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Federal Aviation Administration

General Aviation Airworthiness Alerts

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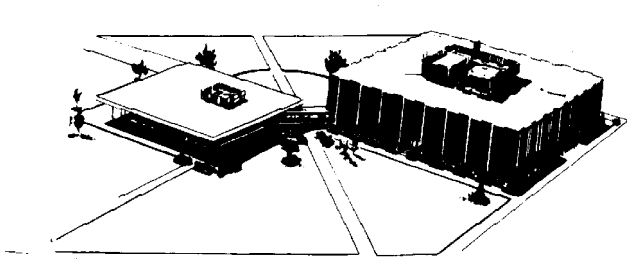
Improve Reliability-Interchange Service Experience

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

GENERAL AVIATION AIRWORTHINESS ALERTS



FLIGHT STANDARDS SERVICE
Mike Monroney Aeronautical Center

The General Aviation Airworthiness 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 of you 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.

UNAPPROVED PARTS NOTIFICATIONS

The following "Unapproved Parts Notifications" were issued by the FAA as "official notice" to everyone of the existence of these parts. Everyone is urged to comply with the recommendations included in each of these "Unapproved Parts Notifications." (The following "Unapproved Parts Notifications" are printed exactly as they were received.)

UNAPPROVED PARTS NOTIFICATION NO. 97-030 May 5, 1997

AFFECTED AIRCRAFT: Installed on, but not limited to, Robinson R-22 Helicopters.

PURPOSE:

The purpose of this notification is to advise all owners, operators, and maintenance entities of Robinson R-22 helicopters that certain rotor blades were improperly repaired.

During the course of an accident investigation involving two fatalities, it was revealed the tail rotor blade assembly, part number A029-1, for the Robinson R-22 helicopter had been improperly repaired by Cherry Air Specialties, also known as CAS International, previously located in Torrance, CA and presently in Buckeye, AZ. The investigation determined that there was strong reason to believe that Cherry Air Specialties/CAS International improperly repaired at least three sets of tail rotor blades. Those blades may have been identified as tail rotor assemblies, part number A008-2. No serial numbers are available for the blade or rotor assemblies. The whereabouts of these parts is unknown.

A subsequent suspected unapproved parts investigation by the Federal Aviation Administration, Federal Bureau of Investigation, and the Department of Transportation Office of Inspector General indicated that Cherry Air Specialties/CAS International may also have altered the total time-since-new information in the component life historical records and serviceable tags of the above tail rotor blade assembly and other main rotor blade assemblies along with their associated drive components.

It is important to note that examination of other documents, as well as a signed statement from the individual under investigation, have revealed possible evidence of additional improper maintenance practices on other helicopter makes and models.

RECOMMENDATION:

Regulations require that type certificated products conform to their type design.

Robinson R-22 helicopter owners, operators and maintenance entities should inspect all in-stock and installed main rotor blades, tail rotor blades and associated drive components to determine if any were received from Cherry Air Specialties or CAS International. If so, those items should be checked for evidence of unapproved repairs or alterations and should include a review of the component's life historical record to substantiate its authenticity. If irregularities are indicated, appropriate action should be taken.

Other helicopter makes and models having main rotor blades, tail rotor blades, and components overhauled or repaired by Cherry Air Specialties or CAS International should be inspected for compliance with FAA approved data.

FURTHER INFORMATION:

Further information may be obtained from the Flight Standards District Office (FSDO) referenced below. The FAA would appreciate any information concerning the discovery of the above referenced unapproved parts from any source, the means used to identify the source, and the actions taken to remove them from aircraft and/or stock.

This notice originated from the Long Beach FSDO, 5001 Airport Plaza Drive, Suite 100, Long Beach, CA 90815, telephone (562) 420-1755, fax (562) 420-6765, and was published through the Suspected Unapproved Parts Program Office, AVR-20, phone (703) 661-0581, fax (703) 661-0113.

UNAPPROVED PARTS NOTIFICATION NO. 96-083 May 5, 1997

AFFECTED AIRCRAFT:

Teledyne Continental Motors and Avco Lycoming Engines overhauled or repaired by Standard Aircraft, Inc. or Quality Engines, Inc.

PURPOSE:

This Unapproved Parts Notification contains information regarding investigation of Quality Engines, Inc., John's Island, South Carolina, and Standard Aircraft, Inc., Belmont, North Carolina.

NOTE: Standard Aero, Inc., is not affiliated with Standard Aircraft, Inc.

This notice is to advise all owners, operators, and maintenance entities of investigations of noncertificated engine overhaul facilities. The investigation was based on numerous customer complaints of poor workmanship, failure to meet standards, and premature failures on overhauled engines and engine accessories. These companies have been, or are now, owned and operated by either Zackery Scott Stroupe or Anthony Mark Stroupe. Over the years, these individuals did business and/or were involved in the following companies:

Standard Aircraft, Inc., Service Performance, Inc., Quality Engines, Inc., Air Palmetto, Inc., Coastal Air Engines, Inc., Air Engines, Inc., Veterans Airmotive, Inc., Aero Tech Engineering, Inc., Gastonia Aircraft Engines, Inc., Aviation Products Int'l, Inc.,

Gastonia Air Engines, Inc., Performance Air, Inc.

BACKGROUND:

During this investigation, it was determined that the above named companies may have been involved in aircraft engine overhauls that were contrary to Title 14 of the Code of Federal Regulations (14 CFR). Discrepancies in engine and accessory overhaul records indicated work accomplished by Standard Aircraft, Inc. and Quality Engines, Inc. was not performed in accordance with accepted industry standards and the performance requirements of 14 CFR Part 43.

The nature of the noncompliance is as follows:

a. Current manufacturers' overhaul manuals and illustrated parts catalogs were not available or being used during the overhaul of Teledyne Continental Motors and Lycoming reciprocating engines and accessories.

b. The use of used/replacement parts that did not meet the engine manufacturers minimum service limits requirements.

c. Accessories were overhauled or repaired by noncertificated repair facilities (i.e., repairs performed by automotive electric shops that did not have current aircraft overhaul manuals). Some of the nondestructive testing (NDT) work was done by a non-certificated facility and components were approved for return to service by a mechanic who had no formal training in NDT procedures.

d. Engines were returned to service without the proper documentation of work accomplished, service instructions, bulletin compliance, and AD compliance.

RECOMMENDATIONS:

Aircraft owners, operators, maintenance entities, parts distributors, suppliers, and manufacturers should determine if any work was accomplished on the referenced engine by the above named companies. If work **was** accomplished, the following should be done:

a. The part or component should be inspected and checked for serviceability and conformity.

b. Particular attention should be given to the engine log book entries, maintenance release tags, invoices, and any other documentation concerning parts in the engines/accessories that were overhauled or repaired. Those items should be reviewed for authenticity and to substantiate the component's historical record.

c. If an engine experienced major problems such as complete engine failure, premature accessory failure, low cylinder compression, burnt valves, piston failure, metal in the oil screen, engine overheating indications and other indications of improperly performed work, it should be reported to the local Flight Standards District Office (FSDO) by telephone, fax, or by a Malfunction and Defect Report.

Regulations require that type certificated products conform to their type design. In instances where an unauthorized procedure and/or repair has been accomplished, appropriate action should be taken.

FURTHER INFORMATION:

The FSDO listed below would appreciate any information regarding the discovery of the above problems from any source, the means used to identify the source, and the actions taken to remove them from aircraft and/or stock.

This notice originated from the Charlotte, North Carolina FSDO, 4700 Yorkmont Road, Rm. 203, Charlotte, NC 28208, telephone (704) 344-6488, fax (704) 344-6485, and was published through the Suspected Unapproved Parts Program Office, AVR-20, telephone (703) 661-0581, fax (703) 661-0113.

UNAPPROVED PARTS NOTIFICATION NO. 96-130 May 5, 1997

AFFECTED AIRCRAFT: Fokker F-27.

PURPOSE:

The purpose of this notification is to advise all owners, operators, and maintenance entities of an unapproved procedure that was accomplished on certain parts of the nose wheel steering assemblies of F-27 aircraft.

BACKGROUND:

During an FAA suspected unapproved parts safety investigation, it was revealed that certain nosewheel steering assemblies indicated a staking procedure was used to aid in retention of the planetary gear pins and the dowel pins contained in the housing assembly. It appeared that this staking procedure was utilized during the repair or overhaul of the housing assemblies. The housing assembly is contained within the nosewheel steering assembly. This is an unauthorized procedure and contributed to a nosegear-up landing by a foreign operator. The component overhaul manual calls for oversizing the holes and installing larger pins, not this staking procedure.

The steering assemblies that could incorporate this procedure are identified by part numbers 893477 and 893477-01, and the housing assemblies are identified by part numbers 891808 and 893970-01. There are indications that more than one company utilized this unauthorized procedure.

RECOMMENDATIONS:

Aircraft owners, operators, maintenance entities, parts distributors, suppliers, and manufacturers should determine if they have received or installed the above housing assemblies. If stake marks are apparent around the gear pin and dowel pin holes, further inspection or review of the maintenance records is recommended to ascertain that the approved oversizing procedure had been accomplished subsequent to the unapproved staking procedure.

Regulations require that type certificated products conform to their type design. In instances where this unauthorized procedure has been utilized, appropriate action should be taken.

FURTHER INFORMATION:

The FAA Flight Standards District Office (FSDO), listed below, would appreciate any information that you could provide concerning the discovery of these assemblies from any source, the means used to identify the source, and the actions taken to remove them from aircraft and/or stock.

This notice originated from the St. Louis FSDO, 10801 Pear Tree Lane, Suite 200, St. Ann, MO 63074, telephone (314) 429-0209, fax (314) 429-6367, and was published through the Suspected Unapproved Parts Program Office, AVR-20, telephone (703) 661-0581, fax (703) 661-0113.

UNAPPROVED PARTS NOTIFICATION NO. 96-186 June 18, 1997

AFFECTED AIRCRAFT: Boeing, Lockheed, and McDonnell Douglas aircraft, as well as certain corporate aircraft.

PURPOSE:

The purpose of this Unapproved Parts Notification is to advise all aircraft owners, operators and maintenance organizations that a large number of nickel cadmium battery cells used in Saft, Marathon, and other manufacturers' batteries, have been improperly repaired and/or altered.

BACKGROUND:

During the course of a suspected unapproved parts investigation, it was revealed that many nickel cadmium battery cells had been improperly repaired and/or altered by D&C Airparts Corporation, Repair Station

MJ4R364M, 485 West 27th Street, Hialeah, Florida 33010. The repairs and/or alterations did not return the cells to their original or properly altered condition, and, in fact, caused leaking battery cells, internal plate trimming, high internal cell resistance, and low cell capacity. These conditions may lead to uncontrollable thermal runaway of a battery. D&C Airparts also approved for return to service emergency light battery pack assemblies. No authority was ever granted to D&C Airparts to perform maintenance on those assemblies.

RECOMMENDATION:

Regulations require that type certificated products conform to their type design. Aircraft owners, operators, maintenance organizations, manufacturers, and parts suppliers should inspect their aircraft and/or aircraft parts inventory for battery cells or complete batteries or emergency light battery pack assemblies repaired and/or altered by D&C Airparts Corporation. If these items are installed in an aircraft, it is recommended that they be removed until such time as they can be inspected for conformity and/or approved for return to service appropriately. If found in existing aircraft parts stock, it is recommended they be quarantined to prevent installation in aircraft.

FURTHER INFORMATION:

Further information may be obtained from the Federal Aviation Administration (FAA) Flight Standards District Office (FSDO) shown below. The FAA would appreciate any information concerning the discovery of the above referenced unapproved parts from any source, the means used to identify the source and the action taken to remove them from aircraft or stock.

This notice originated from the Miami FSDO, P.O. Box 592015, Miami, FL 33159, telephone (305) 526-2568, fax (305) 526-2698 and was published through the Suspected Unapproved Parts Program Office, AVR-20, telephone (703) 661-0581, fax (703) 661-0113.

AIRPLANES

BEECH

Beech	**Nose Landing Gear**
Model C-23	**Failure**
Sundowner	**3222**

The pilot reported that the nose landing gear collapsed during landing.

An evaluation disclosed that the lower nose landing gear strut housing (P/N 169-810011-27) had broken. The structure failed at the upper fastener holes. This is the point where the nose gear steering collar was attached. The submitter did not offer a cause for this failure; however, this area should be given close attention during scheduled inspections and maintenance.

Part total time-4,079 h

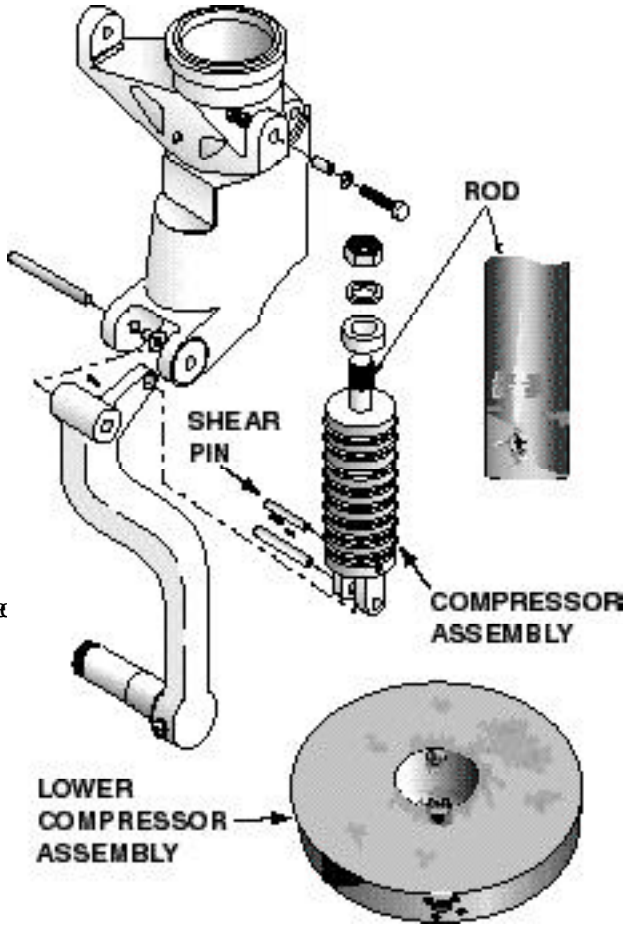
Beech	**Nose Landing Gear**
Model C24R	**Failure**
Sierra	**3222**

During a landing approach, the nose landing gear would not extend. All attempts to extend the nose gear failed and a “nose gear up” landing was made.

An inspection disclosed the nose landing gear was jammed in the nose gear well. The tire was hitting the end of the wheel well preventing the nose gear from extending. Further inspection revealed the roll pin (P/N MS9048-180) installed in the compressor assembly (P/N 169-380003-7) had sheared. (Refer to the following illustration.) This roll pin holds the rod (P/N 169-810000-111) in the compressor assembly. Installation of these parts, along with the shock absorber pads, in the nose gear housing results in a compression load on the pads and a shear load on the roll pin. Failure of the shear pin allows the pads to expand and the nose gear fork and tire to extend.

When correctly installed the roll pin is not visible. Should the roll pin be visible in the compressor assembly, it may indicate that the nose gear strut is incorrectly adjusted or the roll pin has failed. The only required maintenance check in the manufacturer's maintenance manual is related to "hard landing inspections." The submitter recommended the requirements of the "hard landing inspection" related to the nose strut compressor assembly be accomplished each 100 hours of operation.

Part total time not



repo

Beech **Landing Gear**
Model C24R **Malfunction**
Sierra **3230**

The pilot reported that after landing, the aircraft was parked on the ramp, and the engine was shut down. The aircraft master switch was still in the "on" position. As the pilot was preparing to exit the aircraft, his coat inadvertently caught on the landing gear control switch moving it to the "up" position. The landing gear immediately collapsed.

An investigation revealed the differential pressure switch (P/N 90-380010-11) had not disengaged when the airspeed was reduced. Further examination disclosed the pressure switch bellows were defective. The submitter speculated this allowed the landing gear to retract with the aircraft on the ground.

The submitter recommended the manufacturer authorize the use of a "squat" switch in place of the pressure switch.

Part total time 3,153 hours.

Beech **Vacuum System**
Heat
Model F33A **Damage**
Bonanza **3710**

The submitter of this report stated that normal routing of the auxiliary instrument vacuum system plumbing subjects it to heat damage.

At one point especially, the plumbing passes very close to the exhaust stack on the left side of the engine. A vacuum system filter is installed at this location to which a plastic hose (P/N 131823H12A0030) is used to attach the filter to a ridged line. The hose does not tolerate the heat it is exposed to at this location. The submitter recommended that "a high quality, high temperature silicone hose be installed in place of the cheaper factory hose."

Part total time-1,055 hours.

Beech
Model 58P
Baron

Nose Landing Gear Door Malfunction
3231

The pilot reported hearing an abnormal noise when the landing gear was retracted and again when the gear was extended. A safe landing was made and maintenance technicians were summoned.

An investigation disclosed that a section of the shaft assembly (P/N 002-410038-1), which closes the nose gear doors, had broken. This allowed the doors to rotate freely on their hinges. The submitter speculated the doors were held closed by the slipstream, and the abnormal noise was generated when the nose gear forced the doors to open during extension of the gear.

Part total time not reported.

Beech
Model B100
King Air

Defective Oxygen Cylinder Security
3500

During a scheduled inspection, an oxygen cylinder support bracket was found cracked.

Both the left and right support brackets (P/N 178000-1) for the oxygen cylinder located in the aft section of the aircraft were cracked at the "cutout" used to accommodate the clamping band. Oxygen cylinder security should not be taken lightly. Even small defects have the potential to result in personal injuries and aircraft damage.

Part total time-2,322 hours.

CESSNA

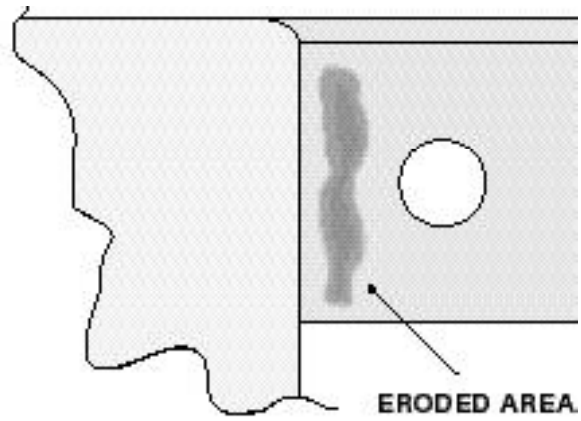
Cessna
Model 150M
Commuter

Worn Wing Attachment Area
5740

This aircraft was being disassembled for refurbishment when this defect was discovered.

The right wing main spar attachment fitting was found "eroded" in the area just outboard of an attachment hole. (Refer to the following illustration.) Additional evidence of similar damage was found at the lower end of the right lift strut. All of the wear found was indicative of a limited fore-and-aft "swing" of the entire wing structure. All of the wing attachment bolts were properly torqued, and there was no fastener hole elongation at the fittings. The submitter could not determine the cause of this defect. It is recommended that this area be given close attention during inspections and maintenance.

Part total time-4,988 hours.



VIEW OF FORWARD WING-ATTACH FITTING, LOOKING AFT

Cessna
Model 172K
Skyhawk

Passenger Seat Failure
2510

The front passenger seat fore-and-aft adjustment handle (P/N 1200504-1) broke at the pivot point, allowing the arm to separate from the pivot point, and the seat locking pin would not engage the seat rail. The passenger seat was then free in a fore-and-aft direction. This allowed the seat to move freely according to the combination of engine power applications and flight attitudes.

The submitter suggested that both front seats be closely inspected for wear and serviceability during scheduled inspections.

Part total time-4,999 hours.

Cessna Model 172 Skyhawk — **Excessive Seat Rail Wear 2510**

All of the seat rails (P/N 0511243-5) and rollers were replaced. After 529 hours of operation, the fourth adjustment hole from the forward end was found worn beyond limits.

The seat rails were originally replaced in accordance with Airworthiness Directive (AD) 87-20-03R2 which establishes the wear limits. In accordance with this AD, the first inspection after replacement of the seat rails is due after 1,000 hours of operation.

The submitter recommended the FAA revise AD 87-20-03R2 to require inspection of the seat rails after 500 hours of operation after replacement. Air taxi operators who make frequent stops may experience an accelerated wear rate on the seat rails and are cautioned to have the seat rails inspected as frequently as possible.

This report has been sent to the responsible FAA aircraft certification office for appropriate action.

Part total time as stated above.

Cessna Model R182 Skylane RG — **Horizontal Stabilizer Crack 5512**

During an annual inspection, the left horizontal stabilizer (P/N 1232600-31) was found cracked.

The crack was located in a reinforcement (P/N 0732101-4). This reinforcement was used for attachment of the horizontal stabilizer to the empennage. The submitter did not mention the length, extent, or cause of the crack. No other details could be obtained; however, it would be wise to thoroughly inspect this area during maintenance and scheduled inspections.

Part total time-9,561 hours.

Cessna Model P210 Centurion — **Defective Nose Landing Gear Door Linkage 3231**

During a scheduled inspection, the nose landing gear door linkage was found damaged.

The left nose landing gear door rod-end stud (P/N S2321L3) was found partially separated from the rod-end. (Refer to the following illustration.) The rod-end and stud assembly exhibited evidence of severe wear. Complete separation of the linkage at this point would allow the door to jam during operation of the nose gear or swing freely in the airstream.

Part total time-1,178 hours.

Cessna Model T210 Centurion — **Nose Landing Gear Actuator Defect 3230**

During an annual inspection, a crack was found in the nose landing gear actuator.

The crack was located at the “bearing end” of the downlock actuator (P/N 1280514-7). It appeared the crack originated at the downlock pin location and extended forward and longitudinally around the casting. Cessna Service Bulletin (SEB) 95-20, which requires a check of “free play” on the downlock pin, had recently been accomplished with no “play” reported. The submitter stated this condition presented the possibility of a nose landing gear failure in the near future.

Part total time not reported.

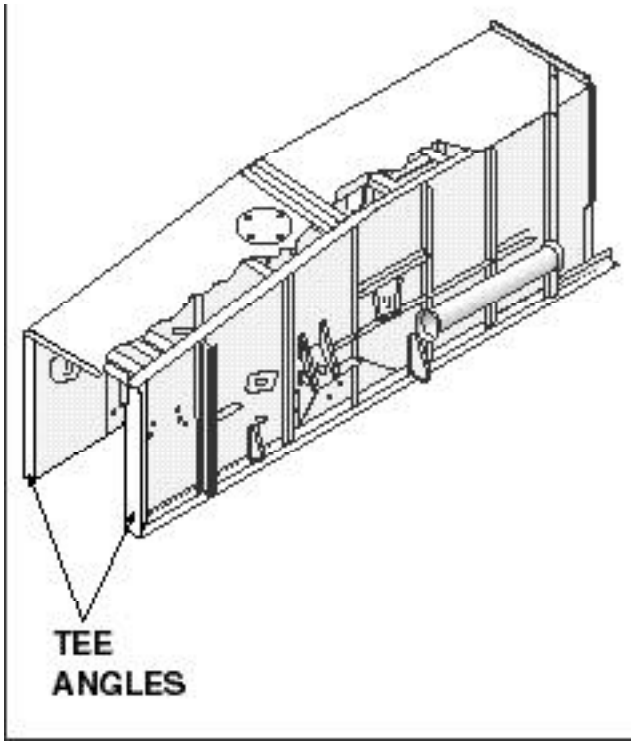
Cessna Model 404 Titan — **Defective Nose Section Structure 5320**

The pilot reported experiencing severe nosewheel shimmy during landing.

The aircraft was taken into a hangar and

jacked for inspection. The inspection revealed the nosewheel shimmy was caused by both the left and right "tee" extrusions (P/N's 5213040-11 left and 5213040-12 right) being broken. (Refer to the following illustration.) These extrusion "tee" angles are part of the primary structural support for the nose landing gear trunnion. The submitter found another like aircraft with sheared rivets in the same area. This is a critical area and deserves your full attention during inspections and maintenance.

Part total time not reported.



Cessna Model 425 Conquest — **Wing Spar Damage 5711**

It was reported that during flight, the right engine generator dropped "off line." The generator was reset several times, and each time it would stay on for a while then drop off again.

During troubleshooting, the generator electrical ground was found to be defective. The ground lug was loose where it was attached to the wing spar web just aft of the engine. When the ground lug was removed, evidence of electrical arcing was discovered. The lug attachment hole in the wing spar web was originally .375 inch diameter and had been burned to an approximate diameter of 1 inch.

Security of electrical connections is very important and deserves your full attention during inspections and maintenance.

Part total time-1,650 hours.

Cessna Model 441 Conquest II — **Fuel Line Damage 2820**

During a scheduled inspection, the main fuel line from the boost pump "tee" to the fuel crossfeed shutoff valve was found chafed beyond limits.

The fuel line (P/N 5700113-3) was chafing on a wing rib (P/N 5722215-33) in the right wing at center wing station (CWS) 88.0. Since this high pressure fuel line is located adjacent to engine bleed air ducting, complete failure of the line would almost certainly produce catastrophic results. The submitter recommended the fuel line be reformed to provide adequate clearance from the wing rib and other structures as well as chafe protection where needed. The submitter stated finding this defect several times in the past.

Part total time-3,141 hours.

Cessna Model 560 Citation — **Rudder Skin Crack 5542**

During a scheduled inspection, a crack was found in the rudder skin.

The crack was located on the right lower rudder skin (P/N 5533000-54). This was the second time a crack was found at this location on the same rudder. The first crack was discovered after 718 hours of operation. In both cases, the rudder skin was replaced. The submitter stated this was the ninth occurrence of this defect in their fleet of like

aircraft. It was speculated that an engineering and/or a production problem led to this type of defect. This is an excellent area for your full attention during scheduled inspections. This report has been sent to the responsible FAA aircraft certification office for appropriate action.

Part total time-1,343 hours.

LUSCOMBE

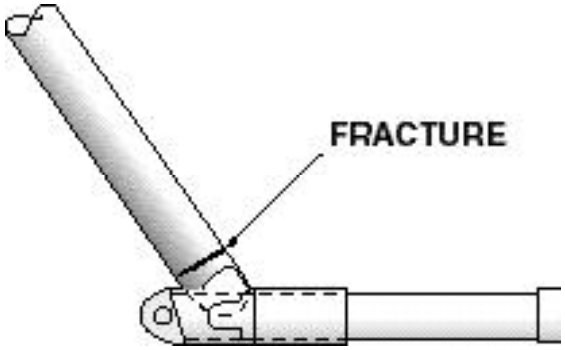
Luscombe Model LL-8-E | **Landing Gear Failure 3213**

Information for the following article was furnished by Mr. Darren Brown, who is an aviation safety inspector (airworthiness) with the FAA Flight Standards District Office located in Richmond, Virginia.

The pilot stated that during the afterlanding rollout, the left main landing gear collapsed.

An examination disclosed that the left main gear lower leg (P/N 58383) had broken. There was evidence of severe corrosion inside the bore of the lower gear leg at the point where it attached to the axle. (Refer to the following illustration.) It was speculated that approximately 70 percent of gear leg structure had been consumed by the effects of corrosion at the point of failure. It was believed the corrosion was caused by moisture and possible other contaminates entering the inner core of the gear leg through the landing gear fairing attachment bolt holes. This area is difficult to properly inspect due to the position of the gear fairing and the tie rod clevis. It was recommended this area be stripped of paint and inspected using dye penetrant to detect any cracks or pitting. It was also suggested that the strut be filled with linseed oil, allowed to soak for a time, and then drained. It would be wise to seal the landing gear fairings at the strut attachment holes.

Part total time-2,840 hours.



PIPER

ALTERNATIVE LEVELING MEANS AND RIGGING OF WING WASHOUT FOR PIPER PA-12, PA-12S, PA-14, PA-18 SERIES, AND PA-19 AIRPLANES

The information contained in the following article was submitted by Mr. Gordon Mandell, who is an aeronautical engineer with the FAA Aircraft Certification Office, ACE-115N, located in Anchorage, Alaska.

This document has been approved by the FAA Aircraft Certification Office, ACE-117A, located in Atlanta, Georgia. ACE-117A is responsible for the Type Certificate Data Sheet for the airplanes listed. Piper will issue service information in the near future authorizing the use of this information.

This information is printed as it was approved by ACE-117A.

This document may be used to supplement the information contained in Piper Aircraft Corporation Service Memos No. 8, No. 9, and No. 19 concerning leveling and setting the wing washout of Piper Aircraft Corporation (now The New Piper Aircraft, Inc.) Models PA-12, PA-12S, PA-14, PA-18 Series, and PA-19 airplanes. This document is intended for use in cases where the airplane's original leveling marks cannot be found. It also contains information about setting the wing washout that is not found in the original Service Memos. For information concerning all other procedures for rigging the subject airplanes consult the original Service Memos.

Piper Models PA-12, PA-12S, and PA-14

1. If the original leveling marks cannot be found, the airplane can be leveled by deviating from Step 1 of Piper Aircraft Corporation Service Memo No. 8 for the PA-12 and PA-12S, or from Step 1 of Piper Aircraft Corporation Service Memo No. 9 for the PA-14, as follows:

Level the airplane laterally by placing an 18 inch spirit level on top of the member that supports the front edge of the rear seat and adjusting the heights of the jacks under the main landing gear axles to bring the bubble to center. Level the airplane longitudinally by placing an 18 inch spirit level on the cabin floor between the front and rear main landing gear attachment points. Position the level outboard of the front seat(s) on one side of the cabin, so that it is facing directly fore and aft, and place a 33/64 inch block under its rear end. Raise or lower the tail to bring the bubble to center. Repeat the procedure with the level positioned outboard of the front seat(s) on the other side of the cabin. If any difference in the tail height required to bring the bubble to center exists between the two sides, adjust the tail height so as to divide the difference evenly.

An 18 inch digital level may be substituted for the spirit level. If a digital level is used, level the airplane laterally by placing the level on top of the member that supports the front edge of the rear seat and adjusting the heights of the jacks under the main landing gear axles until the level reads zero. Level the airplane longitudinally by placing the level on the cabin floor between the front and rear main landing gear attachment points. Position the level outboard of the front seat(s) on one side of the cabin, so that it is facing directly fore and aft, and place it flat against the floor. Raise or lower the tail until the level reads not less than +1.6 degrees nor more than +1.7 degrees (front end of level higher than rear end). Then position the level outboard of the front seat(s) on the other side of the cabin, so that it is facing directly fore and aft, and place it flat against the floor. Observe the reading displayed by the level. If it is less than +1.6 degrees or more than +1.7 degrees, adjust the tail height until the average of the readings taken on the left and right sides of the cabin is between +1.6 degrees and +1.7 degrees (the actual value, expressed to the nearest thousandth of a degree, is +1.665 degrees, but most digital levels read to the nearest tenth of a degree).

2. Step 3 of Piper Service Memo No. 8 for the PA-12 and PA-12S, and Step 3 of Piper Service Memo No. 9 for the PA-14, both instruct the rigger (or two-person rigging crew) to set the wing washout after the airplane has been leveled, as follows:

Place a 1 3/8 inch block under one wing at the rear spar location at the outboard aileron rib. Place a 30 inch spirit level chordwise across this block with the front end of the level at the front spar location. Adjust the rear lift strut fork in or out to bring the bubble to center. When the bubble is centered the wing will have the proper 2 1/2 degree washout. Repeat the procedure for the other wing.

The following additional information pertains to this procedure:

a. The outboard aileron rib is the wing rib at the outboard end of the aileron bay. It is located 169 11/16 inches outboard of the butt rib.

b. A spirit level up to 48 inches long may be substituted for the 30 inch spirit level when setting the washout using the original method described in the Service Memos. The front end of the level must be placed at the front spar location regardless of the length of the level used. Excess length will extend aft past the 1 3/8 inch block.

c. A digital level 30 inches to 48 inches long may be substituted for the spirit level. If a digital level is used, place it chordwise under one wing at the outboard aileron rib, with the rear end of the level at the rear spar location. Excess length will extend forward past the front spar location. Adjust the rear lift strut fork in or out until the level reads -2.6 degrees

(front end of level lower than rear end). When the level reads -2.6 degrees (the actual value, expressed to the nearest thousandth of a degree, is -2.627 degrees, but most digital levels read to the nearest tenth of a degree) the wing will have the proper 2 1/2 degree washout. Repeat the procedure for the other wing.

d. Whether the washout is set by using a spirit level according to the original method described in the Service Memos or by using a digital level, the tolerance in the angle of incidence of the outboard aileron rib is +/- 1/4 of 1 degree. This is approximately equivalent to +/- 1/8 inch in the height of the 1 3/8 inch block used with the spirit level in the original method, or to +/- 0.2 degree in the reading of the digital level.

Piper PA-18 Model Series and PA-19

1. If the original leveling marks cannot be found, the airplane can be leveled by deviating from the "LEVELING" step of Piper Aircraft Corporation Service Memo No. 19 as follows:

Level the airplane laterally by placing an 18 inch spirit level on top of the member that supports the front edge of the rear seat and adjusting the heights of the jacks under the main landing gear axles to bring the bubble to center. Level the airplane longitudinally by placing an 18 inch spirit level on top of the bottom member of the door frame on the right side of the cabin, or by placing a spirit level up to 30 inches long along the lower window frame channel on the left side of the cabin. Raise or lower the tail to bring the bubble to center.

A digital level may be substituted for the spirit level. If a digital level is used, level the airplane laterally by placing the level on top of the member that supports the front edge of the rear seat and adjusting the heights of the jacks under the main landing gear axles until the level reads zero. Level the airplane longitudinally by placing an 18 inch digital level on top of the bottom member of the door frame on the right side of the cabin, or by placing a digital level up to 30 inches long along the lower window frame channel on the left side of the cabin. Raise or lower the tail until the level reads zero.

2. The "WASH OUT" step of Piper Service Memo No.19 instructs the rigger (or two-person rigging crew) to set the wing washout after the airplane has been leveled, as follows:

Place a 3/8 inch spacer block on top of one end of a 30 inch spirit level. Place the level fore and aft along the bottom of the rib adjacent to the outer end of the aileron on one wing, with the spacer block at the rear of the level and the front end of the level at the front spar location. Adjust the rear lift strut fork in or out to bring the bubble to center. The correct washout will exist when the bubble is centered. Repeat the procedure for the other wing.

The following additional information pertains to this procedure:

a. The rib adjacent to the outer end of the aileron is also called the outboard aileron rib or the wing rib at the outboard end of the aileron bay. It is located 166 3/4 inches outboard of the butt rib.

b. A spirit level up to 48 inches long may be substituted for the 30 inch spirit level when setting the washout using the original method described in the Service Memo. The front end of the level must be placed at the front spar location regardless of the length of the level used. Excess length will extend aft past the 3/8 inch block.

c. A digital level 30 inches to 48 inches long may be substituted for the spirit level. If a digital level is used, place it fore and aft along the bottom of the rib adjacent to the outer end of the aileron on one wing, with the rear end of the level at the rear spar location. Adjust the rear lift strut fork in or out until the level reads -0.7 degree (front end of level lower than rear end). When the level reads -0.7 degree (the actual value, expressed to the nearest thousandth of a degree, is -0.717 degree, but most digital levels read to the nearest tenth of a degree) the wing will have the correct

washout. Repeat the procedure for the other wing.

d. Whether the washout is set by using a spirit level according to the original method described in the Service Memo or by using a digital level, the tolerance in the angle of incidence of the outboard aileron rib is +/- 1/4 of 1 degree. This is approximately equivalent to +/- 1/8 inch in the height of the 3/8 inch block used with the spirit level in the original method, or to +/- 0.2 degree in the reading of the digital level.

e. The correct wing washout of the Piper PA-18 model series and PA-19 airplanes is 2 1/2 degrees, the same as that of the Piper PA-12, PA-12S, and PA-14 airplanes. The PA-18 model series and PA-19 airplanes, however, have a wing angle of incidence of +1.843 degrees at the wing root (inboard end; i.e., the centerlines of the wing butt hinge bolts), while the PA-12, PA-12S, and PA-14 airplanes have a wing root angle of incidence of -0.060 degree. The negative angle of incidence at which the outboard aileron ribs of PA-18 model series and PA-19 airplanes must be set in order to produce 2 1/2 degrees of washout is therefore much smaller than the negative angle of incidence at which the outboard aileron ribs of PA-12, PA-12S, and PA-14 airplanes must be set in order to produce that same 2 1/2 degrees of washout. The wing span of PA-12, PA-12S, and PA-14 airplanes is also 3 inches greater than that of PA-18 model series and PA-19 airplanes, and the outboard aileron ribs of PA-12, PA-12S, and PA-14 airplanes are 4 9/16 inches farther from the center of the fuselage than those of PA-18 model series and PA-19 airplanes. These differences in aircraft configuration account for the differences between the instructions for setting the wing washout of PA-18 model series and PA-19 airplanes at 2 1/2 degrees and the instructions for setting the wing washout of PA-12, PA-12S, and PA-14 airplanes at 2 1/2 degrees.

Piper
Model PA 23-250
Aztec

Technical Data Discrepancy 2721

A maintenance technician discovered a discrepancy between the Piper Aztec Service Manual (P/N F753564) and the aircraft. The discrepancy concerned the rudder trim tab travel limits.

After a discussion with a Piper representative, it was determined that the service manual is in error. The Piper representative confirmed that a revision will be issued to correct this problem. Until the service manual revision is issued, the correct rudder trim tab travel limits should be obtained from Type Certificate Data Sheet (TCDS) 1A10.

Piper
Model PA 24-250
Comanche

Defective Engine Compartment Hoses 2820, 2900, 3610, and 7920

During a scheduled inspection, all the flexible hoses in the engine compartment were found to be severely deteriorated.

This aircraft was manufactured in 1959, and it appeared that these hoses had been installed as original equipment. Flexible hoses are not designed or intended to last 38 years! The submitter stated these hoses were “fossilized and brittle.” This subject has been discussed many times in this publication and other aviation maintenance publications; however, we continue to receive this type of report. Even if this aircraft had been stored in a climate-controlled hangar for this amount of time, the hoses would not be serviceable. Maintenance personnel are cautioned to inspect and replace all “aircraft installed” hoses as necessary.

Part total time-5,169 hours.

Piper **Firewall Defects**
Model PA 28R-201T **5412**
Turbo Arrow

While removing the aircraft engine, the "galvanized" portion of the firewall was found severely corroded and deteriorated.

The area of damage was approximately 3 inches in diameter and was located directly behind the turbocharger. The insulation covers were in place when this defect was discovered. The submitter stated that the close proximity of the turbocharger and the excessive heat generated by it caused this damage to the firewall. It was recommended that the manufacturer develop and make available a heat shield assembly constructed of stainless steel to further protect this area from heat damage.

Part total time not reported.

Piper **Landing Gear Failure**
Model PA 28RT-201T **3230**
Turbo Arrow

The pilot reported the landing gear would not extend using the normal extension system. The emergency system was used to lower the landing gear, and a safe landing was made.

An investigation disclosed the hydraulic powerpack reservoir fluid level was very low. There were no apparent hydraulic system leaks after servicing and pressurizing the hydraulic system. The aircraft was placed on jacks, the landing gear was cycled several times, and still there were no signs of leakage. After a diligent search, a hydraulic leak was found when the right side cabin upholstery was removed. The upholstery material and insulation was soaked with hydraulic fluid. The leak source was found to be a pin hole in a hydraulic line (P/N 67700-181) going to the nose gear actuator. The submitter speculated the pin hole in the hydraulic line was caused by corrosion.

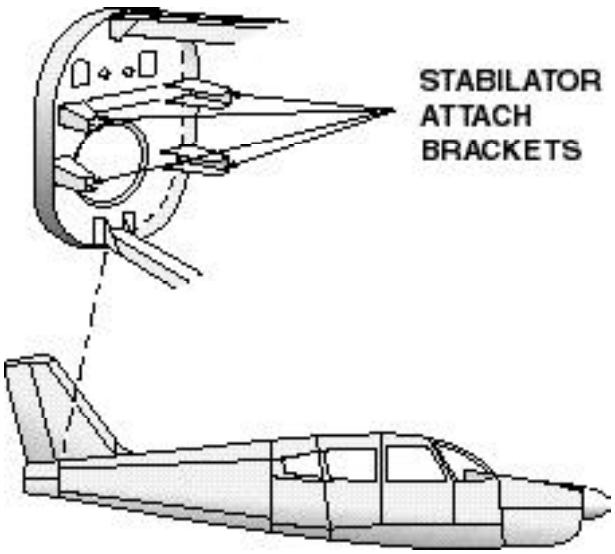
Part total time-3,778 hours.

Piper **Stabilator Corrosion**
Model PA 28-236 **5551**
Dakota

During an annual inspection and compliance with Piper Service Bulletin (SB) 856, corrosion was found at the stabilator attachment fittings.

Two of the four stabilator attachment brackets were severely corroded. (Refer to the following illustration.) The attachment brackets are made of steel and attach to the aluminum stabilator skin. The submitter believed these two metals being in contact with each other caused the corrosion. Eight months prior to this discovery this area had been inspected for corrosion in accordance with SB 856, and no corrosion was present at that time. Therefore, the submitter suggested the manufacturer revise the inspection schedule of SB 856 to 6 months or more often.

Part total time-2,436 hours.



Piper **Elevator Spar Cracks**
Model PA 31-350 **5521**
Chieftain

While complying with Piper Service Bulletin (SB) 998, the left elevator spar was found cracked in two places.

The spar (P/N 40075-14) was cracked at the outboard end and adjacent to the inboard side of the outboard attachment point. The submitter suggested the manufacturer develop and make available a "kit" to strengthen the elevator spars at the failure points outlined in SB 998. All operators of aircraft to which this SB 998 applies are strongly urged to comply with its content. This is especially urgent for high time aircraft.

Part total time-14,480 hours.

Piper **Engine**
Compartment
Model PA 31-350 **Fuel Leak**
Chieftain **2822**

During a scheduled inspection, a fuel leak was found coming from the right engine compartment.

Further investigation revealed the engine driven fuel pump (P/N RG 9080J4A) was the source of the leak. It appeared the leak originated from the pump body flanges. The submitter speculated the cause of this defect could be that the flange fasteners were not properly torqued, the flange gasket was defective, or the flange gasket was not properly installed. On several occasions, the submitter discovered that the gasket was "pinched."

Part total time-510 hours.

Piper **Engine Fuel Leak**
Model PA 31-350 **2820**
Chieftain

A fuel leak was discovered in the vicinity of the right engine cowling.

An investigation revealed a flexible fuel line (P/N 39997-10) was leaking. This line was attached to the emergency fuel pump (P/N 42113-05) and a ridged metal fuel line. Both of the flexible fuel line fittings were properly torqued and neither was leaking.

The exterior of the line was covered with stainless steel braid which appeared to be in excellent condition. However, interior of the line was covered with a "rubber and fabric material" and was severely deteriorated. The leak was located in approximately the middle of the flexible line. The submitter stated this aircraft was manufactured in 1982, and this was probably the "original part" that was installed 15 years ago.

Part total time-5,750 hours.

Piper **Nose Landing Gear**
Model PA 32R-301 **Trunnion Defect**
Saratoga **3222**

After a flight, the pilot noticed that a spring was hanging from the nose landing gear.

An investigation revealed the spring attachment "ear" on the upper right forward part of the nose gear trunnion (P/N 67054-08) had broken. This was a relatively new aircraft, and the submitter speculated the defective trunnion "ear" was caused during the manufacturing process.

Part total time-158 hours.

AMERICAN EUROCOPTER

HELICOPTERS

AMERICAN EUROCOPTER

American Eurocopter Model 105 CBS Twinjet II — **Defective Hydraulic Control**

The Pilot stated that the helicopter hydraulic system switched to the number 2 system during flight. A landing was made and the number 1 hydraulic system was reset. Again, the hydraulic control system switched to the number 2 system.

An investigation disclosed that the guide assembly (P/N D133-1454.01E) switch (P/N 10DB4) had shorted to ground. The helicopter had been operating in high humidity, rain, and snow conditions and there was a great deal of moisture present under the guide assembly cover. It was speculated that the moisture contributed to this defect.

Part total time-644 hours.

American Eurocopter Model AS350B Ecureuil — **Defective Fuel Flow Control 7320**

The pilot reported that during a landing approach, the rotor RPM was higher than normal after the collective was lowered to begin a decent. The rotor RPM did not change when the collective was raised, in a effort to restore the rotor RPM to normal.

When the fuel flow control lever was used, in an effort to slow the rotor RPM, the RPM indication went well below normal. A safe landing was made and maintenance personnel inspected the aircraft.

They discovered that the fuel flow control (anticipator) cable (P/N 704A34-130-30) was binding adjacent to the point where it attached to the fuel flow control. It was recommended this cable be inspected for operational condition at every opportunity.

Part total time not reported.

AGUSTA

Agusta Model 109 K2 — **Tail rotor Bearing Failure 6520**

During a preflight inspection, the duplex bearing (P/N 109-0133-05-101) seal was found detached from the bearing.

After disassembly, it was discovered that all of the lubricant had been lost. Several of the “bearing balls” were missing from the outer duplex bearing. The submitter did not offer a cause for this defect. It was stated that the duplex bearing was severely deteriorated.

Part total time-888 hours.

BELL/GARLIC

Bell/Garlic Model UH-1B Huey — **Tailboom Spar Cap Crack 5302**

During a routine inspection, the tailboom spar cap was found cracked.

This area had been inspected prior to the last flight and there was no damage to the spar cap at that time. The previous flight was 1 hour long and the submitter stated the crack developed during that time. Also, the crack fracture surfaces and other available evidence indicated an instantaneous failure. Garlic Helicopters Alert Service Bulletin (SB) UH1-96-04 had been complied with. This SB requires removal of a rivet which may induce

stress at the defect location. This tailboom had accumulated a large number of operating hours in external load logging operations.

Tailboom total time-2,500 hours.

BELL

Bell — **Inflight Engine Failure**
Model 47G5 — **7160**
Engine Textron Lycoming Model VO-435-B1A

The engine lost power during flight. This resulted in a safe auto-rotation landing.

An investigation revealed that the gasket, installed between the air filter housing and the carburetor inlet was not properly installed. One corner of the gasket (P/N 47-615-004-1) folded over allowing an opening to the atmosphere. This opening allowed debris to enter the carburetor and block critical air passages. The submitter believed the gasket had been improperly installed previously. It would be a good idea to inspect the engine air induction system at every opportunity.

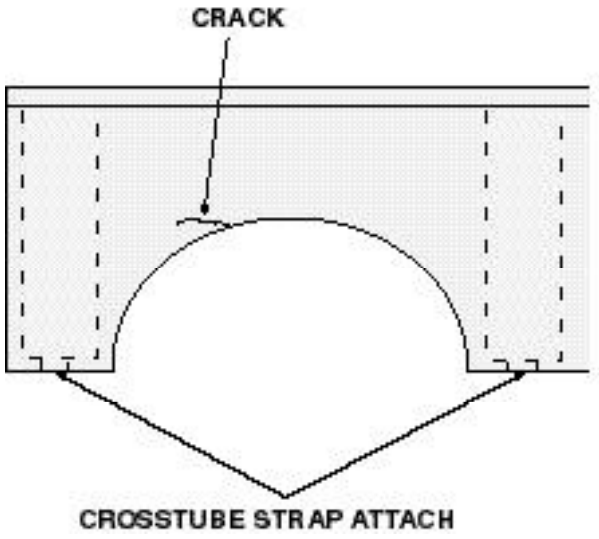
Part total time-190 hours.

Bell — **Defective Cross Tube Bracket**
Model 206 L-4 Long Ranger — **3210**

During a daily inspection, a crack was found in a landing gear cross tube attachment bracket.

The cross tube attachment bracket (P/N 206-030-104-023) was installed at the forward left position. The crack appeared to have originated at the middle of the bracket radius for the cross tube and extended to the left. (Refer to the following illustration.) The submitter did not offer a cause for this defect and there was no mention of corrosion of the bracket or the cross tube.

Part total time-2,528 hours.



AGRICULTURAL AIRCRAFT

GRUMMAN

Grumman — **Main Landing Gear Failure**
Model G164B Ag Cat — **3211**

When the pilot made a turn to line up for takeoff, the left main landing gear collapsed. The aircraft had a full load of fertilizer when this incident occurred.

An examination revealed damage to the propeller, a stud assembly (P/N A1518-111), and the landing gear beam bracket assembly (P/N A1322-001). The cause of the landing gear collapse was determined to be failure of a landing gear attachment bolt (P/N MS20009-138). This bolt was installed at the rear attachment position. The bolt failed at the junction of the bolt shank and the head. It is recommended these bolts be examined by dye penetrant inspection at least annually.

Part total time-1,016 hours.

AMATEUR, SPORT, AND EXPERIMENTAL AIRCRAFT

Glasair
Model III

Landing Gear Failure
3200

The pilot reported that the landing gear failed to retract after takeoff. It was stated that the 3 "green" indicator lights remained illuminated throughout the flight.

During a precautionary landing, all 3 landing gear collapsed. The left main gear collapsed first, followed by the right main gear and finally the nose gear. The significance of the order of failure was not given. The cause of the landing gear failure had not been thoroughly investigated or determined at the time of this report. If further information is received it will be printed in a future edition of this publication.

Part total time not reported.

Revolution Helicopter
Model Mini 500
Engine Rotax
Model 582

Airframe Vibration
1810

The pilot reported that at 100 per cent engine RPM, a very high frequency vibration was noticed. The vibration seemed to originate in the airframe. The engine RPM was lowered and the helicopter was landed immediately.

A test using a "Chadwick" instrument, disclosed a vibration level at the clutch assembly of 8.0 inches per second at 6500 RPM. The clutch assembly was removed and sent to the manufacturer for rebalancing. When the clutch was reinstalled, another vibration test revealed no change in the vibration level.

This is an exceptionally high vibration level and can produce structural failure of the airframe in a short period of time. The submitter of this report seemed to be convinced that the clutch assembly was cause of vibrations. There was no mention of investigating other vibration causes. Owners, operators, and maintenance technicians should consult the helicopter manufacturer for acceptable vibration limits. These limits should be strictly followed to prevent catastrophic airframe failure.

Part total time-10 hours.

ACCESSORIES

CABIN INTERIOR LIGHTING

This report concerns the use of fluorescent lighting in the cabin interior of a Gulfstream, Model G-IV-SP aircraft. The dangerous condition presented by this type of defect can, and has, occurred on many other make and model of aircraft. For that reason, this article is presented to inform all of the possible dangers.

The lower fluorescent lamp on the right side of the aft cabin was found to be inoperative.

When the cover was removed the fluorescent tube (P/N BR9800-005) was found burned completely through and separated. The area of damage was approximately .5 inch from one end of the tube. A small fire had occurred as evidenced by smoke, fire stains, and fire damage in the adjacent area. This light fixture has been sent to the manufacturer for evaluation. If further information is obtained, it will be printed in a future edition of this publication.

Heat problems associated with fluorescent light fixtures are usually caused by the ballast. However, a possible hazardous situation may occur whenever excessive heat is generated in an aircraft cabin.

Part total time-527 hours.

STROBE LIGHT SYSTEMS ARCING

All Aircraft Equipped with High Voltage Strobe Light Systems

Several service difficulty reports (SDRs) indicate that aircraft high voltage strobe light systems are susceptible to wire chafing, flashtube burnout, and arcing.

One report indicated a Beech Model 60 outboard wing panel exploded during takeoff when leaking fuel fumes contacted a chafed and arcing strobe light wire. Another report indicated that during a routine preflight walkaround inspection a Cessna Model 310 wingtip flashtube was found burned through and arcing to the case. The pilot reported loud popping noises. There are several reports of wires chafing at flashtube housing assemblies, power supply locations, loose wire-to-housing connections, and various structural locations where wires chafe due to aircraft structural motion on the ground and in flight.

Several reports indicate unsecured extra wire bundle length allowed chafing contact with the surrounding structure. One report indicates that the wire bundle was too short, resulting in chafing and shorting at the strobe light housing.

It is recommend that operators of aircraft equipped with high voltage strobe light systems conduct daily walkaround inspections while the strobe lights are operating. Specifically, pay attention to decreased strobe light bulb intensity or changes in flash sequence, and listen for popping or arcing sounds that may indicate internal shorts. At night look for evidence of arcing, external to strobe light housings where screwheads may act as a high voltage path to ground, or other evidence of high voltage leakage.

Caution:

Strobe light systems are high voltage devices. Wait ten (10) minutes after removing power before disconnecting the light assembly or power supply.

Do not touch flashtubes with bare hands as residue will cause tube failure/burn through within a short period of time.

During routine maintenance, inspect all high voltage connections for security and tightness, and the switches for evidence of heat damage or other evidence of failure. Ensure that all wires are of correct length and properly secured and routed according to approved maintenance practices. Inspect for loose flashtubes in sockets and signs of arcing within the light head. Wrap wire bundles with chafe-strip protection where needed, particularly near fuel tanks and other structural components. Check for evidence of fuel leakage and vent line security and condition.

Lastly, the FAA highly recommends that operators report all occurrences of high voltage leakage incidents and other maintenance problems in accordance with the Service Difficulty Program (SDP) reporting system. This will allow the FAA to make that information available to other operators who may have the opportunity to inspect for and correct potentially unsafe conditions.

AIR NOTES

APPROVED PARTS SEMINARS

The Designee Standardization Branch, AFS-640, had previously presented an Approved Parts Seminar. However, the FAA convened a task force to conduct a thorough review of the Suspected Unapproved Parts (SUP) issue, and the seminar was discontinued until the review was completed. As a result of the task force recommendations, a new national SUP Program Office, AVR-20, was established to standardize national policy. Now that standard policy is completed, the Approved Parts Seminar will again be presented by AFS-640.

Attendance at these seminars is open to everyone in the aviation community; however, the material and content is mainly directed to Representatives of the Administrator, both foreign and domestic; FAA inspectors; Civil Aviation Authority (CAA) representatives; aircraft engine and propeller manufacturers; parts manufacturers; distributors; suppliers; air carriers; mechanics; and repair stations. It is expected that the seminars will be approved to be used as an acceptable means of renewal for Inspection Authorization (IA). The seminars can also be used as acceptable training in conjunction with the Aviation Maintenance Technician Award.

The major areas which will be covered in these 8-hour seminars are: type design, conformity, different methods to obtain approval on parts that are eligible for installation on U.S.-type certificated products, quality systems, and examples of litigation as a result of the installation of fraudulent/unairworthy parts.

The seminars are tentatively scheduled to begin after October 1997. You may contact AFS-640, your local Flight Standards District Office (FSDO), or your local Manufacturing Inspection District Office (MIDO) for a schedule of seminar locations. The seminar schedules will also be available on the Internet. The Regulatory Support Division, AFS-600, has established a "HomePage" at the following Internet address:

ga-alerts@mmacmail.jccbi.gov

AIRWORTHINESS DIRECTIVES (AD'S)

AD'S ISSUED IN JUNE 1997

AD **-**-** **********
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ALERTS ONLINE

This publication is now available through the FedWorld Bulletin Board System (BBS), via the Internet.

You may directly access the FedWorld BBS at telephone number (703) 321-3339. To access AC 43-16, General Aviation Airworthiness Alerts, through the Internet, use the following address: "http://www.fedworld.gov/ftp.htm". This will open the "FedWorld File Transfer Protocol Search And Retrieve Service" screen. Page down to the heading "Federal Aviation Administration" and select "FAA-ASI". The file names will begin with "ALT", followed by three characters for the month, followed by two digits for the year (e.g. "ALTJUN96.TXT"). The extension "TXT" indicates the file is viewable on the screen and also available for download.

In July 1996, we began using the Adobe Acrobat software program format to upload this monthly publication. Since that time, the "ALT" files now appear with a "PDF" extension, and it is necessary to download the files for viewing. This change was necessary to accommodate inclusion of the illustrations associated with various articles. The Adobe Acrobat Viewer is available for download from the Internet (free of charge) and will allow the files to be read.

Also available at this location are the Service Difficulty Reports for the past 2 months, which may be of interest.

The Regulatory Support Division (AFS-600) has established a "HomePage" on the Internet, through which the same information is available. The Internet address for the AFS-600 "HomePage" is: "http://www.mmac.jccbi.gov/afs/afs600". Also, this address has a large quantity of other information available. There are "hot buttons" to take you to other locations and sites where FAA Flight Standards Service information is available. If problems are encountered, you can "E-mail" us at the address below.

If you wish to contact the staff of this publication, you may do so by any of the means listed below.

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We hope this will allow you to contact us by a means which will be convenient and save some of your time. We welcome the submission of aircraft maintenance information via any form or format. This publication provides an opportunity for you to inform the general aviation community of problems you have encountered as well as bringing them to the attention of those who can resolve the problems. The Service Difficulty Program (SDP) also brings the problems to the attention of those who are able to resolve the problems, as well as, bringing them to the attention of those who can resolve these problems. Your participation in the SDP is vital to ensure accurate maintenance information is available to the general aviation community.

ELECTRONIC AVAILABILITY OF INFORMATION

In light of the previous article, we solicit your input and ideas for the future of this publication. The electronic information media has made available a vast amount of information in a more expedient and efficient manner. We believe the expanded use of this media can bring about the conveyance of safety information in a more efficient and timely manner.

We are currently distributing approximately 28,000 printed copies of this publication each month, and the distribution number continues to increase. The cost for publishing, printing, and mailing this publication has also increased, and there has been a substantial negative impact on our budget allotment.

In an effort to save tax dollars and make better use of the electronic media, we encourage all of our readers to cancel their printed copy subscription to this publication and use the computer to download the monthly issues. (The instructions for downloading the Alerts was given in the preceding article.) We will be happy to assist you if you require further assistance. Some of you may not yet have the equipment necessary to receive the information electronically, and you are welcome to continue receiving it in the printed form.

There have been some efforts to charge an annual subscription fee for this publication. So far these efforts have not been given much credence, and we will make every effort to keep this a free-of-charge publication. However, we need your input and ideas. Would you be willing to pay a nominal subscription charge for this publication?

We appreciate your interest in this publication and the opportunity to serve you. Please offer any comments, questions, or suggestions to us via any of the means in the preceding article.

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For your convenience, FAA Form 8010-4, Malfunction or Defect Report, will be printed in every issue of this publication.

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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/or corrective actions to prevent recurrence.*)

Optional Information:

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

☐ Accident; Date _____ ☐ Incident; Date _____

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

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