

Before Your First Flight....

Balance

- Is the center of gravity within the range shown on the plans? (fore and aft)
- Is the model balanced side to side? (right and left wings of equal weight)

Alignment

- Are all the flying surfaces at the proper angle relative to each other?
- Are there any twists in the wing?
- Are the wings at the proper incidence as shown on the plans?
- Is the engine set at the proper thrust angle as shown on the plans?

Control Surfaces

- Are all control surfaces securely attached? (i.e., hinges glued, pinned). Pull on each one to test.
- Are the control throws in the correct direction with proper amount of deflection (as listed in the plans for your plane)?

Rudder: Left stick should move rudder to the left.

Aileron: left stick should move left aileron up.

Elevator: Pulling back (toward you) on the stick should move elevator up.

Throttle: With trim set fully forward, pushing the stick forward should open throttle fully.

With trim set fully backward, pulling stick back should fully close the throttle.

- Are the control horns secure? (screws been attached to servo horns)

Control Linkages

- Have all the linkages been checked to be sure they are secure?
- Are all the snap links closed? (clevises usually have keepers or fuel tubing to ensure they stay closed)

Engine

- Are all engine screws tight?
- Is the prop nut and/or spinner tight?
- Is the engine securely mounted to the fuselage?
- Does the throttle work without binding?
- Does the throttle trim tab shut down the engine?
- Has the propeller been balanced and checked for damage? (cracks and nicks)
- Are propeller tips painted white?
- Has the engine been thoroughly test run? (engine idle and throttle up properly)
- Has the engine been run at full throttle with the plane's nose straight up in the air? (to make sure it won't stall when full power is applied on climb out)
- Is the fuel tank installed correctly? (i.e., carburetor at the same height as fuel tank, fuel tank klunk in proper position and moving freely, fuel lines in good condition and connected to the engine correctly)
- Does your gasoline engine have a kill switch?
- For gasoline engines, a fire extinguisher should be included in flight box.

Radio and Servos

- Are the radio and battery securely mounted and have they been padded with foam to protect from vibration and shock?
- Are all screws in servo trays?
- Are all push rods firmly secure in servo arms?
- Are servo arms firmly attached with screw in place?
- Are all electrical connectors secure?
- Is the receiver's antenna fully extended and in good condition?
- Are the batteries charged and checked with a volt meter?
- Has a full range check been performed? (see below)

Landing Gear

- Is landing gear firmly attached to airframe? (wheel attachments secure)
- Does aircraft taxi in a straight line? (does nose wheel turn in the correct direction)

General

- Is the covering tight with no visible signs of damage?
- Are wing bolts in place and secure? (fuselage/wing form a tight bond)
- Is the engine cowl secure?
- Is the canopy securely mounted?
- Are all components structurally sound?
- The aircraft must be labeled inside with your name and AMA number.

Range Checking the radio

- Verify frequency is available and put membership card on frequency board.
- Turn on transmitter and receiver.
- Walk about 30 yards from your plane
- Do all surfaces respond to controls?
- Do surfaces start to "flutter"? Do surfaces move from the middle, neutral position without touching the sticks? In either case, it is imperative that the radio problem be fixed before trying to fly the plane. Check to see if any wiring crosses or runs alongside the antenna wire (arrange all wires as far from antenna as possible). Re-check all batteries. Check the transmitter antenna is not loose. Check the receiver switch is operating correctly. The plane must pass this range test before attempting to fly.

Before EVERY flight:

- ***Secure transmitter frequency at frequency control board.***
 - ***Check the receiver and battery pack with a voltmeter to insure enough charge.***
 - ***Check the control throw direction of all surfaces.***
 - ***Check your transmitter to be sure switches were not accidentally thrown to the wrong position.***
 - ***if you have a multi-model transmitter, check is set to correct model.***
 - ***Start the engine and test the entire throttle range.***
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