

# Phase 1

## Pre-Flight and Taxi

Marymoor R/C Club, Redmond, WA  
AMA Charter 1610



# Phase 1

## Pre-Flight and Taxi

- Pre-Flight Inspection
- Before Takeoff Checklist
- Taxi
- Callouts

# *Fail-Safe* Function

The *Fail Safe* function in your receiver decides what to do if the radio link is lost.

- This is *NOT* the same as the Spektrum SAFE and AS3X gyro modes
- Power to the propeller should go to zero when receiver loses the signal
- Test this by restraining the plane, set the throttle at about 1/3, and turn off the transmitter
  - After several seconds, the motor should stop.
  - If it does not, the receiver must be re-bound to correctly set the Fail-Safe function.
- Fail-Safe should be tested after a receiver is bound to a transmitter, or any time it is re-bound to the same transmitter. The throttle stick must be at zero when the binding process is done.

# Range Check

- Do a range check, before a model's first flight, or if any part of the radio installation has changed
- Do the check using the manufacturer's instructions. Radio brands differ
- Do the check with the model in several orientations. You are looking for poor servo response due to various parts of the plane blocking reception to the antennas.

# Pre-Flight Checklist

Before before powering up on every flight, you, the student, should check at least the following:

- Radio installation and internal control links secure (check before you put on the wing and close up the plane)
- Wing secured  
(with proper number of rubber bands if applicable)
- Control surfaces secure: Linkages, hinges, and servos
- Motor & Prop: secure, prop not damaged
- Recently charged and fully charged battery, well secured in the plane

*Note: This checklist is not the same as the much more comprehensive pre-flight inspection checklist that we use before the first flight of a new airplane. This checklist is a shorter version for you to use before every flight*

# *Before Takeoff Checklist*

This habit will save your airplane someday

After the plane is powered up, JUST BEFORE TAKEOFF:

**B**attery (*transmitter battery “in the green”*)

**A**ntenna (*transmitter antenna placement  
– NOT pointed at the airplane*)

**T**rimms – *set correctly*

**T**imer – *ready to be started, right amount*

**C**ontrols – *Check operation and DIRECTION*

*Do Controls check for both student and instructor*



# Taxi

- Hold the right elevator stick full UP to help keep the tail down while taxiing.
- Steer using RUDDER with the left stick
- Control power with the left stick in small amounts
- Use short, small bursts of power to get the plane started rolling over bumps in the grass
- Taxi toward the takeoff area, being aware of other people and planes around you

# Phase 1 - Preflight and Taxi

## Notes for Instructors

- Please emphasize the importance of testing Fail Safe and doing Range Checks for the sake of the club
- These tests avoid “fly-away” accidents where a plane can fly out of our boundaries to other parts of the park.
- Student must understand the difference between Fail Safe and SAFE mode



# Disclaimers

MAR/C provides advice. After you gain solo flight privileges, *only you* are responsible for your model aircraft readiness, your actions, and abilities

Any instructions provided by the manufacturers of equipment such as but not limited to aircraft, radio controls, batteries, motors or engines and anything installed in your airplane have precedence over any advice provided by instructors, this document, or the mar-c website..

Flying and teaching techniques vary widely in our hobby, and vary from one instructor to another.

The goal of this document is to encourage some standardization and provide a practical minimum amount of knowledge.

# Version Information

Version	Author	Date	Description
1.5	Brian Kelly	April 2017	Aligned Flight Training Syllabus with new flight log. Misc corrections and refinements
1.6	Brian Kelly	4/19/2017	Misc edits, repaired links, to prepare for website update
1.7	Brian Kelly	4/26/2017	Corrections and misc edits
1.8	Brian Kelly	9/28/2017	Updated Proficiency Check and misc edits
2.0	Brian Kelly	Nov 2018	Broken into separate standalone chapters for quicker access on the website.
3.0	Brian Kelly	April 2023	Updated to reflect club-owned fleet of electric training planes and miscellaneous improvements