

Inspection Check List for Experimental Weight Shift Control Aircraft

Builder: _____ Model _____ S/N _____

Date of Inspection _____ Inspector _____

Regulatory Prerequisites & Placards

Satisfactory / **U**nsatisfactory Item

S **U**

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|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------|------------------------------|
| 1. FAA Form 8130-6 Application for A/W Certificate properly filled out | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 2. Program Letter signed and dated | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 3. Registration certificate available in aircraft. (NOT pink slip!) | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 4. ID data plate is fireproof (steel), has Builder's name, model, serial number. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 5. ID data plate is installed in proper external location per FAR 45. 11(a). | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 6. N-Numbers installed, block letters, 3" proper location per FAR 45.25, | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 7. Word Experimental Displayed, 2" min size, proper location per FAR 45.23(b). | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 8. Passenger warning placard (not required for single place) ". This aircraft does not meet U.S. safety standards for certified aircraft..." | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 9. Logbook has current annual condition inspection | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 10. A/C Weight and loading done, and shows within designer's limits. FAR 91.9 Placards | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 11. ALL controls - flight and engine, marked as to use. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 12. Markings for: | | | |
| a. Throttle- open-closed | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| b. Carb Heat- pull on | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| c. Trim Tab- Nose Up, Nose Down, Take Off setting | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| d. Mixture- Push rich | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |

Cockpit interior

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|--------------------------------------------------------------------------------|------------------------------|-----------------------------|------------------------------|
| 1. Seat Belts function, and angle is slightly rearward | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 2. Shoulder harness function, and angle is slightly rearward | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 3. Seat Belt Anchor Points firm, no interference | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 4. Shoulder Harness Anchor Points firm, no interference | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 5. Ballistic recovery system if installed deployment handle clearly marked | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 6. Ballistic recovery chute if installed marked for danger to first responders | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 7. Ballistic recovery chute if installed Safty pin clearly marked | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |

Instruments and required equipment

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|---------------------------------------------------------|------------------------------|-----------------------------|------------------------------|
| 1. Fuel quantity for tank, has been calibrated | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 2. Analog instruments marked with green/red line ranges | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 3. EIS instruments installed with limitations placard | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| a. Altimeter | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| b. Airspeed indicator | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| c. Tachometer | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| d. EGT | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| e. CHT | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| f. Coolant temperature | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| g. Oil Pressure | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| h. Oil Temperature | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| i. Anti collision strobes/rotating beacon | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |

Electrical

1. There is a battery installed: Type: _____ Yes No
2. Battery case and battery securely mounted Yes No N/A
3. Battery vented overboard Yes No N/A
4. Battery wiring adequate size and secure Yes No N/A
5. Electrical system wiring adequate size and secure Yes No N/A
6. Switches marked for operation, and wired properly Yes No N/A
7. Circuit Breakers or fuses labeled for value and function, and wired properly Yes No N/A
8. Ground on battery to airframe, or wired into place properly Yes No N/A
9. Ammeter installed Yes No N/A
10. Voltmeter installed Yes No N/A
11. Landing Lights / Position Lights wired correctly Yes No N/A
12. Cockpit lights/ Instrument lighting Yes No N/A

Avionics

1. Antennas are properly installed, and have proper support/doubler plates Yes No N/A
2. Coax Cable secured, with slack enough to prevent disconnection Yes No N/A
3. Radios/Avionics are mounted securely Yes No N/A
4. Avionics gear is wired properly, and functions Yes No N/A
5. Transponder "Mode C" check done, and in aircraft records Yes No N/A

Fuel System

1. Caps fit securely Yes No N/A
2. Fuel drains installed at lowest portion of tank, and at lowest point in fuel lines Yes No N/A
3. Fuel Vent System contains no loops which would block venting Yes No N/A
4. Shutoff valve/ Selector switch ease of operation, and clearly marked for intended operation Yes No N/A
5. Fuel Line routing proper material and diameter for intended fuel supply Yes No N/A
6. Fuel gascolator functional and safety wired Yes No N/A
7. Fuel filter installed with proper orientation Yes No N/A
8. Fuel Lines protected from chafing, and secure from "catching a foot." Yes No N/A
9. Fuel line routing avoids areas of heat Yes No N/A
10. Bypass line on fuel bulb Yes No N/A

Gear/Wheel/Brake Systems

1. Fiberglass spring rods not cracked and servicable Yes No N/A
2. Shock absorbers filled and not flat Yes No N/A
3. Bungee shock cords in good condition and secure Yes No N/A
4. Tires in condition for safe operation, inflated, no cuts, etc Yes No N/A
5. All wheel nuts secured against loosening Yes No N/A
6. Nose wheel steering controls free and adjusted for tracking Yes No N/A
7. Brake System components secure Yes No N/A
8. Brake & Wheel installation secure Yes No N/A
9. Tires are clear of pants or struts, including clearance of "mud scraper", no binding Yes No N/A
10. Wheel Pants are secure Yes No N/A

General Condition- Cart Assembly

1. Tubing in good condition, no dents, abnormal bends or excessive holes. Yes No N/A
2. Main frame rails and/or keel in good condition Yes No N/A
3. Bracing cables or tubes secure, nico press sleeves properly made Yes No N/A
4. Bolts and nuts properly installed and secured Yes No N/A
5. Fairings secure and attachments strong enough to prevent loss in flight Yes No N/A

Wing

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|------------------------------------------------------------------|-----|--------------------------|----|--------------------------|-----|--------------------------|
| 1. Battens and batten cords in place and secure, no damage | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 2. All safety pins in place and secure | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 3. Safety Cable in place and secure | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 4. Wing fabric in servicable condition, no damage | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 5. King post, reflex cable and trim cables no damage or chaffing | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 6. Tensioning cable safety functional and secure | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 7. Steering Bar and cables secure | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 8. All bolts and hardware in good condition and secure | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 9. Wing moves freely, no binding | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 10. Wing limitations decal or placard | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |

Flight Controls

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|----------------------------------------------------------|-----|--------------------------|----|--------------------------|-----|--------------------------|
| 1. Control bar movement free to limits of travel | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 2. Clearance on controls/no hitting panel or floorboards | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 3. Freedom of movement | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |

Engine

Is everything safetied in engine compartment

Yes No N/A

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|-------------------------------------------------------|-----|--------------------------|----|--------------------------|-----|--------------------------|
| 1. Throttle cables anchored and functional | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 2. Clearances in engine compartment | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 3. Carb Heat Control- Functional | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 4. Mixture Control- Functional, spring full-rich | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 5. Fuel Hose routing to avoid heat & bends | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 6. Fuel strainer safety wired | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 7. Fuel Hose diameter sufficient for engine | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 8. Fuel and Oil Hoses proper material | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 9. Oil System Hose & line filter installation | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 10. Engine Mount secure, no cracks | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 11. Alternator, belts, accessories properly installed | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 12. All electrical and ignition wires appear correct | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 13. Cowling secure | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |

Propeller

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|------------------------------------------------------|-----|--------------------------|----|--------------------------|-----|--------------------------|
| 1. Propeller is free of un-repaired nicks and damage | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 2. Bolts are safety wired or stop nuts installed | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 3. Bolts clear engine, proper length | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 4. Prop clears ground in takeoff attitude by >7" | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| 5. Prop Spinner o.k., clear of cowl, not uneven spin | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | N/A | <input type="checkbox"/> |

Certification

Logs present and builder records the following statement:

“I certify that this aircraft has been inspected on [insert date] in accordance with the scope and detail of appendix D to part 43 and was found to be in a condition for safe operation.”

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|-------------------------------------------------------------------------------------------|------------------------------|-----------------------------|------------------------------|
| 1. Discuss operating limitations with applicant, flight test areas, and flight test time. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 2. Airworthiness application properly filled out and signed? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 3. Sign Logbook and issue certificate, if applicable OR | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 4. Provide list of deficiencies to applicant, if applicable Unsatisfactory Conditions | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |

N_____ Owner _____

I have read and understand the operating limitations issued with the airworthiness certificate for this aircraft .

Owner: _____
signed Date