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HOGAN LOVELLS US LLP  
Trenton H. Norris (CA Bar No. 164781)  
David M. Barnes (CA Bar No. 318547)  
Four Embarcadero Center, 35th Floor  
San Francisco, CA 94111-4024  
Telephone: 415.374.2300  
Facsimile: 415.374.2499  
trent.norris@hoganlovells.com  
david.barnes@hoganlovells.com

Attorneys for Settling Defendants

**ELECTRONICALLY FILED**  
Superior Court of California,  
County of Alameda  
**01/30/2025 at 03:51:02 PM**  
By: Milagros Cortez,  
Deputy Clerk

**SUPERIOR COURT FOR THE STATE OF CALIFORNIA**  
**FOR THE COUNTY OF ALAMEDA**

CENTER FOR ENVIRONMENTAL  
HEALTH,

Plaintiff,

v.

AERODYNAMIC AVIATION, *et al.*,

Defendants.

Case No. RG-11-600721

Hon. Somnath Raj Chatterjee

**DECLARATION OF PATRICK  
WADDICK IN SUPPORT OF  
DEFENDANTS' OPPOSITION TO  
MOTION TO ENFORCE AND MODIFY  
CONSENT JUDGMENT**

Date: February 4, 2024

Time: 1:30 p.m.

Reservation Number: 690015831804

Complaint Filed: October 20, 2011

1 DECLARATION OF PATRICK WADDICK

2 I, Patrick Waddick, declare:

3 1. I am President, Innovation & Operations, for Cirrus Design Corp. (“Cirrus”). I  
4 submit this declaration in support of Settling Defendants’ Opposition to Plaintiff Center for  
5 Environmental Health’s (“CEH”) Motion to Enforce and Modify Consent Judgment in the above-  
6 captioned matter. I have personal knowledge of the matters set forth herein. If called and sworn  
7 as a witness, I could and would testify competently thereto.

8 2. On January 27, 2025, Cirrus dispatched technical representatives, Nicole Linder  
9 (Director, Engineering, Mechanical Systems & Propulsion) and Josh Hoskins (Manager, Field  
10 Services) to Reid-Hillview Airport, CA, to investigate a report from a Cirrus customer who owns  
11 and operates aircraft SR22T-0027 (tail number N155KM) (“N155KM”), which is powered by a  
12 Continental Motors TSIO-550 SER piston engine. The owner reportedly began using the General  
13 Aviation Modifications, Inc. (“GAMI”) G100UL fuel under the GAMI Supplemental Type  
14 Certificate in early November 2024, when it was first introduced at Reid-Hillview Airport, in  
15 conjunction with continued use of the 100LL fuel she had previously used. The customer reported  
16 leaking and paint degradation on N155KM following the use of the G100UL fuel.

17 3. Our company technical representatives took several preliminary photographs of  
18 the aircraft damage, which were provided to me on January 28, 2025. Attached hereto as **Exhibits**  
19 **A through F** are photographs of N155KM and the affected areas, which only depict exterior  
20 aircraft images.

21 4. I was also informed that the Federal Aviation Administration San Jose Flight  
22 Standards District Office was informed of the damage to the aircraft and is investigating. To the  
23 best of my knowledge, the FAA’s investigation is still ongoing.

24 5. Cirrus has not completed a full assessment yet regarding the full extent of  
25 N155KM’s damage, to include its fuel system, engine, etc.—or the associated repair costs to  
26 return N155KM to an airworthy condition.

27 Cirrus has found it noteworthy that these adverse effects arose relatively soon after  
28 GAMI’s G100UL was introduced to the affected airplane. Additionally, Cirrus’ previous

1 G100UL testing has repeatedly shown that it can have adverse effects on sealants, O-ring seals,  
2 paint, and other fuel system components in Cirrus aircraft. Because of these identified material  
3 incompatibility issues, Cirrus issued Service Advisory SA24-14R1 (Transition to Unleaded Fuel  
4 and Use of Non-Cirrus Approved Fuel in SR Series Aircraft) (“Service Advisory”). Cirrus issued  
5 this Service Advisory because of our company’s testing and evaluation concerns, the commercial  
6 offerings of the G100UL fuel, and our responsibility to preserve a safe experience for our  
7 customers. Attached hereto as **Exhibit G** is the Cirrus Service Advisory.

8 I declare under penalty of perjury under the laws of the State of California that the  
9 foregoing is true and correct. Executed this 28th day of January 2025, in Duluth, MN.

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By: Patrick Waddick  
Patrick Waddick  
Cirrus Design Corp.

# **EXHIBIT A**



# **EXHIBIT B**



# **EXHIBIT C**





# **EXHIBIT D**



# **EXHIBIT E**





# **EXHIBIT F**



# **EXHIBIT G**



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**Number:** SA24-14R1  
**Issued:** 18 Jun 2024  
**Revised:** 05 Nov 2024

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**SUBJECT:** Transition to Unleaded Fuel and Use of Non-Cirrus Approved Fuel in SR Series Aircraft

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**As part of our proactive participation in the unleaded fuel initiative, Cirrus has been collaborating with potential fuel producers conducting materials compatibility and on-aircraft fuel performance testing for over a decade.**

Cirrus is engaged in a comprehensive testing and evaluation program of the GAMI G100UL fuel. Working in coordination with GAMI, our key powerplant partners (Continental and Lycoming), and the FAA during this process, the goal is to ensure operational safety of both the powerplant and airframe fuel systems. **While some aspects of the initial Cirrus testing of the GAMI G100UL fuel are encouraging, Cirrus has identified specific concerns regarding material compatibility. Lab and on-aircraft testing, in coordination with FAA representatives, revealed degradation of tank sealant when in contact with GAMI G100UL fuel that could result in airworthiness concerns. At this time, Cirrus does not approve the use of GAMI G100UL fuel in any Cirrus SR Series airplanes.** Additionally, Cirrus currently does not warrant or represent in any way an operator's use of the GAMI G100UL fuel in SR Series airplanes.

Per Continental and Lycoming, only approved fuels may be used for an engine to be covered by warranty. **As the GAMI G100UL fuel is a non-approved fuel per Continental and Lycoming, engines known to have run this fuel may not be covered by the current OEM engine warranty.** For specific details, please refer to the respective Continental and Lycoming engine warranty documents.

Cirrus is dedicated to proactively addressing the evolving landscape of sustainability regulations, particularly the shift away from leaded aviation fuels. We continue to actively support industry efforts to develop, evaluate, and advance new fuels while supporting a safe industry transition to a future unleaded fuel environment.

These efforts include working directly with industry associations and all stakeholders including AOPA, GAMA, the FAA, and the FAA-Industry EAGLE program through the PAFI certification program. EAGLE is actively pursuing three potentially viable alternatives/replacements for 100LL: GAMI G100UL, LyondellBasell/VP Racing UL100E, and Swift 100R. Cirrus is dedicated to supporting all major fuel companies in their pursuit to bring alternative high-octane fuels to market.

Shell recently announced that 100VLL will be shipping to airports in Europe beginning in April 2024. Cirrus confirms this fuel can be used in all Cirrus SR Series airplanes as it complies with the ASTM D910 standard specification for leaded aviation gasoline. Please refer to FAA SAIB NE-11-55 "Grade 100VLL Aviation Gasoline," for additional details.

The continued safe operation of all Cirrus aircraft around the world remains our top priority. As progress continues, we will provide updates as soon as they are available. We look forward to ensuring a safe and smooth transition to unleaded fuel for all Cirrus SR Series owners.