National Transportation Safety Board
Office of Aviation Safety
Washington, DC 20594

WPR23LA098

WRECKAGE EXAMINATION SUMMARY

April 12, 2023

A. ACCIDENT

Location:	Murrietta, California
Date:	January 27, 2023
Time:	0837pst 1637gmt
Airplane:	N4758C -1979 Cessna T210N

B. WRECKAGE EXAMINATION SUMMARY

IIC	Michael Hicks NTSB Phoenix, Arizona
Group Chair	Andrew Swick NTSB Phoenix, Arizona

C. SUMMARY

The accident airplane, N4758C, was examined at Phoenix Air Transport, Phoenix, Arizona on 12APR2023@0730mst. The airframe examination revealed no malfunctions or anomalies that would have prevented normal operation of the airplane. Examination of the airplane's engine confirmed an engine test run which lasted less than 30 seconds. Further examination of the engine revealed impact damage to the electrical system and starter, which inhibited a conclusive determination for the loss of engine power.

D. DETAILS OF THE EXAMINATION

1.0 Airframe Examination

An airframe layout was conducted to ensure that the airframe was present in totality. The right door, the radio stack and avionics, the right wing fuel cap, as well as the nose landing gear were not present at the time of examination. The following components were separated from the fuselage to facilitate transport to a secure facility: The left and right wings, vertical and horizontal stabilizers, rudder, and the left and right elevator components.

1.1 Fuselage

The fuselage remained intact and sustained no impact damage to the bottom, left, right sides. The upper (top) fuselage area sustained impact damage as the airplane came to rest inverted. Each the plexi-glass windows were present, but the windscreen was grossly missing. The left and right main landing gear were present and found in the extended and locked position, while the nose landing gear had sustained impact damage and was departed the airplane.

1.2 Empennage

Examination of post-accident photographs revealed that the empennage remained attached to the fuselage but was separated from the fuselage for recovery transport. The vertical stabilizer and rudder remained attached to each other via their respective hinges. They both sustained impact damage and when viewed from the nose of the airplane, were bent to the left, emanating from the top of each structure. The horizontal stabilizer sustained minor impact damage to the left side. The left and right elevator were present, intact, and sustained minor impact damage to the surfaces. The elevator trim tab remained affixed to the right elevator hinge and remained intact.

Figure 1: View of damage to the empennage (Courtesy of NTSB)

1.3 Wings

The right wing sustained impact damage to the leading edge and remained attached via the spar, which was fractured near the middle of the wing. The wing tank was breached, and the vented fuel cap was not present. The outboard section sustained crushing signatures emanating from the outboard wing tip, to about the middle of the wing. The aileron and flap remained attached to their respective hinges and sustained impact damage.

The left wing sustained most of the impact damage to the leading edge and the outboard sections. The center of the wing sustained crushing signatures from the forward to aft surface, and the wing tank was breached. The vented fuel cap was present and unremarkable. The outboard section sustained crushing signatures emanating from the wing tip and about 10 percent of the outboard section of the wing, including the outboard section of the aileron which remained attached to its respective hinges, had folded underneath the wing. The flap remained attached to its respective hinges and sustained minor impact damage.

Figure 2: View of damage to right wing (Courtesy of NTSB)

Figure 3: View of damage to left wing (Courtesy of NTSB)

1.4 Landing Gear

The left and right main landing gear were down and locked and appeared unremarkable. The nose gear separated from the lower fuselage and appeared down and locked.

1.5 Cockpit

The instrument panel was present and did not sustain impact damage. However, the HSI and the attitude indicator were missing from the pilot side (left) of the instrument panel, and the radio stack was missing from the center of the instrument panel. There were two LED screens, both about 2 x 2 inches, that were present and not damaged. The manifold pressure and fuel flow gage indicated zero for both. The battery amperes gage indicated zero amps. The oil pressure gage indicated zero psi. The cylinder head temperature gage indicated zero degrees. The engine RPM gage indicated zero RPM, and the tachometer indicated 1,136.63 hours. The altimeter indicated 1,475 ft and the Khlosman window indicated 30.24. The VSI indicated a 150 ft climb per minute. The airspeed indicator indicated zero knots, and the turn and slip indicator indicated level, with ½ ball left of the trim. The defrost, cabin heat, cabin air, and aux cabin air were all in the Off position.

The landing gear handle was in the gear down and locked position. The cockpit propeller lever was in the maximum RPM position. The mixture was in the full rich position. The throttle was in the full forward position. The CDI and OBS indicated a course to flag 050 degrees, with the NAV flag present. The elevator trim indicated a slightly nose up position, and the rudder trim indicated a neutral position. The cowl flap lever was in the closed position.

The NAV lights, Taxi lighting and Pitot heat switches were in the Off position. The strobe and beacon lighting were in the On position. All circuit breakers were in, the master switch (Alt and Battery) and aux pump were in the off position and the ignition switch appeared to be in the Off position. The Aspen glass cockpit panel that was missing, from the pilot side, had a switch on the left side of the cockpit that indicated that it was in the On position. The Autopilot switch indicated being in the On position, as did the auto-trim switch. The fuel tank selector handle was in the Off position. The left and right tank fuel quality indicators both indicated zero fuel.

1.6 Fuel/Fuel System

The left and right fuel tank were breached. The left fuel cap was present, but the right fuel cap was not present. The wings were detached from the fuselage, and the fuel pick-up and return lines were clear and uninhibited. The fuel lines above the left and right fuselage doors, specifically, the fuel pick-up lines to the fuel selector were connected to an auxiliary external fuel source mounted above the cockpit in preparation for the engine test run. Continuity was observed from the left and right inboard pick-up lines to the fuel selector and the fuel selector was moved from the Off, Left and Right tank positions without impedance. Additionally, continuity was observed from the fuel selector to the fuel manifold inlet. The fuel injectors were removed and observed as being clear and free of impedance. The auxiliary fuel pump was turned on, and fuel flow was observed through the manifold at every cylinder. The engine driven fuel pump was removed from the crank case after the test run and disassembled. No anomalies or failures were observed pertaining to internal components of the vacuum type, engine driven fuel pump.

2.0 Engine Examination

Figure 4: View of examined engine data plate (Courtesy of NTSB)

The airplane and separated parts resulting from the accident sequence were displayed on the facility floor. The engine and cowling remained partially attached to the fuselage as result of impact damage to the engine mounts. The engine was pitched down from its normal position about 15-degrees and the upper cowling was separated from the firewall attachment. The lower cowling sustained impact damage. The right half of the upper cowling sustained impact damage. The upper cowling was removed from the engine compartment.

The magneto p-leads had pulled from the magneto attaching hardware. A large wire had pulled from the alternator control relay located on the firewall, and the alternator wire hardware was loose.

Engine control continuity was established from the cockpit. The throttle, mixture and propeller control cables took effort to move resulting from the damaged engine resting position, and the movement was accomplished from stop to stop. The engine was repositioned to near its normal position on a mounting carriage and engine control continuity improved.

The right induction tubes inlet pressure sensor separated from the inlet tube fittings.

The oil dip stick read about 7 quarts. The oil was clear.

Manifold valve was disassembled, and fuel was present in its cavity. The diaphragm was undamaged, and the inlet screen was clear of debris.

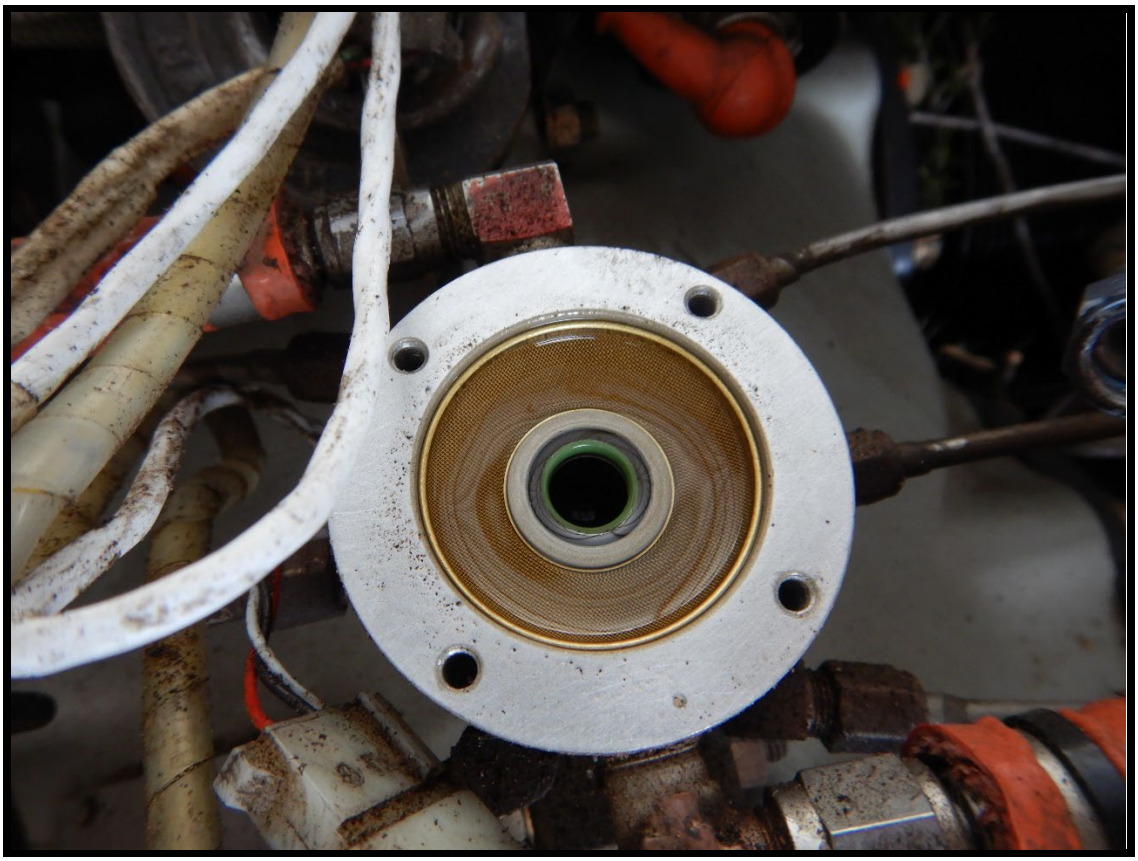


Figure 5: View of fuel manifold with clean screen and fuel present (Courtesy of NTSB)

The upper spark plugs were removed, and their electrode areas had a dark residue, and the electrode areas had a (normal wear) wear condition consistent with the Champion Aviation Service Manual. The spark plugs were reinstalled.

During the first engine start attempt the engine would turnover. Relays were audibly heard during the preparation of the engine start. It was determined that wire damage near the battery prevented power to supply the starter relay. Multiple circuit breakers near the battery position were damaged and replaced. An auxiliary power source was used to connect power to the starter relay, and the starter operated normally from the switch. The engine started successfully but the engine ran with some hesitation and quit less than 30-seconds into the run. During the next few attempts to start the engine the starter would spin up and not engage for engine rotation.

The lower spark plugs were removed, and their electrode areas had a dark residue, and the electrode areas had a (normal-worn out) wear condition consistent with the Champion Aviation Service Manual. The No. 2 lower spark plug electrode area was oil soaked.

The cylinders were observed with a borescope and each of the piston heads and combustion areas revealed light combustion deposits. The cylinder valves in each of the cylinders showed normal operating signatures.

The magnetos were removed from the engine and the drive shafts were rotated by hand. The impulse coupling worked normally, and spark was produced at each ignition lead end.

The manifold inlet line was removed, and the auxiliary pump was switched to the On position. Subsequently, the fuel selector was positioned in all three positions and fuel flowed freely from the separated line.

The fuel nozzles were removed from the cylinders and were clear of obstructions.

Figure 6: Image of bottom spark plugs and fuel injectors (Courtesy of NTSB)

The turbocharger was undamaged and the wastegate valve was found in the open position.

The rocker covers were removed from their respective cylinders and the engine was rotated through by hand, and each rocker showing equal travel on each cylinder intake and exhaust.

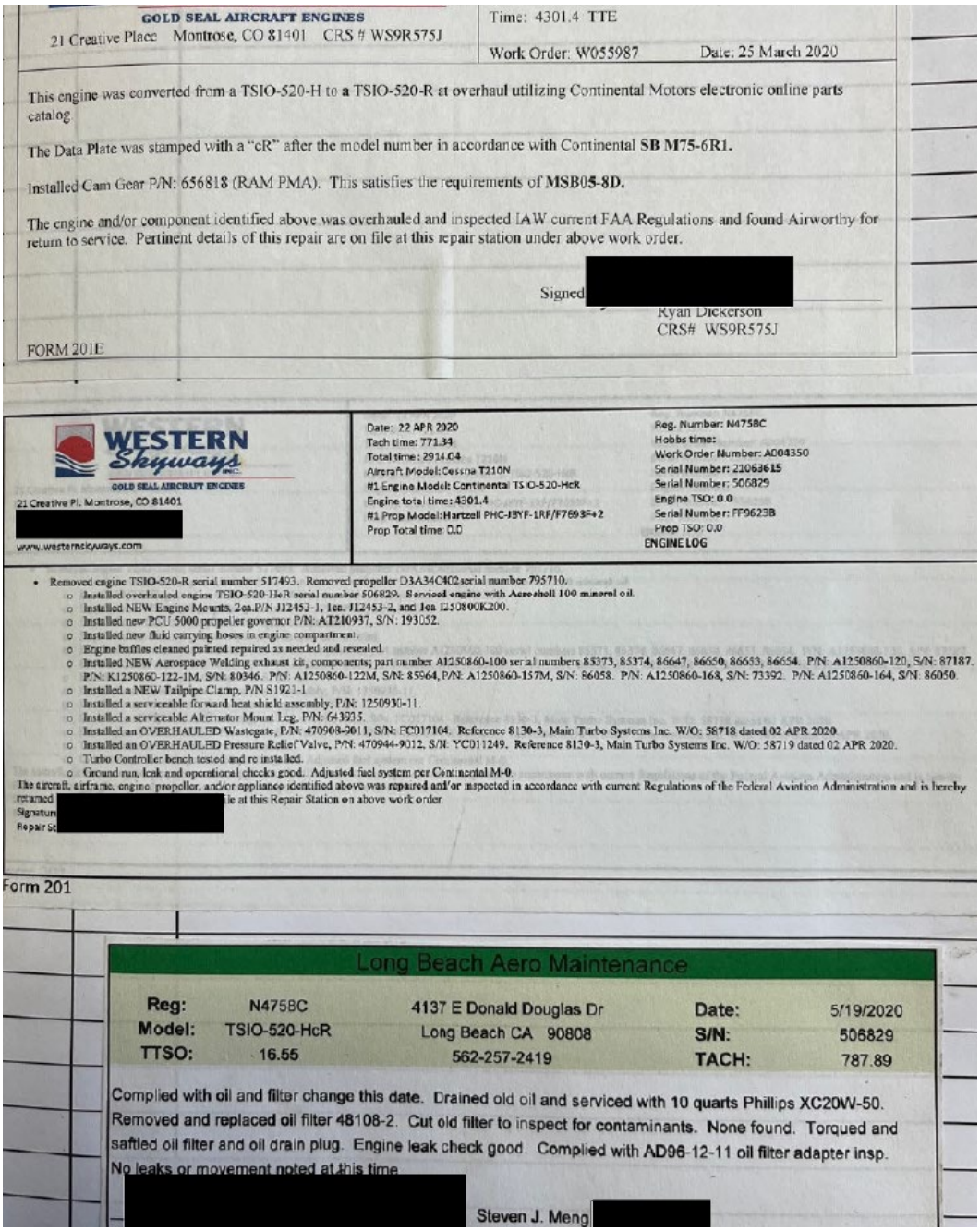
3.0 Propeller Examination

The propeller assembly remained attached to the engine and had impact damage to each of its three blades. The blades were bent aft and had multidirectional scuffing. Some material was missing from two of the blades. The spinner had crushing on one side. The propeller assembly was removed and replaced with a 2-bladed propeller in preparation for an engine test run.

Figure 7: View of the damage to propeller blades (Courtesy of NTSB)

4.0 Aircraft Logbook Information

Engine



GOLD SEAL AIRCRAFT ENGINES
21 Creative Place Montrose, CO 81401 CRS # WS9R575J

Time: 4301.4 TTE

Work Order: W055987 Date: 25 March 2020

This engine was converted from a TSIO-520-H to a TSIO-520-R at overhaul utilizing Continental Motors electronic online parts catalog.

The Data Plate was stamped with a "cR" after the model number in accordance with Continental **SB M75-6R1.**

Installed Cam Gear P/N: 656818 (RAM PMA). This satisfies the requirements of **MSB05-8D.**

The engine and/or component identified above was overhauled and inspected IAW current FAA Regulations and found Airworthy for return to service. Pertinent details of this repair are on file at this repair station under above work order.

Signed [redacted]
Ryan Dickerson
CRS# WS9R575J

FORM 201E

WESTERN Skyways
GOLD SEAL AIRCRAFT ENGINES
21 Creative Pl. Montrose, CO 81401 [redacted]
www.westernskyways.com

Date: 22 APR 2020
Tach time: 771.34
Total time: 2914.04
Aircraft Model: Cessna T210N
#1 Engine Model: Continental TSIO-520-HcR
Engine total time: 4301.4
#1 Prop Model: Hartzell PHC-J3YF-1RF/F7693F+2
Prop Total time: 0.0

Reg. Number: N4758C
Hobbs time:
Work Order Number: A004350
Serial Number: 22063615
Serial Number: 506829
Engine TSO: 0.0
Serial Number: FF9623B
Prop TSO: 0.0
ENGINE LOG

- Removed engine TSIO-520-R serial number 517493. Removed propeller D3A34C402serial number 795710.
  - Installed overhauled engine TSIO-520-HcR serial number 506829. Serviced engine with Aeroshell 100 mineral oil.
  - Installed NEW Engine Mounts, 2ea.P/N J12453-1, 1ea. J12453-2, and 1ea E250800K200.
  - Installed new PCU 5000 propeller governor P/N: AT210937, S/N: 193052.
  - Installed new fluid carrying hoses in engine compartment.
  - Engine baffles cleaned painted repaired as needed and revealed.
  - Installed NEW Aerospace Welding exhaust kit, components; part number A1250860-100 serial numbers 85373, 85374, 86647, 86650, 86653, 86654. P/N: A1250860-120, S/N: 87187. P/N: K1250860-122-1M, S/N: 80346. P/N: A1250860-122M, S/N: 85964, P/N: A1250860-157M, S/N: 86058. P/N: A1250860-168, S/N: 73392. P/N: A1250860-164, S/N: 86050.
  - Installed a NEW Tailpipe Clamp, P/N S1921-1
  - Installed a serviceable forward heat shield assembly, P/N: 1250930-11.
  - Installed a serviceable Alternator Mount Leg, P/N: 643905.
  - Installed an OVERHAULED Wastegate, P/N: 470968-9011, S/N: EC017104. Reference 8130-3, Main Turbo Systems Inc. W/O: 58718 dated 02 APR 2020.
  - Installed an OVERHAULED Pressure Relief Valve, P/N: 470944-9012, S/N: YC011249. Reference 8130-3, Main Turbo Systems Inc. W/O: 58719 dated 02 APR 2020.
  - Turbo Controller bench tested and re installed.
  - Ground run, leak and operational checks good. Adjusted fuel system per Continental M-0.

The aircraft, airframe, engine, propeller, and/or appliance identified above was repaired and/or inspected in accordance with current Regulations of the Federal Aviation Administration and is hereby returned [redacted] file at this Repair Station on above work order.
Signature [redacted]
Repair St[redacted]

Form 201

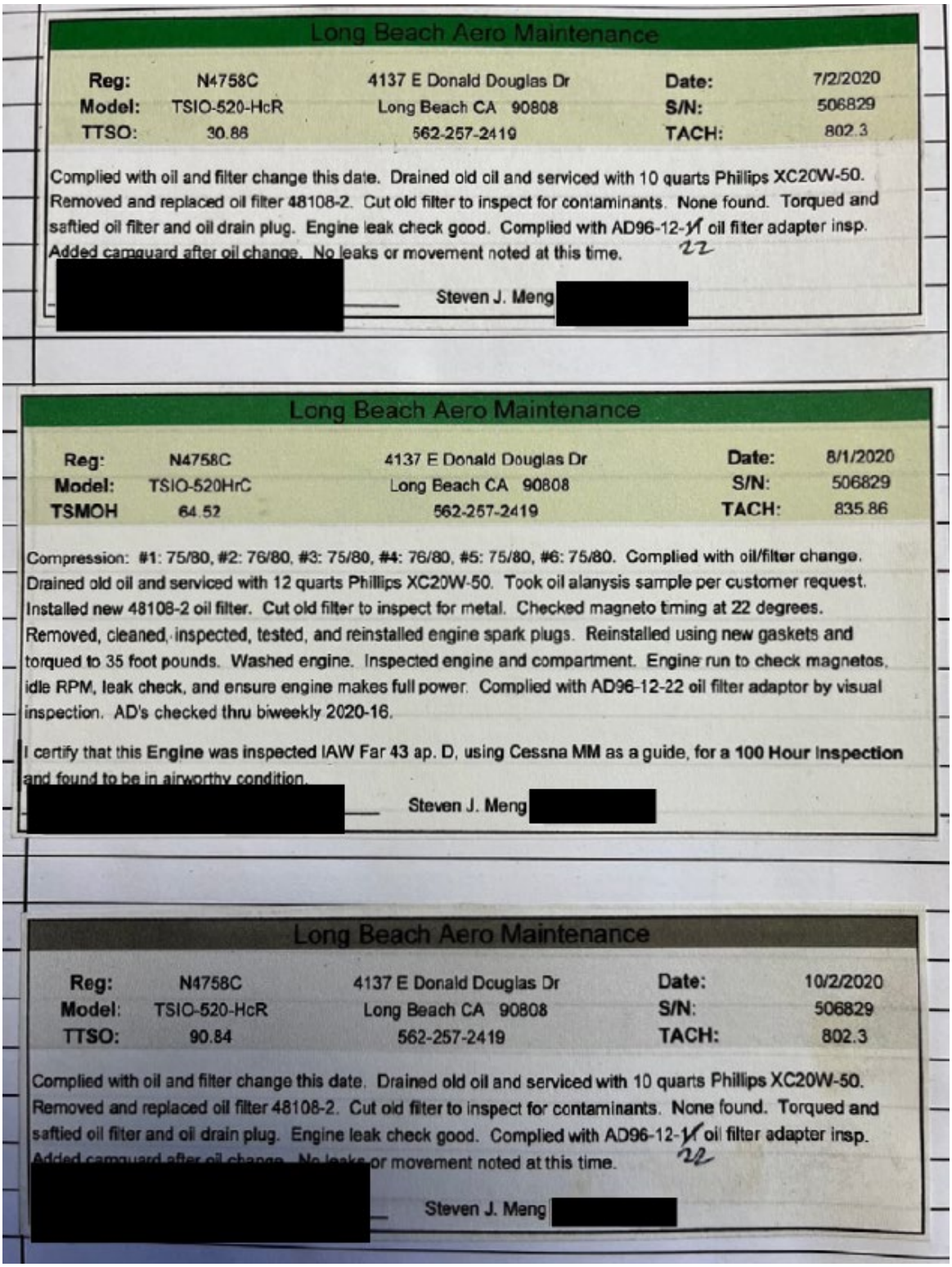
Long Beach Aero Maintenance

Reg:	N4758C	4137 E Donald Douglas Dr	Date:	5/19/2020
Model:	TSIO-520-HcR	Long Beach CA 90808	S/N:	506829
TTSO:	16.55	562-257-2419	TACH:	787.89

Complied with oil and filter change this date. Drained old oil and serviced with 10 quarts Phillips XC20W-50. Removed and replaced oil filter 48108-2. Cut old filter to inspect for contaminants. None found. Torqued and safted oil filter and oil drain plug. Engine leak check good. Complied with AD96-12-11 oil filter adapter insp. No leaks or movement noted at this time.

[redacted] Steven J. Meng [redacted]

Figure 8: View of engine logbook (Courtesy of PIC)



Long Beach Aero Maintenance

Reg:	N4758C	4137 E Donald Douglas Dr	**Date:**	7/2/2020
Model:	TSIO-520-HcR	Long Beach CA 90808	**S/N:**	506829
TTSO:	30.88	562-257-2419	**TACH:**	802.3

Complied with oil and filter change this date. Drained old oil and serviced with 10 quarts Phillips XC20W-50. Removed and replaced oil filter 48108-2. Cut old filter to inspect for contaminants. None found. Torqued and saftied oil filter and oil drain plug. Engine leak check good. Complied with AD96-12-~~Y~~ oil filter adapter insp. Added camguard after oil change. No leaks or movement noted at this time. 22

[redacted] Steven J. Meng [redacted]

Long Beach Aero Maintenance

Reg:	N4758C	4137 E Donald Douglas Dr	**Date:**	8/1/2020
Model:	TSIO-520HrC	Long Beach CA 90808	**S/N:**	506829
TSMOH	64.52	562-257-2419	**TACH:**	835.86

Compression: #1: 75/80, #2: 76/80, #3: 75/80, #4: 76/80, #5: 75/80, #6: 75/80. Complied with oil/filter change. Drained old oil and serviced with 12 quarts Phillips XC20W-50. Took oil alanysis sample per customer request. Installed new 48108-2 oil filter. Cut old filter to inspect for metal. Checked magneto timing at 22 degrees. Removed, cleaned, inspected, tested, and reinstalled engine spark plugs. Reinstalled using new gaskets and torqued to 35 foot pounds. Washed engine. Inspected engine and compartment. Engine run to check magnetos, idle RPM, leak check, and ensure engine makes full power. Complied with AD96-12-22 oil filter adaptor by visual inspection. AD's checked thru biweekly 2020-16.

I certify that this Engine was inspected IAW Far 43 ap. D, using Cessna MM as a guide, for a 100 Hour Inspection and found to be in airworthy condition.

[redacted] Steven J. Meng [redacted]

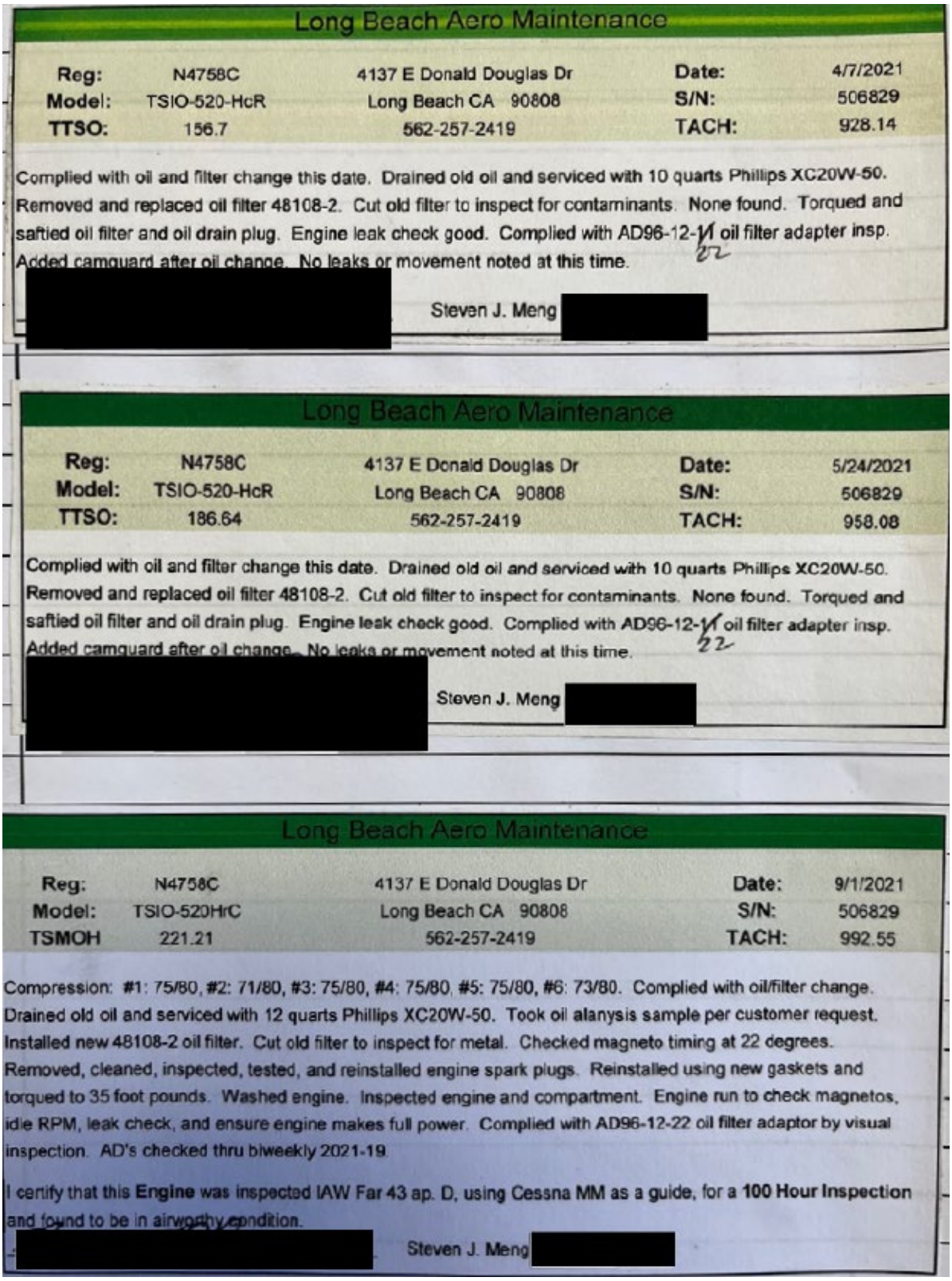
Long Beach Aero Maintenance

Reg:	N4758C	4137 E Donald Douglas Dr	**Date:**	10/2/2020
Model:	TSIO-520-HcR	Long Beach CA 90808	**S/N:**	506829
TTSO:	90.84	562-257-2419	**TACH:**	802.3

Complied with oil and filter change this date. Drained old oil and serviced with 10 quarts Phillips XC20W-50. Removed and replaced oil filter 48108-2. Cut old filter to inspect for contaminants. None found. Torqued and saftied oil filter and oil drain plug. Engine leak check good. Complied with AD96-12-~~Y~~ oil filter adapter insp. Added camguard after oil change. No leaks or movement noted at this time. 22

[redacted] Steven J. Meng [redacted]

Figure 9: View of engine logbook (Courtesy of PIC)



Long Beach Aero Maintenance

Reg:	N4758C	4137 E Donald Douglas Dr	Date:	4/7/2021
Model:	TSIO-520-HcR	Long Beach CA 90808	S/N:	506829
TTSO:	156.7	562-257-2419	TACH:	928.14

Complied with oil and filter change this date. Drained old oil and serviced with 10 quarts Phillips XC20W-50. Removed and replaced oil filter 48108-2. Cut old filter to inspect for contaminants. None found. Torqued and saftied oil filter and oil drain plug. Engine leak check good. Complied with AD96-12-22 oil filter adapter insp. Added camguard after oil change. No leaks or movement noted at this time.

[redacted] Steven J. Meng [redacted]

Long Beach Aero Maintenance

Reg:	N4758C	4137 E Donald Douglas Dr	Date:	5/24/2021
Model:	TSIO-520-HcR	Long Beach CA 90808	S/N:	506829
TTSO:	186.64	562-257-2419	TACH:	958.08

Complied with oil and filter change this date. Drained old oil and serviced with 10 quarts Phillips XC20W-50. Removed and replaced oil filter 48108-2. Cut old filter to inspect for contaminants. None found. Torqued and saftied oil filter and oil drain plug. Engine leak check good. Complied with AD96-12-22 oil filter adapter insp. Added camguard after oil change. No leaks or movement noted at this time.

[redacted] Steven J. Meng [redacted]

Long Beach Aero Maintenance

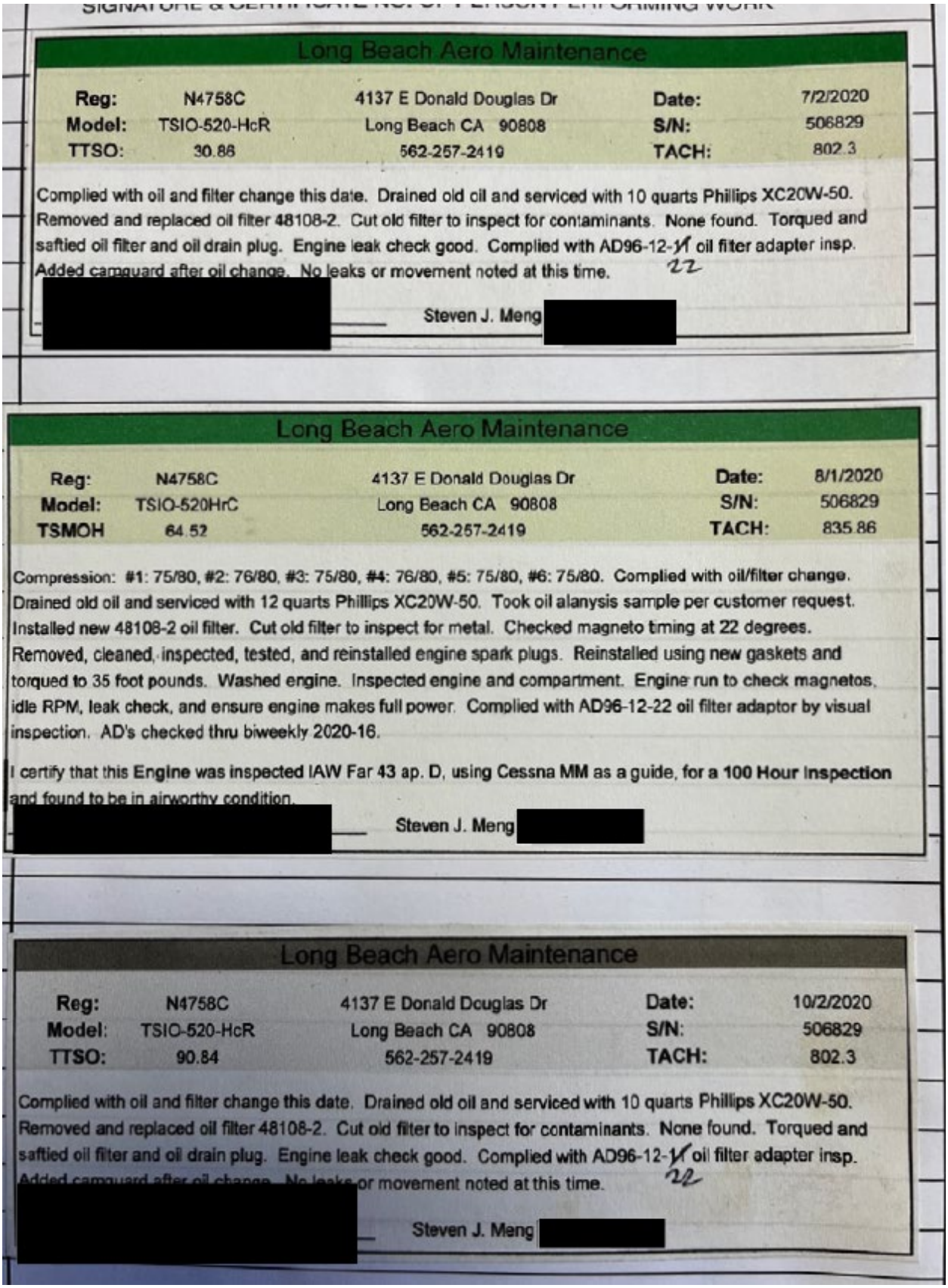
Reg:	N4758C	4137 E Donald Douglas Dr	Date:	9/1/2021
Model:	TSIO-520HrC	Long Beach CA 90808	S/N:	506829
TSMOH	221.21	562-257-2419	TACH:	992.55

Compression: #1: 75/80, #2: 71/80, #3: 75/80, #4: 75/80, #5: 75/80, #6: 73/80. Complied with oil/filter change. Drained old oil and serviced with 12 quarts Phillips XC20W-50. Took oil alanysis sample per customer request. Installed new 48108-2 oil filter. Cut old filter to inspect for metal. Checked magneto timing at 22 degrees. Removed, cleaned, inspected, tested, and reinstalled engine spark plugs. Reinstalled using new gaskets and torqued to 35 foot pounds. Washed engine. Inspected engine and compartment. Engine run to check magnetos, idle RPM, leak check, and ensure engine makes full power. Complied with AD96-12-22 oil filter adaptor by visual inspection. AD's checked thru biweekly 2021-19.

I certify that this **Engine** was inspected IAW Far 43 ap. D, using Cessna MM as a guide, for a **100 Hour Inspection** and found to be in airworthy condition.

[redacted] Steven J. Meng [redacted]

Figure 10: View of engine logbook (Courtesy of PIC)



Long Beach Aero Maintenance

Reg:	N4758C	4137 E Donald Douglas Dr	**Date:**	7/2/2020
Model:	TSIO-520-HcR	Long Beach CA 90808	**S/N:**	506829
TTSO:	30.86	562-257-2419	**TACH:**	802.3

Complied with oil and filter change this date. Drained old oil and serviced with 10 quarts Phillips XC20W-50. Removed and replaced oil filter 48108-2. Cut old filter to inspect for contaminants. None found. Torqued and saftied oil filter and oil drain plug. Engine leak check good. Complied with AD96-12-22 oil filter adapter insp. Added camguard after oil change. No leaks or movement noted at this time.

[redacted] Steven J. Meng [redacted]

Long Beach Aero Maintenance

Reg:	N4758C	4137 E Donald Douglas Dr	**Date:**	8/1/2020
Model:	TSIO-520HrC	Long Beach CA 90808	**S/N:**	506829
TSMOH	64.52	562-257-2419	**TACH:**	835.86

Compression: #1: 75/80, #2: 76/80, #3: 75/80, #4: 76/80, #5: 75/80, #6: 75/80. Complied with oil/filter change. Drained old oil and serviced with 12 quarts Phillips XC20W-50. Took oil alanysis sample per customer request. Installed new 48108-2 oil filter. Cut old filter to inspect for metal. Checked magneto timing at 22 degrees. Removed, cleaned, inspected, tested, and reinstalled engine spark plugs. Reinstalled using new gaskets and torqued to 35 foot pounds. Washed engine. Inspected engine and compartment. Engine run to check magnetos, idle RPM, leak check, and ensure engine makes full power. Complied with AD96-12-22 oil filter adaptor by visual inspection. AD's checked thru biweekly 2020-16.

I certify that this Engine was inspected IAW Far 43 ap. D, using Cessna MM as a guide, for a 100 Hour Inspection and found to be in airworthy condition.

[redacted] Steven J. Meng [redacted]

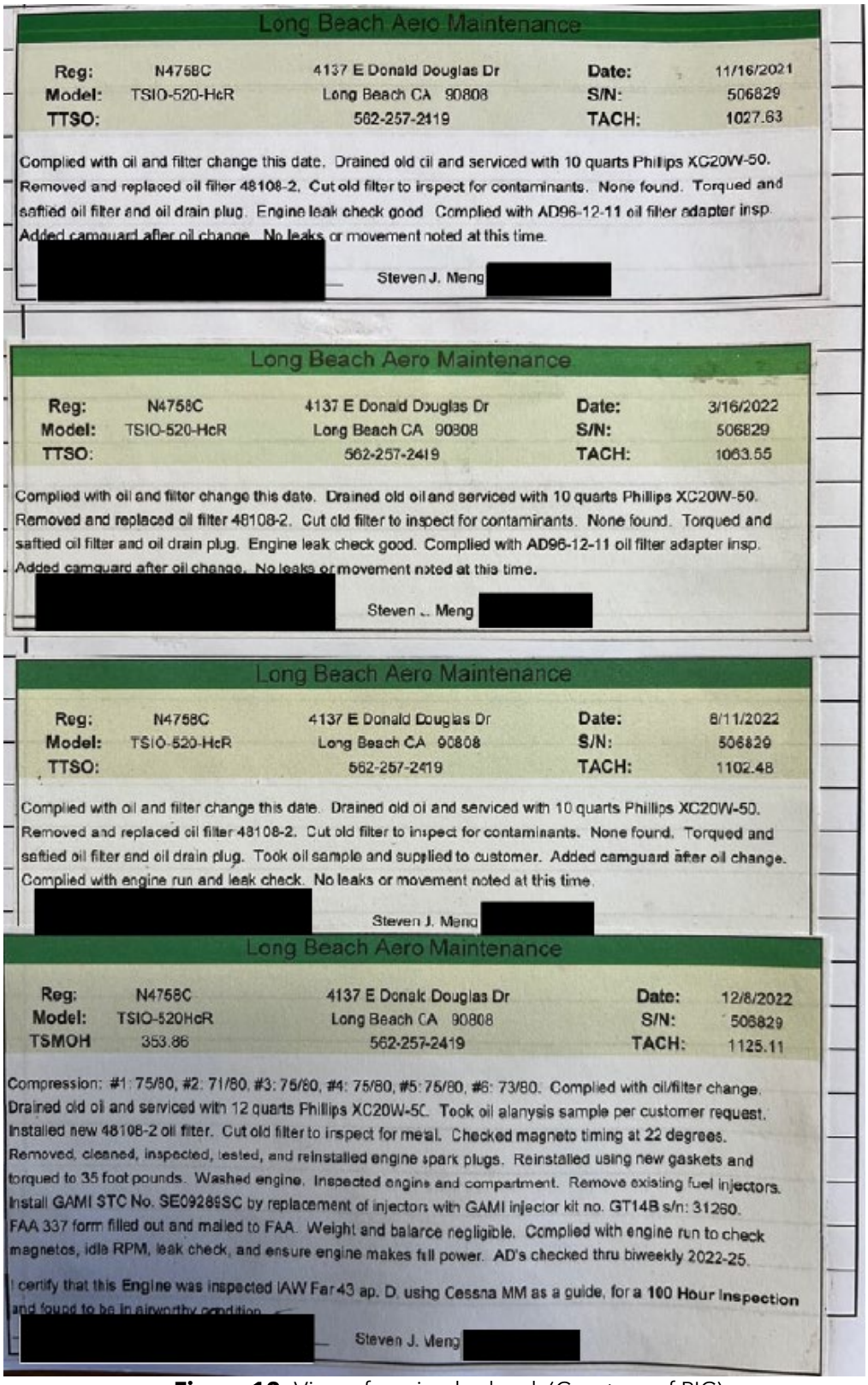
Long Beach Aero Maintenance

Reg:	N4758C	4137 E Donald Douglas Dr	**Date:**	10/2/2020
Model:	TSIO-520-HcR	Long Beach CA 90808	**S/N:**	506829
TTSO:	90.84	562-257-2419	**TACH:**	802.3

Complied with oil and filter change this date. Drained old oil and serviced with 10 quarts Phillips XC20W-50. Removed and replaced oil filter 48108-2. Cut old filter to inspect for contaminants. None found. Torqued and saftied oil filter and oil drain plug. Engine leak check good. Complied with AD96-12-22 oil filter adapter insp. Added camguard after oil change. No leaks or movement noted at this time.

[redacted] Steven J. Meng [redacted]

Figure 11: View of engine logbook (Courtesy of PIC)



Long Beach Aero Maintenance

Reg:	N4758C	4137 E Donald Douglas Dr	Date:	11/16/2021
Model:	TSIO-520-HcR	Long Beach CA 90808	S/N:	506829
TTSO:		562-257-2419	TACH:	1027.63

Complied with oil and filter change this date. Drained old oil and serviced with 10 quarts Phillips XC20W-50. Removed and replaced oil filter 48108-2. Cut old filter to inspect for contaminants. None found. Torqued and safties oil filter and oil drain plug. Engine leak check good. Complied with AD96-12-11 oil filter adapter insp. Added camguard after oil change. No leaks or movement noted at this time.

[redacted] Steven J. Meng [redacted]

Long Beach Aero Maintenance

Reg:	N4758C	4137 E Donald Douglas Dr	Date:	3/16/2022
Model:	TSIO-520-HcR	Long Beach CA 90808	S/N:	506829
TTSO:		562-257-2419	TACH:	1063.55

Complied with oil and filter change this date. Drained old oil and serviced with 10 quarts Phillips XC20W-50. Removed and replaced oil filter 48108-2. Cut old filter to inspect for contaminants. None found. Torqued and safties oil filter and oil drain plug. Engine leak check good. Complied with AD96-12-11 oil filter adapter insp. Added camguard after oil change. No leaks or movement noted at this time.

[redacted] Steven J. Meng [redacted]

Long Beach Aero Maintenance

Reg:	N4758C	4137 E Donald Douglas Dr	Date:	8/11/2022
Model:	TSIO-520-HcR	Long Beach CA 90808	S/N:	506829
TTSO:		562-257-2419	TACH:	1102.48

Complied with oil and filter change this date. Drained old oil and serviced with 10 quarts Phillips XC20W-50. Removed and replaced oil filter 48108-2. Cut old filter to inspect for contaminants. None found. Torqued and safties oil filter and oil drain plug. Took oil sample and supplied to customer. Added camguard after oil change. Complied with engine run and leak check. No leaks or movement noted at this time.

[redacted] Steven J. Meng [redacted]

Long Beach Aero Maintenance

Reg:	N4758C	4137 E Donak Douglas Dr	Date:	12/8/2022
Model:	TSIO-520HcR	Long Beach CA 90808	S/N:	506829
TSMOH	353.86	562-257-2419	TACH:	1125.11

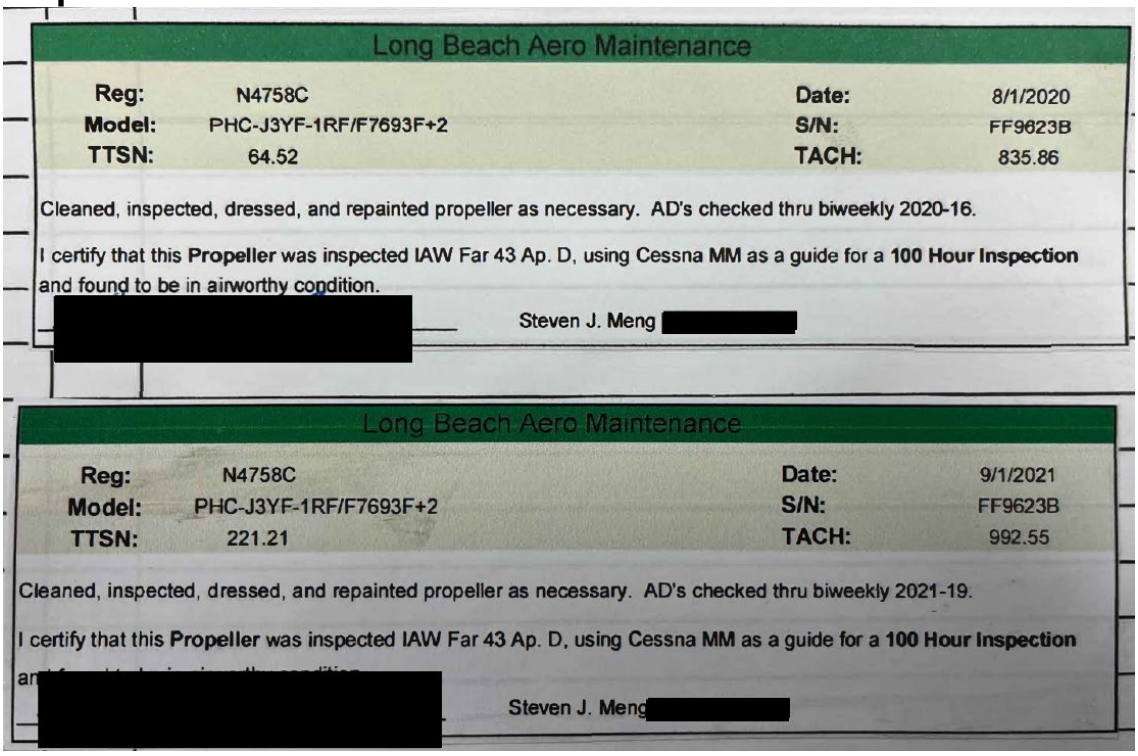
Compression: #1: 75/80, #2: 71/80, #3: 75/80, #4: 75/80, #5: 75/80, #6: 73/80. Complied with oil/filter change. Drained old oil and serviced with 12 quarts Phillips XC20W-5C. Took oil alanysis sample per customer request. Installed new 48108-2 oil filter. Cut old filter to inspect for metal. Checked magneto timing at 22 degrees. Removed, cleaned, inspected, tested, and reinstalled engine spark plugs. Reinstalled using new gaskets and torqued to 35 foot pounds. Washed engine. Inspected engine and compartment. Remove existing fuel injectors. Install GAMI STC No. SE09286SC by replacement of injectors with GAMI injector kit no. GT14B s/n: 31260. FAA 337 form filled out and mailed to FAA. Weight and balance negligible. Complied with engine run to check magnetos, idle RPM, leak check, and ensure engine makes full power. AD's checked thru biweekly 2022-25.

I certify that this Engine was inspected IAW Far 43 ap. D. using Cessna MM as a guide, for a **100 Hour Inspection** and found to be in airworthy condition.

[redacted] Steven J. Meng [redacted]

Figure 12: View of engine logbook (Courtesy of PIC)

Propeller



Long Beach Aero Maintenance

Reg:	N4758C	**Date:**	8/1/2020
Model:	PHC-J3YF-1RF/F7693F+2	**S/N:**	FF9623B
TTSN:	64.52	**TACH:**	835.86

Cleaned, inspected, dressed, and repainted propeller as necessary. AD's checked thru biweekly 2020-16.

I certify that this **Propeller** was inspected IAW Far 43 Ap. D, using Cessna MM as a guide for a **100 Hour Inspection** and found to be in airworthy condition.

[redacted] Steven J. Meng [redacted]

Long Beach Aero Maintenance

Reg:	N4758C	**Date:**	9/1/2021
Model:	PHC-J3YF-1RF/F7693F+2	**S/N:**	FF9623B
TTSN:	221.21	**TACH:**	992.55

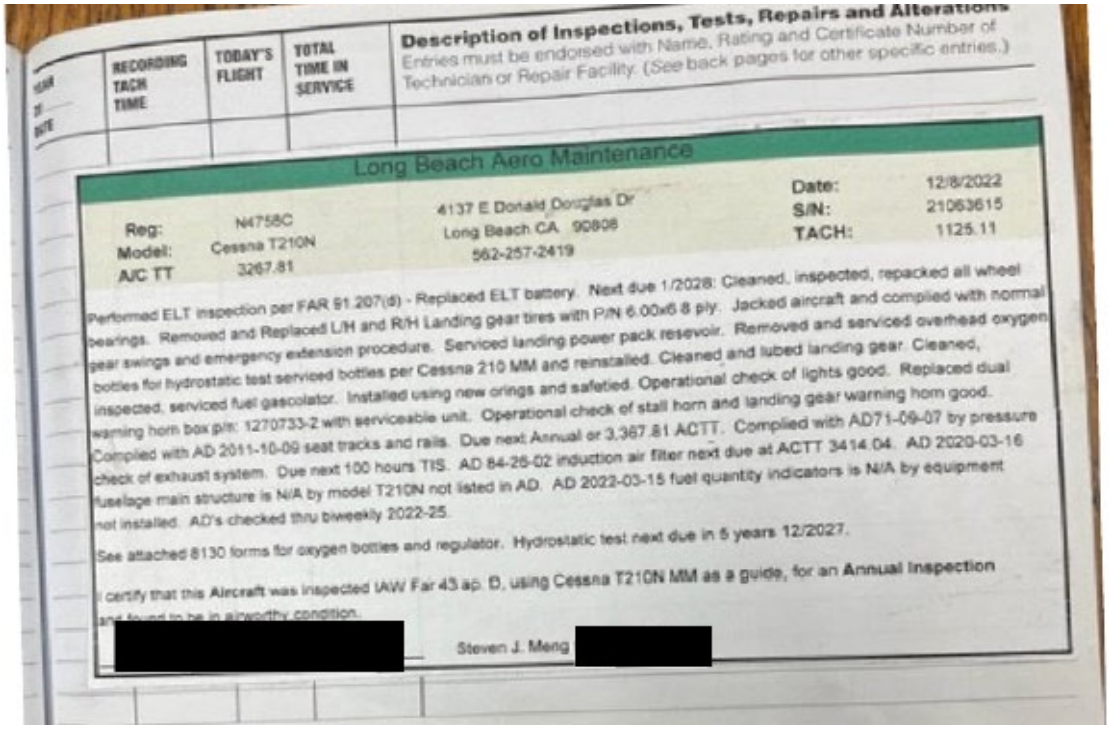
Cleaned, inspected, dressed, and repainted propeller as necessary. AD's checked thru biweekly 2021-19.

I certify that this **Propeller** was inspected IAW Far 43 Ap. D, using Cessna MM as a guide for a **100 Hour Inspection**

[redacted] Steven J. Meng [redacted]

Figure 13: View of propeller Logbook (Courtesy of PIC)

Airframe



DATE	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations (Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)

Long Beach Aero Maintenance

Reg:	N4758C	4137 E Donald Douglas Dr	Date:	12/8/2022
Model:	Cessna T210N	Long Beach CA. 90808	S/N:	21063615
A/C TT	3267.81	562-257-2419	TACH:	1125.11

Performed ELT inspection per FAR 91.207(d) - Replaced ELT battery. Next due 1/2028. Cleaned, inspected, repacked all wheel bearings. Removed and Replaced L/H and R/H Landing gear tires with P/N 6.00x6 8 ply. Jacked aircraft and complied with normal gear swings and emergency extension procedure. Serviced landing power pack resevoir. Removed and serviced overhead oxygen bottles for hydrostatic test serviced bottles per Cessna 210 MM and reinstalled. Cleaned and lubed landing gear. Cleaned, inspected, serviced fuel gascolator. Installed using new orings and safetied. Operational check of lights good. Replaced dual warning horn box p/n: 1270733-2 with serviceable unit. Operational check of stall horn and landing gear warning horn good. Complied with AD 2011-10-09 seat tracks and rails. Due next Annual or 3,367.81 ACTT. Complied with AD71-09-07 by pressure check of exhaust system. Due next 100 hours TIS. AD 84-26-02 induction air filter next due at ACTT 3414.04. AD 2020-03-16 fuselage main structure is N/A by model T210N not listed in AD. AD 2022-03-15 fuel quantity indicators is N/A by equipment not installed. AD's checked thru biweekly 2022-25.

See attached 8130 forms for oxygen bottles and regulator. Hydrostatic test next due in 5 years 12/2027.

I certify that this Aircraft was inspected IAW Far 43 ap. D, using Cessna T210N MM as a guide, for an **Annual Inspection** and found to be in airworthy condition.

[redacted] Steven J. Meng [redacted]

Figure 14: View of airframe logbook entry (Courtesy of PIC)

Submitted by:

Michael Hicks
Air Safety Investigator