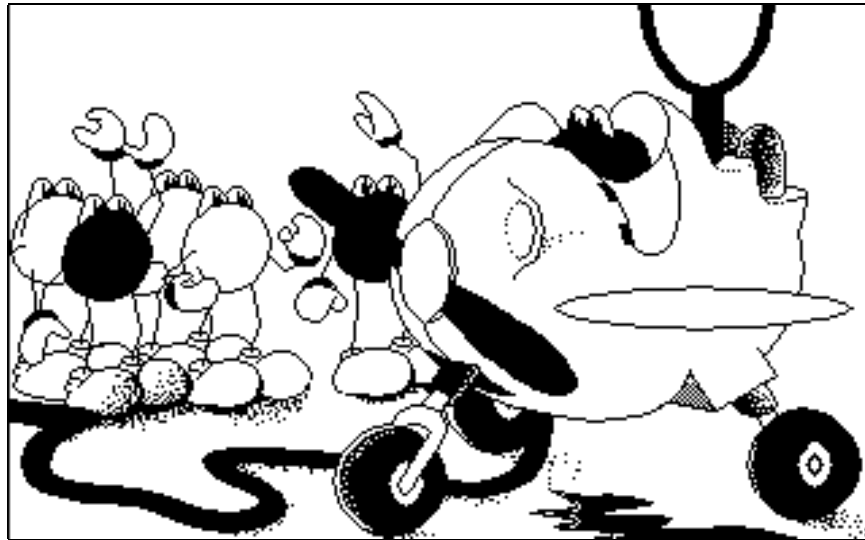


*REGINA
WINDY
FLYERS
WINGS PROGRAM
BEGINNER'S
MANUAL*



January 1,1992

R.W.F Wings Program

Welcome to the hobby and sport of model aviation. The members of the Regina Windy Flyers are pleased to have you as a new club member. By joining our club you have opened yourself to many benefits only obtainable by being a member, from access to developed flying sites to a wealth of knowledge and experience passed on from many years of modeller's successes. Learning to fly radio controlled aircraft is comparable to any learning experience, mistakes are made. Unfortunately this can result in damages and disappointment to a new pilot, because of this the Windy Flyers had some of their best and most experienced flyers step forward to act as instructors for beginning pilots, over the years this led to the creation of this wings program. The program is designed to create an enjoyable safe method for new pilots to learn and hopefully lessen the difficulties that occur during the learning stages. As a club we only wish you the best of luck and happiness in the hobby. Remember that the success of a club is measured only by the success of its individual members. The Windy Flyers feel confident that the success, strength and fellowship of our club is equalled by few others and this tradition may only be passed on by new members such as yourself.

Good luck & Good flying.

Purpose of the program

To assist club members in achieving a level of proficiency in the sport of model aviation. To teach the individual how to use and maintain their model in a safe and competent manner. To help the new club member to overcome the obstacle of learning to fly by passing on the experience and knowledge club members have taken years to learn. To achieve this goal at a comfortable rate of progress that is appropriate for each individual. Finally to have the new pilot fly their aircraft unassisted with confidence, consistency and a high regard for the safety of their equipment and all individual's at the flying site.

Administration Of The Wings Program

R.W.F. club rules state that all pilots may not solo until they have shown two instructors that they are capable of flying at a level equal to or above that set out in this program.

Until such time these pilots must fly with the assistance of a club appointed instructor.

Once the new pilot achieves all the goals in this program they undergo a short solo test flight to show their abilities to the instructors. If all goes well the new pilot will be awarded their wings by the club.

The new pilot will learn this program in stages as their abilities increase.

The stages to be learned are as follows:

STAGE 1

Ground school and pre-flight checks

At this stage the beginner will learn to do a pre-flight check for airworthiness proper radio installation and operation. Also to learn all control functions before any actual flying. You will also learn to operate your engine correctly and safely.

STAGE TWO

The instructor will complete all takeoffs and landings and assist the new pilot in learning orientation in straight level flight with shallow turns progressing to full figure 8's.

STAGE THREE

This stage will sharpen the beginners skills on stage two manoeuvres while learning medium banked turns slow passes and climb out procedures.

STAGE FOUR

Four will teach the beginner to taxi, leading to high speed taxi's through to takeoff's and to learn rectangular traffic patterns.

STAGE FIVE

The beginner will continue practising takeoff's and low speed landing approaches leading to competent landings.

STAGE SIX

This will be the continued practice of all previous stages, when they can all be completed with competence then the beginner may proceed with the wings test.

The Wings Test Shall Be As Follows

1. Start and tune engine, check for correct control movement, proceed safely to takeoff area.
2. Taxi and takeoff, followed with a procedure turn (90 deg. turn away from runway and pit area followed by a 270 deg. turn back to a parallel course with the runway.).
3. Two rectangular traffic patterns at altitude, one left circuit one right, maintaining level flight at all times.
4. Fly one horizontal figure eight in front of the flight line maintaining level flight.
5. Execute a rectangular traffic pattern preparing for landing.
6. Complete a landing and retrieve your aircraft in a safe manner.

Defaulting The Test

The test shall be considered defaulted if:

1. A crash or flyaway occurs.
2. A landing that is not deemed safe occurs.
3. If the test is not completed (due to lack of fuel engine flameout etc.)
4. Any major deviation from a manoeuvre without acceptable cause.
5. Direct violation of M.A.A.C. or club rules.

Notes to the beginner

Once a beginner's aircraft is ready to be flight-tested the equipment will be fully checked by a flight instructor, if a problem is found it may result in a delay of the first flight. It is wise for the beginner to check many of these items at home before attending the field.

1. Make sure engine and mount are securely fastened to the aircraft by putting firm pressure on them from all directions, looking for any movement that should not be there.
2. Check to see that fuel tank is properly supported by loosely packed foam, and that fuel lines and filters have no kinks or restrictions.

3. Check wing mounts are secure and you have an adequate number and size of rubber bands. (10 to 12 # 64 rubber bands). Or you have nylon bolts in good shape plus a couple of spares.
4. Check pushrods are connected securely to servos and control surfaces; also check them for free movement.
5. Tug firmly on each control surface to make sure all hinges are secure and free to travel in either direction without binding.
6. Check all servos and control horns are properly secured to airframe and all screws are firmly attaching servo wheel to servos.
7. Check that receiver and battery are wrapped gently in light foam rubber, also they could be inserted into small plastic bags to fuel proof them, then secured in place in the fuselage so they will not move around during your flights.
8. Check that the antenna is routed in a proper fashion for good radio reception, range check radio this is best done with two people, with your antenna collapsed you should be able to walk at least 100 to 150 feet (35 to 50 steps) from your plane without any jittering in the control surfaces. (This could be done at the flying field).
9. Ensure all control movements are in the correct directions, left and right are correct for ailerons, rudder and nose or tail wheels, up and down are correct for elevator and high and low throttle is correct. (Check with manual or contact an instructor.)
10. If you have a new motor, break it in. approximately 4 to 10 tanks of fuel or until motor runs reliable at all throttle settings. (Consult owner's manual or contact an instructor for directions, this step may be done at the flying field so as not to disturb neighbours.)
11. Check centre of gravity with the plans of the aircraft. (With a high wing trainer this should be done with fuel tank empty and wing mounted securely, lift the aircraft by the wing tips at the first spar or about 1/3 of the way back from the leading edge of the wing. The aircraft should balance on your fingertips with the nose slightly down 1/2 to 1".)
12. Check that all surfaces are warp free and correctly aligned.

If during the instructors inspection a fault is found do not feel bad you cannot fly that day, feel good that someone may have saved you a great deal of frustration and money. One small problem with any of the checkpoints could cause a crash resulting in loss of aircraft or injury to a club member.

LEVEL TWO

Once a junior member has achieved their wings he/she may wish to learn some basic aerobatic skills. They may wish to continue on to a second level of the wings program, the Intermediate Wings level. This level is not mandatory but voluntary by the club member. This level may be taken whenever the pilot feels he is ready to achieve this level. Note that not all aircraft are capable of all aerobatic manoeuvres and may not be suitable to learn this level on. Also some club instructors may not be able to teach this level, check with the instructors to find one that is capable.

Purpose of Level Two

The purpose of this level is to allow the pilot to achieve a higher level of skill in aerobatics and be taught these by qualified instructors instead of learning by trial and error. This level is the same as novice pattern competition recognized by M.A.A.C.

The Level Two Test Shall Be As Follows

1. Pre-flight check, start engine, taxi and stop forward movement (if possible)
2. On each consecutive pass the pilot must complete the following in order. You may have the instructor or an assistant read the manoeuvres to you but they may not assist you in any other manner.
 - a. Take off
 - b. Straight flight out
 - c. Procedure turn
 - d. Straight flight back
 - e. One loop
 - f. One roll or Immelmann turn
 - g. Rectangular traffic pattern
 - h. Landing (touchdown and stop forward movement on runway.)

Defaulting The Test

The test shall be considered defaulted if:

1. A crash or flyaway occurs.
2. A landing not on the designated runway occurs.
3. Any major deviation from a circuit or procedure that is required to be flown.

4. If the test is not completed. (Due to lack of fuel engine flameout etc.)
5. Receiving instructions or directions from anyone other than the designated assistant as permitted.
6. Direct violation of M.A.A.C. or club rules.

NOTE

Neither the Regina Windy Flyers Model flying club nor its members shall be liable for damages to the student's aircraft and/or equipment.