



SAIB: 2024-02
Date: April 4, 2024

SUBJ: Wing Spar

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts all owners, operators, maintenance technicians, and inspectors of **Revo Incorporated Model Colonial C-1, Colonial C-2, Lake LA-4, Lake LA-4A, Lake LA-4P, Lake LA-4-200, Lake Model 250 (including those modified in accordance with Supplemental Type Certificate (STC) SA469NE) and Lake 270 Turbo Renegade (Model 250 with STC AS469NE as noted in TCDS 1A13 Note 8) aircraft** to potential cracks in the wing rear attach beam assembly and hole-quality issues that have been identified in a significant number of aircraft.

At this time, the airworthiness concern is not an unsafe condition that would warrant airworthiness directive (AD) action under Title 14 of the Code of Federal Regulations (14 CFR) part 39.

Background

Over the past 45 years, the Lake Amphibian Club (LAC) received approximately 27 reports of cracks in the wing rear spar web that were visible in the aft wheel well. In addition, there is one report of elongated bolt holes in the wing to fuselage attach fittings.

Figure 1 shows a Lake LA4-200 Buccaneer looking aft into the left-hand main landing gear (MLG) wheel well and shows the area where cracks are occurring and the recommended inspection area. Figure 1 also shows the inspection area and the accessibility to perform the recommended inspections.

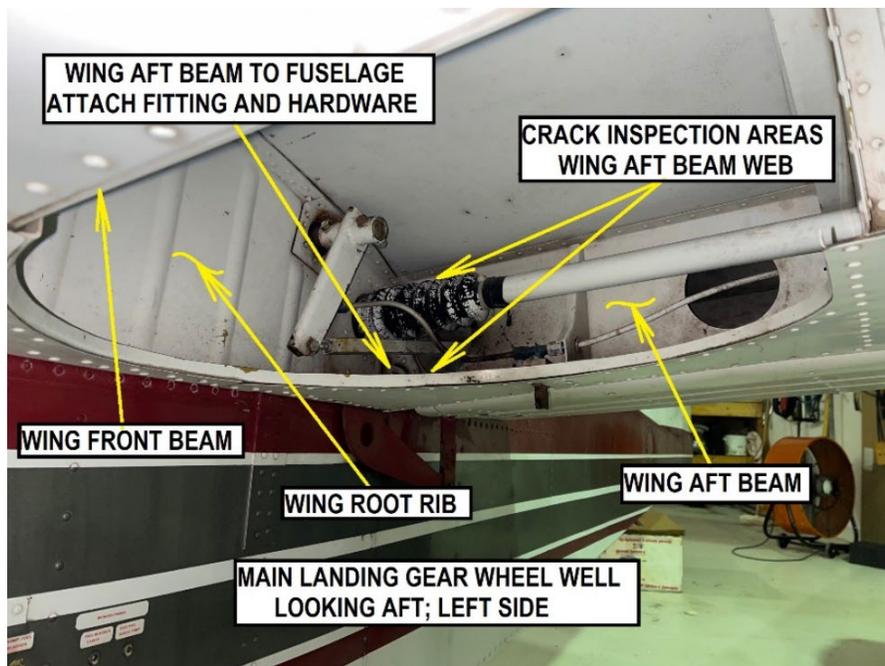


Figure 1
Lake LA-4-200 Buccaneer MLG Wheel Well

Figures 2 and 3 show cracks found on a Lake LA-4-200 Buccaneer Left side rear attach beam assembly. The small holes shown in the web are manufacturer holes presumably for part positioning during forming processes.

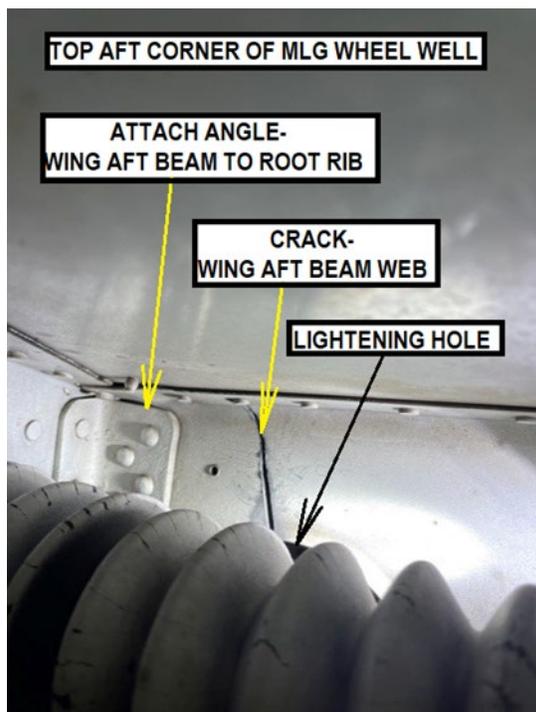


Figure 2

Lake LA-4-200 Buccaneer MLG Wheel Well
Top Aft Corner (Left Side Looking Aft)

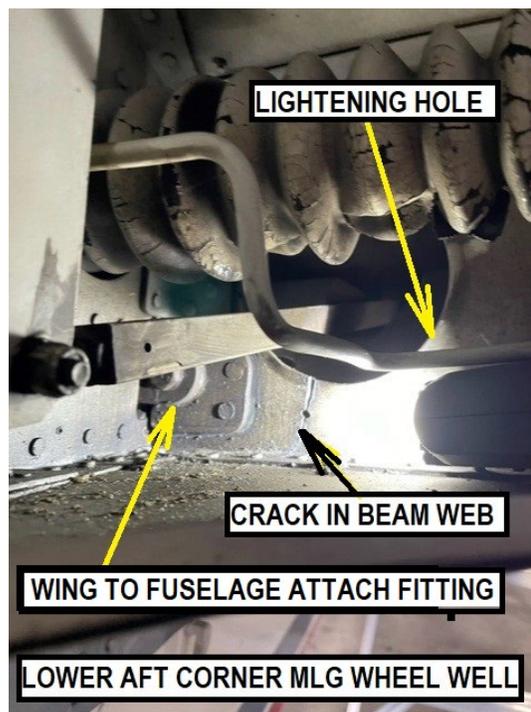


Figure 3

Lake LA-4-200 Buccaneer MLG Wheel Well
Bottom Aft Corner (Left Side Looking Aft)

The information in the SAIB was provided to us by LAC. The potential effect on the aircraft's strength is prompting the FAA to issue this SAIB.

Recommendations

The FAA recommends owners and operators perform the following inspections:

1. Inspect all wing attach hardware for corrosion, loose rivets, witness marks indicating movement in the joint and bolt, torque, and condition. Note that the bolts may need to be loosened or removed to determine if gaps exist.
2. Inspect all wing attach fittings for security, wear, corrosion, damage, and condition of sealant at fuselage.
3. Inspect wing aft beam assembly for damage, distortion, corrosion, and general condition. Perform close visual inspection around the lightning holes near the large cut out in the aft web. Look for indications of cracking as shown in the pictures above.
4. Inspect wing tips for general security and condition – rock wing fore and aft to check for looseness at wing attach points.
5. Report all inspection findings using the FAA's Service Difficulty Reporting (SDR) System Site at <https://sdrs.faa.gov/>. When filing SDRs, please include as much information as possible. For example, if the spar had been replaced, if there are any shims or gaps, and any alterations that might affect the durability of the spar. Alternatively, inspection findings may be reported directly to the Lake Amphibian Club using the contact information below.

6. If cracks, gaps, or elongated holes are found, repair or replace parts in accordance with the manufacturer's instructions, or using other methods, techniques, and practices acceptable to the Administrator provided in FAA Advisory Circular [AC 43.13-1B](#)

The inspections above can be performed during pre-flight, annual, or 100-hour inspections. The FAA also recommends that the above inspections also be performed following a water loop incident or accident, wing impact damage/incident or accident, landing gear impact damage/incident or accident, or other cases where the wing may have incurred greater than normal torsion stresses applied to the rear attachment area.

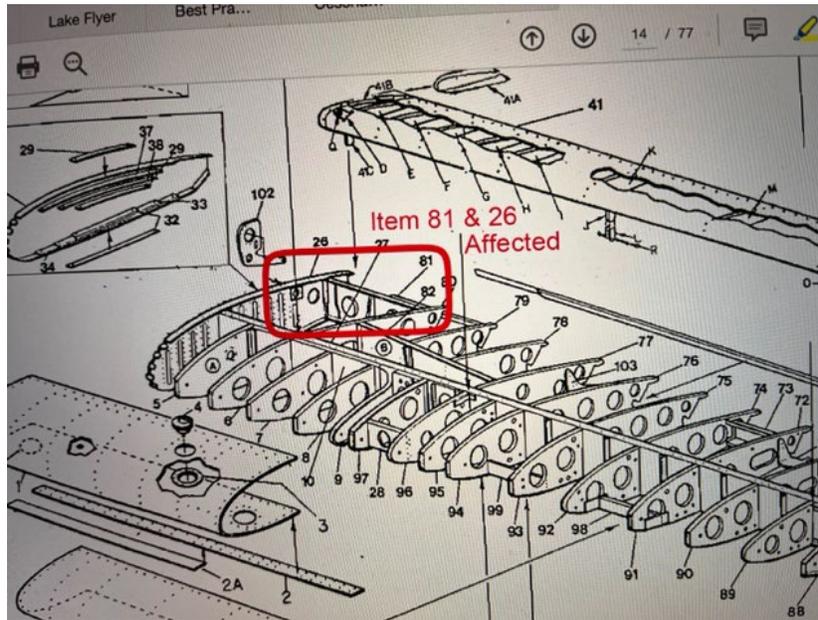


Figure 4
Lake Model 250 Renegade Manual
Root Rib (Item 26) and Rear Attach Beam Assy (Item 81)

For Further Information Contact

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You May Also Contact

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