1 2 3 4 5 6	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			
7	Attorneys for Settling Defendants			
8   9   10   11		THE STATE OF CALIFORNIA		
112	CENTER FOR ENVIRONMENTAL HEALTH,  Plaintiff,  v.  AERODYNAMIC AVIATION, et al.,  Defendants.	Case No. RG-11-600721  Hon. Somnath Raj Chatterjee  DECLARATION OF DAVID BERTUCCI IN SUPPORT OF DEFENDANTS' OPPOSITION TO MOTION TO ENFORCE AND MODIFY CONSENT JUDGMENT  Date: February 25, 2025 Time: 01:00 p.m. Reservation Number: 690015831804  Complaint Filed: October 20, 2011		
25   26   27   28   us				

HOGAN LOVELLS US LLP ATTORNEYS AT LAW SAN FRANCISCO

#### DECLARATION OF DAVID BERTUCCI

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I, David Bertucci, declare:

would testify competently thereto.

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1. I am a general aviation ("GA") pilot and airplane owner. I submit this declaration

in support of Settling Defendant's Opposition to Plaintiff Center for Environmental Health's ("CEH") Motion to Enforce and Modify Consent Judgment in the above-captioned matter. I have personal knowledge of the matters set forth herein. If called and sworn as a witness, I could and

2. I have been a GA pilot since 2007 and hold a U.S. Federal Aviation Administration (FAA)-issued private pilot certificate with single engine/land endorsements. I own and fly a 1969 Mooney M20F, serial number 670263, registration number N9703M ("N9703M"). Attached hereto as **Exhibit A** is a true and correct copy of the registration details for N9703M, which is publicly available at: https://registry.faa.gov/aircraftinquiry/Search/. My airplane, N9703M, is equipped with a Lycoming IO-360 piston engine that has an EDM-930 JPI engine monitor ("engine monitor") installed on it, which provides detailed engine performance data that can be recorded and digitally stored. N9703M is hangered and flown at Reid-Hillview Airport of Santa Clara County, CA ("Reid-Hillview"). I have owned the aircraft for approximately 5-6 years.

- 3. In mid-2024, I had the General Aviation Modifications, Inc. ("GAMI") Supplemental Type Certificate SA01967WI installed on N9703M to use GAMI's G100UL unleaded aviation gasoline ("avgas") because this was the only high-Octane fuel available to Reid-Hillview, which my airplane requires.
- 4. Approximately one week later, on November 9, 2024, I purchased and fueled N9703M with 30 gallons of G100UL; this left approximately 34 gallons of 100LL remaining in the tanks. The approximate amount of G100UL in the left tank was 63% and 36% in the right tank. After fueling it, I flew the airplane 0.7 hours.
- 5. The next time I came to the hangar, on November 21, 2024, I noticed fuel weeping out of several places on N9703M. I initially did not think much of this and simply wiped it off.

- 6. On January 11, 2025, I flew the aircraft and observed one cylinder running a high exhaust gas temperature ("EGT"). The cylinder ran approximately 1450 degrees Fahrenheit instead of being around 1200 degrees. I *leaned* the fuel-to-air mixture in the engine by adjusting the *mixture* controls, which reduced the temperature to around 1300 degrees Fahrenheit. For reference, *leaning* is an aviation term that means the engine's fuel-to-air ratio (i.e., the *mixture*) is adjusted to reduce the fuel introduced into the *mixture*, which should make the engine run more efficiently.
- 7. Attached hereto as **Exhibit B** is a screenshot that I took from the engine monitor that records my engine's performance data, which illustrates some of the temperature fluctuations I had experienced. On February 13, 2025, I took a screenshot of the performance data for the January 11, 2025, flight, which I affirm to be a true and correct representation of the January 11, 2025, flight data.
- 8. The following is an explanation of the data (i.e., **Exhibit B**), based on my analysis of it, and having performed the changes to engine performance in-flight. Takeoff occurred approximately 12 minutes into the log (12:00). EGT3 is elevated compared to the other cylinders on the engine even on takeoff, but less than 1400 degrees. I did not initially notice this issue on departure; however, I did realize it when I was leaned the mixture around three minutes later at 15:00. When I reached the cruise phase of flight, I leaned the mixture to a cruise fuel flow and observed the temperature readings to be above 1500 degrees, which was not normal for N9703M. I would consider these temperatures to be high as the EGTs usually remain within 50 degrees of each other. It is noteworthy to mention that GAMI manufactured the injectors that I have installed on N9703M, which are meant to improve engine performance. At 18:00, I again adjusted the mixture to attempt to bring the EGT temperatures back together because EGT3 still differed by approximately 100 degrees from the others. After more adjustments to the *mixture* at 24:00, I was able to bring all the EGT temperatures together. I observed three of the cylinders still had rising temperatures when Cylinder Number 3's temperature dropped as the *mixture leaned*, which indicated to me, to the best of my knowledge, that although the temperatures were similar, the engine had performed in a very different manner that it had before I first used the G100UL fuel.

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- 9. On January 13, 2025, based on G100UL's performance in my aircraft and after speaking with other Mooney owners who experienced issues with the fuel, I decided that I wanted to remove the G100UL from N9703M. Because defueling an airplane is difficult, I decided to burn the fuel out through a series of flights. By January 16, 2025, I had most of the G100UL burned out, probably leaving a 3% concentration of G100UL in the airplane (with the remaining 97% being 100LL).
- 10. On January 15, 2025, I decided to take pictures of the damage to my airplane, as the fuel weeping had continued, and the bubbled paint was still present around N9703M's fuel tank access panels. I also observed bubbled paint, staining, and a brown liquid seeping out of multiple covers. I took several photographs of the affected areas, which are attached hereto as **Exhibits C through L**.
- 11. When I landed, the engine cylinder needed to be disassembled. I contacted my mechanic, Nik Nickravesh, owner of Flying S and Nik's Aircraft at Reid-Hillview. As I have technical experience in aircraft repairs, I disassembled the cylinders under Mr. Nickravesh's direct observation and supervision. When the Cylinder Number 3 injector was removed, I observed it to be semi-clogged and covered with an unidentified black substance. I then ran the covered injector through an ultrasonic cleaner to remove the unknown deposit, under Mr. Nickravesh's supervision.
- 12. Since January 16, 2025, I have only refueled N9703M with 100LL, which I purchase at airports other than Reid-Hillview. Because of the issues I have had with the G100UL, I will not purchase it again. If 100LL is not available in the California, I feel that I will be forced to sell my airplane, as no safe and reliable alternative fuel—leaded or unleaded—would exist.

I declare under penalty of perjury of the laws of the state of California that the foregoing is true and correct. Executed this 17<sup>th</sup> day of February, 2025, at San Jose, CA.

By: David Bertucci
David Bertucci

# **EXHIBIT A**

#### **FAA REGISTRY**

#### **N-Number Inquiry Results**

N-NUMBER ENTERED: 9703M

#### **AIRCRAFT DESCRIPTION**

Serial Number	670263	Status	Valid
Manufacturer Name	MOONEY	Certificate Issue Date	08/04/2017
Model	M20F	Expiration Date	08/31/2027
Type Aircraft	Fixed Wing Single-Engine	Type Engine	Reciprocating
Pending Number Change	None	Dealer	No
Date Change Authorized	None	Mode S Code (base 8 / Oct)	53303162
MFR Year	1967	Mode S Code (Base 16 / Hex)	AD8672
Type Registration	Individual	Fractional Owner	NO

#### **REGISTERED OWNER**

Name	BERTUCCI DAVID		
Street	345 ORCHARD AVE		
City	SUNNYVALE	State	CALIFORNIA
County	SANTA CLARA	Zip Code	94085-4314
Country	UNITED STATES		

#### **AIRWORTHINESS**

#### INFORMATION PROVIDED HERE SHOULD NOT BE USED TO DETERMINE THE AIRWORTHINESS OF AN AIRCRAFT.

Refer to 14 CFR Parts 39, 43, 91, and FAA Order 8130.2 for airworthiness regulations and guidance.

Type Certificate Data Sheet	None	Type Certificate Holder	None
Engine Manufacturer	LYCOMING	Classification	Standard
Engine Model	10360 SER	Category	Normal

2/13/25, 12:19 PM Aircraft Inquiry

01/11/1967

A/W Date

The information contained in this record should be the most current Airworthiness information available in the historical aircraft record. However, this data alone does not provide the basis for a determination regarding the airworthiness of an aircraft or the current aircraft configuration. For specific information, you may request a copy of the aircraft record at https://aircraft.faa.gov/e.gov/ND/
OTHER OWNER NAMES
None
TEMPORARY CERTIFICATES
None
FUEL MODIFICATIONS
None
DEREGISTERED AIRCRAFT
None

**Exception Code** 

No

The duration of aircraft registration certificates has been extended up to 7 years. The Registry will be issuing revised certificates in batches based on the former expiration date. For verification purposes, even though the expiration date on the registration certificate may not match the expiration date in the FAA Aircraft Registration database, any registration certificate displaying an expiration date of January 31, 2023 or later is still valid. This applies to all foreign Civil Aviation Authorities or anyone else with a verification need.

You are accessing a U.S. Government authorized information system, which includes (1) this computer, (2) this computer network, (3) all computers connected to this network, (4) all devices and storage media attached to this network or to a computer on this network, and (5) all cloud services and hosting environments supporting this information system. This information system is provided for U.S. Government-authorized use only.

Unauthorized or improper use of this system may result in disciplinary action, as well as civil and criminal penalties.

By logging in and using this information system, you understand and consent to the following:

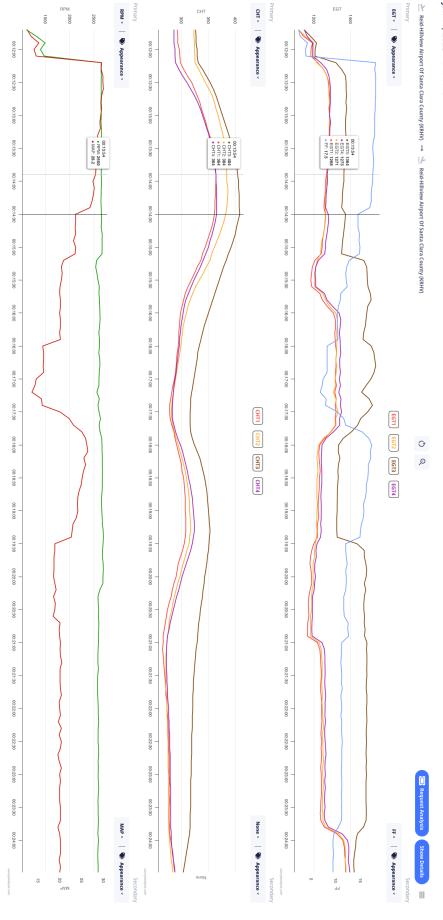
- You have no reasonable expectation of privacy regarding communications or data transiting or stored on this information system.
- At any time, and for any lawful Government purpose, communication between the user and this information system, data transiting to/from the system, or stored on this system is subject to monitoring, interception, and search.

2/13/25, 12:19 PM Aircraft Inquiry

• Any communications or data transiting or stored on this information system may be disclosed or used for any lawful Government purpose.

# **EXHIBIT B**

Jan 11, 2025 21:01 UTC  $\leftrightarrow$   $\rightarrow$ 



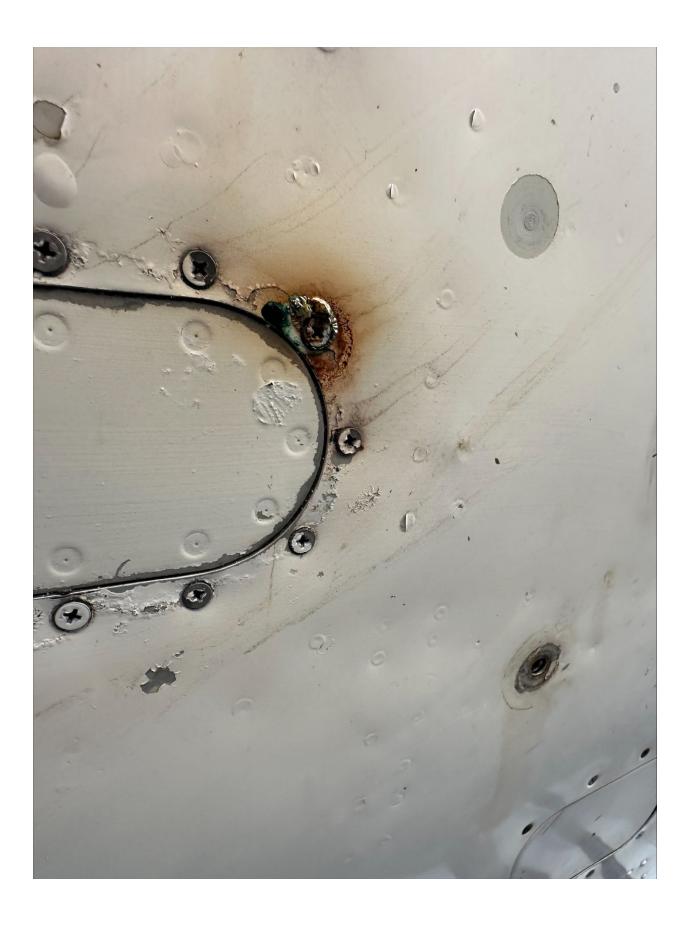
# **EXHIBIT C**



#### **EXHIBIT D**



# **EXHIBIT E**



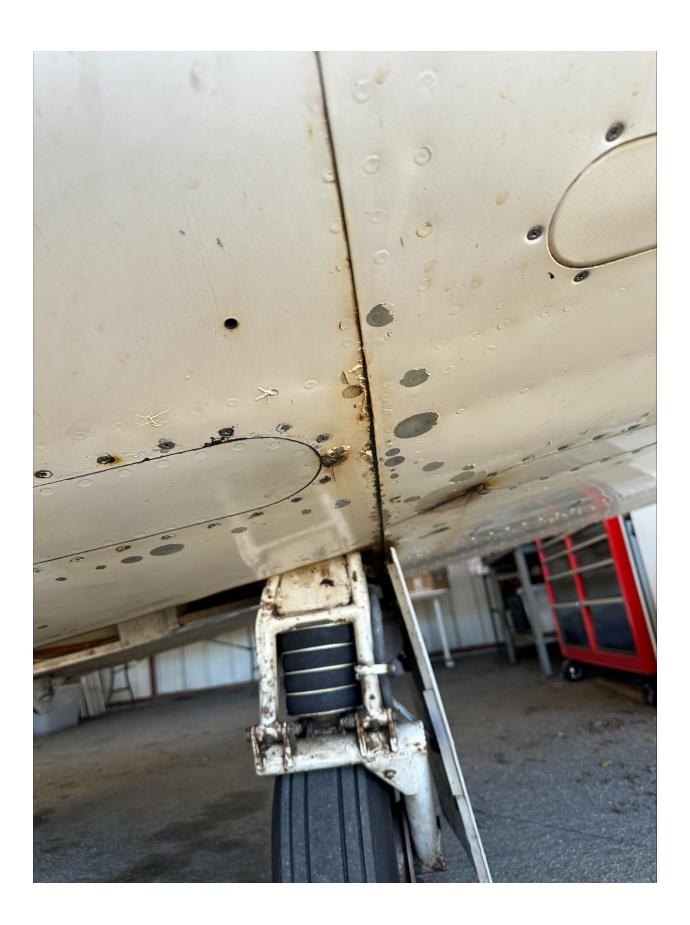
# **EXHIBIT F**



#### **EXHIBIT G**



# **EXHIBIT H**



# **EXHIBIT I**



# **EXHIBIT J**



# **EXHIBIT K**



# **EXHIBIT L**

