

## Rapid City Probusters New Pilot Handbook

# PILOT INFORMATION

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_

PHONE: \_\_\_\_\_

AMA#: \_\_\_\_\_

Feel free to contact any of the members for assistance. A membership roster is attached. Please bring this booklet with you when you come to the field to allow the instructor to monitor your progress.

### CLUB OFFICERS:

Doc McGuigan President  
Darrell Cassidy Vice President  
Denny Bernal Treasurer  
Ken Corrin Secretary

### INSTRUCTOR GUIDE

The following is a guide the Instructor should use for the purpose of training Student Pilots. The guide should be followed step-by-step, and the Student should complete each section before moving on to the next. This will help the Student to progress in an organized manner. The Instructor should work with the Student until the Student can perform each task without being helped. The first two sections do not require any flying skill. At the beginning of each item is an area where the Instructor can initial after the Student has successfully completed that item. If the Student did not complete any items, the Instructor should not sign off any items. The Instructor should keep in mind that he may not always be the one to instruct the Student, so it is very important to sign off on every completed item. The Student should not attempt to fly on his own until he has fully completed this program. This program is designed to help the Student learn to fly quickly and safely.

### EQUIPMENT CHECKOUT

- \_\_\_\_ 1. The equipment is installed properly and is in good working order. All servos are installed, all wires plugged in correctly, battery has a fresh charge, and the radio has been range tested properly.
- \_\_\_\_ 2. All clevises are connected, all pushrods are properly installed and do not bind, all servo screws are in place and servo rails are installed properly.
- \_\_\_\_ 3. Engine mount is properly installed. All engine mounting screws are secure and tight. The prop nut is tight and not cross threaded.
- \_\_\_\_ 4. All items/accessories are attached securely to the aircraft. The center of gravity is located as recommended by the manufacturer.
- \_\_\_\_ 5. The wing is properly secured with rubber bands or wing bolts. There does not appear to be any warps or flaws in the wing or the fuselage that may hinder the flight of the aircraft.

- \_\_\_\_ 6. The control surfaces move in the correct direction and all hinges are secure.
- \_\_\_\_ 7. The motor runs reliable and idles properly. The Student may want to make sure the motor is broken-in before moving on to the next section.
- \_\_\_\_ 8. Overall, the aircraft appears to be "airworthy" with no major flaws that will jeopardize the success of the first flight.

## GROUND SCHOOL

Congratulations!!!! You have successfully completed the first part of your training. It is now time to put all your hard work in the air. The Instructor will now get your airplane in the air and hopefully back on the ground in one piece!! Please remember we can offer only our best and sometimes accidents happen--**no guarantees! GOOD LUCK!**

- \_\_\_\_ 1. The Student has learned how to start the motor with ease and uses the proper safety precautions. (The Instructor may want to hold the aircraft).
- \_\_\_\_ 2. The Student has learned to taxi the aircraft safely without endangering other pilots at the flight line. The Student should be able to taxi the aircraft into position for takeoff at this point. The Student should also be able to taxi away from and toward himself/herself.
- \_\_\_\_ 3. At this point the Instructor should fly the aircraft and trim the controls (within reason). The Student should not yet fly but follow along with the Instructor to develop a "feel" for the airplane. PLEASE BE PATIENT!!!!
- \_\_\_\_ 4. Upon landing the aircraft, the Student and instructor should perform a post flight check.

## LEARNING TO FLY

- \_\_\_\_ 1. The Student should be able to accomplish maneuvers without any help from the Instructor. The Instructor should work with the Student so the Student will be able to do the following:

## MANEUVERS

- \_\_\_\_ a. Straight and level flight for a reasonable distance.
- \_\_\_\_ b. Left turns Right turns
  - \_\_\_\_ 90deg
  - \_\_\_\_ 180deg
  - \_\_\_\_ 360deg
- \_\_\_\_ c. Climb and Descent
- \_\_\_\_ d. Fly towards the Student/Pilot and turn left and right.
- \_\_\_\_ e. Move the throttle to full-middle-idle, maintaining a good flight altitude.

**\*\*\*\*\*It should be noted that this item may take some Students longer than others to complete. The instructor should work with the Student as much as possible before moving on to the next section. Be Patient.**

- \_\_\_\_ 2. The Student should learn to handle a stall at different throttle settings and should learn to handle a steep stall as well as a shallow stall.
- \_\_\_\_ 3. The Student should be able to fly figure "8's", circles, and should also be able to fly around the field. All of these maneuvers should be executed using left and right turns.
- \_\_\_\_ 4. At this point the Instructor may want to introduce a few simple aerobatics (loops, rolls, spins, etc.). This should depend on the type of aircraft being flown and the comfort level of the Instructor and the Student. This item is optional.
- \_\_\_\_ 5. The Student should be able to loop the airplane with little variance in heading. This item is also optional.
- \_\_\_\_ 6. The Student should now be able to take off. The instructor should help the Student as much as possible but the Student should not need any help in order to check off this item. The Student should be made aware of the importance of choosing the proper direction of take off. The Student should always take off from left to right or right to left (depending on wind conditions) and never straight out.
- \_\_\_\_ 7. The Student should now learn to execute a cross-wind take off.

## LEARNING TO LAND

It should be noted once again that this section may take some time depending on the amount of time the Instructor can spend with the Student. The Instructor should allow some time and even an entire flight session between items for the Student to

practice. This section should only be attempted after the Student has had ample time to practice the items from the Learning to Fly, section

- \_\_\_\_\_ 1. The Student should be able to fly the aircraft slow at idle for an extended period of time (1-2 minutes) at a reasonable altitude (3 mistakes high). The Student should be able to do this without stalling or falling off course too far.
- \_\_\_\_\_ 2. The Student should be able to work the throttle effectively and bring the aircraft back to the field to set up an approach.
- \_\_\_\_\_ 3. The Student should be able to set up an approach without landing. Be patient.
- \_\_\_\_\_ 4. The Student should be able to set up an approach and maintain a low and slow fly by across the field (about 50 feet of altitude).
- \_\_\_\_\_ 5. The Student should now be able to set up an approach and land on the field. Motor running is optional, after landing with power. Pay close attention to the Flight Line Rules.
- \_\_\_\_\_ 6. The Student should now be able to land the aircraft "dead stick". The Instructor should be ready at all times to bail out the student if necessary.
- \_\_\_\_\_ 7. The flight training is now complete and the Instructor should now allow the Student to practice a few of the items in the previous sections before going on to the next section.
- \_\_\_\_\_ 8. The Instructor should now show the Student a cross-wind landing. The Student should be aware of the landing pattern of left to right (or right to left) in relation to the flight line. This is why it is important for the Student to have basic understanding of cross-wind landings. GOOD LUCK!!!!

#### **FINAL CHECK-OUT AND SOLO**

- \_\_\_\_\_ 1. The Student should have read all of the safety and flight line rules for Propbusters and the AMA and have good practical knowledge of the use of the field.
- \_\_\_\_\_ 2. The Student should be able to start and taxi the airplane into position given no more than (2) attempts.
- \_\_\_\_\_ 3. The Student should be able to take off without veering sharply from side to side and maintain the proper direction on climb out.
- \_\_\_\_\_ 4. The Student should be able to fly around the field, do a figure "8" turning left and right, descend and climb, and perform a low "fly-by" (approx. 50-75' of altitude).
- \_\_\_\_\_ 5. The Student should be able to set up an approach without veering sharply from side to side and have ample control of the altitude of the aircraft. The Student should be able to land the aircraft onto the field with the motor running and also be able to and "dead stick". It should be noted that the Student does not have to keep the motor running after landing with power.

#### **CONGRATULATIONS**

You have been successful in learning to FLY! You are now able to fly on your own without the help of an Instructor! Feel free to come and fly anytime. We look forward to seeing you at the field. GOOD LUCK!! The Student should now be presented to the executive board as a member with full flying status. The Student should also be presented at the next meeting to be congratulated by the members.

#### **CERTIFICATION**

By signing below, the Instructor certifies that the Student has completed the flight course in full and has shown the ability to safely operate a model aircraft. The Student's signature indicates compliance with all club and AMA rules and safety codes.

\_\_\_\_\_  
Instructor

\_\_\_\_\_  
Student

\_\_\_\_\_  
Date

## RAPID CITY PROPBUSTERS FLYING FIELD

Janice Jensen field is located just north of I-90 at the New Underwood Exit. After leaving the interstate, turn north and go one half mile north. You will see our field as you crest the hill. Take the left onto the gravel road to find the gate. We float fly from New Underwood Lake which is just past the field to the west.

### GPS LOCATION:

N 44° 06.476'  
W 102° 49.908'

### APPROXIMATE ELEVATION:

2962 feet above sea level

**Please Check the Propbuster website for news and information:**

**[www.rcpropbuster.com](http://www.rcpropbuster.com)**

## Rapid City Propbusters Safety Rules

These rules are in addition to the Official AMA National Model Aircraft Safety Code. All model flying MUST be in accordance with this code.

### General Rules:

1. All pilots must fly on an established flight line as set per wind direction or consensus of pilots.
2. All pilots should be behind the safety barrier fence during normal flying.
3. All 72 mhz radios should display the channel number on which it is transmitting.
4. No taxiing in the pit area. Aircraft must be restrained until beyond safety fence.
5. No flying over pit, parking, or spectator area.
6. No Alcoholic beverages allowed.
7. No flying without current AMA and Propbuster membership.
8. All equipment must be in satisfactory condition and tested prior to flight.
9. All 72 mhz radio equipment MUST be AMA gold stickered (narrow band).
10. New pilots must be certified by an instructor before their first solo flight.
11. Identification must be present in models including name, address, and AMA number.
12. All 72 mhz radios must use the frequency control board at all times.
13. Maiden flights will be given priority status as requested by the pilot.
14. Dead stick landings or other aerial emergencies are given absolute priority.
15. Announce your intentions to land, takeoff, or walk on the runway to other pilots that are flying or are waiting to takeoff.
16. It is strongly recommended that members do not fly alone.
17. On 72 mHz, be EXTREMELY aware of your frequency and do not turn on your transmitter without checking other frequencies or without obtaining the correct frequency pin.

### Site Specific Rules:

1. Deliberate flying behind the flight line is prohibited.

2. Do not fly near or over the houses to the west.
3. No smoking except in an automobile.
4. The flight area should be occupied by no more than five airborne aircraft at any one time without the consensus of those present or a special event at which time the event director will determine the maximum number.

**Site Operational Rules:**

1. Flying is restricted to club members and their guests, provided that the guest has an AMA membership.
2. Cars are to be parked only in designated area.
3. On arrival at the field, 72 mhz radios should secure your frequency pin from the frequency board. If you have to share a pin you will have to work it out with the other member.
4. Do not aim prop wash at other modelers, their equipment or their autos.
5. New or repaired aircraft must be range checked, and it is recommended that someone other than you double-check the controls if practical.
6. Anything that you bring to the field you take with you when you leave.
7. Keep pets in spectator area.
8. If there is a float fly in progress at the lake, the field is closed except by permission of the FFD.
9. Last one to leave should check that all buildings are locked, check that nothing has been left behind and lock the gate.

These rules are required for everyone's protection and must be followed. Every member is responsible for their enforcement. Any infraction of these rules may result in revocation of your daily flying privileges. Additional infractions may result in a probationary period or revocation of club membership.

**Please remember, this hobby is fun, let's keep it that way**