

PREFLIGHT CHECKLIST

This checklist is intended to promote safety awareness for all radio control model airplane pilots. Inexperienced flyers should request assistance from an experienced pilot, particularly for the "At the Flying Field" steps.

BEFORE LEAVING FOR THE FLYING FIELD

1. Charge all batteries according to manufacturer's recommendations.
2. Turn on transmitter and onboard flight pack and run each servo to maximum throw using both sticks and trims. Listen for any buzzing that might indicate that a linkage adjustment is needed or that a control surface is binding. Turn off radio system and recharge if needed.
3. Check all control surfaces and hinges to ensure they are securely attached. Check all fasteners for tightness, such as engine mounting bolts, prop nut, muffler bolts, landing gear screws, wheel collars, control push rods, crevices and retainers etc.
4. Check the center of gravity with the fuel tank empty to make sure the airplane is properly balanced.
5. Check any wing bolts and threaded insert mounts. If using rubber bands to hold wing on fuselage, it is a good idea to check old ones and replace them frequently with new ones during pre-flight preparation.
6. Several times each season do a radio equipment range check per the manufacturer's instructions.
7. Several times each season, remove the fuel tank from the plane and check for leaks as well as clean or replace fuel line filters.
8. Make sure your flight box is prepared with charged batteries, fuel, extra props, glow plugs, paper towels, hand cleaner, etc.

AT THE FLYING FIELD

1. Assemble the airplane making sure to connect all plugs of servos in the wing to the receiver as well as any retractable landing gear linkages, wing struts, wing bolts/bands, cables, etc.
2. Secure/tether the airplane in the pit area and place field box in a safe position.
3. Fill fuel tank and check fuel lines for leaks and good tension on fittings.
4. Put AMA card in proper frequency slot on the frequency control board and put frequency tag on antenna of your transmitter.
5. Switch on the transmitter with the antenna collapsed and then switch on the onboard flight pack.
6. Operate control sticks in all directions and observe that control surfaces are functioning properly and that throttle, retracts, etc. are working properly. Make certain that all controls are moving in the proper directions. Watch for glitches that might indicate frequency interference or potential radio problems.
7. Prime engine through carburetor (if necessary) and make sure needle valve is set per manufacturer's instructions.
8. Make sure throttle is set to low speed (slightly above idle).
9. Make sure airplane is secure (tethered or an assistant holding fuselage from behind the tail).
10. Connect glow plug igniter/connector plug, making sure that any battery cables are clear of the prop. If using a control panel, set heat control to proper setting.
11. Flip the prop or use an engine starter to turn it while keeping clear of the prop.
12. Once the engine starts, keep all objects (fingers etc.) clear of the prop, move behind prop to remove glow plug connector or adjust engine.
13. With plane still secured rev up the engine and if necessary adjust the needle valve for high speed.
14. Set throttle to idle and if necessary adjust the low speed setting screw.
15. Rev up engine slowly to full speed while working control surfaces to make sure they are still functioning properly.
16. Throttle back and make final carburetor adjustments if necessary (if engine is still running rich or lean).
17. Once the carburetor appears to be properly adjusted it is a good idea for your assistant to lift and hold the airplane in a "high attack" position (nose up) while you rev the engine up to about half speed, then back to idle, to make sure that fuel feed to the carb remains consistent. Full speed is not recommended for .45 and larger size engines during this test.
18. Move model to taxi/launch area, with the throttle set to idle and airplane pointed away from flight line. Fully extend antenna of transmitter and check for other flyers and spectators to make sure they are clear of the runway.
19. At your signal have your assistant release the airplane. Rev your engine enough to get the airplane to taxi and check if steering is working properly. If not bring the airplane back to the flight line and make adjustments to the steering. Restart engine as noted in steps 6, 7, 8, 9, 10, and 11, the skip to step 18 to continue.
20. Once the airplane can taxi properly, maneuver into takeoff position (downwind) on the runway, rev up the engine to adequate speed for takeoff and control plane through liftoff and climb-out.
21. While flying follow AMA and flying club rules and regulations and have fun flying but always remember - Safety First!
22. When preparing to land or do any low altitude pass along the runway, always check to make sure the runway is clear of personnel. If you have a "dead-stick" situation (engine off) and people are on the runway, yell "dead stick, clear the runway". If the runway is not clear in time for your landing you must ditch the plane off the runway.
23. When your airplane has landed normally, apply just enough throttle to taxi at a safe (slow) speed back to your position at the flight line, watching out for people that may be in the path of your plane.
24. Throttle all the way back (if necessary use trim) to kill the engine then turn off the on-board flight pack then the transmitter.
25. Take your airplane back to the pit area, return the frequency tag to control board and pick up your AMA card.
26. Wipe down the airplane and make adjustments to control surface linkage if found necessary while the plane was airborne.