



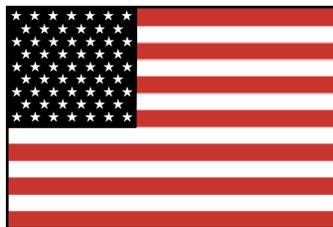
U.S. Department
of Transportation
**Federal Aviation
Administration**

AFS-600

Regulatory Support Division

ADVISORY CIRCULAR 43-16A

AVIATION MAINTENANCE ALERTS



ALERT
NUMBER
299



JUNE
2003

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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

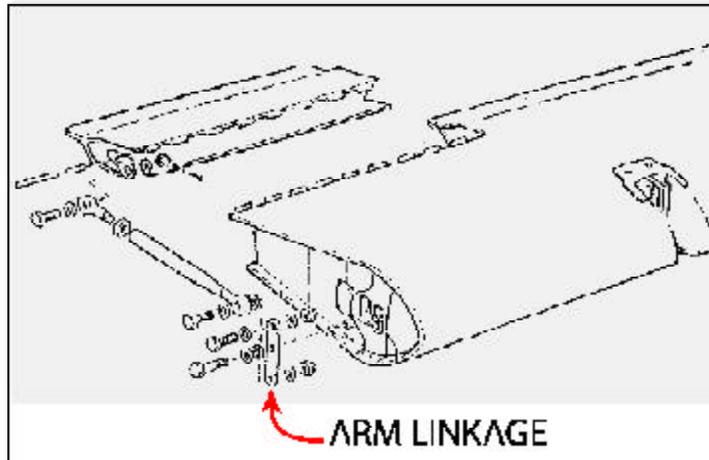
BEECH

Beech; Model B-58; Baron; Aileron Trim Control; ATA 2711

During annual inspection, the technician discovered the aileron trim tab linkage (P/N 45-135039-3) was rubbing on the leading edge of the aileron.

He found the trim tab linkage arm was installed 180 degrees out, with the short end hooked to the actuator linkage, and the trim tab linkage attached to the long end. (Refer to the illustration.)

Part total time-unknown.



Beech; Model C90A; King Air; Elevator Trim Control; ATA 2731

At flight level (FL) 220 feet, the crew heard a loud bang and experienced a significant airframe vibration. The aircraft climbed approximately 200 feet before the crew could stop the ascent. The crew declared an emergency and made an unscheduled landing.

During an inspection, the technician discovered the left elevator trim-control tube assembly (P/N 50-524474-13) had failed.

Part total time unknown.

CESSNA
Cessna; Model 414; STC SA2680SW (400 Horsepower Engine Conversion)

The FAA Small Airplane Directorate, Continued Operational Safety (ACE-113) located in Kansas City, Missouri, provided the following article. (*The article is published as it was received from ACE-113.*)

STC SA2680SW modifies the Cessna 414 airplane by the installation of larger engines and different propellers. The STC replaces the factory installed 310 horsepower TCM TSIO 520-() engines and three-bladed propellers with 400 horsepower Textron-Lycoming IO 720-() engines, that are turbo-normalized, and four-bladed Hartzell propellers. The installation includes an overboost safety protection system designed to limit manifold pressure of the turbo-normalized system to that of sea level at all altitudes up to the system critical altitude.

If the safety protection system is not properly installed and functioning, a manifold overboost condition can occur creating excessive manifold pressures to be generated that may exceed the design specifications and may lead to failure of engine cylinder assemblies, crankshaft, and/or engine crankcase.

Operators should have a properly FAA-certified mechanic inspect any Cessna 414 with STC SA2680SW installed for proper installation and operation of the engine overboost redundant safety protection system. Aircraft may be returned to service after inspection has determined installation is in an airworthy condition.

System components include:

Turbocharger	Garrett Model TE0659 Garrett P/N 406610-27
Pressure Relief Valve (31 in. Hg)	Garrett P/N 470944-16 (old p/n) Garrett P/N 470944-25 (new p/n)
Variable Absolute Pressure Controller	Garrett P/N 470836-1
Wastegate Valve	Garrett P/N 481036-1

Garrett-Airesearch Aerospace is now Kelly Aerospace, Montgomery, Alabama.

Flightcrews should be advised that less than cautious operation of throttles could result in an overboost condition on engines that do not have a properly functioning overboost protection system. Monitoring of manifold pressure indicators during throttle advances will provide an indication of a system that is not operating properly per design specifications (reference STC SA2680SW Aircraft Flight Manual supplement for manifold pressure limits). Manual limiting of manifold pressure by throttle position can prevent an overboost condition in the event of inadequate overboost protection. Flight crews should report any overboost condition immediately and have a properly FAA certified mechanic resolve all defective conditions before further flight.

The FAA is preparing a Special Airworthiness Information Bulletin (SAIB) to notify owner/operators of Cessna 414 aircraft with STC SA2680SW installed of this safety condition.

Cessna; Model 172RG; Cutlass; Main Landing Gear Actuator ATA 3233

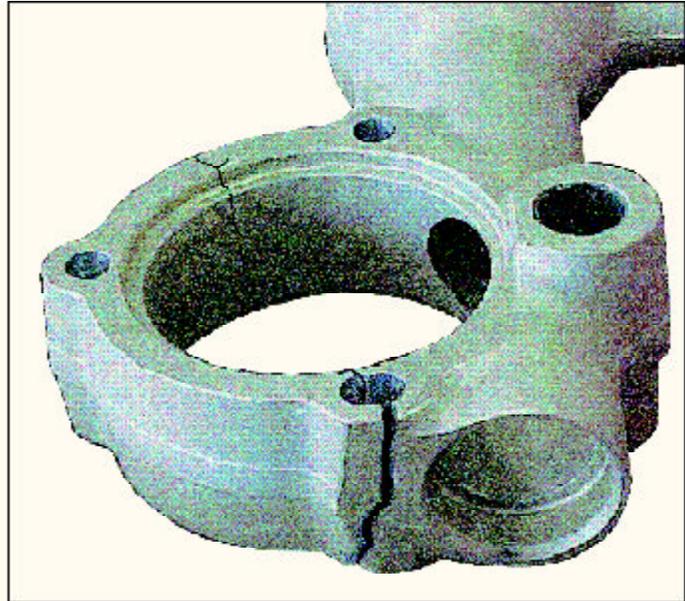
The pilot heard a loud bang when he retracted the landing gear. He landed the aircraft without further incident.

The technician investigated and discovered the Cessna (P/N 1281001-3) right main gear actuator body was cracked. (Refer to the illustration.) He found another crack starting where the landing gear casting attaches onto the spot face of the body. This defect cannot be seen without removing the actuator assembly. He discovered the piston assembly (P/N 9882004-1) and the sector gear (P/N 9882002-2) displayed signs of gear galling.

The submitter suspects the actuator body may have failed due to fatigue.

The FAA Service Difficulty Reporting Program data base revealed 22 reports of cracks on Cessna 172RG main landing actuators for the period of January 1, 1995, to May 15, 2003.

Part total time-8,129 hours.



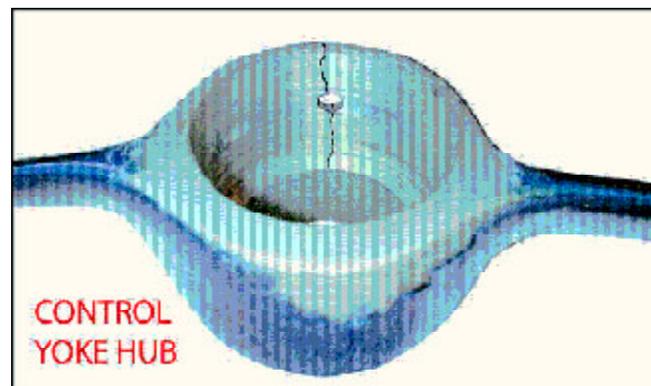
PIPER

Piper; Model PA 24-250; Comanche; Control Column; ATA 2701

During an annual inspection, the owner requested that the technician change the yokes.

The technician discovered that both yokes were cracked on the lower side, through the hole for the roll pin. This condition was not visible until he removed the emblem and yoke.

According to the submitter, a plastic coating on the yoke exterior had not cracked even though the aluminum yoke beneath it was cracked fully through. (Refer to the illustration.)



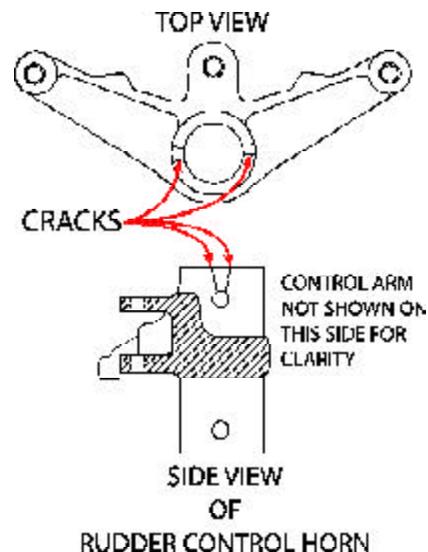
Part total time-3 hours and 428 hours.

Piper; Model PA 30-160; Twin Comanche; Rudder Control; ATA 2720

The technician removed the rudder control horn (P/N 20185-5) due to wear between the horn and the rudder. He also found cracks going from the mount holes to the top of the rudder horn. (Refer to the illustration.)

The submitter stated that he is aware of several other rudder control horns that have cracked in the same manner.

Part total time-4, 375 hours.



RAYTHEON**Raytheon; Model 390; Premier I; Engine Fuel Flow Transmitter; ATA 7333**

During a routine 200-hour inspection, the technician discovered fuel in the right engine compartment. An investigation revealed that the electrical connector on the fuel flow transmitter (P/N 12181-302) was leaking internally.

The submitter said this is the third occurrence that he is aware of on this type aircraft. He also stated that the overhauled replacement part had the same malfunction. He suspects that either environmental conditions are causing rapid wear on the part, or there is a design fault in the part, or the manufacturer's quality assurance needs improvement.

Part total time-180 hours.

HELICOPTERS

BELL

Bell; Models 222, 222B, 222U, and 230; Tailboom, Tailboom Attachment, and Tailboom Longerons; ATA 5302

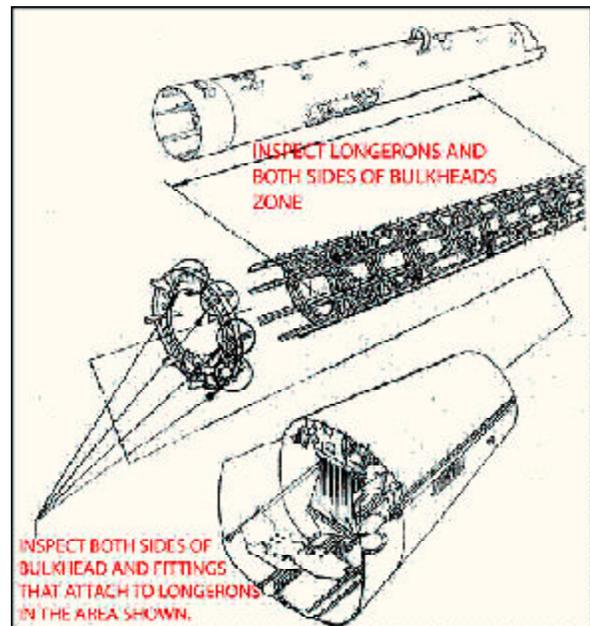
The FAA Aircraft Certification Service, Rotorcraft Directorate (ASW-110) located in Fort Worth, Texas, provided the following article. (*The article is published as it was received from ASW-110.*)

The following information applies to the Bell 222, 222B, 222U, and 230 operated in any category with tailbooms that have a total time-in-service (TIS) greater than 5,000 hours.

There have been a number of reported tailboom skin cracks located on the right hand side and top of the tailboom between tailboom stations TB 120-140 for 222, or TB 220-240 for 222B, U, and 230 models. During the inspection and repair of those cracks, there have been additional cracks discovered in the longerons and in the bulkhead flanges inside the tailboom.

The FAA recommends that aircraft/tailbooms that have accumulated more than 5,000 hours time-in-service be inspected closely within the next 300 hours and any time a skin crack is discovered on the left hand side of the tailboom or on the upper skin between the two most upper longerons adjacent to Buttock Line BL 0.0.

Most of the cracks on the right hand side could be prevented by the application of the existing BHT technical bulletins 222U-94-65 and 222-94-138. All cracks discovered in skins must be repaired. Inspections should be accomplished in the areas as shown in Figure 1. Access can be gained through removal of the access door (see Figure 2) and removal of the horizontal stabilizer.



BRANTLY

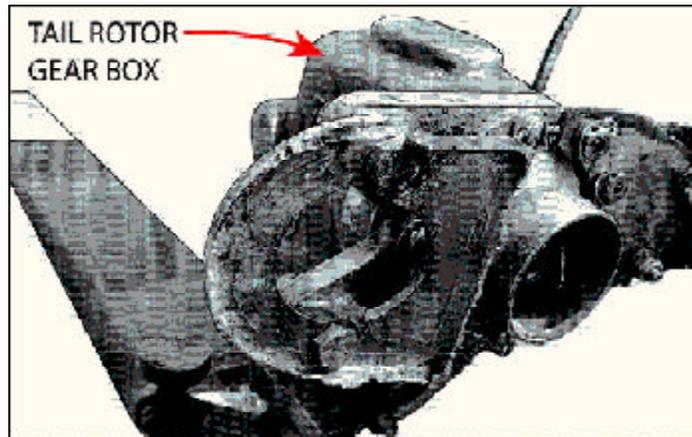
Brantly; Model B-2B; Tail Boom; ATA 5302

During an accident investigation, the investigator discovered the top bulkhead ring had separated (P/N 270-3) from the tail boom pylon.

The investigator also discovered the tail rotor gearbox was still attached to bulkhead ring. The bulkhead ring had separated at the rivet attach point, just below the transition radius. Exiting cracks were found on the left and right side of the bulkhead. (Refer to the illustration.)

The submitter stated that inspection could be accomplished through a lightening hole at the top of the tail boom pylon.

Part total time-unknown.



AIR NOTES

ELECTRONIC VERSION OF 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/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.

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

Telephone: (405) 954-6486

E-Mail address: 9-AMC-SDR-ProgMgr@faa.gov

IF YOU WANT TO CONTACT US

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

Editor: 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 April 23, 2003, and May 26, 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.

ACFT MAKE	ENG MAKE	COMP MAKE	PART NAME	PART CONDITION	DIFF-DATE	T TIME
ACFT MODEL	ENG MODEL	COMP MODEL	PART NUMBER	PART LOCATION	OPER CTRL NO.	TSO
REMARKS						
BEECH		PWA	WIRE HARNESS	FAILED	03/06/2003	
100BEE		PT6A28	1003810061	DOWNLOCK (CAN) UPON APPROACH, MLG WAS SELECTED		
DOWN FOR LANDING. AFTER EXTENSION IT WAS NOTED THAT THE RT MAIN WAS NOT INDICATING THAT IT WAS DOWN AND LOCKED. THE GEAR WAS CYCLED SEVERAL TIMES WITH NO CHANGE IN DOWN AND LOCKED INDICATION PROBLEM. FFLT CREW PERFORMED EMERGENCY MLG EXTENSION & DECLARED AN IN-FLT EMERGENCY AND A/C WAS LANDED SAFELY. A/C WAS PLACED ON JACKS AND INDICATION SYSTEM INSPECTED. FAULT WAS LOCATED IN THE RT DOWNLOCK SWITCH WIRING HARNESS WHERE IT BENDS AT MLG ASSEMBLY AND DRAG LEG INTERSECTION. A BROKEN WIRE WAS LOCATED FROM THE DOWNLOCK SWITCH AND REPAIRED. MLG SYSTEM WAS GROUND-CHECKED SERVICEABLE WITH SEVERAL MLG EXTENSION AND RETRACTIONS, AND THE A/C WAS RELEASED FOR RETURN TO SERVICE.						
BEECH		PWA	HOSE	CUT	03/16/2003	
1900D		PT6A67D	1013880175	HYD SYSTEM		
(CAN) DURING A WALK AROUND, THE CREW NOTICED HYDRAULIC FLUID IN THE RT MAIN GEAR AREA. MAINTENANCE FOUND THAT THE RETRACT LINE HAD BEEN CUT CLOSE TO THE IDENTIFICATION CLAMP. THE CUT OCCURED NEAR THE CLAMP WHICH MAY INDICATE A CYCLIC FAILURE WITH THE CLAMP BEING THE EDGE APPLYING PRESSURE THROUGH THE WEIGHT ON-WEIGHT OFF MOTION. THE HOSE WAS REPLACED, GEAR CYCLED AND THE AIRCRAFT RELEASED.						

BEECH 58	CONT IO520C	INDICATOR 13P2002	MISMARKE ENG OIL PRESSURE	02/05/2003	
(AUS) ENGINE OIL PRESSURE GAUGE LIMITS INCORRECTLY MARKED.PERSONNEL/MAINTENANCE ERROR.					
BEECH 58	CONT IO550C	BRUSHES 35175A	BROKEN MLG MOTOR	03/03/2003	
(CAN) DURING LANDING, MLG SELECTED DOWN & NOTHING HAPPENED. CIRCUIT BREAKER TRIPPED. STARTED A MANUAL EMERGENCY MLG EXTEND MANUAL MLG EXTEND HANDLE ENGAGED. STUDENT COULDN'T MOVE ACT. AFTER SEVERAL ATTEMPTS & 2 STUDENTS MANAGED TO TURN AACT HANDLE. AFTER 1ST TURN HANDLE BECAME EASY TO MOVE. GEAR LOWERED SUCCESSFULLY & A/C LANDED. INSPECTION OF MLG ACT SYS, MLG MOTOR FOUND U/S WITH ONE BAD BRUSH. ACT WAS STIFF IN FULL UP POSITION. BOTH MOTOR & ACT REPLACED. PARTS SENT FOR INSPECT & REPAIR.					
BEECH 95B55	CONT IO470L	BOLT 654811	CORRODED ENGINE	03/21/2003	
(AUS) CONNECTING ROD BOLTS CONTAINED PITTING ON GROUND SURFACES. BOLTSWERE NEW ITEMS FOR FITMENT FOLLOWING STRIP AND INSPECTION FOR PROPELLER STRIKE.					
BEECH B100	SPLINE 115610010125	CRACKED ELEVATOR	04/08/2003		
(CAN) DURING ROUTINE MAINTENANCE, ELEVATORS WERE REMOVED FOR SB 2145 ON ELEVATOR TORQUE TUBE. AFTER REVIEWING SERVICE DIFFICULTY ADVISORY AV-2003-01 FOR BEECH A100, WE FOUND SAME CRACKES ON THE RIGHT ELEVATOR ON OUR B100. AFTER DISASSEMBLE AT LOCAL SHEET METAL SHOP WE WERE INFORMED THAT THERE WERE 17 CRACKS AND ONE CRACK WAS COMPLETELY THROUGH THE SPLINE.THE TRANSPORT OFFICE WAS NOTIFIED AND THEY REQUESTED PICTURES.					
BEECH C90	PWA PT6A21	FITTING 351150583	DEFORMED RT WING	05/01/2003 806	10508
DURING INSPECTION OF THE WING FITTINGS AND BOLTS THE RIGHT REAR WING ATTACH BOLT WAS FOUND TO BE BENT AND THE FITTING WAS DEFORMED. IN THE MFG STRUCTURAL INSPECTION AND REPAIR MANUAL COVERS THE INSTPECTION OF THE BOLTS AND FITTING AREA. THHE BOLT AND A CASTING OF THE DEFORMED FITTING WAS SENT TO MFG TECH SUPPORT FOR EVALUATION. TECH RECOMMENED THE FITTING AND BOLT BE REPLACED.					
BEECH C90A	PWA PT6A21	TUBE 909100991317	CRACKED ANTI-ICE SYS	04/08/2003	
(CAN) DURING RT ENGINE CHANGE, THE LOWER COWL WAS REMOVED AND BOTH ENGINE INTAKE ANTI-ICE FLEX TUBES WERE FOUND CRACKED. BOTH TUBES (P/N 90-910099-13 AND 90-910099-17) WERE CRACKED GREATER THAN 50 PERCENT OF THEIR CIRCUMFERENCE. THERE WAS NO EVIDENCE OF ANY EXHAUST LEAK INSIDE THE COWLING. (TUBE P/N 90-910099-13) TSN110-2 HRS. P/N 90-910099-17 WAS 307.1 TSN. BOTH TUBES HAVE BEEN REPLACED.					
BEECH C90A	PWA PT6A21	HINGE 5052442034	CRACKED ELEVATOR	04/09/2003	
(CAN) DURING UNSCHEDULED INSPECTION OF THE TAIL. THE ENGINEER CHECKED FOR PLAY IN THE ELEVATOR HORN BEARINGS P/N MS27645-5. UPON CLOSER EXAMINATION THE ENGINEER NOTICED A CRACK IN THE BEARING HOUSING AREA OF P/N 50-524420-4. AFTER REMOVAL OF THE BEARING FROM THE LT BEARING HOUSING P/N 50-524420-3 CORROSION WAS FOUND. NEW PARTS WERE ORDERED TO CORRECT DEFECT.					
BEECH C90A	PWA PT6A21	TUBE 9091009913	CRACKED ANTI ICE SYS	04/09/2003	
(CAN) THE COWLINGS WERE REMOVED FROM THE AIRCRAFT FOR SCHEDULED OIL CHANGE. VISUAL INSPECTION CARRIED OUT ON COWLING PRIOR TO REINSTALLATION IDENTIFIED ONE CRACKED COWL ANTI-ICE BLEED AIR TUBE. NEW PARTS WERE INSTALLED. . A FLEET CAMPAIGN IINSPECTION IS ONGOING, WITH INSPECTION DUE THE NEXT TIME THE COWL IS REMOVED FOR MAINTENANCE. AVERAGE PART LIFE IS LESS THAN 200 HRS. AFTER INSTALLATION.					
BEECH C90A	PWA PT6A21	TRIM TAB 5061001736	FRETTE ELEVATOR	03/17/2003	
(CAN) SPECIAL INSPECTION CARRIED OUT AS PER CAMPAIGN 681-27-30-015 WHICH MANDATES INSPECTION OF THE ELEVATOR CONTROL TUBE ATTACHMENT TO TRIM TAB. RT TRIM TAB, BUSHING WAS FOUND NOT SEATED ALL THE WAY INTO THE TRIM TAB HORN. THE OUTBOARD SSIDE OF THE HORN HAD EXCESSIVE FRETTING FROM CONTROL ROD FORK					
BEECH C90A	PWA PT6A21	TUBE 5052447413	BROKEN CLEVIS	03/14/2003	
(CAN) AT FLIGHT LEVEL 220, FLIGHT CREW HEARD A LOUD BANG AND EXPERIENCED SIGNIFICANT AIRFRAME VIBRATION. THE A/C CLIMBED APPROXIMATELY 200FT BEFORE CREW WERE ABLE TO STOP ASCENT. EMERGENCY DECLARED, UNSCHEDULED LANDING CARRIED OUT. MAINTENAANCE CREW FOUND THE LT ELEVATOR TRIM CONTROL TUBE FAILED.					
BEECH D18S	PWA R985AN14B	CIRCUIT MLG	FAILED	04/07/2003	
(CAN) UPON SELECTING THE LANDING GEAR UP THE LANDING GEAR MOTOR WAS UNDER EXCESSIVE STRAIN DUE TO THE LANDING GEAR GUIDE BEING VERY DIRTY AND THE CIRCUIT BREAKER POPPED. THE PILOT SELECTED FREE FALL ASSIST TO LOCK THE GRAR DOWN. CIRCUIT BREEAKER WAS REPLACED, IT HAD 494.6 HOURS IN SERVICE.					
BELL 407	ALLSN 250C47B	COMBUST 23030911	CRACKED ENGINE	04/14/2003 244	2170
OUTER COMBUSTION CAN CRACKED 180 DEGREES AROUND FUEL NOZZLE WELD. PRIOR TO CRACK THE ENGINE WAS RATED AS A +22 MGT. THE ENGINE WAS -6 MGT WHEN CRACK WAS DISCOVERED. THE CRACK IS NOT VISIBLE TO THE PILOT DURING PREFLIGHT. AN INSPECTION MIRRORR IS REQUIRED TO SEE THE CRACK. A CATASTROPHIC ENGINE FAILURE WITH A RESULTING FIRE WOULD HAVE OCCURED IF THE CRACK HAD NOT BEEN DETECTED.					
BELL 430		TRANSMITTER HYD SYSTEM	FALSE INDICATION	04/09/2003	
AFTER FLIGHT IN RAIN, NR 2 HYDRAULIC PRESSURE INCREASED TO 1760 PSI AND NR 2 HYDRAULIC TEMPERATURE INCREASED TO 44 DEGREES C. CLEANED WATER FROM NR 2 HYDRAULIC PRESSURE TRANSMITTER CONNECTOR PLUG.					
BELL UH1H	ARTEX 100HM	BATTERY 452013002	LEAKING ELT	04/25/2003	
AT REMOVAL OF ELT BATTERY AT POSTED REMOVAL DATE IT WAS DISCOVERED THE BATTERY PACK HAD LEAKED AND CORRODED COMPONENTS WITHIN THE CASE. THERE WAS ALSO A CRACK NOTED ON THE BATTERY CASE WHICH APPEARS TO BE CAUSED BY OVER HEAT OR OVER PRESSUURE. THE ELT IS CHECKED EVERY 100 HRS AND APPEARED TO BE WORKING CORRECTLY. THE MANUFACTURER WAS NOTIFIED OF THE PROBLEM. NO CAUSE HAS BEEN DETERMINED.					
CESSNA 150G	CONT O200A	INDICATOR 415062	MISMARKE AIRSPEED	02/07/2003	
(AUS) AIR SPEED INDICATOR (ASI) LIMITS INCORRECTLY MARKED.					
CESSNA 152	LYC O235L2C	SPAR 043200121	CRACKED ELEVATOR	03/10/2003	
(AUS) ELEVATOR SPAR CRACKED AROUND UPPER RIVET HOLE FOR HINGE BRACKET ATTACHMENT. CRACK LENGTH 30.04MM (1.183IN). CRACK TRAVELS INBOARD AND OUTBOARD FROM RIVET HOLE.					

CESSNA 152	LYC O235L2C	BRACKET 04135731	LOOSE ENGINE MOUNT	03/19/2003	
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(AUS) LOWER LH ENGINE MOUNT BRACKET RIVETS SHEARED. SUSPECT CAUSED BY UNREPORTED HEAVY LANDING.

CESSNA 152	LYC O235L2C	SPAR 043200121	CORRODED ELEVATOR	03/11/2003	
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(AUS) RT ELEVATOR CORRODED IN AREA OF TORQUE TUBE. CAUSED BY LACK OF PRIMER DURING ASSEMBLY. INSPECTION ALSO FOUND RACKS FOUND EMANATING FROM UPPER AND LOWER RIVET HOLES EXTENDING TOWARDS INBOARD END OF ELEVATOR SPAR AND OUTBOARD END. UPPERR RIVET CRACK 18.9MM (0.745IN) LONG. LOWER RIVET CRACK 15.8MM (0.625IN) LONG. A CRACK WAS ALSO FOUND IN CIRCUMFERENCE OF HOLE IN THE SPAR THAT THE ELEVATOR TRIM TAB ACTUATOR ROD PASSES THROUGH.

CESSNA 172A		STUD 613132421	CRACKED SEAT	04/25/2003	
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DURING AN UNSCHEDULED INSPECTION IT WAS NOTED THAT THE PASSENGER SEAT ATTACHMENT STUD WAS CRACKED AT THE LOBE. A REPLACEMENT STUD WAS PROCURED AND INSTALLED AND UPON TORQUING THIS STUD TO THE SPECIFIED VALUE IT ALSO CRACKED. A RANDOM INSPECTION OF OTHER G-IV AIRCRAFT AT THIS FACILITY REVEALED CRACKED SEAT STUDS AS WELL. A TOTAL OF TWELVE (12) SEAT STUDS WERE FOUND TO BE CRACKED IN THIS SPECIFIC CESSNA

WORN	03/13/2003	2207		CONT	WHEEL
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172A	O300*	9520653	NLG		
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ANNUAL INSPECTION, NOSEWHEEL ASSY WAS REMOVED IN ORDER TO INSPECT BEARINGS FOR CONDITION. ONE BEARING CUP WAS FOUND CORRODED. WHEN LW67010 CUP WAS REMOVED FROM WHEEL HALF, DISCOVERED BEARING BORE SEVERELY WORN. BEARING CUP HAD BEEN GLUED IN PLACE WITH A REDDISH COLORED ADHESIVE COMPOUND. COMPOUND ADHERED TO THE WHEEL HALF AND BEARING CUP. WITHOUT REMOVING COMPOUND FROM WHEEL HALF, TECH PLACED A CLEAN LW67010 BEARING CUP IN THE WHEEL HALF. CUP SEATED IN BORE WITH LIGHT HAND PRESSURE AND SPUN FREELY, CONSIDERABLE CLEARANCE. NOSEWHEEL BEARINGS HAD BEEN REPLACED AT THE LAST ANNUAL. WHEEL HALF DID NOT EXHIBIT A SIMILAR CONDITION, CORROSION IN THE BEARING BORE INDICATES IT WOULD NOT BE LONG IN DEVELOPING.

CESSNA 172A	CONT O300*	WHEEL NLG	CORRODED	03/13/2003	2207
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DURING ANNUAL INSP. NOSEWHEEL ASSY WAS REMOVED IN ORDER TO INSPECT THE BEARINGS FOR CONDITION. ONE BEARING CUP WAS FOUND CORRODED. WHEN LW67010 CUP WAS REMOVED FROM WHEEL HALF, TECH DISCOVERED BRG BORE SEVERELY WORN. BEARING CUP HAD BEEN GLUED IN PLACE WITH REDDISH COLORED ADHESIVE COMPOUND, POSSIBLE LOCKTITE. COMPOUND ADHERED TO WHEEL HALF AND BEARING CUP. WITHOUT REMOVING COMPOUND FROM WHEEL HALF, TECH PLACED A CLEAN LW67010 BEARING CUP IN WHEEL HALF. CUP SEATED IN BORE WITH LIGHT HAND PRESSURE AND SPUN FREELY WITH CONSIDERABLE CLEARANCE. A/C OWNER STATED THAT NOSEWHEEL BRGS HAD BEEN REPLACED LAST ANNUAL. GLUEING THE BEARING CUP IN PLACE IS NOT AN APPROVED REPAIR.

CESSNA 172B	CONT O300*	BOLT AN724A	MISINSTALLED RT WING	03/26/2003	1881
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DURING ANNUAL INSPECTION, THE RT DIRECT AILERON CABLE (PN 0510105-72) WAS FOUND TO BE CHAFFING ON THE RT WING AFT ATTACH BOLT THREADS AND NUT. FURTHER INVESTIGATION REVEALED THAT BOTH THE LEFT AND RT AFT WING ATTACH BOLTS WERE INSTALLED BAACKWARDS WITH THE THREADS FACING IN THE AFT DIRECTION. THE EXCESSIVE LENGTH OF THE THREADED PORTION AND NUT AFT OF THE WING SPAR CAUSED INTERFERENCE WITH THE RT AILERON CABLE. REPLACED THE AILERON CABLE DUE TO SEVERAL STRANDS BEING CHAFFED EXCESSIVELY. REPLACED BOTH AFT WING ATTACH BOLTS AND HARDWARE. RECORD REVIEW SHOWS THAT A/C HAD BEEN REASSEMBLED (FROM STORAGE) IN MAY OF 2002, AT WHICH TIME AN ANNUAL INSP WAS SIGNED OFF.

CESSNA 172N		PIN	MISSING	03/27/2003	
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(AUS) LT AILERON CHAIN CLEVIS BOLT SPLIT PINS MISSING AND TOP NUT LOOSE. THE AIRCRAFT HAD ONLY FLOWN FOR TWO HOURS SINCE THE LAST ANNUAL INSPECTION.

CESSNA 172N	LYC O320H2AD	RIB 05230301	CRACKED LT WING	03/12/2003	16746
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(CAN) ROUTINE INSPECTION FOUND CRACKS IN LEFT NOSE RIB AT STATION 100.00 OF WING. THE RIB WAS CRACKED THROUGH LIGHTENING HOLE TO UPPER BEND RELIEF. RIGHT SIDE AT 100.00 WAS ALSO SHOWING CRACKS FROM RIVET HOLES AND FROM THE BEND RELIEF TOWARRD THE LIGHTENING HOLE. BOTH RIBS WERE REPLACED. NO OTHER RIBS AFFECT ED. PLANE BELONGS TO A FLYING SCHOOL WHERE OUT OF THE 7 OPERATED 4 SHOWED SIGNS OF CRACKS ON BOTH OREITHER SIDE. TIME ON AIRCRAFT RANGE FROM 9500 TO 16746.1 HRS.

CESSNA 172P	LYC	MARVELSCHEBX O320D2J	SCREW CARBURETOR	MISSING	04/11/2003
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(CAN) PILOT FIRST NOTICED PROBLEM WHEN TURNED OFF RUNWAY AFTER LANDING. REPORTED ENGINE WILL NOT CONTINUE TO RUN BELOW 1200 RPM. MAINTENANCE FOUND IDLE MIXTURE SCREW MISSING FROM CARBURETOR. OPERATION OK WHEN PART REPLACED.

CESSNA 172R		CONTROL 0510105364	CHAFED AILERON	05/13/2003	
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DURING A ROUTINE INSPECTION, THE LEFT AILERON BALANCE CABLE (P/N 0510105-364) WAS FOUND CHAFING ON A FAIRLEAD LOCATED MIDWAY THROUGH THE FLAP WELL AREA. THE CABLE IS EXTREMELY DIFFICULT TO EXAMINE THOROUGHLY WHILE INSTALLED. A BORESCOPE CANN AID IN VIEWING THE AREA MORE ACCURATELY. THE BEST METHOD IS TO REMOVE THE CABLE AND PERFORM A BENDING TEST ON THE SHINY AREA, WHICH WILL EXPOSE ANY BROKEN WIRES. THIS OPERATOR HAS A FLEET OF APROXIMATELY 60 AIRCRAFT OF THIS MODEL, AND THIS PROBLEM BEGINS TO MANIFEST ITSELF AS EARLY AS 1,500 HOURS TIS.

CESSNA 172R		LOCK MM201057	MISINSTALLED PILOT SEAT	03/31/2003	
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FRONT BOLT HOLE ON THE PILOT LOCK-CYLINDER WAS INSTALLED 90 DEGREES THE WRONG DIRECTION.

CESSNA 172R	LYC IO360L2A	CONTROL 0510105365	CHAFED AILERON	05/13/2003	
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DURING A ROUTINE INSPECTION, THE RIGHT AILERON BALANCE CABLE (P/N 0510105-365) WAS FOUND CHAFING ON A FAIRLEAD LOCATED MIDWAY THROUGH THE FLAP WELL AREA. THE CABLE IS EXTREMELY DIFFICULT TO EXAMINE THOROUGHLY WHILE INSTALLED. A BORESCOPE CANN AID IN VIEWING THE AREA MORE ACCURATELY. THE BEST METHOD IS TO REMOVE THE CABLE AND PERFORM A BENDING TEST ON THE SHINY AREA, WHICH WILL EXPOSE ANY BROKEN WIRES. THIS OPERATOR HAS A FLEET OF APROXIMATELY 60 AIRCRAFT OF THIS MODEL, AND THIS PROBLEM BEGINS TO MANIFEST ITSELF AS EARLY AS 1,500 HOURS TIS.

CESSNA 172R	LYC IO360L2A	SPARK PLUG ENGINE	FOULED	04/30/2003	
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THE CREW REPORTED THE ENGINE (COUGHED) ON TAKE OFF. COMPLETED AN INSPECTION ON SUSPECT ITEMS. CLEANED, TESTED AND FLOW TESTED ALL NOZZLES, CLEANED AND TESTED SPARK PLUGS. SEVERAL WERE FOUND MARGINALLY FOULED. THIS ENGINE/FUEL CONTROL COMBINNATION DOES REQUIRE SUBSTANTIAL ADJUSTMENT TO MAINTAIN PROPER IDLE SPEED/MIXTURE SETTINGS.

CESSNA 172R	LYC IO360L2A	SERVO 2576536-2	INACCURATE FUEL	04/22/2003	
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DURING FLIGHT THE CREW REPORTED A ROUGH ENGINE. SUBSEQUENTLY THE FUEL SERVO AND FLOW DEVIDER WERE CHANGED.

CESSNA 172R	LYC IO360LYC*	FUEL CONTROL 25765362	INACCURATE ENGINE	04/30/2003	
DURING PRE TAKE OFF GROUND CHECK, THE CREW REOPORTED THE IDLE TO BE LOW. IT WAS SUBSEQUENTLY ADJUSTED. THIS ENGINE/ FUEL CONTROL COMBINATION REQUIRES SUBSTANTIAL ADJUSTMENT TO MAINTAIN PROPER					
CESSNA 172RG	LYC O360F1A6	PIVOT ASSY 2441100-1	CRACKED MLG	04/10/2003	2367
FOUND CRACK IN RIGHT MAIN GEAR PIVOT ASSEMBLY AT CASTING SEAM. AIRPLANE SAT FOR 8 YEARS ON THE COAST OF FLORIDA. CORROSION WAS A MAJOR FACTOR IN THIS CRACK. PLANE WAS REPAINTED AND CRACK WAS COVERED. PAINT WAS SPLITTING IN AREA. STRIPPED PAAINT AND THE CRACK APPEARED. IT WAS CRACKED ALL THE WAY THROUGH HOUSING DOWN TO GEAR LEG AND EXTENDED IN TOWARDS PIVOT 4 INCHES.					
CESSNA 172RG	LYC O360F1A6	FITTING 24130023	CRACKED FUSELAGE	04/07/2003	
(CAN) DURING SCHEDULED INSPECTION OF THE AIRCRAFT AND LANDING GEAR IT WAS NOTICED THAT THE FITTING WHICH ACCEPTS THE NOSE GEAR ACTUATOR ASSEMBLY WAS CRACKED. THE TWO CRACKS WERE LOCATED JUST OUTBOARD OF THEACTUATOR MOUNTING BOSSES AND EXTENND BACK FROM THE FORWARD EDGE TO THE FIRST INBOARD FASTENER HOLE.THE AFFECTED PART WAS REMOVED AND REPLACED WITH A NEW PART.					
CESSNA 172S	LYC IO360A1A	HOSE S14956	FAILED FUEL SYSTEM	03/05/2003	1867
PILOT REPORTED FUEL LEAK AT WING ROOT AREA, RIGHT SIDE OF AIRCRAFT. INSPECTING MECHANIC FOUND THAT WING ROOT FUEL HOSES WERE DETERIORATED CAUSING FUEL LEAKAGE. HOSES LOOKED TO BE ORIGINAL INSTALLATION BUT WERE VACUUM TYPE HOSE.					
CESSNA 172S	LYC IO360L2A	CYLINDER 456655	INOPERATIVE PILOT SEAT	04/01/2003	
PRIOR TO ENGINE START, PILOT COULD NOT GET SEAT BACK TO STAY UPRIGHT. LOCK CYLINDER WILL ALLOW SEAT BACK TO FULLY RECLINE.					
CESSNA 172S	LYC IO360L2A	CESSNA 05503671	SPINNER PROPELLER	CRACKED	04/21/2003 737
PILOT WROTE UP MISSING SCREW. UPON EXAMINATION THE SPNNER AND BULKHEAD WERE FOUND CRACKED.					
CESSNA 177RG	LYC IO360A1B6	BELLCRANK 204303112	FAILED NLG WW	04/30/2003	4355
NOSE GEAR FAILED TO EXTEND ON LANDING SUBSTANTIAL DAMAGE OCCURRED. JACKED AIRCRAFT, CYCLED GEAR TO UP POSITION WITH AFT LG DOORS DISCONNECTED. ON EXTENTION, NOSE GEAR FAILED ONCE AGAIN. MECHANICAL UPLOCK FAILED TO RELEASE. SUSPECT OUT OOF ADJUSTMENT.					
CESSNA 182K	CONT O470*	BULKHEAD 07126161	CRACKED FUSELAGE	04/11/2003	
PART WAS FOUND CRACKED DURING INSPECTION REQUIRED BY AD 72-07-09. PART WAS CRACKED AT IT HAND RUDDER CONTROL CABLE HOLE, BETWEEN HOLE AND BULKHEAD FLANGE. PROBABLE CAUSE IS FATIGUE. RECOMMEND THAT CONTROL LOCK IS ALWAYS PUT IN WHEN AIRCRAFT IS STORED OUTSIDE.					
CESSNA 182P		RIVET	MISSING RT WING SPAR	03/25/2003	
(AUS) AIRCRAFT CONTAINED NUMEROUS DEFECTS. FOUND WHEN NEW OWNER TOOK DELIVERY. PERIODIC INSPECTION HAD BEEN CARRIED OUT SIX WEEKS (13HOURS) PREVIOUSLY. DEFECTS FOUND WERE: MISSING RIVETS ON THE RT WING MAIN SPAR DUE TO CORROSION. PROPELLER HAD 97 HTR NOT 597 AS REPORTED AND ADVISED BY PREVIOUS MRO. FIXED ELT HAD EXPIRED - NO MENTION ON CURRENT MAINTENANCE RELEASE. TWO SMALL HOLES IN THE LT FUSELAGE SKIN NEAR BATTERY BOX, POSSIBLY DUE TO ELECTRICAL CONTACT. RT FUEL CAP SEALS UNSERVICEABLE AND CAP NOT ATTACHED TO AIRCRAFT. LT AND RT LANDING GEAR LEG FAIRINGS LOOSE ON AIRCRAFT. THROTTLE CABLE ATTACHMENT CLAMP MODIFIED WITH NO SUPPORTING APPROVAL DOCUMENTATION FOUND.					
CESSNA 182Q	CONT O470U	BAR 07606041	CRACKED RUDDER	03/12/2003	
(AUS) RUDDER BAR CRACKED AT BASE OF RUDDER PEDAL POST.					
CESSNA 182S	LYC IO540AB1A5	SKIN 07133343	CRACKED FUSELAGE	04/11/2003	
(CAN) FUSELAGE SKIN PANEL UNDER REFUELING STEP NOTED HAVING A BULGE AREA UNDER TOP REAR MOUNTING BOLT AREA. SKIN MOVEMENT ALSO WAS EVIDENT WHEN WEIGHT WAS APPLIED TO THE STEP. DETAIL INSPECTION OF AREA FOUND BOTH THE FUSELAGE SKIN AND BULKHEAD WHERE THE STEP IS MOUNTED HAS MULTIPLE CRACKS.					
VOLT 185A	IO520D	C6110010101	UNSERVICEABLE DC SYSTEM	03/17/2003	
(AUS) VOLTAGE REGULATOR FAULTY. VIBRATING CONTACTS WELDED CLOSED CAUSING OVER VOLTAGE WHICH DAMAGED SOME AVIONICS EQUIPMENT.					
CESSNA 207A		BULKHEAD	CRACKED FUSELAGE	02/02/2003	
(AUS) FORWARD DOORPOST BULKHEAD CRACKED AS INDICATED IN AD/C207/32.2.					
CESSNA 208B	PWA PT6A114A	MOTOR C145350	SEPARATED FLAP SYSTEM	04/21/2003	
(CAN) ON APPROACH WHEN FLAPS WERE SELECTED FROM FLAPS 10 TO FLAPS 20 THE PILOT HEARS A LOUD BANG AND FLAPS RAPIDLY RETRACTED BACK TO FLAPS 10. PILOT LANDED THE AIRCRAFT IN THIS CONFIGURATION. MAINTENANCE FOUND THE FLAP TRANSMISSION TO HAVE BROKEN FREE OF THE STRUCTURE. AN INSPECTION WAS CARRIED OUT ON THE FLAPS AND FLAP TRACKS FOR ANY ITEM THAT MAY HAVE CAUSED THE FLAPS TO JAM. NO FAULTS WERE FOUND.THE AIRCRAFT IS CURRENTLY OUT OF SERVICE WHILE REPAIRS ARE CARRIED OUT TO THE DAMAGED FLAP TRANSMISSION SURPORT ASSEMBLY. MAINTENANCE HAS BEEN UNABLE TO DETERMINE WHAT CAUSED THIS FAULT. DUE TO PREVIOUS PROBLEMS WITH THE FLAP SYSTEM ON THE C208 CARAVAN MAINTENANCE SUSPECTS A FAILURE OF THE FLAP MOTOR					
CESSNA 210L	CONT IO520F	ACTUATOR 12801204	FAULTY MLG	03/05/2003	
(AUS) LANDING GEAR DOWNLOCK ACTUATOR FAULTY. SUSPECT LEAKING INTERNALLY AS REPLACEMENT OF SEALS FIXED PROBLEM.					
CESSNA 210L	CONT IO520L	DOWNLOCK RT MLG	OUT OF ADJUST	03/17/2003	
(AUS) LANDING GEAR FAILED TO EXTEND CORRECTLY. INVESTIGATION FOUND THE RT MAIN LANDING GEAR SWITCH AND DOWNLOCK OUT OF ADJUSTMENT. LANDING GEAR CIRCUIT BREAKER CONTAINED A HAIRLINE CRACK.					
CESSNA 210L	CONT IO520L	HOOK 124166345	CONTAMINATED MLG DOWNLOCK	03/14/2003	
(AUS) RT MAIN LANDING GEAR DOWNLOCK HOOK CONTAMINATED WITH DIRT WHICH PREVENTED CORRECT SEATING OF THE HOOK AND ACTIVATION OF THE MICROSWITCH.					

CESSNA 210R	CONT IO520L	MOTOR 19A6002	WORN FAN	03/13/2003	
(CAN) PILOT REPORTED DURING CRUISE A ODOUR AND NOISE IN COCKPIT. A SLIGHT AMOUNT OF SMOKE WAS NOTICED IN WINDSHIELD AREA. PILOT PULLED CIRCUIT BREAKER FOR AVIONICS FAN AND NOISE STOPPED.PILOT RETURNED TO BASE AS PRECAUTION. SMELL DISSIPATEDD DURING RETURN TO BASE. BEARINGS ON MOTOR SHAFT FOUND TO BE WORN, CAUSING FAN TO RUB ON HOUSING.					
CESSNA 310R	CONT IO520M	TUBE 65010	TORN MLG WHEEL	03/11/2003	
(CAN) A/C LANDED WITH NO PROBLEM, TAXIED TO RAMP AND PILOT NOTICE A LOT OF DRAG ON RT MAIN HEEL DISSESSEMBLED AND FOUND TUBE WITH TWO TEARS APPROX 1/4 INCH.					
CESSNA 340A	CONT TSIO520*	BOLT AN414	BENT ELE BELLCRANK	04/11/2003	3469
DURING INSPECTION OF THE ELEVATOR SYSTEM THE TECHNICIAN DISCOVERED THE ELEVATOR BELLCRANK BOLT BENT. WE HAVE FOUND SEVERAL BENT IN OUR FLEET, AND WOULD SUGGEST THAT ALL OPERATORS HAVE THE BOLT AND BEARING INSPECTED AS SOON AS POSSIBLE.					
CESSNA 500CES	PWA JT15D1A	CONTROL 66710	MAFUNCTIONED LANDING GEAR	04/03/2003	
(CAN) CESSNA 500 ON APPROACH, GEAR DID NOT EXTEND SO MANUAL GEAR EXTENSTION PROCEDURE CARRIED OUT. AIRCRAFT LANDED NORMALLY. INSPECTED AIRCRAFT UNABLE TO DUPLICATE SNAG. SO CHANGED LANDING GEAR CONTROL VALVE AS A PRECAUTION.					
CESSNA 525	WILINT FJ441A	BLADE 65278	DAMAGED HP TURBINE	04/03/2003	1017
ON TAKEOFF, NOTICE SMALL BIRD PASS OVER NOSE AND LEFT WINDSHIELD, TAKEOFF WAS NORMAL. DURING CLIMBOUT, 14,500 FEET, STARTED TO HEAR A LOUD WHINE AND VIBRATION COMING FROM LEFT ENGINE. DIVERTED AND BROUGHT LEFT ENGINE TO FLIGHT IDLE. DESCENT AND LANDING WAS NORMAL. DURING TAXI IN, SHUTDOWN LEFT ENGINE TO PREVENT POSSIBLE DAMAGE. INITIAL INSPECTION AFTER PILOT REPORTED EVENT. REVEALED EXTENSIVE HP COMPRESSOR AND TURBINE DAMAGE WITH HEAVY OIL CONTAMINATION. CONTINUED OPERATION, WOULD RESULT IN TOTAL CATASTROPHIC FAILURE.					
CESSNA 550	PWA JT15D4	PICCOLO TUBE RT ENGINE	CRACKED	03/25/2003	
(CAN) A RIGHT ENGINE INLET FOUND CRACKED WHERE INLET INTO PICCOLO TUBE FOR LIP HEAT IS MOUNTED. CRACK RADIATES UPWARD ABOUT 4 INCHES. NEW INLET INSTALLED. TEST					
CESSNA P210N	CONT TSIO520*	BUMPER BLOCK 12416307	DEBONDED MLG	07/14/2000	201
LEFT AND RIGHT MAIN LANDING GEAR SHELL BUMPER DEBONDS, THE BUMPER EDGES CURL OVER PREVENTING MAIN GEAR STRUT FROM MAKING FULL DOWN TRAVEL. THIS CONDITION PREVENTS MAIN GEAR STRUT FROM CONTACTING DOWNLOCKS AND PROPER DOWNLOCK SWITCH ACTUATION, THEREFORE, AN UNSAFE CONDITION. IT APPEARS THAT MFG MAY HAFE CHANGED THE COMPOSITION OF THE SHELL BUMPER MATERIAL WHICH DOES NOT HAVE GOOD BONDING QUALITIES. RECOMMEND CHANGING COMPOSITION OF BUMPER MATERIAL. (PHOTO)					
CESSNA R182		CONTROL RUDDER	OUT OF RIG	04/14/2003	
WHEN THE RUDDER IS DEFLECTED TO THE FAR RIGHT, THE RIGHT RUDDER CABLE GOES SLACK AND HANGS UP UNDER THE NUT FOR THE ELEVATOR PULLEY CLUSTER LOCATED BY THE FUSELAGE RIGHT SIDE ACCESS PANEL. TO PREVENT THIS A GUARD WAS SUGGESTED TO PREVENT TTHE CABLE FROM SLIPPING UNDER THE BOLT AND HANGING UP THE CONTROL CABLE. THE CABLE TENSION WAS CHECKED AND DOUBLE CHECKED. THE MECHANIC STATES THAT THIS IS NOT THE FIRST TIME HE HAS SEEN THIS PROBLEM.					
CESSNA T206H	LYC TIO540A1A	MOUNT 121322287	CRACKED ENGINE	05/01/2003	
ENGINE JUST CAME BACK FROM LYCOMING FOR SB553 AND WAS BOLTED ON AIRFRAME. FOUND THE RT REAR-LIFTING RING CRACKED 85 PERCENT THROUGH. CRACK HAD GRAY PAINT IN IT. THIS COULD HAVE BROKEN WITH THE ENGINE UP IN THE AIR AND FULL ON SOMEONE OR THE AIRCRAFT.					
CESSNA T210N	CONT IO550*	DIPSTICK 65217122	BROKEN ZONE 400	04/29/2003	340
AFTER THE SECOND GROUND RUN, AND DURING A PRE-RUN CHECK FOR A THIRD GROUND RUN, A MECHANIC REMOVED THE OIL FILLER CAP/DIPSTICK AND DISCOVERED THAT THE DIPSTICK HAD BROKEN OFF FROM THE OIL FILLER CAP. THE OIL WAS DRAINED FROM THE ENGINE, AND A BORESCOPE WAS USED TO DETERMINE THAT THE DIPSTICK HAD BEEN BROKEN INTO NUMEROUS PARTS. ONE PART OF THE DIPSTICK WAS RECOVERED FROM THE OIL DRAIN HOLE AND IT WAS ABOUT ONE INCH LONG AND BENT IN A 90 DEGREE ANGLE. THE OIL FILTER WAS REMOVED, CUT OPEN, AND THE FILTER CONTAINED A LARGE AMOUNT OF METAL FLAKES. THE OIL REMAINING IN THE FILTER CAN LOOKED LIKE METALLIC PAINT.THE MECHANIC SAID HE HAD NO PROBLEM WITH INSTALLING THE OIL CAP/DIPSTICK BACK INTO THE ENGINE					
CESSNA T210N	CONT TSIO520*	ALT AIR DOOR 21095011	SEPARATED ENGINE	03/19/2003	930
ON CLIMB OUT, ENG BEGAN TO RUN ROUGH, DROPPING 300 RPM. DURING GROUND RUN UP, MAG CHECK AT 1700 RPM SHOWED NO PROBLEM. RUN UP TO PWR AND ENG RAN FINE, THEN DROPPED 300 RPM AND RAN ROUGH. MAINT REMOVED ALL SPARK PLUGS AND FOUND LEAD FOULED. CLEANED AND FIRE CHECK SPARK PLUGS. CHANGED IGN LEADS, BOTH MAGS AND ALL SPARK PLUGS, SUSPECT BURN MARKS AT LEADS TO HARNESS. AIR INTAKE DUCT ALTERNATE AIR DOOR WAS FOUND TO BE UNHINGED AND FOUND HINGE PIN AND DOOR LAYING IN DUCT. NO SPRING WAS FOUND. ALL CYL WERE BOROSCOPED. NR 5 CYLINDER WAS FOUND TO HAVE IMPACT MARKS ON TOP OF PISTON, HEAD AND INTAKE VALVE SEAT. NR 5 CYL WAS REPLACED. INTAKE DOOR SPRING HAD ENTERED CYLINDER AND EXITED					
CESSNA U206G	CONT IO520F	SKIN 1211650	CORRODED FUSELAGE	05/05/2003	
(CAN) THE AIRCRAFT HAS A BLACK MATERIAL BONDED TO THE AIRCRAFT BELLY SKIN INTERIOR TO PREVENT OIL CANNING.SEVERE CORROSION WAS FOUND BETWEEN THE BONDED MATERIAL AND THE SKIN. IN SOME AREAS THE CORROSION EX TENDED TO A DEPTH EQUAL TO HALF OFF THE SKINS 032THICKNESS. THE SKIN WAS REPLACED. OTHER SKIN AREASALSO REQUIRED REMOVAL OF THE BLACK MATERIAL AND REMOVAL OF SURFACE CORROSION CARRIED OUT. A REVIEWOF THE AIRCRAFT IPC COULD NOT FIND THIS ITEM. THIS UNKNOWN BLACK MATERIAL WAS CHECKED WITH A MULTI-METER AND FOUND TO BE CONDUCTIVE SUGGESTING THAT WITH THE PRESENCE OF MOISTURE ELECTROLYTIC CORROSIONCOULD RESULT.					
CIRRUS SR20	CONT IO360*	MOTOR 12546001	DAMAGED ROLL TRIM	03/21/2003	
SHAFTED IN ROLL, TRIM MOTOR ASSEMBLY SHEARED IN FLIGHT, DURING LANDING APPROACH. THE PILOT RETAINED CONTROL AND A SAFE LANDING WAS ACCOMPLISHED. NO FURTHER DAMAGE WAS FOUND DURING INSPECTION OF THE TRIM SYSTEM, AILERON AND LEFT WING. THEE CAUSE OF THIS FAILURE IS UNDETERMINED AT THIS TIME.					

CIRRUS SR20	CONT IO360E	ENGINE 16	MALFUNCTIONED	04/30/2003	16
AIRCRAFT ENGINE DID NOT RESPOND TO FULL THROTTLE DURING ATTEMPTED REJECTED LANDING FOLLOWING ENCOUNTER WITH SEVERE LOW ALTITUDE TURBULENCE. SUBSEQUENT EXAMINATION OF ENGINE AND COMPONENTS REVEALED NO ABNORMALIES. RECOMMEND CAUTIONARY NOTE IN PILOT OPERATING HANDBOOK REGARDING ENGINE POWER RESPONSE DURING TURBULENCE.					
CLARK 1000CL		BUSHING 350A37112602	LOOSE MAIN ROTOR	04/25/2003	289
BUSHING LOOSE REPLACED LINK AND SPACER.					
CLARK 1000CL		SPACER 704A33640021	STUCK SCISSOR LINK	04/25/2003	289
SPACER STUCK IN LOOSE BUSHING OF SCISSOR LINK. REPLACED SCISSOR LINK AND BUSHING.					
CLARK 1000CL	ALLSN 250C*	NOZZLE 23008054	DISTORTED ENGINE	04/01/2003	
MATING SURFACE FOR SEALING PURPOSES BETWEEN NR1 & NR2 NOZZLES IS OUT OF CONCENTRICITY CAUSING AIR LEAKAGE, CREATING LOW POWER CONDITIONS. RETURNED PART TO MFG FOR WARRANTY EXCHANGE.					
DHAV DHC2MK	PWA R985AN14B	TORQUE TUBE C27A	WORN ELEVATOR	03/04/2003	21878
(CAN) THE ELEVATOR TORQUE TUBE LOWER CABLE ATTACH POINT WAS FOUND TO BE ELONGATED. THE PART WAS SENT OUT TO BE REPAIRED.					
DHAV DHC2MK	PWA R985AN14B	FLAPPER 525GG12D	DETERIORATED FUEL SYSTEM	03/19/2003	
(CAN) ON ANNUAL INSPECTION, THIS FUEL CHECK VALVE WAS REMOVED FROM AIRCRAFT FOR INSPECTION. WE HAD TROUBLE DISMANTLING THE VALVE AS CORROSION HAD STARTED TO FUSE THE PARTS TOGETHER. ONCE DISMANTLED THE RUBBER SEAL ON THE INTERNAL FLAPPER VALVE WAS FOUND TO BE IN POOR CONDITION, AND WHEN TOUCHED WITH A SCREWDRIVER IT CRUMBLLED APART. THE CURE DATE STAMPED ON THE OUTSIDE OF THE VALVE WAS DATED IN 1955. FAILURE OF THIS VALVE IN COULD CAUSE THE HAND WOBBLER PUMP IN THE AIRCRAFT TO BECOME INEFFECTIVE.					
DHAV DHC630	PWA PT6A27	HINGE TE FLAP	CORRODED	02/07/2003	
(AUS) LEVEL 1 CORROSION WAS FOUND ON EXTERNAL SURFACES IN VARIOUS LOCATIONS. LEVEL 2 CORROSION WAS FOUND ON FLAP HINGE ARMS, VERTICAL AND HORIZONTAL FORWARD ATTACHMENT FITTINGS. FOUND DURING INSPECTION IAW AD/DHC-6/69, LEVEL 1 AND LEVEL 2 CORROSION WAS FOUND AS OUTLINED IN PSM 1-GEN-5.					
DHAV DHC710	PWA PT6A50	LINE 73010033147	CHAFED DE-ICE SYS	03/18/2003	32910
(CAN) AFTER FINDING THIS LINE CHAFED ON AN OTHER AIRCRAFT WE COMPLETED A SPECIAL INSPECTION. WE FOUND THAT THE DE-ICE LINE HAD BEEN CHAFING ON A HYDRAULIC LINE. THIS LINE IS LOCATED UNDER PANEL 419AT (NR 1 ENG BATMAN PANEL). THE LINE IS HIDDEN UNDER NUMEROUS OTHER LINES AND IT IS VERY DIFFICULT TO SEE / NOTICE THE CHAFFING. WE HAD TO USE A BORESCOPE TO CONFIRM IF THE LINES WERE TOUCHING EACH OTHER. THE LINE WILL BE REMOVED AND REPLACED.					
DHAV DHC710	PWA PT6A50	LINE 73010033147	CHAFED DE-ICE SYS	02/12/2003	28861
(CAN) DURING TROUBLESHOOTING A DE-ICE SNAG, (NR 1 ENG DE-ICE BOOT WILL NOT INFLATE) IT WAS FOUND THAT THE DE-ICE LINE P/N 73010033-147 HAD BEEN CHAFFING ON A HYDRAULIC LINE. THIS LINE IS LOCATED UNDER PANEL 419AT (NR 1 ENG BATMAN PANEL). THE LINE IS HIDDEN UNDER NUMEROUS OTHER LINES AND IT IS VERY DIFFICULT TO SEE / NOTICE THE CHAFFING. WE HAVE CHECK AN OTHER AIRCRAFT AND HAD TO USE A BORESCOPE TO CONFIRM IF THE LINES WERE TOUCHING EACH OTHER. THE LINE WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE.SEE ATTACHED					
DHAV DHC820	PWA PW123D	CONTROL AILERONS	MISRIGGED	02/17/2003	
(AUS) FLIGHT CONTROL PROBLEMS. SUSPECT CAUSED BY AILERON CONTROL SYSTEM RIGGING. PROBLEM WAS FOUND TO BE AN INHERENT CHARACTERISTIC OF THIS SERIES AIRCRAFT.					
DOUG A26BSH	PWA R280079	BEARING ENGINE	FAILED	04/16/2003	
(CAN) DURING A LOCAL TRAINING FLIGHT THE RT OIL TEMP WAS NOTICED TO BE ON THE RISE. THE OIL COOLER WAS OPENED HOWEVER THE TEMP CONTINUED TO RISE. A SHORT TIME LATER THE OIL PRESSURE BEGAN TO DROP ACCOMPANIED BY BLACK SMOKE FROM EXHAUST.ENNGINE WAS SHUT DOWN AND THE AIRCRAFT MADE A SINGLE ENGINE LANDING AT RED DEER WITHOUT INCIDENT.THE ENGINE APPEARS TO HAVE A MAIN BEARING FAILURE.					
GROB G115C	LYC O360A1F6	FLAPPER 1156602	SEPARATED ENG AIR INTAKE	02/25/2003	
(AUS) CARBURETOR AIR BOX FLAPPER VALVE SEPARATED FROM SPINDLE SHAFTDUE TO WEAR.					
GULSTM 111RKW	HEAT TAPE 304316	MELTED GALLEY	12/07/2002		
DURING INSPECTION, TECHNICIANS DISCOVERED MELTED GALLEY DRAIN HEAT TAPE. WHEN THE TAPE OVERHEATED, IT APPEARS TO HAVE CAUSED THE INSULATION TO HAVE MELTED. THIS TAPE WAS INSTALLED IN 1996.					
GULSTM 114B	LYC IO540*	BOLT 442615	LOOSE HORIZONTAL STAB	02/10/2003	1150
DURING 100-HOUR INSPECTION, THE HORIZONTAL STABILIZER WAS FOUND LOOSE. REMOVED DORSAL FIN, RUDDER AND ELEVATORS. FORWARD ATTACH BOLTS FOR HORIZONTAL STABILIZER WERE FOUND LOOSE. 9 RIVETS ON RIGHT HAND AFT VERTICAL SUPPORT ANGLE, (PN 4426682 WERE FOUND SHEARED. CHECKED AND REPLACED SHEARED RIVETS. CONTACTED DER FOR REPAIR OF SPAR ATTACH HOLES AND HARDWARE. REPAIRED IAW SR. REPAIR CONSISTED OF GOING TO OVERSIZE HARDWARE FOR FRONT MOUNTING AND INSTALLING SHIM IN DOUBLER PLATE UNDER NUTPLATES. THE FLOATING NUTPLATE USED IN PRODUCTION ARE REPLACED WITH FIXED NUT PLATES. FLOATING NUTPLATES ALLOWED STABILIZER TO MOVE TOO MUCH WITH LOOSE BOLTS AND ELONGATED HOLES IN STABILIZER.					
GULSTM G1159A	RROYCE SPEY5118	TUBE 1159P20518	CHAFED HYD SYSTEM	04/03/2003	
(CAN) HUDRAULIC TUBES WERE FOUND TO BE CHAFFED BEYOND LIMITS DURING THE PYLON INTERIOR SCHEDULE INSPECTION. BOTH LEFT & RIGHT TUBES SHOWED DAMAGE IN NEARLY IDENTICAL SPOTS, CAUSED BYCHAFFING ON A ELECTRICALWIRE THAT HAD BEEN CLAMPED NOT PRROPERLY. THE WIRE SHOWED NO SIGNS OF DAMAGE. BOTH TUBES WERE REPLACED.					
GULSTM GV		CONTROLLER 145111	CORRODED ENTERTAIN SYS	04/24/2003	
DURING A ROUTINE SCHEDULED INSPECTION, PASSENGER CABIN ENTERTAINMENT SYSTEM CONTROLLER P/N 1451-1-1 AND 1-1-2 COMPONENTS WERE BEING REPLACED DUE TO CUSTOMER REQUEST, PRIOR TO INSTALLATION A BENCH CHECK WAS PERFORMED ON UNITS AND THE UNITS FFAILED TEST. UPON OPENING THE COVER OF THE UNITS FOR INSPECTION, CORROSION WAS NOTED ON THE INSIDE OF THE UNIT DUE TO THE INTERNAL 12 VOLT GELPACK BATTERY LEAKING, CORRODING INTERNAL IC COMPONENTS. UNITS INSTALLED IN THE AIRCRAFT EXHIBITED SIGNS OF CORROSION ALSO. UNITS CAN BE INSTALLED AT VARIOUS LOCATIONS WITHIN THE PASSENGER CABIN AND MAY BE INSTALLED ON VARIOUS OTHER MODEL AIRCRAFT.					

HYNES B2B	LYC O360*	RING 2703	SEPARATED TAILBOOM BLKHD	03/08/2003	
DURING ACCIDENT INVESTIGATION, FOUND TOP BULKHEAD RING SEPARATED FROM TAILBOOM PYLON. TAIL ROTOR GEARBOX WAS STILL ATTACHED TO BULKHEAD RING. BULKHEAD RING HAD SEPARATED FROM RIVET FLANGE AT TRANSITION RADIUS DUE TO EXISTING CRACKS ON THE LEFT AND RIGHT SIDES. INSPECTION CAN BE ACCOMPLISHED THROUGH LIGHTENING HOLE OF BULKHEAD.					
LANCAR LC4055		PUMP CH216CW	FAILED DRY AIR	05/09/2003	7
DRY AIR VACUUM PUMP SHAFT SHEARD IN FLIGHT AT AROUND 7.0 HRS TOTAL TIME SINCE NEW. THE BACK-UP PUMP MODEL NR CH216CW SERIAL NR C40069 ALSO FAILED BEFORE REACHING DESTINATION WITH A TOTAL AIRFRAME TIME OF 13.0 HRS. 3 PUMPS WERE NEW AND INNSTALLED DURING PRODUCTION OF THE AIRCRAFT.					
LEAR 25B	GE CJ610*	FIRE LOOP 153831	LOOSE RT ENGINE	05/12/2003	
FIRE DETECTION LIGHT CAME ON IN FLIGHT. REDUCED ENGINE POWER TO IDLE, AFTER 1 MINUTE SHUT DOWN ENGINE AND EXTIGUISHD BOTH BOTTLES. ONCE ON THE GROUND ENGINE WAS INSPECTED, NO EVIDENCE OF FIRE, FOUND LOOSE CONNECTION ON FIRE LOOP.					
LEAR 35A		LINE 2607024324	CRACKED HYD SYSTEM	04/17/2003	
LOST HYDRAULIC PRESSURE WHEN LANDING GEAR WAS EXTENDED. NO BRAKES AVAILABLE UPON LANDING. DRAG CHUTE DEPLOYED TO STOP AIRCRAFT.					
MOONEY M20J		ACTUATOR 1057005G	FAILED MLG	11/22/2002 349	4284
AIRCRAFT LANDING GEAR WOULD NOT FULLY EXTEND WITH MOTOR OR HAND CRANK. AIRCRAFT LANDED FOLLOWED BY GEAR COLLAPSE, CAUSING DAMAGE TO BELLY, STEP, PROP AND GEAR DOORS. EXAMINATION REVEALED SEVERAL TEETH GROUND FLAT. ALL LIMIT SWITCHES APPEARS TO FUNCTION NORMAL.					
PILATS PC1245	PWA PT6A67B	PROXIMITY 973303311	FAILED MLG	04/10/2003	
(CAN) AFTER TAKE-OFF THE CREW HAD AN INTRANSITT LIGHT AND A DOWN LOCK LIGHT ON NOSE GEAR. GEAR WAS FUNCTIONING NORMALLY. FOUND THE NOSE GEAR DOWN LOCK PROX. SWITCH STUCK IN THE LOCK INDICATION POSITION. REPLACED SWITCH, RIGGED, FUNCTION TESSTED GEAR THROUGH SEVERAL SWINGS AND NO FURTHER					
PILATS PC1245	PWA PT6A67B	CRANEXXXXXXX BOOST PUMP	WIRE CHAFED	04/14/2003	
(CAN) REFERENCE PREVIOUS SDR 20030224002 ON SAME ISSUE. AIRCRAFT WAS INSPECTED DUE TO FINDINGS ON PREVIUOS AIRCRAFT IN OUR FLEET. BOTH THE LEFT AND RIGHT HAND AIRFRAME FUEL BOOST PUMPS WERE FOUND WITH CHAFED WIRES IN THE HARNESS. A VERY CLLOSE VISUAL INSPECTION WAS NEEDED TO FIND THE DAMAGE. PILATUS HAS BEEN CONTACTED AGAIN TO STRESS THE IMPORTANCE OF A RECOMENDATION TO REPAIR, EVEN IF ONLY TEMPORARY.					
PILATS PC1245	PWA PT6A67B	HEATER TAS203	BURNED BATTERY	04/15/2003	
(CAN) A SECTION OF THIS HEATING ELEMENT BURNED OUT SCORCHING THE PAINT ON THE BATTERY. THE BURNED AREA ON THE ELEMENT IS 5MM X 22CM.					
PIPER PA1815	LYC O320A2B	BOLT AN721	SHEARED TAILWHEEL ASSY	04/07/2003	
(CAN) GROUND CREW WAS MOVING THE AIRCRAFT ON RAMP AND RAN TAILWHEEL OF AIRCRAFT OVER SMALL ICE RIDGE IN ORDER TO GAIN ACCESS TO POSITION FOR PARKING. JOLT FROM THE WHEEL JUMPING ICE RIDGE RESULTED IN COLLAPSE OF THE TAILWHEEL ASSEMBLY FROMM THE LEAF SPRING ASSEMBLY. INSPECTION REVEALED THAT ATTACHING BOLT HAD SHEARED AND ALLOWED THIS CONDITION TO OCCUR. FURTHER INVESTIGATION BY MAINTENANCE REVEALED THAT THE BOLT HAD LIKELY BEEN PARTIALLY SHEARED FOR SOME TIME AND GONE UNDETECTED HOWEVER, THE BRIEF JOLT FROM THE GROUND HANDLING INCIDENT WAS ENOUGH TO COMPLETELY SEVERE THE BOLT ITSELF. THE ROOT CONDITION IS DUE TO REPEATED LANDINGS IN THE FLIGHT TRAINING					
PIPER PA2210	LYC O235*	BENDIX 10157123Y	GEAR LEFT MAGNETO	04/09/2003	1876
THE KEEPER FOR THE MAGNETO TIMING GEAR WAS FOUND LOOSE IN THE MAG CASE. THE KEEPER, TIMING GEAR KEY WAY AND SHAFT KEY WAY SLOT WERE ALL FOUND WORN. THIS WAS A 1961 ENGINE, WITH 1876 HOURS TT. NO RECORD OF MAG MAINTENANCE COULD BE LOCATEDDD. KEY PN 10-907-88-5.					
PIPER PA2325	LYC IO540C4B5	DOWNLOCK MLG	STIFF	04/03/2003	
(CAN) ONCE THE PILOT SELECTED LANDING GEAR UP, THE GEAR DID NOT RETRACT. WE DISCOVERED THAT THE DOWN LOCK MECHANISM WAS HARD TO MANEUVER, AFTER LUBRICATION AND CLEANING WE CARRIED OUT GEAR RETRACTION. SYSTEM SERVICEABLE.					
PIPER PA2325	LYC TIO540*	BOLT 402427	SHEARED DRAG LINK	04/15/2003	
LEFT LANDING GEAR COLLAPSED ON LANDING. CENTER BOLT ON LEFT MAIN GEAR DRAG LINK SHEARED AND PULLED LOOSE FROM THE DRAG LINK REMOVING SUPPORT FROM THE LEG. SHAPE OF THE BOLT AFTER SHEARING SUGGEST TREMENDONS LOAD, PROBABLE BAD LANDINGS BOLT WAS TAKEN BY REP FOR TEST. TO PREVENT REOCCURRENCE DEPEND ON WHETHER IT IS A MATERIALS FAILURE OR PILOT ERROR.					
PIPER PA2816	LYC O320*	HOUSING 6531904	CRACKED LT MLG STRUT	04/16/2003	10263
LT MLG COLLAPSED DURING LANDING ROLLOUT. SUBSEQUENT INVESTIGATION DISCLOSED THAT THE DRAG LINK ATTACH EARS SEPARATED FROM THE STRUT HOUSING. VISUAL INSPECTION SUGGEST THAT A PRE-EXISTING CRACK IN THE OUTBOARD SCISSORS ATTACH POINT INDUCEDDD SEPARATION FROM THE STRUT HOUSING. RECOMMEND VISUAL INSPECTION OF THE MLG STRUT SCISSORS ATTACH POINTS.					
PIPER PA2816	LYC O320D2A	BELLCRANK 6210200	CRACKED LT WING	04/08/2003	
(CAN) FOUND BRACKET CRACKED FOR A LENGTH OF ABOUT 2 CENTIMETERS JUST BELOW FORWARD BOLT HOLE. DEFECT CAN ONLY BE SEEN WITH INSPECTION MIRROR FROM OUTBOARD INSPECTION HOLE.					
PIPER PA2818	LYC O360*	BOLT VERTICAL FIN	UNDERTORQUED	04/08/2003	3890
DURING ANNUAL INSPECTION FOUND VERTICAL FIN LOOSE. UPON CHECKING ATTACHMENT HARDWARE, FOUND THE FOUR BOLTS AT THE REAR SPAR TO BE INSUFFICIENTLY TORQUED. THE SINGLE BOLT AT THE FRONT SPAR WAS TIGHT BUT WOULD NOT PREVENT SIDE-TO-SIDE MOVEMENNT OF THE FIN (APPROX. 1/4 TO 1/2 INCH. THERE WAS NO RECORD OF THE VERTICAL FIN BEING REMOVED FOR MAINTENANCE AND THIS MECHANIC CANNOT OFFER ANY EXPLANATIONS AS TO WHY THESE BOLTS WERE NOT TIGHT. ALL THE ATTACHING BOLTS WERE REMOVED, THE AREAS SURROUNDING THE BOLT HOLES INSPECTED FOR CRACKS, NEW HARDWARE INSTALLED AND RETORQUED.					
PIPER PA2818	LYC O360A1D	WIRE 79412011	BURNED ELECTRICAL	02/05/2003	2408
AIRCRAFT ALTERNATOR ANNUNCIATOR LIGHT STAYS ON BUT AMMETER SHOWS OUTPUT. FOUND ALTERNATOR POWER WIRE AND ANNUNCIATOR WIRES BURNED AT DIODE ASSEMBLY. REPLACE TERMINAL ENDS AND WIRE. CAUSE					

PIPER PA2818	LYC O360A4M	OIL COOLER B99340413	CRACKED ENGINE	04/25/2003	186
FOUND OIL LEAK ON PRE-FLIGHT INSPECTION BY STUDENT PILOT PRESSURE CHECKED OIL COOLER AND FOUND OIL COOLER LEAKING AT SEAM ON TOP. THIS IS A WEAK AREA ON THE OIL COOLER, COULD BE CAUSED BY VIBRATION AND NOT USING A BACK UP WRENCH WHEN INSTAALLING OIL COOLER HOSES.					
PIPER PA2823	LYC O540*	EYEBOLT 65254000	INCORRECT STABILATOR TRIM	05/01/2003	
PART ON A/C DID NOT FIT BUSHING ASSY. HOLE IN EYEBOLT IS TOO BIG. ORDERED NEW PART AND HOLE WAS THE SAME. API TECH SAID MFG MUST HAVE MADE BAD BATCH OF PARTS W/HOLE ID OF .315 INSTEAD OF CORRECT.286. OUR SUPPLIER (KRN) MEASURED THEIR INNVENTORY AND FOUND AN EYEBOLT W/CORRECT DIMENSION.					
PIPER PA28R1	LYC IO360A1A	SPRING 67203-000	WORN DOWNLOCK	04/21/2003	8066
DURING AN ANNUAL INSPECTION, IT WAS FOUND THAT BOTH MAIN LANDING GEAR DOWNLOCK SPRINGS WERE WORN 80 PERCENT OF THE WAY THROUGH WHERE THEY CONNECT TO THE LANDING GEAR.					
PIPER PA28R1	LYC IO360A1A	TRUNNION 6704212	CRACKED RT MLG	04/17/2003	8066
WHILE REBUSHING THE RIGHT MAIN LANDING GEAR, A VERY VISIBLE CRACK WAS FOUND IN THE SUPPORT WEB OF THE AFT TRUNNION FITTING ASSEMBLY.					
PIPER PA28R2		BRACKET 67271800	WORN NLG ACTUATOR	03/14/2003	1086
DURING A ROUTINE INSPECTION THE NOSE GEAR ACTUATOR ATTACH BRACKETT WAS FOUND LOOSE. ALL ATTACH RIVETS AND HARDWARE WERE FOUND TO BE WORKING. THE NOSE GEAR ACTUATOR ROD END CLEVIS ATTACH BOLT WAS ALSO FOUND BENT. THE BRACKETT AND CLEVIS BBOLT WERE REPLACED. THIS SI THE SECOND SUCH OCCURANCES IN OUR FLEET. RECOMMEND REPLACING THE CLEVIS BOLT EVERY 100 HOUR AND THOROUGHLY INSPECTING THIS AREA AT EACH INSPECTION. THE DEFECTIVE PARTS WERE SENT TO THE MANUFACTURE FOR EVALUATION.					
PIPER PA28R2	CONT TSIO360F	LINK 7642603	FAILED NLG	03/25/2003	
(AUS) NOSE LANDING GEAR DRAG LINK ASSEMBLY SHEARED IN AREA LOCATED FORWARD OF THE RH ATTACHMENT					
PIPER PA28R2	LYC IO360C1C	RIB 7847504	CRACKED LT WING	02/17/2003	5506
THE LT AND RT FORWARD TRUNNION FITTING ASSEMBLIES WERE REMOVED TO COMPLY WITH MFG (FORWARD SIDEBRACE STUD). WHILE THE FITTINGS WERE REMOVED IT WAS NOTICED THAT THE LEFT AND RIGHT WING RIBS MFG (PN 7847504 AND 05) WERE CRACKED AT THE FORWAARD OUTBOARD FLANGE OF THE RIBS. THIS FLANGE IS UNDER THE TRUNNION FITTING ASSEMBLY AND CANNOT BE SEEN WITHOUT REMOVAL OF THE TRUNNION FITTING. THIS IS THE THIRD TIME THESE CRACKED RIBS HAVE BEEN FOUND. SUGGEST PERIODIC INSPECTION IN THIS AREA.					
PIPER PA28RT	LYC IO360C1C6	ALTERNATOR 2642997R	OVERHEATED ENGINE	04/27/2003	130
A POOR CONNECTION BETWEEN THE OUTPUT STUD AND THE POSITIVE DIODE MOUNTING ASSEMBLY RESULTED IN EXTREME HEATING OF THE STUD AND MOUNTING ASSEMBLY. THIS HEAT ALSO MELTED THE TEFLON OUTPUT STUD INSULATOR AND VAPORIZED THE DIODE LEADS. THE DIODE MOUNTING ASSEMBLY IS HELD IN PLACE ONLY BY THE MOUNTING STUD AND DIODE LEADS. THIS CAUSED THE DIODE MOUNTING ASSEMBLY TO BECOME FREE FLOATING INSIDE THE ALTERNATOR. THIS FAILURE MODE HAS A HIGH POTENTIAL TO CAUSE AN IN-FLIGHT FIRE IN THE ENGINE					
PIPER PA31	LYC TIO540A2B	TUBE 65010	TORN MLG WHEEL	03/17/2003	
(CAN) A/C LANDED WITH NO PROBLEM, TAXIED TO RAMP AND PILOT NOTICE A LOT OF DRAG ON RT MAIN WHEEL. ASSEMBLY DISASSEMBLED AND FOUND TUBE WITH TWO TARE APPROX 1/4 INCH LONG ABOUT 6 TO 7 INCHES APART. THE TWO TEARS ARE ALONG THE OUTBOARD DIAMMETER OF THE TUBE. TIRE INSPECTED FOR ANY FOREIGN OBJECTS AND					
PIPER PA3135	LYC TIO540J2BD	CONTROL 41734078	BROKEN ELEVATOR	05/01/2003	
(CAN) AFT ELEVATOR TRIM CABLE LOCATED AT AUTOPILOT SERVO SNAPPED.					
PIPER PA31T	PWA PT6A28	BEVEL GEAR 4536700	BROKEN ELEVATOR TRIM	04/20/2003	18055
(CAN) PILOT REPORTED JAMMING ELEVATOR TRIM CONTROL BETWEEN 2 TO 4 DEGREES DOWN POSITION. THE WHEEL WOULD RELEASE IF WORKED BACK AND FORTH. UPON INSPECTION, ONE OF THE BEVEL GEARS INSIDE THE ELEVATOR TRIM INDICATOR BOX WAS FOUND TO HAVE TWO BROKEN TEETH.					
PIPER PA31T2	PWA PT6A135	REGULATOR 5842281H5210	MALFUNCTIONED ENGINE	03/08/2003	
(CAN) ON APPROACH, THE CREW NOTICED MULTIPLE AVIONICS FAILURES. BOTH VOR SIGNAL STRENGTHS VERY WEAK, NR 1 COMM INOP, MOST NAVIGATION EQUIPMENT INOP. THE PNEUMATIC PRESSURE WAS NOTED AS BEING AT 21 PSI, WHEN IT SHOULD HAVE BEEN AT 18 PSI. THHE PNEUMATIC REGULATOR VALVE HAD FAILED. THIS FAILURE CAUSED HOT AIR TO BE RELEASED AT THE PRESSURE RELIEF VALVE WHICH IS LOCATED IN CLOSE PROXIMITY TO AN ANTENNA COAXIAL CABLE BUNDLE. THE HOT AIR HARDENED & DAMAGED THE CABLES, CAUSING THE AVIONICS FAILURES					
PIPER PA3230	LYC TIO540*	SPARK PLUG URHB37E	BROKEN ENGINE	04/10/2003	
(CAN) SPARK PLUG SEPARATED IN HALF AND BURNT HOLE IN TOP COWLING.					
PIPER PA3230	LYC TIO540S1AD	AIRBORNE VACUUM PUMP	GASKET UNSERVICEABLE	03/12/2003	826
GASKET FAILED NEAR MOUNTING STUD, ALLOWING OIL UNDER PRESSURE TO EXCAPE OVERBOARD, RESULTING IN LOSS OF OIL PRESSURE AND SUBSEQUENT EMERGENCY OFF AIRPORT LANDING. THE VACUUM PUMP WAS INSTALLED NEW IN DECEMBER 1998 AND HAS BEEN IN SERVICE FFOR 826.3 HOURS. THE GASKET WAS FURNISHED NEW WITH THE VACUUM PUMP. MODEL 215CC, S/N 11AP3962.					
PIPER PA32R3		VOLT 68804-007	DEFECTIVE	04/24/2003	
WHILE UPGRADING VOLTAGE REGULATOR P/N 68804-006 TO P/N 68804-007 IAW MFG SERVICE LETTER 1049 WE HAVE HAD SEVERAL NEW REGULATORS THAT WOULD NOT WORK RIGHT OUT OF THE BOX. IN THIS PARTICULAR INSTANCE THE REGULATOR OPERATIONAL CHECKED NORMAL DURING GROUND RUNS BUT IN FLIGHT CAUSED THE AUTOPILOT TO FAULT. WE RECCOMEND DOING A THOROUGH JOB OF TESTING AUTO-PILOTS AND AVIONICS WHEN DOING THIS UPGRADE BEYOND THE SCOPE OF NORMAL GROUND CHECKS.					
PIPER PA32R3	LYC TIO540S1AD	BEARING 74309	WORN ENGINE	03/04/2003	320
FOUND BEARING MATERIAL IN OIL SUCTION SCREEN. REMOVED CYLINDERS AND FOUND CYLINDER NR 2 CONNECTING ROD BEARING FAILING BY LAMINATIONS PICKING LOOSE ON INSIDE DIAMETER. THIS IS THE SAME CONDITION FOUND DURING REPLACEMENT OF ROD BEARINGS UNNDER MFG SA 59-800 WITH THE SAME MFG DATE CODE.					

PIPER PA4418	LYC O360*	TRUNNION 6705403	DAMAGED NOSE STRUT	04/07/2003	
AIRCRAFT WAS ON TAKEOFF ROLL WHEN AT ABOUT 79 KNOTS PILOT HEARD A LOUD POP AND SAW A PIECE OF NOSE GEAR FLY OFF THE AIRCRAFT. PILOT ABORTED TAKEOFF AND NOTICED A DIFFERENCE IN THE STEERING COMING BACK TO THE RAMP. WHEN CHECKED BY MAINTENANCE, NOTICED THAT THE LOWER REAR SECTION OF THE NOSE TRUNNION ASSEMBLY DETACHED, IT CAUSED THE SHIMMEY DAMPENER SHAFT TO SHEAR AND BENT THE BRACKETS ON THE SHIMMEY DAMPENER BODY.					
PIPER PA4418	LYC O360*	SWITCH 688381	FAILED INSTRUMENT PILOT REPORTED COMPLETE ELECTRICAL FAILURE. DURING TROUBLESHOOTING, THE BATTERY WAS FOUND TO HAVE NO CHARGE AND THE RIGHT ENGINE STARTER WAS STILL ENGAGED AT THE BENDIX. FURTHER TROUBLESHOOTING FOUND THE STARTER TOGGLE SWITCH WAS STUCK IN THE ON POSITION FOR THE RIGHT ENGINE CAUSING THE STARTER TO REMAIN ENERGIZED AFTER ENGINE START UNTIL IT SHORTED OUT, DRAINING THE ELECTRICAL SYSTEM TILL FAILURE.	03/13/2003	
RAYTHN HAWKER		BOOT 25F2108	MISMANUFACTURE OXYGEN TANK	05/12/2003	
OXYGEN COVER BOOTS WERE TEARING. UPON INVESTIGATION, FOUND THE BOOTS WERE MADE OF WRONG MATERIAL AND THE MATERIAL DIDN'T HAVE PROPER FLAME RESISTANT TREATMENT. THE BOOTS IN QUESTION WERE MADE BY AER, A COMPANY CONTRACTED BY BRITISH AEROSPACE. BOOTS WE RECEIVE BY PPA (ALSO CONTRACTED BY BRITISH AEROSPACE) ARE ALL GOOD.					
REIMS F406	PWA PT6A112	CLAMP W901B24DE	CORRODED PNEUMATIC SYS	04/06/2003	
(AUS) NR 1 ENGINE SHUT DOWN FOLLOWING LT WING OVERHEAT WARNING. INVESTIGATION FOUND THE CLAMP ATTACHED TO THE PNEUMATIC FLOWCONTROL VALVE DOWNSTREAM FROM THE NO1 ENGINE BLEED PORT CORRODED AND RUPTURED CAUSING EXCESSIVE AIR LEAKS.					
SKRSKY S76	SEAL SB8208102	LEAKING T/R GEARBOX		04/16/2003	
(CAN) NEW SEALS P/N SB8208-102 HAVE BEEN FOUND TO BE LEAKING FROM NEW. THESE ARE A NEW P/N RELEASED BY SIKORSKY AND SEVERAL CUSTOMER COMPLAINTS HAVE BEEN RECEIVED. NEW SEALS P/N SB8209-102 FOUND IN THE MAIN GEARBOX HAVE ALSO LEAKED UPON TEST OR SUBSEQUENT FIELD USE.					
SOCATA TB21	LYC TIO540*	LEVER TB2156011000	FRETTED ENGINE	04/01/2003	
CUSTOMER COMPLAINED OF EXCESSIVE VIBRATION. ATTEMPTS TO BALANCE THE PROP WERE UNSUCCESSFUL. INSPECTION REVEALED THAT THE EXHAUST SUPPORT (LEVER ASSY) SUPPORT BUSHINGS WERE WORN ALLOWING THE METAL PORTION TO CONTACT THE MOUNT TRANSMITTING THE ENGINE VIBRATION TO THE AIRFRAME.					
SOCATA TBM700	PWA PT6A6	VALVE Z00N6039257260	LEAKING COCKPIT	03/21/2003	72
AIRCRAFT ARRIVED WITH AN OXYGEN LEAK. THE ALTIMETRIC VALVE WAS REPLACED. THE REPLACEMENT VALVE ALSO LEAKED. THE THIRD VALVE INSTALLED DIDN'T LEAK IN THE OFF POSITION BUT WHEN THE PASSENGER OXYGEN WAS TURNED ON DEPLOYING THE MASKS THE VALVE LEAKED FROM THE PRESSURE RELIEF VALVE. THIS VALVE IS LOCATED IN THE COCKPIT ABOVE THE HEADLINER IN CLOSE PROXIMITY TO NUMEROUS ELECTRICAL SWITCHES. AN OXYGEN RICH ENVIRONMENT IN THIS LOCATION COULD BE DISASTOROUS. THIS VALVE SHOULD BE RELOCATED TO THE CABIN TO ELEMENATE ANY HAZARDS.					
SWRNGN SA226T	GARRT TPE33110UA	RECEPTACLE 2720063907	CRACKED PAX DOOR	03/11/2003	15106
(CAN) DURING DOOR REPAIR. INSPECTION OF LATCHING MECH ON FUSELAGE WAS CARRIED OUT. RECEPTICLE CRACKS WERE NOTICED VISUALLY ON 6 OF 7 RECEPTICLES. LATCHING RECEPTICLE CONTAINS AN ECCENTRIC FITTING SITS IN RECEPTICLE TO ADJUST FOR ALIGNMENT OOF CABIN DOOR WHEN CLOSED. CRACKS IN RECEPTICLES CAN'T BE SEEN IF ECCENTRICS ARE INSTALLED. THESE RECEPTICLES ARE ALL ALUMINUM EXCEPT FOR NR 7 WHICH IS LOCATED AT TOP OF FUSELAGE THAT ONE IS STEEL. NR 7 RECEPTICLE ALSO DOESN'T REQUIRE AN ECCENTRIC FITTING. RECEPTICLES WERE REMOVED FROM A A/C PREVIOUSLY REMOVED FROM SERVICE & SENT FOR NDT INSPECTION PRIOR TO INSTALLATION. WERE ALSO ALL CRACKED SIMILAR TO ONES REMOVED FROM AIRCRAFT.					
UROCOP EC135P	PWA PW206A	STUD L621M1010054	BROKEN M/R BLADE	04/22/2003	2722
WEIGHT STUD BROKE AT CUTTER KEY HOLE. BLADE INSTALLED BUT NEVER FLOWN. MECHANIC WENT TO ADJUST WEIGHT AND FOUND THE STUD BROKE. BLADE SENT TO BE REPAIRED UNDER PO NR. REINSTALLED RENTAL BLADE S/N					
ZINAIR CH2000	LYC O235*	EXHAUST PIPE 2017911,0	DEFECTIVE BEHIND MUFFLER	03/13/2003	150
THIS IS THE SECOND REPORT OF FINDING THE ABOVE COMPONENT DEFECTIVE. THEY ARE CRACKING BEHIND THE MUFFLER SHROUD AND CANNOT BE SEEN WITHOUT REMOVAL OF THE SHROUD. THIS ALLOWS EXHAUST GASES TO ENTER THE COCKPIT WHEN THE HEATER IS UTILIZED. THE CRACK LENGTH IS APPROXIMATELY FIVE TO SIX INCHES. A PICTURE OF THE CRACKED AREA WILL BE E-MAILED AS WELL.					
ZINAIR CH2000	LYC O235*	STRUCTURE FIREWALL	CRACKED 100	04/22/2003	734
DURING INSPECTION THE UPPER HORIZONTAL (Z) ON THE FIREWALL WAS FOUND CRACKED. THIS IS THE LATER REINFORCED VERSION REV. 4. THE CRACK WAS LOCATED FROM THE HOLE WHERE THE NOSE GEAR STRUT COMES THROUGH TO THE OUTSIDE FORWARD EDGE. THE PLASTIC SSTOP UNDER THE (Z) WAS ALSO CRACKED.					
ZINAIR CH2000	LYC O235*	STRUCTURE FIREWALL	CRACKED 100	04/22/2003	734
DURING INSPECTION THE UPPER HORIZONTAL (Z) ON THE FIREWALL WAS FOUND CRACKED. THIS IS THE LATER REINFORCED VERSION REV. 4. THE CRACK WAS LOCATED FROM THE HOLE WHERE THE NOSE GEAR STRUT COMES THROUGH TO THE OUTSIDE FORWARD EDGE. THE PLASTIC SSTOP UNDER THE (Z) WAS ALSO CRACKED.					

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Enter pertinent data	MANUFACTURER	MODEL/SERIES	SERIAL NUMBER	REPAIR STA. OPER. MECH. AIR TAXI MFG. FAA COMPUTER OTHER			
2. AIRCRAFT							
3. POWERPLANT							
4. PROPELLER							
5. SPECIFIC PART (of component) CAUSING TROUBLE							SUBMITTED BY: _____ TELEPHONE NUMBER () _____
Part Name	MFG. Model or Part No.	Serial No.	Part/Defect Location.				
6. APPLIANCE/COMPONENT (Assembly that includes part)							
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Part TT	Part TSO	Part Condition	7. Date Sub.				
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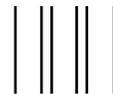
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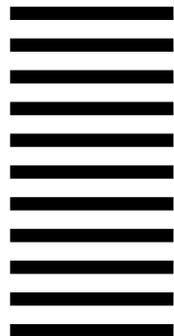
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