

V-12022



The Standard

ENGINE LOG

ASA-SE-1

Engine Record General Information

Manufacturer FALCONER Model V-12

Serial 12023 Type Certificate _____

This engine is currently installed in aircraft N352BT

Minimum Octane Fuel _____ Oil Grade: Summer _____ Winter _____

Magneto Time _____ Point Setting _____ Firing Order _____

Spark Plug Gap _____

Manufacturer recommended overhaul at _____ hours

YEAR DATE	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Engine must be endorsed with Name, Rating and Certificate Number of Signatory Repair Facility. (See back pages for other specific entries.)
				 American Air Racing, Ltd. 5805 Alpha Ave. Heno, NV 89506-1209 775-477-4868 www.americanairracing.com Date 4/15/2009 Tach. 00 Installed this engine V-12022 on the Thunder Mustang N352BT [REDACTED] [REDACTED] APIA

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



American Air Racing, Ltd.
15 Alpha Ave.
Reno, NV 89506-1209
775-677-4860
www.americanairracing.com

Date 3/1/2010
Tach. 47.15

I certify that this engine has been inspected on 3/1/2010 in accordance with the scope and detail of Appendix D in part 43, and was found to be in a condition for safe operation.

[Redacted Signature]

[Redacted] AIA

YEAR 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 Repair Facility (See back pages for other specific entries)
--------------	---------------------------	-------------------	-----------------------------	--



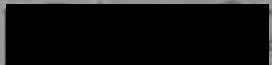
American Air Racing, Ltd.
5805 Alpha Ave.
Remi, NV 89506-1204
775-677-4660
www.aairracingclub.com

Date 5/5/2011
TTSN 92,73

I certify that this Falcner Engine, sn 12022, has been inspected in accordance with the scope and detail of Appendix D to part 43, and was found to be in a condition for safe operation.

[Redacted Signature]

[Redacted Signature] APLA

YEAR:	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's Firm Facility. (See back pages for other specific entries.)
DATE				
				 American Air Racing, Ltd. 15 Alpha Ave. Reno, NV 89506-1209 775-677-4860 www.americanairracing.com
				Date: 4/17/2013 TTSN: 99.87 I certify that this Falconer Engine, sn12022, has been inspected in accordance with the scope and detail of Appendix D to part 43, and was found to be in a condition for safe operation.   APIA

Date: 2
ITSN: 1
I certify that
is in part 2
[redacted]
[redacted]

YEAR	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.)
------	---------------------------	-------------------	-----------------------------	---



American Air Racing, Ltd.
15 Alpha Ave.
Hend, NV 89506-1208
775-677-4860
www.americanairracing.com

Date: 2/13/2014

TTSN: 100.22 Per 51 Aero engine flight time

I certify that this Falconer Engine, sn12022, has been inspected in accordance with the scope and detail of Appendix D to part 43, and was found to be in a condition for safe operation.

[Redacted Signature]

[Redacted Signature] PIA

YEAR	RECOMMENDED TIME	TOTAL TIME IN REPAIR	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS
DATE			Engine must be endorsed with Name, Rating and Certificate Number of Technician at Repair Facility. (Use both pages for other available engines.)



American Air Racing, Inc.
 15 Alhambra Ave.
 Broom, NY 10806-1201
 718-477-4900
WWW.AIRRACINGINC.COM

Date: 3-18-2015

TTSN: 009763 Per 51 Aero engine flight time

I certify that this Falcoose Engine, sn12022, has been inspected in accordance with the scope and detail of Appendix D to part 43, and was found to be in a condition for safe operation.

[Redacted Signature]

[Redacted Signature]



Date: _____
 TTSN: _____
 Airframe: _____
 TSMO: _____
 Falcoose: _____
 for overhauled and has been found in condition _____

[Redacted Signature]

[Redacted Signature]



American Air Racing Ltd.
P.O. Box 479
Hend, NV 89096-3299
775.477.4800
www.americanairracing.com

Date: 4/9/2016
TTSN: 144.82 Per 51 Aero engine flight time
airframe time: 236.38
TSN02: 0

Palmer Engine, sr12022, was removed from N352BT on 8/1/2015 and delivered to Exotic engine Developers
in overland. It was received 3/18/2016 and installed on 352BT 4/2/2016. The engine was leak checked and test run
and has been inspected in accordance with the scope and detail of Appendix D to part 43, and was found to be in a
condition for safe operation.

[REDACTED]

[REDACTED]

YEAR: | RECORDING | TODAY'S | TOTAL | Description of Inspections Tests Repairs and Alterations

DATE



American Air Racing Ltd.
15 Alpha Ave.
Reno, NV 89506-1209
775-677-4860
www.americanairracing.com

Date: 04/03/2017
TTSN: 161.97 Per 51 Aero engine flight time
Airframe time: 236.38
TSMO: 17.15

Falconer Engine, sn12022, was installed on N352BT on 03/17/2017. The engine was leak checked and test run and has been inspected in accordance with the scope and detail of Appendix D to part 43, and was found to be in a condition for safe operation.

John C Parker

APIA

YEAR: 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.)
---------------	---------------------------	-------------------	-----------------------------	---



American Air Racing, Ltd.

5805 Alpha Ave.

Reno, NV 89506-1209

775-677-4860

www.americanairracing.com

Date 09/9/2009

Tack: 35.2 Hrs.

I certify that the following aerobatic maneuvers have been test flown and the aircraft is controllable throughout the maneuvers' normal range of speeds, and is safe for operation. The flight-tested aerobatic maneuvers are Chandelles, Lazy-eights, Rolls and Loops.

[REDACTED]

[REDACTED] APIA



Flight Manual and Training Guide

Original
09/01/04

Section 5
pg 1

SECTION 5 - PERFORMANCE

Weight and Balance

The Thunder Mustang Empty Weight C.G. is very near or beyond the forward limit on most airplanes. Adding pilot, passenger, and fuel moves the C.G. aft. The C.G. can approach or exceed the aft limit based on the distribution of the weight added.

Fuel burned during flight will result in a substantial forward shift in the C.G.. Pilots should be aware of the affects C.G. has on aircraft handling characteristics. The Thunder Mustang CG will move from being very close to the aft CG at takeoff to being very close to the forward CG on landing giving very different handling characteristics. When the airplane is close to or at the aft CG limit, stick forces are very light.

Takeoff and Landing Distance

Note: Thunder Mustang operational experience is somewhat limited at this time.

The Thunder Mustang can be very comfortably operated off a 4000 ft. strip.

Feedback from pilots flying the Thunder Mustang indicate required takeoff distance is minimal due to the power to weight ratio. 2000 feet has been referenced as a minimum for takeoff. Wind, density altitude, and obstacle clearance are dynamics that need to be factored into every takeoff.

Landing distance will vary considerably based on numerous factors. Pilot technique is the primary influencing factor on landing distance. At issue is the choice between a three point or wheel landing. If the airplane is three pointed on landing, 2000 feet is adequate. A wheel landing requires approximately 3500 feet. Wind, approach speed, density altitude, and obstacle clearance are dynamics that need to be factored into every landing.

Cruise Altitude Selection - Fuel Consumption

Altitude	KIAS	KTAS	Fuel Flow - GPH/MPG	HRS	MILES
6000	250	274	26 10.5	4:10	1137
8000	250	282	28 10.67	3:50	1085
10000	285	332	38 8.73	2:50	940
12000	276	320	36 8.88	3:00	960

This material is intended for TRAINING PURPOSES ONLY. It in no way supercedes manufacturer data or current FAA approved practices. Any reference to specific system descriptions and operating parameters may vary from aircraft to aircraft because of the unique nature of the homebuilt aircraft market. Please check with the manufacturer of the specific aircraft or aircraft component for which you are planning to fly for the applicable systems descriptions and operating parameters. © Thunder Builders Group LLC.