

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



ANC25LA021

WRECKAGE EXAMINATION

March 3, 2025

TABLE OF CONTENTS

A. ACCIDENT.....	3
B. WRECKAGE EXAMINATION.....	3
C. SUMMARY	3
D. DETAILS OF THE EXAMINATION.....	3
1.0 ACCIDENT SITE	3
2.0 AIRFRAME EXAMINATION.....	3
2.1 Wings 5	
2.2 Landing Gear.....	7
3.0 CHECKLIST	14

A. ACCIDENT

Location: Lihue airport, Lihue, Hawaii
Date: February 28, 2025
Time: 1100L
Airplane: Gippsland GA-8 N699AV

B. WRECKAGE EXAMINATION

FAA Joewie Maldonado
Airworthiness Safety Inspector
Honolulu, HI

FAA William Brode
Airworthiness Safety Inspector
Honolulu, HI

C. SUMMARY

On February 28, 2025 about 1100 Hawaii-Aleutian Standard time, a Gippsland GA-8 airplane, N699AV, was substantially damaged when it was involved in an accident near Lihue, Hawaii. The pilot and four passengers were not injured, one passenger sustained minor injuries. The airplane was operated as a Title 14 Code of Federal Regulations Part 91 air tour flight.

The pilot reported that he made a normal approach with full flaps and landed on runway 21 at the Lihue Airport (LIH). While taxiing to parking he made a slow right turn off the runway. As the pilot straighten the airplane out of the turn on to the taxiway, the right landing gear leg collapsed resulting in substantial damage to the fuselage.

D. DETAILS OF THE EXAMINATION

1.0 Accident Site

Taxiway on Lihue Airport.

2.0 Airframe Examination

As reported N699AV suffered collapse of the right main landing gear during attempt to turn off taxiway post landing on 2/28/2025. Initial overall visual inspection of aircraft identified damage suffered during incident and from removal from taxiway. Inspection of the Right Main Landing gear is showing discoloration and offset grain

structure where it sheared indicating to our belief that corrosion had weakened the assembly allowing for failure.



Figure 1 Right side of the airplane.



Figure 2 Damage to the right side of the fuselage

2.1 Wings



Figure 3 Top side of the right wing.



Figure 4 Top aft view of the right wing.



Figure 5 Top aft view of the right wing.

2.2 Landing Gear

The left main landing gear cover was removed, and the landing gear leg was cleaned and inspected to find a crack in nearly identical location of the shear/failed landing gear.

Air Venture mentioned ordering new and replacing the landing gear. After reviewing the maintenance program and checklist for 100 hour inspections it is stated that access panels should be removed and the aircraft cleaned, also that when inspecting the landing gear the attachment points should be inspected which would we believe require the removal of the landing gear boot/shield and cleaning and inspection of the landing gear leg/strut. The interval for the 100hr for these aircraft appears to be roughly every two months. The level of effort required to remove the shields during our visit and the amount of build up of dirt and contaminants on the majority of the fleets landing gear seem to indicate that there may be a need for further investigation of how this inspection is being performed.



Figure 6 Fracture surface of the right landing gear.



Figure 7 Fracture surface of the right landing gear.



Figure 8 Fracture surface of the right landing gear.



Figure 9 View of the fracture surface of landing gear that is still attached to the airplane.



Figure 10 View of the left landing gear.



Figure 11 View of the left landing gear near the fuselage attachment point. Corrosion is visible in the same location as the fracture on the right-side landing gear.



Figure 12 View of the left landing gear near the fuselage attachment point. Corrosion is visible in the same location as the fracture on the right-side landing gear.

3.0 Checklist

* 01-07-2025
Chapter 5
MAINTENANCE SCHEDULES
H0835 # 11782.1

All repair data must bear the endorsement of a certified repair station.

GA
GIPPS AERO

A Mahindra Aerospace Company
Model GA8

GA8 100 HOURLY/ANNUAL MAINTENANCE SCHEDULES		
CATEGORY – AIRFRAME	PAGE 1	
Aircraft Reg: <u>N659AV</u> Job/No.: <u>GA8-06-106</u>	50 Hours	100 Hours or annual
COMPLETE AIRCRAFT		
- Remove or open all necessary inspection plates, access doors, fairing and cowling. - Thoroughly clean the aircraft and aircraft engine.		•
REQUIRED PLACARDS		
External and Internal NOTE: Reference should be made to Chapter 11 of this Service Manual, the applicable Flight Manual and airworthiness directives or local operating regulations for required placards.		•
WINGS – INSPECT		
- Skins for evidence of wrinkles, buckles, sheared or loose rivets, corrosion and general damage. - Internally through normal inspection panels for corrosion, disbonds, distortion and damage to spars and internal structures. - Lift struts. - Flight control surfaces, flaps, mass balances, hinges and hinge brackets. Check freeplay per 27-10-70. - Wing to fuselage attachments and surrounding structure for damage, distortion, corrosion, GRP fairing disbonds, cracks and loose or sheared rivets and bolts. - Lubricate all flight control system pivot points and hinges as per 12-20-30.	•	•
EMPENNAGE – INSPECT		
- Skins for evidence of wrinkles, buckles, sheared or loose rivets, corrosion and general damage. - Internally through normal inspection panels for corrosion, disbonds, distortion and damage to spars and internal structures. - Horizontal stabiliser and fin. - Flight control surfaces, mass balances, hinges and hinge brackets. Check freeplay per 27-20-50 and 27-30-09. - Empennage to fuselage attachments and surrounding structure for damage, distortion, corrosion, GRP fairing disbonds, cracks and loose or sheared rivets and bolts. NOTE: Horizontal stabiliser SB-GA8-2002-02 at latest issue. External and internal inspections are to be carried out at each 100h/annual inspection. - Lubricate all flight control system pivot points and hinges as per 12-20-30.	•	•

C01-00-04

GA8 Airplane Service Manual

Page 5-11
Jan 2021

Figure 13 view of the last 100-hour inspection on the accident airplane.

• Cabin fire extinguisher for correct charge, legibility of operating instructions and condition of locking pin or seal; ensure that extinguisher has not reached expiry date. See section 26-00-20 • Fresh air system ducting and outlets, airflow control valves. • Emergency and flotation equipment (if carried), ensure that equipment has not reached expiry date. • Lubricate as per 12-20-30.		
LANDING GEAR - INSPECT		
• Jack aircraft so that landing gear is clear of the ground. • Landing gear attachment to airframe structural members. • Nose wheel for security and condition. • Main and nose wheel tyres. • Inspect wheel bearings for condition, clean & relubricate as required, reinstall and adjust pre-load. See section 32-40-00 and sub-sections thereof. • Brake pads and discs. • Brake lines and flexible hoses. • Lubricate as per 12-20-30.	• • • • • • •	• • • • • • •

Figure 14 Checklist for the inspection on the landing gear.

Submitted by:

M. Ward
AAI