA PT6A28	BEECH	STRUCTURE 115610010125	CRACKED ELEVATOR	12/18/2002 2003011600122	18850
(CAN) DURING INSPECTION, THE TRAILING EDGE SPLINE ON THE ELEVATORS WERE FOUND CRACKED AT SEVERAL LOCATIONS, THIS IS THE 5TH SDR REGARDING THESE SPLINES AND A TOTAL OF 7 SPLINES WERE FOUND CRACKED. THE ELEVATORS WERE REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. WE ARE CURRENTLY CONDUCTING A FLEET						
BEECH A36	CONT IO550*		SWITCH 363800501	LOOSE CAM	10/25/2002 2003011100063	528
LANDING GEAR WARNING HORN WAS SOUNDING IN COCKPIT AS A/C WAS TAXIED. DURING TAKEOFF, LANDING GEAR RETRACTED AS SOON AS A/C BROKE GROUND, EVEN THOUGH LANDING GEAR CONTROL SWITCH WAS IN LANDING GEAR (DOWN). ELECTRICAL T/S ESTABLISHED THAT LANDING GEAR CONTROL SWITCH COMMANDING GEAR RETRACTION EVEN THOUGH SWITCH WAS IN DOWN POSITION. SWITCH WAS REMOVED FROM PANEL AND INSPECTED. CAM, WHICH ACTUATES SWITCH TO RAISE AND LWR LANDING GEAR, INSIDE OF LANDING GEAR CONTROL SWITCH WAS LOOSE. CAM IS HELD IN PLACE WITH TWO SET SCREWS WHICH LOCK CAM TO GEAR SELECTOR HANDLE SHAFT. ONE OF SET SCREWS WAS NOT MAKING CONTACT WITH THE GEAR HANDLE SHAFT. THE OTHER SET SCREW WAS MAKING LIGHT CONTACT.						
BEECH A36	LYC TIO540J2B		ACTUATOR R3582517213	FAILED NLG	09/22/2002 2003010700095	3150
NLG ACTUATOR ARM FAILED DURING GEAR EXTENSION. NOSE LANDING GEAR WOULD NOT EXTEND. AIRCRAFT LANDED. CAUSING DAMAGE TO PROP, GEAR DOORS, SKIN.						
BEECH G35	CONT E2258		OIL FILTER CH48109	BURST ENGINE	12/20/2002 2003010700069	21
AFTER STARTING ENGINE AND PERFORMING A ROUTINE WARM UP. PILOT NOTICED OIL PRESSURE DROPPING. AFTER SHUTDOWN, THE OIL FILTER WAS SHOWN TO HAVE PARTIALITY BLOWN OPEN AT THE BASE WHERE IT IS CRIMPED. ALSO THE PRESSURE RELIEF VALVE WAS FOUND TO HAVE 14 WASHERS UNDER THE SPRING. THIS ENGINE IS NOT ALLOWED TO HAVE ANY WASHERS. THE OIL FILTER HAD 21 HRS SINCE INSTALLATION AND WAS NOT OVER TORQUED.						
BELL 205A1		BELL 205040001045	SUN GEAR 205040230003	SPALLED TEETH	12/02/2002 2003010800109	
(CAN) TRANSMISSION REMOVED FOR METAL CONTAMINATION SUN GEAR FOUND DAMAGED ON INSPECTION.						
BELL 206B3			BEARING	WORN LINK ASSY	01/08/2003 2003011800114	
MAIN ROTOR HEAD LINK HAS A WORN BEARING. REPAIRED.						
BELL 206B3	ALLSN 250C20B	ALLSN COMPRESSOR	SEAL CAC35460	SEIZED TURBINE ENGINE C	09/21/2002 2003012200237	
(AUS) ENGINE COMPRESSOR SEIZED. INVESTIGATION FOUND THE REAR LABYRINTH SEAL HAD PICKED UP IN THE SEAL HOUSING.						
BELL 206B3	ALLSN 250C20B	BELL FILTER	INDICATOR NSN	FAILED HYDRAULIC	10/25/2002 2003012200238	
(AUS) HYDRAULIC FILTER DIFFERENTIAL PRESSURE INDICATOR FAULTY. INDICATOR APPEARED TO BE STUCK DUE TO CORROSION AND DIRT.						
BELL 206L1			CONNECTOR N0001552	DAMAGED VHF ANTENNA	01/06/2003 2003011700235	
BNC CONNECTOR WILL NOT LOCK ALL THE WAY DOWN ON VHF ANTENNA.						
BELL 206L1	ALLSN 250C30P	BELL	TUBE 206040948101	CHAFED TUBE/HOSE PROX.	10/25/2002 2003010800107	
(CAN) AME NOTICED AN OIL LEAK APPEARING TO BE ORIGINATED FROM BRAIDED STEEL TRANSMISSION RETURN LINE FROM THE FREEWHEELING UNIT. CLOSER INSPECTION REVEALED THAT ADJACENT ALUMINUM TUBE (P/N 206-040-948-101, BELL 206L IPC, 63-99-00, FIG 10, ITEM 60) WAS CHAFED. THE AME VERIFIED PROPER CLAMPING OF THE AFFECTED PARTS - NO FAULT WAS FOUND. APPARENTLY THE STEEL BRAIDED HOSE (P/N 70-061G00D270A, BELL 206L IPC 63-99-00, FIG. 10, ITEM 67) CHAFED AGAINST THE TUBE DURING MAXIMUM (100%) TORQUE OPERATION, ALTHOUGH THERE SEEMED TO BE SUFFICIENT CLEARANCE DURING FLAT PITCH OPERATION ON THE GROUND. TUBE REPLACED- A/C RETURNED TO SERVICE. RECOMMENDATION: INSTALL ADDITIONAL CLAMP TO ENSURE LINE AND TUBE SEPARATE						
BELL 206L3			BEARING	WORN DRIVE LINK	01/08/2003 2003011700202	
TAIL ROTOR HEAD DRIVE LINK HAS WORN BEARINGS. REPAIRED.						
BELL 206L3			RELIEF VALVE 206073926107	LEAKING EMERGENCY	01/08/2003 2003012200068	
EMERGENCY FLOAT RELIEF VALVE LEAKING. REPAIRED.						
BELL 206L3			INDICATOR 206375007103	INOPERATIVE TOT	01/09/2003 2003012200138	
TOT INDICATOR INOPERATIVE. REPAIRED.						
BELL 206L3			CAP 4369	DEFECTIVE OIL TANK	01/09/2003 2003012200319	
OIL TANK CAP AND ADAPTER DOES NOT FIT PROPERLY. SCRAPPED.						
BELL 206L3	ALLSN 250C30P		FUEL CONTROL 25490925	MALFUNCTIONED ENGINE	01/09/2003 2003012200084	6971
FUEL CONTROL UNIT PRODUCING INTERMITTENT START. UNABLE TO VERIFY DIFFICULTY REPORTED. NO DISCREPANCIES NOTED.						

BELL 214ST		COUNTERWEIG PHI214ST103	WORN TAIL ROTOR	12/09/2002 2002123100193	
TAIL ROTOR COUNTERWEIGHT HAS WORN BEARINGS. REPAIRED.					
BELL 407	ALLSN 250C47B	BELL 407040001103	DISC PACK 407340340103	CRACKED DISC PACK	12/01/2002 2003012200329
(CAN) ONE DISC CRACKED. TOTAL TEN DISC IN PACK.					
BELL 412		212030100147	BOLT NAS62826	BROKEN TAIL BOOM	06/09/1999 2003010400040
UPPER LEFT TAILBOOM ATTACH BOLT SNAPPED DURING CRUISE/DESCENT FLIGHT. REMOVED T/B, INSPECTED AIRFRAME AND T/B ATTACH POINTS FOR ALIGNMENT, ZYGLOED FITTINGS, REPLACED ALL BOLTS					
BELL 412		412010100127	SPINDLE 412010190105	DEFECTIVE ROTOR HEAD	06/28/1999 2003010400042
BLADE TRACKING ABOUT 2 FT TO LOW REPLACED SPINDLE ASSY WHICH WAS INCORRECTLY MANUFACTURED					
BELL 430			POWER SUPPLY 214175140101	MALFUNCTIONED CABIN	12/10/2002 2003010400030
POWER SUPPLY WILL NOT CHARGE BATTERIES. REPLACED POWER SUPPLY.					
BELL 47G5A	LYC VO435B1A		VALVE 476822241	SEPARATED AIRCRAFT FUEL DI	12/10/2002 2003012200252
(AUS) AIRCRAFT SUFFERED IN-FLIGHT POWER LOSS. INVESTIGATION FOUND LH FUEL TANK CRASHWORTHY SYSTEM BREAKAWAY FUEL VALVE BEGINNING TO SEPARATE WHICH RESTRICTED FUEL FLOW FROM THE LH TANK. SUSPECT CAUSED BY UNKNOWN PERSON STANDING ON VALVE DURING MAINTENANCE OR PREFLIGHT.					
BNORM BN2B21	LYC IO540K1B5		TRANSMITTER NB571261	WORN FUEL QTY FLOAT	12/10/2002 2003011500046
(CAN) FIBRE FUEL LEVEL FLOAT WORE ON RIB INSIDE FUEL TANK SENDING SMALL PARTICLES THROUGH ENTIRE FUEL					
BOEING 737205			BRACKET 69429494	CRACKED FUSELAGE	12/17/2002 2003010700029
DURING C CHECK INSPECTION FOUND THRESHOLD BRACKET CRACKED BS 807, RBL 22 IN AFT CARGO. REMOVED DAMAGED BRACKET AND INSTALLED NEW PER SRM 51-30-2. MAJOR REPAIR.					
BOEING 737205			STANCHION 69353509	CRACKED FUSELAGE	12/13/2002 2003010700030
DURING C CHECK INSPECTION FOUND FWD CARGO BAY STANCHION CRACKED. REPLACED STANCHION PER SRM 51-30-2. 51-10-3, MINOR REPAIR.					
BOEING 737205			BRACKET 6546533503	CRACKED FUSELAGE	12/13/2002 2003010700031
DURING C CHECK INSPECTION FOUND CRACKED BRACKET IN FWD CARGO COMPARTMENT BAY. REPLACED BRACKET PER SRM 51-30-2, 51-10-3. MINOR REPAIR.					
BOEING 737205			SKIN 65458001215	WORN PAX DOOR	12/16/2002 2003010700032
DURING C CHECK REPLACED SMALL OUTER SKIN PANEL FWD OF L-1 DOOR BETWEEN HINGES THAT HAD A PREVIOUS REPAIR OF A HOLE IN THE SKIN WITH A EXTERNAL DOUBLER. REMOVED AND REPLACED PER SRM 51-30-2, 51-20-1.					
BOEING 737205			GUSSET 6573771	GOUGED WING	12/17/2002 2003010700033
DURING C CHECK INSPECTION FOUND NUMBER ONE O/B FIXED FAIRING UPPER AFT GUSSET GOUGED. REMOVED, FABRICATED AND INSTALLED GUSSET PER SRM 54-10-2 & 51-30-2. MINOR REPAIR.					
BOEING 737205			SKIN 65464312	CHAFED RT TE FLAPS	12/15/2002 2003010700035
RT OUTBOARD FORE FLAP CHAFED INBOARD END 4 INCHES FROM INBOARD END ON LEADING EDGE. REPLACED CHAFFED SKIN PER SRM 57-50-1 & 51-30-2. MINOR REPAIR.					
BOEING 737217	PWA JT8D17	BOEING 7273090002	COMPUTER	COMPUTER	01/05/2003 2003012200327
(CAN) MACH TRIM LIGHT CAME ON IN FLIGHT, CREW REPORTED ELEVATOR FEEL INOP. AIRCRAFT RETURNED TO DEPARTURE STATION ELEVATOR FEEL COMPUTER REPLACED AS PER AMM. AND OPERATION CHECKED SERVICEABLE.					
BOEING 737284	PWA JT8D9A	BOEING 65449617	ACTUATOR 65449617	LEAKING ACTUATOR	11/30/2002 2003010800108
(CAN) AFTER LANDING, FLIGHT CREW REPORTED THE AIRCRAFT LOST ALL SYSTEM 'A' HYDRAULIC PRESSURE AND THE FLUID QUANTITY INDICATION READ ZERO. MAINTENANCE INSPECTION REVEALED THE #1 GROUND SPOILER OUTBOARD ACTUATOR ASSEMBLY WAS LEAKING - ACTUATOR CASING CRACKED. ACTUATOR REPLACED IAW MM					
BOEING 7372H4	PWA JT8D9A	BOEING 65449617	ACTUATOR 65449617	LEAKING CRACKED CASE	12/03/2002 2003010800112
(CAN) FLIGHT #178 CREW REPORTED 'A' SYSTEM HYDRAULIC PRESSURE AND QUANTITY WENT TO ZERO ON TAXI INTO YYC. LOW PRESSURE WARNING LIGHT ILLUMINATED FOR APPROXIMATELY 90 SECONDS - CREW SELECTED 'A' PUMPS OFF AND SHUTDOWN BOTH ENGINES. AIRCRAFT TOWED TO THE GATE. MAINTENANCE INSPECTION REVEALED THE #1 GROUND SPOILER ACTUATOR CASING WAS CRACKED AND LEAKING. MAINTENANCE REPLACED THE ACTUATOR, S/N: 'OFF' 1233, S/N: 'ON' 923, IAW MM27-62-101. SYSTEM GROUND CHECKED SERVICEABLE - NO LEAKS AND RETURNED TO SERVICE WITH NO FURTHER INCIDENTS TO REPORT.					
BOEING 737376	CFMINT CFM563C		DOUBLER	CRACKED FUSELAGE MAIN, S	11/14/2002 2003012200256
(AUS) FORWARD GALLEY DOORWAY FORWARD UPPER CORNER CRACKED AT FOUR FASTENER HOLES. ONE CRACK IN BEARSTRAP DOUBLER AND THREE CRACKS IN EXTRA INTERNAL DOUBLER. FOUND DURING EDDY CURRENT INSPECTION IAW AD/B737/24 AND EI 733-53-14R4.					
BOEING 737476	CFMINT CFM563C		DOOR	CRACKED CARGO/BAGGAGE	11/22/2002 2003012200257
(AUS) FORWARD CARGO DOOR CRACKED IN FORWARD AND AFT LOWER CORNERS AS WELL AS THE LOWER CORNER OUTER T' CHORD. FOUND DURING EDDY CURRENT INSPECTION IAW AD/B737/142 AND EI 737-52-3.					
BOEING 767277	GE CF680A		PUMP 5006003C	FAULTY FUEL BOOST PUMP	12/12/2002 2003012200255
(AUS) MAIN FUEL TANK BOOST PUMPS (3OFF) DEFECTIVE. FOUND DURING INSPECTION IAW A AESER B76-28-20-37 AND HAMILTON SUNDSTRAND SB5006003-28-2.					
BOLKMS BK117A3			INDICATOR 117945641	MALFUNCTIONED MAST MOMENT	12/20/2002 2003010400038
MAST MOMENT INDICATOR POPS CIRCUIT BREAKER. REPLACED WITH SERVICEABLE UNIT.					
BOLKMS BO105S			CONTROL ROD 10531821	WORN TAIL ROTOR	12/11/2002 2002123100212
TAIL ROTOR CONTROL ROD PITCH LINK HAS WORN BEARINGS. REPAIRED. REPLACED BEARINGS.					

BOLKMS		INDICATOR	INOPERATIVE	12/11/2002	
BO105S		206070274005	TURN & BANK	2003010300022	
TURN AND BANK INDICATOR INOPERATIVE.					
BOLKMS		VOLT	DEFECTIVE	12/11/2002	
BO105S		51565000R	DC SYSTEM	2003010300031	
DC VOLTAGE REGULATOR WILL NOT ADJUST. TO BE SENT TO VENDOR FOR REPAIR.					
BOLKMS		TRANSDUCER	FAILED	12/11/2002	
BO105S		BSE206150G3	OIL PRESSURE	2003010300036	
NO OIL PRESSURE INDICATION. REPLACED WITH SERVICEABLE PART.					
BOLKMS		INDICATOR	READS LOW	12/11/2002	
BO105S		DK50439	DUAL TORQUE	2003010300040	
DUAL TORQUE INDICATOR READS LOW.					
BOLKMS		HOSE	LEAKING	12/11/2002	
BO105S		AE705801	FUEL SYSTEM	2003010400017	
FUEL HOSE LEAKING. REPLACED WITH SERVICEABLE HOSE.					
BOLKMS		INDICATOR	MALFUNCTIONED	12/11/2002	
BO105S		DK50439	DOUBLE TORQUE	2003010400018	
INDICATOR SHOWING NR 1 NG TORQUE FLUCTUATIONS.					
BOLKMS	ALLSN	ELBOW	STRIPPED	12/11/2002	
BO105S	250C20	23073525	PC FILTER	2003010400007	
PC FILTER SIDE STRIPPED. SCRAPPED.					
BOLKMS	ALLSN	FILTER	CLOGGED	12/11/2002	
BO105S	250C30	23033400	PC AIR	2003010300026	
NR 1 ENGINE PC FILTER CLOGGING WITH WATER ON ENGINE WASH AND CAUSING HANG STARTS. REPLACED WITH SERVICEABLE FILTER.					
BRAERO	RROYCE	OIL COOLER	LEAKING	11/09/2002	
HS7482B	DART5342	RK35782A	ENGINE	2003011500164	
(CAN) AIRCRAFT TOOK OFF FROM YZG FOR YUZ, AFTER TAKEOFF IN FLIGHT THE RT ENGINE OIL PRESSURE LIGHT CAME ON, OIL PRESSURE ZERO, PILOT SHUTDOWN ENGINE. ON ARRIVING TO YVP, INSPECTION WAS CARRIED OUT, AND RT OIL COOLER HONEYCOMB WAS LEAKING. RT OIL COOLER WAS REPLACED AND AIRCRAFT RETURNED TO SERVICE.					
CESSNA	LYC	CARBURETOR	FAILED	11/19/2002	
152	O235L2C	105267	ENGINE	2003011500004	
(CAN) LOSS OF CONTROL AT/ON TAKEOFF 200KM. CARBURETOR MALFUNCTION.					
CESSNA	LYC	CYLINDER	CRACKED	11/15/2002	
152	O235L2C	LW11633	ENGINE	2003011500135	
(CAN) CYLINDER BARREL CRACKED, 2 INCHES LONG AT BOTTOM OF CYLINDER HEAD.					
CESSNA	LYC	PUSHROD TUBE	BROKEN	11/20/2002	
172M	O320E2D	75772	NR 3 CYLINDER	2003011500006	
(CAN) WITH THE ENGINE COWLING REMOVED TO REPLACE UNSERVICEABLE LANDING LIGHT, OIL WAS NOTED AROUND THE NR 3 CYLINDER. INVESTIGATION SHOWED SHROUD WAS BROKEN APPROXIMATELY MIDWAY ALONG THE TUBE. AS THE CRACK WAS A RATHER SHARP BREAK THE PROBLEM WAS NOT FOUND UNTIL THE TUBE WAS MOVED					
CESSNA	LYC	TORQUE TUBE	CORRODED	11/19/2002	
172M	O320E2D		ELEVATOR	2003012200240	
(AUS) LH AND RH ELEVATOR TORQUE TUBE ASSEMBLIES SEVERELY CORRODED PARTICULARLY FITTINGS PNO 0734102-4 AND PNO 0734102-3. LOWER LEFT HAND SKIN PNO 0532001-91 ALSO CORRODED.					
CESSNA	LYC	LINE	LEAKING	12/19/2002	3930
172N	O320*		FUEL SYSTEM	2003011100062	
FUEL LEAK NOTED CENTER TOP EDGE OF LT DOOR FROM HEADLINER. FOUND OUTSIDE AIR DUCT CHAFING ON FUEL VENT LINE, CORRODED HOLE IN LINE. BOTH LINE AND DUCT REPLACED. SPIRAL PLASTIC WRAP ADDED TO NEW LINE DUE TO TIGHT AREA ON LT SIDE. RT SIDE INSPECTED, NO PROBLEMS. AS CLEARANCE IS ADEQUATE. INSPECTION AT LEAST DURING ANNUAL INSPECTIONS SHOULD BE ACCOMPLISHED. REQUIRES OPENING HEADLINER TO VIEW DUCT, LINES AND RUBBER HOSE CONNECTIONS.					
CESSNA		WHEEL	CRACKED	11/12/2002	6473
172RG		C1630050201	MLG	2003010700078	
DISCOVERED CRACK IN THE SEAT FOR THE WHEEL BEARING RACE IN THE NOSE WHEEL HALF DURING ANNUAL INSPECTION. DEFECT APPEARS TO HAVE BEEN CAUSED BY REPEATED INSTALLATION OF THE RACE OVER THE LIFE OF					
CESSNA	LYC	CESSNA	HOUSING	CRACKED	11/26/2002
172RG	O360F1A6	98820152	12810013	LANDING GEAR	2003012200242
(AUS) LH MAIN LANDING GEAR ACTUATOR HOUSING CRACKED. ACTUATOR RACK SEPARATED FROM SECTOR GEAR.					
CESSNA		SPINNER	CRACKED	12/04/2002	445
172S		05503671	PROPELLER	2003010700096	
DURING PREFLIGHT INSPECTION, THE PILOT NOTED THE PROPELLER SPINNER WAS CRACKED.					
CESSNA	LYC	BEARING	DELAMINATED	12/09/2002	1241
172S	IO360L2A	LW13884	FWD MAIN	2003011100054	
BEARING DELAMINATED PART DEFECT REQUEST PART BE ANALYZED BY MANUFACTURER OR FAA.					
CESSNA	CONT	BELLCRANK	BENT	07/01/2001	2067
180K	O470J	12600211	RUDDER PEDALS	2003010700094	
AIRCRAFT WAS INVOLVED IN AN ACCIDENT ON LANDING DUE TO LOSS OF CONTROL. CFI WAS FLYING FROM THE RT SEAT. AIRCRAFT LEFT THE RUNWAY TO THE RT EVEN THOUGH PILOT APPLIED FULL LT RUDDER. DURING INSPECTION. DISCOVERED THAT THE LT RUDDER PEDAL WOULD UNLOCK (STOWABLE PEDALS) WHEN FIRM PRESSURE WAS APPLIED, DUE TO BENT BELLCRANK.					
CESSNA	CONT	CONT	CLAMP	BROKEN	12/21/2002
182Q	O470*		AN737TW26	BALANCE TUBE	2003010700028
PILOT REPORT REPORTED SMOKE FROM THE COWLING DURING AN ATTEMPTED ENGINE START DURING COLD WEATHER. FOUND FIRE STARTED AT CLAMP SUPPORT FOR THE ENGINE INDUCTION SYSTEM BALANCE TUBE. CLAMP HAD BROKEN AND TUBE HAD CHAFED THROUGH DUE TO LOOSE AND BROKEN CLAMP. RAW FUEL LEAK OUT DURING START ATTEMPT AND WAS IGNITED THROUGH PARTIAL IGNITION. THIS IS THE SECOND BROKEN BALANCE TUBE CLAMP IN ONE MONTH ON THE 182 SERIES AIRCRAFT WITH REPLACEMENT OF THE BALANCE TUBE REQUIRED. SUGGEST CAREFUL VISUAL INSPECTION ANYTIME THE LOWER COWLING IS REMOVED AND USE PROPER TORQUE ON					
CESSNA	CONT	BENDIX	MAGNETO		11/21/2002
182Q	O470U	103493505		MAGNETO	2003010800105
(CAN) WHILE PERFORMING ROUTINE MAINTENANCE, IT WAS FOUND THAT THE LEFT MAGNETO COULD NOT BE TIMED. IT APPEARS THAT THE MAGNETO POINTS ARE NOT OPENING. MAGNETO REPLACED WITH O/H UNIT AND TIMED NORMALLY. GROUND RUN CHECKS ALL O.K.					

CESSNA 210E	CONT IO520A	NUT	LOOSE OIL FILTER ADAPT	12/04/2002 2003010700120	
LARGE LOCKNUT ON OIL FILTER ADAPTER CAME LOOSE AND OIL WENT OVERBOARD AND THE ENGINE SEIZED. THE AIRCRAFT LANDED IN A FIELD. THE SAFETY WIRE WAS STILL ATTACHED.					
CESSNA 310L	CONT IO470VO	TORQUE TUBE 50450102	CRACKED MLG	11/13/2002 2003011500118	
(CAN) ON T/O, A CLUNK HEARD NEAR END OF MLG TRAVEL DURING RETRACTION. NO DIFFERENCE IN FLT CONTROL. PILOTS INFORMED RT MLG HANGING. MLG SELECTED DOWN STEEP BANKS & YAWS PERFORMED TO GET RT MLG LOCKED. NO DOWN & LOCKED IND EVIDENT, A/C LANDED UNEVENTFULLY. RT MLG NOT LOCKED, SIDE BRACE LOCK NOT OVER-CENTER AND DOWNLOCK SPRING BROKEN. JACKED A/C, RT TORQUE TUBE ASSY BROKEN AT OTBD PUSH-PULL TUBE ATTACH POINT. INVEST REVEALED A CRACK AT ATTACH POINT. THERE IS NO SPECIAL INSPECTION ON THIS PART OF MLG, DIFFICULT TO DETECT A CRACK WITHOUT REMOVING TORQUE TUBE FROM A/C. TORQUE TUBE AND RETRACTION SYSTEM TEARDOWN AND INSPECT REQUIRE INITIAL INSPECTIONS AT 10000 HOURS. A/C HAS					
CESSNA 337A	CONT IO360C	BRACKET 151350013	CRACKED RUDDER	11/21/2002 2003011500197	
(CAN) CRACK FOUND ON BOTH INBOARD RUDDER TORQUE TUBE MOUNTING BRACKETS. THE CRACK BEGAN AT THE AFT END OF THE BRACKET, EXTENDING FORWARD APPROXIMATELY 3-4 INCHES ON THE LT BRACKET AND 1/2 INCH FORWARD ON THE RT BRACKET. THE CRACK OCCURRED AT THE BEND RADIUS ON THE OUTER PIECE OF THE					
CESSNA 340A	CONT TSIO520*	PUMP	LEAKING VACUUM SYS	12/03/2002 2003011100055	
LOSS OF OIL AND OIL PRESSURE ON RT ENGINE. TROUBLESHOT FOUND LEAKING FROM VACUUM PUMP BASE. REMOVED VACUUM PUMP. FOUND PIECES OF OLD GASKET STILL ATTACHED TO MOUNTING PAD WITH A NEW GASKET INSTALLED. CLEANED MOUNTING BASE, INSTALLED NEW VACUUM PUMP GASKET AND REINSTALLED VACUUM PUMP. INSPECTED OIL FILTER, NO METAL NOTED. INSTALLED NEW OIL FILTER, SERVICED ENGINE WITH OIL. RAN ENGINE. OPS AND LEAK CHECKED, OK. PILOT SAID VACUUM PUMP WAS CHANGED THAT DAY.					
CESSNA 402B	CONT IO520*	WIRE M227591618	BROKEN LIGHT SOCKET	12/04/2002 2003010700106	
ON TAKEOFF PILOT OBSERVED SMOKE AND SPARK FROM BEHIND INSTRUMENT PANEL. BROKEN WIRE WAS FOUND FROM POST LIGHT SOCKET CONNECTOR. REPLACED CONNECTOR. OPS CHECK OF DASHBOARD LIGHTING FOUND, OK.					
CESSNA 402C	CONT TSIO520VB	BEARING 276455A	COLLAPSED AILERON CONTROL	12/03/2002 2003012200245	
(AUS) LH AILERON YOKE BEARING COLLAPSED.					
CESSNA 402C	CONT TSIO520VB	CESSNA 402C	BRACKET 513102057	CORRODED VERTICAL STABILI	12/09/2002 2003012200251
(AUS) VERTICAL FIN FORWARD MOUNT BRACKET EXCESSIVELY CORRODED.					
CESSNA 404	CONT GTSIO520M	CONT	GEAR 646655	CORRODED ALTERNATOR	12/06/2002 2003011500044
(CAN) GEAR TEETH FOUND CORRODED ON ALTERNATOR DRIVE HUB. CORRESPONDING DRIVE RING INSIDE ENGINE CHECKED OK.					
CESSNA 414	CONT TSIO520N	SCREEN C1650010202	DESTROYED AIR/OIL SEP	11/14/2002 2003011500129	
(CAN) DURING OPERATION 1 INSPECT, NON FERROUS METAL FOUND IN LT OIL FILTER AND SCREEN. INSPECTED FILTER AGAIN IN 20 HOURS. IN LESS THAN 15 HOURS OIL WAS DRIPPING ONTO LT MLG. PAINT REMOVED FROM CRANKCASE FWD OF ALTERNATOR, CRACK WAS CONFIRMED BY DEVELOPER. ENG REMOVED FOR CRACK REPAIR AND SHOP NOTIFIED TO INSPECT FOR SOURCE OF CONTAM FOUND IN FILTER AFTER 14.6 HOURS. SHOP COULDN'T FIND SOURCE. RETURN LINE REMOVED FROM AIR/OIL SEPARATOR, METAL FOUND IN HOSE. SEPARATOR, REMOVED, & CUT APART. INSIDE SCREEN & HOLDER HAD VIBRATED APART & ALUMINUM GETTING TO CRANKCASE THROUGH RETURN LINE. PRESS HOSE TO BOOTS & PRESSURE FILTER HAD A LARGE AMOUNT OF METAL SCREEN PARTS TRAPPED INSIDE.					
CESSNA 550	PWA JT15D4	AEROQUIP AE3663218G0150	HOSE HOSE	12/12/2002 2003010800117	
(CAN) AT A FLEX POINT NEAR THE UPPER FITTING OF THE LOWER BRAKE LINE, THE HOSE RUPTURED ALLOWING THE BRAKE FLUID TO ESCAPE. THE FOLLOWING OCCURRENCE/SAFETY NOTIFICATION # 2002-90 WAS FILED - BRAKE FAILURE. UPON ARRIVAL AT CY XD ON FINAL FOR RUNWAY 16, THE GEAR WAS SELECTED DOWN. IMMEDIATELY TWO LIGHTS ILLUMINATED (POWER BRAKE LOW PRESS AND ANTISKID INOP) AND STAYED ON. TOWER WAS ADVISED, CREW CLIMBED TO 4,000 FT WEST OF EDMONTON AND FOLLOWED THE CHECKLIST. LANDING DISTANCE WAS RECALCULATED AND THE CITATION WAS LANDED WITHOUT FURTHER INCIDENT, USING REVERSE THRUST AND EMERGENCY BRAKING. AIRCRAFT WAS SHUTDOWN ON THE RUNWAY AND TOWED IN. NO DAMAGE EVIDENT.					
CESSNA 550	PWA JT15D4	MOTOR 9910554	INTERMITTENT TE FLAPS	12/02/2002 2003011500233	
(CAN) FLAPS WILL NOT RETRACT COMPLETELY. INVESTIGATION REVEALED A SNAPPED COUPLING ON THE RT FLAP ACTUATOR SHAFT AT THE GEARBOX. FURTHER INVESTIGATION REVEALED THE RT FLAP MOTOR WAS INTERMITTENT. SUSPECT THE FLAP MOTOR BRAKE WAS NOT RELEASING DURING FLAP OPERATION.					
CESSNA T210L		ALTERNATOR 99105921	SEIZED ENGINE	11/26/2002 2003010700123	3389
PILOT REPORTED THAT THE LOW VOLTAGE LIGHT ILLUMINATED ON TAXI. MECHANIC FOUND THAT THE ALTERNATOR HAD SEIZED AND THE BELT HAD BROKEN. WHEN THE ALTERNATOR WAS REMOVED, THE MECHANIC NOTED THAT THERE WAS A NOTICEABLE CATCH WHILE ROTATION THE PULLEY. ADDITIONALLY ONE OF THE CASE HALF THROUGH BOLTS HAD BACKED OUT SLIGHTLY AND WAS LOOSE.					
CESSNA TR182	LYC O540L3C5	LINE 228000113	LEAKING HYD POWERPACK	12/18/2002 2003011100056	
THE POWERPACK CONTROL LINE WAS LEAKING HYDRAULIC FLUID, CAUSED BY AN IMPROPER SECURITY AND/OR ROUTING OF THE HYDRAULIC POWERPACK CONTROL LINE IN PROXIMITY TO THE MIXTURE CONTROL CABLE. AREA AROUND THE HYDRAULIC POWERPACK CONTROL LINE SHOULD BE INSPECTED UNDER THE PANEL DURING ROUTINE AND ANNUAL INSPECTIONS.					
CESSNA TU206F	CONT TSIO520C	THRU BOLT MDW100211	UNDERTORQUED ALTERNATOR	11/26/2002 2003010700125	
THE ALTERNATOR THROUGH BOLTS SECURING THE FRONT CASE HALF TO THE REAR CASE HALF WERE FOUND TO HAVE BACKED OUT ALLOWING THE CASE HALVES TO SEPARATE APPROXIMATELY .1250 INCH. THE THROUGH BOLT RETAINERS AND SAFETY WIRE WERE STILL IN PLACE. THE ALTERNATOR HAD MFG DATE OF 02/00. THIS IS ONE OF TWO CONDITION REPORTS FILED FROM THIS REPAIR STATION WITH THE DEFICIENCY AND MFG DATE. THE CASE HALF THROUGH BOLTS WERE NOT TORQUED TO THE PROPER SPECIFICATIONS.					
CESSNA U206B	CONT IO520*	BOLT	LOOSE VERTICAL STAB	09/30/2002 2003011100059	
INSPECTION IAW AD AND FOUND LOOSE BOLT HOLES FOR VERTICAL STABILIZER ATTACH. INSTALLED OVERSIZE BOLTS AND DYE CHECK, NO CRACKS FOUND, RETORQUED BOLTS DYE PENETRANT INSPECTION ITEMS.					
CESSNA U206C	CONT IO520F	RIB	MISREPAIRED HORIZONTAL STAB	01/03/2003 2003010700080	8670 2012
HORIZONTAL STABILIZER WAS REPAIRED AT AIRCRAFT TOTAL TIME OF 6658.5. 6 EACH NEW AND IMPROVED NOSE RIBS WERE INSTALLED AND NUMEROUS RIVETS WERE NOT INSTALLED IN THE REPLACED RIBS. REFERENCE SERVICE NEWSLETTER NR 87-18R1. RIBS THAT WERE DETERMINED TO BE REPLACED ARE AT STATION 14.74 THRU 35.915 LT AND RT OF HORIZONTAL STABILIZER CENTER LINE.					

CESSNA	CONT		SHIMMY	MISINSTALLED	12/20/2002	
U206C	IO520F		07436242	NLG	2003010700081	
SHIMMY DAMPENER SLIDING SHAFT INSTALLED 180 DEGREES OUT. UNIT WAS OVERHAULED.						
CESSNA	CONT		THRU BOLT	UNDERTORQUED	11/26/2002	
U206G	IO520F		MDW100211	ALTERNATOR	2003010700124	
THE ALTERNATOR THROUGH BOLTS SECURING THE FRONT CASE HALF TO THE REAR CASE HALF WERE FOUND TO HAVE BACKED OUT, ALLOWING THE CASE HALVES TO SEPARATE APPROXIMATELY .1250 INCH. THE THROUGH BOLT RETAINERS AND SAFETY WIRE WERE STILL IN PLACE. THE ALTERNATOR HAD A MANUFACTURING DATE OF 02/00. THIS IS ONE OF TWO CONDITION REPORTS FILED FROM THIS REPAIR STATION WITH THE SAME DEFICIENCY AND MANUFACTURING DATE. IT IS SUSPECTED THAT THE CASE HALF THROUGH BOLTS WERE NOT TORQUED TO THE						
CESSNA	CONT		ALTERNATOR	SEIZED	11/26/2002	98
U206G	IO520F		99105921	ENGINE	2003010700133	
PILOT REPORTED THAT THE AMMETER WAS SHOWING A DISCHARGE UPON ENGINE STARTUP. IT WAS DISCOVERED THAT THE ALTERNATOR HAD SEIZED AND THE BELT HAD BROKEN.						
CESSNA	CONT		FUEL LINE	RUPTURED	12/04/2002	
U206G	IO520F			WING	2003011500248	
(CAN) WATER CONTAMINATION IN ALUMINUM FUEL LINE CAUSE DETERIORATION OF THE LINE BY CORROSION AND RUPTURE BY FREEZING. THIS LINE IS LOCATED BETWEEN WING TIP TANK AND ELECTRIC TRANSFER PUMP LOCATED						
CESSNA	CONT		SEAT TRACK	CRACKED	11/22/2002	
U206G	IO520F		121040821	SEAT/CARGO	2003012200241	
(AUS) SEAT TRACK CRACKED ACROSS LOCK PIN HOLES.						
CESSNA	CONT	CONT	DIPSTICK	DISTORTED	10/14/2002	
U206G	IO520F	IO520F	632062	RECIPROCATING	2003012200243	616
(AUS) ENGINE OIL DIPSTICK BENT, GIVING AN INCORRECT READING OF OIL QUANTITY. SUSPECT CAUSED BY BENDING THE DIPSTICK WHILE WIPING OFF THE OIL. BENT DIPSTICK CAN ALSO WEAR ON THE BOTTOM OF THE SUMP.						
CLARK			CVR	MALFUNCTIONED	12/06/2002	
1000CLARK			9806020023	COCKPIT	2002122400078	
COCKPIT VOICE RECORDER CAUSES THE CVR TEST LIGHT TO STAY ON.						
CNDAIR	GE	PPG	WINDSHIELD		11/16/2002	17424
CL6002B19	CF343A1	NP1393219		WINDSHIELD	2003010800118	
(CAN) CAPTAIN'S WINDSHIELD CRACKED IN FLIGHT AT FL410. THE WINDSHIELD WAS REPLACED IAW AMM 56-11-01 THE WINDSHIELD INSTALLED WAS A POST SERVICE BULLETIN WINDSHIELD (SEE ALSO: US #2002120300075)						
CNDAIR	GE		COMPUTER	INACCURATE	11/17/2002	
CL6002B19	CF343A1			FUEL QTY IND	2003011500213	
(CAN) AIRCRAFT OPERATING UNDER MEL 28-24-01-2 (XFLOW /APU FUEL PUMP INOP). ON TAKEOFF CREW NOTICED 600LB FUEL IMBALANCE. UNABLE TO TRANSFER FUEL FROM LT TORT TANK USING GRAVITY FLOW. IMBALANCE INCREASED TO 2000LB IN STRAIGHT AND LEVEL DESPITE ALL EFFORTS. FUEL PUMP WAS REPLACED TO CLEAR THE MEL, BUT TROUBLESHOOTING REVEALED THAT FAULT CODES 701 & 702, (FAULTS IN BOTH CHANNEL 1 AND CHANNEL 2, WHICH MAY CAUSE ERRONEOUS FUEL SYSTEM INDICATION) WERE INDICATED, WHICH IS BELIEVED TO BE THE CAUSE						
CNDAIR	GE	GE	ENGINE		12/09/2002	
CL6002B19	CF343B1	6078T27G01		ENGINE	2003010800114	
(CAN) ON TAKE-OFF, CREW REPORTED AN HIGH VIBRATION AND A LOUD NOISE, FOLLOWED BY AN ITT INCREASE. ENGINE SHUT DOWN, AND RETURNED TO DEPARTURE AIRPORT. ENGINE REPLACED						
CNDAIR	GE	PPG	WINDSHIELD	CRACKED	12/23/2002	
CL6002B19	CF343B1	601R3303311	601R3303311	INNER PLY	2003010800120	
(CAN) UPON LANDING IN BUDAPEST IT WAS NOTICED THE CAPT'S SIDE WINDOW WAS CRACKED. CAPT'S SIDE WINDOW REPLACED AIRCRAFT RETURNED TO SERVICE.						
CNDAIR	GE	PPG	WINDOW	CRACKED	12/16/2002	
CL6002C10	CF348C1	601R3303312	COPILOT	WINDOW	2003010800116	
(CAN) CO-PILOT SIDE WINDOW CRACKED IN FLIGHT. CAUSE UNKNOWN. UNEVENTFUL LANDING MADE AT CYMX. WINDSHIELD REMOVED AND NEW WINDSHIELD INSTALLED. NO MORE PROBLEM FOUND.						
CNDAIR	GE	PPG	WINDSHIELD	CRACKED	12/18/2002	
CL6002C10	CF348C1	NP1393215		WINDSHIELD	2003010800119	
(CAN) LEFT WINDSHIELD CRACKED DURING APPROACH AT FL80, IAS 220 KNOTS. WINDSHIELD WAS REMOVED AND REPLACED PER AMM.						
DHAV	PWA		BRACKET	CORRODED	11/28/2002	
DHC2*	R985AN14B		CZW151A	AILERONS	2003012200248	
(AUS) LH AILERON CENTRE HINGE BEARING SUPPORT BRACKET CONTAINED EXFOLIATION CORROSION. AREA OF CORROSION APPROXIMATELY 20MM (0.78IN) BY 5MM (0.196IN) AND 0.5MM (0.019IN) DEEP. AIRCRAFT IS A						
DHAV	PWA	ELDEC	PSEU		11/29/2002	
DHC8102	PW120A		841005	INTERNAL FAULT	2003010800111	
(CAN) ON APPROACH CREW SELECTED GEAR DOWN, RECEIVED						
DHAV	PWA		INVERTER	FAILED	11/29/2002	
DHC8201	PW123D		DH1030246	ELECTRICAL	2003011600086	
(CAN) JUST AFTER THE A/C BECAME AIRBORNE, CREW NOTED A SMOKE ODOR IN THE COCKPIT. PRIMARY INVERTER, DC CIRCUIT BREAKER OPENED. THE AUX AND SECONDARY INVERTER DC CIRCUIT BREAKERS OPENED ALMOST IMMEDIATELY THEREAFTER. BOTH 400HZ BUSES, AND 26 VAC BUSES BECAME UNPOWERED, WITH THE ASSOCIATED LOSS OF SERVICES. THE PRIMARY INVERTER FAILED, THE AUX INVERTER WAS SELECTED TO THE LT BUSS AT THE TIME. WHEN THE PRIMARY INVERTER FAILED, THE SHORT CIRCUIT INTERNAL TO THE INVERTER, DRAGGED DOWN THE AUX INVERTER, AND IT ALSO WENT OFF LINE. THE REMAINING SECONDARY INVERTER WAS UNABLE TO HANDLE THE ELECTRICAL LOAD AND IT ALSO DROPPED OFF LINE. THE BUSS TIE CIRCUIT BREAKER, (3.5 AMP, CB 14) DID NOT						
DIAMON			CANOPY	CRACKED	12/03/2002	
DA20A1			2056501100	COCKPIT	2003011500020	
(CAN) A PREVIOUS CRACK THAT ORIGINATED IMMEDIATELY AFT OF THE PORT CANOPY LOCKING HANDLE HAD BEEN STOP-DRILLED. IN FLIGHT A CRACK ORIGINATED FROM THE STOP DRILL LOCATION AND PROPAGATED TO THE UPPER PORTION OF THE CANOPY. AN ELLIPTICAL SEGMENT APPROX. 12 INCHES X 6 INCHES OF THE UPPER SIDE OF THE CANOPY FELL INTO THE AIRCRAFT. THE NEW CRACK WAS NOT THE RESULT OF A BIRD STRIKE OR TURBULENCE						
DIAMON	ROTAX	DIAMON	SPRING	BROKEN	12/15/2002	
DA20A1	ROTAX912F3		2056000902	CANOPY	2003011600092	
(CAN) THE RT SIDE CANOPY SPRING FAILED AT THE LOWER ATTACH POINT. THIS TYPE OF FAILURE HAS BEEN ROUTINELY OCCURRING AROUND 800-1000 HOURS OPERATION.						

DIAMON	ROTAX	CRANKCASE	CRACKED	11/13/2002	
DA20A1	ROTAX912S3	888364	ENGINE	2003011600087	
(CAN) CRANKCASE APPEARED TO BE LEAKING OIL ABOVE AND BETWEEN NR 1 AND 3 CYLINDERS. CLEANING AREA AND RUNNING SHOWED MORE OIL COMING FROM THIS AREA. ENGINE COOLING SHROUD WAS REMOVED AND REVEALED A 3 INCH CRACK IN CASE. CASE WAS REPLACED WITH NEW AND ENGINE RETURNED TO SERVICE.					
DOUG	PWA	PWC	TURBINE	DAMAGED	12/21/2002 13140
DC983	JT8D219	JT8D219		TURBINE BLADES	2003012200328
(CAN) ON ROUTE TO YVR FROM YYZ AT 130NM FROM YYC HEARD LOUD BANG, FOLLOWED BY #1 ENGINE EPR DROP TO ZERO N1-N2 SPEED DECREASING. ENGINE RETARDED TO IDLE. PARAMETERS WITHIN LIMITS. DIVERTED TO YYC. PRELIMINARY INSPECTION REVEALS DAMAGED TURBINE BLADES. ENGINE WILL BE SENT TO SHOP FOR					
FOKKER	RROYCE	PPG	WINDSHIELD	CRACKED	12/07/2002
F28MK0100	TAY62015	D20543406	D20543406	FLIGHT	2003012200253
(AUS) RH WINDSHIELD CRACKED. SIGNS OF ELECTRICAL FAILURE. MANUFACTURER SUGGESTS PROBLEM COULD BE DUE TO MOISTURE INGRESS. SEE MDR02/1419 FOR FURTHER INFORMATION.					
GULSTM	RROYCE	FITTING	MISMANUFACTURE		12/19/2002
G1159	SPEY50614	ASC 426	WING		2003010700134
WHILE PERFORMING AND NDT INSPECTION IT WAS BROUGHT TO OUR ATTENTION THAT THERE APPEARED TO BE MORE THAN NORMAL SPACING BETWEEN THE WING CLOTHESPIN FITTING AND THE DOUBLER PLATE THAT WERE MODIFIED IAW ASC. UPON INSPECTION WE DETERMINED THAT THERE WAS A GAP BETWEEN THE PARTS THAT SHOULD NOT BE THERE. WE HAVE CONTACTED THE MANUFACTURER AND HAVE RECEIVED AN ENGINEERING ORDER ADVISING THAT THE INSTALLATION OF THE ASC 426 WAS IN FACT, NOT DONE CORRECTLY. WE ARE IN THE PROCESS OF DISASSEMBLING THE AREA IAW THE MANUFACTURERS INSTRUCTIONS FOR THE PURPOSE OF REQUESTED NDT TESTING AND INSPECTION AND INTEND TO CORRECT THE DEFECTS AS ADVISED BY THE AIRCRAFT MANUFACTURER.					
GULSTM	RROYCE	ACTUATOR	LEAKING		12/09/2002 7264
GIV	TAY6118	1159L41000145	MLG		2003011100053
CREW REPORTED COMBINED HYDRAULIC QUANTITY LOW, LIGHT ILLUMINATED. JACKED AIRCRAFT AND PERFORMED GEAR SWING. FOUND RTMLG SIDEBRACE ACTUATOR LEAKING. REMOVED LEAKING ACTUATOR, INSTALLED OVERHAULLED ACTUATOR OF SAME P/N, PERFORMED GEAR SWINGS, OPERATIONAL AND LEAK CHECKS GOOD. SERVICED AND BLED HYDRAULIC RESERVOIRS. ALL WORK PERFECTLY IAW GAC G IV MSG-3 MM. OLD ACTUATOR SENT TO MFG FOR EVALUATION. AIRCRAFT RETURNED TO SERVICE.					
HUGHES	LYC	SCWZER	CONTROL UNIT	FAILED	10/30/2002
269C1	HO360C1A	269A95323	269A9533001	INTERNAL	2003012200326
(CAN) PILOT REPORTED DURING HOVER, THE TAXI LOW ROTOR WARNING ACTIVATED BUT ROTOR RPM WAS IN PROPER AREA OF GREEN ARC ON DUAL TACH. DURING SHUTDOWN, SWITCHING BELT DRIVE ENGAGEMENT SWITCH TO DISENGAGE MADE ENGINE QUIT. TROUBLESHOOTING REVEALED CONTROL UNIT DISCONNECTION REQUIRED FOR ENGINE START AND OPERATION AND CONTROL UNIT HAD FAINT ELECTRONIC BURN SMELL. SYSTEM DISABLED FOR AIRCRAFT RETURN TO SERVICE.					
KAMAN	LYC	NOZZLE	UNAPPROVED		10/31/2002
K1200	T5317A	119005007	1ST STAGE PT		2003011500117
(CAN) MILITARY PART FOUND INSTALLED ON ENGINE S/N LE-81004. INSTALLED PART MANUFACTURER CODE NUMBER IS 81996, (US MILITARY) IT SHOULD BE 91547. (HONEYWELL OEM) ITEM INSTALLED 7TH MARCH 2001.					
LEAR	GE	STARTER GEN	FAILED		12/12/2002
25B	CJ6106	3083949AT	STARTER GEN		2003012200330
(CAN) THE LEARJET C-XX, DEPARTED VANCOUVER INTERNATIONAL AIRPORT AND LEVELED OFF AT FL410. VERY LIGHT TURBULENCE WAS ENCOUNTERED. APPROXIMATELY TWO MINUTES INTO CRUISE, THE R/H ENGINE PRODUCED A LIGHT BANG & BEGAN TO SPOOL DOWN. THE RPM'S SETTLED AT 25-30%. THE R/H THROTTLE WAS REDUCED TO IDLE THEN TO IDLE CUT-OFF. DURING THE DESCENT, AT FL380 THE L/H ENGINE BEGUN TO VIBRATE, FOLLOWED BY AN ILLUMINATION OF THE L/H GENERATOR WARNING LIGHT. AT THIS TIME AN EMERGENCY WAS DECLARED & A DESCENDING TURN WAS INITIATED. WHILE PASSING THROUGH FL250, A SUCCESSFUL STARTER ASSISTED START ON THE R/H ENG WAS COMPLETED. THE R/H ENG OPERATED NORMALLY. THE L/H ENG WAS PRODUCING NORMAL THRUST BUT					
LKHEED		WIRE HARNESS	FAULTY		01/01/2003
1011*		58643	CABIN		2003011700197
EGRESS LIGHTING AT GALLEY 72 INCH SEGMENT INOP. REMOVED AND REPLACED TRANSITION CABLE JUMPER 72 INCH BETWEEN SEGMENT AND POWER CABLE.					
LKHEED	RROYCE	FUEL TANK			12/14/2002
10113853	RB211524B402		FUEL TANK		2003012200331
(CAN) TANK 2R INBD, QTY HIGHER THAN NORMAL WITH QTY SWITCH LIGHT LATCHED IN. FUEL QTY GAUGES O.K.. (INBD QTY READS 4000LBS, WITH TOTAL BELOW 7000LBS). PER FAULT ISOLATION AMM 28-27-00 P.107, REPLACED BOOST PUMP CHECK VALVES PER AMM 28-24-03 (NIL FIX). FUEL WAS STILL TRANSFERRING FROM OUTER INTO INNER TANK (GRAVITY FLOW). FAULT FOUND TO BE A PAPER TOWEL (FACE WIPE) LOGGED IN THE FWD FLAPPER CHECK VALVE OF THE TANK 2R INNER TANK / BOOST PUMP BOX. PAPER TOWEL REMOVED AND TANK 2R TRANSFER CHECKED SERVICEABLE PER AMM 28-27-00 (REF., DEFECT # 64900).					
MAULE		DISK	MISINSTALLED		12/31/2002
M5210C		16420	BRAKE ASSY		2003010700079
PILOT GROUND LOOPED A/C FOR THE SECOND TIME, FIRST FLIGHT AFTER REPAIRS FROM 1ST GROUND LOOP. PILOT REPORTED IT FELT LIKE BRAKE WAS LOCKING UP. DISASSEMBLED BOTH WHEEL AND BRAKE ASSY AND FOUND INCORRECT DISCS NR 164020 HAD BEEN INSTALLED BY PERSONS UNKNOWN. THIS DISC THICKNESS IS .187 INCH. INSTALLED CORRECT DISC 164-02601 WHICH HAS A THICKNESS OF .250 INCH. THE DIFFERENCE IN DIMENSION WAS ALLOWING THE PISTON TO EXTEND TO FAR OUT AND BINDING THE CALIPER. VISUAL INSPECTION ALSO SHOWED FLUID SEEPAGE AROUND BOTH PISTONS. NEW SEALS HAD BEEN INSTALLED AT LAST ANNUAL/15 HOURS PRIOR.					
MOONEY	LYC	CABLE	FAULTY		12/03/2002
M20J	IO360A3B6		DC POWER DISTRIB		2003012200250
(AUS) ALTERNATOR MAIN POWER CABLE FAULTY. CABLE WAS SPLICED CAUSING HIGH RESISTANCE. PERSONNEL/MAINTENANCE ERROR.					
MOONEY	CONT	SHIELD	MISSING		11/05/2002
M20K	TSIO520NB		FUEL DIST HEAD		2003011500165
(CAN) A/C ENROUTE AT FLIGHT LEVEL 210, DECLARED AN EMERGENCY. AIRCRAFT TURNED BACK. PILOT REPORTED ROUGH RUNNING ENGINE & MISFIRING BADLY A/C LANDED SAFELY. PILOTS EXPERIENCED POWER LOSS ON NR 3 CYLINDER FIRST & THEN ON BOTH NR 3 & 4 CYLINDERS. ENGINE IS EQUIPPED WITH CYLINDER HEAD TEMPERATURE PROBES FOR ALL CYLINDERS & COULD SEE 3 & 4 AS COLD CYLINDERS. BASED ON THE INVESTIGATION PILOTS ARE CONFIDENT PROBLEM WAS ICE CRYSTALS IN THE FUEL. FUEL IS FEED TO THE CYLINDERS FROM A DISTRIBUTION HEAD ON THE TOP OF ENGINE. A SHIELD THAT IS DESIGNED TO DEFLECT COLD AIR FROM THE DISTRIBUTION HEAD AND THE LINES COMING FROM IT, REQUIRED BY AN AD.					
PILATS	PWA	HYDRAELECT	PRESSURE		11/24/2002
PC1245	PT6A67B	9738114304	PRESSURE SWITCH		2003010800106
(CAN) THE PILOT RETRACTED THE LANDING GEAR, AND NOTICED THAT THE HYDRAULIC CAUTION LIGHT CAME ON SHORTLY AFTER THE GEAR HAD FINISHED MOVING. THE HYDRAULIC CIRCUIT BREAKER WAS PULLED, AND RE-SET ON THE DECENT FOR LANDING. THE CAUTION LIGHT REMAINED ON UNTIL THE AIRCRAFT'S POWER WAS TURNED OFF. WHEN THE POWER WAS TURNED ON AGAIN, THE LIGHT DID NOT RETURN. A VISUAL INSPECTION FOR LEAKS, FLUID LEVEL, AND N2 CHARGE WERE PERFORMED WITH NO DEFECTS BEING NOTED. THE SYSTEM PRESSURE SWITCH WAS REPLACED, AND A FUNCTIONAL TEST OF THE LANDING GEAR SYSTEM COMPLETED. NO PROBLEMS HAVE					

PILATS PC1245	PWA PT6A67B	PLATE	DISLODGED PROPELLER	11/01/2002 2003011500208	
(CAN) PROPELLER WAS NOT IN THE FULL FEATHER POSITION. INSPECTION SHOWED THAT THERE WAS A GAP BETWEEN THE FEATHER STOP NUT AND THE REVERSE ADJUST SLEEVE. PROPELLER WAS REMOVED AND SENT TO PROPELLER OVERHAUL SHOP FOR REPAIR. ON DISASSEMBLY, THE PRELOAD PLATE WAS FOUND TO HAVE MOVED THUS PREVENTING THE PROPELLER TO GO INTO THE FULL FEATHER POSITION. SERVICE BULLETIN HC-SB-61-243 REV.1					
PIPER PA31	LYC TIO540A2B	BOLT STD2209	SHEARED CRANKSHAFT GEAR	12/06/2002 2003011600181	
(CAN) PILOT WAS IN CRUISE FLIGHT WHEN HE FELT A SURGE IN POWER ON THE LT ENGINE AND SUDDEN LOSS OF RPM, ATTEMPTED TO SWITCH TANKS AND NOTHING HAPPENED, FEATHERED PROP AND SHUT ENGINE DOWN. PILOT FLEW TO AIRPORT AND LANDED SAFELY ON RT ENGINE. AN ENGINE RESTART WAS ATTEMPTED ON THE GROUND AND NOTHING HAPPENED. THE PROP WAS TURNED BY HAND AND NO COMPRESSION WAS FELT. THE REAR ACCESSORY SECTION WAS REMOVED AND FOUND CRANKSHAFT GEAR BOLT SHEARED AND GEAR TEETH BROKEN OFF. TOTAL TIME ON ENGINE 1100 HOURS, 400 HOURS SINCE BULK DISASSEMBLY AFTER PROP STRIKE, 40 HOURS SINCE AD 02-20-51 AND SB					
PIPER PA31T2	PWA PT6A135	PIPER	WIRE 47936002	BROKEN DOWNLOCK	12/14/2002 2003011600091
(CAN) ON FINAL APPROACH, PILOTS SELECTED GEAR DOWN. THREE GREEN INDICATION LIGHTS WERE CONFIRMED. THE GEAR HANDLE WOULD NOT COME BACK TO NEUTRAL. THE CREW CONDUCTED A MISSED APPROACH AND PROCEEDED TO FOLLOW THE APPROPRIATE CHECKLISTS. THE CREW FLEW OVER THE CONTROL TOWER FOR GEAR DOWN CONFIRMATION. THE AIRCRAFT LANDED SAFELY AND WAS TOWED OFF RUNWAY. MAINTENANCE CONFIRMED BROKEN WIRE ON LT MAIN GEAR DOWN SWITCH. THE WIRE WAS REPAIRED, GEAR SWING CARRIED OUT, AND SYSTEM TESTED OK. THE AIRCRAFT WAS RELEASED FOR SERVICE.					
PIPER PA44180	LYC O360*	PIPER	CONTROL 554294	BROKEN LT ALT AIR DOOR	10/23/2002 2003010700107
DURING 100 HOUR INSPECTION FOUND THAT THE FOLLOWING CONTROL CABLE WHERE BROKEN ON THE ENGINE SIDE WHERE TWO PIECES OF SHROUD OF SWAGED TOGETHER. PROBABLE CAUSE MAY BE DUE TO THE WAY THE CABLES					
PIPER PA44180	LYC O360*	PIPER	CONTROL 554545	BROKEN ALT AIR DOOR	10/23/2002 2003010700108
DURING 100 HOUR INSPECTION, FOUND THAT THE FOLLOWING CONTROL CABLES WERE BROKEN ON THE ENGINE SIDE WHERE TWO PIECES OF SHROUD OF SWAGED TOGETHER.					
PIPER PA44180	LYC O360*	PIPER	CONTROL 554544	BROKEN ENG MIXTURE	10/23/2002 2003010700109
DURING 100 HOUR INSPECTION FOUND THAT THE FOLLOWING CONTROL CABLES WERE BROKEN ON THE ENGINE SIDE WHERE TWO PIECES OF SHROUD OF SWAGED TOGETHER.					
PIPER PA44180	LYC O360E1A6	PIPER	CONTROL 554546	BROKEN MIXTURE	10/23/2002 2003010700110
DURING 100 HOUR INSPECTION, FOUND THAT THE FOLLOWING CONTROL CABLES WHERE BROKEN ON THE ENGINE SIDE WHERE TWO PIECES OF SHROUD OF SWAGED TOGETHER.					
PIPER PA44180	LYC O360E1A6	PIPER	CONTROL 554546	BROKEN THROTTLE	10/23/2002 2003010700111
DURING 100 HOUR INSPECTION, FOUND THAT THE FOLLOWING CONTROL CABLE WHERE BROKEN ON THE ENGINE SIDE WHERE TWO PIECES OF SHROUD OF SWAGED TOGETHER.					
SAAB SF340A	GE CT75A	SAAB	INDICATOR 523250	FAILED HYDRAULIC	12/03/2002 2003012200244
(AUS) MAIN HYDRAULIC SYSTEM PRESSURE INDICATOR FAILED.					
SAAB SF340A	GE CT75A2	SAAB	INDICATOR 522794	INTERNAL	12/23/2002 2003012200325
(CAN) ON APPROACH THE LEFT ENGINE OIL TEMP WENT INTO THE RED ARC ON THE INDICATOR. ALL OTHER ENGINE PARAMETERS WERE INDICATING IN THE NORMAL OPERATING RANGE. THE ENGINE WAS SHUT DOWN AS A PRECAUTIONARY MEASURE. THE CREW ELECTED TO PROCEED TO YVR AS THE RUNWAY CONDITIONS IN YAY WERE NOT SUITABLE FOR A SINGLE ENGINE LANDING. THE AIRCRAFT LANDED IN YVR WITHOUT INCIDENT. MAINTENANCE INSPECTED THE ENGINE AND OIL TEMP INDICATING SYSTEM AND DETERMINED THAT THE OIL TEMP INDICATOR WAS DEFECTIVE. THE INDICATOR WAS REPLACED.					
SKRSKY S61N		SKRSKY	INDICATOR 40008330208	INTERMITTENT COCKPIT	01/02/2003 2003011600031
RADAR UNIT BLINKS ON & OFF. FOUND RADAR UNIT TO BE INTERMITTENT. RADAR UNIT HAD MAJOR WATER DAMAGE. REPAIRED TRACES, REMOVED CORROSION AND TESTED.					
SKRSKY S76A		SKRSKY	TRANSPONDER 066104100	INOPERATIVE ATC	12/12/2002 2002122400090
INTERMITTENT MODE "C" OPERATION. CLEANED CORROSION FROM UNIT. FOUND WEAK MTL AND TRANSMIT POWER. TROUBLESHOT AND REPLACED V201 CAVITY OSCILLATOR AND CATHODE ASSY, ADJUSTED FREQUENCY AND POWER TO SPECS. ALSO FOUND DYNAMIC RANGE OUT OF SPECS. ALIGNED AND ADJUSTED RECEIVER AND VIDEO BOARD SEVERAL TIMES. BENCH CHECK GOOD.					
SKRSKY S76A		SKRSKY	TRANSCIEVER 066104701	WEAK ADF	12/12/2002 2002122400092
WEAK RECEIVE AUDIO, WON'T POINT TO STATIONS. IN SHOP REPAIR.					
SKRSKY S76A		SKRSKY	RECEIVER 066107700	FAILED ADF	12/12/2002 2002122400095
ADF RECEIVER FOUND INOPERATIVE. PERFORMED PRELIMINARY INSPECTION. FOUND IC 1306, 1307 BAD. REPLACED. REPAIRED. BENCH CHECK GOOD.					
SKRSKY S76A		SKRSKY	WARNING	ILLUMINATED COCKPIT	12/12/2002 2002122400097
BATTERY HOT LIGHT ON. IN SHOP REPAIR.					
SKRSKY S76A		SKRSKY	BOTTLE 297800013	DISCHARGED EMERGENCY	12/12/2002 2002123100036
EMERGENCY FLOAT BOTTLE DISCHARGED, REPAIRED.					
SKRSKY S76A		SKRSKY	CONTROL HEAD 4000038	INOPERATIVE WX RADAR SYS	12/12/2002 2002123100043
WEATHER RADAR CONTROL HEAD IS INOPERATIVE. FOUND CORROSION ON UNIT, SWITCH R4/S1 AND VOLUME KNOB BAD. CLEANED CORROSION AND INSTALLED SWITCH AND VOLUME KNOB. REPAIRED. BENCH CHECK GOOD.					
SKRSKY S76A		SKRSKY	DISPLAY 7007700614	MALFUNCTIONED WX RADAR SYS	12/12/2002 2002123100049
WEATHER RADAR SCREEN INTERMITTENTLY COMPRESSES AND FLICKERS.					

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SKRSKY S76A		TRANSCIEVER 7001840913	MALFUNCTIONED WARNING SYSTEM	12/12/2002 2002123100133	
TRANSCIEVER FLAG STAYS IN OFF POSITION.					
SKRSKY S76A		BEARING	RATCHETING LINK ASSY	12/13/2002 2002123100162	
LINK ASSY HAS RATCHET BEARINGS. REPAIRED.					
SKRSKY S76A		INDICATOR 7645001078123	FLUCTUATES TORQUE	12/13/2002 2002123100233	
TORQUE INDICATOR FLUCTUATES IN FLIGHT.					
SNIAS AS350B1	TMECA ARRIEL1D	AUXILEC P6007052	BELL ASSY STARTER GEN	CRACKED 2003011500168	09/17/2002
(CAN) WHILE COMPETING A DAILY INSPECTION ON THE AIRCRAFT THE ENGINEER NOTICED A CRACK ON THE DRIVE END BELL ON THE STARTER GEN.					
SWRNGN SA226TC	GARRTT TPE33110UA	GASKET 8961151	LEAKING ENGINE	10/09/2002 2003010700082	24361 24361
P3 AIR LEAK AT PRIMARY BLEED PORT CAUSED ENGINE FIRE INDICATION. NO FIRE WAS DISCOVERED					
SWRNGN SA226TC	GARRTT TPE33110UA	BRAKE 212033	FIRE BRAKE	12/12/2002 2003012200254	
(AUS) LH MAIN LANDING GEAR BRAKE FIRE. BRAKES WERE BEING BURNED IN FOLLOWING BRAKE REPLACEMENT. ON ARRIVING BACK AT THE MAINTENANCE FACILITY AND AFTER SHUTTING DOWN THE ENGINEERS SAW FLAMES FROM THE LEFT HAND BRAKE PACK AND EXTINGUISHED THE FIRE. HYDRAULIC FLUID WAS LEAKING FROM ALL FOUR BRAKE ASSEMBLIES. DUE TO THE HEAT GENERATED FROM THREE HEAVY BRAKE APPLICATIONS THE SEALS IN THE BRAKES LET GO CAUSING THE BRAKES TO BECOME SPONGY AND ALLOWING FLUID ONTO THE HOT DISCS WHICH THEN IGNITED AFTER SHUTDOWN. TWO TIRES WERE ALSO FLAT SPOTTED AND BURST ON TAXI BACK.					
UNIVAR 415D		RIB 41513017R	CORRODED CENTER WING	01/03/2003 2003010700135	2120
DURING REFURBISHMENT OF THE WING CENTER SECTION WING WALKWAY BOXES, AN INSPECTION WAS CONDUCTED TO COMPLY WITH AD 2002-26-02. LOWER SKINS OF THE WALKWAY BOXES HAD BEEN REMOVED TO PROVIDE ACCESS FOR REFURBISHMENT, THIS PROVIDED UNIMPEDED ACCESS TO THE ENTIRE CENTER SECTION. CORROSION WAS FOUND ON THE RIGHT SIDE INBOARD REAR FORMER RIB LOCATED BEHIND THE REAR SPAR. CORROSION HAD SEVERELY DAMAGED THE RIB BEYOND AC43-4A CRITERIA REQUIRING REPLACEMENT. NEW RIB WAS PURCHASED AND INSTALLED. NO OTHER CORROSION WAS FOUND IN THE CENTER SECTION. THE ENTIRE CENTER SECTION WAS CLEANED AND PRIMED PRIOR TO REINSTALLATION OF LOWER SKIN.					

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DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION  <b>MALFUNCTION OR DEFECT REPORT</b>		OPER. Control No.			8. Comments (Describe the malfunction or defect and the circumstances under which it occurred. State probable cause and recommendations to prevent recurrence.)
		ATA Code			
		1. A/C Reg. No.	N-		
Enter pertinent data	MANUFACTURER	MODEL/SERIES	SERIAL NUMBER		
2. AIRCRAFT					
3. POWERPLANT					
4. PROPELLER					
5. SPECIFIC PART (of component) CAUSING TROUBLE					
Part Name	MFG. Model or Part No.	Serial No.	Part/Defect Location.		
6. APPLIANCE/COMPONENT (Assembly that includes part)					
Comp/App'l Name	Manufacturer	Model or Part No.	Serial Number		
Part TT	Part TSO	Part Condition	7. Date Sub.		
<b>Optional Information:</b> Check a box below, if this report is related to an aircraft <input type="checkbox"/> Accident; Date _____ <input type="checkbox"/> Incident; Date _____					

DISTRICT OFFICE	OPERATOR DESIGNATOR
OTHER	COMPUTER
FAA	MFG.
AIR TAXI	MECH.
OPER.	REPAIRS
SUBMITTED BY: _____	
TELEPHONE NUMBER ( ) _____	

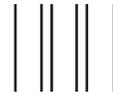
FAA FORM 8010-4 (10-92) SUPERSEDES PREVIOUS EDITIONS

Use this space for continuation of Block 8 (if required).

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

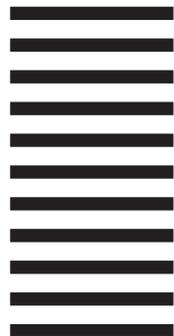
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