

# *Wing and Rotor Model Flying Club*

## **Pre-Start Checklist for a New Airplane**

1. Items to pack for first day at field:
  - a. Hat .....
  - b. Sunglasses .....
  - c. [Optional] Sun Screen .....     [Optional] Chair .....     [Optional] Beverages .....
  - d. Glow Driver .....
  - e. Glow Plug(s) .....
  - f. [Optional] Electric Starter .....
  - g. Chicken Stick .....
  - h. Assorted wrenches and screwdrivers required for engine and airframe .....
  - i. Nails, pegs, or other device or devices to restrain the airplane when starting .....
  - j. [Recommended] First Aid kit .....
  - k. Cleanup materials (towel or rags or Scott towels; Windex...) .....
  
2. Gas lines:
  - a. Not pinched or kinked .....
  - b. Connected properly (clunk line to carb, breather line to muffler) .....
  
3. Engine:
  - a. Mounted securely (to mount and to firewall) .....
  - b. All bolts tight (carb, head, backplate, muffler, glow plug) .....
  - c. Neutral or offset to right a few degrees .....
  
4. Propellor:
  - a. Tightened .....
  - b. Balanced .....
  - c. Tips painted (recommended for safety) .....
  - d. Edges dulled .....
  
5. Batteries charged for 14 to 24 hours (check instructions!) ..... 
  - a. TX--check voltmeter on unit .....
  - b. RX--check with loaded voltmeter (above 4.8 volts under load) .....
  - c. On/off switch accessible from outside the aircraft .....
  - d. [Electric Starter] .....
  - e. Glow-driver .....
  
6. Check all flight structures:
  - a. Wing joint (kind of glue used? reinforced properly?) .....
  - b. Stab joint .....
  - c. Fin joint .....
  - d. No warp in wing or stabilizer .....
  - e. Hinges glued in .....
  - f. Control horns securely fastened .....
  - g. Controls at proper neutral position:
    - i. Ailerons .....
    - ii. Elevator .....
    - iii. Rudder .....
    - iv. Throttle: idles with trim switch up, dies with trim switch down .....
  - h. Wheel collars tightened (preferably with flat spots ground on axle) .....

- 7. Fresh or properly stored fuel .....
- 8. Foam rubber around:
  - a. Tank [*fuel-proof the tank compartment, too*] .....
  - b. Receiver .....
  - c. Batteries .....
- 9. Batteries and fuel tank held firmly in place .....
- 10. Antenna strung correctly--away from servos, not kinked or coiled .....
- 11. Pushrods:
  - a. All clevises snapped shut, preferably with safety tubing .....
  - b. Sufficient threading inserted at ends of nyrods .....
- 12. **CHECK FOR CONFLICTING RADIO FREQUENCIES**  
**BEFORE TURNING ON TRANSMITTER** ..... 
  - a. Preliminary range check with antenna collapsed. *Extend antenna before flying!* .....
  - b. Trim switches set to neutral .....
  - c. Correct direction for controls when viewed from rear of plane:
    - i. Aileron (left stick makes left aileron go UP; right stick, right UP) .....
    - ii. Elevator .....
    - iii. Rudder .....
    - iv. Nose Wheel .....
  - d. Correct range of throw on flight surfaces .....
- 13. Servos:
  - a. No binding in servo linkages or control horns .....
  - b. Examine servos for set screws .....
  - c. No slop in pushrods (supported properly) .....
  - d. Capable of turning off engine .....
  - e. No interference between servo arms and servo leads .....
  - f. No metal-to-metal connections .....
  - g. Servo tray securely fastened or glued .....
- 14. Wing attachment:
  - a. Sufficient number of rubber bands .....
  - b. Nylon bolts at correct torsion (tight, not over-stressed) .....
  - c. No interference from bolts, servos, pushrods, or wires when wing is installed .....
- 15. Center of Gravity within bounds (with empty gas tank) .....
- 16. Start engine:
  - a. Range check with engine running .....
  - b. Break in engine per manufacturer's instructions before flying .....
- 17. Range check with engine running and antenna collapsed .....   
*Extend antenna before flying!*