



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

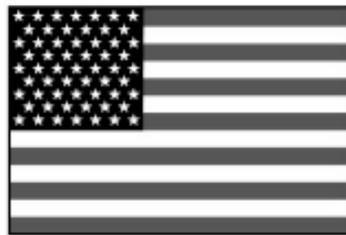
**AFS-600**  
*Regulatory Support Division*

# ADVISORY CIRCULAR 43-16A

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## AVIATION MAINTENANCE ALERTS

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ALERT  
NUMBER  
297

APRIL  
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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**UNAPPROVED PARTS  
NOTIFICATION**

**UPN NO. 2002-00196**

UNAPPROVED PARTS  
NOTIFICATION

SUSPECTED UNAPPROVED PARTS PROGRAM OFFICE, AVR-20  
13873 PARK CENTER ROAD, SUITE 165  
HERNDON, VA 20171

No. 2002-00196  
March 20, 2003

UPNs are posted on the Internet at <http://www.faa.gov/avr/sups/upn.cfm>

Published by: FAA, AIR-140, P.O. Box 26460, Oklahoma City, OK 73125

**AFFECTED PRODUCT**

Lycoming engines.

**PURPOSE**

The purpose of this notification is to advise all aircraft owners, operators, manufacturers, maintenance organizations, and parts distributors regarding improper aircraft engine maintenance performed on Lycoming aircraft engines.

**BACKGROUND**

Information received during a Federal Aviation Administration (FAA) suspected unapproved parts investigation revealed that Larry Good (Good Aviation, 1705 Smoking Tree Street, Moore, OK 73160-5725) improperly approved for return to service Lycoming engines used on general aviation aircraft. The investigation revealed numerous discrepancies when the engines were returned to service, contrary to Title 14 of the Code of Federal Regulations, Part 43. Larry Good approved the engines for return to service under Mechanic Certificate – Airframe and Powerplant ratings, and Inspection Authorization (IA) No. 1922744.

Listed below are some of the noted discrepancies:

Use of scrap parts marked "NOT AIRWORTHY" and parts with identification data removed in the repair and overhaul of engines.

Falsified logbook entries stating that "new" pistons and piston pins had been installed when, in fact, the parts were used.

Falsification of return-to-service tags and engine maintenance logbook entries.

Use of replacement parts that extended their use beyond the manufacturers' service limits.

Repairs and overhauls carried out without acceptable or approved data.

Engines approved for return to service that were not in compliance with applicable Airworthiness Directives or not in accordance with applicable service bulletins (e.g., use of incorrect fuel line clamps, failure to replace oil pump housings and gears, failure to replace thermostatic bypass valve seats, failure to modify crankcase gears, or installation of incorrect camshafts).

Unauthorized replacement of identification plates.

Approval of incomplete engines for return to service.

Installation of wrong-size main bearings.

Installation of incorrect engine cylinders.

## **RECOMMENDATIONS**

Regulations require that type-certificated products conform to their type design. Aircraft owners, operators, maintenance organizations, parts suppliers, and distributors should inspect their aircraft, aircraft records, and/or parts inventories for engines approved for return to service by Larry Good. If any of these engines are installed or found in existing stock, you should:

Inspect the engine parts and components for conformity.

Inspect the validity of engine logbook entries, return-to-service tags, invoices, and other documentation associated with engine parts and accessories.

Report any evidence of engine failure, premature accessory failure, low cylinder compression, burnt valves, piston failure, metal in the oil screen, overheating, or other improper maintenance to the FAA Flight Standards District Office (FSDO) given below.

## **FURTHER INFORMATION**

Further information concerning this investigation and guidance regarding the above-referenced engines may be obtained from the FSDO given below. In addition to the above recommendations, the FAA would appreciate any information concerning the discovery of the engines, the means used to identify the source, and the action taken to remove the engines from service.

This notice originated from the Oklahoma City FSDO, 1300 S. Meridian, Suite 601, Oklahoma City, OK 73108, telephone (405) 951-4200, fax (405) 951-4282; and was published through the FAA Suspected Unapproved Parts Program Office, AVR-20, telephone (703) 668- 3720, fax (703) 481-3002.

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## AIRPLANES

### BOEING

#### Boeing; Model 727 Series; Nose landing Gear Scissors, Apex Pin Assembly; ATA 3222

During routine surveillance at Miami International Airport, the technicians discovered that Original Equipment Manufacturer (OEM), Component Maintenance Manual (CMM) and Overhaul Manual (OHM) procedures are not being followed concerning the nose landing gear apex pin assembly on the Boeing 727 aircraft.

The inherent problem exists and could compromise the airworthy status of the nose landing gear scissors.

The following is a listing of the various configurations observed which are contrary to the manufacturer recommendations: (Refer to the illustration).

**A.** Lock Cam (#200) P/N 69-64516-1, detent ground deeper, worn beyond limits or additional detents added. Paint also was missing in required area.

**B.** Pin (#170) P/N MS39086-520, missing and hole utilized for safety wiring.

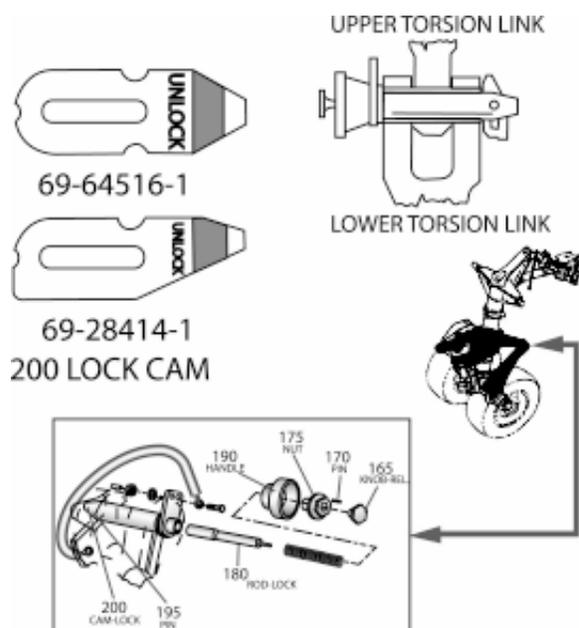
**C.** Nut (#175) P/N 69-28413, improperly safety wired.

**D.** Handle (#190) P/N 69-284151-1, has multiple holes drilled to facilitate safety wire installation.

**E.** Release Knob (#165) P/N 66-20304-1, missing or altered to reduce the effort needed to overcome the 20-pound spring force holding Lock Cam (#200).

**F.** Rod-Lock (#180) P/N 69-28412-1, missing half inch at tapered rod end. Condition exists when Release Knob (#165) is missing.

**G.** Pin (#195) P/N 6534878-2, incorrect hardware used as substitution or incorrectly installed.



The FAA Service Difficulty Reporting Program data base revealed 12 similar reports for the period of January 1, 1995, to March 18, 2003, on the Boeing Model 727 series aircraft nose landing gear scissors and apex pin assembly.

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**BEECH****Beech; Model C90; King Air; Aft-Facing Seats and Headrests; ATA 2510**

This article was provided by the FAA Aircraft Certification Office Aircraft, Propulsion and Services (ACE-118W) located in Wichita, Kansas.

During the course of several ramp inspections and aircraft conformity inspections, it was found that the placard instructions issued by Raytheon for headrest positions cannot be followed.

The placards state that for the aft-facing seats, the seat back must be in the “upright position” and the headrest in the “fully-extended position” for takeoff and landing. This position offers the required support of the passenger’s head and neck during the critical phases of flight.

Headrests have been inspected, and it was determined that the headrests could not be locked in the “fully-extended position.” Also, the headrest stop did not function properly. The headrest could be pulled out of the seat completely. Others had some form of locking device, but the locking device did not work properly due to either missing or broken parts. Spring stops (P/N 131345) act as a stop to prevent the headrest from coming completely out.

The aircraft that were inspected did not have these springs installed. All aft-facing seat headrest installations should be inspected for the presence of locking springs and proper operation of spring stops. If spring stops are not present and functioning properly, corrective maintenance actions such as installing new springs (P/N 131345) should be taken.

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**Beech; Model 1900C; Airliner; Engine Torque Indication System; ATA 7712**

During takeoff roll, the flightcrew reported that both torque gauges were spinning. The flightcrew aborted the flight and taxied back to the ramp.

The technician inspected the torque indicating system and discovered the power supply wire for both torque indicators had a broken fuse holder (P/N HUI-B). The fuse holder failed at the locking tabs and was no longer compressing the fuse within the fuse holder.

The submitter suggests inspecting fuse holder locking tabs for proper operation and condition.

Part total time unknown.

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## CESSNA

### Cessna; Model 150/152; Fuel Tank Vent Installation; ATA 2810

The FAA Aircraft Certification Office (ACO) located in Wichita, Kansas, provided the following article.

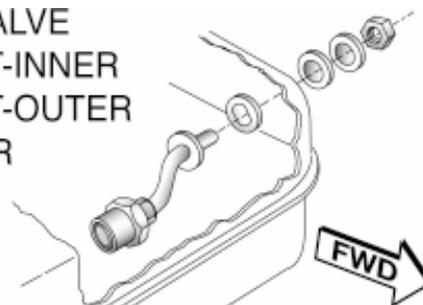
Recently the FAA received a Safety Recommendation applicable to the fuel tank vent installation description as shown in the maintenance manual for the Cessna Model 152 airplanes.

The picture shown in this maintenance manual can be perceived as showing the fuel tank vent line as being located toward the bottom of the fuel tank rather than toward the top as intended and also described in the written text above the suspect picture.

Since as people often say, "A picture is worth a thousand words." Cessna has agreed to provide a change to the applicable maintenance manuals when future revisions to the manuals are initiated.

This article has been coordinated with Cessna Aircraft Company and is intended to provide early notification to these changes. (Refer to the illustration.)

15. VENT VALVE
16. GASKET-INNER
17. GASKET-OUTER
18. WASHER
19. NUT



TUBE FOR VENT VALVE  
EXTENDS INTO FUEL TANK,  
THEN FORWARD AND  
SLIGHTLY UPWARD

DETAIL A (LH TANK ONLY)

### Cessna; Model 172S; Skyhawk; Pilot Seat Failure; ATA 2510

During rotation after the takeoff, the pilot's seat back failed and went into the reclined position.

According to the technician, complete failure of the pilot's seat could not be duplicated in the shop, but some slippage of the locking cylinder (P/N 0514213-2) for the pilot's seat was noted.

The FAA Service Difficulty Program data base revealed two reports where the pilot's seat back failed on the Cessna 172 aircraft.

Part total time-1,075 hours.

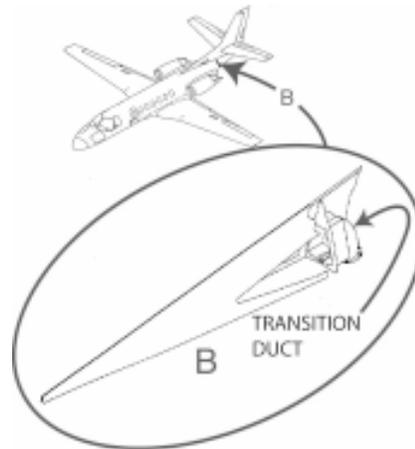
**Cessna; Model 560; Citation V; Air Distribution System; ATA 2120**

During a routine inspection of the dorsal fin airscoops, the technician discovered that material was missing from the air vanes (P/Ns 6512072-11 and 6512072-12) located in the transition duct (P/N 6512072-10-1). (Refer to the illustration.)

The location and route of the missing material was a concern. The material would have been routed into the ventilation J-box (air-mixing box) where it would have passed the cabin pressurization fresh air check valve and possibly wedge the valve open. With the valve open, the aircraft would not be able to hold pressurization.

The technician’s inspection revealed that a piece of the material was wedged in the check valve, and the valve could not seal. Pieces of the material also passed through the overhead blower and wedged in the duct work. The blower cage was not damaged.

Part total time-3,545 hours.



**PIPER**

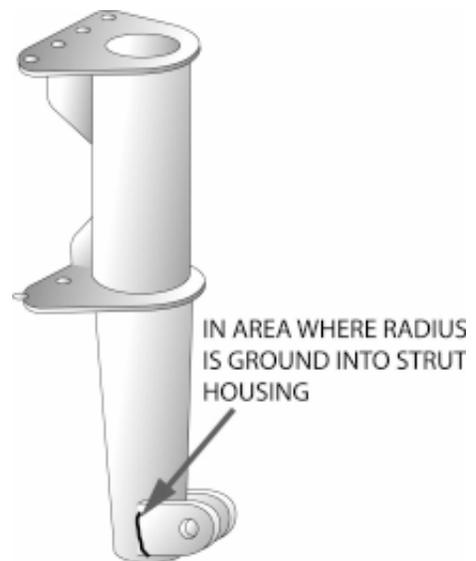
**Piper; Model PA 28-161; Warrior II; Main Landing Gear Strut; ATA 3213**

During routine 100-hour inspection, a technician discovered a crack in the main landing gear upper-strut housing (P/N 65319-04).

The crack was located at the attachment lobes for the landing gear torque link. (Refer to the illustration.)

A search of the FAA Service Difficulty Program data base (by P/Ns 65319-04 and 65319-004) revealed 25 reports on the Piper PA 28 series aircraft main landing gear failures. The data base can be accessed at: <<http://av-info.faa.gov/isdr/SDRQueryControl.asp?>>.

Part total time-9,722 hours.



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**Piper; Model PA 28R-201; Arrow III; Exterior Lighting; ATA 3340**

The pilot reported smoke in the cockpit during climb out on a VFR flight. He was able to make a safe landing.

The technician conducted an inspection that revealed the navigation/instrument light potentiometer (P/N 67436-04) had overheated.

The submitter is aware of three other like failures of the navigation/instrument light potentiometer.

Part total time unknown.

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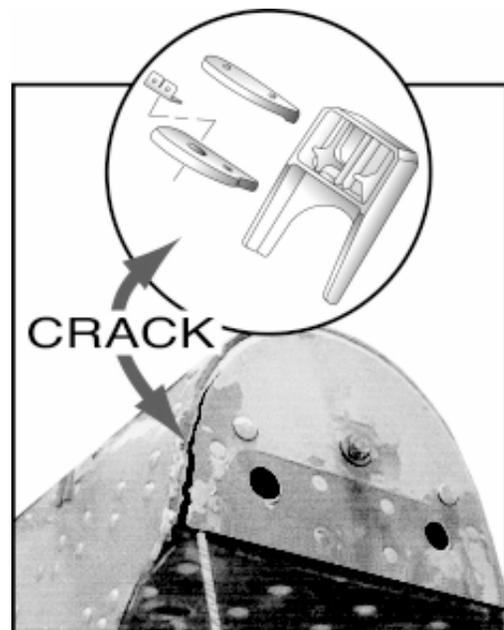
## HELICOPTERS

### EUROCOPTER

**Eurocopter; Model B0105; LS A-3; Vertical Fin; ATA 5530**

While conducting a daily inspection of the aircraft vertical fin area, the technician discovered cracks.

One crack was approximately 1.5 inches and was located on the nose rib assembly (P/N 105-304051). The other crack was approximately .5 inch and was located on the tail rotor gearbox attachment fitting (P/N 105-30414.15). (Refer to the illustration.)



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**ROTORWAY****RotorWay; Models Exec 90 and Exec 162F; Secondary Shaft Assembly; ATA 6310**

During a recent accident investigation, the investigator found a problem with the secondary shaft assembly on a RotorWay International Exec 162F helicopter.

During this investigation, the investigator determined that the failure of the shaft assembly was due to a progressive fracture. The presence of corrosion in the fracture area indicated that the shaft was apparently cracked for some time.

Part total time-561 hours.

On March 6, 2003, RotorWay International issued the following Mandatory Service Bulletin M-21 for the inspection of the secondary shaft assembly, replacement of the lower secondary bearing, and replacement of the fan drive bearing at 100 hour intervals. RotorWay issued an additional inspection for the lower secondary shaft after a tail rotor strike.

**ROTORWAY INTERNATIONAL****March 6, 2003****TO ALL EXEC 90 AND EXEC 162F OWNERS****MANDATORY COMPLIANCE BULLETIN M-21****THIS BULLETIN IS MANDATORY AND MUST BE COMPLIED WITH**

History: A failure of a secondary shaft at the bottom of the assembly in the area of the lower mount has occurred to one of our flight school aircraft. The secondary assembly had 561 hours on it and had been involved in two tail rotor strikes. The NTSB will be examining the failed shaft. Upon initial examination by the FAA and ourselves, the presence of corrosion in the fractured area indicated that the shaft was apparently cracked for some time.

Action: RotorWay currently requires the inspection of the tail rotor assembly and tail rotor drive when a tail rotor blade strike occurs. Parts that are normally replaced are the blades and tail rotor belts. Other parts of the tail rotor assembly that may require conditional replacement include the tail rotor shaft, shaft bearings, and tail rotor drive pulley bearings.

RotorWay has issued this bulletin to require a periodic inspection of the lower shaft area of the secondary drive assembly at the 100-hour intervals. If your aircraft has been involved in a tail rotor strike, an immediate inspection of the shaft is also required.

Please update your Maintenance Manual by adding the enclosed pages. These pages show the required inspection of the lower secondary shaft at 100 hours, replacement of the lower secondary bearing at 100 hours, replacement of the fan drive bearing at 100 hours, and the inspection of the lower secondary shaft after a tail rotor strike. (Note: the "Inspection Guide For Hard Landings, Tail Rotor Strike, or Roll Overs" was not originally included in the Exec 90 Maintenance Manual.)

Additional Information: RotorWay has utilized the same basic design of the secondary assembly for over 20 years. Any time a problem occurred the design was reviewed, and if an improvement could be made it was put into production after adequate testing. Listed below are some engineering data and details of production of the secondary shaft.

1. The material used for the shaft is 9310 VAR. This is described as an alloy that offers high strength with excellent toughness and ductility. The VAR process insures this steel is of the highest quality at high strength levels.
2. A finished machined shaft has been heat-treated in the production process to have a core hardness of 34 to 44 RC and a hardness of 60 RC (carburized) in the sprag clutch area where bearing rollers contact the shaft.
3. The single double-row spherical bearing currently being supplied is fit to the upper end of the shaft with an interference fit recommended by the bearing manufacturer. This interference fit is determined by the type of application and the bearing's internal tolerances. The bearing fits onto a section of the shaft that is not case hardened. The acceptable misalignment for the bearing is 1-1/2 (one and one half) degree. With the forward bending on the shaft, both statically and dynamically, combined with improper alignment of the entire secondary assembly to the frame, this tolerance could be exceeded.
4. Currently a stainless steel sleeve is installed just under the upper mount bearing to act as a stop for the bearing in case the bearing was to move on the shaft, which would affect the alignments of the entire drive system. Earlier shafts (prior to having the sleeve) had a step ground into the shaft that would have acted as a stop. Both the end of the sleeve and the step are located approximately .050 inch below the upper bearing inner race. The step was removed due to its potential of becoming a stress point around the shaft if galling occurred, from either bearing installation onto the shaft or if the bearing failed. The stainless steel sleeve is I.D. ground and is positioned on the shaft with an interference fit.

Forces and loads, controllable and uncontrollable, acting on the entire drive system:

1. Static alignments from the engine to the secondary assembly.
2. Static alignments of the secondary itself.
3. Static alignments of the rotor system itself and rotor system to secondary assembly.
4. Tension and alignment of chain.
5. Tension of all drive belts.
6. RPM of drive system components.
7. Vibrations of resonance throughout the aircraft or in certain components.
8. Airframe flexing.
9. Power applied through the drive system (gently or aggressively).
10. Aftermarket products.
11. Abuse to the aircraft within or outside of limitations placed on the aircraft.

Understanding and complying with these controllable and uncontrollable variables will result in a good service life for all of the drive system components.

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## AIRNOTES

### 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.

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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 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 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/srchFolder.asp?Category=alerts>>.

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**AVIATION SERVICE DIFFICULTY REPORTS**

The following are abbreviated reports submitted between February 21, 2003 and March 25, 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 ENG MODEL	COMPMAKE COMPMODEL	PART NAME PART NUMBER	PART CONDITION PART LOCATION	DIFF-DATE OPER CTRL NO.	T TIME TSO
			ELT AK450	FAILED CABIN	02/02/2003 2003031200007	40
INSTALLED NEW AK450 ON 09/01/2001. THE ELT WAS TESTED AND FAILED TO FUNCTION. UNIT SENT TO MFG FOR						
			BLADE 6607132886	CRACKED PROPELLER	01/23/2003 2003031300012	30718 6910
PROPELLER RECEIVED FOR OVERHAUL AT TEARDOWN FOUND OUTER SLEEVE WAS CRACKED ON BLADE S/N 1140. CRACK APPROXIMATELY 4 INCHES LONG. BLADE WAS REJECTED FROM FURTHER SERVICE.						
	CONT IO520*		DISTRIBUTOR K3823	MISMANUFACTURE MAGNETO	02/24/2003 2003031400140	
MAGNETO REMOVED FROM ENGINE FOR 500-HOUR INSPECTION IAW THE MAINTENANCE MANUAL. DURING INSPECTION FOUND THAT THE CARBON BRUSH WAS RUBBING AND CAUSING CARBON DUST. RECOMMENDATION IS TO HAVE MANUFACTURE LOOK AT PROCESS OF MANUFACTURING AND LOOK AT REDUCING THE TOLERANCES BETWEEN THE DISTRIBUTOR BLOCK AND THE GEAR POST WHERE THEY FIT TOGETHER TO HELP PREVENT GEAR FROM ROCKING BACK AND FORTH. FURTHER INVESTIGATION BY MFG REQUIRED TO CORRECT PROBLEM.						
	CONT IO520BB	SLICK	BRUSHES	DIRTY MAGNETO	01/28/2003 2003022100088	500
MAGNETO REMOVED FROM ENGINE FOR 500 HOUR INSPECTION IAW MM. DURING INSPECTION FOUND THAT THE CARBON BRUSH WAS RUBBING AND CAUSING CARBON DUST.						
	CONT IO520F	CONT	PUSHROD 538304P030	WORN CYLINDER	02/24/2003 2003031300009	1700
UPON DISASSEMBLING THE ENGINE FOR OVERHAUL IT WAS DISCOVERED THAT THE NR 1 CYLINDER EXHAUST PUSHROD WAS SEVERELY WORN ATA POINT ABOUT 4 INCHES FROM THE ROCKER ARM END. THE WORN AREA WAS SMOOTH, CRESCENT SHAPED, ABOUT 1/2 INCH IN LENGTH, ALMOST PENETRATING THE ENTIRE WALL THICKNESS OF THE PUSHROD. INSPECTION OF THE PUSHROD HOUSING REVEALED A SMALL BUT SHARP DENT ABOUT 1/8 INCH DEEP CORRESPONDING TO AREA OF WEAR ON THE PUSHROD. IT WAS UNABLE TO DETERMINE HOW LONG THE DENT HAD BEEN THERE BUT IMMINENT FAILURE OF THE PUSHROD WAS VERY LIKELY.						
	LYC O360A4M		ENGINE	MAKING METAL	03/01/2003 2003031200026	
AT JUST FIVE HOURS AFTER MAJOR OVERHAUL, THE FLIGHT CREW REPORTED THAT THE ENGINE MADE NOISE AT LOWER RPMS METAL PARTICLES THAT LOOK LIKE BEARING MATERIAL WERE FOUND IN THE OIL FILTER. AN OIL SAMPLE WAS SENT IN FOR ANALYSIS.						
AMD FALCON200	GARRTT ATF3*		CARTRIDGE 30111102	DISCHARGED FIRE BOTTLE	03/07/2003 2003031400143	6520 2
FOUND THE "AFT BAGGAGE" FIRE EXTINGUISHER CARTRIDGE DISCHARGED WITHOUT DISPENSING THE FIRE BOTTLE.						
AMD FALCON900	GARRTT TFE731*		PROXIMITY 803682	FAILED MLG	03/18/2003 2003032500043	29
AFTER TAKEOFF WHEN THE GEAR HANDLE WAS PLACED UP ALL THREE GREEN LIGHTS EXTINGUISHED. A LOUD METALLIC GRINDING TYPE NOISE WAS NOTED AFTER SEVERAL SECONDS (10-15) THE NOISE STOPPED AND THE GREEN LIGHT FOR THE NOSE GEAR ILLUMINATED. AT THIS TIME THE GEAR HANDLE WAS UP THE NOSE GEAR INDICATED DOWN, THE LT & RT MAIN GEAR DOORS WERE OPEN. WHEN THE GEAR HANDLE WAS PLACED DOWN NO ACTIVITY WAS NOTED VISUALLY OR NOISE BY THE GEAR. APPROX. 45-75 SECONDS LATER THE LT & RT MAIN GEAR DOWN LOCK GREEN LIGHTS ILLUMINATED AND THE RED DOOR LIGHTS EXTINGUISHED.						

AMD	GARRTT	PROXIMITY	FAILED	03/18/2003	29
FALCON900	TFE731*	803682	MLG	2003032500044	
AFTER TAKEOFF WHEN THE GEAR HANDLE WAS PLACED UP ALL THREE GREEN LIGHTS EXTINGUISHED. ALOUD METALLIC GRINDING TYPE NOISE WAS NOTED AFTER SEVERAL SECONDS 10-15 THE NOISE STOPPED AND THE GREEN LIGHT FOR THE NOSE GEAR ILLUMINATED. AT THIS TIME THE GEAR HANDLE WAS UP TH NOSE GEAR INDICATED DOWN, THE LT & RT MAIN GEAR DOORS WERE OPEN. WHEN THE GEAR HANDLE WAS PLACED DOWN NO ACTIVITY WAS NOTED VISUALLY OR NOISE BY THE GEAR. APPROX. 45-75 SECONDS LATER THE LT & RT MAIN GEAR DOWN LOCK GREEN LIGHTS ILLUMINATED AND THE RED DOOR LIGHTS EXTINGUISHED.					
AMTR	LYC	INDICATOR	INOPERATIVE	01/24/2003	
RV8A	O360A1A	10172001999	ALTIMETER	2003031200003	
ALTIMETER PURCHASED NEW. MAY 5, 2001 MANUFACTURE DATE. FAILED TO PASS FRICTION PORTION OF PITOT/STATIC/XPDR. BIENNIAL CHECK. MFG CONTACTED AND IS UNAWARE OF ANY PROBLEMS WITH THIS MODEL BUT TECHNICIAN DOING STATIC TEST NOTES SEVERAL LIKE IT HAVE FAILED SAME CHECK EARLY IN THEIR LIFETIMES. INSTALLED IN HANGARED HOMEBUILT. UNIT RETURNED TO MFG FOR EVALUATION.					
BAG		HUB	CRACKED	03/10/2003	20695
JETSTM4112		D67132C1102	PROPELLER	2003032500114	3677
RECEIVED PROPELLER FOR OIL LEAK; UPON DISASSEMBLY, FOUND CRACK ON TOP OF HUB AT NR 1 BLADE PORT; CRACK PROPAGATED FROM TOP OF HUB TO NR 1 BLADE SOCKET.					
BBAVIA		PUSHROD	LOOSE	02/19/2003	
7GCBC		12341	AILERON	2003031300004	
AILERON RODEND JAM NUTS FOUND LOOSE. HAVE FOUND SIMILAR CONDITION ON PREVIOUS AIRCRAFT NEW FROM					
BBAVIA	LYC	ATTACH	CHAFED	02/01/2003	
8KCAB	AEIO360*	31691	WING STRUT	2003031200154	
DURING A ROUTINE SERVICE INTERNAL CUSTOMER REQUESTED THE 1000 HOUR INSPECTION DETAILED IN AIRWORTHY LIMITATIONS OF MM. ON ALL FOUR STRUT ATTACH FITTINGS. BOTH FITTINGS WERE REJECTED ON LEFT WING DUE TO CHAFING ON EDGES WHERE FITTINGS PASS THROUGH LEADING EDGE SKIN. FITTINGS WERE INSTALLED BY ANOTHER AGENCY AT 96-HOUR TT ACCORDING TO AC RECORDS. GREATER ATTENTION TO INTERFERENCE OF SKIN RELIEF WOULD PREVENT THIS.					
BEECH		TORQUE TUBE	EXCESS PLAY	01/10/2003	
1900C		1016100195	ELEVATOR	2003031400137	20
FOUND LOOSE RIVETS ON HORN ADAPTER ATTACHED TO LT ELEVATOR TORQUE TUBE PN 1016100195.					
BEECH		BALLAST	BURNED OUT	03/03/2003	
200BEECH		6900080000	CABIN LIGHTS	2003031300022	
CABIN LIGHT C/B TRIPPED WITH ASSOCIATED ELECTRICAL ODOR IN CABIN. REMOVED ALL FLUORESCENT LIGHT POWER SUPPLIES AND FOUND ONE HAD SHORTED OUT AND HAD BURNED THROUGH POWER SUPPLY BALLAST CASE. CLOSE TO STARTING VELCRO ON FIR THAT HOLDS LIGHT POWER SUPPLY IN PLACE. RECOMMEND PERIODIC INSPECTIONS TO LOOK FOR ANY HOT SPOTS ON BALLAST.					
BEECH		ADAPTER	CORRODED	02/24/2003	9400
200BEECH		10092007117	FUEL CELLE	2003031400074	
WHILE PERFORMING MAINTENANCE TO REPAIR A FUEL LEAK THE TECHNICIAN NOTICED CORROSION ON DEFUEL ADAPTER PLATE IN NACELLE TANK. FURTHER INVESTIGATION FOUND SIGNIFICANT CORROSION ON DEFUEL ADAPTER PLATE ASSY. THIS PLATE ALSO SUPPORTS THE BOTTOM PORTION OF THE NACELLE FUEL PROBE. SECTION 28-40 OF THE KING AIR MM COVERS THE RECURRING 30 MONTH INSPECTION OF THE NACELLE FUEL PROBE FOR CORROSION AND CONTAMINATES. THIS PORTION OF THE PLATE ASSY. IS DIFFICULT TO SEE. MOISTURE IN THE LOW PART OF THE					
BEECH		UPLOCK	SHEARED	02/24/2003	4778
400BEECH			MLG	2003031300007	
ACFT IN PHASED INSPECTION. WHEN INSPECTORS REMOVED THE AVIONICS RACK TO TORQUE A LOOSE ATTACH FITTING BOLT ON THE RIGHT MLG UPLOCK FITTING, A CHECK WAS MADE OF THE OTHER ATTACH BOLTS. THE BOTTOM FORWARD ATTACH BOLT HEADS WERE FOUND SHEARED OFF. THE BOLT HEADS WERE FOUND ON TOP OF THE GEAR UPLOCK ASSY. THERE WAS EVIDENCE THE BOLTS HAD BEEN SHEARED FOR A LONGTIME. FURTHER EXAMINATION DISCOVERED THE BOLTS WERE PART NUMBER NAS1204-9 AND NOT THE REQUIRED NAS1204-8.					
BEECH		CHANNEL	MISINSTALLED	02/19/2003	221
58		954200154748	FUSELAGE	2003031400149	
FOUND ROW OF RIVETS MISSING FROM LEFT AND RIGHT CHANNELS, FORWARD END TO ANGLE SPLICE. CHANNELS ARE LOCATED UNDER CABIN FLOOR JUST BEHIND WING AFT SPAR AND SUPPORT FLOOR PANEL. THE RIVETS ATTACH SPLICE ANGLE RUNNING UNDER AFT SPAR TYING INTO FORWARD CHANNELS. RIVET HOLES WERE PRESENT IN BOTH PIECES IN CORRECT LOCATION. THESE RIVETS ARE PRESENT IN SIMILAR MODELS WITH EARLIER SERIAL NUMBERS.					
BEECH	LYC	PUMP	FAILED	02/12/2003	239
65B80	IO720*	442CW6	RT VACUUMSYS	2003031200015	
VACUUM PUMP FAILED UNDER NORMAL OPERATING CONDITIONS.					
BELL		FLOAT	LEAKING	02/28/2003	
206L3		206050248113	MLG	2003031200121	
DURING PRESSURE TESTING FLOAT BAG LEAKED THROUGH AFT SEAM.					
BELL		HANGER ASSY	CRACKED	02/12/2003	
222U		222044003101	TAIL ROTOR	2003022800053	
RUST INSIDE SPLINED ADAPTER; BEARING SEAL DAMAGED; AND HANGER SUPPORT CRACKED ON BOTTOM. REPLACED BEARING 222344606-101DUE TO SEAL DAMAGED. REPLACED HANGER DUE TO CRACKED. REPAIRED.					
BELL		HANGER ASSY	CORRODED	02/12/2003	
222U		222044003101	TAIL ROTOR	2003022800054	
RUST INSIDE SPLINED ADAPTER; BEARING SEAL DAMAGED; AND HANGER SUPPORT CRACKED ON BOTTOM. REPLACED BEARING DUE TO SEAL DAMAGED. REPLACED HANGER DUE TO CRACKED. REPLACED SHAFT DUE TO CORROSION.					
BELL		SEARCH LIGHT	MALFUNCTIONED	02/12/2003	
230		930500251	EXTERIOR	2003022800057	
SEARCHLIGHT DOES NOT RETRACT ALL THE TIME.					
BELL		PANEL	CRACKED	01/20/2003	
407		407070620149	SEAT	2003022500068	
SEAT PANEL CRACKED.					
BELL		TRIM PANEL	CRACKED	01/20/2003	
407		407070620150	INTERIOR	2003022500069	
INTERIOR TRIM PANEL CRACKED.					
BELL		CONTACTOR	FAILED	02/12/2003	
407		SM20ACD300A21	ELECTRICAL	2003022800111	
CAUSING START/AUTO RELIGHT CAUTION LIGHTS TO NOT ILLUMINATE.					
BELL		CONTACTOR	FAILED	02/12/2003	
407		SM20ACD300A21	ELECTRICAL	2003022800113	
GENERATOR TAKES SEVERAL SECONDS TO GO OFFLINE WHEN SWITCH IS TURNED OFF.					

BELL		INDICATOR	WEAK	02/14/2003	
412		MI585200	WX RADAR SYS	2003030500067	
WEATHER RADAR PAINTS WEAK RETURNS. FOUND RECEIVER SENSITIVITY WEAK. ADJUSTED TO SPECS. BENCH CHECK					
BELL		CONTROL UNIT	MALFUNCTIONED	02/14/2003	
412		80511400003	WX RADAR SYS	2003030600007	
AIR COLLISION AVOIDANCE SYSTEM SHOWS RS232 NR 2 FAIL - ERROR CODE 13 AT STARTUP. TO BE SENT TO VENDOR FOR REPAIR.					
BELL		RECEIVER	INOPERATIVE	02/14/2003	
412		066107800	COCKPIT	2003030600027	
VHF NAVIGATION RECEIVER INOPERATIVE. POWER SUPPLY VOLTAGES ARE BAD. REPLACED BURNED RESISTORS R791, R792, R793 AND R794. ALSO REPLACED IC I101, TRANSISTOR Q718, Q719 AND Q103. REPAIRED PROBLEM. BENCH					
BELL		AMPLIFIER	CORRODED	02/14/2003	
412		071107600	VOR SYSTEM	2003030600030	
NR 2 KDA CONNECTOR FROZE ON BOX. FOUND UNIT EXCESSIVELY CORRODED. CLEANED CORROSION AND REPLACED 18 HEADER PINS DUE TO CORROSION. BENCH CHECK GOOD.					
BELL		SWITCH	LOOSE	02/17/2003	
412			INTERPHONE BOX	2003030700001	
NR 2 COMM SWITCH IS LOOSE. FOUND LIGHT PANEL AND SELECTOR KNOB BAD. SWITCH S1 NOISY AND SWITCH S2 LOOSE. CLEANED SWITCH S1, TIGHTENED SWITCH S2. REPLACED SELECTOR KNOB AND LIGHT PANEL. REPAIRED. BENCH CHECK GOOD.					
BELL		CONTROL BOX	DAMAGED	02/17/2003	
412		071121004	COCKPIT	2003030700105	
ADF CONTROL BOX DAMAGED. CAN'T CHANGE FREQUENCY. FOUND DISPLAY DS302, PHOTOCELL V301, PHOTOCELL LENS BAD AND SWITCH SPOOL NOT PROPERLY ALIGNED WITH SWITCH S304. REPLACED DISPLAY, PHOTOCELL, PHOTOCELL LENS AND ALIGNED SWITCH. REPAIRED. BENCH CHECK GOOD.					
BELL		MIXERBOX	FAILED	02/17/2003	
412		A3016R	COCKPIT	2003030700121	
ICS MIXER BOX HAS NO SOUND. FOUND ICS AUDIO INTERMITTENTLY CUTTING OUT. CLEANED REAR CONNECTOR AND S1 SWITCHES. RESOLDERED WIRES TO CIRCUIT BOARD AND R72 VOLUME CONTROL. REPAIRED. BENCH CHECK GOOD.					
BELL		ROD BEARING	WORN	02/21/2003	
412		412310400103	M/R HEAD	2003030700139	
MAIN ROTOR HEAD HAS A WORN ROD BEARING. REPAIRED.					
BOLKMS		CONTROL ROD	WORN	01/22/2003	5952
BK117B1		117132811	ROTOR HEAD	2003022500027	
BEARINGS WORN. REPLACED WITH SERVICEABLE ROD.					
BOLKMS		STUD	LOOSE	02/04/2003	4107
BK117B1			GEARBOX	2003022500031	
STUD ON GEARBOX MOUNT IS WORKING LOOSE. REPLACED WITH SERVICEABLE UNIT.					
BOLKMS		BATTERY	WORN	01/28/2003	391
BK117C1		171BS1011	MAIN	2003022500029	
INTERMITTENT CHARGE OF BATTERY. NO CHARGE LIGHT ON. REPLACED WITH SERVICEABLE UNIT.					
BOLKMS		POTENTIOMET	FAILED	02/12/2003	
BO105S			AUDIO PANEL	2003030600033	
AUDIO PANEL CONTROL UNIT VOLUME IS SENSITIVE. FOUND FACEPLATE INSERT, VOLUME POTENTIOMETER S101, AND TRANSFER SWITCH S102 BAD. REPLACED. BENCH CHECK GOOD.					
BOMBDR	RROYCE	BATTERY	FAULTY	09/05/2001	168
BD7001A10	BR700710A220	427CK1	APU	2003031400144	
AIRCRAFT WAS CONNECTED TO EXTERNAL AIRCRAFT POWER CART, AND POWERED UP. A LOUD POP WAS HEARD COMING FROM AFT EQUIPMENT BAY OF AIRCRAFT. DURING INVESTIGATION, ANOTHER POP WAS HEARD. ACCESSED APU BATTERY. FOUND IT TO BE DAMAGED AND SMOKING. FOUND SEVERAL CELLS BURNED AND HEAT BLANKET BURNED. ALSO. SUSPECT BATTERY CHARGER TO BE FAULTY. BOTH COMPONENTS REPLACED. REMOVED ITEMS, SENT FOR EVALUATION. NO DAMAGE TO AIRCRAFT. THE COCKPIT INDICATION AT TIME OF INCIDENT SHOWED (APU BATT FAIL) TEMPERATURE AND VOLTAGE WERE NORMAL.					
BRAERO		CONNECTOR	ARCED	03/14/2003	
BAE125800A		MS3126F24	ANGLE OF ATTACK	2003031900001	
ANGLE OF ATTACK WILL NOT HEAT: INSPECTED CONNECTOR FS20, AND FOUND BOTH ENDS TO BE BURNT. INSPECTED BREAKER AND FOUND TO BE, 10AMP BREAKER, WHICH WAS TO LARGE FOR 18 GAUGE WIRE. REPLACED CONNECTOR AND ENGINEERING ISSUED A DRAWING TO ACCOMMODATE SYSTEM REQUIREMENTS.					
CASA	GARRIT	WIRE	CHAFED	03/01/2003	
C212200	TPE331*		BOOST PUMP	2003031200027	
THE WIRE PROVIDING A NEUTRAL AND POWER TO THE PUMP EXITS/ENTERS PUMP USING A SEALED AN FLARE FITTING CAUSING CHAFING TO OCCUR.					
CESSNA	CONT	SPINNER	DAMAGED	02/17/2003	143
150L	O200*	04500422	PROPELLER	2003031200019	
PROP REMOVED TO FACILITATE REPLACEMENT OF ENG CRANKSHAFT SEAL. REMOVAL OF SPINNER, SEVERE WEAR AND FRETTING OF INNER SURFACE WAS NOTED WHERE FWD BULKHEAD (PN04500503) CONTACTS SPINNER. AFTER REMOVING PROP, PROP MOUNT BOLTS WERE OVERTORQUED, RESULTING IN DEFORMATION OF WASHERS AND BULKHEAD. AFT BULKHEAD (04500465) WAS CRACKED ALMOST ENTIRELY AROUND CIRCUMFERENCE OF BOLT CIRCLE. PROP, AFT BULKHEAD, AND PROPELLER SPACER SHOWED EVIDENCE OF HAVING BEEN PRIED APART WITH A SCREWDRIVER OR SIMILAR INSTRUMENT. MOVEMENT OF CRACKED REAR BULKHEAD HAD CAUSED FRETTING DAMAGE TO AFT FACE OF PROP HUB. REQUIRED REPLACEMENT OF SPINNER, AFT BULKHEAD, AND FORWARD BULKHEAD. PROP WAS REPAIRED AT A CERTIFIED FACILITY.					
CESSNA	CONT	ALTERNATOR	INOPERATIVE	02/17/2003	
172H	O300D	DOFF10300F	ENGINE	2003031200029	
FAILURE OF THE SHAFT ON AN OVERHAULED ALTERNATOR. THE PILOT REPORTED AN AMMETER DISCHARGED WHILE CONDUCTING A PART 61 INSTRUCTIONAL FLIGHT. A PRECAUTIONARY LANDING WAS MADE AT THE NEAREST AIRPORT. INSPECTION OF THE ELECTRICAL SYSTEM INDICATED A FRACTURE OF THE MAIN SHAFT OF THE GEAR DRIVEN ALTERNATOR, AFT OF THE FRONT SEAL POSSIBLY DUE TO A MANUFACTURING DEFECT. NO OTHER DAMAGE WAS NOTED TO EITHER THE ACCESSORY GEARS OR THE ALTERNATOR ITSELF. PICTURES OF THE FRACTURED SHAFT ARE ENCLOSED. THE UNIT WAS INSTALLED IN DECEMBER 2001 AND ACCUMULATED 328 HOURS.					
CESSNA	LYC	ROLLER	DAMAGED	02/27/2003	3641
172K	O320E2D	0523920	TE FLAP	2003031300036	
RT FLAP, INBOARD AFT FLAP ROLLER, FAILED AND BOUND DURING FLAP RETRACTION. THE RT OUTBOARD FLAP END CONTINUED TO RETRACT DEFORMING THE FLAP TO SOME EXTENT.					

CESSNA	LYC	TIRE	SPLIT	02/01/2003	
172R	IO360A1A	30620	MLG	2003031200002	
FOUND SPLIT IN LT MAIN TIRE ON SIDEWALL. RECAP TIRE 6.00 X 6. SPLIT IS APPROX 50 PERCENT RADIUS OF THE SPLIT IS TO CORD.					
CESSNA	LYC	CONNECTOR	IMPROPER PART	01/30/2003	
172R	IO360A1A	PI307	GYRO	2003031400139	
CONNECTOR FROM AIRCRAFT HARNESS TO TURN COORDINATOR HAS IMPROPERLY CRIMPED PINS AND LOOSE BACK SHELL, CAUSING AUTOPILOT FAILURES AND INCORRECTLY DIAGNOSED FAILURES OF TURN-COORDINATORS.					
CESSNA	LYC	SPINNER	CRACKED	03/01/2003	830
172R	IO360L2A	05503671	PROPELLER	2003031300020	
THE PROP SPINNER ON THE 172 RS SERIES CRACKS VERY FREQUENTLY. THE CRACKS RADIATE FROM THE CUT OUT FOR THE PROP BLADES.					
CESSNA	LYC	ENGINE	FLUCTUATES	03/01/2003	10816
172R	IO360L2A			2003031300021	569
DURING AN INSPECTION THE IDLE WAS FOUND TO BE ABOUT 900 RPM. TYPICALLY THIS IS NOT CONSIDERED TO BE A REPORTABLE EVENT, HOWEVER THIS ENGINE/AIRCRAFT COMBINATION HAS BEEN THE SUBJECT OF AN AIRWORTHINESS DIRECTIVE REGARDING UNSTABLE IDLE/MIXTURE ISSUES. IT IS NOT UNCOMMON FOR THIS SITUATION TO OCCUR NOT ONLY DURING INSPECTION GROUND RUNS, BUT ALSO DURING OPERATION BETWEEN INSPECTIONS.					
CESSNA	LYC	FUEL CONTROL	OUT OF ADJUST	02/05/2003	
172R	IO360L2A	425765362	ENGINE	2003031300031	1462
THE CREW REPORTED A PARTIAL POWER LOSS DURING STALL RECOVERY. THIS ENGINE/AIRCRAFT COMBINATION HAS BEEN THE SUBJECT OF AN AIRWORTHINESS DIRECTIVE REGARDING UNSTABLE IDLE/MIXTURE ISSUES. IT IS NOT UNCOMMON FOR THIS SITUATION TO OCCUR NOT ONLY DURING INSPECTION GROUND RUNS, BUT ALSO DURING OPERATION BETWEEN INSPECTIONS. THE IDLE SYSTEM ON THIS FUEL CONTROL UNIT HAS ISSUES, WHERE IT REQUIRES CONSIDERABLE ADJUSTING WITHIN A RELATIVELY FEW NUMBER OF OPERATING HOURS.					
CESSNA	LYC	FUEL NOZZLE	OBSTRUCTED	02/18/2003	
172R	IO360L2A	25248642	ENGINE	2003031300033	
ON TAKE OFF THE ENGINE RAN ROUGH. INVESTIGATION SHOWED THAT ONE FUEL INJECTOR NOZZLE WAS FOUND WITH AN IRREGULAR FLOW. IT WAS REPLACED.					
CESSNA	LYC	FUEL CONTROL	FAILED	02/19/2003	
172R	IO360L2A	25765362	ENGINE	2003031300034	1906
DURING A PRE TAKE OFF IDLE CHECK, THE ENGINE QUIT. THIS ENGINE/FUEL CONTROL SYSTEM IS THE SUBJECT OF AN AIRWORTHINESS DIRECTIVE CONCERNING UNSTABLE IDLE TENDENCIES.					
CESSNA	LYC	FLOW DIVIDER	STICKING	02/14/2003	
172R	IO360L2A	63B22623	FUEL SYSTEM	2003031300038	1467
DURING GROUND OPERATIONS, THE CREW FELT A ROUGH AND UNSTABLE IDLE. AN INSPECTION WAS MADE OF THE ENGINE AND SYSTEMS. 2 NOZZLES WERE DETERMINED TO HAVE AN IRREGULAR SPRAY PATTERN. AFTER CLEANING, 1 WAS REPLACED. ALSO, THE FUEL FLOW DIVIDER WAS FOUND TO BE STICKING INTERNALLY. IT WAS REPLACED.					
CESSNA	LYC	BULKHEAD	CRACKED	02/14/2003	1011
172R	IO360L2A	055032111	SPINNER	2003031300043	
THE SPINNER AFT BULKHEAD WAS FOUND CRACKED. IT WAS REPLACED WITH A NEW UNIT.					
CESSNA	LYC	FUEL CONTROL	ERRATIC	03/06/2003	
172R	IO360L2A	25765362	ENGINE	2003031300045	168
DURING A PRE TAKE OFF IDLE CHECK, THE ENGINE RAN EXTREMELY SLOW. IT WAS ADJUSTED. THIS ENGINE/FUEL CONTROL SYSTEM HAS BEEN THE SUBJECT OF AN AIRWORTHINESS DIRECTIVE CONCERNING IDLE ANOMALIES.					
CESSNA	LYC	PIVOT	CRACKED	02/12/2003	1536
172RG	O360*	24411003	MLG	2003031400024	
DURING A ROUTINE INSPECTION IT WAS NOTICED BY THE TECHNICIAN THAT THERE WAS A LARGE AMOUNT OF VERY THIN GREASE SEEPING OUT FROM AROUND THE MAIN LANDING GEAR ACTUATOR CAPS ON BOTH THE LEFT AND RIGHT SIDES. THE GEAR ACTUATORS AND PIVOTS WERE FOUND TO BE CRACKED IN THE RADIUS AT THE BOTTOM OF THE GEAR SPLINES. TO PREVENT THIS PROBLEM IT IS SUGGESTED THAT THE MAIN LANDING GEAR PIVOTS BE REMOVED FROM THE AIRCRAFT AND INSPECTED EVERY 1000 HOURS. IT IS ALSO SUGGESTED THAT THE MFG OF THIS PART REDESIGN THE PART OUT OF STEEL. AD ON THE MLG PIVOT ASSEMBLIES HAD BEEN COMPLIED WITH.					
CESSNA		CYLINDER	FAILED	02/10/2003	1075
172S		05142132	SEAT BACK	2003031200014	
SHORTLY AFTER ROTATION SEAT BACK FAILED AND WENT TO THE RECLINED POSITION. COMPLETE FAILURE COULD NOT BE DUPLICATED IN THE SHOP BUT SOME SLIPPAGE OF THE LOCKING CYLINDER WAS NOTED.					
CESSNA		SPINNER	CRACKED	02/24/2003	45
172S		05503671	PROPELLER	2003031300010	
DURING PHASE 3 INSPECTION FOUND PROPELLER SPINNER CRACKED AT BLADE CUT OUT ON ONE SIDE. THE PROBLEM IS REOCCURRING, THIS IS THE 5TH SPINNER REPLACEMENT ON THIS AIRCRAFT IN 1928. 0 HOURS AND IS A COMMON PROBLEM ON OTHER C-172S AIRCRAFT. CESSNA SERVICE BULLETIN SB02-61-01 WAS ACCOMPLISHED 45. 6 HOURS AGO WHICH REQUIRED ELONGATING THE MOUNTING SCREW HOLES TO ACHIEVE A GAP OF LESS THAN 0.03 BETWEEN SPINNER AND AFT BULKHEAD. THE MATERIAL THICKNESS OF THIS P/N SPINNER IS HALF THE THICKNESS OF THE OLDER CESSNA AIRCRAFT SPINNERS AND IS THE REASON FOR THE CRACKING AS IT IS NOT A PROBLEM ON THE OLDER					
CESSNA	LYC	PRECISION	VALVE	SCORED	03/05/2003
172S	IO360L2A		2520626	FUEL CONTROL	2003031300025
THE CREW REPORTED FLUCTUATING IDLE DURING GROUND CHECK. THE CREW RETURNED TO THE RAMP. TYPICALLY THIS IS NOT CONSIDERED TO BE A REPORTABLE EVENT, HOWEVER THIS ENGINE/AIRCRAFT COMBINATION HAS BEEN THE SUBJECT OF AN AIRWORTHINESS DIRECTIVE REGARDING UNSTABLE IDLE/MIXTURE ISSUES. IT IS NOT UNCOMMON FOR THIS SITUATION TO OCCUR NOT ONLY DURING INSPECTION GROUND RUNS, BUT ALSO DURING OPERATION BETWEEN INSPECTIONS. A COMMON SOURCE OF PROBLEMS WITH THIS FUEL CONTROL IS THE MIXTURE VALVE, PN-2520626. THIS VALVE BECOMES SCORED AND THEN INACCURATE IN IT'S FUNCTION. THERE IS A PROCEDURE FOR					
CESSNA	LYC	SPINNER	CRACKED	02/10/2003	424
172S	IO360L2A	05503671	PROPELLER	2003031300026	
THE PROP SPINNER ON THE 172R/S SERIES CRACKS VERY FREQUENTLY. THE CRACKS RADIATE FROM THE CUT OUT FOR THE PROP BLADES.					
CESSNA	LYC	SPINNER	CRACKED	02/10/2003	424
172S	IO360L2A	05503671	PROPELLER	2003031300027	
THE PROP SPINNER ON THE 172R/S SERIES CRACKS VERY FREQUENTLY. THE CRACKS RADIATE FROM THE CUT OUT FOR THE PROP BLADES.					
CESSNA	LYC	FLOW DIVIDER	STICKING	02/10/2003	475
172S	IO360L2A	63B22623	FUEL SYSTEM	2003031300028	
DURING CRUISE THE CREW REPORTED A ROUGH ENGINE. AFTER INSPECTING APPLICABLE SYSTEMS, THE FUEL FLOW DIVIDER WAS CHANGED AFTER HAVING BEEN FOUND STICKING INTERNALLY.					
CESSNA	LYC	FLOW DIVIDER	STICKING	02/10/2003	475
172S	IO360L2A	63B22623	FUEL SYSTEM	2003031300029	
DURING CRUISE THE CREW REPORTED A ROUGH ENGINE. AFTER INSPECTING APPLICABLE SYSTEMS, THE FUEL FLOW DIVIDER WAS CHANGED AFTER HAVING BEEN FOUND STICKING INTERNALLY.					

CESSNA 172S	LYC IO360L2A	FLOW DIVIDER 63B22623	STICKING FUEL SYSTEM	02/10/2003 2003031300030	475	
DURING CRUISE THE CREW REPORTED A ROUGH ENGINE. AFTER INSPECTING APPLICABLE SYSTEMS, THE FUEL FLOW DIVIDER WAS CHANGED AFTER HAVING BEEN FOUND STICKING INTERNALLY.						
CESSNA 172S	LYC IO360L2A	FUEL CONTROL 25765362	FLUCTUATES	02/19/2003 2003031300035	535	
THE CREW REPORTED A ROUGH IDLE DURING GROUND OPERATION. THIS ENGINE/AIRCRAFT COMBINATION HAS BEEN THE SUBJECT OF AN AIRWORTHINESS DIRECTIVE REGARDING UNSTABLE IDLE/MIXTURE ISSUES. IT IS NOT UNCOMMON FOR THIS SITUATION TO OCCUR NOT ONLY DURING INSPECTION GROUND RUNS, BUT ALSO DURING OPERATION BETWEEN INSPECTIONS. THE IDLE SYSTEM ON THIS FUEL CONTROL UNIT HAS ISSUES, WHERE IT REQUIRES CONSIDERABLE ADJUSTING WITHIN A RELATIVELY FEW NUMBER OF OPERATING HOURS.						
CESSNA 172S	LYC IO360L2A	INJECTOR 25248642	RESTRICTED ENGINE	02/20/2003 2003031300037		
DURING CRUISE, THE ENGINE SPUTTERED FOR 1-2 SECONDS. THE AIRCRAFT WAS RETURNED TO HOME BASE. A THOROUGH INSPECTION OF THE ENGINE AND SYSTEMS WAS MADE, AND THE ONLY OBSERVABLE ITEM WAS A FUEL INJECTOR NOZZLE THAT PRODUCED A MINOR IRREGULAR FLOW PATTERN DURING TESTING. THE NOZZLES WERE CLEANED THE AIRCRAFT WAS FLOWN WITH NO OPERATIONAL DEFECTS NOTED.						
CESSNA 172S	LYC IO360L2A	SPARK PLUG REM40E	FOULED ENGINE	02/17/2003 2003031300039	483 22	
DURING STALL MANEUVERS, THE ENGINE HESITATED AND RAN ROUGH WHEN POWER WAS BROUGHT TO IDLE. AS ITEMS WERE BEING INSPECTED, THE SPARK PLUGS WERE FOUND WITH HEAVY DEPOSITS. THE PLUGS HAD BEEN CLEANED AND TESTED ABOUT 23 HOURS PREVIOUS TO THE EVENT. TYPICALLY, FOULED SPARK PLUGS ARE NOT A REPORTABLE INCIDENT, BUT THIS ENGINE FUEL CONTROL SYSTEM HAS BEEN THE SUBJECT OF AN AIRWORTHINESS DIRECTIVE REGARDING UNSTABLE IDLE/MIXTURE ISSUES. EVEN THOUGH CONSTANT CHECKING AND ADJUSTMENT OF THE IDLE MIXTURE/SPEED IS ACCOMPLISHED ON THIS ENGINE, IT QUITE OFTEN DEGRADES TO A VERY RICH IDLE, SHORTLY THEREAFTER, THEREBY CAUSING SPARK PLUG AND OTHER PROBLEMS AS DESCRIBED ABOVE.						
CESSNA 172S	LYC IO360L2A	FUEL CONTROL 25765362	ERRATIC ENGINE	02/17/2003 2003031300040	635	
THE CREW REPORTED THAT THEY WERE EXPERIENCING A VERY SLOW IDLE DURING PRE TAKEOFF IDLE CHECK. IT WAS ADJUSTED. THIS ENGINE/FUEL CONTROL COMBINATION HAS BEEN THE SUBJECT OF AN AIRWORTHINESS DIRECTIVE CONCERNING UNSTABLE IDLE AS WELL AS VARIOUS SERVICE BULLETINS ABOUT THE SAME SUBJECT. EVEN WITH CONTINUOUS ADJUSTMENT AND CHECKS, IT IS NOT UNCOMMON TO HAVE MANY WRITE-UPS PERTAINING TO HIGH/LOW OR LEAN/RICH IDLE PROBLEMS.						
CESSNA 172S	LYC IO360L2A	FUEL CONTROL 25765362	ERRATIC ENGINE	02/16/2003 2003031300041	521	
DURING A PRE TAKEOFF IDLE CHECK, THE ENGINE IDLED VERY SLOW AND BEGAN TO QUIT. THIS ENGINE FUEL CONTROL COMBINATION HAS BEEN DIFFICULT TO MAKE MAINTAIN A STABLE IDLE AND REQUIRES A SIGNIFICANT AMOUNT OF BETWEEN INSPECTION ADJUSTMENTS						
CESSNA 172S	LYC IO360L2A	FUEL CONTROL 25765362	ERRATIC ENGINE	02/14/2003 2003031300042	503	
DURING THE PRE TAKEOFF IDLE CHECK, THE ENGINE QUIT. THE AIRCRAFT WAS RETURNED TO THE RAMP. AS IS OFTEN THE NEE, THE IDLE SPEED AND MIXTURE WERE ADJUSTED.						
CESSNA 172S	LYC IO360L2A	BULKHEAD 055032111	CRACKED SPINNER	02/11/2003 2003031300044	965	
AFT SPINNER BULKHEAD WAS FOUND CRACKED, IT WAS REPLACED WITH A NEW PART.						
CESSNA 172S	LYC IO360L2A	FUEL CONTROL 25765362	ERRATIC ENGINE	03/06/2003 2003031300046	401	
DURING A PRE TAKE OFF IDLE CHECK, THE ENGINE IDLED VERY SLOWLY. IT WAS ADJUSTED. THIS ENGINE/FUEL CONTROL SYSTEM HAS BEEN THE SUBJECT OF AN AIRWORTHINESS DIRECTIVE REGARDING ERRATIC IDLE OPERATION.						
CESSNA 172S	LYC IO360L2A	BULKHEAD 055032110	CRACKED SPINNER	03/07/2003 2003031300047		
DURING INSPECTION, THE REAR SPINNER BULKHEAD WAS FOUND CRACKED. THIS IS A COMMON OCCURRENCE WITH						
CESSNA 172S	LYC IO360LYC*	PRECISION RSA5AD1	VALVE 2520626	SCORED FUEL CONTROL	02/08/2003 2003031300032	444
DURING A PRE TAKE OFF IDLE CHECK THE ENGINE RAN VERY SLOW AND EVENTUALLY QUIT. THE INJECTOR SERVO WAS INSPECTED AND THE INTERNAL IDLE MIXTURE PLATE WAS FOUND TO BE SCORED. THERE IS A PROCEDURE FOR LAPPING THIS VALVE. IT WAS ACCOMPLISHED AND THE IDLE SPEED/MIXTURE WAS ADJUSTED.						
CESSNA 182Q	CONT O470*	BULKHEAD 07126153	CRACKED FUSELAGE	01/21/2003 2003031200028		
SMALL CRACK IN AFT BULKHEAD AT STA 209. ORIGINATING FROM UNDER THE ATTACH POINT OF RIGHT HORIZONTAL STABILIZER, AT THE UPPER INBOARD CORNER.						
CESSNA 182T	LYC IO540*	SKIN	CRACKED FUSELAGE	02/28/2003 2003031400151	26	
BELLY SKIN CRACKED AT NUTPLATE FOR FAIRING AFT OF NOSE GEAR. CAUSED BY VIBRATION OF FAIRING. INCREASE STRUCTURE STRENGTH INSTEAD OF USING . 025 2024 USE . 032 2024 T-3.						
CESSNA 206H		INDICATOR 52D189	INOPERATIVE HSI GLIDESLOPE	02/28/2003 2003031300018		
NEW AIRCRAFT, NEW HSI 345 HRS TTAF. GLIDE SLOPE INOPERATIVE, FOUND GLIDE SLOPE NEEDLE RESTRAINT (FROM TRANSPORT) STILL IN PLACE.						
CESSNA 208B		INDICATOR 26060152	SHORTED INSTRUMENT	02/19/2003 2003031500120	11493	
PILOT OBSERVED SMOKE IN AND UPON SCANNING INSTRUMENTS, NOTICED LOWER THAN NORMAL OIL PRESSURE AND HIGHER THAN NORMAL OIL TEMP. ENGINE WAS SHUT DOWN. PILOT ALSO REPORTED FACE OF INSTRUMENT GLOWING AS CABIN FILLED WITH SMOKE. PILOT DONNED O2MASK AS SMOKE THICKENED. MASTER POWER WAS NEVER SHUTDOWN AND 5 AMP BREAKER NEVER OPENED AUTOMATICALLY NOR WAS IT PULLED. AFTER LANDING AND SECURING THE MASTER SWITCH THE SMOKE CLEARED. ALL DAMAGE APPEARED TO BE CONTAINED INTERNALLY AND SMOKE MOST LIKELY EXITED INSTRUMENT THROUGH THE VENT FITTING.						
CESSNA 208B	PWA PT6*	INVERTER MD2628	FAILED DIRECTIONAL	05/14/2002 2003031400141	200	
DIRECTIONAL GYRO FAILED DUE TO UNACCEPTABLE INSTALLATION OF A MD26-28 INVERTER WITH ITS 26V AC OUTPUT IN PARALLEL WITH THE KG102A 26V AC OUTPUT. THIS WAS DONE IN ERROR TO BOOST THE CURRENT CAPACITY ON THE 26V AC LINE. CANNOT PARALLELED INVERTER OUTPUT UNLESS THE CAN BE SYNCHRONIZED, WHICH IS NOT POSSIBLE ON THESE TWO UNITS. IN THIS INSTALLATION, THE ADDITIONAL CURRENT WAS NOT REQUIRED SINCE THE TWO UNITS DRIVEN BY THE BOOTSTRAP ARE NOT MECHANICAL SYNCHROS BUT HIGH IMP ELECTRONIC CIRCUITS. THE GYRO WAS REPLACED AND THE MD26-28 ELIMINATED.						

CESSNA 310N		BRACKET 083200056	CRACKED STAB HINGE	02/17/2003 2003031200010	8161
UNIT WAS MANUFACTURED BY COMBINING TWO SHEETMETAL BRACKETS RIVETED TO A CASTING THAT HOLDS THE OUTBOARD ELEVATOR HINGE BEARING. CRACKING WAS FOUND IN BOTH THE RIGHT AND LEFT HAND ASSEMBLIES ON THE UPPER, INBOARD BEND RADIUS. THIS CAN BE SEEN FROM UNDERNEATH AND LOOKING THROUGH THE					
CESSNA 441		STRUCTURE	MISREPAIRED LT WING	03/05/2003 2003031300053	
DURING A PHASE 2, 3 & D INSPECTION, IT WAS VISUALLY DISCOVERED UPPER & LOWER RIB CAP STRUCTURE WAS MISSING AT LT WS 128. 80 AS WELL AS STRINGER SPLICES WERE NOT ATTACHED TO THE WING SKIN BETWEEN LT WS 120. 0 & 148. 30 & THE SKIN SPLICE USED WAS THE WRONG MATERIAL THICKNESS.					
CESSNA 500CESSNA		ARM 556555026	CRACKED ELEVATOR	03/06/2003 2003031400023	13186 921
DURING A PHASE 5 INSPECTION A SMALL CRACK WAS DISCOVERED NEAR THE LT UPPER NUTPLATE ON THE ELEVATOR BOB WEIGHT SUPPORT ARM. AFTER REMOVING THE ASSEMBLY IT WAS DISCOVERED THAT THERE WERE MULTIPLE CRACKS AROUND ALL FOUR NUTPLATES. REPLACED BOTH SUPPORT ARMS. SUSPECT METAL FATIGUE AS CAUSE OF THE CRACKING. SUGGEST THAT THIS ASSEMBLY BE REMOVED AT EACH PHASE 5 INSPECTION TO INSPECT FOR CRACKING.					
CESSNA 551	PWA JT15D4	MECHANISM 551905514	BROKEN PAX DOOR HANDLE	01/22/2003 2003031200005	3040
CREW WAS UNABLE TO OPEN THE CABIN DOOR FROM INSIDE. LINE CREW HAD TO USE EXTERNAL HANDLE TO OPEN CABIN DOOR. THE PROBLEM WAS THE INNER DOOR RELEASE LOWER TRIGGER, HAD BROKEN OFF AT THE TOP INNER CORNER AND FALLEN BEHIND THE TRIGGER. CAUSING IT TO JAM AND NOT RELEASE THE DOOR HANDLE.					
CESSNA 750		HOSE AE1011888G0131	DETERIORATED NLG	03/04/2003 2003031400138	2620
AT 19, 000 FT, NOSE GEAR TRIED TO EXTEND. HYDRAULIC PRESSURE SLAMMED GEAR BACK UP. WITHIN 30 SECONDS HYDRAULIC QUANTITY ON "A" SYSTEM RESERVOIR STARTED DROPPING. AIRCRAFT WAS SLOWED AND NORMAL GEAR EXTENSION WAS MADE. HYDRAULIC QUANTITY ON A SYSTEM RESERVOIR WENT TO ZERO. AFTER LANDING A SYSTEM HYDRAULIC QUANTITY INDICATED 10 PERCENT. TROUBLE SHOT PROBLEM TO NOSE GEAR EXTEND HOSE LEAKING. REMOVED AND REPLACED HOSE WITH NEW. PERFORMED LANDING GEAR SWING, OPERATIONAL CHECKS, BLED HYDRAULIC SYSTEMS, SERVICED RESERVOIRS, AND LEAK CHECKS. ALL FOUND TO BE SATISFACTORY. RAN ENGINES AND OPERATED HYDRAULIC SYSTEMS ON GROUND ALL FOUND TO BE SATISFACTORY.					
CESSNA T210N	CONT TSIO520R	TRUNNION 12430097	BROKEN NLG	03/03/2003 2003031400148	3686
NOSE GEAR COLLAPSED DURING TAXI, AFTER LANDING, TOOK PLACE AFT NORMAL LANDING. COLLAR BROKE WHERE TRUNNION ATTACHES TO NOSE GEAR BARREL, PREVIOUS CRACK EXISTED.					
CIRRUS SR20	CONT IO360*	BRACKET 11799002B	CRACKED NLG	01/03/2003 2003031200020	
THE PANT BRACKETS MOVE AND ALLOW THE WHEEL PANT TO MOVE AND CRACK OR COME APART. THE NEW WHEEL PANT BRACKETS COME WITH A BUSHED . 2500 INCH HOLE INSTEAD OF THE NR 10 HOLE THAT IS THE SIZE NEEDED FOR THE NR 3 BOLT. WE HAVE BEEN MAKING UP PLASTIC BUSHINGS THAT JUST FIT IN THE HOLES AND TAKE UP THE EXTRA SPACE AND THE NR 3 BOLT FITS INTO. THIS HAS TAKEN CARE OF THE LOOSENESS OF THE BRACKET AND THE WHEEL PANT STAYS IN PLACE. HAVEN'T HAD ANY WHEEL PANTS CRACK OR FALL OFF BEFORE THIS HAS BEEN DONE TO PLANES SERVICED. THIS AC HAD LOST THE BACK HALF OF ITS WHEEL PANT ON LANDING. OWNER HAD REPAIRED WHEEL PANT BEFORE WHEN BACK HALF STARTED TO COME LOOSE. FOUND BRACKETS WOULD ROLL IF YOU TRIED					
CIRRUS SR20	CONT IO360E	CRANKCASE 653688	CRACKED ENGINE	02/05/2003 2003031200021	322
ON AIRCRAFT, BECAUSE OF A CRACK FOUND ON ANOTHER ENGINE, DECIDED TO INSPECT AND FOUND A CRACK ON THE RIGHT FRONT SIDE OF THE ENGINE CASE AT THE ALTERNATOR MOUNTING FLANGE AREA. THE CRACK STARTED ON THE ALTERNATOR REAR MOUNTING CASE THROUGH BOLT. THIS CRACK IS ABOUT 2 INCHES LONG. A REPLACEMENT ENGINE HAS BEEN ORDERED.					
CIRRUS SR20	CONT IO360E	CRANKCASE 653688	CRACKED ENGINE	02/05/2003 2003031200024	1100
A SLIGHT OIL LEAK COMING FROM THE FRONT RIGHT SECTION OF THE ENGINE WAS FOUND TO BE A CRACKED CASE. REMOVED NR 1 ALTERNATOR AND DYE CHECKED THE AREA. FOUND A 6 INCH CRACK ON THE ALTERNATOR MOUNTING FLANGE STARTING ON THE ALTERNATOR MOUNTING FLANGE THROUGH BOLT. THIS ENGINE WAS					
CLARK 1000CLARK		PINION GEAR E6893672	SPALLED GEARBOX	03/06/2003 2003031900018	150
HEAVY SPALLING ON DRIVE SIDE OF PINION GEAR TEETH CAUSING METAL IN OIL. THIS IS A REOCCURRING EVENT. VENDOR NEEDS TO UPGRADE THEIR QUALITY CONTROL ON GEAR MATERIAL AND FABRICATION OF GEARS.					
DHAV DHC6		STRUCTURE C6UM111010	CRACKED MLG	11/08/2002 2003022100086	
MAIN LANDING GEAR, CRACKED AT TAC OF WELD. UNKNOWN. NO OTHER APPARENT DAMAGE.					
DHAV DHC6	PWA PT6A27	EXHAUST PIPE C65C11073	CRACKED ENGINE	01/20/2003 2003022100085	
EXHAUST DUCT, CRACK IN BASE METAL. VIBRATION					
DHAV DHC6300	PWA PT6A11	LATCH C6FSM373027	UNSECURE CARGO DOOR	09/26/2002 2003031200006	
CARGO DOOR DEPARTED AIRCRAFT. AFTER INSPECTION OF THE REAR CARGO DOOR UPON ITS RECOVERY, IT WAS NOTED THAT AN ATTEMPT MAY HAVE BEEN TRIED TO OPEN THE DOOR ON THE AIRCRAFT AND THE DOOR WAS NOT FULLY SECURED WHEN THE AIRCRAFT DEPARTED. TESTING ON THE GROUND SHOWED THAT THE DOOR COULD ONLY BE PARTIALLY SECURED, THE LATCHING PINS WERE PARTIALLY ENGAGED IN THE DOOR FRAME. IT WAS FOUND THAT PRIOR TO THE COMPLETE LATCHING OF THE DOOR, THE LATCHING MECHANISM BECAME HARDER TO TURN, GIVING THE IMPRESSION THAT THE DOOR WAS FULLY LATCHED AND SECURED.					
DOUG MD900	PWC PW207E	TRANSMISSION 900D1400005101	MAKING METAL MAIN ROTOR	06/23/2001 2003031300013	56
MAIN TRANSMISSION PRODUCING METAL CHIPS. CHIP SIZE EXCEED MAINTENANCE MANUAL LIMITS.					
DOUG MD900	PWC PW207E	DRIVE LINK 900C2010186101	WORN MAIN ROTOR	07/24/2001 2003031400133	107
MAIN ROTOR UPPER DRIVE LINK BEARING PLAY EXCEEDS MAINTENANCE MANUAL LIMITS.					
DOUG MD900	PWC PW207E	DRIVE LINK 900C2010186101	WORN MAIN ROTOR	07/26/2001 2003031400134	
MAIN ROTOR UPPER DRIVE LINK BEARING PLAY EXCEEDS MAINTENANCE MANUAL LIMITS.					
DOUG MD900	PWC PW207E	INDICATOR 071142258	DEFECTIVE FILTER BYPASS	09/06/2001 2003031400135	
AFTER INSTALLING NEW HYDRAULIC FILTER, THE RETURN SIDE BYPASS INDICATOR POPPED WITH NO PRESSURE APPLIED. AFTER RESETTNG THE INDICATOR, INDICATOR POPPED AGAIN. REPLACED IMPENDING BY-PASS INDICATOR PN 071142-258. OPS CHECK GOOD.					

DOUG	PWC	FILTER	CONTAMINATED	09/17/2001	
MD900	PW207E	AC3676F1	HYD SYSTEM	2003031400136	
BYPASS PIN POPPED ON NR 1 HYDRAULIC RETURN FILTER. REMOVED FILTER AND INSPECTED FOR CONTAMINATION. REPLACED FILTER. OPS AND LEAK CHECK GOOD.					
EMB		PICCOLO TUBE	BENT	12/30/2002	
EMB145		14565200402	WING	2003022100089	
PICCOLO TUBE BENT AND CRUSHED.					
GROB		MANIFOLD	INOPERATIVE	01/28/2003	
G120A		X030004000000	MLG	2003022100087	
DURING FLIGHT THE FLIGHT CREW REPORTED THAT THE LEFT GEAR WAS SLOW TO EXTEND. MAINTENANCE TROUBLESHOT SYSTEM AND FOUND LEFT EXTENSION VALVE BAD. PARTICLES INSIDE OF VALVE WHICH PREVENTED FLUID TO FLOW UNRESTRICTED.					
GULSTM	RROYCE	NUT	MISSING	03/07/2003	607
G1159	SPEY5118	U125924	ENGINE	2003031400016	607
IN JUNE 2000 DURING A ROUTINE POSTFLIGHT INSPECTION FOD WAS DISCOVERED ON THE LP COMPRESSOR 5TH STAGE BLADES. DURING A SUBSEQUENT TEARDOWN IT WAS DISCOVERED THAT A LP COMPRESSOR OGV BOLT AND NUT AND CAME LOOSE AND CAUSED THE DAMAGE TO THE ENGINE. THE BOLT WAS FOUND LOOSE INSIDE THE LP COMPRESSOR DRUM BUT THE NUT AND WASHER WERE NOT FOUND. AT THE TIME, THE OVERHAUL FACILITY, ROLLS ROYCE CANADA (RRC) AND ROLLS ROYCE UK, THE MANUFACTURER, CONSIDERED IT AN ISOLATED INCIDENT EVEN THOUGH THERE HAD BEEN TWO SERVICE BULLETINS ISSUED FOR THIS ITEM DURING THE YEARS AND THERE WERE SEVERAL OTHER DOCUMENTED OCCURRENCES OF THIS PROBLEM. THE ENGINE HAD 607. 8 TSO. IN MARCH 2002, SPEY ENGINE					
GULSTM		ELBOW	CRACKED	03/11/2003	1495
GIV		MS21908D6	APU FUEL	2003031300048	
DURING POST FLIGHT INSPECTION RESIDUAL FUEL WAS NOTICED IN THE LEFT MAIN WHEEL WELL. WHEN SELECTING MAIN BOOST PUMP ON WITH APU MASTER SWITCH ON, FUEL WAS NOTICED RUNNING OUT OF THE FLEX HOSE ATTACHED TO THE APU FUEL SHUT OFF VALVE. MECHANIC FOUND THE ALUMINUM ELBOW CRACKED. ELBOW WAS REPLACED AND LEAK CHECKED OKAY. PAST EXPERIENCE WITH ANOTHER TYPE AIRCRAFT HAD SIMILAR CRACKS IN ALUMINUM FITTINGS WHEN STAINLESS STEEL LINES WERE CONNECTED TO THEM. A SERVICE BULLETIN WAS ISSUED STATING THAT OVER TORQUE COULD CAUSE THIS CONDITION. NO WORK HAD BEEN DONE IN THIS AREA AND WAS IN					
GULSTM	RROYCE	CONVERTER	INOPERATIVE	03/06/2003	690
GIV	TAY6118	1159SCAV373509	ACS SYSTEM	2003031400146	
DURING TAXI FROM THE OPERATOR'S HOME BASE AND PRIOR TO A SCHEDULED DEPARTURE, THE RT AC ELECTRICAL SYSTEM FAILED. THE AIRCRAFT RETURNED TO BASE, THE SYSTEM WAS TROUBLESHOT AND THE RT AC CONVERTER WAS FOUND TO BE FAULTY. THE UNIT WAS REPLACED WITH A SERVICEABLE PART AND THE AIRCRAFT WAS RETURNED TO AIRWORTHY CONDITION. THIS UNIT HAS PROVEN TO BE VERY UNRELIABLE. SINCE IT'S CONSIDERED TO BE DISPATCH CRITICAL, WE BELIEVE THAT THE FAA AND THE MANUFACTURER NEED TO FULLY INVESTIGATE THIS GULSTM RROYCE					
1121			CONTACTOR	STICKS	03/11/2003
GULFSTREAMGV BR700710A110					
		220CC02	LEFT PDB	2003032500115	
CONTACTOR STICKS INTERMITTENTLY. REPLACED CONTACTOR OPERATIONAL CHECKS NORMAL.					
GULSTM	RROYCE	CONTACTOR	FAILED	03/18/2003	1124
GULFSTREAMGV BR700710A110		220CC02	LEFT PDB	2003032500116	
CONTACTOR INTERMITTENTLY FAILS TO CONNECT TO THE BUS. REPLACED CONTACTOR.					
HUGHES		BLADE	BROKEN	03/04/2003	897
369E		500P3100101	TAIL ROTOR	2003031300023	
WHILE IN FLIGHT, PILOT EXPERIENCE VIBRATION WITH LOSS OF TAIL ROTOR CONTROL AUTHORITY. AFTER LANDING, INSPECTION REVEALED THE BLADE PITCH HORN HAD BROKEN INTO TWO PIECES, RENDERING ONE BLADE WITH NO PITCH CONTROL.					
LEAR	GARRTT	LINE	CLOGGED	10/30/2002	
45LEAR	TFE7312B		EJECTOR PUMP	2003032100072	
DEBRIS WAS DISCOVERED IN THE PRESSURE LINE TO THE EJECTOR PUMP. THIS CAUSED A LACK OF VACUUM TO THE OUTFLOW VALVES AND ALLOWED THE CABIN TO PRESSURIZE ON THE GROUND.					
LET		RING	MISSING	02/21/2003	
L13ACBLANK		12 CSN 02 2930	RUDDER PEDAL	2003031400150	
ONE TIME FLEET INSPECTION REVEALED SAFETY CLIP MISSING. THIS CLIP HOLDS THE RUDDER PEDAL THAT ATTACHES THE RUDDER PEDAL TO THE FUSELAGE FITTING. ONE TIME INSPECTION INITIATED DUE TO ANOTHER AIRCRAFT IN FLEET HAVING PEDAL VERTICAL STABILITY DETERIORATE.					
LET		RING	MISSING	02/21/2003	95
L23		12CSN022930	RUDDER PEDAL	2003031300005	
RUDDER PEDAL LOST VERTICAL STABILITY AND THE INSTRUCTOR PILOT REPORTED THE PROBLEM TO MAINTENANCE. MAINTENANCE INSPECTED THE AREA AND FOUND THE SAFETY RING, WHICH HOLDS THE RUDDER PEDAL ATTACH SHAFT TO THE FUSELAGE FITTING, MISSING. AN INSPECTION WAS MADE TO FIND THE RING, AND DETERMINED IT WAS NOT IN THE AIRCRAFT. MAINTENANCE QUESTIONED IF IT WAS INSTALLED AT THE FACTORY, WHICH INITIATED A FLEET WIDE ONE TIME INSPECTION. TWO MORE AIRCRAFT WERE FOUND TO BE MISSING THE SAFETY RINGS. THESE ARE NEW AIRCRAFT WITH LESS THAN A HUNDRED HOURS TIME IN SERVICE.					
LET		RING	MISSING	02/21/2003	
L23		12CSN022930	RUDDER PEDAL	2003031300006	
ONE TIME FLEET INSPECTION REVEALED SAFETY RING MISSING. ONE OF THREE AIRCRAFT BELIEVED TO HAVE NOT HAD INSTALLED AT FACTORY. INSPECTION OF AIRCRAFT DID NOT PRODUCE MISSING PART.					
MOONEY	LYC	SHAFT	SHEARED	02/20/2003	
M20F	IO360A1A		VACUUM PUMP	2003031200013	
NEW VACUUM PUMP SHAFT SHEARED WITH ONLY 3 HOURS OF OPERATION INSTALLED ON 04/25/2002. BROKE ON					
MOONEY	CONT	BEARING	DISINTEGRATED	02/18/2003	497
M20R	IO550G	7202N	AC DRIVE	2003031200008	
DURING INSTALLATION OF AN AIR/OIL SEPARATOR, REMOVED THE AIR CONDITIONER ACCESSORY DRIVE OFF THE STARTER SHAFT TO INSTALL AN OIL RETURN FITTING FOR THE AIR/OIL SEPARATOR. UPON REMOVAL OF THE ACCESSORY DRIVE HOUSING, PIECES OF THE AIR CONDITIONER DRIVE BEARING FELL OUT OF THE HOUSING, FURTHER EXAMINATION REVEALED TOTAL DISINTEGRATION OF CAGE FOR BALL BEARINGS.					
PIPER	LYC	PUMP	FAILED	03/01/2003	4456
PA23150	O320*	67B025	HYD SYSTEM	2003031200025	
ONE PRESSURE LINE FAILED IN THE WING BETWEEN PUMP AND THE POWER PACK. AFTER REPLACEMENT OF ALUMINUM LINE THE SYSTEM WAS SERVICED AND TESTED. ON THE TEST HOP THE ENGINE DRIVEN PUMP FAILED AND THE PUMP CASE RUPTURED. THE PUMP WAS REPLACED. THE SYSTEM RESERVICED AND GROUND CHECKS COMPLETED. ON TEST HOP WITH THE SECOND PUMP, THE SAME FAILURE OCCURRED. THE PUMP RUPTURED, THE CASE SPLIT AND AFTER LOSS OF PRESSURE THE GEAR WAS EXTENDED BY HAND PUMP SUCCESSFULLY. THE TWO PUMPS AND THE POWER PACK HAVE BEEN SENT TO REPAIR STATION FOR IRAN. THIS IS ON A 1954 APACHE WITH 4456 HOURS TT. NORMAL CONFIGURATION IS WITH ONE ENGINE DRIVEN HYDRAULIC PUMP ON THE LEFT ENGINE.					

PIPER PA23250	LYC IO540*	SEAL A23D04	LEAKING FUEL REGULATOR	01/29/2003 2003031200004	3519
UNIT WAS INSPECTED DURING A 100 HOUR INSPECTION USING S/B. FUEL STAINS WERE FOUND, BAD NO FUEL, AROUND BOTH TOP AND BOTTOM GASKETS. UNIT WAS REMOVED FROM SERVICE.					
PIPER PA28161		AXLE 78738002	CRACKED MLG	02/12/2003 2003031200012	13331
DURING ROUTINE 100 HOUR INSPECTION, BOTH LOWER AXLE STUBS (INNER PORTION OF LOWER STRUT ASSY. ) WERE FOUND CRACKED. POSSIBLE JUST NORMAL FATIGUE VS. HARD LANDING DAMAGE. BOTH ARE BELIEVED TO BE ORIGINAL EQUIPMENT. AIRCRAFT IS FLIGHT SCHOOL TRAINING AIRCRAFT. COULD HAVE THOUSANDS OF LANDINGS ON					
PIPER PA28181	PIPER	HORN 63300014	BROKEN NLG STEERING	02/18/2003 2003031300003	257
PILOT LANDED AT GON WITH REPORTED LOSS OF RUDDER CONTROL IN FLIGHT. FURTHER INVESTIGATION REVEALED THAT NOSE LANDING GEAR STEERING HORN ASSEMBLY TUBING HAD BROKEN ALLOWING RUDDER CABLES TO SLACK. TUBING IS 3/4 INCH OD STEEL. SUSPECT TOW LIMITS WERE EXCEEDED AND CRACKED STEERING HORN DURING PREVIOUS GROUND HANDLING. LIMIT BOLTS WERE NOT BENT AS USUALLY FOUND WHEN TURN LIMITS HAVE BEEN EXCEEDED. ASSEMBLY RETURNED TO PIPER FOR FURTHER ANALYSIS SINCE IMPROPER HEAT TREATING MAY OF					
PIPER PA28R201	LYC IO360A1A	CLAMP MS21919WDG	FAILED ENGINE MOUNT	01/17/2003 2003031200017	
CLAMP PN MS21919WD6 THAT RETAINS THE MIXTURE CONTROL CABLE TO THE ENGINE MOUNT FAILED ALLOWING CABLE TO RESTRICT THE OPERATION OF THE NOSE LANDING GEAR. INSPECT SECURENESS AND ROUTING OF MIXTURE CABLE ON LIKE AIRCRAFT TO PREVENT CABLE FROM RESTRICTING LANDING GEAR TRAVEL.					
PIPER PA28R201	LYC IO360A1A	RHEOSTAT 6743604	OVERHEATED NAV LIGHTS	02/24/2003 2003031400152	
PILOT REPORTED SMOKE IN THE COCKPIT CLIMBING OUT OR A NIGHT VFR FLIGHT. INSPECTED AIRCRAFT AND FOUND NAV LIGHT / INSTRUMENT LIGHT SWITCH / RHEOSTAT HAD OVERHEATED. ORDERED REPLACEMENT SWITCH (PN 587779) AND INSTALLED. OPS CHECKS GOOD. I HAVE SEEN THESE RHEOSTATS GET HOT BEFORE.					
PIPER PA31P	LYC TIGO541*	BELLOWS 9810002004	CHAFED INTERCOOLER	01/22/2003 2003031400147	30
INSUFFICIENT CLEARANCE, BELLOWS ARE CHAFING THROUGH, CAUSED ENGINE FAILURE ON FINAL APPROACH. PART OF INTER COOLER INSTALLATION, STC NR SA3801NM,					
PIPER PA32R301T	LYC TIO540A1A	BAFFLE LW13383	CRACKED OIL SUMP	02/20/2003 2003031300052	501
PN LW13383 SUMP BAFFLE WAS FOUND CRACKED AT THE 6 ATTACHING SCREWS. A FEW OF THE SCREW HOLES WERE COMPLETELY BROKE ALL THE WAY AROUND THE SCREW AND WASHER.					
PIPER PA34200T	ELECTROSYS	SHAFT ALU306	BROKEN ALTERNATOR	03/04/2003 2003031400025	497
AIRCRAFT RIGHT ALTERNATOR DROPPED OFF LINE IN FLIGHT. PILOT RETURNED TO AIRPORT WITHOUT INCIDENT. REMOVED ALTERNATOR AND DISCOVERED DRIVE SHAFT SHEARED. THIS AIRCRAFT HAS THE SINGLE PIECE COUPLING INSTALLED. WHEN SHAFT SHEARS WE HAVE SEEN PIECES CONTAMINANT OIL SYSTEM AND SUBSEQUENTLY CAUSE OIL					
PIPER PA44180		STARTER GEN MZ4220R	MISMARKED ENGINE	03/01/2003 2003031300019	
THIS STARTER WAS RECEIVED AS AN OVERHAULED UNIT. THE BOX AND FAA FORM 81303 INDICATED A BASIC PART NUMBER PN MZ4220, HOWEVER THE DATA PLATE ON THE STARTER WAS MARKED MZ4222R WHICH ROTATES THE					
PIPER PA44180	LYC O360*	BOLT AN313A	MISSING NLG DOWNLOCK	11/21/2002 2003031200001	
THE NOSE LANDING GEAR DOWNLOCK BOLT WAS MISSING, FOUND BROKEN OFF AT NUTPLATE. THIS CONTRIBUTED TO AN INADVERTENT NOSE GEAR RETRACTION. BOLT COULD POSSIBLY HAVE BEEN BENT PREVIOUSLY OR LOOSE.					
PIPER PA44180	LYC O360*	PRECISION HA6	RETAINER 55255	MISINSTALLED CARBURETOR	02/24/2003 2003031300008
PILOT COMPLAINED OF STIFF THROTTLE. FOUND THE HA-6 CARBURETOR VERY STIFF. FOUND THE SEAL RETAINERS FOR THE THROTTLE SHAFT, ACCELERATOR ROD AND ECONOMIZER RODS TO BE SEATED TOO DEEPLY CAUSING THE SEALS TO 'GRAB' THE SHAFTS TIGHTLY MAKING THROTTLE ADJUSTMENTS DIFFICULT. MARVEL SHEBLER ADDRESSED THIS PROBLEM IN S/B A2-78 ISSUED JANUARY 1979. HAVE FOUND A TOTAL OF 5 FACTORY NEW CARBS WITH THIS SAME					
RAYTHN HAWKER800XP		HARNES	MISINSTALLED FIRE BOTTLES	03/07/2003 2003031400142	
CHECKED THE WIRING OF THE ENG FIRE BOTTLES IN SN 8604 BECAUSE DURING A SCHEDULED INSPECTION OF SN 8588 FOUND SQUIBS TO ENG FIRE BOTTLES MISWIRED. IT WAS DISCOVERED THAT IN THEIR SCENARIO, YOU WOULD SEND FIRE RETARDANT TO THE WRONG ENG (PRESS SHOT FOR LT ENG, AND THE RETARDANT GO TO THE RT ENG). DURING INSPECTION OF 8604 USING MM, IT WAS DISCOVERED CONNECTORS GH2 (ENG 2, SHOT 2) & GJ1 (ENG 2, SHOT 1) WERE REVERSED. RESEARCHING RAC PRINT, IT APPEARS THAT SWITCHES RR & RT HAVE SHOT 1 & SHOT 2 LABELING REVERSED IN THE PRINT. LABELING CONTRADICTS THE PRINT AND THE MM. 8604 WAS TESTED PER MM TO VERIFY THEY WERE CORRECTLY MARKED AND THEN BOTTLES WERE CONNECTED CORRECTLY.					
RKWELL NA26565	ALIDSG TFE7313AR	RESTRICTOR 6F3058	BYPASSING SPEED BRAKES	03/20/2003 2003032200080	2011
MAIN ACCOMPLISHED PREFLT INSP AND THEN PILOTS PROCEEDED TO DO THEIR PREFLT INSP. UPON NORMAL EXTENSION OF SPEED BRAKE PANELS, THEY RETRACTED WITH HIGH SPEED AS THOUGH SWITCHES WERE IN THE "GROUND AUTO DEPLOY" POSITION. DISASSEMBLY OF RESTRICTOR VALVE SHOWED THAT IT HAD FAILED INTERNALLY EVIDENCED BY PARTIALLY CRUSHED MESH FILTERS AT EACH END AND SEPARATION OF RESTRICTOR FROM CENTER DIVIDER. THIS IS SECOND OCCURRENCE ON THIS AIRCRAFT, M&D SUBMITTED AT FIRST OCCURRENCE. SUSPECT THAT THIS ASSEMBLY IS NOT SUBSTANTIALLY STRONG ENOUGH TO WITHSTAND INTERNAL PRESSURES.					
RKWELL NA26565	ALIDSG TFE7313AR	RESTRICTOR 6F3058	BYPASSING SPOILER	03/20/2003 2003032500029	2011
DURING PREFLT INSP, MAINT CREW NOTED THAT SPOILERS FULLY DEPLOYED IN LESS THAN 1 SECOND WITH SPOILER SWITCHES SET TO "IN-FLT" MODE. NORMAL DEPLOY TIME IN THIS MODE IS 6-10 SECONDS WHEREAS "GROUND AUTO-DEPLOY" MODE FOR LANDING IS LESS THAN ONE SECOND. IN PROCESS OF TROUBLESHOOTING, IT WAS DETERMINED THAT HYD RESTRICTOR IN SPOILER SYS WAS NOT RESTRICTING FLOW IN DEPLOY MODE BUT WILL RESTRICT IN RETRACT MODE. FURTHER INVESTIGATION DETERMINED THAT RESTRICTOR HAD FAILED. IT APPEARS THAT THE INTERNAL FILTER SCREENS IN THE RESTRICTOR DEFORM ALLOWING THE RESTRICTOR AND DIVIDER PLATES TO FLOAT BACK AND FORTH AND DEFORM TO THE POINT THAT RESTRICTOR AND DIVIDER PORTIONS BREAK					
SKRSKY S76A		MASTER 7625001101102	LEAKING BRAKE SYS	02/12/2003 2003022500083	
PILOT RT MASTER CYLINDER LEAKS.					
SKRSKY S76A		BRACKET A29261	BROKEN ACCESS DOOR	02/12/2003 2003022500095	
RT TRANSMISSION ACCESS DOOR STRUT UPPER ATTACH BRACKET BROKEN. SCRAPPED.					

SKRSKY S76A		BEVEL GEAR 7635109011105	CORRODED M/R GEARBOX	02/13/2003 2003022500111	970
MAIN ROTOR BEVEL GEAR HAS HEAVY FROSTING AND PITTING - GEAR WAS LOAD TESTED AND ACCEPTED PRIOR BY SIKORSKY PER SO NR DF624-0001 ON APRIL 18, 2001. TO BE SENT TO VENDOR.					
SKRSKY S76A		GYRO 7660002113103	DAMAGED VERTICAL	02/28/2003 2003030800039	
IMPACT INDICATOR ON VERTICAL GYRO WAS RED, INDICATING EXCESSIVE IMPACT. TO BE SENT TO VENDOR FOR					
SKRSKY S76A	ALLSN 250C*	INDICATOR 54487129110	INTERMITTENT ENGINE N1	02/13/2003 2003022500109	
LIGHT INTERMITTENT. REPLACED WITH SERVICEABLE PART.					
SNIAS AS350B2		ALTIMETER 066011530101	CONTAMINATED TAILBOOM	02/24/2003 2003031300051	
HYDRAULIC FLUID LEAKING FROM THE TAIL ROTOR CONTROL SERVO ONTO THE RADAR ALTIMETER RECEIVER TRANSMITTER. THE R/T UNIT WAS MOUNTED DIRECTLY UNDER THE TAIL ROTOR CONTROL SERVO WITH NO PROTECTION FROM FLAMMABLE FLUID LEAKAGE.					
SOCATA TBM700	PWA PT6*	PWC 3041211	BLADE COMPRESSOR	FAILED 2003031500123	1449 25
EXPERIENCED A TOTAL POWER FAILURE WHILE DESCENDING FROM FL250 TO FL240. PILOT MADE A SUCCESSFUL DEAD STICK LANDING. INSPECTION OF THE ENG REVEALED A CATASTROPHIC FAILURE OF A COMPRESSOR TURBINE BLADE WHICH RESULTED IN A COMPLETE ENGINE STOPPAGE AND LOCKING UP THE POWER TURBINE. THIS RESULTS IN A LOSS OF PRESSURIZATION, ELECTRICAL GENERATOR POWER AND INSTRUMENT AIR POWER. LEARNED THAT PWC HAS FOUND MANY CT ASSEMBLIES CRACKED IN THE FIELD ON THE 060 SERIES ENGINES.					
UROCOP EC120B	TMECA ARRIU2F	DISPLAY B19030FB02	DEFECTIVE COCKPIT	03/06/2003 2003031900017	610
LANE NR 1 CALCULATOR FAILURE.					
UROCOP EC130B4	TMECA ARRIEL2B	BLOWER 3972A010000	SHORTED TAILBOOM	02/21/2003 2003031500304	15
SINCE DELIVERY OF THE AIRCRAFT THE CONDENSER BLOWER HAS NOT BEEN OPERATIONAL. REPLACED BLOWER					
UROCOP EC130B4	TMECA ARRIEL2B	INDICATOR 78899811	SHORTED NR & NG	02/21/2003 2003031500305	
INSTRUMENT BEGAN TO FAIL INTERMITTENTLY. FINALLY FAILED COMPLETELY. REPLACED INSTRUMENT WITH SERVICEABLE UNIT.					
UROCOP EC135P1	PWA PW206A	MASTER BOX 450235002	FAILED RIGHT SIDE	03/10/2003 2003032500024	2014
DURING A DEFUELING PROCEDURE WITH THE AIRCRAFT BATTERY DISCONNECTED AND THE GPU CONNECTED. THE BATTERY SWITCH TURNED ON AND AFTER APPROXIMATELY 30 MINUTES INTO THE DEFUELING PROCEDURE THE RIGHT HAND ELECTRICAL MASTER BOX STARTED SMOKING. WE QUICKLY DISCONNECTED ALL ELECTRICAL POWER TO THE AIRCRAFT. THIS OCCURRENCE ALSO BLEW AN 8 AMP IN THE BATTERY MASTER BOX AT (F2) LOCATION.					
UROCOP EC135T1		RADAR 071015190101	INOPERATIVE WX RADAR SYS	01/27/2003 2003022500028	963
WEATHER RADAR INOPERATIVE. REPLACED WITH SERVICEABLE UNIT.					
ZINAIR CH2000		NUT MS21044N4	FAILED STAB HINGE BOLT	02/07/2003 2003031300001	
ON BOTH STABILATOR HINGE BOLTS THE NYLON LOCKNUTS BACKED OFF DUE TO THE NYLON PART OF THE NUT BECOMING DETACHED FROM THE NUT ITSELF. THIS HAPPENED IN APPROXIMATELY 100 HOURS TSN.					
ZINAIR CH2000	LYC O235*	NUT MS21044N4	FAILED STAB HINGE BOLT	02/01/2003 2003031300002	100
ON BOTH STABILATOR HINGE BOLTS THE NYLON LOCKNUTS BACKED OFF DUE TO THE NYLON PART OF THE NUT BECOMING DETACHED FROM THE NUT ITSELF. THIS HAPPENED IN APPROXIMATELY 100 HOURS TSN					
ZINAIR CH2000	LYC O235*	EXHAUST PIPE 20179110	CRACKED ENGINE	03/14/2002 2003031400145	
ASSEMBLIES ARE CRACKING WITH LESS THAN 100 HOURS IN SERVICE SINCE NEW. THE CRACKS ARE UNDER THE CABIN HEAT SHROUD AND CAN NOT BE SEEN UNLESS THE SHROUD IS REMOVED. NUMEROUS CRACKS HAVE ALSO BEEN FOUND IN OTHER AREAS OF THESE ASSEMBLIES. IT IS SUGGESTED THAT THE MANUFACTURER BE CONTACTED IMMEDIATELY WITH THE ABOVE INFORMATION AND RECOMMEND CORRECTIVE ACTION. UNTIL THE ABOVE IS CORRECTED BY THE MANUFACTURER, IT IS SUGGESTED BY THIS REPAIR STATION THAT THE EXHAUST SYSTEM BE PRESSURE CHECKED					

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.)	DISTRICT OFFICE  OPERATOR DESIGNATOR	
		ATA Code				
		1. A/C Reg. No.	N-			
Enter pertinent data		MANUFACTURER	MODEL/SERIES			SERIAL NUMBER
2.	<b>AIRCRAFT</b>					
3.	<b>POWERPLANT</b>					
4.	<b>PROPELLER</b>					
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.			
Optional Information: Check a box below, if this report is related to an aircraft <input type="checkbox"/> Accident; Date _____ <input type="checkbox"/> Incident; Date _____						

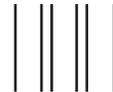
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Use this space for continuation of Block 8 (if required).

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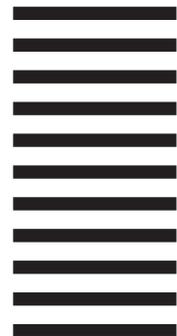
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