

Appendix 1 – SLSA Flight Test Card

DATE: ____ - ____ - ____	SERIAL #N _____
BALLAST WEIGHT: _____	
PILOT: _____	PILOT WEIGHT: _____
TIME END: ____ : ____	FUEL END: ____ (gage) ____ (totalizer)
TIME BEGIN: ____ : ____	FUEL BEGIN: ____ (gage) ____ (totalizer)
OAT on ground END: _____	BARO PRESSURE END: _____
OAT on ground BEGIN: _____	BARO PRESSURE BEGIN: _____
LOCATION: _____	
SURFACE WIND, END: _____ @ _____	
SURFACE WIND, BEGIN: _____ @ _____	
# LANDINGS: _____	

PRE-FLIGHT PREPARATION:
<u>Aircraft load-out:</u> Pilot plus 10 to 14 gallons fuel to obtain 1050 lbs +/- 5%
If ballast is needed, add ballast to co-pilot seat. Note ballast added _____ lb

FLIGHT PROCEDURE:
Zero flap take-off and accelerate to 75 kt IAS
Climb at 75 kts. IAS until >3,000 ft AGL while remaining within gliding distance of a runway.
Engine Indications:
<input type="checkbox"/> Engine RPM 5100 +/- 100 RPM _____
While remaining within a safe distance of a runway, level-off and set throttle for 4500 to 5000 rpm and trim for hands-off flight
Systems Check-out:
<input type="checkbox"/> Check and Note EFIS indications and/or discrepancies. (pay close attention to oil and fuel pressure during entire flight from takeoff to landing)

<input type="checkbox"/> Check for regulator function system charging _____

Appendix 1 – SLSA Flight Test Card**FLIGHT PROCEDURE (continued):**

Cabin Heat:

- Door shuts and does not leak when closed (heat off) _____
- Heat on provides sufficient heat output _____

EFIS Indications:

- Airspeed _____
- Altitude _____
- Slip/Skid indicator - ball moves opposite direction of rudder input. _____
- Attitude _____
- Outside Air Temperature _____
- ADS-B IN (verify by pulling up weather in flight) _____

Avionics:

- Comm. radio functionality (ask for a radio check) _____
- GPS functionality _____
- Intercom (verify side tone) _____
- Transponder functions AUTO, GROUND, ALT _____
- Autopilot check (LVL, Heading, Alt Hold, VS, AP Disconnect) _____
- Autopilot Control Head check (if installed) VS, Heading, LVL, altitude capture, GPS tracking.
Leave AP in advanced mode if an Autopilot Control Head is installed.

Initial Flying Qualities Evaluation:

Control Response appropriate?

- Pitch _____
- Roll _____
- Yaw _____

Control Forces appropriate?

- Pitch _____
- Roll _____
- Yaw _____

Trim Evaluation:

Pitch -

- Sufficient Authority _____
- Motor speed acceptable during all phases of flight (check at 65 kts and 110 kts)

Yaw -

- Slip/skid ball centered during cruise with feet off rudder pedals _____

Roll -

- No tendency to roll with slip/skid ball centered (hold rudder if/as required)
and hand off stick. 1 deg/sec max. .5 deg/sec or less is ideal _____

Flap extension/retraction: close throttle and trim for level flight (or slight climb) at 65 kt

Clean to ½ flaps -

- Note amount of degrees roll change. 1 deg/sec max. .5 deg/sec or less is ideal _____
_____.
- Note any controllability problems _____.

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FLIGHT PROCEDURE (continued):

Flap extension/retraction (continued):

½ flaps to full flaps -

Note amount of degrees roll change. 1 deg/sec max. .5deg / sec or less is ideal

Note any controllability problems _____

Slow Flight:

Flaps up at 59 kt (1.3 Vs)

Power set to maintain level flight or slight climb RPM _____

- Straight & level
- 30° bank turn left
- 30° bank turn right

Flaps ½ at 56 kt (1.3 Vs1)

Power set to maintain level flight or slight climb RPM _____

- Straight & level
- 30° bank turn left
- 30° bank turn right

Flaps full at 54 kt (1.3 Vs0)

Power set to maintain level flight or slight climb RPM _____

- Straight & level
- 30° bank turn left
- 30° bank turn right

Slow Flight Flying Qualities Evaluation:

Control Response appropriate?

- Pitch _____
- Roll _____
- Yaw _____

Control Forces appropriate?

- Pitch _____
- Roll _____
- Yaw _____

Stalls:

Power Off w/immediate recovery (wings level & ball centered; no deep stalls or aggravated stalls)

Flaps up (Vs). Buzzer must activate 3-5 kts above stall break.

- Note indicator reading when warning buzzer activates
- Note indicator reading at onset of buffeting _____
- Note indicator reading at break _____
- Note rolling tendency (direction and amount in degrees) _____

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FLIGHT PROCEDURE (continued):

Stalls (continued):

Flaps 1/2 (Vs1)

- Note indicator reading when warning buzzer activates
- Note indicator reading at onset of buffeting _____
- Note indicator reading at break _____
- Note rolling tendency (direction and amount in degrees) _____

Flaps full (Vs0)

- Note indicator reading when warning buzzer activates
- Note indicator reading at onset of buffeting _____
- Note indicator reading at break _____
- Note rolling tendency (direction and amount in degrees) _____

Retract Flaps. Descend to allow speed to reach 136 kt TAS perform easy maneuvers

- Verify no unusual flying qualities or other unexpected behavior.

Landing:

Power-off approach at minimum 55 kts with flaps as required for glide path control.

- Verify proper operation of brakes and verify proper ground handling characteristics
- Before shut-down - throttle to idle and verify RPM is within range called-out in Section G6
- Download EFIS data, use to calculate T/O distance, climb rate and archive file
- Intercom check both sides (check with second person on ground) _____
- Check Co-Pilot Push to Talk Function _____

Engine Power Output:

- Unusual vibrations, noises, etc. _____
- Fuel and/or exhaust smell in cockpit _____

Section Appendix 1 Flight Test completed by:

Printed Name/Title

Signature

Date

Aircraft Serial Number

Type of authorization issued to conduct the flight testing.

(Example: FAA 8130-7 Special Airworthiness Certificate)

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POST FLIGHT ACTIONS:

To be completed by the test pilot:

- Adjust trim on rudder required; YES __NO__ _____
- Squeeze light wing's aileron trailing edge required; YES __NO__ _____
- Adjust stall warning vane required; YES __NO__ _____
- Adjust idle speed to be within range called-out in Section G6 required; YES __NO__ _____

To be completed by the ground crew:

- Remove cowl and inspect engine _____
- Any engine issues (leaks, high temps, etc.) YES __NO__ _____
- Any airframe system issues; YES __NO__ _____
- Other _____

Section Appendix 1 Post Flight completed by:

Printed Name/Title

Signature

Date

Aircraft Serial Number

Appendix 1 – SLSA Flight Test Card

DISCREPANCY & RESOLUTION FLIGHT # _____

DATE: ____-____-____

BALLAST WEIGHT: _____

PILOT: _____ **PILOT WEIGHT:** _____

TIME END: ____:____ **FUEL END:** ____ (gage) ____ (totalizer)

TIME BEGIN: ____:____ **FUEL BEGIN:** ____ (gage) ____ (totalizer)

OAT on ground END: _____ **BARO PRESSURE END:** _____

OAT on ground BEGIN: _____ **BARO PRESSURE BEGIN:** _____

LOCATION: _____

SURFACE WIND, END: _____ @ _____

SURFACE WIND, BEGIN: _____ @ _____

LANDINGS: _____

Section Appendix 1 Flight Resolution completed by:

Printed Name/Title

Signature

Date

Aircraft Serial Number