

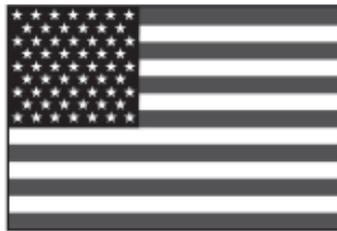


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AVIATION MAINTENANCE ALERTS



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

AVIATION MAINTENANCE ALERTS

The Aviation Maintenance Alerts provide a common communication channel through which the aviation community can economically interchange service experience and thereby cooperate in the improvement of aeronautical product durability, reliability, and safety. This publication is prepared from information submitted by those who operate and maintain civil aeronautical products. The contents include items that have been reported as significant, but which have not been evaluated fully by the time the material went to press. As additional facts such as cause and corrective action are identified, the data will be published in subsequent issues of the Alerts. This procedure gives Alerts' readers prompt notice of conditions reported via Malfunction or Defect Reports. Your comments and suggestions for improvement are always welcome. Send to: FAA; ATTN: Designee Standardization Branch (AFS-640); P.O. Box 25082; Oklahoma City, OK 73125-5029.

AIRPLANES

BEECH

Beech; Model F-33A; Bonanza; Structural Defect; ATA 5500

During a scheduled inspection, the technician discovered a structural defect in the empennage section.

The technician found a crack in a bend radius at the upper left corner of the bulkhead (P/N 002-440023-7). He suspects the crack was caused by many hours and years of operation.

The submitter recommended that technicians give the bulkhead close attention for signs of similar defects during inspections and maintenance. He also stated it would be prudent to conduct a one-time inspection of the bulkhead on aircraft that have over 18,000 hours of operating time.

Part total time-19,291 hours.

Beech; Model A-36; Bonanza; Defective Structure; ATA 5345

During a scheduled inspection, a technician discovered a structural defect in the aft avionics shelf.

The avionics shelf attachment bracket (P/N 36-340310-15) was cracked in a bend radius at the aft end. This bracket is located on the right side between fuselage station (FS) 179 and 207. Also, the technician found another crack in the bend radius at the upper corners.

The submitter believes the cracks jeopardized the structural integrity of the avionics shelf installation. He speculated "vibration and time in service" might have caused this damage.

Part total time-4,716 hours.

Beech; Model 65-80; Queen Air; Wing Flap Failure; ATA 2750

During a landing approach, the pilot placed the wing flap control in the “extend” position with no response from the flaps. He landed the aircraft safely and summoned maintenance personnel.

A technician investigated the pilot’s report and found that the wing flap drive motor (P/N 99-524025-3) operated but did not drive the flaps. Checking further, he discovered that all the teeth were stripped on the gear used on the flap motor armature shaft. Also, the residue from the gear teeth contaminated the wing flap gearbox.

The submitter encouraged all maintenance personnel to thoroughly check the wing flap drive system during scheduled inspections and maintenance.

Part total time-377 hours.

Beech; Model C90A; King Air; Defective Wing Flap Actuator; ATA 2752

While conducting a scheduled inspection, the inspector discovered an accumulation of excessive lubricant in the wing flap actuator area.

A technician removed the excessive lubricant and inspected the area further. He found that the chromed shaft of the wing flap actuator (P/N 90-521024-1) was cracked. The crack ran parallel to the shaft length and terminated (or originated) at the rod-end fitting. The crack was approximately 2.75 inches long.

Given the relatively short time in service for this part, technicians should be alert for excessive lubricant accumulation and possible actuator shaft cracks.

Part total time-375 hours.

Beech; Model C-99; Airliner; Wheel Brake Failure; ATA 3242

The pilot reported that during a landing, the left wheel brake failed. He was able to maintain control of the aircraft and used propeller reversing to stop the aircraft. Maintenance personnel towed the aircraft to a hanger.

While inspecting the wheel brake assembly (P/N 99-8003-5), a technician discovered the bottom of both left wheel brake calipers were broken. It was apparent that a piece of foreign material (FOD) had gotten between the two wheel halves causing both castings to fail. When the failure occurred, the brake system hydraulic fluid was lost.

The submitter speculated that the damage was caused by a large rock since the previous takeoff was from a gravel landing strip.

Part total time-262 hours.

Beech; Model 100; King Air; Defective Flight Control Component; ATA 2740

After finding a defective stabilizer actuator, the technician ordered a replacement part.

When the overhauled actuator (P/N 115-38011-19) was received, the technician conducted a receiving inspection. During the inspection, he found dirt and corrosion in the upper attachment bearings, and the lower attachment bearings were stiff. The general appearance of the unit was “questionable.”

The technician installed the actuator and conducted an operational test. During the test, the “standby trim function” would not operate at full travel in either direction. Also, the “standby” function failed at various points of travel. After removing the actuator and performing a bench test, he discovered the motor was noisy and rough.

The submitter cautioned all technicians to be very vigilant when checking new, overhauled, or newly-acquired parts.

Part total time is unknown.

Beech; Model 100; King Air; Defective Wing Attachment; ATA 5741

During a scheduled inspection, a technician discovered the left wing attachment was defective.

The technician found that a wing attachment bolt (P/N 81786-10), used at the left wing aft upper attachment point, was cracked. The crack was located at the junction of the bolt head and the shank. A similar inspection was conducted 1 year prior to this finding, and no defects were noted at that time.

The submitter recommended giving close attention to this area during inspections and maintenance.

Part total time-3,616 hours.

Beech; Model 400A; Beechjet; Landing Gear Failure; ATA 3230

During a landing approach, the pilot placed the landing gear control in the “down” position with no response for the nose gear. He extended the nose gear using the emergency system and landed the aircraft safely.

A technician placed the aircraft on jacks and conducted a test of the landing gear system. During the test he determined that the nose gear downlock microswitch (P/N MS24331-1) failed in the “locked” position. After replacing the microswitch, the nose gear operated properly.

Considering the time in service for the microswitch, the submitter questioned the reliability of this part. The same microswitch is used on several other aircraft, and the FAA Service Difficulty Program data base contains 11 additional reported failures.

Part total time-67 hours.

CESSNA**Cessna; Model 172; Skyhawk; Flight Control Discrepancy; ATA 2710**

During an annual inspection, a technician discovered a problem with the right aileron.

He found that the right outboard aileron hinge pin (P/N 0523807) had migrated out approximately 5 inches. One aileron hinge lobe cotter pin was still installed, and the other pin was only partially in place.

FAA Airworthiness Directive (AD) 83-22-06 references Cessna Service Information Letter (SE) 83-18, and both documents deal with this subject. However, these two documents do not apply to the particular serial number or year of manufacture (1956) of this aircraft.

The submitter encourages all technicians to refer to AD 83-22-06 and SE 83-18 for information concerning applicability.

Part total time not reported.

Cessna; Model 172R; Skyhawk; Cockpit Seat Structural Defect; ATA 2510

While conducting an annual inspection, a technician discovered the copilot's seat assembly had a structural defect.

The seat pan (P/N 0514227-13) had a crack that was approximately 1.5 inches long in both aft corners. The technician stated the cracks compromised the structural integrity of the seat.

The submitter recommended that technicians closely check the seat assemblies for structural defects at every opportunity.

Part total time-780 hours.

Cessna; Model 172R; Skyhawk; Erroneous Fuel Quantity Indications; ATA 2840

A flight school maintenance department received numerous reports of the "low fuel warning light flickering during flight." The reports indicated the warning light flickered so fast the pilot could not determine if it was for the left or right tank.

Maintenance personnel had been unable to duplicate these reports on the ground. After a similar recent report, a technician removed the left fuel-quantity sending unit from the tank. As a test, he moved the sending unit float arm by hand to approximate the 24-gallon level. He observed that the "left low fuel" light illuminated, and the left fuel quantity indicator needle dropped to "zero."

Many of the operator's pilots have reported erroneous fuel warning lights in 9 of the 10 like aircraft. The problem is almost always intermediate, which makes it difficult, if not impossible, for the maintenance personnel to duplicate.

The submitter suggested that the manufacturer redesign the fuel quantity system to eliminate this problem.

Part total time-1,742 hours.

Cessna; Model 207A; Stationair; Defective Horizontal Stabilizer Security; ATA 5510

During a scheduled inspection, a technician discovered unusual movement of the horizontal stabilizer. The stabilizer could be moved by hand both vertically and horizontally without movement of the control system.

Investigating further, the technician found that the lower left stabilizer “folded tab” was broken outboard of the bolt. The technician discovered a crack, which ran across approximately 80 percent of the forward flange (P/N 1232623-2). This damage reduced the effective left stabilizer support from three bolts to one.

The submitter stated that technicians should check this area closely during scheduled inspections and maintenance.

Part total time-4,294 hours.

Cessna; Model 208B; Grand Caravan; Smoke in the Cockpit; ATA 2400

Approximately 30 minutes into a flight, the pilot detected smoke in the cockpit. He took measures to eliminate the smoke and landed the aircraft safely at the nearest airport.

Maintenance personnel discovered the smoke was generated from the propeller heat electrical wire connector (P-186/J-186) adjacent to the circuit breaker (wire number 4A-36). Even though the electrical connector was fully engaged and properly attached to the wire bundle, the technician discovered the internal connector pins were loose. The loose pins produced high resistance in the connector, which generated excessive heat and smoke.

The propeller heat electrical circuit has a high amperage draw, and the submitter recommended checking the pins in this connector for tightness, condition, and proper installation during scheduled inspections.

Part total time not reported.

Cessna; Model 210N; Centurion; Landing Gear Failure; ATA 3233

During a landing approach, the pilot placed the landing gear control in the “down” position. The right main gear did not respond and all efforts to extend the gear failed. The pilot had to make a gear-up landing.

While assisting the removal of the aircraft from the runway, a technician noticed the right main gear actuator (P/N 9882015-4) would not extend or retract. Upon further inspection, he discovered the actuator was cracked.

The submitter stated this defect was described in Cessna Service Bulletin (SEB) 01-2. He urged all operators and maintenance technicians to consult and comply with SEB 01-2.

Part total time-14,625 hours.

Cessna; Model 340A; Main Landing Gear Failure; ATA 3230

During a landing, the right main gear collapsed just after touchdown.

While removing the aircraft from the runway, a technician noticed the right main gear outboard retraction link (P/N 5041001-12) was broken at both attachment points. The upper attachment strut attachment lug and bolt were sheared, and it appeared that both breaks were instantaneous.

The submitter could not determine the exact cause for this failure, but cautioned other technicians and operators to be observant for any retraction link defects.

Part total time not reported.

Cessna; Model 441; Conquest; Hydraulic System Failure; ATA 2910

During a flight, the pilot noticed that the hydraulic system quantity and pressure indicators fell to zero. After using the emergency system to extend the landing gear, he made a safe landing.

Maintenance personnel investigated the problem, and a technician discovered that a hydraulic line (P/N 5727002-58) was split. This line is located on the left side, aft of the firewall, between the hydraulic system filter and the flow valve. Due to the split line, all the hydraulic system fluid was lost. (Refer to the illustration.)

The submitter speculated the line failed due to “a manufacturing defect.”

Part total time-3,750 hours.



Cessna; Model 560; Citation; Electrical System Defect; ATA 2435

The pilot reported that during a flight, the right engine generator “dropped offline.” He reduced the electrical system load and was able to reset the system. After landing and engine shutdown, the right engine would not start.

A maintenance technician investigated the pilot’s report and discovered that the starter/generator (P/N 300SGL129Q) would not rotate. He believed the starter/generator suffered from internal failure and replaced the unit.

The submitter did not conduct any further investigation to determine the cause of the failure.

Part total time-950 hours.

Cessna; Model 650; Citation; Wing Flap Discrepancy; ATA 2750

Personnel from a repair station found that the wing flaps were “stuck” at 20 degrees. When they attempted to raise or lower the flaps, the 40-amp fuse failed.

While investigating, a technician discovered that a bearing in the flap-drive unit (P/N 9914416-1) was seized. The seized bearing was located on one end of the teleflex drive. He noticed that a fuselage drain was located above the flap motor and found that “water” from the toilet had been leaking onto the motor. The toilet “water” had entered the bearing and caused severe corrosion.

The submitter suggested that measures be taken to ensure the toilet “water” is routed to the intended place and kept out of the wing-flap mechanism and other aircraft components.

Part total time not reported.

GROB**Grob; Model G120A; Defective Fuel System Indication; ATA 2840**

After starting the engine for a flight, the pilot noticed the fuel-flow indication was “zero.” He secured the aircraft and reported the problem to maintenance personnel.

The aircraft was taken to a maintenance hangar, and a technician performed a test of the fuel-flow system. He discovered that “tapping” on the indicator face made it work. After he replaced the fuel flow transducer (P/N P165-75G-B), the system operated properly.

There was no explanation of why the fuel-flow transducer failed.

Part total time-9 hours.

LUSCOMBE**Luscombe; Model 8A; Silvaire; Structural Damage; ATA 5711**

During an annual inspection and compliance with Airworthiness Directive (AD) 55-24-1, a technician discovered severe structural damage.

The aft carry-through spar (P/N 28018) bottom web suffered the long term effects of intergranular corrosion. The corrosion damage had seriously compromised the structural integrity of the center wing carry-through structure. If this had not been corrected, it could have resulted in a catastrophic failure.

The submitter recommended that technicians give this area rigorous attention during inspections.

Part total time-1,821 hours.

PIPER**Piper; Model PA 18-150; Super Cub; Fuel Leak; ATA 2810**

This float-equipped aircraft was modified by installation of Supplemental Type Certificate (STC) SA02171AK.

While investigating the cause of a reported fuel leak, a technician discovered the fuel tank was defective. The fuel tank (P/N DC 18049-24G-32L) was leaking along the lower welded seam on the outboard side.

The submitter stated, "It appeared there was an insufficient amount of material along the welded seam."

Part total time-220 hours.

Piper; Model PA 28-151; Warrior; Poor Engine Operation; ATA 7322

During a ground engine-operational test, the engine performance was very poor. It seemed the engine fuel mixture was excessively rich, and the technician secured the engine to investigate the problem.

The technician removed the carburetor (Marvel P/N MA4SPA) throttle body assembly and discovered the needle valve would not seat. He found a "sliver of metal lodged between the needle and the seat." The metal sliver appeared to be aluminum and was approximately .188 inch long, .018 inch thick, and .023 inch wide.

The submitter believes the metal sliver was a portion of the female threads used to attach the fuel inlet and strainer assembly to the throttle body. He suggested that technicians pay close attention to the condition of these, and all threaded assemblies, during inspections and installations.

Part total time-4,000 hours.

Piper; Model PA 28-161; Warrior; Landing Gear Failure; ATA 3211

During a landing, the left main landing gear assembly separated from the aircraft when it contacted the runway.

The left main gear (P/N 35644-04) attachment sheared at the location of the upper and lower retaining bolts. This aircraft was used for flight training for a long period of time, which led the submitter to speculate this failure was caused by the accumulation of many hours of operation and, possibly many "hard landings."

The submitter recommended the landing gear attachments of aircraft used in a training environment be closely inspected every 5,000 hours of operation.

Part total time-12,250 hours.

Piper; Model PA 31-350; Chieftain; Nose Landing Gear Failure; ATA 3230

During a landing approach, the nose landing gear would not extend when the pilot placed the control in the “down” position. All efforts to extend the nose gear failed, and he landed the aircraft without aid of the nose gear.

Maintenance personnel recovered the aircraft from the runway, took it to a hangar, and investigated the failure. A technician discovered that the nose gear “J-hook” nut and cotter pin were missing. The missing hardware allowed the control rod to disengage from the “J-hook” bolt.

After the technician installed the proper hardware, the nose gear functioned properly.

Part total time not reported.

Piper; Model PA 31-350; Chieftain; Poor Engine Performance; ATA 7310

During a takeoff run, the pilot noticed the left engine was 200 RPM low. He aborted the takeoff and returned to the parking ramp.

While troubleshooting the problem, a technician discovered that the left engine fuel manifold was “sucking air” past the “O-ring” seals (P/N MS29512-8). The “O-ring” seals were located in the left wing root area and were severely deteriorated. He replaced the “O-ring” seals and conducted an operational test. The engine performed satisfactorily during the test.

The submitter recommended that technicians check the fuel manifold “O-ring” seals for serviceable condition during scheduled inspections.

Part total time not reported.

Piper; Model PA 32RT-300T; Turbo Lance; Nose Landing Gear Failure; ATA 3230

During a landing approach, the pilot placed the landing gear control in the “down” position and noticed the nose gear did not fully extend. After many attempts to get the nose gear locked down, the pilot decided to land the aircraft in the present configuration. While on a short final, the nose gear went to full down and locked, and the landing was completed without further incident.

Maintenance technicians moved the aircraft into a hangar and prepared to test the gear retraction system. During the test, the gear failed to retract, and the hydraulic powerpack would not run. After terminating the test, a technician noticed the hydraulic motor was “hot” to the touch, and the hydraulic reservoir was empty. While replacing the hydraulic powerpack, he noticed evidence of a “slow seep” at the female threads of “cross” fitting (P/N AN918-1D) located just below the powerpack. Further inspection revealed that three of the four bosses had “hairline” cracks and one was leaking.

The submitter urged all technicians to examine the hydraulic system fitting bosses at every opportunity.

Part total time-3,046 hours.

Piper; Model PA 34-200T; Seneca; Engine Oil System Defect; ATA 8550

The engine used in this aircraft is a Teledyne Continental, Model LTSIO-360-EB.

After landing safely, the pilot reported losing oil pressure on the right engine just after takeoff.

A technician investigated the pilot report and discovered the engine oil pump drive shaft (P/N 640926) was broken. He researched this discrepancy and discovered that Airworthiness Directive (AD) 81-13-10 R1 is applicable to this problem; however, the AD does not apply to this engine serial number.

The submitter speculated the oil pump drive shaft "is the weak link" in this engine.

Part total time-1,700 hours.

Piper; Model PA 44-180; Seminole; Defective Engine Induction Air System; ATA 7160

During a scheduled inspection, a technician discovered the left engine carburetor heat airbox was damaged.

The airbox (P/N 86245-834) was cracked at the hot air inlet, and the crack extended almost all the way around the tube circumference. The submitter believes "poor design and weak welds at the air inlet tubes" might cause this type of damage. He is aware of repeated similar defects on other like aircraft, and the FAA Service Difficulty Program data base contains five additional reports.

The submitter recommended the manufacturer review the airbox design and service history to develop a more reliable airbox assembly. He urged technicians to give the engine air induction system very close attention at every opportunity.

Part total time-299 hours.

Piper; Model PA 44-180; Seminole; Carburetor Heat Failure; ATA 7160

The pilot conducted an engine runup check prior to a flight and found there was no RPM drop on the right engine when carburetor heat was applied. He taxied back to the parking ramp and summoned maintenance personnel.

A technician inspected the right engine and discovered the carburetor heat control (P/N 554-545) was broken. The control cable broke where the threaded shaft is swaged onto the cable. The shroud, which goes around the shaft, was missing.

During a previous 100-hour inspection, both engine throttle controls and the right engine mixture control displayed signs of extreme wear and damage and were replaced. While these controls had not yet failed, the shrouds had come loose and were floating freely on the threaded shaft. The submitter speculated these defects were caused by "poor design or manufacturing defects."

Part total time-577 hours.

Piper; Model PA 46-500TP; Mirage; Propeller Governor Damage; ATA 6122

During a scheduled inspection, a technician discovered the overspeed governor wiring was damaged.

The overspeed governor is located on the forward left side of the engine. The electrical plug for the “overspeed governor test solenoid” is positioned in a manner which causes damage to the wires when the cowling is removed or installed. The electrical plug for the wiring is straight, and the submitter suggested that a 90-degree plug might alleviate future wire damage.

The submitter urged all technicians to check the governor wiring closely at every opportunity.

Part total time not reported.

AGRICULTURAL AIRCRAFT

CESSNA

Cessna; Model A188B; AG Wagon; Loss of Engine Power; ATA 2820

While engaged in aerial application work, the pilot lost engine power, which resulted in an accident.

While investigating the accident, a technician discovered the cockpit mixture control was set properly; however, the engine fuel/air mixture was extremely lean. The fuel filter assembly (P/N 0756009-7) was contaminated to the point of restricting the engine fuel supply. He did not say what “contamination” was found in the filter assembly or how it got there.

The submitter recommended repositioning the fuel filter/strainer drain. He stated this would allow better access when the technician checked the condition of the drained fuel.

Part total time not reported.

ACCESSORIES

ENGINE EXHAUST SYSTEM CLAMPS

This article was submitted by Mr. Barry Ballenger, who is an aerospace engineer with the FAA Aircraft Certification Office (ACE-110), located in Kansas City, Missouri. *(This article is printed as it was received.)*

Exhaust system maintenance continues to be a factor in aircraft accidents. A recent fatal accident of a single-engine aircraft involved the apparent separation of the tailpipe assembly from the turbocharger allowing hot exhaust gases to be expelled into the engine compartment. The pilot reported smoke and fire in the cockpit before the aircraft crashed short of the airport, destroying the aircraft and resulting in two fatalities. The National Transportation Safety Board (NTSB)

investigation is targeting an exhaust clamp failure due to fatigue cracks found in the turbocharger to tailpipe clamp. A review of the FAA Service Difficulty Report (SDR) database reveals similar incidents involving this clamp as a primary factor.

This accident highlights the necessary concern that maintenance personnel should have for exhaust system maintenance procedures. Annual and 100 hour inspection programs require an inspection of all exhaust system components for condition and security accordance with Part 43, Appendix D of the Federal Aviation Regulations. Maintenance personnel should follow the instructions provided by each manufacturer for specific inspections or maintenance on exhaust system components, including turbocharger installations. It is important to note that many manufacturers do not recommend welding of cracked exhaust system components. (Reference FAA Advisory Circulars (AC) 43.13-1B and 91-59 for further guidance on exhaust system inspection and repair.)

This particular aircraft had maintenance record entries for two turbocharger replacements since the aircraft was new. These maintenance actions would have provided an excellent opportunity for conducting a thorough inspection of the clamp and flange area in question. It is important for maintenance personnel to routinely inspect all associated components for condition when performing maintenance tasks.

A review of the aircraft manufacturer maintenance manual revealed a specific procedure for inspection of the multi-segmented "V" band clamp that secures the tailpipe to the turbocharger. These multi-segmented clamps typically utilize spot welds to secure the segments to the outer band. Particular attention to the spot welds for signs of cracks is advised. It also provides a procedure for properly torquing the clamp upon reinstallation and instructions for periodic inspection of the complete exhaust system. A recommended replacement time for the clamp is also provided.

Exhaust system defects will continue to be a problem due to heat, vibration and dissimilar metals. Maintenance personnel should review exhaust system maintenance practices provided by the manufacturer and follow those instructions when servicing aircraft.

Preventive maintenance can save dollars, but more importantly, it can save lives.

BENDIX MAGNETO DEFECT

This article was submitted by a technician (A&P, IA) and forwarded through the FAA Flight Standards District Office (FSDO) located in Fargo, North Dakota.

The subject magneto (Bendix type S4LN-21) was installed on a Teledyne Continental Model C-90 engine being used on a Cessna Model 140A aircraft.

During an engine teardown because of a broken rocker boss, the owner decided to overhaul the engine due to performance degradation. When the engine was disassembled, a technician discovered the crankshaft was cracked. The engine maintenance records indicated the engine was involved in a "propeller strike" approximately 18 months prior. When the magnetos were removed, he found that the flyweights on one magneto were starting to rub on the posts. The washer was "welded" to the axle. (Refer to the illustration.) Normally, the flyweights are secured by countersunk washers that are "hot riveted" to the axle. In this case, someone had "brazed" the washers to the axle, evidently because it was loose.



The manufacturer's inspection requires checking the washers with hand pressure for rotation. Movement of the washer requires replacement of the cam/flyweight assembly. It was not possible to determine the identity of the person who improperly welded the washer in this assembly!

AIRNOTES

OUR BEST WISHES TO YOU FOR THIS VERY SPECIAL SEASON

During the Christmas season, I always reflect on the passing of the year and evaluate what has transpired in that time. Have there been improvements, progress, a better way of doing things, have I been a positive influence on someone, have I treated everyone with dignity and respect, have I given my best effort? These are but a few of the questions I mull and reflect upon.

Also, I cogitate on the year ahead and wonder how I personally can improve, do things better, and be a positive influence on the people in my life. I eagerly look forward to the coming year with zeal for the things to come. If the natural order of things hold true, each new year should bring improvements and more efficiency since I have another years' worth of experience to draw upon. Yesterday is the past, tomorrow is the future, and tomorrow, today will become the past. Since the actions of the past cannot be changed, we can only hope to gain from our experience and improve our present actions. Therefore, with a thankful heart we should strive each day to gain, expand, and improve the skills and talents we have been given. As each person is different, so are their many and varied skills, as well as how each individual perfects the level of those gifts.

It has been our pleasure to serve the aviation community with this publication over the past year and since its inception. This is truly **YOUR** publication, since most of the material and information is supplied by you, our readers. The purpose of this periodical always has been, and will continue to be, the improvement of aviation safety and the professionalism of the aviation maintenance technician. You have come a long way since Charles Taylor, yet when we look back sometimes we wonder what miraculous and inconceivable progress we will embrace in the future as "common place." For one, I am proud to be counted among your numbers.

Whatever deity you reverence and serve, I take this opportunity to extend my wishes to all for the best of everything on this Christmas season.

MERRY CHRISTMAS AND A PEACEFUL AND PROSPEROUS NEW YEAR

MOVIN' ON

In a relay race, each participant carries the baton for a set distance and then passes it to the next runner. Well, it is time for me to pass my baton to another person.

I have decided to retire at the end of this year and am leaving with some reluctance. I have truly enjoyed this job and working personally with many of you. It is my sincere hope that I have made at least a small contribution to aviation safety over the past 10 years as editor of this publication and 40 odd years in the aviation industry.

I'm just retiring, I didn't die, (yet) and I would be happy to hear from you in the future. So, give me a call some time, I'm in the "book" (OKC). I have not made any firm plans for the future, but am open to suggestions. I do plan to travel, and next spring I will visit Alaska and hope to gain a greater appreciation of this "Great Creation" in which we live.

At the time of this writing, I don't know the future of this publication, but rest assured that I have done everything possible to ensure its' continued publication. As I prepare to depart, I do not know to whom I will "pass the baton."

I offer my best wishes to each and every one of you for your future and the future of aviation maintenance.

Thanks for the memories.
Phil Lomax, Civilian A&P, IA

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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 or 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 data base contains records dating back to 1974. Reports may be submitted on the Internet through an active data entry form or on hard copy. The electronic data entry form is in the AFS-600 Aviation Information web site under the heading SDR Main Menu. The URL is: <<http://av-info.faa.gov>>

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

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

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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.

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

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AVIATION SERVICE DIFFICULTY REPORTS

The following are abbreviated reports submitted between October 31, 2002, and November 21, 2002, 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:

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These reports contain raw data that has not been edited. If you require further detail please contact AFS-620 at the address above.

FEDERAL AVIATION ADMINISTRATION

Service Difficulty Report Data

Sorted by Aircraft Make and Model then Engine Make and Model. This Report Derives from Unverified Information Submitted By the Aviation Community without FAA review for Accuracy.

ACFTMAKE ACFTMODEL REMARKS	ENG MAKE ENGMODEL	COMPMAKE COMPMODEL	PART NAME PART NUMBER	PART CONDITION PART LOCATION	DIFF-DATE OPER CTRL NO.	T TIME TSO
	CONT GTSIO520*		CRANKSHAFT 652832	CRACKED ENGINE	10/14/2002 2002FA0001299	2916
CRANKSHAFT CRACKED BETWEEN FRONT TWO COUNTERWEIGHTS AND A PIECE MISSING FROM THAT AREA.						
	CONT IO520D		BOLT 535810	MISMANUFACTURE CRANKCASE	10/31/2002 2002FA0001246	
CRANKCASE UPPER TIE BOLT THREADS WERE NOT CUT PROPERLY. THEY HAD A FLAT PROFILE LIKE THE THREADS WERE NOT CUT DEEP ENOUGH. CONDITION DISCOVERED WHEN ATTEMPTING TO INSTALL NUTS ON THE BOLT.						
	CONT IO520F		DIPSTICK 6320622	FAULTY ENGINE OIL	10/09/2002 AUS20021159	1687
(AUS) ENGINE SUMP WORN INTERNALLY BY DIPSTICK ROD. DEPTH OF WEAR GROOVE APPROXIMATELY 0.635MM (0.025IN). THICKNESS OF SUMP SKIN 1.27MM (0.050IN). TWO OTHER SIMILAR DEFECTS FOUND FROM THE SAME OPERATOR. ALL HAVE BEEN ASSOCIATED WITH LATE MANUFACTURE RIVETED DIPSTICKS WITH SUFFIX AW OR BF. SUSPECT DESIGN PROBLEM WITH LATER MODEL DIPSTICKS.						
	CONT IO520L		CRANKSHAFT	DAMAGED ENGINE	09/01/2002 AUS20021221	
(AUS) CRANKSHAFT BIG END JOURNALS FOR NR 4 AND NR 5 CYLINDER CONNECTING ROD SEVERELY OVERHEATED. CRANKSHAFT AND CONNECTING RODS DAMAGED BEYOND REPAIR. FOUND DURING ENGINE STRIP INSPECTION FOR LOW OIL PRESSURE.						
AMTR LANCAIR	CONT IO550G		NUT	SEPARATED ALTERNATOR	10/22/2002 2002FA0001257	141
NUT SECURING ALTERNATOR DRIVE GEAR CAME OFF. GEAR SUBSEQUENTLY FELL OFF OF ALTERNATOR SHAFT DAMAGING INTERNAL ENGINE GEARS.						
AMTR RV8	LYC AEIO360*		BLADE	DELAMINATED PROPELLER	10/03/2002 AUS20021098	
(AUS) PROPELLER LEADING EDGE DELAMINATING IN AREA OF TIP.						
AVIAT A1B	LYC O360*		LINE	SEPARATED ENGINE FUEL SYS	11/13/2002 2002FA0001294	259
CENTER SUPPLY PRIMER LINE SEPARATED FROM TEE FITTING AT BACK OF ENGINE. DISCOVERED DURING ATTEMPT AT COLD ENGINE STARTING. NOTICED DIFFICULTY IN STARTING AND FUEL SMELL. OPENED COWLING TO DISCOVER PRIMER LINE SEPARATED.						
AVIONS R2160	LYC O320D2A	LYC O320D2A	MOUNT	CRACKED ENGINE MOUNT	09/13/2002 AUS20021166	
(AUS) ENGINE MOUNT CRACKED IN SEVERAL AREAS. FURTHER INSPECTION FOUND BOTH LOWER ENGINE MOUNT BRACKETS LOCATED BEHIND THE FIREWALL ALSO CRACKED. LH AND RH TOP FUSELAGE SKINS REMOVED FOR INSPECTION AND LH TOP MOUNT STRUCTURE FOUND CRACKED. LH RUDDER BAR ATTACHMENT POINT CRACKED BENEATH ANCHOR NUT.						

BAG	GARRTT	BAC	WINDOW	CRACKED	10/21/2002	
JETSTM3201	TPE33112UA	137169C411	1379595C3	PASSENGER	AUS20021216	
(AUS) PASSENGER WINDOW OUTER PANE CRACKED. WINDOW IS THE THIRD WINDOW ON THE LH SIDE.						
BEECH	PWA	PWA	TRANSDUCER	LEAKING	10/04/2002	
200BEECH	PT6A41	PT6A41	660526	FUEL FLOW INDICA	AUS20021150	
(AUS) RH ENGINE FUEL FLOW TRANSDUCER OUTLET FITTING LOOSE AND LEAKING FUEL. TRANSDUCER IS MANUFACTURED BY SHADIN.						
BEECH	PWA		WINDSHIELD	CRACKED	10/18/2002	
200BEECH	PT6A41		10138402516	COCKPIT	2002FA0001275	
WINDSHIELD SHATTERED IN FLIGHT, FROM UNKNOWN CAUSES.						
BEECH	PWA		WIRE HARNESS	BURNED	10/21/2002	910
400A	JT15*		128364231601	MAIN BATTERY	2002FA0001288	
WHILE MOTORING ENGINE FOR OTHER MAINTENANCE, FOUND BURNING ODOR AND SMOKE IN AREA OF MAIN BATTERY. ON VISUAL INSPECTION, FOUND POSITIVE TERMINAL AND WIRE LEADS OF CONNECTOR BURNED. ALSO FOUND DAMAGE TO BATTERY TERMINAL.						
BEECH	CONT		FITTING	DAMAGED	10/23/2002	
58	IO520C		0001100881	WING, FUSELAGE A	AUS20021222	7086
(AUS) LH WING FORWARD LOWER ATTACHMENT BATHTUB FITTING CORRODED AND DAMAGED. PERSONNEL/MAINTENANCE ERROR.						
BEECH	CONT		FITTING	DAMAGED	10/23/2002	
58	IO520C		0001100882	WING, FUSELAGE A	AUS20021223	7086
(AUS) RH WING FORWARD LOWER ATTACHMENT BATHTUB FITTING CORRODED AND DAMAGED. PERSONNEL/MAINTENANCE ERROR.						
BEECH	CONT		FITTING	DAMAGED	10/23/2002	
58	IO520C		0001102501	WING, FUSELAGE A	AUS20021224	7086
(AUS) LH WING FORWARD TOP ATTACHMENT BATHTUB FITTING CORRODED AND DAMAGED. PERSONNEL/MAINTENANCE ERROR.						
BEECH	CONT		FITTING	CORRODED	10/23/2002	
58	IO520C		9511001621	WING, FUSELAGE A	AUS20021225	7086
(AUS) RH WING REAR TOP ATTACHMENT BATHTUB FITTING CORRODED. PERSONNEL/MAINTENANCE ERROR.						
BEECH	CONT		FITTING	CORRODED	10/23/2002	
58	IO520C		0001102502	WING, FUSELAGE A	AUS20021226	7086
(AUS) RH WING TOP FORWARD ATTACHMENT BATHTUB FITTING CORRODED. PERSONNEL/MAINTENANCE ERROR.						
BEECH	CONT		FITTING	CORRODED	10/23/2002	
58	IO520C		951100161	WING, FUSELAGE A	AUS20021227	7086
(AUS) LH WING REAR UPPER ATTACHMENT BATHTUB FITTING CORRODED. PERSONNEL/MAINTENANCE ERROR.						
BEECH	CONT		CONNECTOR	CORRODED	10/23/2002	
58	IO520C		369200141	AIRCRAFT FUEL DI	AUS20021228	7086
(AUS) LH WING MAIN FUEL TANK OUTLET FUEL RESERVOIR CONNECTOR CORRODED DUE TO WATER						
BEECH	CONT		CONNECTOR	CORRODED	10/23/2002	
58	IO520C		369200141	AIRCRAFT FUEL DI	AUS20021229	7086
(AUS) RH WING MAIN FUEL TANK OUTLET FUEL RESERVOIR CONNECTOR CORRODED DUE TO WATER						
BEECH	LYC		FRAME	CRACKED	10/31/2002	6561
76	O360*		10581002367	MLG	2002FA0001289	
THE LEFT FRAME WAS NOTED TO HAVE CORROSION PREVENTATIVE Oozing IN THE EXACT AREA OF THE INSPECTION, IN A LINE THAT APPEARED AS A CRACK. THE AREA WAS CLEANED AND A CRACK WAS APPARENT BY USING A GOOD LIGHT AND 10 POWER GLASS. A DYE CHECK OF THE AREA FAILED TO REVEAL THE CRACK. SUSPECT THE CORROSION PREVENTATIVE FILLS THE CRACK AND IS NOT CLEANED OUT BY THE PENETRANT CLEANER SO THE PENETRANT IS NOT ALLOWED TO WORK AS IT IS MEANT TO.						
BEECH	CONT		ROD	FAULTY	09/01/2002	
95C55	IO520C		3581512512	LANDING GEAR	AUS20021122	
(AUS) LH MAIN LANDING GEAR RETRACTION ROD FAULTY. ROD HAD BEEN ILLEGALLY REPAIRED IN AN ATTEMPT TO STRAIGHTEN THE ROD. RIVETS HAD BEEN REPLACED WITH BOLTS AND PENNY WASHERS. UNAPPROVED REPAIR. PERSONNEL/MAINTENANCE ERROR.						
BEECH	CONT	BEECH	RIB	CORRODED	09/01/2002	
95C55	IO520C	95110234	95110233	WING, RIB/BULKHE	AUS20021123	
(AUS) LH WING RIB PNO 9511023-3 AND RH WING RIB PNO 9511023-4 CORRODED THROUGH. LH WING RIB CHANNEL PNO 9511023-5 AND RH WING RIB CHANNEL PNO 9511023-6 CORRODED THROUGH. RIBS AND CHANNELS ARE LOCATED AT STN 66.						
BEECH	CONT		ROD END	CORRODED	09/01/2002	
95C55	IO520C		135038	AILERON TAB	AUS20021125	
(AUS) LH AILERON TRIM TAB ROD END FORK RUSTY AND CLEVIS PIN SEIZED.						
BEECH	CONT		FITTING	CORRODED	09/01/2002	
95C55	IO520C			FUSELAGE, WING A	AUS20021126	
(AUS) WING ATTACHMENT TOP BATHTUB FITTINGS CORRODED AND DRAIN HOLES BLOCKED. NO CORROSION PROTECTION ON FITTINGS.						
BEECH	CONT		DOUBLER	CORRODED	09/01/2002	
95C55	IO520C			FUSELAGE, MISCEL	AUS20021127	
(AUS) LH AND RH FUSELAGE DOUBLERS LOCATED AT STN 0.00 CONTAINED EXFOLIATION CORROSION. ADJACENT RIB PNO 95-410005-4 CORRODED AWAY. AIRCRAFT HAS OPERATED IN A SALT AIR ENVIRONMENT FOR A CONSIDERABLE TIME.						
BEECH	CONT		BEARING	SEIZED	09/01/2002	
95C55	IO520C			RUDDER CONTROL	AUS20021129	
(AUS) RUDDER BEARINGS UNSERVICEABLE. TOP BEARING SEIZED WITH A GROOVE WORN IN THE ATTACHMENT PIVOT BOLT. CENTER BEARING WORN. LOWER BEARING PARTIALLY SEIZED.						
BEECH	CONT		CABLE	CORRODED	09/01/2002	
95C55	IO520C			LANDING GEAR	AUS20021130	
(AUS) LH AND RH MAIN LANDING GEAR UPLOCK CABLES RUSTY. UPLOCK SPRINGS BROKEN AND RUSTY. CLOSING PANELS IN WHEEL WELL BAYS MISSING ALLOWING DIRT AND MUD ETC TO BUILD UP.						
BEECH	CONT		STRINGER	CORRODED	09/01/2002	
95C55	IO520C			FUSELAGE MAIN, L	AUS20021131	
(AUS) FUSELAGE STRINGER LOCATED AT STN 107.00 CONTAINED SEVERE EXFOLIATION CORROSION. EVIDENCE OF WATER ENTRY OVER AN EXTENDED PERIOD.						
BEECH	CONT		KEEL	CORRODED	09/01/2002	
95C55	IO520C		96410032601	FUSELAGE MAIN, K	AUS20021132	
(AUS) LH AND RH KEEL SPLICE JOINTS LOCATED IN NOSE LANDING GEAR WHEEL WELL AT STN 49.000 CONTAINED SEVERE EXFOLIATION CORROSION BETWEEN THE JOINT FACES. ATTACHMENT RIVET HEADS MISSING. AFFECTED PARTS WERE:-1. LH FORWARD KEEL PNO 96-410032-6012. LH AFT KEEL PNO 96410032-133. RH FORWARD KEEL PNO 96-410032-6084. RH AFT KEEL PNO 96410032-608						

BEECH	CONT		RIB	CORRODED	09/01/2002	
95C55	IO520C			WING, RIB/BULKHE	AUS20021133	
(AUS) LH AND RH WING TRAILING EDGE RIBS CORRODED. RIBS AFFECTED ARE:- LH WING-PNO 95110014-121PNO 95110014-191PNO 95110014-153PNO 95110014-129PNO 95110014-135RH WING-PNO 95110014-122PNO 95110014-192PNO 95110014-154PNO 95110014-130PNO 95110014-120						
BEECH	CONT		LINK	SEIZED	09/01/2002	
95C55	IO520C		35361145	LANDING GEAR POS	AUS20021135	
(AUS) SQUAT SWITCH LINKS SEIZED.						
BEECH			SPACER	MISSING	11/18/2002	
A36TC			102933D5ZM245	CONTROL COLUMN	3739	
THESE BUSHINGS ARE LOCATED BETWEEN THE CONTROL COLUMN TORQUE KNEES, LOCATED BEHIND THE INSTRUMENT PANEL. THE SPACERS WERE FOUND MISSING WHILE INVESTIGATING EXCESSIVE PLAY IN THE TORQUE KNEES.						
BEECH			BOLT	CRACKED	10/13/2002	
B100			817841432SPS12	WING	CA021015010	
(CAN) DURING INSPECTION OF WING AND BOLTS, IN CONJUNCTION WITH AD. DYE PENETRANT INSPECTION FOUND CRACK IN LOWER FORWARD LT WINGBOLT. CRACK FOUND ON BOLT SHAFT/FLANGE AREA. NO OTHER CRACKS FOUND DURING INSPECTION. BOLT REPLACED. ORIGINAL FAILED BOLT INSTALLED AUG. 1ST, 1996. TIME ON A/C 6776.0, CYCLES 5362. BOLT WAS INSPECTED ON A YEARLY BASIS. WITH NO CRACKS DETECTED PREVIOUS.						
BEECH	PWA		FORK	CRACKED	10/21/2002	6798
B200	PT6A11		1018200741	MLG	2002FA0001259	2113
FOUND HOLE FORK CRACKED, INSTALLED KIT.						
BEECH	PWA	BEECH	TORQUE TUBE	FAULTY	10/25/2002	
B200C	PT6A42	B200C	10152401215	RUDDER	AUS20021234	
(AUS) RUDDER TORQUE TUBE RIVETS LOOSE AND RIVET HOLES WORN BY UP TO APPROXIMATELY 0.254MM (0.010IN) OVERSIZE.						
BEECH	CONT		CLAMP	DISCONNECTED	10/23/2002	
B36TC	TSIO520*		539487	CROSSOVER TUBE	2002FA0001270	
PILOT REPORTED HEARING A POP AT 11,000 FT AND IMMEDIATELY LOST MANIFOLD PRESSURE. PILOT MAKE PRECAUTIONARY LANDING WITHOUT INCIDENT. INSPECTION OF ENGINE REVEALED FORWARD CYLINDER INDUCTION MANIFOLD CROSSOVER TUBE HAD BECOME DISCONNECTED FROM NR 5 CYLINDER INTERCONNECT HOSE. IT APPEARS SECURITY CLAMP MAY BE TOO NARROW TO ADEQUATELY SECURE CROSSOVER TUBE TO NR 5 CYLINDER MANIFOLD ASSEMBLY AND INTERCONNECT HOSE. ORDERED AND INSTALLED CLAMP IAW IPC. REPLACEMENT CLAMP IS WIDER THAN CLAMP REMOVED AND WILL PROVIDE IMPROVED INTEGRITY.						
BEECH			SUPPORT	LOOSE	10/31/2002	3138
C24R				LT & RT MLG	2002FA0001242	
LT AND RT MLG FORWARD PIVOT SUPPORT ATTACHMENT 'JO-BOLTS' WERE FOUND LOOSE AND COULD BE ROTATED BY HAND. MORE THAN HALF OF THE 26 TOTAL FASTENERS HAD TO BE REPLACED.						
BEECH	LYC	RAYTHN	SPRING	DISTORTED	10/31/2002	
C24R	IO360A1B6		97343	LT UPLOCK	2002FA0001241	
LT MLG UPLOCK ACTUATOR WOULD NOT RELEASE THE LANDING GEAR DURING 'FREE FALL' TEST. DISASSEMBLY OF ACTUATOR REVEALED A NONAPPROVED SPRING THAT WAS 0.125 INCHES SHORTER THAN THE ORIGINAL MANUFACTURER. THE SCARCITY OF REPLACEMENT PARTS FOR THIS UNIT MAY HAVE CAUSED A PREVIOUS REPAIRER TO USE UNAPPROVED PARTS.						
BEECH	CONT	CONT	PUMP	LEAKING	09/29/2002	
V35A	IO550B	64621218	64621218	ENGINE FUEL	AUS20021119	
(AUS) ENGINE DRIVEN FUEL PUMP LEAKING. SUSPECT FAULTY SHAFT SEAL.						
BELL	ALLSN		SWITCH	INOPERATIVE	10/23/2002	
206B	250C20		7G547	FUEL BOOST	YT2R631367	
FUEL BOOST SWITCH INOPERATIVE UPON INSTALLATION.						
BELL	ALLSN		SWITCH	INOPERATIVE	10/23/2002	
206B	250C20		7G547	FUEL BOOST	YT2R631369	
FUEL BOOST SWITCH INOPERATIVE UPON INSTALLATION.						
BELL	PWA		HOSE	WORN	09/27/2002	
412	PT6T3B		70061L275W210	MAIN ROTOR	AUS20021096	
(AUS) TRANSMISSION OIL HOSE HOLED AND LEAKING. HOSE WAS CHAFING ON AN ADJACENT PIPE. TRANSMISSION OIL LOST OVERBOARD.						
BELL	LYC		FITTING	FAULTY	10/15/2002	
UH1H	T5313B		2050308153	FUSELAGE MAIN, A	AUS20021231	
(AUS) TAILBOOM LH LOWER ATTACHMENT FITTING ON FUSELAGE HAD OVERSIZE HOLES ALLOWING THE HILOK' PINS TO LOOSEN. SUSPECT CAUSED BY POOR REPAIR WORK.						
BNORM	LYC		BRACKET	WORN	10/11/2002	
BN2A26	IO540K1B5		NB310077	ELEVATOR/TAB,	AUS20021181	
(AUS) ELEVATOR OUTBOARD HINGE BRACKET WORN AND RIVETS LOOSE. FOUND DURING INSPECTION IAW AD/BN2/70 AND BN2/SB259.						
BNORM	LYC		SLEEVE	SPLIT	10/11/2002	
BN2B20	IO540K1B5		NB45B349	AILERON CONTROL	AUS20021153	
(AUS) LH AILERON CONTROL ROD SLEEVE SPLIT THROUGH TAPER PIN HOLE.						
BOEING	RROYCE	RROYCE	FMU	FAULTY	10/04/2002	
717200	BR700715A130	BR700715A130	8061965	FUEL	AUS20021108	
(AUS) LH ENGINE SPOOLED DOWN. FUEL METERING UNIT (FMU) PNO 18061-965 AND ENGINE ELECTRONIC CONTROL (EEC) PNO 114E6112G119 CHANGED ON ADVICE FROM MANUFACTURERS.						
CESSNA	LYC	LYC	GASKET	DAMAGED	08/08/2002	
152	O235L2C	O235L2C	60096	RECIPROCATING	AUS20021235	
(AUS) ENGINE FUEL PUMP/BLANK PLATE GASKET CUT BY LOCKWIRE WRAPPED AROUND THE TWO MOUNTING BOLTS. GASKET LEAKING ENGINE OIL. ENGINE WAS FITTED WITH A BLANKING PLATE AND NOT A FUEL PUMP. ENGINE WAS A RECENTLY OVERHAULED AND FITTED UNIT. PERSONNEL/MAINTENANCE ERROR.						
CESSNA	LYC		SPAR	CRACKED	10/21/2002	14155
152	O235N2C		043200121	ELEVATOR	2002FA0001264	
FOUND CRACK EXTENDING ABOUT .5 INCH FROM OUTBOARD HINGE POINT TO SPAR ATTACHMENT.						
CESSNA	LYC	MCAULY	BOLT	BROKEN	10/08/2002	
172M	O320E2D	C30019	AN4H214	THREAD	CA021016030	
(CAN) UPON COMMENCING TAXI, BRAKES WERE TESTED BY PILOT AS PER CHECKLIST, AND CALIPER ASSEMBLY BOLTS FAILED AND ALLOWED PISTON TO OVER EXTEND AND CAUSE LOSS OF FLUID. BOLTS APPEAR TO HAVE BEEN FRACTURED FOR SOME TIME, DUE EITHER TO FATIGUE OR OVERTORQUING. BOLT MANUFACTURER UNKNOWN, BUT HEAD HAS SYMBOL. C-X-S						
CESSNA			SPAR	BROKEN	10/04/2002	8134
172N			0532001202	HORIZONTAL STAB	2002FA0001248	
HORIZONTAL STABILIZER, SPAR BROKEN THRU LIGHTENING HOLE AS MARKED. SPAR AND REINFORCEMENT ARE BOTH BROKEN. UPPER CRACK EXTENDS INTO TOP OF REINFORCEMENT. BOTH CRACKS ARE INBOARD OF STABILIZER ATTACH HOLES.						

CESSNA	LYC	SHAFT	MISMANUFACTURE	10/15/2002	
172P	O320*	05160194	FUEL SELECTOR	2002FA0001237	
TOP FUEL SELECTOR SHAFT AT SELECTOR HANDLE ATTACH AREA NOT MANUFACTURED CORRECTLY CAUSING INADVERTENT MISLOCKING OF SELECTOR HANDLE. OLD SHAFT AND NEW SHAFT BOTH HAVE GLOB OF ALUMINUM WELDED ON TOP OF SHAFT TO PREVENT THIS, BUT THE WELD GLOB NEEDS TO EXTEND TO TOP OF SHAFT, AND THEN SHAPED TO EXCEPT HANDLE IN ONE DIRECTION ONLY.					
CESSNA	LYC	BOLT	LACK OF LUBE	11/06/2002	8911
172P	O320*	AN460A	RT FLAP PULLEY	2002FA0001298	
LACK OF LUBRICATION CAUSED BOLT TO SEIZE IN FLAP DRIVE PULLEY RIGHT BUSHING. OVER PERIOD OF TIME, WITH EVERY CYCLE OF FLAPS THIS BOLT ROTATING ELONGATED TOP AND LOWER BRACKETS. ON PREFLIGHT PILOT NOTED SOMETHING STREAKING FROM LOWER SKIN. REPLACEMENT OF BRACKETS, BOLT, BUSHING WERE NECESSARY.					
CESSNA	LYC	SLICK	IMPULSE	CRACKED	09/26/2002
172R	IO360L2A	4371	M3163	MAGNETO	CA021010004
(CAN) OUR MAINTENANCE SCHEDULE APPROVAL FOR 172R CALLS FOR MAG OVERHAUL AT 700 HOURS +/- 10 HOURS. AT 657.9 HR MAGS WERE CHANGED FOR ROUGH ENGINE (2-3 SEC) SNAG. AT OVERHAUL MAG IMPULSE COUPLINGS FOUND CRACKED AT HUB.					
CESSNA	LYC		P-LEAD	FAILED	10/15/2002
172R	IO360L2A			LT MAGNETO	2002FA0001267
REPORTS OF INTERMITTENT LT MAG FAILURE. TROUBLESHOT AND REMOVED ENTIRE P-LEAD ASSEMBLY. FOUND SHIELDING SOLDER / CRIMP AT SWITCH END CUT INTO CENTER CORE VERY SLIGHTLY. REPLACED P-LEAD ASSEMBLY. NO ADDITIONAL REPORTS OF MAG FAILURE.					
CESSNA		BULKHEAD	CRACKED	10/28/2002	1756
172S		055032111	PROP SPINNER	2002FA0001232	
DURING PHASE 1 INSPECTION, MAINTENANCE FOUND AFT PROPELLER SPINNER BULKHEAD CRACKED AT ONE FLANGE BY THE PROPELLER BLADE CUT OUT ON ONE SIDE. REPLACED PROPELLER AFT SPINNER BULKHEAD & REINSTALLED PROPELLER.					
CESSNA		GUIDE	DAMAGED	10/29/2002	1055
172S		24600352	CONTROL COLUMN	2002FA0001235	
PILOT'S YOKE BINDS WHEN PULLED FULL AFT WITH LEFT HAND CREATING A SIDE LOAD ON COLUMN (IE. FLYING SINGLE HANDED). MAINTENANCE FOUND THE YOKE ROLLER NOT FULLY ENGAGING IN GUIDE. YOKE CLEARANCE IS WITHIN SPECIFIED .100 INCH CALLED OUT IN SB99-53-03, HOWEVER, THE ROLLER RIDES TOO LOW IN THE GUIDE AND WILL POP OUT OF THE GUIDE IF ANY SIDE PRESSURE IS APPLIED. PER SB99-53-03 A AN970-3 SPACER WASHER WAS INSTALLED ALLOWING THE ROLLER DEEPER ENGAGEMENT IN THE GUIDE WITHOUT THE ROLLER BOLT HEAD SCRAPING THE TOP OF THE GUIDE.					
CESSNA		BULKHEAD	CRACKED	10/14/2002	82
172S		055032111	SPINNER	2002FA0001240	
FOUND AFT PROPELLER SPINNER BULKHEAD, CRACKED AT ONE FLANGE AT PROPELLER BLADE CUT OUT. EDGE WITH NUTPLATE AND SCREW STILL ATTACHED TO PROPELLER SPINNER. AFT SPINNER BULKHEAD REPLACED AT 82.2 HOURS.					
CESSNA	LYC	ACTUATOR	INOPERATIVE	11/07/2002	250
172S	IO360A1A	MM201057	SEAT RECLINE	2002FA0001304	
PILOT SEAT RECLINE MECHANISM FAILED. SEAT RECLINED FULLY AFT, WAS REPEATABLE.					
CESSNA	LYC	LIFTER	BROKEN	10/28/2002	1636
172S	IO360L2A		NR 2 CYLINDER	2002FA0001272	
WHILE DRAINING OIL, FOUND A PIECE OF STEEL WITH A ROUNDED EDGE. ALSO FOUND METAL IN THE OIL FILTER. REMOVED NR 2 CYLINDER AND FOUND THE INTAKE VALVE LIFTER HAD PIECES FRACTURED OFF OF THE EDGE. THE CAM WAS SPALLED AND THE NR1 CYLINDER INTAKE VALVE LIFTER WAS ALSO SPALLED. THE SKIRT ON THE NR 2 PISTON HAD SCRATCH MARKS FROM SHIPS OF THE LIFTER. I COULD FIND NO OBVIOUS CAUSE TO THE DAMAGED. SUSPECT MANUFACTURING FLAW IN THE LIFTER BODY.					
CESSNA	LYC	FORK	CRACKED	10/10/2002	
175	O360*	B24573	PROPELLER	2002FA0001258	
OVERHAUL WAS BEING ACCOMPLISHED DUE TO HIGH CALENDAR TIME, LOW HOURS SINCE NEW. DURING MAGNETIC PARTICLE INSPECTION, MULTIPLE LARGE CRACKS WERE DISCOVERED IN PITCH CHANGE FORK. FORK APPEARS TO BE MANUFACTURING DEFECTS, POSSIBLY HEAT TREAT CRACKS.					
CESSNA	CONT	STARTER	INOPERATIVE	10/02/2002	
182	O470R	C12ST1	ENGINE	2002FA0001226	
STARTER DOES NOT ALLOW THE STARTER ADAPTER TO DISENGAGE WHEN THE ENGINE STARTS. THE RESULT IS EXCESSIVE HEAT AND WEAR WHICH RAPIDLY DESTROYS THE EFFECTIVENESS OF THE ADAPTER. WITHIN 30-60 HOURS THE ADAPTER MUST BE REPLACED.					
CESSNA	CONT	OIL COOLER	LEAKING	08/22/2002	
182P	O470*	627392	ENGINE	2002FA0001254	
FACTORY REBUILT ENGINE, INITIAL START UP OIL COOLER LEAKS, REMOVED COOLER AND BASE PLATE AND CHECKED SURFACES, SURFACES FOUND NOT TO BE FLAT.					
CESSNA	CONT	FLOAT	SEPARATED	10/02/2002	400
182P	O470S		CARBURETOR	2002FA0001256	
CARBURETOR, LEAKING ON AIRCRAFT. SUSPECT FLOAT OR FLOAT NEEDLE STUCK. REMOVED CARBURETOR, REMOVED BOWL. HALF OF FLOAT PONTOON COMPLETELY SEPARATED FROM FLOAT ASSY. SOLDER JOINT HOLDING FLOAT TO ARM SEPARATED.					
CESSNA		FITTING	CRACKED	10/21/2002	4085
182Q		07436062	RUDDER	2002FA0001263	
FOUND RUDDER TO BE OUT OF RIG FOR 2ND TIME IN 17 HRS INSPECTED AND FOUND LOWER STRUT FITTING TO BE CRACKED WERE STRUT FITTING TO BE CRACKED WERE STRUT ATTACHES TO FITTING.					
CESSNA	CONT	NUT	LOOSE	10/28/2002	
182Q	O470*		ALTERNATOR	2002FA0001279	
ALTERNATOR CHARGE, FAILURE DUE TO LOOSE PULLEY FAN AND SHROUD ASSEMBLY. UNDER ANY LOAD SLIPPAGE OCCURRED. HEATED NUT AND LOOSENED ASSEMBLY. KEYWAY INSTALLATION WOULD SOLVE POSSIBLE PROBLEM AND PULLEY SLIPPAGE. AIRCRAFT WAS REPORTING INTO IMC PREFLIGHT RUN UP, CHARGING FAILED.					
CESSNA	CONT	FITTING	CRACKED	01/26/2000	
210J	IO520J	07326015	HORIZONTAL STAB	2002FA0001302	
FITTING CRACKED DUE TO FATIGUE & VIBRATION. INSTALL IMPROVED FITTING IN HORIZONTAL STABILIZER.					
CESSNA	CONT	SWITCH	FAULTY	10/15/2002	
210M	IO520L	P6340005	MLG	AUS20021162	
(AUS) LT MAIN LANDING GEAR DOWN SWITCH INTERMITTENT IN OPERATION.					
CESSNA	CONT	CESSNA	STUD	SHEARED	10/15/2002
210N	IO520L	210N	64679	TRAILING EDGE FL	AUS20021218
(AUS) FLAP MOTOR MOUNT STUD BROKEN. MOTOR SEPARATED FROM ACTUATOR.					
CESSNA	CONT	CONT	BEAM	CRACKED	10/10/2002
310K	IO470V	IO470V	08516004	ENGINE MOUNT	AUS20021201
(AUS) LH ENGINE CROSSOVER BEAM CRACKED. FURTHER INVESTIGATION FOUND THAT THE LH MOUNTS DROPPED IN MOUNT BRACKETS AND PUT OUTWARD LOAD ON THE ENGINE LONGITUDINAL BEAMS.					

CESSNA 310R	CONT IO520M	PRESTOLITE ALV9407	HUB 646655A1	WORN ALTERNATOR-GEN	10/23/2002 AUS20021219	759
(AUS) ALTERNATOR GEAR DRIVE HUB SLIPPING. FOUND DURING INSPECTION IAW MEB01-3.						
CESSNA 310R	CONT IO520M	CONT IO520M	BOLT 6419311075	FAILED RECIPROCATING	05/22/2002 AUS20021112	80
(AUS) NO6 CYLINDER UPPER THROUGH BOLT FAILED.						
CESSNA 404CESSNA	CONT GTSIO520M	CONT GTSIO520M	PISTON 654840C	DAMAGED RECIPROCATING	09/10/2002 AUS20021144	
(AUS) LH ENGINE NO2 CYLINDER PISTON DAMAGED. SUSPECT CAUSED BY DETONATION.						
CESSNA 404CESSNA	CONT GTSIO520M	CONT GTSIO520M	BEARING 634503	BROKEN RECIPROCATING	10/07/2002 AUS20021165	1214
(AUS) NO2 MAIN BEARING BROKEN. REMAINING MAIN BEARINGS MOVING SIDEWAYS CAUSING TANGS TO WEAR INTO						
CESSNA 414			CELL 41423	DETERIORATED FUEL STORAGE	11/08/2002 JAC001RR	2720 2720
DURING ANNUAL INSPECTION, LEFT WING OUTBOARD AUX FUEL CELL LEAKAGE NOTED. UPON INVESTIGATION, FUEL CELL FOUND TO BE SERIOUSLY DETERIORATED AROUND THE FILLER PORT OPENING. THE FUEL CELL MATERIAL AT THAT POINT HAD BECOME BRITTLE. SUGGEST THOROUGH EXAMINATION OF FUEL CELLS CONDITIONS DURING ALL SCHEDULED INSPECTIONS.						
CESSNA 414	CONT TSIO520*		TUBE 50452133	FAILED AILERON	11/11/2002 2002FA0001313	
AT ANNUAL INSPECTION, A CLICKING NOISE WAS NOTED WHEN LANDING GEAR WAS RETRACTED. UPON INVESTIGATION, IT WAS DETERMINED THAT THE END FITTINGS RIVETED IN THE TUBE ASSEMBLY WERE WORKING. CATASTROPHIC FAILURE WAS PROBABLY NOT IMMINENT, HOWEVER IF LEFT UNATTENDED THE RIVETS WOULD HAVE EVENTUALLY SHEARED ALLOWING THE END FITTING TO SEPARATE FROM TUBE.						
CESSNA 421B			WINDSHIELD 51116041	MISINSTALLED COCKPIT	10/31/2002 2002FA0001243	4550 43
ON 27 JUNE 2002 WHILE AT CRUISE ALT FL240, PILOTS FRONT WINDSHIELD DEPARTED THE AIRCRAFT ALONG WITH PART OF THE INSTRUMENT GLARE SHIELD AND PILOTS SUN VISOR. LABORATORY EXAMINATION OF THE WINDSHIELD DID NOT REVEAL THE POINT OF FAILURE BUT DID STATE NUMEROUS INSTALLATION DISCREPANCIES ISSUES AT THE TIME OF MANUFACTURE/INSTALLATION AT THE MANUFACTURER. RECORDS REVIEW DID NOT SHOW THAT THIS WINDSHIELD HAD EVER BEEN REPLACED SINCE MANUFACTURE. MAINTENANCE RECORD DID SHOW A REPAIR WAS ACCOMPLISHED TO CORRECT A PRESSURIZATION LEAK AT THE 7 O' CLOCK POSITION ON THE WINDSHIELD. SIX PLASTIC INSERTS WERE INSTALLED. DISCREPANCIES PERTAINING TO REPAIRS TO THE WINDSHIELD HAVE BEEN REPORTED TO THE FAA PMI OF THE RESPONSE						
CESSNA 421B	CONT GTSIO520C		WINDSHIELD 51116041	FAILED COCKPIT	10/31/2002 2002FA0001271	
WHILE AT CRUISE ALT FL240, PILOTS FRONT WINDSHIELD DEPARTED THE AIRCRAFT ALONG WITH PART OF THE INSTRUMENT GLARE SHIELD AND PILOTS SUN VISOR. LAB EXAM OF WINDSHIELD DID NOT REVEAL POINT OF FAILURE BUT DID STATE NUMEROUS INSTALLATION DISCREPANCIES. MAINTENANCE RECORD DID SHOW A REPAIR WAS ACCOMPLISHED TO CORRECT A PRESSURIZATION LEAK AT THE 7 O' CLOCK POSITION ON THE WINDSHIELD. SIX PLASTIC INSERTS WERE INSTALLED.						
CESSNA 421C	CONT GTSIO520*		HUB D30321	CRACKED NOSEWHEEL	11/06/2002 2002FA0001301	5422
DURING NOSE TIRE CHANGE, DEGREASING OF WHEEL AND HUB, THREE CRACKS WERE FOUND ON CENTER HUB WHERE END PLATES BOLT TO HUB. WHEEL ASSEMBLY WAS PREVIOUSLY PAINTED MAKING VISUAL INSPECTION IMPOSSIBLE. AT TIME OF CHANGE, PAINT FLAKING ALLOWED CRACKS TO SHOW UP. LAST NOSE TIRE CHANGE WAS 2/97 AT TT 4952.4.						
CESSNA 550			WIRE HARNESS	CHAFED DIRECTIONAL	11/14/2002 2002FA0001297	20
OPERATOR NOTED NR 2 DIRECTIONAL GYRO CIRCUIT BREAKER POPPING. MAINTENANCE DETERMINED A WIRE BUNDLE ROUTED AROUND THE DATA TRANSFER UNIT (DTU) WAS CHAFING AGAINST THE OUTBOARD CONNECTOR PLUG ON THE DTU. ONE WIRE IN THE BUNDLE WAS FOUND SHORTED AGAINST THE CONNECTOR PLUG. THE WIRE WAS REPAIRED BY INSTALLING AN ENVIRONMENTAL SPLICE IN THE DAMAGED AREA. SPIRAL WRAP WAS INSTALLED AROUND THE WIRE BUNDLE AND THE WIRE BUNDLE WAS RELOCATED AS MUCH AS POSSIBLE TO PREVENT A RECURRENCE OF THE PROBLEM. FUNCTION TEST REVEALED NO FURTHER DEFECTS.						
CESSNA 560XL			CLIP 66312024	CRACKED VERTICAL STAB	10/31/2002 2002FA0001244	1195
CRACKS AT TWO FASTENER HOLES ATTACHING NOTED CLIP TO THE VERTICAL STABILIZER AFT SPAR.						
CESSNA 650	GARRTT TFE7314R		LINE	CHAFED DOOR SEAL	10/25/2002 2002FA0001231	3525 2462
PILOT CLOSED MAIN CABIN DOOR. UPON LOCKING DOOR CREW HEARD HISSING NOISE FROM DOOR AND DOOR SEAL WOULD NOT INFLATE. INSPECTION BY MAINTENANCE DISCOVERED LINE HAD BEEN CHAFED THROUGH BY A FLIGHT CONTROL CABLE. LINE IS FOR MAIN ENTRANCE DOOR SEAL INFLATION. HOWEVER OPENING AND CLOSING OF DOOR STILL PUSHES THE LINE IN AND OUT ALLOWING IT TO CHAFED. THIS AREA IS INSPECTED EVERY PHASE 5 WHICH IS 1200 HOURS OR 36 MONTHS WHICH EVER OCCURS FIRST. SUGGEST THIS AREA BE INSPECTED DURING ONE THE PHASE ONE THROUGH FOURS.						
CESSNA 750			TUBE 671440238	FAILED DEICE SYSTEM	11/16/2002 2002FA0001303	670 220
PILOTS COMPLAINT OF RT ANTI-ICE HOT MESSAGE WHEN SYSTEM TURNED ON. VERIFIED SENSOR AND LOGIC CARD OPERATION OK. REMOVED RT LEADING EDGE AND FOUND MAIN TUBE HAD BURST WITH A 2.5 X .375 INCH HOLE, BLOWING AWAY INSULATION AROUND ASSEMBLY. THIS WAS JUST INBOARD OF THE SLAT ANTI-ICE VALVE. TUBE ASSEMBLY TO BE RETURNED TO MFG FOR EVALUATION. NEW ASSEMBLY INSTALLED.						
CESSNA A185E			BOLT	LOOSE TRUNNION	09/27/2002 2002FA0001251	
FOUND BOTH MAIN GEAR FORWARD TRUNNION BOLTS LOOSE IN SPAR. THIS WAS FOUND ON AN 100 HOUR INSPECTION.						
CESSNA T206H			SKIN 122010024	CRACKED T/E FLAP	10/29/2002 2002FA0001260	
RIGHT SIDE FLAP CRACKED SKIN AROUND RIVETS IN INBOARD LEADING EDGE BOTTOM SKIN.						
CESSNA T206H			SKIN	CRACKED TE FLAP	10/29/2002 2002FA0001280	114
RT SIDE FLAP CRACKED SKIN AROUND RIVETS ON LEADING EDGE BOTTOM SECTION.						
CESSNA T206H	LYC TIO540*		SKIN 122010024	CRACKED T/E FLAP	10/29/2002 2002FA0001261	
FLAP HAS SEVERAL CRACKS ON SKIN AROUND RIVETS ON INBOARD LEADING EDGE.						
CESSNA TU206F	CONT TSIO520M		OIL COOLER G02188528	LEAKING ENGINE	10/01/2002 2002FA0001255	
UPON INITIAL RUN UP OF FACTORY REBUILT ENGINE, COOLER LEAK NOTED. REMOVED COOLER AND CHECK BASE PLATE AND COOLER BASE FOR SURFACE VARIATIONS. BOTH PIECES DID NOT HAVE SURFACES THAT SHOWED TO BE TRUE AND FLAT.						

CESSNA U206F	CONT IO520F	CYLINDER CCST712	CRACKED ENGINE	10/05/2002 2002FA0001249	
PILOT NOTED ROUGH RUNNING ENGINE AND MADE PRECAUTIONARY LANDING. LATER INSPECTION REVEALED NR 1 CYLINDER CRACKED AND A HOLE BLOWN THROUGH THE EXHAUST SIDE.					
CHRIS A1	LYC O360*	INDICATOR	CONTAMINATED COCKPIT	09/24/2002 2002FA0001253	
AFTER RAIN STORM, FOUND WATER IN THE AIRSPEED INDICATOR AND THE ALTERNATOR POSSIBLE CAUSE IS COMING THROUGH THE STATIC PORTS ON THE PITOT TUBE.					
CIRRUS SR22		GROMMET 10209001	DEFORMED MLG	11/01/2002 2002FA0001290	224
DURING A SCHEDULED INSPECTION FOUND BOTH MLG LEG ATTACH BRACKET GROMMETS CRACKED AROUND FLANGES AND DISTORTED. HAVE FOUND SIMILAR CONDITION ON SEVERAL CIRRUS SR20 AND SR22 AIRCRAFT WITH TOTAL TIME IN SERVICE AS LOW AS 105 HOURS. TOTAL FAILURE OF THE GROMMET WILL RESULT IN DAMAGE TO THE LAMINATED MAIN GEAR LEG THAT WILL RENDER IT UNSERVICEABLE.					
CIRRUS SR22		GROMMET 10209001	DEFORMED MLG	11/08/2002 2002FA0001291	192
DURING A SCHEDULED INSPECTION FOUND BOTH MLG LEG ATTACH BRACKET GROMMETS SEVERELY CRACKED AROUND FLANGES AND DISTORTED. HAVE FOUND SIMILAR CONDITION ON SEVERAL CIRRUS SR20 AND SR22 AIRCRAFT WITH TOTAL TIME IN SERVICE AS LOW AS 105 HOURS. TOTAL FAILURE OF THE GROMMET WILL RESULT IN DAMAGE TO THE LAMINATED MAIN GEAR LEG THAT WILL RENDER IT UNSERVICEABLE.					
CIRRUS SR22	CONT IO550*	CARTRIDGE 11898002	DEFECTIVE YAW TRIM	10/17/2002 2002FA0001281	
DURING COMPLIANCE WITH SB, REPLACEMENT OF TRIM CARTRIDGE NUT THE YAW TRIM CARTRIDGE FAILED TORQUE CHECK. THE ROD FOR THE TRIM CARTRIDGE APPEARS TO BE UNDERSIZE THEREFORE THE NUT WILL ONLY HOLD AT 1 INCH POUND OF TORQUE RATHER THAN 3 INCH POUNDS AS REQUIRED IN SB.					
DHAV DHC2*	PWA R985AN14B	FORMER C2FS533	CORRODED FUSELAGE MAIN, S	09/17/2002 AUS20021115	
(AUS) REAR FUSELAGE FORMER AND SKIN STRUCTURE LOCATED IN AREA BENEATH THE FORWARD TAILPLANE ATTACHMENT PICKUP BRACKETS PNO C2FS5189A SEVERELY CORRODED. AIRCRAFT OPERATES AS A FLOATPLANE.					
DHAV DHC2*	PWA R985AN14B	CHANNEL C2FS537A	CORRODED FUSELAGE MAIN, F	10/09/2002 AUS20021146	
(AUS) LH AND RH CHANNELS SEVERELY CORRODED. AIRCRAFT OPERATES AS A FLOATPLANE.					
DHAV DHC8311	PWA PW123	DHAV DHC8311	HAND RAIL 85210240007	SHEARED AT ROD END	10/21/2002 CA021029011
(CAN) AFT AIRSTAIR DOOR SUPPORT STRUT SHEARED. FWD SUPPORT STRUT CRACKED. BOTH SUPPORT STRUTS					
DHAV DHC8315	PWA PW123D	PIPE 82920010335	LEAKING LANDING GEAR	10/02/2002 AUS20021087	
(AUS) BRAKE ACCUMULATOR HYDRAULIC PRESSURE LINE LEAKING AT FLARE. SUSPECT CAUSED BY CORROSION PITTING OF THE FLARE. LOSS OF NO2 HYDRAULIC SYSTEM FLUID.					
DIAMON DA20A1	ROTAX ROTAX912S3	CRANKCASE	CRACKED ENGINE	11/13/2002 2002FA0001293	659
AIRCRAFT WAS SQUAWKED FOR OIL LEAKING FROM COWL. UPON INSPECTION THE LEAK WAS DETERMINED TO BE COMING FROM A CRACK ON TOP OF ENGINE UNDER COOLING SHROUD. (COOLING SHROUD HAS TO BE REMOVED TO INSPECT THIS AREA) THE CRACK WAS APPROXIMATELY 3 INCHES AND IS ORIENTATED FORE AND AFT BETWEEN CYLINDERS 1 AND 3.					
DIAMON DA20C1	CONT IO240A	HINGE 2055450000WIP	CRACKED RUDDER	09/13/2002 2002FA0001239	1126
DURING 100 HOUR INSPECTION MECHANIC FOUND CRACK ON LOWER RIGHT CORNER OF LOWER RUDDER HINGE SUPPORT TOWER NEXT TO THE WELD LINE. PART WAS REPLACED WITH NEW PART.					
DIAMON DA20C1	CONT O200*	HINGE 2055450000WIP	CRACKED RUDDER	09/13/2002 2002FA0001238	1497
DURING 100 HOUR INSPECTION MECHANIC DISCOVER THAT THE LOWER LEFT CORNER OF THE LOWER RUDDER HINGE SUPPORT TOWER HAD A CRACK. EVIDENCED BY LINE OF BROWN RUST RESIDUE VISIBLE AGAINST THE BLACK PAINT, AND ADJACENT TO THE WELD. PART WAS REPLACED.					
GROB G115	LYC O235H2C	CYLINDER	SEPARATED ENGINE	10/08/2002 AUS20021095	
(AUS) NR 1 CYLINDER SEPARATED. THE CYLINDER BASE FLANGE WAS STILL CONNECTED TO THE CRANKCASE.					
GRUMAV G21	PWA R985AN14B	ENGINE	MAKING METAL NACELLE	10/27/2002 CA021028008	
(CAN) PILOT NOTICED ENGINE RUNNING ROUGH ON LAST FLIGHT. PROCEEDED TO DO PERFORMANCE RUNS ON GROUND AND FOUND ENGINE WOULD NOT DEVELOP POWER. MAINTENANCE PULLED OIL SCREENS AND FOUND SEVERE METAL CONTAMINATION IN SUMP. CAUSE UNKNOWN AT THIS POINT.					
GULSTM 112	LYC IO360A1A	TORQUE TUBE 45291401	CRACKED NLG	11/01/2002 2002FA0001285	2023
DURING INSPECTION OF THIS LANDING GEAR TORQUE TUBE THE PART WAS CLEANED OFF WITH A RAG AND VISUALLY INSPECTED AS USUAL. PAINT WAS SMOOTH AND UNBROKEN AROUND ENTIRE PART OTHER THAN NORMAL SMALL CHIPS IN PAINT FROM NORMAL USAGE. THEN SERVICED WITH A HAND OPERATED GREASE GUN ON THE FORWARD ZERK FITTING THE PAINT ON AFT SIDE OF PART SPLIT ALONG APPROXIMATELY FOUR INCH LENGTH AND GREASE EXITED FROM CRACK. THIS DEFECT WOULD NOT HAVE BEEN DETECTED DURING THE ANNUAL INSPECTION UNLESS THE SERVICE WORK HAD BEEN DONE CONCURRENTLY WITH THE INSPECTION.					
GULSTM 114	LYC IO540T4B5	BOLT AN415	BROKEN NOSE/TAIL LANDIN	10/24/2002 AUS20021238	
(AUS) NOSE LANDING GEAR ACTUATOR REAR MAIN ATTACHMENT BOLT BROKEN IN AREA OF SHAFT.					
GULSTM GIV	LYC	WINDSHIELD 1159SCB51023	CRACKED COCKPIT	10/25/2002 2002FA0001245	3831
OUTER PANE ON CO-PILOT WINDSHIELD CRACKED					
HUGHES 269C1	LYC HO360C1A	LYC HC360H1A	ENGINE FAILED CAMSHAFT	09/23/2002 CA021031010	
(CAN) 1) ENGINE RUNS UNEVEN. FOUND METAL DEPOSITS IN OIL FILTER. 2) ENGINE REMOVED AND SENT FOR INSPECTION/REPAIR.					
HUGHES 269C1	LYC HO360C1A	PRECISION ALU8421	ALTERNATOR ALU8421	FAILED INTERNAL	08/05/2002 CA021031013
(CAN) 1) ALTERNATOR LOW VOLTAGE. 2) ARE PLACED ALTERNATOR.					

LEAR 45LEAR		RUDDER 455540001V380	OUT OF RIG EMPENNAGE	10/28/2002 2002FA0001234	601
UPON RE-INSTALLATION OF RUDDER AFTER INSTALLATION OF S/B 45-55-6, FOUND THAT THE RUDDER TRAVEL WAS APPROXIMATELY 25 DEGREES IN LIEU OF 30 +/-1 DEGREES AS PER LEARJET AMM 27-20-00. WHEN TRAVEL WAS CORRECTED, DISCOVERED THAT THE BOTTOM SKIN OF RUDDER WAS CONTACTING THE SKIN PRIOR TO ACHIEVING FULL TRAVEL.. THE RUDDER WAS REPLACED WITH SAME P/N (S/N 0155). NO OTHER ACTION WAS REQUIRED AT THAT TIME.					
LET L13BLANIK		FRAME A102006L	DETACHED FUSELAGE AFT	11/19/2002 2002FA0001308	
DURING ACCEPTANCE INSPECTION UPON DELIVERY FROM THE CZECH REPUBLIC, EXTERNAL DAMAGE WAS NOTED WHERE THE AFT FUSELAGE RESTS IN THE TRAILER TAIL DOLLY. INTERNAL INSPECTION OF THE FUSELAGE REVEALED DEFORMED AND TORN FUSELAGE FRAME MEMBERS NR11, 12, AND 13. SUBSEQUENT INSPECTION OF THREE OTHER RECENTLY ACQUIRED AIRCRAFT REVEALED SIMILAR DAMAGE. THE SUBMITTER SUGGESTS TWO POSSIBLE CAUSES FOR THIS DAMAGE. FIRST, THAT THIS DAMAGE OCCURRED DUE TO LACK OF LOAD DISTRIBUTION ON THE AFT FUSELAGE WHILE BEING TRANSPORTED IN THE TRAILER. SECOND, THAT THE DAMAGE OCCURRED DURING THE MANUFACTURING PROCESS. PART NUMBERS OF AFFECTED FRAMES: FRAME NR 11- A102006L (LT), A102006P (RT) FRAME NR 12- A102007L, A102007P FRAME N					
MAULE M5235C	LYC O540*	BOLT	FAILED MLGSTRUT	09/14/2002 2002FA0001307	
BOLT (NR 32) IS ONE OF FOUR. THREE APPARENTLY WERE PROBABLY SHEARED FROM PAST ACCIDENT. SAFETY WIRE HELD 211 BOLTS FROM ROTATING. REMAINING BOLT TORE OUT END OF UPPER TUBE, CAUSING COMPLETE DISASSEMBLY OF UPPER PART OF STRUT. UPPER ATTACH BOLT (NR 17) AND LOWER ATTACH BOLT (NR 16) WERE BENT SLIGHTLY, ALSO.					
MOONEY M20R	CONT IO550*	TUBE 646207	CRACKED FUEL INTAKE	10/09/2002 2002FA0001250	150
INSPECTED AIRCRAFT ENGINE DURING ROUTINE OIL CHANGE AND NOTICED FUEL STAIN ON NR 6 INTAKE TUBE. REMOVED TUBE AND FOUND TO BE CRACKED AT FLANGE PART HAD BEEN REPLACED 2 MONTHS EARLIER FOR SAME REASON. COULD BE CAUSED BY ABNORMAL VIBRATIONS OR SHOCK COOLING OF TUBE.					
PIPER J3C65		SHUTOFF VALVE	FAILED FUEL SYSTEM	10/17/2002 2002FA0001265	
DURING AN INVESTIGATION OF AN AIRCRAFT INCIDENT IN WHICH THE AIRCRAFT CRASHED INTO A POND DUE TO FUEL STARVATION. IT WAS DETERMINED THAT AN ALTERATION TO FUEL SHUT OFF VALVE HAD BEEN PERFORMED AND WAS NOT APPROVED. AN EXTENSION TO THE VALVE WAS INSTALLED AND THE EXTENSION SWIVELED ON THE FUEL SHUT OFF VALVE HANDLE CAUSING A FALSE INDICATION IN THE COCKPIT SHOWING THE VALVE TO BE OPEN BUT IN REALITY THE VALVE WAS CLOSED. THE SHUT OFF VALVE WAS PROBABLY PARTIALLY OPEN BUT THE EXTENSION WAS 90 DEGREES TO THE HANDLE AND WAS BUMPED DURING FLIGHT WHILE PICTURES WERE BEING TAKEN CAUSING THE FUEL SHUT OFF VALVE TO CLOSE AND ENGINE TO QUIT.					
PIPER PA24250	LYC O540*	BOLT	MISINSTALLED SHIMMY	11/06/2002 2002FA0001300	
BOLT WAS INSTALLED BACKWARDS ON SHIMMY DAMPNER. GEAR WAS LOWERED IN FLIGHT AND HUNG UP ON COWL LT V CHANNEL. SUBSEQUENT DAMAGE WAS CAUSE TO CHANNEL AND REAR SUPPORT. TIME SINCE LAST WORK TO SHIMMY DAMPNER MOUNT CLAMP UNKNOWN.					
PIPER PA25235	LYC O540H2A5	STRUCTURE	CORRODED TE FLAP	09/30/2002 AUS20021099	
(AUS) LT AND RT TRAILING EDGE FLAPS SEVERELY CORRODED AT HINGE ATTACHMENT TO MAIN SPAR.					
PIPER PA28140	LYC O320*	SPAR 6205400	CORRODED LT & RT WING	10/09/2002 AUS20021145	
(AUS) LT AND RT AFT SPAR ASSEMBLIES CORRODED BETWEEN SPAR AND ATTACHMENT PLATE PNO 66762-00.					
PIPER PA28140	LYC O320E2A	SELECTOR 66945000	FAILED FUEL SYSTEM	08/31/2002 2002FA0001274	
FUEL PLACARD, UPSIDE DOWN, FUEL SELECTOR LEVER WOULD TURN ONLY 180 DEGREES, AREA OF TRAVEL, COULD NOT SELECT OTHER 180 DEGREES.					
PIPER PA28161	LYC O320*	RIB 356171	CRACKED RT WING	10/22/2002 2002FA0001227	148
DURING INSPECTION NOTED CRACK AROUND STIFFENER BEAD. CRACK APPEARED TO BE PRESENT AT MFG. CONTACT WITH MFG MADE AND A REPAIR SCHEME DONE IAW SB.					
PIPER PA28180	LYC O360*	CYLINDER 75874	WORN ENGINE	10/02/2002 2002FA0001252	133
REMOVED 2 CYLINDER ASSEMBLY FROM ENGINE BECAUSE OF LOW COMPRESSION. CYLINDER WERE REPAIRED AND INSTALLED AT OVERHAUL.					
PIPER PA28181	LYC O360*	LINE 98044072	CORRODED FUEL SYSTEM	10/15/2002 2002FA0001229	4150
FUEL LINE CORRODED UNDER CUSHION CLAMP TO A POINT OF LEAKING INSIDE CABIN. OTHER AREAS OK. SUSPECT REPEATED EXPOSURE TO MOISTURE AROUND DOOR OPENING AND CARPET AND INSULATION CONTRIBUTED TO CONDITION. THE SEVERITY OF THE CORROSION COULD NOT BE SEEN UNTIL CLAMP WAS REMOVED.					
PIPER PA28181	LYC O360A4M	CONTACTOR 455151	BURNED COCKPIT	10/29/2002 2002FA0001236	300
A/C DIVERTED DUE TO THE SEVERE CHOKING SMOKE. PILOT DECLARED AN EMERGENCY AND SQUAWKED 7700 STATING THAT DUE TO THE SMOKE HE WOULD HAVE TO DITCH IN THE OCEAN. HE SAW THE BLOCK ISLAND AIRPORT AND LANDED LONG AND FAST RUNNING OFF THE END OF THE RUNWAY INTO A PERIMETER FENCE. PILOT STATED HE HAD A HARD TIME STARTING THE ENGINE AND CRANKED THE ENGINE CONTINUOUSLY UNTIL THE BATTERY WENT DEAD. HE GOT A JUMP-START FROM A VEHICLE USING THE CORRECT PLUGS AND 12 VOLT BATTERY. IT APPEARS THAT THE POWER RELAY CONTACTOR PIPER FAILED, PERHAPS SHORTED INTERNALLY. STARTER, ALTERNATOR, REGULATOR, START SWITCH, STARTER SOLENOID ALL CHECKED GOOD. THIS CONTACTOR WAS CHANGED TWO MONTHS PRIOR TO THIS FAILURE.					
PIPER PA31	LYC TIO540A2C	CONT 103993101	CONTACTOR ES10382585	FAILED MAGNETO/DISTRIB	10/09/2002 AUS20021116
(AUS) MAGNETO CAM FOLLOWER SEPARATED FROM CONTACT ASSEMBLY.					
PIPER PA31	LYC TIO540A2C	LYC TIO540A2C	BEARING L86661C	COLLAPSED EXHAUST	10/02/2002 AUS20021200
(AUS) RH ENGINE TURBOCHARGER PNO 406610-9020 BEARING COLLAPSED. TURBINE ASSEMBLY CONTACTED OUTER					

PIPER	LYC	TORQUE TUBE	CORRODED	10/31/2002	2614
PA31325	TIO540*	4004009	RUDDER	2002FA0001262	
WHILE COMPLYING WITH SB, WE FOUND EXCESSIVE CORROSION ON RUDDER TORQUE TUBE, RUDDER BUTT RIB AND RUDDER MAIN RIB.					
PIPER	LYC	GARRTT	BEARING	FAILED	10/14/2002
PA31350	TIO540J2BD	LW12463	KHR0173	EXHAUST	AUS20021215
(AUS) LH ENGINE TURBOCHARGER FAILED. SUSPECT BEARING FAILED.					
PIPER	LYC	EXHAUST PIPE	WRONG PART	11/08/2002	
PA31350	TIO540J2BD		LT ENGINE	JAC002RR	48
DURING 100 HOUR/ANNUAL INSPECTION, LT ENGINE TURBOCHARGER EXHAUST PIPE WAS NOTICED TO BE ABNORMAL, IN THAT IT WAS ASSEMBLED OF 13 WELDED SEGMENTS, WHEREAS THE CORRECT PART CONSISTS OF TWO WELDED SEGMENTS. PART WAS REPLACED WITH THE CORRECT ITEM, PART NUMBER 40310-10. NO MENTION OF INSTALLATION FOUND IN THE AIRCRAFT RECORDS. SUGGEST THAT A CAREFUL WATCH FOR BOGUS PARTS IS INCLUDED IN ALL MAINTENANCE FUNCTIONS.					
PIPER	CONT	MAGNETO	INOPERATIVE	10/12/2002	173
PA34220T	LTSIO360RB	6320	ENGINE	2002FA0001225	
WHILE TRAINING, A/C SIMULATED ZERO THRUST SINGLE ENGINE APPROACH. WHEN POWER WAS REAPPLIED, ENGINE WAS FOUND DEAD AND WOULD NOT RESPOND TO ANY INPUTS FOUND IN EMERGENCY PROCEDURES CHECKLIST. A SINGLE ENGINE LANDING WAS MADE WITHOUT INCIDENT. FOUND BOTH MAGNETOS FAILED FROM SEVERE INTERNAL CORROSION AND BOTH COILS WERE SHORTED AND BURNED THROUGH IN THE SAME LOCATION. REMOVED AND INSP BOTH MAGS ON THE OTHER ENG AND FOUND THE LEFT MAG WITH SEVERE CORROSION AND PRESSURIZED AND FILTERS APPEARED IN GOOD CONDITION. THESE MAGS HAVE VERY SMALL VENT HOLES THAT WERE ALL PLUGGED. THE MAG THAT WAS IN GREAT SHAPE HAD A DISTORTED HSG SEAL THAT OBVIOUSLY ALLOWED THE NEEDED VENTILATION THAT THE OTHER MAGS DID NOT GET.					
PIPER	CONT	TUBE	CORRODED	09/27/2002	
PA34220T	TSIO360KB	9515340	LANDING GEAR	AUS20021102	
(AUS) LANDING GEAR UP' HYDRAULIC PIPE CORRODED.					
PIPER	CONT	TUBE	CORRODED	09/27/2002	
PA34220T	TSIO360KB	9515339	LANDING GEAR	AUS20021103	
(AUS) LANDING GEAR DOWN' PIPE CORRODED.					
PIPER	CONT	TUBE	CORRODED	09/09/2002	
PA34220T	TSIO360KB	9515339	LANDING GEAR	AUS20021104	
(AUS) LANDING GEAR DOWN' HYDRAULIC PIPE CORRODED.					
PIPER	CONT	TUBE	CORRODED	09/09/2002	
PA34220T	TSIO360KB	9515340	LANDING GEAR	AUS20021105	
(AUS) LANDING GEAR UP' HYDRAULIC PIPE CORRODED.					
PIPER	PWA	BULKHEAD	CRACKED	10/05/2002	
PA42	PT6A41	70382	NACELLE/PYLON, B	AUS20021192	
(AUS) LH ENGINE NACELLE BULKHEAD CRACKED.					
PIPER	PWA	TRUNNION	CRACKED	10/05/2002	
PA42	PT6A41	40288006	MAIN LANDING	AUS20021193	
(AUS) LANDING GEAR TRUNNION CRACKED THROUGH VERTICAL WEB. CRACK LENGTH APPROXIMATELY 12.7MM (0.5IN). AIRCRAFT OPERATES FROM ROUGHSTRIPS.					
PIPER	PWA	SCREEN	CRACKED	10/21/2002	
PA42	PT6A41	570473	AIRSCOOP	2002FA0001269	
DURING A SCHEDULED EVENT INSPECTION, BOTH ENGINE AIR INLET SCOOP SCREENS WERE FOUND CRACKED IN BOTH FORWARD CORNERS FOR EACH ENGINE. REPAIR WAS NOT FEASIBLE DUE TO THE LOCATION DAMAGE. BOTH INLET SCREEN HAD TO BE REPLACED WITH NEW PARTS.					
PIPER		BRACKET	BROKEN	09/26/2002	
PA44180		8626305	MLG DOOR	CA021010009	
(CAN) NOSE GEAR RECYCLE FOUR TIMES BEFORE FULLY EXTENDED. NOSE GEAR INSPECTED AND FOUND RIGHT GEAR DOOR LINK ATTACHMENT BRACKET BROKEN. THE BROKEN BRACKET WAS STOPPING THE NOSE FROM GOING DOWN TO LOCK POSITION.					
PIPER	PWA	BOLT	CORRODED	10/04/2002	299
PA46500TP	PT6A11	40142	MLG WHEEL	2002FA0001268	
DURING A TIRE REPLACEMENT ON THE RT MAIN WHEEL ASSEMBLY, ALL WHEEL THRU BOLTS FOUND WORN AND CORRODED. THERE WAS NO TYPE OF ANTI-SEIZE LUBRICANT ON THE BOLTS. PIPER MAINTENANCE MANUAL DOES NOT REQUIRE ANY ANTI-SEIZE LUBRICANT ON THE THRU BOLTS.					
RAYTHN	GARRTT	CURRENT	FAILED	10/04/2002	
HAWKER800	TFE731*		PULSELIGHT	2002FA0001276	
ON A/C WITH BUS-TIE OPEN, LEFT MAIN BUS (PS1) AND RIGHT MAIN BUS (PS2) SHOULD BE SEPARATED. COULD NOT SEPARATE PS1 AND PS2. THEY WERE INADVERTENTLY LINKED TOGETHER THROUGH A PULSELIGHT INSTALLATION. HAD A PULSELIGHT SYSTEM INSTALLED, A COMPONENT OF THE PULSELIGHT SYSTEM WAS INCORRECTLY INSTALLED. IT IS THE CURRENT LIMITER.					
RAYTHN	GARRTT	CURRENT	FAILED	10/04/2002	
HAWKER800	TFE731*		PULSELIGHT	2002FA0001277	
ON A/C WITH BUS-TIE OPEN, LEFT MAIN BUS (PS1) AND RIGHT MAIN BUS (PS2) SHOULD BE SEPARATED. COULD NOT SEPARATE PS1 AND PS2. THEY WERE INADVERTENTLY LINKED TOGETHER THROUGH A PULSELIGHT INSTALLATION. HAD A PULSELIGHT SYSTEM INSTALLED, A COMPONENT OF THE PULSELIGHT SYSTEM WAS INCORRECTLY INSTALLED. IT IS THE CURRENT LIMITER.					
REIMS	LYC	LINE	CORRODED	10/25/2002	1650
F177RG	IO360A1B6	200001040	FUEL SYSTEM	2002FA0001278	
FUEL VENT LINES ABOVE HEADLINER CORRODED FROM CLAMPS AND SEAT TUBING TOUCHING LINES CAUSING RAW FUEL AND FUMES TO ENTER UPPER CABIN AREA.					
RHNFLU	LYC	SETScrew	BACKED OUT	10/09/2002	
EA300L	AEIO540L1B5		PROP GOVERNOR	2002FA0001224	
PROPELLER GOVERNOR SET SCREW INSIDE CASE HALVES, BACKED OUT CAUSING A CHAIN REACTION OF ENGINE DAMAGE. ALL MAJOR ENGINE COMPONENTS BROKEN (NON-REPAIRABLE), RESULTING IN AN ENGINE FAILURE AND A FORCED LANDING.					
RKWEEL	GARRTT	LINE	NICKED	11/06/2002	7625
NA26565	TFE7313R1D	30726361	NR 1 ENGINE	JV2R200200003	
WHEN COMPLYING WITH CAMP CARDS, A VISUAL INSPECTION OF THE ENGINE WAS PERFORMED AND FOUND THE OIL LINE HAD NICKS IN IT CAUSE BY THE CLAMPS THAT HAD THE TEFLON WORN CAUSING METAL TO METAL CONTACT. REPAVED LINE AND CLAMPS.					

RKWELL	GARRTT		LINE	NICKED	11/06/2002	7603
NA26565	TFE7313R1D		30726361	NR 2 ENGINE	JV2R200200004	
WHEN COMPLYING WITH CAMP CARDS, A VISUAL INSPECTION OF THE ENGINE WAS PERFORMED AND FOUND THE OIL LINE HAD NICKS IN THE LINE CAUSE BY THE CLAMPS, THAT HAD THE TEFLON WORN CAUSING METAL TO METAL CONTACT. REPLACED LINE AND CLAMPS.						
ROBSIN	LYC	ROBSIN	GEARBOX	UNSERVICEABLE	10/28/2002	
R22BETA	O320B2C	A0211	A0211	TAIL ROTOR	AUS20021247	
(AUS) TAIL ROTOR GEARBOX CHIP LIGHT ILLUMINATED. GEARBOX WAS FLUSHED. THE AIRCRAFT WAS FLOWN AGAIN AND CHIP LIGHT ONCE MORE ILLUMINATED. TAIL ROTOR GEARBOX WAS THEN CHANGED.						
ROBSIN	LYC	LYC	MUFFLER	CRACKED	07/19/2002	
R44	O540F1B5	O540F1B5	G693	ENGINE NOISE SUP	AUS20021209	
(AUS) MUFFLER AND LH COLLECTOR CRACKED AND DISTORTED.						
SNIAS	TMECA		EXCITER	FAILED	07/16/2002	
AS350B	ARRIEL1B		ABG6766000	ENGINE	CA021016019	
(CAN) ENGINE START REVEALED REDUCED IGNITER SPARKING. ONE HIGH ENERGY GENERATOR FOUND FAULTY, REMOVED UNSERVICEABLE. NEW PART INSTALLED.						
SNIAS	TMECA		TACH	FAILED	06/05/2002	
AS350B	ARRIEL1B		0177555170	ENGINE	CA021016020	
(CAN) FAILURE OF THE TACH BOX CAUSED THE BLEED VALVE TO CLOSE ON ENGINE START-UP, STALLING THE COMPRESSOR. START WAS ABORTED. PART REPLACED WITH AIRWORTHY TACH BOX.						
SNIAS	TMECA	TMECA	IGNITER	FAILED	10/09/2002	
AS350B	ARRIEL1B	ARRIEL1B	SC2036	SPARK PLUG/IGNIT	AUS20021180	
(AUS) ENGINE IGNITER ELECTRODE BROKEN OFF.						
SNIAS	TMECA		VALVE	FAILED	06/23/2002	
AS350BA	ARRIEL1B		9550147560	STARTER	CA021016014	
(CAN) ENGINE FAILED TO START. MAXIMUM NG ATTAINED - 40 PERCENT. START ELECTRO VALVE REPLACED WITH AIRWORTHY PART, START CORRECT.						
SNIAS	TMECA	TMECA	IGNITER	UNSERVICEABLE	10/17/2002	
AS350BA	ARRIEL1B	ARRIEL1B	9550168760	SPARK PLUG/IGNIT	AUS20021171	
(AUS) ENGINE IGNITER BROKEN. BORESCOPE INSPECTION FOUND SEVERE DOWNSTREAM DAMAGE. IGNITER IS MANUFACTURED BY EQYEM.						
SOCATA	LYC	LYC	PIPE	FRACTURED	10/16/2002	
TB10TOBAGO	O360A1A	O360A1AD	LW12920	PROPELLER	AUS20021187	64
(AUS) PROPELLER GOVERNOR EXTERNAL OIL PIPE FAILED AT CONNECTION TO THE GOVERNOR.						
SPHRTH			SPAR	CRACKED	11/05/2002	1683
CIRRUSSTD				STABILATOR	2002FA0001284	
MAIN SPAR OF TAILPLANE (STABILATOR) WAS FOUND TO CONTAIN MULTIPLE CRACKS IN WOOD STRUCTURE AFT MOUNTING HOLES. PLYWOOD FACE PLATES WERE DELAMINATED AND HIDING CRACKS. ALL ATTACHMENT HARDWARE WERE RUSTED. TAILPLANE WAS LOOSE WITH EXCESSIVE PLAY AFTER HARD LANDING, PILOT INDICATED IT WAS ALWAYS LOOSE.						
STBROS	PWA		CABLE	BROKEN	10/14/2002	
SD360	PT6A67R		SD3456028	ELEVATOR TAB	AUS20021155	
(AUS) ELEVATOR TRIM CABLE BROKEN.						
ZLIN	LYC		VALVE	ERODED	10/28/2002	
Z242L	AEIO360A1B6			OIL DRAIN	2002FA0001233	
OIL DRAIN VALVE WAS REMOVED BECAUSE OF LEAK, UPON REMOVAL IT WAS DISCOVERED THAT SMALL NUT HOLDING SLUDGE VALVE ASSY TOGETHER WAS WORE TO MIN AMOUNT AND MISSING ONE HALF, IF NUT HAD COME OFF VALVE ASSY WOULD OPEN CAUSING ENGINE OIL TO COMPLETELY DRAIN.						

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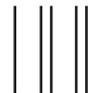
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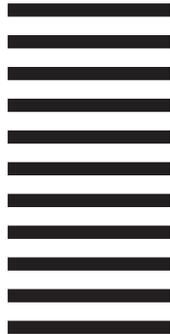
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