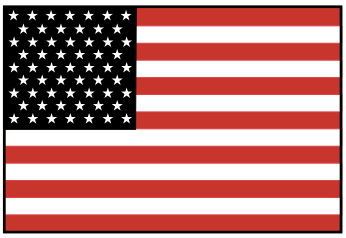
U.S. Department
of Transportation
**Federal Aviation
Administration**

AFS-600
Regulatory Support Division

ADVISORY CIRCULAR
43–16A

AVIATION MAINTENANCE ALERTS



ALERT
NUMBER
278

SEPT.
2001

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AIR NOTES

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: Designee Standardization Branch (AFS-640); P.O. Box 25082; Oklahoma City, OK 73125-5029.

AIRPLANES

AMERICAN CHAMPION

American Champion; Model 7EC; Wing Spar Cracks; ATA 5711

While conducting an annual inspection, the technician complied with the requirements of Airworthiness Directive (AD) 2000-25-02.

AD 2000-25-01 required top inspection holes. Due to these inspection holes, the technician discovered compression cracks on the upper surface of the right rear wing spar that had been hidden under "old spar varnish." He also found several other "questionable cracks" that were later identified as "pencil lines used during the manufacturing process to locate the adhesive lines." Without the inspection holes, he would have had to dismantle the wing to find these defects.

Part total time not reported.

American Champion; Model 7GCBC; Citabria; Main Landing Gear Axle Defect; ATA 3222

Due to a damaged left main landing gear axle, the technician replaced it with new axle hardware. He discovered the new axle hardware was defective.

The new axle nuts had a chamfer cut into the inside diameter where the nut contacts the wheel-bearing washer. The technician contacted American Champion, and they confirmed the chamfered area on the inside diameter of the nut was not correct.

The submitter recommended all owners, operators, and maintenance personnel involved with like or similar aircraft be aware of this anomaly and take appropriate action to preclude installation of any defective nuts.

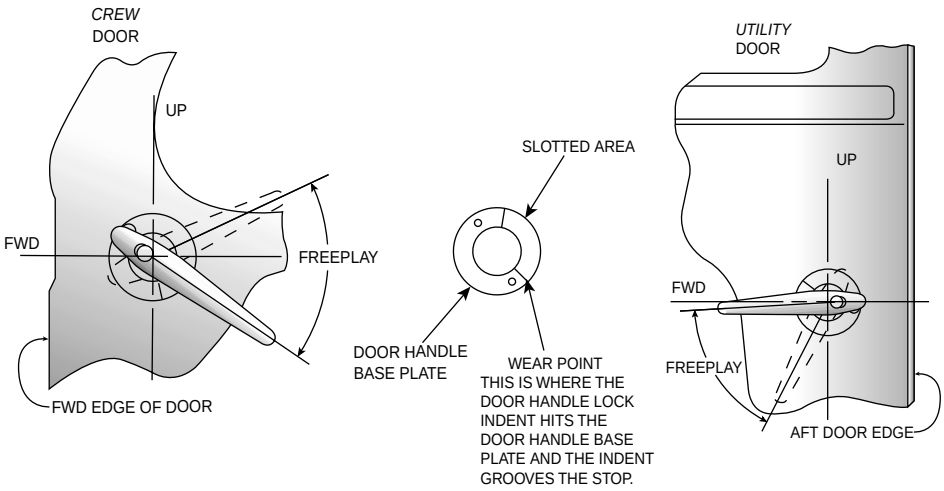
Part total time-0 hours.

BEECH

Beech; Models Debonair, Bonanza, Baron, and Travel Air; Inspection of Interior Door Handles for Wear; ATA 5200

This is an update to a similar article published in the August 2001, edition of this publication. This information was furnished by the FAA, Aircraft Certification Office, ACE-115W, located in Wichita, Kansas. The article emphasizes the importance of checking the interior door handles of **both** the cabin side door handle and utility door handle from the interior of the airplane for proper locking as required by AD 97-14-15.

As noted in the previous article, the Pilot's Operating Handbook provides corrective action required by "Unlatched Door in Flight." Since considerable noise occurs when a door opens in flight, the pilot should not let this occurrence distract him from flying the airplane.



Regular maintenance should identify incorrectly installed door handles or a door handle that has a worn stop on the handle base plate. (See the illustration.)

If the door handle opens the door when rotated, without depressing the handle lock release button, it should be repaired prior to further flight. To correct the door handle lock, remove the door handle, and reinstall it so that the lock release button locks the door in accordance with Raytheon Aircraft Service Bulletin 2693.

If the handle is properly positioned and the door opens without depressing the door lock release button, the handle base plate may be worn.

If the door handle is locked and will only unlock by depressing the handle door lock release button, then no further action is necessary.

Part total time not applicable.

Beech; Model C-23; Sundowner; Defective Fuel Selector Valve; ATA 2823

While complying with Airworthiness Directive (AD) 75-01-04 and Beech Service Bulletin (SB) 0364-289 Revision III, the technician discovered the fuel selector valve was defective.

Both the AD and the SB require that the running torque for the selector valve (P/N 169-920000) not exceed 5 inch-pounds. This selector valve required in excess of 25 inch-pounds of torque to move the valve. After disassembling the selector valve for lubrication, the mechanic discovered the valve cone was severely scored.

Beech supplies a new fuel selector valve kit (P/N 23-9015-1S) that replaces the old style valve.

Part total time-3,296 hours.

Beech; Model A-36; Bonanza; Fuel Pump Failure; ATA 2822

After returning from a flight, the pilot reported that during a descent he lost engine power. When he noticed the fuel pressure was low, he engaged the electric fuel boost pump and restored proper engine operation.

When the aircraft was taxied into the parking place, the technician noticed fuel leaking from the engine-driven fuel pump seal drain. Also, fuel stains were evident in the nose landing gear wheel well and the lower fuselage in the vicinity of the right engine exhaust pipe. Although the leaking fuel could have ignited at any time, there was no evidence of fire. Teledyne Continental Service Bulletin (SB) 01-1 addresses this problem; however, it is not applicable to the fuel pump (P/N 646766-4A1) that was installed in this aircraft. SB 01-1 is applicable to fuel pumps that were manufactured during a 30-month period of time and have not attained 300-hours of operating time. The subject fuel pump was manufactured during the 30-month period of time; however, it had exceeded the 300-hours of operating time.

The submitter recommended revising SB 01-1 to include recurring tests of any fuel pump falling within the date range stated in SB 01-1 regardless of the operating time. Had the leaking fuel ignited during flight, it is very likely that a catastrophic accident would have occurred.

Part total time-608 hours.

Beech; Model 36TC; Bonanza; Cabin Heater Discrepancy; ATA 2140

During an annual inspection, a technician removed the cabin heater to facilitate a leak check.

With the heater (P/N 642663) removed, the technician discovered one of the heat muff (P/N 654316C) support rings was cracked approximately half way around its diameter. If the crack had traveled completely around the support ring, it would have allowed the edge to cut into the engine exhaust pipe. A puncture in the exhaust pipe would have allowed the induction of carbon monoxide exhaust gases into the aircraft cabin.

Maintenance personnel should be aware of the danger presented by this defect and exercise diligence during inspections and maintenance.

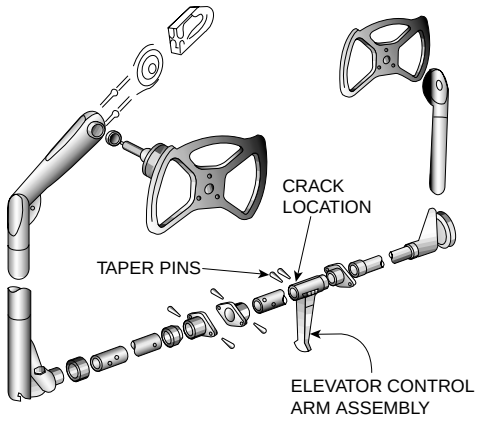
Part total time-116 hours.

Beech; Model C-45H; Elevator Control System Damage; ATA 2730

While complying with the recurring requirements of Airworthiness Directive (AD) 77-19-07, the technician discovered a crack in the elevator control arm.

The crack originated adjacent to the aft side of the taper pin hole and traveled to the left side of the elevator control arm (P/N 187504) casting. (Refer to the illustration.) The submitter stated that when the aircraft was parked, it was exposed to rotor wash from a helicopter landing nearby. He speculated the damage found resulted when turbulence generated by the helicopter caused the elevator to move violently from one stop to the other.

Aircraft total time-7,529 hours.



Beech; Model C-90; King Air; Fuel Indicating Anomaly; ATA 2840

The pilot reported an intermittent problem with the fuel transfer system. The “NO FUEL TRANSFER” light occasionally remained illuminated when fuel was being transferred.

After troubleshooting the system, the technician discovered that, at times, the “NO FUEL TRANSFER” light illuminated when no electrical power was applied to the aircraft. While inspecting the system wiring, he disconnected a cannon plug that appeared to be in good condition. However, he disassembled the cannon plug back shell and discovered severe and extensive corrosion on the back of each pin, and several pins were shorted together. He discovered the cause of the fuel transfer indicating problem was an intermittent short circuit between the pins supplying electrical power to the indicating system.

Many times, strange electrical system anomalies can be traced to corrosion, and technicians should be aware of this possibility.

Part total time-6,474 hours.

Beech; Model BE-95-95; Baron; Landing Gear Failure; ATA 3230

The pilot reported that during an afterlanding roll, the nose landing gear collapsed.

A technician investigated and found the spline portion of the landing gear crank arm (P/N 35-825174), adjacent to the landing gear transmission, was cracked. The crack allowed the arm to flex and open enough to cause the mating gears to separate. He determined the crack was caused by metal fatigue which led to the nose gear collapse.

The submitter recommended that owners, operators, and maintenance personnel of like aircraft conduct frequent periodic inspections of the nose gear assembly to detect cracks and other defects.

Part total time-5,681 hours.

Beech; Model 200; King Air; Defective Fire Warning System; ATA 2610

The flightcrew reported there were false fire warning indications during flight.

A technician found three fire detectors (P/N 473275) installed with “butt splices.” (Refer to the illustration.) The use of “butt splices” in the fire-detection system is contrary to the manufacturer’s technical data. The manufacturer’s data requires the use of “sealed” connectors.

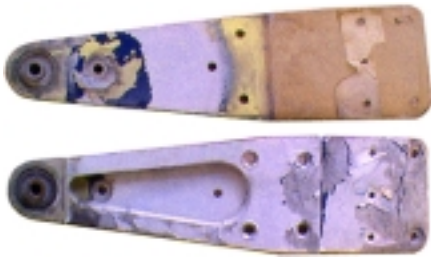
The submitter stated that all maintenance personnel should be made aware of this requirement before they perform maintenance on a fire-detection system.

Part total time not reported.

Beech; Model 1900C; Airliner; Stabilizer and Elevator Corrosion Damage; ATA 5510

While conducting a scheduled inspection, the inspector discovered severe structural corrosion on the horizontal stabilizer and the elevator.

The right rear lower spar cap (P/N 101-620014-48) extrusion exhibited metal corrosion exfoliation on the outboard 6 inches. Also the right outboard and middle elevator hinge brackets (P/N 101-620011-3) were corroded beyond repair. (Refer to the illustration.)



ELEVATOR HINGE BRACKET

HORIZONTAL STABILIZER SPAR CAP

The submitter attributed these defects to age, stress, and metal fatigue. This aircraft was manufactured in 1984 and has accumulated a considerable number of operating hours. The age and number of operating hours on an aircraft are directly proportional to the maintenance and care required to maintain it in an airworthy condition. Therefore, exercise due diligence during inspections and maintenance.

Aircraft total time-31,542 hours.

Beech; Model 1900D; Airliner; Uncommanded Opening of the Cabin Entrance Door; ATA 5210

The flightcrew reported that during a descent for landing, the cabin entrance door opened without command. The crew declared an emergency and landed the aircraft safely.

A technician inspected the door assembly (P/N 129-400034-1) and compiled the following list of discrepancies.

1. Both door handle annunciator switches were stuck closed, and there was evidence of corrosion at the wire attachment points.

2. Both cam latch switches were not properly rigged.

3. The door handle required excessive force to attain the “locked” position. This resulted from a restriction between a door weld and the bushing at the center of the door handle.

4. Two of the locking nuts on the actuating rods were loose.

5. The door handle latching cables were below the recommended tension, and one cable was frayed due to contact with a cable guide.

6. The cable pulley groove was filled with foreign matter forcing the cable to ride high contacting the guide.

There were no maintenance record entries concerning prior problems with the door since the aircraft was originally placed in service. The submitter stated he has found similar defects on other like aircraft and cautioned other operators and maintenance personnel to be aware of these findings.

Part total time-1,015 hours.

CESSNA

Cessna; Models 120, 140, 150, 152, 170, 172, 175, 206, and 207; Corrosion Inspection and Control; (No ATA)

The information for this article was furnished by the FAA, Aircraft Certification Office, ACE-118W, located in Wichita, Kansas. *The article is published as it was received.*

The FAA issued two Safety Recommendations (SR)(00.167 and 01.002) involving Cessna aircraft. The SR’s concern damage caused by corrosion. One of the SR’s, 00.167, involved corroded bolts that were removed from the Fuselage Spar Block of a 1969 Cessna 172K. The aircraft had been based five miles from the ocean in Maryland. The other, SR 01.002, occurred in the United Kingdom and involved failure of the nose gear drag brace bolt on a 1966 Cessna U206A aircraft resulting in a landing accident.

Both of these aircraft were based in areas with a salt-air environment. Maintenance technicians and owner/operators need to take special care for corrosion in such an environment. There are several, FAA and manufacturer’s documents, which provide guidance and information concerning this subject such as Advisory Circulars (AC), Cessna service and structural repair manuals.

Paragraph 501 of FAA Advisory Circular (AC) 43-4A, Corrosion Control for Aircraft, states:

“FREQUENCY OF INSPECTIONS. In addition to the routine maintenance inspections, the following special requirements should be observed:

a. Aircraft operating in a severe environment should be inspected every 15 days.

b. Aircraft operating in a moderate environment should be inspected every 45 days.

c. Aircraft operating in a mild environment should be inspected every 90 days.

d. The aircraft should be washed prior to any inspection for corrosion.

e. Checks should be performed by a crew familiar with corrosion problems and the nature of their treatment.

f. Operators of low utilization aircraft should develop a corrosion inspection and repair program based on calendar time rather than flight hours. Due to the uncertainties that may be encountered in various operating environments, adjustments to the calendar time inspection interval should be made after analysis of corrosion inspection findings."

Other documentation that should be consulted include:

1. Cessna Service Manuals D2065-1-13 and D972-3-13

2. Cessna Repair Manual SESRR03

3. The U.S. Code of Federal Regulations (CFR) 14 Part 43

4. FAA AC 43-13-1B

Corrosion presents a critical problem for safe operation of aircraft, especially older aircraft, and should be given the extra attention it deserves. Corrosion of metals begins when the raw materials are processed to produce a product and it is a natural order of events that they revert to their natural state. We cannot eliminate corrosion; however, there are many things we can do to inhibit or slow down the corrosion process and lengthen the life of aeronautical products.

Part total time not applicable.

Cessna; Model 172S; Skyhawk; Wing Flap Damage; ATA 5753

While conducting a scheduled inspection, the inspector discovered several cracks on the left wing flap.

The wing flap (P/N 0523901-6) lower trailing edge skin was cracked at several locations between 2 and 3 feet from the inboard end. The cracks were adjacent to rivets that secure the skin at the trailing edge, and each crack was between .125 and .250 inch in length.

These cracks may be the result of "built-in" stress or preload when the control surface was manufactured.

Aircraft total time-1,168 hours.

Cessna; Model R182; Skylane; Defective Fuel Supply Plumbing; ATA 2820

During an annual inspection, the technician discovered a leak in the fuel system plumbing.

The steel braided flexible hose (P/N 156001-6D0140), that runs from the engine-driven fuel pump to the carburetor, was leaking severely. There was evidence that fuel had "washed" the engine compartment. This created a very hazardous condition and threatened flight safety.

The submitter stated this hose assembly was placed in service in February 1987. He suggested establishing life limits for all flexible aviation plumbing and stressed the importance of adhering to the life limits.

Part total time-391 hours.

Cessna; Model 182R; Skylane; Defective Vacuum System Plumbing; ATA 3710

A customer delivered his aircraft to a repair station because of low vacuum indication even though the gyro systems were functioning properly.

A technician discovered all the vacuum system hoses appeared to be in good shape; however, they fell apart when touched. He removed both gyros and found several pieces of the inner hose material lodged in the inlet fitting screens.

Although the submitter found no specific date on the vacuum system hoses, he stated they appeared to be original equipment when the aircraft was manufactured in 1982. Once again, it is recommended that all owners, operators, and maintenance personnel strictly adhere to the life limits for these, as well as other, aircraft flexible hoses.

Part total time-2,433 hours.

Cessna; Model 182S; Skylane; Missing Gasket; ATA 3710

While performing an annual inspection, the inspector discovered an oil leak at the engine accessory drive case.

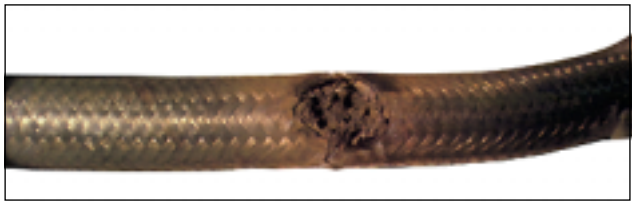
The oil leak appeared to be coming from the lower vacuum pump drive pad. After further inspection and removal of the vacuum pump, the technician discovered the pump gasket (P/N 653487) was missing. It was evident that the previous installer of the pump omitted using the gasket.

The submitter speculated the gasket was omitted when the aircraft was assembled.

Part total time-276 hours.

Cessna; Model A185F; Skywagon; Improper Fuel Vent Line Routing; ATA 2820

While conducting an annual inspection, the inspector discovered that the flexible fuel vapor vent line was defective.



The steel braided outer covering of the flexible line chafed against the “positive” battery cable, which supplies electrical power to the engine starter contact solenoid. When the battery cable insulation wore through the steel braiding, arcing occurred causing a very hazardous condition. (Refer to the illustration.)

The submitter stated this type defect could be avoided by proper routing and security of these components.

Part total time-872 hours.

Cessna; Model 208B; Caravan; Wing Flap Defect; ATA 5753

During a landing approach, the wing flaps would not operate using the normal system. The pilot extended the flaps using the standby system and landed the aircraft safely.

The standby wing flap system does not incorporate the limit switches used in the normal system. The pilot activated the switch longer than necessary, the flap motor continued to run, and the wing flap drive shaft assembly twisted out of the mounting bracket (P/N 2611144-7).

The submitter recommended that pilots be more aware of proper system operation and that manufacturers incorporate limit switches into the standby flap system.

Part total time-3,790 hours.

Cessna; Model 210L; Centurion; In-Flight Engine Failure; ATA 7602

The pilot stated that during a flight, the engine power decreased, and he turned on the fuel boost pump and attempted to adjust the mixture control. The mixture control came loose in his hand, and the engine failed. He made a safe gear-up off-airport landing.

While recovering the aircraft from the field, the technician examined the mixture control cable (P/N 6299505-0101) and discovered it was broken at the point where it entered the protective barrel of the rod-end. He also found ample evidence of corrosion products adjacent to the mixture cable fracture site. He believes the corrosion caused this failure.

Part total time-567 hours.

Cessna; Model 310Q; Fuel Tank Explosion; ATA 2810

The aircraft was placed in a hanger for completion of a scheduled inspection. When the technician applied electrical power to the aircraft and turned on the strobe lights, he heard a loud explosion and immediately turned off all electrical power.

After securing the aircraft, the technician found damage to the left wing fuel tiptank nose cap. He removed the tiptank nose cap and discovered a fuel leak adjacent to a spot weld on the upper strobe light mounting bracket attachment point. The spot welds attach the strobe/navigation light-mounting bracket to the forward bulkhead of the fuel tank. He stated this failure might have occurred due to the weight of the light assembly, extended exposure to vibration, and metal fatigue at the spot welds. He inspected the right wing tiptank and found fuel leaking from the same location and for the same cause.

Airworthiness Directive (AD) 76-08-02, Revision 2, dated January 31, 1983, deals with the subject of sealing the tiptank strobe light installations and references Cessna Service Letter (SL) ME75-16 dated July 11, 1975. Neither of these documents mentions fuel tank bulkhead panel cracks at the light bracket spot welds. The closest reference is found in SL ME75-16, which states: “Along with installation of Service Kit SK402-30B, it remains good practice to inspect for fuel leaks and an obstructed drain/vent hole in the tiptank nose caps at each 100-hour inspection as set forth in earlier Service Letters (reference ME73-4, Item 2 and ME73-4 Supplement 1.)” The quoted references are concerned with fuel leaks associated with the “stat-o-seal” and panel seal.

It is recommended that the FAA consider either revising AD 76-08-02, Revision 2, or issuing a new AD to deal with panel cracks adjacent to the light bracket spot welds.

Aircraft total time-10,544 hours.

Cessna; Model 402B; Businessliner; Engine Exhaust System Failure; ATA 7810

During a landing approach, the pilot experienced a loss of manifold pressure on the right engine. He landed the aircraft safely and reported the occurrence to maintenance personnel.

The technician discovered a hole approximately 1.5 by 3 inches in the lower section of the engine exhaust pipe (P/N 9910295-36). The hole was located adjacent to the number 3 cylinder exhaust pipe.

The submitter recommended subjecting the exhaust system components forward of the slip joints to the same life/overhaul limits that are required for the components aft of the slip joints.

Part total time not reported.

MAULE

Maule; Model MX7-235; Engine Exhaust System Defect; ATA 7800

During an annual inspection, the inspector discovered a crack on an engine exhaust pipe.

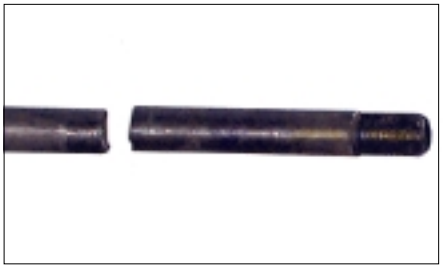
The left exhaust pipe was cracked at the mounting support tab. The crack traveled around approximately 95 percent of the pipe diameter, and complete separation occurred when it was being removed.
It appeared the crack originated adjacent to the weld attachment for the exhaust pipe mounting support tab. The technician also found cracks at the junction of the left muffler exhaust pipe. These cracks were also adjacent to the weld attachment.

Part total time-151 hours.

PIPER

Piper; Model PA 23-250; Aztec; Nose Landing Gear Hardware Broken; ATA 3221

During an annual inspection, the technician discovered a broken nose landing gear bolt.



The bolt (P/N AN6-43) is used to attach the upper nose gear drag link to the airframe structure. (Refer to the illustration.) For some time, the aircraft has been operated from both turf and paved runway surfaces. The submitter gave no further details concerning the circumstances leading up to this bolt failure.

Aircraft total time-8,600 hours.

Piper; Model PA 28-181; Archer; Excessive RPM Drop; ATA 7414

During an engine runup prior to flight, the pilot noticed an excessive RPM drop when he switched to the right magneto.

The technician discovered the right magneto rotor assembly (P/N M3548) cam slot was broken. He stated this is the third broken magneto rotor found in the operator’s fleet of like aircraft. The magneto used on the aircraft is a Slick, Model 4370.

This condition presents a potentially dangerous situation, and the submitter recommended the FAA issue an Airworthiness Directive covering this subject. Maintenance technicians should be alert for the occurrence of this type defect and report all findings to the FAA.

Part total time-1,654 hours.

Piper; Model PA 28-181; Archer; Defective Engine Starter; ATA 8011

A pilot reported the engine would not start, and he heard a strange sound when the starter was engaged.

The technician determined the engine starter was faulty. After he removed and disassembled the starter, he discovered the starter armature (P/N MHB 23995) drive splines were almost completely stripped away. This left shards of steel in the gear housing which contaminated the bearings. The Bendix drive end was not damaged, and the shear pin was still intact.

The submitter speculated the armature splines on the drive end were not properly heat-treated or the shear pin was too hard. He stated this is the seventh starter armature problem he has found.

Part total time not reported.

Piper; Model PA 31-350; Chieftain; Heater Fuel Leak; ATA 2140

During a scheduled inspection, the inspector noticed fuel stain around the front heater drain.

The technician discovered the heater fuel pressure regulator (P/N A23D04) was leaking from the gasket at the upper parting surface. He had complied with the requirements of Airworthiness Directive (AD) 2001-08-01 and the referenced Service Bulletin (SB) A-107 approximately 59 hours prior to this discovery. As required by the inspection criteria, he conducted a heater pressure test and found no defects or leakage.

The submitter recommended the manufacturer consider modifying the design of the fuel pressure regulator to include machining the parts and installation of an “O-ring” seal.

Part total time-160 hours.

Piper; Model PA 31-350; Chieftain; Hydraulic Pump Failure; ATA 2913

During an engine runup prior to flight, the pilot found the right hydraulic pump was inoperative.

When the technician removed and disassembled the hydraulic pump (P/N 1213HBG310), he discovered the shaft was sheared. Further inspection revealed the nozzle, spring, and ball were loose in the small pressed-in fitting on the pressure outlet port of the pump. He found the ball jammed into the pump vanes and speculated this caused the shaft to shear.

Part total time since overhaul-192 hours.

Piper; Model PA 32R-301; Saratoga; Defective Main Landing Gear Strut; ATA 3213

During a preflight inspection, the pilot found hydraulic fluid leaking from the right main landing gear strut and requested assistance from a maintenance shop.

The technician cleaned the suspected leak area, but the leak reappeared in the middle of the main gear strut (P/N 67926-17). The fluid was leaking through a crack in the strut housing below the aft support web. He inspected the left main gear strut and discovered it was cracked in the same location. After removing and replacing both main gear struts, he discovered the new struts had a different part number and were designed differently. The new design incorporates a web support the entire length of the casting.

It would be wise for all operators of like aircraft to inspect for the presence of the old type struts and any sign of leakage from them.

Part total time-1,845 hours.

Piper; Model PA 34-200T; Seneca; Pitot Heat System Inoperative; ATA 3411

After returning from a flight, the pilot reported the pitot heat system was inoperative.

The technician discovered the pitot heat switch assembly (P/N 587-954) was severely corroded. The switch contacts were covered with corrosion, which caused high resistance, produced excessive heat, and restricted the flow of electrical power. He stated the corrosion occurred when rainwater leaked through the windshield.

The submitter recommended checking windshields of like aircraft to ensure they are properly sealed to prevent water entrance.

Part total time not reported.

Piper; Model PA 34-220T; Seneca; Landing Gear Control Failure; ATA 3260

The pilot reported that after takeoff, the landing gear selector switch broke when he selected the "gear-up" position. He was able to land the aircraft safely.

The technician examined the landing gear selector switch (P/N 688131) and found it had "snapped" off even with the instrument panel. It appeared the selector switch shaft was "overstressed" or the material was weak. Since the selector switch was relatively new, he speculated it failed due to overexuberant movement to the "up" position.

The landing gear selector has broken on many other makes and models of aircraft. The submitter recommended that "gentle-but-firm" movement will attain the desired result and extend the longevity of the gear selector.

Part total time-20 hours.

Piper; Model PA 44-180; Seminole; Main Landing Gear Failure; ATA 3213

While practicing "touch-and-go landings," the pilot added power for the "go," and the left main landing gear collapsed. The aircraft came to a stop on the runway, and the occupants were evacuated.

When the aircraft was being moved from the runway, the technician noticed the left main landing gear strut was broken. The strut broke inside the fork casting and was still attached only by the brake hose. The gear was wedged under the left nacelle and wing flap.

The aircraft maintenance records did not reveal any previous landing gear maintenance. At this time, the incident is under investigation.

Aircraft total time-5,737 hours.

Smith (Piper); Model PA 60-601; Aerostar; Wing Structural Damage; ATA 5740

While complying with Aerostar Service Bulletin (SB) 600-136, the technician discovered the left wing attachment fittings were cracked.

The left wing forward- and aft-wing attachment fittings (P/N's 200012-001 and 200010-001) were severely cracked and in danger of allowing wing separation. According to the submitter, these defects were caused by poor design of the wing attachment fittings. Additionally, it is possible that the high number of operating hours may have produced metal fatigue and stress, which contributed to the cracks.

Operators of like aircraft are urged to have these wing fittings inspected and comply with the data contained in SB 600-136 as soon as possible.

Part total time-12,948 hours.

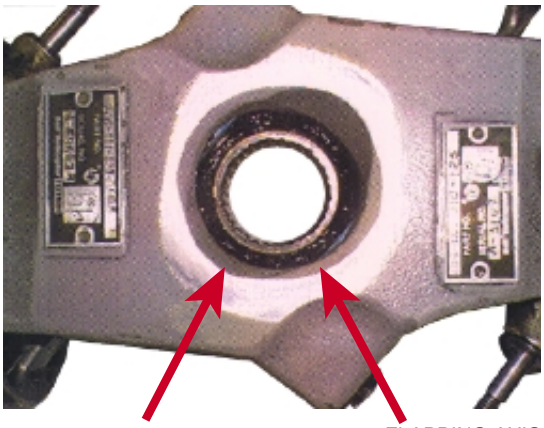
HELICOPTERS

BELL

Bell; Model 206-L3; Long Ranger; Defective Tail Rotor Yoke; ATA 6420

While installing a new tail rotor hub and blade assembly (P/N 206-011-810-153) ,the technician discovered the new assembly was defective.

The technician discovered the "flapping" angle could not be properly adjusted. After investigating this problem, he discovered the yoke assembly (P/N 206-011-819-109) was machined 90 degrees to where the "flapping" cutouts were. This resulted in the static stop (P/N 206-010-742-003) contacting the side and not the stop face. This decreased the hub assembly travel. (Refer to the illustration.)



Part total time-0 hours.

Bell; Model 407; Mast Corrosion; ATA 6230

During a scheduled inspection, the inspector discovered severe corrosion on the mast pole retaining nut threads.

The severity of the corrosion damage was beyond allowable limits and the technician replaced the mast pole (P/N 407-040-038-101) and nut. After removing the mast pole nut, he discovered there was no torque on the retaining nut, and the Pro-Seal was not sealing against the mast pole.

The submitter speculated that water and/or contaminates entered the mast assembly past the Pro-Seal causing the corrosion and damage.

Part total time-943 hours.

EUROCOPTER

Eurocopter; Model EC-120B; Hydraulic System Failure; ATA 6730

After starting the engine during ground operations, the technician noticed the cyclic control felt stiff and movement was “sluggish” in all directions.

The technician removed and replaced the hydraulic system powerpack (P/N GHC100-4). An operational test proved the problem was solved. However, when he removed the filter from the defective hydraulic powerpack, he found “very fine metallic particles in the hydraulic fluid.”

The submitter gave no further explanation for these findings and no details concerning the circumstances.

Part total time-400 hours.

Eurocopter; Model AS350-B2; Ecureuil; Air-Conditioning System Defect; ATA 2100

This helicopter had an Integrated Flight Systems air-conditioning system installed in accordance with Supplemental Type Certificate (STC) SH3509SW.

During an inspection, the technician noticed the air-conditioning circuit breaker was open. He reset the circuit and applied electrical power to the system. Immediately, an observer advised the technician that sparks were coming from the back of the air-conditioner fan assembly. He removed and disassembled the fan motor (P/N 590010-1) and discovered that one of the long case retaining screws had loosened enough to allow the threaded end to contact the fan motor armature. The case screw was worn over halfway through while riding against the armature. The screw shank finally lodged against the armature and prevented it from turning.

The submitter stated he had experienced this problem in the past and began using “Locktite” or a similar product to prevent loosening of the fan motor case screws.

Part total time-877 hours.

Eurocopter; Model AS350-B2; Ecureuil; Defective Tail Rotor Bearing; ATA 6510

During a scheduled inspection, the technician discovered the aft tail rotor bearing had rotated.

The bearing (P/N 83A851BC3) rotated approximately .375-inch inside the rubber bushing (P/N FA3819). The operator was in compliance with the manufacturer's Service Bulletin (SB) 65.00.39 which deals with this subject and offers a periodic lubrication schedule. Also, the manufacturer provides a newer type bearing to which SB 65.00.39 does not apply.

The submitter recommended giving these bearings close scrutiny at every opportunity.

Part total time-2,672 hours.

McDONNELL DOUGLAS

McDonnell Douglas; Model 369FF; Tail Rotor Gearbox Failure; ATA 6520

After completing a 3.5-hour flight, the pilot performed the shutdown procedures. The pilot and technician noticed an odd noise and a slight vibration coming from the tail rotor.

The tail rotor gearbox oil change and chip plug inspection was accomplished 19.3 hours prior to this occurrence. Since the helicopter was due for a 100-hour inspection, the technician drained the tail rotor gearbox oil and inspected the chip plug again. The chip plug did not have any metal deposits; however, it was covered with a black paste material. He examined the black paste material and discovered it contained only extremely small metallic particles, which were not large enough to cause the chip light to illuminate. He disassembled the gearbox and found the input gear shaft was broken. He stated he could not understand why the gearbox did not fail completely.

During the day's flying, there was no evidence of a problem with the tail rotor gearbox and no indication of an impending catastrophic failure. The affected parts were sent to a laboratory for metallurgical testing and analysis.

Part time since overhaul-1,666 hours.

POWERPLANTS AND PROPELLERS

TEXTRON LYCOMING

Textron Lycoming; Models O235, O320, O360, and O540 Series; Cylinder Cracks; ATA 8530

The FAA Service Difficulty Reporting (SDR) program data base recently received several reports concerning cylinder cracks in the engines mentioned above.

All the reports state the cylinders cracked adjacent to the spark plug holes. In some cases, the crack extended from one spark plug hole to the other. Many of these cracks occurred at a very low number of operating hours ranging from 41 hours to 4,065 hours. Out of the 43 reports received, only 6 recorded operating times above 2,000 hours.

Technicians and operators should be aware of the possibility of engine failures due to cylinder cracks and take appropriate actions.

Part total times as stated above.

AIR NOTES

GENERAL AVIATION SHOWCASE EVENT

Great Smoky Mountain Corporate
Operators Symposium
September 24-27, 2001
Holiday Inn SunSpree Resort
Asheville, North Carolina

Corporate Flight & Maintenance Departments, A&P Mechanics/IA, Repair Station Employees, Avionics Techs, Aviation Mgrs. & Pilots

All training sessions count toward AMT/Wings Awards and/or IA Renewal

The North Carolina Department of Transportation (NCDOT) – Division of Aviation, Federal Aviation Administration (FAA) CLT/GSO FSDO along with sponsorship from industry vendors and supporters is sponsoring the Great Smoky Mountain Operators Symposium (GSMOS) to be held September 24-27, 2001, at the Holiday Inn SunSpree Resort, Asheville, NC.

The GSMOS provides a forum for sharing professional and technical knowledge to the aviation industry, **provide IA renewal opportunities** and to bring industry wide professionals together for the promotion of safety.

Check the complete 3-day seminar schedule at: **www.dot.state.nc.us** (airplane icon) or wait for confirmation.

This event qualifies for the AMT Awards program per FAR's. For more Information contact Phil Randall FAA SPM (336) 662-1008.

Return to:
NCDOT Aviation
1560 Mail Service Center
Raleigh, NC 27699-1560

Fax (919) 840-0645
Email tfreeman@dot.state.nc.us
Web site: www.dot.state.nc.us

Official Registration Form/GSMCOS 9/24-27

NCDOT Aviation, 1560 Mail Service Ctr., Raleigh, NC 27699-1560

Name:_____**email:**_____

Address: ___Same as above ___Changed To:_____

Phone(w) (____)_____ **Phone(h)** (____)_____

I am an: ___A&P ___IA ___Repairman ____Avionics Tech ____Student
___Pilot ___Mgt. ___Vendor ____Sponsor

I Will: ___Fly-in ____Drive-in ___

I Will Arrive: ____Sun., Sept. 23 ____Mon., 9/24 ____Tues., 9/25
____Wed., 9/26 ____Thurs., 9/27

I Will Depart: ____Mon., 9/24 ____Tues., 9/25 ____Wed., 9/26 ____Thurs., 9/27

I Will Participate in:	**Cost**
____Seminars	**FREE!**
____Mon., 9/24 **GSMOS Social** (7p.m.-until?) Cash bar & music.	Free + drinks
____Tues., 9/25 **Harrah's Cherokee Casino Trip**	$15 per person
____Wed., 9/26 **Biltmore House Tours**	On your own.
____I have enclosed a check made out to Aviall sent to NCDOT.	Important

GSMOS Golf Tournament –Sept. 24 – Holiday Inn Sunspree

____Please register me for the GSMOS Golf Tournament at $100 per person.

____I have enclosed a check for $100 made out to AMCC and sent to: NCDOT, 1560 Mail Service Center, Raleigh, NC 27699-1560. For information call Phil Randall FAA SPM (336) 662-1008.

____I/my Company is interested in sponsoring the GSMOS Tournament.

ALL AIRWORTHINESS DIRECTIVES ARE ON THE WEB

The FAA, Aircraft Certification and Flight Standards Services are pleased to announce that all Airworthiness Directives (ADs) are now available on the Internet in the Regulatory and Guidance Library (RGL).

The Internet address is: <http://www.airweb.faa.gov/rgl>

In addition, you can find the ADs from the FAA homepage by clicking on "FAA Organizations" and then "Aircraft Certification Service."

This improvement should be of great benefit to aircraft owners, operators, technicians, pilots, and other interested persons.

SUBSCRIPTIONS

The Government Printing Office (GPO) distributes this publication. If you have any questions regarding a subscription to this publication, please direct your questions to GPO.

You may contact GPO at: Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954, telephone (202) 512-2250, fax (202) 512-1800.

When you contact GPO, be specific concerning the publication you are interested in (e.g., Advisory Circular 43-16A). GPO accepts payment in the form of checks and credit cards. Please make your checks payable to the *Superintendent of Documents*.

In the past, we furnished the GPO subscription form in this publication. The older issues which contain the subscription form, may not have current pricing information. Since GPO controls price increases, contact GPO for current subscription information.

ELECTRONIC VERSION OF MALFUNCTION OR DEFECT REPORT

One of the recent improvements to the AFS-600 Internet web site is the inclusion of FAA Form 8010-4, Malfunction or Defect Report. This web site is still under construction and further changes will be made; however, the site is now active, usable, and contains a great deal of information.

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

http://av-info.faa.gov/isdr/

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

SERVICE DIFFICULTY REPORTING PROGRAM

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

A report is filed whenever a system, component, or part of an aircraft, powerplant, propeller, or appliance fails to function in a normal or usual manner. In addition, if a system, component, or part of an aircraft, powerplant, propeller, or appliance has a flaw or imperfection which impairs, or which may impair its future function, it is considered defective and should be reported under the program.

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

The consolidation, collation and analysis of the data, and the rapid dissemination of trends, problems and alert information to the appropriate segments of the aviation community and FAA effectively and economically provides a method to ensure 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 database 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:
Tom Marcotte
Service Difficulty Program Manager
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125

Telephone: (405) 954-6500
9-AMC-SDR-ProgMgr@mmacmail.jccbi.gov

ADDRESS CHANGES

In the past, the Designee Standardization Branch (AFS-640) maintained the mailing list for this publication. Now, the Government Printing Office (GPO) sells this publication and maintains the mailing list; therefore, please send your address change to: U.S. Government Printing Office, **ATTN: SSOM, ALERT-2G**, 710 N. Capital Street N. W., Washington, DC 20402

You may also send your address change to GPO via FAX at: (202) 512-2168. If you FAX your address change, please address it to the attention of: **SSOM, ALERT-2G**. Whether you mail or FAX your address change, please include a copy of your old address label, and write your new address clearly.

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: Phil Lomax (405) 954-6487
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Mailing address: FAA, ATTN: AFS-640 ALERTS, P.O. Box 25082,
Oklahoma City, OK 73125-5029

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You can access current and back issues of this publication from the internet at: http://afs600.faa.gov

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

AVIATION SERVICE DIFFICULTY REPORTS

The following are abbreviated reports submitted between June 17, 2001, and July 20, 2001, 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						
AGUSTA	ALLSN	BELL	GRIP	DAMAGED	06/28/2001	
206AAGUSTA	250C20B		206010102121	MAIN ROTOR HEAD	AUS20010675	583
(AUS) MAIN ROTOR GRIP BLADE BOLT BORES DAMAGED. INVESTIGATION FOUND THAT THE MAIN ROTOR BLADE BUFFER PAD WAS DISLODGED DURING BLADE INSTALLATION. THE BLADE BOLT WAS FORCED IN CAUSING THE EDGE OFTHE BUFFER PAD INTO THE BLADE BOLT HOLE. DAMAGE CAUSED TO BLADE BOLT PNO 206-010-152-003 AND MAIN ROTOR BLADE PNO 206-010-200-033. PERSONNEL/ MAINTENANCE ERROR.						
AIRTRC			WHEEL	FATIGUED	07/28/2001	5100
AT301			40041	MLG	2001FA0000149	
DURING TAKEOFF, RIGHT MAIN WHEEL HALF (OUTBOARD) SEPARATED. PILOT UNABLE TO REGAIN CONTROL AND WENT IN ROAD DITCH AND LANDED INVERTED. MINOR INJURY TO PILOT. WHEEL NUT, BEARING AND SPACER WERE STILL ON AXLE UPON ARRIVAL AT ACCIDENT SCENE. OUTER BEARING RACE HAD PULLED THROUGH WHEEL HALF RACE SHOULDER AND ALL 9 WHEEL BOLTS WERE EITHER BROKE UNDER TENSION OR HAD NUTS PULLED OFF BOLTS LEAVING BOLTS INTACT WITH NUT THREADS STILL EMBEDDED IN BOLT THREADS. CAUSE OF WHEEL FAILURE UNKNOWN AT THIS TIME. IMPROPER WHEEL ASSEMBLY OR INSTALLATION OF OVERSIZE TIRES AND TOO MUCH AIR						
AIRTRC	PWA		ROCKER BOSS	CRACKED	07/16/2001	
AT401B	R1340AN1		399356	EXHAUST VALVE	CA010724009	538
(CAN) THE EXHAUST VALVE ROCKER ARM BOSS CRACKED THROUGH THE PIVOT BOLT HOLES WHICH ALLOWED THE ROCKER ARM TO MOVE WITHOUT OPENING THE EXHAUST VALVE, SEVERLY REDUCING ENGINE POWER. FROM DISCUSSIONS WITH SEVERAL AME'S THE CONSENSUS IS THAT OVERTORQUING OF THE PIVOT BOLT, AT SOME TIME IN THE PAST, COULD CAUSE FATIQUE IN THIS AREA. THIS CYLINDER HAS HAD NO REPAIRS SINCE LAST OVERHAUL.						
AMTR			STRUCTURE	DELAMINATED	05/30/2001	
MK1				WING	AUS20010684	
(AUS) INTERNAL DELAMINATION OF WING/FUEL TANK. SEVERE FUEL LEAKAGE. THE AIRCRAFT IS A HOMEBUILT AND IT IS SUSPECTED THAT INCORRECTTECHNIQUES WERE USED IN THE CONSTRUCTION.						
AMTR	CONT		BLADE	SEPARATED	07/20/2001	
SUPERPULSAR	IO240B		RB2000	PROPELLER	BB1 BOTH PROPELLER BLADES	
DEPARTED THE HUB AT 500 FT AGL ON TAKE OFF. SUSPECT A MANUFACTURING DEFECT. THIS IS A SERIOUS PROBLEM AND MIGHT INVOLVE OTHER BLADES BY THE SAME MFG.						
AVIAT			STRUT	FAILED	03/27/2001	
A1B			35017502	MLG	2001FA0000058	
LANDING GEAR STRUT FAILED AT WELD DUE TO COMPLETE LACK OF WELD PENETRATION. LANDING GEAR SEPARATED FROM AIRCRAFT AT LANDING. DUE TO WELD FAILURE.						
BBAVIA	CONT		SPAR	CRACKED	07/02/2001	
7AC	O200A			LIFT STRUT ATTCH	2001FA0000106	
FOUND A SMALL LONGITUDINAL CRACK BETWEEN THE PLYWOOD DOUBLER PLATE AT THE FORWARD LIFT STRUT ATTACH FITTING AND THE NEXT OUTBOARD RIB ALONG THE REAR FACE OF THE SPAR. WITH A MIRROR IN THE NEXT OUTBOARD RIB BAY, THE CRACK PROTRUDED ABOUT THREE INCHES. WHEN THE FABRIC WAS REMOVED THE CRACK RAN FROM THREE INCHES INBOARD OF THE PLYWOOD DOUBLER AT THE LIFT STRUT ATTACH FITTING TO ABOUT THREE INCHES OUTBOARD OF THE SAME DOUBLER. THE CRACK WAS ONLY VISIBLE ON THE AFT FACE OF THESPAR.						
BBAVIA			STRUT	DEFECTIVE	06/07/2001	
7CCM				WING STRUT	2001FA0000020	
WING STRUTS HAD FILLED WITH WATER FROM SITTING OUTSIDE. RUST STAINS VISIBLE FROM OUTSIDE OF STUT. WHEN POKED WITH AIRAWL IT PUSHED A HOLE INTO STRUT AND DRAINED WATER. DRILLED A .0312 HOLE IN BOTTOM OF OTHER 3 STRUTS AND WATER CAME OUTIN EXCESS OF 1 CUP EACH. OWNER NOTIFIED OF UNAIRWORTHY						

BBAVIA CONT SPAR CRACKED 05/20/2001
7CCM C9012F WING CA010628043
(CAN) TO CARRY OUT AD 2000-25-02, ADDITIONAL HOLES WERE CUT IN EACH LOWER WING PANEL. NO PROBLEMS WERE FOUND. REMOVED WING ROOT FAIRINGS AND FABRIC ON TOP OF BOTH WINGS JUST TO BE SURE IN WING ROOT AREA. FOUND BOTH FWD SPAR ROOT ATTACH POINTS CRACKED AT THE ENDS. ALSO ONE LONG CRACK APPROX. 1 INCH DOWN FROM TOP TO BOTTOM OF SPAR APPROX. 4 FT LONG BETWEEN ROOT /STRUT WHICH WAS NOT SEEN UNTIL FABRIC WAS COMPLETELY REMOVED. THE OTTAWA AIRWORTHINESS OFFICE WAS CONTACTED.

BBAVIA ARM WORN 05/26/2001 652
7GCBC 189502 CARBURETOR 20010613CW006
AN4 BOLT ACTS AS TERMINAL END OF CARBURETOR HEAT CABLE AND IS FREE TO ROTATE IN HOLE DRILLED NEAR END OF SHAFT ASSY ARMOF CARB HEAT BUTTERFLY VALVE IN CARB AIR INTAKE BOX. FORE AND AFT MOVEMENT, RESULTING FROM CARB HEAT APP. HAS ELONGATED HOLE IN ARM AND CUT BOLT APPROX .7500 THRU ITS DIAMETER, ALLOWING APPROX .3125 FREE TRAVEL OF ARM AND FREE VERT DISPLACEMENT OF CARB HEAT BUTTERFLY VALVE FROM FULLY CLOSED TO APPROX .5000 OPEN. REPAIR ACCOMPLISHED BY REAMING OUT HOLE ON ARM TO ACCEPT BUSHING TO RETAIN AN4 BOLT OR TO ACCEPT AN5 BOLT. THEREBY EXPANDING SURFACE BRG CONTACT BETWEEN ARM AND BOLT. FUTURE WEAR CAN BE MINIMIZED BY CONTINUED ATTENTION TO LUBRICATION OF BOLT.

BBAVIA LYC SPAR CRACKED 06/29/2001
7KCAB IO320* 5262 WING 2001FA0000123
DURING INSPECTION OF RIGHT WING, A CRACK WAS FOUND ON THE AFT SIDE OF THE FORWARD WOOD SPAR, 79 INCHES OUTBOARD FROM THE BUTT RIB. THE 5 INCH LONG, HORIZONTAL CRACK WAS LOCATED AT THE COMPRESSION MEMBER AND RAN THROUGH THE HOLES FOR THE DRAG WIRES. UNDETERMINED CAUSE.

BBAVIA LYC PULLEY SEIZED 06/06/2001
8GCBC O360C2E 12395 FLAP SYSTEM CA010628016
(CAN) LT AND RT PULLEYS FOUND SEIZED AT WING ROOT(100 HOUR INSP.) BOTH CABLES FREYED AND UNSERVICEABLE. (LT/RT) AT POSITION OF PULLEY.SOLID ALUMINUM PULLEYS, NO BEARING , DIFFICULT TO KEEP LUBRICATED. HIGH POTENTIAL FOR INFLIGHT FLAP CABLEFAILURE.

BEECH PWA BEECH RIB CRACKED 05/22/2001 8742
100BEECH PT6A28 115610010347 115610010169 ELEVATOR CA010625038
(CAN) WHEN REMOVING RH ELEVATOR FOR INSTALLATION OF UPDATE KIT # 100-4005-1SWAS FOUND INBOARD RIB CRACKED TWO PLACES ATFORWARD END. RIB REPLACED WITH FACTORY NEW.

BEECH PWA WINDSHIELD FAILED 06/26/2001 3218
200BEECH PT6A41 10138402515 COCKPIT CA010627056
(CAN) AIRCRAFT WAS IN LEVEL FLIGHT AT 24000 FEET ON AUTOPILOT WHEN LT WINDSHIELD SHATTERED. FLIGHT CREW DEPRESSURIZED AND DESCENDED. AIRCRAFT RETURNED WITHOUR FURTHER INCIDENT.

BEECH CONT HOSE FOULED 07/10/2001
58 IO520C BRAKE AUS20010758
(AUS) LT AND RT MAIN LANDING GEAR BRAKE LINES FOULING ON LANDING GEAR DOORS DURING RETRACTION. INVESTIGATION FOUND THATTHE BRAKE HOSES WERE APPROXIMATELY 53.975MM (2.125IN) LONGER THAN THOSE FITTED TO SIMILAR AIRCRAFT. IN ADDITION THE BRACKETS PNO 35-815264-1 AND PNO 35-815264-2 WHICH ATTACH THE HOSES TO THE MLG LEGS WERE FITTED TO THE WRONG SIDES. PERSONNEL/MAINTENANCE ERROR.

BEECH PLATE CORRODED 06/06/2001 3278
65B80 9664000093 RUDDER 2001FA0000052
DURING ANNUAL INSPECTION, UPPER AND MID RUDDER ATTACH FITTING PLATES (THESE CONTAIN THE BEARINGS) WERE FOUND TO BE SEVERELY EXFOLIATED. THE UPPER RUDDER ATTACH PLATE EXFOLIATED TO THE POINT THAT THE ATTACH POINT HAD FAILED. THE RUDDER COULD BE MOVED APPROXIMATELY SIX INCHES OUT OF ITS PLANE OF ROTATION DUE TO THE UPPER ATTACH POINT FAILURE. SUSPECT THAT INSUFFICIENT OR INFREQUENT INSPECTION OF THE AERA ALLOWED THE CORROSION TO PROGRESS TO THE EXTENT OF ATTACH POINT FAILURE.

BEECH AIR BOX CRACKED 05/31/2001 2356
95B55 9691910016 RT ENGINE 2001FA0000074 69
RIGHT ENGINE AIRBOX DISPLAYS MORE THAN NORMAL WEAR DUE TO VIBRATION INDUCED CRACKING OF AIRBOX COMPONENTS.

BEECH GARRTT DUCT FAILED 06/22/2001
B100 TPE331* 973800011 CABIN PRESSURE 2001F00164
WHILE TROUBLESHOOTING POOR CABIN PRESSURIZATION, FOUND FAILED HOSE IN LEFT ENGINE AIR SUPPLY LINE TO CABIN. THIS CAUSED PRESSURIZATION TO WORK POORLY, BECAUSE THERE WAS NO INPUT TO CABIN FROM LEFT FLOW PACK. SUSPECT DUCT FAILED DUE TO AGE.

BEECH PWA SWITCH INTERMITTENT 06/15/2001 6147
B200 PT6A42 1013841379 COCKPIT CA010627055
(CAN) WHEN LANDING GEAR SELECTED UP AFTER TAKE OFF, GEAR DID NOT RETRACT. GEAR SELECTED BACK DOWN WITH NORMAL DOWN AND LOCKED INDICATION ON ALL GEAR. NORMAL LANDING CARRIED OUT WITHOUT INCIDENT. TROUBLESHOOTING FOUND INTERMITTENT MIRCOSWITCH CONTACTS IN LANDING GEAR SELECTOR SWITCH ASSEMBLY WHEN HANDLE SELECTED UP. ASSEMBLY REPLACED AND GEAR SWINGS COMPLETED. NO FURTHER FAULTS.

BEECH PWA BRACKET MISMANUFACTURE 05/18/2001
F90 PT6A135 11581102011 998100753 SWITCH MOUNT CA010625033
(CAN) SWITCH MOUNT FLANGE NOT BENT PROPERLY PER DRAWING TO OBTAIN 90 DEGREE RELATIONSHIP WITH PIVOT POINT. THIS RESULTSIN A SMALLER RANGE OF ADJUSTMENT. SWITCH P/N 622EN51 (HONEYWELL) INTERNAL SPRING IS SOSTIFF(3-6LBS) THE BRACKET FLEXES EXCESSIVELY AS THE SWITCH IS BEING ACTIVATED. THIS ALSO RESULTS IN REDUCING RANGE OF ADJUSTMENT. HAVE TALKED TO RAYTHEONTECH SUPPORT.

BELL LYC BELL SKIN CRACKED 05/25/2001
204B T5313B 205030899009 TAIL BOOM CA010625047
(CAN) CRACK IN SKIN DUE TO BROKEN STIFFENER INSIDE FIN. APPROX LOCATION IS FSTA 444.75, WATERINE 85 RIGHT BUTTLINE 3.0.STIFFENER P/N 205-030-899-036 ALSO RIB P/N 204-030-827-015 WAS DAMAGED BY BROKEN STIFFENER.

BELL ALLSN STRAP CRACKED 07/12/2001
206B 250C20 206031200118 FUSELAGE CA010724012
(CAN) WHILE INSTALLING ELECTRICAL EQUIPMENT, A CRACK WAS FOUND ON THE AFT OUTBOARD RADIUS, STATION 100.8. THE CRACK STARTED FROM THE EDGE OF THE STRAP AT A TOOLING MARK MADE EITHER DURING MANUFACTURE OR PREVIOUS INSTALLATION. THE CRACK IS APPROXIMATELY 2 1/2 INCHS LONG, MOVING FORWARD AND OUTBOARD. THE STRAP WAS REPLACED.

BELL ALLSN FITTING CORRODED 06/07/2001 13109
206L 250C20R 206030111003 FUSELAGE CA010724032
(CAN) THE FITTING WAS FOUND CORRODED ON 1200 HOUR INSPECTION AND NEW PART 206-033-173-001 WAS INSTALLED. THE ORIGINAL PART IS MANUFACTURED FROM MAGNESIUM WHERE THE NEW PART IS ALUMINUM SO AFTER 13109 OF FLYING ON A AIRCRAFT MANUFACTURED IN 1978 THIS WOULD NOT BE UNUSUAL. WE SHOULD GET MUCH BETTER SERVICE FROM THE ALUMINUM FITTING.

BELL ALLSN HOSE LEAKING 07/03/2001
206L 250C20R2 206063600 206063688001 FUEL SYSTEM CA010725031
(CAN) DURING REFUELING OPERATION, FUEL WAS OBSERVED LEAKING FROM TANK VENT HOSE ASSEMBLY WHEN TANK WAS FILLED TO CAPACITY. HOSE APPEARS TO HAVE DETERIORATED WITH AGE ALLOWING FUEL TO LEAK. DUE TO THIS DEFECT ANOTHER AIRCRAFT WAS VERIFIED BY PRESSURE TESTING THE VENT HOSE ASSEMBLY. IT WAS ALSO FOUND TO BE LEAKING. BOTH AIRCRAFT HOSES WERE REPLACED AND SYSTEMS CHECKED SERVICEABLE. MANUFACTURER OF AIRCRAFT CURRENTLY DOES NOT HAVE A RETIREMENT OR TEST SCHEDULE FOR THESE

BELL ALLSN FUEL CONTROL MALFUNCTIONED 06/19/2001
206L3 250C* 25490925 ENGINE HEEA073696 ENGINE WOULD HIT 850 DEGREE ON START. ADJUSTING START/DERICH AND START/ACCELERATION TO MINIMUM WOULD NOT BRING THE ENGINE TO AN ACCEPTABLE START TEMPERATURE. IN SHOP FOR REPAIR.

BELL PWA TUBE CRACKED 05/19/2001
212 PT6A34 212040233001 TRANSMISSION OIL CA010627052
(CAN) DURING CRUISE 300 FT AGL, MAIN TRANSMISSION OIL PRESS WAS NOTICED FLUCTUATING. AN IMMEDIATE PRECAUTIONARY LANDINGWAS CARRIED OUT. A/C WAS INTERMEDIATELY SHUT DOWN. UPON INVESTIGATION TUBE ASSY P/N 212-040-233-001 IN HELL HOLE WAS FOUND LEAKING. TUBE REPLACED TRANSMISSION FILTER WAS INSPECTED NO CONTAMINATION WAS FOUND. 6 LITRES OF OIL WAS ADDED. (12 L MAX CAPACITY) AIRCRAFT GROUND RUN & RETURNED TO SERVICE.

BELL GEARBOX MAKING METAL 06/19/2001 13445
412 212040004009 TAIL ROTOR ERAA074626 GEARBOX IS MAKING METAL. BEARINGS BREAKING DOWN. ACTION TAKEN: OVERHAULED, DISASSEMBLED, CLEANED, VISUALLY INSPECTED AND NDT. C/W TB 412-99-157. INSTALLED NEW BEARINGS OP SHAFT, EXCLUDER ASSY AND ALL SEALING ELEMENTS. REASSEMBLED 90 DEGREE GEARBOX AND CHECKED BACKLASH. .009, .009, .009 REPACKED COUPLING WITH GREASE DATED GREASE DATED NOV. 12, 1999.

BELL HOSE DAMAGED 06/20/2001
412 70077P140B370 FUEL SYSTEM HEEA073765 SHORTLY AFTER TAKEOFF, BOTH FUEL TRANSFER CAUTION LIGHTS ILLUMINATED. THE FUEL QUANTITY INDICATOR SHOWED BOTH FORWARD FUEL CELLS EMPTY AND MID TANKS SHOWING 50 LBS. WITH 1500 LBS ON BOARD. REPLACED 3 EACH HOSES. (P/N 70-077P140B370, P/N 70-077P288W294, P/N 412-061-610-103)

BLANCA FRNKLN FLAP DEPARTED 04/23/2001
14132 6A4150B3 LT WING 2001FA0000185
LT FLAP SEPARATED FROM A/C AT ABOUT 500 FT WHILE TURNING DOWNWIND TO AIRPORT. A/C WAS BEING CONFIGURED FOR LANDING AT THE TIME OF SEPARATION. 80 MPH GEAR DOWN AND THE FLAP HANDLE WAS PULLED FOR FULL FLAP. AN IMPULSE WAS FELT IN THE HANDLE WHICH I FIRST THOUGHT WAS A BROKEN FLAP CABLE AND IMMEDIATELY RETRACTED THE FLAPS OR IN THIS CASE THE FLAP. THE A/C WAS STABLE AND CONTROLLABLE SO MORE POWER WAS ADDED AND LANDED FASTER THAN NORMAL. MOISTURE HAD COLLECTED IN THIS AREA AND COMPROMISED THE WOOD AND GLUE CAUSING THE FAILURE OF THE OUTBOARD HINGE RIB, INSPECTION AT THIS AREA IS ONLY POSSIBLE BY CUTTING A HOLE. THE INBOARD RIB OF THE FLAP FAILED, THIS WAS SECONDARY AFTER

BOLKMS HEAD BINDING 06/13/2001 11983
BO105S 10531714 TAIL ROTOR ERAA074617 T/R ASSY IS BINDING. REPAIRED, PARTIAL DISASSEMBLY, VISUALLY INSPECTED. FOUND NO CAUSE FOR BINDING, INST'D NEW GRIP BUSHINGS AND SEALS. CHECKED FRICTION FORCES 10N AND 17N (MAX 25N) REASSEMBLED T/R ASSY AND MARVEL BALANCED ALL WORK IAWBO105 MM 32, MARVEL MANUAL REM 301.

BOLKMS HEAD BINDING 06/13/2001 13133
BO105S 10531714 TAIL ROTOR ERAA074618 THIS INFORMATION FOR FAA SDR. CC: AMERICAN EUROCOPTER CORP. T/R ASSY IS BINDING. ACTION TAKEN: FOUND INNER SLEEVE AND BLADE MOUNTING, FORK BEARING BUSHINGS COATED WITH TEFLON FILM REPAIRED FOR BINDING. DISASSEMBLED, CLEANED, VISUALLY INSPECTED, REASSEMBLED WITH NEW SEALS AND BALANCED. ALL WORK DONE IAW MBB-BO105 REM 301, MM CHAP 34 & 107 & MARVEL BOOK..

BOLKMS HEAD STIFF 06/15/2001 13133
BO105S 10531714 TAIL ROTOR ERAA074623 THIS INFORMATION FOR FAA SDR. CC: AMERICAN EUROCOPTER CORP. STIFF T/R PEDALS AT 100% FOUND NO CAUSE FOR BINDING. ACTION TAKEN: DISASSEMBLED, CLEANED & VISUALLY INSPECTED. REASSEMBLED USING NEW BUSHINGS & SEALS. C/W FRICTION CHECK (TESTED 3N & 44) & MARVEL BALANCED. ALL WORK IAW BO105 REM 301 & MM CH 33 & 34 & MARVEL BOOK.

BOLKMS HEAD STIFF 06/18/2001 12841
BO105S 10531714 TAIL ROTOR ERAA074624 T/R ASSY HAS HEAVY LEFT PEDAL. ACTION TAKEN: REPAIRED, DISASSEMBLED, CLEANED, VISUALLY INSPECTED. INSTALLED NEW GRIP BUSHINGS AND SEALS. INST'D SERVICEABLE CONTROL LEVERS. REASSEMBLED AND BALANCED ALL WORK IAW BO105 REM 301 MM 33,34.

BOLKMS HEAD BINDING 06/15/2001 3137
BO105S 10531714 TAIL ROTOR ERAA074621 T/R ASSY IS BINDING. FOUND NO ABNORMAL WEAR OR DEFECTS. DISASSEMBLED, CLEANED AND INSPECTED BUSHINGS ON INNER SLEEVE. REMOVED AND REPLACED BUSHINGS AND SEAKS IN BLADE MOUNTING FORKS. REASSEMBLED AND BALANCED. ALL WORK DONE IAW MBB BO105 REM 301, MBB-BO105 MM CHAPTERS 34& 107 AND MARVEL BOOK.

BOLKMS SKID MISOVERHAULED 05/31/2001
BO105S 10550103 MLG ERAA073274 SKID TUBE ISSUED TO AC 125EH BUT COULD NOT BE INSTALLED. SKID TUBE WAS OVERHAULED AND RETURNED WITH NUT PLATES NOT LINING UP WITH SKID SHOES.

CESSNA FITTING CRACKED 05/25/2001
152 04310093 VERTICAL STAB 2001FA0000091
DURING ROUTINE 100 HR INSPECTION, MINOR CORROSION WS FOUND ON BOTH LEFT AND RIGHT VERTICAL STABILIZER ATTACH FITTINGS, APPROX BS 200.4. UPON REMOVAL OF CORROSION, A CRACK WS FOUND IN THE RADIUS OF THE RIGHT FITTING APPROXIMENTLY .7500 OF THE WAY ACROSS AND APPROX .50 PERCENT OF THE THICKNESS DEEP. PROBABLE CAUSE: ROUTINE STRESS SOLUTION: TIME LIFE REPLACEMENT OF ATTACH FITTINGS.

CESSNA RIB BROKEN 06/06/2001 419
172 RUDDER 2001FA0000098
UPPER RUDDER RIB WAS FOUND BROKEN AT THE OPENING FOR UPPER HINGE BOLT INSTALLATION ACCESS. THIS TYPE OF DAMAGE IS A REOCCURRING PROBLEM DUE TO A LACK OF PROPER GUST LOCKS FOR THE RUDDERS, WIND SLAPPING OF THE RUDDER WITH THE ARM OF THE BALANCE WEIGHT CAUSING CRACKS IN THE RIB WEAK POINT EVEN WITH THE ADDED DOUBLER. PROPER SECURING THE RUDDER WHEN OUTSIDE,MAY PREVENT FURTHER DAMAGE.

CESSNA LYC AIR BOX DAMAGED 08/08/2001
172N O320* 05521644 ENGINE 2001FA0000179
NOTED: DURING ANNUAL INSPECTION, CARBURETOR AIR BOX OUTLET/INLET FOR CARBURETOR HEAT SWEDGED ONTO AIR BOX. ROUND METAL FLANGE VIBRATING AND CHAFING WHERE SWEDGING DONE. GETS LOOSE AND CHAFES ITSELF TO PIECES. COULD EVENTUALLY BREAK, ALLOWING HOSE TO FALL OFF AND CARBURETOR TO INGEST THIN

CESSNA CHECK VALVE MISINSTALLED 07/06/2001 1731
172R S23591 LT FUEL TANK 2001FA0000171
WHEN FUEL TANKS WERE FILLED TO ABOVE 35 GALLONS, HIGH AMBIENT TEMPERATURE CAUSED FUEL TO LEAK FROM VENT TUBE. REMOVED LEFT FUEL BAY INSPECTION PLATE AND FOUND THAT THE FUEL VENT TUBE INVERTED CHECK VALVE S2359-1 ALSO INVERTED FROM FACTORY. ROTATED 180 DEGREES TO CURRENT POSITION. INSPECTION PLATE SHOWED NO SIGN OF EVER BEEN REMOVED.
CESSNA HINGE PIN BROKEN 06/15/2001 1722
172R 051701912 CABIN DOOR 2001FA0000172
DURING A PHASE II INSPECTION, FOUND LEFT AND RIGHT LOWER CABIN DOOR HINGE PINS, BROKEN. IT APPEARS THAT THE CABIN DOORWAS NOT INSTALLED PROPERLY FROM THE FACTORY, CAUSING UNDUE STRAIN ON LOWER
CESSNA LYC GYRO FAILED 06/04/2001 294
172R IO360A1C 101490159 ATTITUDE 2001FA0000102
GYRO TUMBLED IN FLIGHT AND WOULD NOT RE-ERECT. MAINTENANCE TROUBLESHOOTING REVEALED NO DEFECTS WITH INSTRUMENT AIR SYSTEM. GYRO WAS REPLACED WITH A SERVICEABLE OVERHAULED UNIT. SYSTEM RETESTED AND REPLACEMENT GYRO FUNCTIONS NORMALLY. AIRCRAFT AND SYSTEM HAVE BEEN MAINTAINED AS PER MANUFACTURERS RECOMMENDATIONS SINCE NEW.
CESSNA BOLT MISINSTALLED 05/30/2001
172S S3461111 LEFT STRUT 2001FA0000023
BOLTS ARE INSTALLED BACKWARDS, POINTING FORWARD.
CESSNA LYC PREAIR SERVO MALFUNCTIONED 06/29/2001 1119
172S IO360L2A RSA5AD1 FUEL INJECTION 2001FA0000129
RPM SET TO 1500 FOR PURGING FUEL VAPORS PRIOR TO TAXI, TAXI AND RUN UP WERE NORMAL. WHEN FULL THROTTLE WAS APPLIED FORTAKE OFF THE ENGINE WOULD NOT DEVELOP FULL POWER. IT WOULD ONLY DEVELOP 2000 RPM. MAINTENANCE INSTALLED CLEAR FUEL LINE ON OUTLET LINE FROM FUEL INJECTION SERVO IAW PRECISION AIRMOTIVE TROUBLESHOOTING TECHNIQUES. THE THROTTLE AND MIXTUREWERE OPENED TO SIMULATE ENGINE OPERATION, VAPOR BUBBLES WERE OBSERVED FOR APPROXIMATELY 10 MINUTES FLOWING FROM THE FUEL SERVO. AFTER 10 MINUTES, THE LINE FILLED WITH FUEL AND THE ENGINE HAD COOLED. THE ENGINE WAS STARTED AND ALL OPERATION NORMAL WITH FULL POWER BEING DEVELOPED. AIRCRAFT RELEASED FOR TEST FLIGHT. TEST
CESSNA LYC CYLINDER OVERHEATED 06/29/2001 1116
172S IO360L2A LW12427 ENGINE 2001FA0000130
PILOT REPORTED ENGINE STARTED RUNNING ROUGH IN FLIGHT AND LOOSING ALTITUDE. MADE EMERGANCY LANDING, WENT OFF END OF RUNWAY AND WENT UPSIDE DOWN. AIRCRAFT RIGHTED AND MOVED TO HANGER. MAINTENANCE FOUND #2 CYLINDER EXHAUST PUSHROD BENT INHALF & BROKEN, THE PUSHROD HOUSING BENT AND PULLED LOOSE FROM CASE WITH SUBSIQUENT OIL LOSS. THE INTAKE PUSHROD & HOUSING WAS BENT. WHEN THE VALVE COVER WAS REMOVED BOTH VALVES WERE CLOSED AND NOT STUCK. THE VALVES WERE REMOVED FROM THECYLINDER AND FELL OUT OF THE GUIDES FREELY, THEY WERE FREE OF CARBON DEPOSITES AROUND STEMS. BOTH VALVE SEATS WERE BURNED & THE INTAKE VALVE WAS ALSO BURNED AROUND THE SEATING AREA.
CESSNA LYC SERVO FROZEN 07/18/2001 1053
172S IO360L2A 25765362 FUEL INJECTOR 2001FA0000145 543
SECOND FLIGHT OF THE DAY, TEMP 89F, DA 9444. ENGINE START WAS DIFFICULT, TAXI AND ENGINE RUN UP NORMAL. AIRCRAFT TOOK THE RUN WAY FOR TAKE OFF. WHEN THROTTLE WAS OPENED TO FULL POWER, ENGINE HAD POPPING NOISE AND WOULD ONLY DEVELOP 2000 RPM. TAKE OFF WAS ABORTED FOR LOW POWER. A CLEAR LINE WAS INSTALLED FROM THE FUEL INJECTION SERVO TO THE FLOW DIVIDER IAWPRECISION AIRMOTIVE TROUBLE SHOOTING MANUAL AND EXCESSIVE VAPOR IN THE LINE WAS DISPLACING THE FUEL WHEN THE ENGINE WASRUN. THE ENGINE WAS ALLOWED TO COOL COMPLETELY AND RESTARTED, NO VAPOR WAS DETECTED AND ALL OPERATION WAS NORMAL INCLUDING FUEL FLOW WITH THE ENGINE DEVELOPING FULL POWER. AIRCRAFT TEST FLOWN AND
CESSNA CONT HOSE DISINTEGRATED 06/27/2001
182R O470* 0701030807 VACUUM SYSTEM 2001FA0000108
CUSTOMER REPORTED LOW VACUUM INDICATION BUT GYROS RUNNING OK. INITIAL INVESTIGATION ALL HOSES LOOKED OK, HOWEVER WHEN HOSES WERE TOUCHED, FELL APART. THE ABOVE REFERENCED PN IS FOR ONE OF THE VACUUM GAUGE HOSES, HOWEVER ALL INSTRUMENT HOSE WERE OF THE SAME TYPE AND ALL FELL APART WHEN TOUCHED. BOTH GYROS WERE REMOVED FROM INLET FITTINGS (SCREENS ON INLETPORTS STOPPED MATERIAL FROM GETTING IN INSTRUMENTS). A TEMPORARY IN LINE FILTER WAS INSTALLED ON THE INLET SIDE OF VACUUM PUMP TO PREVENT MATERIAL FROM GOING INTO THE PUMP AND THE AIRCRAFT WAS GROUND RUN. NO DATES WERE FOUND ON THE HOSES. THE NUMBER 04A WAS ON SEVERAL HOSES EVERY 6 INCHES. THEY APPEAR TO BE ORIGINAL
CESSNA ELEVATOR WEAK 06/14/2001 276
182S 123460020 RT SIDE ELEVATOR 2001FA0000064
WHILE PERFORMING AN ANNUAL INSPECTION ON THIS AIRCRAFT, SEVERAL WRINKLES AND LOOSE RIVETS WERE DISCOVERED ON BOTH ELEVATORS ALONG WHERE THE BALANCE TAB ATTACHES TO THE ELEVATOR SPAR. THE STRUCTURE AROUND THIS AREA APPEARED VERY WEAK AND FLEXIBLE. CESSNA WAS CONTACTED FOR TECHNICAL ASSISTANCE. AT CESSNAS REQUEST, NEW REPLACEMENT ELEVATORS WERE INSTALLED, AND THE OLD ONES WERE RETURNED FOR AN ENGINEERING EVALUATION. ALL INSPECTORS ARE URGED TO VIGILANT FOR SUCH CONDITION ON
CESSNA ELEVATOR WEAK 06/14/2001
182S 12346001 LT SIDE ELEVATOR 2001FA0000069
WHILE PERFORMING AN ANNUAL INSPECTION ON THIS AIRCRAFT, SEVERAL WRINKLES AND LOOSE RIVETS WERE DISCOVERED ON BOTH ELEVATORS ALONG WHERE THE BALANCE TAB ATTACHES TO THE ELEVATOR SPAR. THE STRUCTURE AROUND THIS AREA APPEARED VERY WEAK AND FLEXIBLE. CESSNA WAS CONTACTED FOR TECHNICAL ASSISTANCE. AT CESSNAS REQUEST, NEW REPLACEMENT ELEVATORS WERE INSTALLED, AND THE OLD ONES WERE RETURNED FOR AN ENGINEERING EVALUATION. ALL INSPECTORS ARE URGED TO BE VIGILANT FOR SUCH CONDITION
CESSNA FITTING BROKEN 07/05/2001 16
182S P10UCB86 VACUUM SYSTEM 2001FA0000136
THE PILOT REPORTED THAT THERE WAS ZERO VACUUM INDICATED ON THE GAUGE AND THAT THE HSI GYRO WOULD NOT ERECT. A VISUAL INSPECTION BY A MAINTENANCE TECHNICIAN REVEALED THAT THE VACUUM SUPPLY LINE REDUCER FITTING WAS BROKEN IN TWO.
CESSNA LYC GASKET MISSING 06/14/2001 276
182S IO540AB1A5 653487 VACCUUM PUMP 2001FA0000182
WHILE PERFORMING AN ANNUAL INSPECTION ON THIS AIRCRAFT, AND OIL LEAK WAS NOTICED COMING FROM THE LOWER VACUUM PUMP DRIVE PAD. FURTHER INSPECTION REVEALED THAT THE GASKET FOR THE PUMP WAS MISSING. A NEW GASKET WAS INSTALLED AND A LEAK CHECK WAS PERFORMED.
CESSNA CONT CONT NUT DAMAGED 04/25/2001
337G IO360D 646742 646605 CYLINDER SECTION CA010529023 1432
(CAN) AFTER LANDING PILOT WAS TAXIING FOR SHUTDOWN WHEN HE HEARD A BANKING NOISE AND REAR ENGINE ROUGHNESS. INSPECTION REVEALED A DENT IN VALVE COVER. COVER REMOVED AND FOUND BOTH ROCKER SHAFT HOLD DOWN STUDS SHEARED. IT HAS BEEN NOTED BEFORE ON OTHER AIRCRAFT THAT ROCKER SHAFT HOLD DOWN NUTS HAVE BEEN STRIPING EASILY EVEN WITH TELEDYNE CONTINENTAL NEW ROCKER SHAFT HOLD DOWN NUTS

CESSNA CONT CABLE FRAYED 06/01/2001
340A TSIO520N 530040050 RUDDER CONTROL AUS20010643
(AUS) YAW DAMPER CABLE FRAYED AND STRANDS BROKEN IN AREA WHERE THECABLE PASSES INTO THE TERMINAL FITTING AT THE RUDDER BELLCRANK.
CESSNA CONT ATTACH CRACKED 06/05/2001
401 TSIO520E 504100036 MLG CA010622025
(CAN) DURING AN INSPECTION, THE LOWER SCISSOR ATTACH LUG WAS FOUND CRACKED. THE CRACK WAS FOUNDONLY AROUND THE SMALLER LUG. THE RT LANDING GEAR AXLE ASSE MBLY WAS REPLACED.
CESSNA CONT DOUBLER CRACKED 06/05/2001
401 TSIO520E 52920048 MLG CA010622028
(CAN) WHILE COMPLETING AN INSPECTION A CRACK WAS FOUND ON THE RT MAIN LANDING GEAR DOUBLER. A WING RIB IMPROVEMENT KIT (SK414-8E) WAS PREVIOUSLY INSTALLED. DOUBLER P/N 5292004-8 WAS PART OF THE KIT. IT WAS THIS DOUBLER THAT WAS AGA IN FOUND CRACKED. THE DOUBLER WAS REPLACED.
CESSNA CONT CESSNA CHANNEL CRACKED 06/08/2001 5890
402B TSIO520E 501509797 50150193 SEAT SUPPORT CA010622021 5890
(CAN) BROUGHT THE A/C IN TO ADJUST THE LOW FUEL PRESS ON THE AUX FUEL PUMP. TO D0SO YOU MUST REMOVE THE PILOT SEAT & ADJUST A RESISTOR UNDER THE PILOT SEAT SUPPORT ASSY. THAT IS WHEN NOTICED THE CRACKIN THE LOWER R/H SEAT SUPPORT ASSY BOTTOM CHANNEL
CESSNA CONT BOLT BROKEN 05/07/2001
402B TSIO520E 6419311075 LT ENGINE CA010622036 973
(CAN) UPON INSPECTION (EVENT 1 & 2), TAKING THE COWLING OFF ON LEFT ENGINE, A NUT WITH PART OF THE THRU BOLT HIT THE FLOOR, FURTHER INSPECTION FOUND THE LEFT THRU BOLT HAS SNAPPED.
CESSNA BARREL CRACKED 06/19/2001
402C 51411021 MAIN LANDING AUS20010674
(AUS) MAIN LANDING GEAR LOWER TORQUE LINK ATTACHMENT LUGS CRACKED.FOUND DURING FLUORESCENT MAGNETIC PARTICLE INSPECTIONIAW MEB 89-2R1. LOWER ATTACHMENT LUGS ARE NOT CALLED FOR IN
CESSNA CONT SEATTRACK FRACTURED 01/18/2001
402C TSIO520VB 50150191 CABIN AUS20010509
(AUS) PILOTS SEAT TRACK CHANNELS PNO 5015019-1 AND PNO 5015019-3CRACKED THROUGH MOUNT HOLES. ONE CHANNEL HAD BEEN REMANUFACTUREDFROM A LIGHTER MATERIAL AND WAS ALSO SECURED USING COMMERCIAL POP RIVETS. UNAPPROVED PART. PERSONNEL/MAINTENANCE ERROR.
CESSNA CONT SIGHT GLASS SPLIT 05/22/2001
402C TSIO520VB 51170071R HYD QUANTITY AUS20010575
(AUS) HYDRAULIC SYSTEM SIGHT TUBE SPLIT. PARTIAL LOSS OF HYDRAULICFLUID. SIGHT TUBE HAD ONLY RECENTLY BEEN REPLACED.
CESSNA GARRTT CAM MISMANUFACTURE 05/15/2001
441 TPE331* 8976021 ENGINE 2001FA0000001
AFTER INSTALLING NEWLY OVERHAULED ENGINE ON AIRCRAFT, FOUND THAT THE -30 P.P.C. COULD NOT BE RIGGED. REMOVED P.O.C. AND FOUND THAT THE CAM INSIDE, ALTHOUGH MARKED CORRECTLY (P/N 897602-1), THE CAM WAS MANUFACTURED WRONG. IT HAS THE WRONGCAM PROFILE. REF: SB TPE331-72-0904. CESSNA PWA FUEL CONTROL MALFUNCTIONED 07/09/2001
500CESSNA JT15D1A RT ENGINE 2001FA0000180
DURING A CLIMB THROUGH FL 290, THE RIGHT ENGINE FAN SPEED DECREASED TO 82 PERCENT. ENGINE IGNITION WAS SELECTED ON TO NO EFFECT. AN EMERGENCY WAS DECLARED AND A SAFE LANDING WAS MADE. SUSPECT THAT THE FUEL CONTROL UNIT MALFUNCTIONED.
CESSNA SKIN CRACKED 04/30/2001 7855
550 65241263 AILERON 2001F00046
DURING A SCHEDULED PHASE INSPECTION THE LEFT AILERON WAS REMOVED. UPON REMOVAL THE LEADING EDGE SKIN AT THE WEIGHT ATTACHMENT SCREWS WAS FOUND CRACKED. THIS HAD ALLOWED THE SKIN TO CRACK ABOVE AND BELOW A SCREW APPROX. .5000. THE RIGHT AILERON WAS ALSO REMOVED AND TWO OF THESE LEADING EDGE WEIGHT SCREWS WERE ALSO FOUND LOOSE.
CESSNA CONT PUMP LEAKING 06/04/2001 570
A185E IO520D 6462121 FUEL SYSTEM CA010622033
(CAN) THE PILOT NOTED FUEL DRIPPING FROM THE OVERBOARD DRAIN TUBE. MAINTENANCE DISCOVERED FUEL COMING FROM THE FUEL PUMP SEAL DRAIN. THERE IS A CRITICAL SERVICE BULLETIN C53 01-01. ALTHOUGH THE PART NUMBER DID NOT MATCH THE BASIC FUEL PUMPWAS IDENTIFIED BY THE PRESENCE OF TWO ROUND BOSSES LOCATED ON OPPOSITE SIDES OF THE FUEL PUMP HOUSING OWNER / AME SHOULDBE ALERT TO ANY FUEL LEAKAGE IN
CESSNA CONT ALTERNATOR MISOVERHAULED 07/05/2001
R172G IO360DB DOFF10300FR 2001FA0000135 170
DURING MAINTENANCE 100 HOUR INSPECTION, FOUND ALTERNATOR INTERNAL FAN SHIELD SEPERATED FROM FAN DUE TO SHEARED RIVITS AND THE DRIVE SHAFT OIL SEAL WAS LEAKING. REPLACED ALTERNATOR WITH UNIT OVERHAULED BY DIFFERENT MANUFACTURER, OPERATIONAL CHECKED SATISFACTORY.
CESSNA CONT SWIVEL SEPARATED 07/12/2001 6
T337G IO360* S29991 MIXTURE 2001FA0000120 6
INSTALLED BALL JOINT OR SWIVEL PN S2999-1 ON MIXTURE CONTROL CABLE FRONT AND REAR ENGINES AT TIME OF ENGINE INSTALLATION. A/C WAS TEST FLOWN AND FERRIED TO PAINT SHOP AND RETURNED. PREVIOUS TO ANY ADDITIONAL ADJUSTMENT AND WHILE IN THE COCKPIT PERFORMING A MAINTENANCE CHECK AND OPERATING THE MIXTURE CONTROL, THE SWIVEL SEPARATED ON THE REAR ENGINE CABLE.FURTHER OPERATION, IT WAS NOTED THE FRONT ENGINE MIXTURE CONTROL BALL JOINT SWIVEL CAME APART. MFG WAS NOTIFIED.
CESSNA CONT WASTEGATE UNDERTORQUED 05/01/2001
TU206G TSIO520M 4709089011 ENGINE EXHAUST 2001FA0000159
FOUND THE 7 ACTUATOR TO BYPASS VALVE MOUNTING BOLTS (REF. GARRETT MANUAL TP30-4001-1 PG. 10-11 ITMES NR 7 AND 10) WITH LITTLE TO NIL MEASURABLE TORQUE. THIS IS THE SECOND ACTUATOR ON WHICH WE HAVE DISCOVERED THIS PROBLEM. DURING INSTALLATION INSPECTION, A WRENCH JUST HAPPENED TO BE PLACED ON THESE BOLTS WHICH WERE THEN OBSERVED TO BE LOOSE.
CIRRUS CONT CHECK VALVE MISINSTALLED 07/06/2001 31
SR20 IO550* RT HEADER TANK 2001FA0000118
RIGHT FUEL QUANTITY GAUGE FALLS TO ZERO WHEN RIGHT TANK WAS SELECTED. FOUND FUEL QUANTITY TRANSMITTER WAS CORRECT, INBOARD TRANSMITTER MOUNTED IN THE HEADER TANK WAS GOING TO ZERO WHEN FUEL WAS BEING USED FROM THE RIGHT TANK. CAUSE: THEFUEL INLET CHECK VALVE WAS GLUED CLOSED DURING ASSEMBLY OF THE AIRCRAFT. THE ENG WOULD USE MORE FUEL THAN THE RATE THEHEADER TANK COULD FILL, THIS CONDITION COULD CAUSE ENGINE STOPPAGE.DURING REPAIRS IT WAS FOUND THE NORMAL OPERATING SYSTEM CAN NOT KEEP EITHER HEADER TANK FULL. FUEL QUANTITY INDICATION IS NOT ACCURATE WHEN ENGINE IS USING

CIRRUS CONT CIRRUS BUSHING LOOSE 07/13/2001 27
SR20 IO550* MLG 2001FA0000143 27
ON LANDING, NOSE WHEEL HAD SEVERE OSCILLATION/SHIMMY. INSPECTION AFTER TAXI FOUND NOSE WHEEL FAIRING CRACKED AND TIRE DAMAGED AROUND CIRCUMFERENCE. FURTHER INSPECTION FOUND THAT THE BUSHING ON THE RIGHT BOTTOM NLG MOUNT TO THE ENGINE MOUNT SHIFTED OUT OF ITS SEAT IN THE NLG WISHBONE MOUNT CAUSING THE BOLT TO RIDE ON THE HOLE IN THE NLG WISHBONE MOUNT. WEBELIEVE THAT THE PROBLEM IS A RESULT OF POSTION/TYPE OF BUSHINGS ON ASSEMBLY.
DHAV PWA EXHAUST CRACKED 05/12/2001 870
DHC3 PT6A34 311178001 LT ENGINE CA010622029 870
(CAN) ON A 100 HOUR INSPECTION A CRACK WAS FOUND ON THE LT EXHAUST STACK MOUNTI NG FLANG OF THE TURBINE_EXHAUST DUCT. DUE TO THE FACT THAT THERE WAS SO LITTLE TIME ON THE ENGINE I CALLED P&W AND THEY SENT A REP. & A NEW PART FOR OUR AIRCRAFT. THE REP DID NOT KNOW WAY OUR EXHAUST WOULD CRACK. WE ARE NOW LOOKING AT THE EXHAUST AT 50 HOURS INTERVALS FOR THE NEXT LITLE WHILE TO SEE IF WE GET DOUG ALLSN BLADE
CRACKED 05/27/2001 642
600N 250C47M 369D21102523 MAIN ROTOR CA010626007
(CAN) A/C STOPPED FOR REFUELING, DUE TO THE TQ EVENTS THAT HAD BEEN ACCUMULATED, (160) THE PILOTS CARRIED OUT A BLADE TORQUE EVENT INSPECTION I.A.W. SB600N-031. THEY FOUND THE WHITE BLADE TO BE CRACKED, BOTTOM SIDE, 12.5" O/B OF THE LAST BOLT ON THE BLADE GRIP, 2.25" I/B OF THE SERIAL # DATA PLATE, MID WAY IN THE BLADE, CRACK WAS MEASURED TO BE .75" LONG, BUT THE PILOTS CONFIRMED THAT THE CRACK WAS LONGER WITH THE BLADE SUPPORTED OFF THE DROOP STOP RING, AND WAS SAID TO RUN TO .25" FROM THE TRAILING EDGE, ESTIMATING THE CRACK TO BE 2.5" TO 3.0" LONG IN LENGTH.
GROB LYC CARBURETOR LOOSE 07/03/2001 400
G115C O320D1A 105217 ENGINE BIER200103057 90
FOUND FUEL BOWL ATTACH SCREWS LOOSE WITH SUBSEQUENT FUEL LEAK AT BOWL GASKET, REQUIRED CARBURETOR REPLACEMENT DUE TO SCREW HOLE ELONGATION. SUBMITTER NOTES: LYCOMING SB 366, DATED SEPT 14, 1973 REFERENCES THIS FOR MARVEL-SCHEBLER CARBURETORS, WITH NO MENTION OF FACETS. SUBMITTER RECOMMENDS ANNUAL/250 HR SCREW TORQUE CHECK AS A MINIMUM INSPECTION INTERVAL.
GULSTM LYC LYC WASHER FAILED 04/20/2001
500S IO540E1B5 IO540E1B5 71907 RECIPROCATING AUS20010451
(AUS) RH ENGINE COUNTERWEIGHT RETAINING WASHER PNO 71907 HAD FAILED ALLOWING THE COUNTERWEIGHT ROLLER PNO 72797 TO MIGRATE ANDCONTACT NO5 CYLINDER CONNECTING ROD AND CAUSING IT TO FAIL WHICHCAUSED SEVERE DAMAGE TO THE CRANKCASE. THE RETAINING CIRCLIPPNO LW14820 REMAINED IN POSITION.
GULSTM RROYCE FUEL LINE RUPTURED 06/05/2001
G1159 SPEY5118 1159P20106 RT ENGINE 2001F00015 RIGHT MAIN FUEL LINE RUPTURED ON TAKEOFF WHICH CAUSED ENGINE TO SPOOL DOWN TO FLIGHT IDLE. REPLACED FUEL LINE ON ENGINE. HP FUEL PUMP WAS ALSO DAMAGED AND REPLACED. ENGINE WAS BORESCOPED AND RETURNED TO SERVICE.
GULSTM RIB CRACKED 06/20/2001 2298
GIV GIV 1159WM4007415 LT WING 2001FA0000035 2298
WHILE DOING A SCHEDULE VISUAL INSPECTION OF THE WING IT WAS NOTED A CRACK WAS IN RIB WEB. THE RIB IS LOCATED NEXT TO THE LAST OUTBOARD LEFT WING. CRACK IS 7 INCH LONG ALONG THE THE BOTTOM SIDE THEN TURNS UP AT BOTH ENDS FOR 1 INCH. REMOVED AND REPLACED WITH NEW RIB.
HILLER LYC LYC GEAR FAILED 05/31/2001
UH12E VO540C2A VO540C2A 67583 RECIPROCATING AUS20010648
(AUS) ENGINE DRIVE GEAR PNO 67583 HAD SHEARED ALL THE BOLTS ATTACHING IT TO ACCESSORY DRIVE PNO 67609.
HUGHES LYC BLADE CRACKED 07/10/2001 3380
269C HIO360D1A 269A603523 TAIL ROTOR CA010724034
(CAN) ON DAILY INSPECTION OUTBOARD PART OF BLADE SKIN WAS FOUND TO BE CRACKED. CRACK IS FORMED AROUND TIP BLOCK ON BLADE. THE CRACK IS APPROX. 3 INCHES LONG, STARTING FROM BEHIND ABRASION STRIP TO ABOUT MIDDLE OF BLADE.
HUGHES LYC BLADE DAMAGED 07/10/2001 2890
269C HIO360D1A 269A603523 TAIL ROTOR CA010724035
(CAN) ON INSPECTION OF OPPOSITE TAIL ROTOR BLADE, THIS TAIL ROTOR BLADE WAS FOUND TO HAVE NO ABRAISON STRIP ON LEADING EDGE OF BLADE. FURTHER INSPECTION REVEALED THAT FILLER WAS USED UNDER PAINT TO BUILD UP EDGE. BOTH BLADES WERE REMOVED AND SENT TO SCHWEIZER A/C CORP FOR FURTHER INVESTIGATION.
HUGHES ALLSN SPAR CRACKED 04/24/2001 5657
369D 250C20B 369D23623 HORIZONTAL STAB CA010523020
(CAN) UPON SHOP REPAIR OF THIS STABILIZER FOR SKIN CRACKS, DOUBLER CRACKS AND LOOSE RIVETS. IT WAS OBSERVED, THAT THE AFT SPAR IS CRACKED ALMOST ALL THE WAY THROUGH, 2.5 INCHES FROM THE INBOARD END. WE ALSO SUSPECT ANOTHER CRACK AT ANOTHERLOCATION ON THE SAME SPAR, BUT HAVE NOT CONFIRMED IT. THESE STABILIZERS HAVE JUST HAD THEIR RETIREMENT LIFE EXTENDED. THIS STABILIZER HAS BEEN REMOVED FROM
HUGHES ALLSN WINDSHIELD CRACKED 05/28/2001
369D 250C20B COCKIT CA010627015
(CAN) DURING FLIGHT F5890 FROM MADRID TO LYON, INCRUISE CO-PILOT WINDSHIELD INNER PLY CRACKED, UNSCHEDULED LANDING IN BIARRITZ. RT WINDSHIELD REPLACED. A/C RETURNED TO SERVICE.
HUGHES ALLSN DOUG PULLEY FAILED 05/24/2001
369HS 250C20 369H5656 369H5656 OIL COOLER CA010621026
(CAN) OIL COOLER PULLEY IS MADE UP OF A SPLINE BELT PULLEY WITH A METAL RING THAT IS “STAKED” ONTO THE PULLEY. THE RINGWAS FOUND AROUND THE ENGINE OUTPUT DRIVE SHAFT AFTER GROUND RUNNING THE A/C. A NEW PART WAS USED TO COMPARE THE STAKINGMARKS ON THE OLD PULLEY. THE NEW PULLEY HAS 4 LARGE STAKE MARKS COMPARED TO 8 SMALLER STAKE MARKS ON THE OLD PULLEY.
HUGHES ALLSN OIL SYSTEM BLOCKED 07/12/2001
500N 250C20R 23038160 ENGINE AUS20010762
(AUS) NR 6 AND NR 7 BEARING OIL SCAVENGE PORT PARTIALLY BLOCKED BY CARBON DEPOSITS. OIL TYPE HAD BEEN CHANGED FROM MOBIL 254 TO MOBIL 291.
LAKEAC GERDES O-RING DETERIORATED 04/24/2001 1868
250(LAKE) MS28775115010 SHAFT 2001FA0000086
DURING LOCAL FLIGHT, PILOT NOTICED HYDRAULIC PUMP CYCLING CONSTANTLY. PILOT ELECTED TO LAND AND CHECK. LANDING GEAR WOULD NOT FULLY EXTEND. PILOT COULD NOT GET LANDING GEAR FULLY UP OR DOWN. EMERGENCY LANDING MADE WITH PARTIAL GEAR ON GRASS STRIP WITH MINIMAL DAMAGE. FOUND T/E FLAP ACTUATOR SHAFT SEALS (3 ORINGS) LEAKING FLUID CAUSING LACK OF SUFFICIENT PRESSURE TO OPERATE GEAR AND
LAKEAC DOUBLER CRACKED 04/05/2001 1574
250LAKE 21610063 WING 2001FA0000083
WHILE PREPARING PRE-PURCHASE CONDITION REPORT ON ABOVE AIRCRAFT, THE LEFT LOWER SPAR DOUBLER WAS FOUND CRACKED. VISUALINSPECTION SHOWED LOWER SPAR ANGLE CRACKED.

LEAR FITTING CLOGGED 07/31/2001
25B DEFUEL SYSTEM 2001FA0000151
WHILE DEFUELING THE AIRCRAFT PREPATORY TO PAINTING, IT WAS DISCOVERED THAT NO FLOW COULD BE ACHIEVED THROUGH THE RIGHT DEFUEL FITTING. THE DEFUEL WAS ACCOMPLISHED BY TRANSFERRING ALL OF THE FUEL TO THE LEFT TANK AND REMOVING IT THROUGH THAT VALVE. WHEN WE OPENED THE RIGHT TANK A SHOP RAG WAS FOUND PLUGGING THE DEFUEL PORT. IT HAD OBVIOUSLY BEEN LEFT IN THE TANK DURING PRIOR MOONEY LYC RAJAYXXXXXXX DOOR LOOSE 07/18/2001 500
M20D O360* RJ0506041 TURBO DOOR 2001FA0000119
DURING ANNUAL INSPECTION, PART WAS OBSERVED TO BE EXTREMELY LOOSE. REMOVED PART FROM ASSEMBLY. FOUND PORTION OF HINGEMISSING, HINGE PIN 95 PER CENT WORN THROUGH AND SIDE BRACKETS WORN 90 PER CENT THROUGH. REMOVED ASSEMBLY AND REPLACED DOOR AND FRAME WITH SERVICEABLE PART. FOUND BYPASS FLUTTER VALVE FOR CARB HEAT MISSING. INSTALLED NEW PART AND SECURED.
MOONEY HARNESS CHAFED 06/11/2001
M20K FUSELAGE 2001FA0000060
WHEN REPAIRING AVIONICS POWER SYSTEM, CB PANEL PULLED LOOSE AND OUT FOR MAINTENANCE. DISCREPANCY NOTED: FUSELAGE UNDER WINDSHIELD CHAFING POWER CABLES TO CB S AND RELAYS. NO CHAFE STRIP NOTED IN THIS AREA BEHIND CB PANEL AND CHAFING EVIDENCE ON LARGE POWER WIRES. GLARESHIELD REMOVAL TO INSPECT. PROBLEM NOT RELATED TO AVIONICS PROBLEM THAT WAS REPAIRED.
MOONEY ACTUATOR FAILED 06/11/2001 741
M20M 1020004 LANDING GEAR 2001FA0000178
ACTUATOR FAILED BOTH MANUALLY AND ELECTRICALLY RESULTING IN A GEAR UP LANDING.
NAMER ATTACH IMPROPER PART 03/27/2001 8496
HARVARDMK4 WING CA010529009
(CAN) OUTER WING ATTACHMENT HARDWARE CONSISTS OF 224 NUTS AND BOLTS FOR BOTH WINGS. APPROXIMATELY 40% OF THE NUTS USEDWERE OF A TYPE USED IN SHEAR APPLICATIONS (NAS679). CORRECT HARDWARE SHOULD HAVE BEEN AN365-428 AND AN365-524 NUTS AS CALLED FOR IN THE HARVARD PART LIST. HARDWARE WAS REPLACED AS
NAMER SKIN MISREPAIRED 03/27/2001 84960
HARVARDMK4 662200110 ELEVATOR CA010529010
(CAN) ELEVATOR COVERING WAS OBSERVED DURING NORMAL INSPECTION TO HAVE CRACKING OF THE DOPE FINISH. FURTHER INVESTIGATION DISCOVERED BODY FILLER BETWEEN TWO SEPARATE DOPING AND PAINTING PROCESSES. UPON REMOVAL OF ELEVATOR, THE BALANCE CHECKCONFIRMED AN EXTREME TAIL HEAVINESS (IN EXCESS OF TWO POUNDS BEYOND ALLOWABLE LIMITS) OF BOTH ELEVATORS. ELEVATORS WEREREPLACED WITH SERVICEABLE
NAMER PIN WORN 04/24/2001 2290
SNJ4 5533525 MLG 2001FA0000044
BINDING OF PIN WOULD NOT ALLOW LEFT MAIN GEAR TO LOCK DOWN, CAUSING GEAR TO COLLAPSE ON LANDING. UPON INSPECTION, PIN DOES NOT APPEAR WORN. MANUAL DOES NOT CALL OUT FOR LUBING PIN. A SLIGHT OIL FILM ON PIN MAKES IT LOCK NORMAL.
PIPER CONT WIRE CHAFED 08/01/2001
J3F65 A658 MAGNETO 100000
DURING TAKE-OFF THE ENGINE QUIT. THE AIRCRAFT WAS DESTROYED. INVESTIGATION BY THE FAA INSPECTOR PROVED THAT THE PROBABLE CAUSE OF THE ENGINE FAILURE WAS ATTRIBUTED TO BOTH MAGNETO P-LEAD WIRES BEING GROUNDED OUT AGAINST A SCREW THAT SECURED THE LEFT-HAND INNER AND OUTER WINDOW TRIM PIECES.
PIPER CHANNEL CRACKED 04/20/2001 4221
PA23 1712124 FUSELAGE CA010523012
(CAN) DURING ANNUAL 100 HOUR INSPECTION OF THE TAIL AREA, NOTICED THAT THE CHANNEL THAT SUPPORTS THE LOWER RUDDER SUPPORT AND RUDDER STOP BRACKET WAS CRACKED. THIS WAS THE RESULT OF THE RUDDER BEING FORCED HARD AGAINST THE RUDDER STOPS BY WIND.
PIPER HARTZL FORK CRACKED 04/27/2001 3341
PA23160 PITCH CHANGE SW15200112234
AT OVERHAUL THE PITCH CHANGE FORK NR B2457-3 WAS FOUND TO HAVE A CRACK APPROX. .1875 INCHES IN LENGTH LOCATED AT THE LOWER INSIDE RADIUS OF THE NR 2 BLADE PITCH CHANGE SLOT.
PIPER LYC LYC DRAIN VALVE LEAKING 04/27/2001
PA28161 O320D3G O320D3G CCA1550 ENGINE DRAINS AUS20010440
(AUS) AIRCRAFT RETURNED TO AIRSTRIP AFTER TAKEOFF FOR A FORCED LANDING. FUEL STAINS FOUND DOWN THE SIDE OF THE AIRCRAFTEMANATING FROMTHE DRAIN VALVE. INSPECTION OF THE VALVE COULD FIND NO DEFECTSAND THE VALVE WAS CLOSED. ENGINE DRAIN VALVE SUSPECT LEFT PARTIALLY OPEN ALLOWING FUEL LEAKAGE AND THEN CLOSED ON LANDING.
PIPER LYC BOLT LOOSE 06/27/2001
PA28161 O320D3G 401187 WING AUS20010670
(AUS) LT WING REAR SPAR ATTACHMENT BOLTS LOOSE WITH NUT HOLDING BY ONLY THREE THREADS. SUSPECT NUTS NOT TIGHTENED AT LAST MAINTENANCE INSPECTION FOLLOWING WORK CARRIED OUT IN THE AREA.PERSONNEL/MAINTENANCE ERROR.
PIPER LYC PISTON RING FAILED 06/13/2001
PA28180 O360A3A ENGINE AUS20010611 1015
(AUS) NR 3 CYLINDER FIRST AND SECOND PISTON RINGS BROKEN. PISTON LANDERODED. NR 4 CYLINDER NO1 PISTON RING BROKEN. PISTON RINGS WERECAST IRON IN CHROME CYLINDERS. SMALL AMOUNT OF ALUMINIUM ALLOYMETAL IN OIL FILTER.
PIPER STRUT CRACKED 06/16/2001 7891
PA30 2468105 RT MLG 2001FA0000059
RIGHT SIDE MAIN LANDING GEAR UPPER HOUSING CRACKED FROM BOLT HOLE WHERE BROKE LINE ATTACHES INTO THE INNER MOST AREA OFTHE STRUT 1 INCH LONG ON EACH SIDE. LEAKING FLUID. POTENTIAL COMPLETE SEPARATION OF GEAR LEG.
PIPER LYC BOLT BROKEN 06/27/2001
PA30 IO320* AN310A MLG 2001FA0000112
THE AN3-10A BOLT, HOLDING THE MAIN GEAR SPRING ATTACH BRACKET ON TO THE STRUT HOUSING, BROKE. IT CAUSED THE BRACKET TOJAM AGAINST THE GEAR FORWARD ATTACH FITTING AND WOULD NOT LET THE GEAR GO DOWN. AIRCRAFT LANDED WITH THE GEAR UNSAFE.
PIPER LYC MANIFOLD CRACKED 06/21/2001
PA31 TIO540A2B 76778 FUEL SYSTEM CA010627063 2407
(CAN) ON INSPECTION OF AD 93-02-05 FUEL INJECTOR LINES AND CLAMPS IT WAS NOTED THAT FUEL WAS LEAKING WITH BASE OF FITTING IN MANIFOLD. UPON REMOVAL OF MANIFOLD IT WAS TOWED TO BE CRACKED BETWEEN BOTH
PIPER LYC TORQUE TUBE CORRODED 06/26/2001
PA31 TIO540A2C 4004009 RUDDER AUS20010662 7066
(AUS) RUDDER TORQUE TUBE CORRODED BOTH INTERNALLY AND EXTERNALLY.

PIPER LYC LANDING GEAR COLLAPSED 04/01/2001
PA31 TIO540A2C NLG AUS20010438
(AUS) NOSE LANDING GEAR COLLAPSED. INSPECTION COULD FIND NO DEFECTS WITH THE SYSTEM. SUSPECT INCORRECT TECHNIQUE.
PIPER LYC LYC VALVE GUIDE WORN 04/21/2001 41
PA31 TIO540J2BD LW12966 75838 CYLINDER CA010622024
(CAN) ON THE 1ST EVENT INSPECTION AFTER ENGINE WAS INSTALLED FOUND NR 5 CYLINDER FAILED COMPRESSION CHECK WITH 15/80. PROGRESSIVE AIR IN KAMLOOPS SUSPECTS GUIDE WORN. RETURNED CYLIDER TO THEM FOR WARRANTY CONSIDERATION.
PIPER LYC BENDIX DISTRIBUTOR WORN 05/18/2001
PA31 TIO540J2BD D6LN3200 10682056 DUAL MAGNETO CA010625034 1335
(CAN) PILOT EXPERIENCED ROUGH RUNNING ENGINE SHORTLY AFTER TAKEOFF. INSPECTION OF THE MAGNETO REVEALED A SEVERLY WORN BRONZE BUSHING ON THE DISTRIBUTOR BLOCK. ROUGH RUNNING WAS ATTRIBUTED TO INTERNAL CONTAMINATION OF THE MAGNETO WITH FINE BRONZE FILINGS, PARTIALLY SHORTING THE CONTACTS.
PIPER ALIDSG SWITCH FAILED 05/21/2001 2305
PA31350 KA132 ACCEL SWITCH WVBA2001034 2305
PILOT REPORTED SWITCH WOULD NOT TEST IN EITHER POSITION. SWITCH WAS REMOVED FROM SERVICE. PARTS TAKE FROM 3 TO 12 WEEKS TO BE DELIVERED RENDERING THE AUTOPILOT INOPEATIVE FOR THAT TIME FRAME. WITH SWITCHES FAILING RIGHT OUT OF THE BOX OR VERY FEW HOURS IN SERVICE, WE RECOMMEND ELIMINATING THIS SWITCH FRO THE SYSTEM AS THE AUTOPILOT CAN STILL BE PHYSICALLY OVERCOME OR MANUALLY CUT OFF BY
PIPER PUMP FAILED 05/21/2001
PA31350 1213HBG310 HYDRAULIC SYS WVBA2001035 192
PILOT REPORTED RIGHT HYDRAULIC PUMP FAILED CHECK DURING RUN UP. PUMP WAS REMOVED AND IT WAS DISCOVERED THAT THE SHAFT HAD SHEARED. DURING REMOVAL OF THE FITTINGS IT WAS DISCOVERED THAT THE SMALL PRESSED IN NOZZLE, SPRING AND BALL HAD COME LOOSE WITH THE BALL JAMMING THE PUMP VANES AND CAUSING THE SHAFT TO SHEAR. NOTE: THIS WAS ON THE PRESSURE OUTLET SIDE. THE PUMP WAS REMOVED AND
PIPER REGULATOR LEAKING 05/29/2001 160
PA31350 A23D04 FUEL SYSTEM WVBA2001036
DURING INSPECTION IT WAS NOTICED THAT FUEL STAIN WAS IN THE DRAIN TUBE OF THE FUEL PRESSURE REGULATOR OF THE FRONT COMBUSTION HEATER. THE REGULATOR WAS INSPECTED AND FOUND TO BE LEAKING FROM THE GASKET OF THE UPPER PARTING SURFACE. UNIT WAS REMOVED AND REPLACED. IT SHOULD BE NOTED THAT THIS UNIT WAS INSPECTED PER SB WHICH INCLUDES A PRESSURE CHECK TO COMPLY WITH AD AND WAS DETERMINED SERVICABLE. TIME SINCE INSPECTION WAS 59 HOURS.
PIPER TUBE ELONGATED 06/05/2001 3692
PA31350 42901002 ELEVATOR 2001FA0000055
WHILE C/W UNDER PANEL ITEMS ON ANNUAL CHECKLIST, FOUND ARM ON THE ELEVATOR CONTROL TUBE VERY LOOSE. DISASSEMBLY SHOWEDHOLE WHERE ARM MOUNTS TO TUBE VERY ELONGATED. PART REPLACED WITH NEW PART. SUGGEST PHYSICALLY CHECKING EACH ARM FOR UNWANTED MOVEMENT WHEN DOING INSPECTION, NOT JUST
PIPER LYC GEAR BROKEN 07/13/2001 883
PA31350 LTIO540* LW10284 ENGINE 2001FA0000177
ONE TOOTH ON GEAR SEPARATED AND LODGED BETWEEN CRANKSHAFT GEAR AND OIL PUMP HOUSING. THIS CAUSED THE REMAINING TEETH OF THE CRANKSHAFT GEAR TO ROUND OFF AND DISENGAGE FROM THE OTHER GEARS. THIS ALSO CAUSED 2 IDLER GEARS AND THE OIL PUMP DRIVE GEAR TO SHEAR SEVERAL TEETH AS WELL.
PIPER LYC LYC HOSE FAULTY 05/03/2001
PA31350 LTIO540J2BD LTIO540J2BD L142368A ENGINE FUEL DIST AUS20010435
(AUS) FUEL HOSES LOCATED BETWEEN THE FCU AND THE FLOW DIVIDER DID NOT HAVE FIRESLEEVES FITTED. PERSONNEL/MAINTENANCE ERROR.
PIPER LYC PIPER ROD END CONTAMINATED 05/01/2001
PA31350 TIO540J2BD ACTUATOR 452383 LANDING GEAR AUS20010493
(AUS) RH MAIN LANDING GEAR ACTUATOR RODEND CONTAMINATED AND DRY.SUSPECT CAUSED BY EXHAUST GASES FROM TAILPIPE.
PIPER LYC LYC STUD BROKEN 05/30/2001
PA31350 TIO540J2BD TIO540J2BD 38125015 RECIPROCATING AUS20010633
(AUS) LH ENGINE NO3 CYLINDER HOLDDOWN STUDS BROKEN. CYLINDER WAS HELD IN PLACE BY THE THROUGH BOLTS
PIPER LYC HOSE LEAKING 07/05/2001
PA31350 TIO540J2BD 8004804 FUEL INDICATING AUS20010700
(AUS) FUEL PRESSURE HOSE TO FUEL FLOW GAUGE LEAKING UNDER PRESSURE.
PIPER LYC SWITCH OUT OF ADJ 05/07/2001
PA31350 TIO540J2BD MLG AUS20010411
(AUS) NOSE LANDING GEAR UP LIMIT SWITCH OUT OF ADJUSTMENT.
PIPER LYC HINGE MISINSTALLED 05/07/2001
PA31350 TIO540J2BD 717002 HORIZONTAL STAB AUS20010425
(AUS) LT AND RT HORIZONTAL STABILISER OUTBOARD HINGES FITTED WITH ONLYTWO RIVETS ON THE TOP AND BOTTOM WHEN THE PIPER MODIFICATION KITPNO 766-646 WHEN THE CORRECT NUMBER SHOULD BE FOUR RIVETS.PERSONNEL/MAINTENANCE ERROR.
PIPER LYC EXHAUST DAMAGED 05/15/2001
PA31350 TIO540J2BD LW12966 16T19468 ENGINE CA010625043
(CAN) ON GROUND RUN PILOT REPORTED R/H ENGINE RUNNING ROUGH. MAINTENANCE FOUND #2CYLINDER, EXHAUST VALVE SEAT DISLODGED, DAMAGING THE PISTON. ENGINE HAD METAL CONTAMINATION. ENGINE FIREWALL FORWARD REPLACEDWITH O/H UNIT AND COMPONENTS AND HOSES. CYLINDER ASSY HAD 596.4 HOURS SINCE REPAIR.
PIPER LYC BENDIX CLAMP WORN 04/27/2001
PA31350 TIO540J2BD 1068291018 66M19385 MAGNETO CA010523024 207
(CAN) DURING A ROUTINE INSPECTION, IT WAS NOTED THAT EXCESSIVE OIL WAS LEAKING AROUND THE MAGNETO GASKET. UPON REMOVAL OF THE MAGNETO, IT WAS NOTED THAT THE MAGNETO HAD ABNORMAL AMOUNT OF WEAR IN THE MAGNETO CLAMP AREA. FURTHER INVESTIGATION REVEALED ONE OF THE HOLD DOWN CLAMPS WAS GROUND AWAY IN THE FACE CONTACT AREA, RESULTING IN THE MAGNETO HANGING ON THE CASE BY ONE CLAMP. BOTH THE MAGNETO AND CLAMPS WERE REMOVED AND SENT TO THE OVERHAUL FACILITY FOR REPLACEMENT.
PIPER LYC SPRING BROKEN 06/14/2001 632
PA31350 TIO540J2BD 71056003 ELEVATOR CA010703026
(CAN) AFTER LANDING, THE PILOT NOTED UNUSUALY LIGHT ELEVATOR.UPON SHUTDOWN, THE ELEVATOR WAS INSPECTED AND IT WAS NOTEDTHAT THE SPRING WAS BROKEN. UPON INSPECTION OF RECORDS, THE PART WAS FOUND TO HAVE 632HOURS SINCE REPLACEMENT AS PER AWD 98-08-18. THE PART HAS BEEN RETAINED IF FUTURE

PIPER PWA WIRE MELTED 05/22/2001 9259
PA31T PT6A28 COCKPIT CA010628014
(CAN) DURING CRUISE, WITH ENGINE AND WINDSHIELD HEAT SELECTED. SMOKE WAS OBSERVED COMING FROM THE RIGHT FORWARD CIRCUITBREAKER PANEL. AT THIS POINT THE RIGHT ENGINE AND WINDSHIELD DEICE SYSTEMS WERE TURNED OFF AND THE SMOKE DISSAPPEARED. THE AIRCRAFT LANDED SAFELY AT ITS DESTINATION. MAINTENANCE THEN DISCOVERED THAT 2 WIRES, BEHIND THE CIRCUIT BREAKER PANEL WERE MELTED : ONE BEING RIGHT INLET DEICE ANDTHE OTHER RIGHT WINDSHIELD HEAT. CORROSION WAS FOUND AT THE SPLICES, WHICH

PIPER PIPER STRUT LOOSE 06/27/2001
PA31T1 4533307 NLG 2001F00097 INCIDENT
HAPPENED DUE TO NOSE GEAR STEERING ARM PN 4438600 ON TOP OF NOSE STRUT HOUSING, BECOMING LOOSE DUE TO ATTACHMENT BOLTS FOR ARM BECOME LOOSE AND SHEARED OFF. AS A RESULT STEERING WAS MINIMAL AND UNCONTROLLABLE ON LANDING.

PIPER RUDDER BAR CRACKED 06/06/2001 11045
PA32260 6342004 RUDDER 2001FA0000045
DURING 100 HOUR INSPECTION, FOUND LEFT RUDDER BAR CRACKED AT WELD WHERE STRAIGHT TUBE CONNECTS TO CARRY OVER TUBE. SPECULATE AGE AND USAGE CAUSED CRACK.. THIS COMPONENT HAS BEEN FOUND CRACKED SEVERAL TIMES IN THE PAST ON OTHER SIMILAR AIRCRAFT. LATER MODEL AIRCRAFT HAVE A REINFORCEMENT PLATE WELDED ON THIS AREA BY THE FACTORY.

PIPER LYC BOLT FAILED 05/19/2001
PA32260 O540E4B5 79543002 MAIN LANDING AUS20010743
(AUS) LH MAIN LANDING GEARLOWER LEG SEPARATED FROM UPPER LEG. SUSPECT CAUSED BY FAILURE OF THE CENTRE TORQUE LINK BOLT.LOWER LEG HOLED LH FLAP DURING SEPARATION.

PIPER LYC CONT GEAR BROKEN 04/26/2001
PA32RT300 IO540K1G5D D6LN3000 10682016 DISTRIBUTOR 2001FA0000154
AFTER TAKE OFF AT APPROX 500FT AGL, THE ENGINE STOPPED RUNNING. AIRCRAFT MADE EMERGENCY LANDING IN A FIELD WITH NO DAMAGE OR INJURIES. INSPECTION OF MAGNETO REVEALED THAT BOTH DISTRIBUTOR GEARS HAD FAILED. MAGNETO WAS REBUILT BY TCM 04/07/2000 AND INSTALLED ON 5/12/2000.

PIPER DOWNLOCK INOPERATIVE 07/02/2001 2490
PA44180 8929103 MLG 2001FA0000137
WHILE CONDUCTING A SCHEDULED INSPECTION,THE TECHNICIAN DISCOVERED SEVERAL WIRES WERE BROKEN OF THE DOWN LIMIT SWITCH.THERE WERE NO PROBLEMS REPORTED BY THE PILOT AT THIS TIME.ALSO WHEN PLACING THE AIRCRAFT ON JACKS AND PERFORMING A LANDINGGEAR TEST THERE WERE NO PROBLEMS FOUND.EVERYTHING SEEMED NORMAL. WHEN THE LANDING GEAR WAS RETRACTED SEVERE TENSION OCCURED ON THE WIRES AND WERE THEREFORE PULLED FROM THE SWITCH ASSY.A PROBLEM COULD HAVE OCCURED IF ALL THE WIRES HAD BROKEN. BOTH THE LT AND RT DOWN LIMIT SWITCHES WERE REPLACED AND THE WIRES REROUTED. ATTENTION SHOULD BE PAID TO THE ROUTING OF THE WIRES,WHEN THE LANDING GEAR RETRACTS.

PIPER KNOB INOPERATIVE 04/25/2001
PA46310P MOR CONTROL SW15200111824
MANUAL OVER RIDE (MOR) CONTROL LEVER KNOB CAME APART CAUSING THIS SYSTEM TO BE RENDERED INOPERATIVE AND A CERTAIN SAFETY ISSUE. PROBLEM CAN BE SOLVED WITH PROPER INSTALLATION. THIS AIRCRAFT JUST COMPLETED A PHASE I AND II INSPECTION.

PIPER MOUNT DAMAGED 01/06/2001 3890
PA46310P 8401002 ENGINE 2001F00048
FOUND ENGINE CONTROL CABLES CHAFFING ON THE ENGINE MOUNT DURING ENGINE CHANGE. DAMAGE WAS FOUND TO BE BEYOND LIMITS. SENT MOUNT FOR REPAIR. ENGINE MOUNT WAS FOUND TO HAVE 6 CRACKS AND CORROSION BEYOND LIMITS .

PIPER ROD CORRODED 07/11/2001 2321
PA46310P 8283302 ELEVATOR 2001FA0000128
ELEVATOR PUSH PULL CONTROL ROD VERY RUSTY AND PITTED. LOCATED IN TAIL SECTION WHERE MOISTURE AND CONTAMINATION ACCUMULATE.

ROBSIN DRIVE SHAFT FAILED 06/07/2001
R22 TAIL ROTOR 2001FA0000173
DURING RUN-UP PRIOR TO TAKE-OFF, AN R22 TAIL ROTOR DRIVE CUT LOOSE AND SEVERED THE TAIL BOOM. HELICOPTER WAS ABOUT TO FLY TO A MAINTENANCE FACILITY FOR 100 HOUR INSPECTION. PRELIMINARY SURVEY INDICATES THAT THE INCIDENT WAS INITIATED BY THE TAIL ROTOR DRIVE SHAFT DAMPER BREAKING OFF INSIDE THE TAIL BOOM. THIS ALLOWED THE DRIVE SHAFT TO WHIP, FRACTURE, AND CUT OFF THE TAIL BOOM.

ROBSIN LYC ROBSIN ARM FAILED 04/05/2001
R22BETA O320B2C TAILCONE A0413 TAIL ROTOR DRIVE AUS20010458
(AUS) TAIL ROTOR DRIVESHAFT DAMPENER ARM FAILED ALLOWING TAIL ROTOR DRIVESHAFT TO WHIP AND BREAK AND CAUSING DESTRUCTION OF THE TAILCONE ASSEMBLY PNO A023-20.

ROBSIN BELT MALFUNCTIONED 05/18/2001 488
R22BETAII A1902 ROTOR DRIVE 2001FA0000018
V-BELT, (PN A190-2) OF THE R22 DRIVE SYSTEM, MALFUNCTIONED BY COMING APART AND JUMPED OFF DRIVE PULLEYS, CAUSING LOSS OF DRIVE TO ROTOR DRIVE SYSTEM.

SCWZER BOLT LOOSE 07/10/2001
269D NAS12254N DRIVESHAFT 2001F00104
DURING PRACTICE AUTOROTATION, ENGINE POWERSHAFT TO KFLEX POWERTRAIN ADAPTER CAME LOOSE BY BACKING OUT, DURING OPERATION MAIN ROTOR WAS NO LONGER POWERED BY ENGINE. BOLT PIN NAS1225-4N IS A BOLT WITH A SMALL CIRCLE OF PLASTIC ON THREADS FOR LOCKING. EMERGENCY LANDING, NO DAMAGE.

SCWZER BELLCRANK CRACKED 04/25/2001 4155
SGS233A 3310961 DRAG CONTROL CA010523030
(CAN) AN INSPECTION WAS CALLED FOR AS INSRUCTED IN A SPECIAL INSPECTION DND C-12-382-000/NS-016. UPON INSPECTION OF SUBJECT PART, IT WAS DETERMINED THAT THE PART HAD REJECTABLE INDICATIONS. SUBJECT PART WAS SENT FOR REPAIRS AND RETURNED TOSERVICE. FURTHER INSTRUCTION PENDING QUALITY ENGINEERING TEST ESTABLISHMENT FINDINGS.

SCWZER BELLCRANK CRACKED 04/25/2001 2897
SGS233A 3313661 DRAG CONTROL CA010523031
(CAN) AN INSPECTION WAS CALLED FOR AS INSTRUCTED IN A SPECIAL INSPECTION DND C-12-382-000/NS-016. UPON INSPECTION OF SUBJECT PART, IT WAS DETERMINED THAT THE PART HAD REJECTABLE INDICATIONS. SUBJECT PART WAS SENT FOR REPAIRS AND ETURNED TOSERVICE. FURTHER INSTRUCTION PENDING QUALITY ENGINEERING TEST ESTABLISHMENT FINDINGS.

SKRSKY MANIFOLD LEAKING 06/19/2001
S76A 766500980511 30006762102 MAIN ROTOR HEEA073521
CAUSING LEAKAGE BETWEEN MAIN AND BYPASS SERVO VALVES ON SYSTEM ONE ON FINAL TEST. FOUND MISSING LEE PLUG IN DRILLED PASSAGE ON SYSTEM ONE BETWEEN MAIN AND BYPASS SERVO VALVES. SENDING TO VENDOR FOR

SKRSKY BLOWER INOPERATIVE 04/24/2001
S76A 60692032 ENGINE ERAA072936
PART IS INOPERABLE. MOTOR WON'T START WITH BLOWER ON. HAVE TO TAP ON PLUG CONNECTOR BOX TO START. INSTALLING NEW BLOWER SOLVED PROBLEM. TSO IS ONLY 47.1 HRS. RETURNING TO CORPORATE ROTABLE ON REPAIR ORDER # RW-883735 REQUESTING WARRANTY REPAIR.
SKRSKY VALVE LEAKING 05/11/2001
S76A FLOAT BOTTLE HEEA073009
WHILE IN FLIGHT THE LT NOSE FLOAT ASSEMBLY STARTED TO DEPLOY. MAINTENANCE FOUND FLOAT VALVE LEAKING INTERNALY AND STARTED TO INFLATE BAG.
SKRSKY ALLSN HARNESS BROKEN 07/05/2001
S76A 250C30S 7655200904046 MLG CA010726012
(CAN) DURING CRUISE, RED LANDING GEAR UNSAFE LIGHT FLICKERING INTERNITTENTLY WITH A CORRESPONDING "CLUNKING" IN THE AIRFRAME FELT THROUGH THE COLLECTIVE STICK. UPON RETURN FROM FLIGHT MAINTENACE PUT AIRCRAFT ON JACKS AND THE LANDING GEARWAS OPERATED TO SIMULATE THE CONDITION. THE FAULT WAS TRACED TO THE LEFT MAIN DOWN LOCK WIRING HARNESS. THE HARNESS WAS REPLACED WITH A NEW ONE. THE SYSTEM WAS FUNCTION TESTED SERVICEABLE AND THE AIRCRAFT WAS RETURNED TO SERVICE.
SKRSKY DISPLAY INTERMITTENT 06/19/2001
S76C 7645001098105 COCKPIT HEEA073526
CENTER DISPLAY UNIT SHOWING AN INTERMITTENT FAIL FAULT ALONG WITH GIVING INTERMITTENT INCORRECT INFORMATION AND CAUSINGINTERMITTENT NR 1 AND 2 ENGINE OUT WARNING LIGHTS TO COME ON IN FLIGHT. SENT TO VENDOR FOR REPAIR.
SNIAS TMECA SEAT BELT DAMAGED 05/30/2001
AS350B ARRIEL1B AFG0314294 COCKPIT CA010622032
(CAN) INERTIA REELS, EACH 2 WERE RE-WEBBED BY AN UNAUTHORIZED REPAIR FACILITY IN CANADA. IT IS UNKNOWN IF WEBBING / THREAD MEETS REQUIRMENT SPECIFICATIONS / IF THE HARNESS ASSY WOULD TENSUKE TEST TO PROPER FOR MATERIAL / STITCH PATTERN. PARTS WERE RE-WEBBED AND CERTIFIED WITH PROPER MATERIALS AND TC24-0045 CONFORMITY CERTIFICATIONS ISSUED PARTS RETURNED TO SERVICE.
SNIAS TMECA SIREN SPACER CORRODED 04/30/2001 843
AS350B1 ARRIEL1D S16096 S160919 CARGO HOOK CA010529020 843
(CAN) WHEN THE HOOK ARRIVED AT E.C.L., THE SCREW AND NUT WHICH TIGHTEN THE SPACER (P/N S1609-19) HAD BEEN LOOSENED. IT WAS TIGHTENED TO PERFORM INCOMING TESTS. THE CAM WHICH RELEASES THE LOAD BEAM WOULD NOT FUNCTION UNDER LIGHT LOAD (12 LBS). AS THE LOAD WAS INCAREASED THE CAM WOULD BE PUSHED OUT OF THE PATH OF THE LOAD BEAM, BUT THE CAM WOULD NOT RETURN. WHEN THIS OCCURES THE HOOK WILL
SNIAS TMECA LINER CRACKED 07/04/2001
AS350BA ARRIEL1B T/R BEARING CA010725020
(CAN) THE BEARING LINER WAS FOUND CRACKED IN BOTH TAIL ROTOR PITCH LINKS. THE SAME PROBLEM HAS BEEN REPORTED IN THE PAST.
SNIAS LYC ROD END SEPARATED 07/04/2001
AS350D LTS101600A2 350A371508 MAIN ROTOR CA010725024
(CAN) DURING POST FLIGHT INSPECTION OF AIRCRAFT IT WAS NOTICED THAT THE MAIN ROTOR PITCH LINK ROD AND RETAINER HAD SEPARATED FROM ROD END. PILOT CONFIRMED THAT ON PREVIOUS FLIGHT HE HAD STARTED TO EXPERIENCE A MAIN ROTOR VIBRATION. MAIN ROTOR AND SWASHPLATE ASSEMBLIES INSPECTED BY MAINTENANCE. NO OTHER DAMAGE FOUND. THE MAIN AIRCRAFT WAS FLIGHT TESTED AND RETURNED TO SERVICE.
SOCATA PWA SEAL MISINSTALLED 06/04/2001 29
TBM700 PT6A6A ACTUATOR CA010629020
(CAN) INERTIA ACTUATOR MOTOR P/N 200N6071017220 WAS REPLD 29.9 HRS PRIOR TO FAILURE . NEW ACTUATOR WAS BEING INST WHEN NOTICES INERTIA APOATOR DEFLECTOR BEING CUT WHILE MANU MOVING. UNIT WAS REMOVED FROM HC & WHILE INVESTIGATING NOTICED SEAL THAT HAD UNEVEN MASHINGS FROM WEAR. WHEN DISLOCATED CREATED SAME PROBLEM OF DEFLECTOR BEING CAUGHT & REQ A LOT OF FORCE TO MOVE. THAT COND ITION TOOK OUT NEW MOTOR. EMPIRE PERFORMANCE DROPPED IN FLT & A/C ALTITUDE LIMITED. INCORRECT INSTOF INERTIA SEPARATOR SEAL DISCLOSED CAUSING PROC FAILURE OF MOTOR DUE TO EXCESSIVE PRESSURE SUGGESTED CONNECTIVE ACTION-AFTER REMOVAL & REINSTATIN OF INERTIA SEPARATOR DISCONNECT WATER FROM ASSY & SWFTMS
CONT SWITCH DEFECTIVE 05/11/2001
GC1B IO360C COCKPIT 20010605CW019
INVESTIGATION SUBSEQUENT GEAR UP LANDING, FINDS WIRES TO THROTTLE MICRO SWITCH FOR GEAR WARNING SYSTEM INCORRECTLY CONNECTED. SWITCH FUNCTION INOPERATIVE. WHEN WIRES CORRECTLY CONNECTED TO SWITCH, FUNCTION RESTARTED. FLAG/SPADE CONNECTING EXTREMELY LOOSE, FELL OFF AT SLIGHTEST FORCE. WHEN CONNECTED, SWITCH DOES NOT ACTIVATED GEAR WARNING LIGHT UNTIL THROTTLE IS PULLED HARD TO POST IDLE. (POOR WIRE CONNECTING, MISWIRED, AND MISRIGGED SWITCH.
WACO JACOBP STUD BROKEN 08/03/2001 252
YMF R755* 4109 NR 4 CYLINDER 2001FA0000163
FOUND BROKEN CYLINDER BASE STUD ON NR 4 CYLINDER. AFTER REMOVING BROKEN STUD, FOUND TWO OTHERS BENT, SENT STUDS FOR EVALUATION TO SEE IF THEY MET DESIGN INTENT. THE STUDS DID NOT MEET

OMB No. 2120-0003

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

MALFUNCTION OR DEFECT REPORT

OPER. Control No.	
ATA Code	
1. **A/C Reg. No.**	**N-**

Enter pertinent data	**MANUFACTURER**	**MODEL/SERIES**	**SERIAL NUMBER**
2. **AIRCRAFT**			
3. **POWERPLANT**			
4. **PROPELLER**			

5. SPECIFIC PART *(of component)* CAUSING TROUBLE

Part Name	MFG. Model or Part No.	Serial No.	Part/Defect Location.

6. APPLIANCE/COMPONENT *(Assembly that includes part)*

Comp/Appl Name	Manufacturer	Model or Part No.	Serial Number

Part TT	Part TSO	Part Condition	7. Date Sub.

8. Comments *(Describe the malfunction or defect and the circumstances under which it occurred. State probable cause and recommendations to prevent recurrence.)*

Optional Information:

Check a box below, if this report is related to an aircraft

☐ Accident; Date _____ ☐ Incident; Date _____

DISTRICT OFFICE | OPERATOR DESIGNATOR

OTHER | COMMUTER | FAA | MFG. | AIR TAXI | MECH. | OPER. | REP. STA.

SUBMITTED BY:

TELEPHONE NUMBER: ( ) –

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