

## **Additional Success Tips for Hobby Zone Firebird Commander Airplanes**

We at HobbyZone are dedicated to making your flying experiences the most successful and enjoyable that they can be. In order to do this, we have compiled a few extra tips that we have found will be very beneficial and should help your flights to be more successful.

### **I. Wind: A very important factor!**

- The lower the wind, the easier it is to learn!
- If you have not yet mastered the Commander, do not fly unless the winds are less than 6 mph. As much as you want to fly (and we don't blame you!), do not fly when the winds will keep you from having success.
- Always use your transmitter antenna ribbon to determine the wind direction, and launch directly into the wind!
- When you are flying, make absolute certain that you keep the plane over the part of the field that is upwind from you. Failure to keep the airplane upwind makes flying more difficult, and can cause you to lose your plane!
- When flying the airplane and keeping it upwind as directed, you will automatically have more time with the nose going away from you into the wind so that you can fly looking at the tail. For beginners, it is much easier to give steering direction like you are in the cockpit. When you are flying the airplane with the nose of it facing you, give yourself plenty of room to correct steering mistakes.
- Remember, the wind is usually faster the higher you get! The higher you allow the plane to climb, the more the winds will affect the airplane.
- A common mistake that many newcomers make with the Commander is to try and fly the airplane back to you, against the wind, by giving it full throttle. When you give the airplane throttle, you are making it climb (and making it smaller and harder to see). This means it may encounter even stronger headwinds! To make progress against a headwind, reduce power (or glide) to descend to a lower altitude while steering into the wind.
- The plane's speed in steady level flight is nearly constant whether at full power, or no power! The main thing that changes is whether the plane is climbing or descending.

- One tip that helps some beginners: If you are trying to fly the plane toward you, pushing the steering stick ‘toward the low wing’ will cause the plane to level out.
- Remember to always land directly into the wind as well. Failure to do so will cause the nose of the plane to drop, the tail to rise and cause a likely crash.

## II. General Flying Tips:

- Make certain that you are very accomplished at flying your Commander in Standard Mode with the aid of Smart-Trak before you attempt to fly in Expert Mode. You should be able to fly successfully every time, including landings that are soft and smooth prior to attempting to advance to more aggressive flying in Expert Mode.
- Remember, once you are in Expert Mode and Smart-Trak has been disabled, you will have full control. This means that if you hold the sticks full over for too long, you can enter a spiral that may threaten your aircraft if you do not have sufficient altitude.
- After you have charged a battery, make certain that the battery remains warm until you need it. Do not allow the battery to be stored in a cold place or the performance of the battery will be greatly reduced (and may trigger the motor auto-cut circuit). If you have charged a battery pack more than 18 hours prior to flying with it, charge the battery again for 30 minutes immediately before you fly. If you have purchased the DC Peak Charger (HBZ1026), you can simply re-peak the battery.
- In Smart Trak standard mode, if you want to make tighter turns, simply “blip” the throttle (off-on) a few times while continuing to give the airplane the steering input. This will help you make tighter turns if needed.
- If you enter a spiral and fear that you may crash release both sticks. The plane will want to right itself. Releasing the throttle stick is a **must**. Continuing to give the airplane throttle when the nose is straight down will only cause the plane to dive even faster. If you are already clear as to which way you are turning, you can apply the opposite steering command to correct the flight faster. (Example: If the plane is spiraling to the right, give the plane left to correct). Do not give the airplane any additional throttle until the nose is level with the tail once again.
- If you are flying where there is only grass, you may want to remove the landing gear and have your Commander simply skid in for a landing. This will prevent your Commander from having the tail go in the air and damaging the wing or nose in the event that your landing is less than ideal. (Always used the landing gear if you are using X-port accessories!)
- Altitude: It is very important to fly at an altitude that will allow you to be successful. In general, we recommend that you fly at an altitude of approximately 100-200 ft. Flying too low will put more obstacles in your flight path. Also winds can be more turbulent

closer to the ground. Flying at an altitude of 150 feet or so will also allow you to see the plane better, meaning less of a chance to lose direction perspective which can lead to a fly away or crash. This height also allows for more time to correct pilot error. Once you are more familiar with the airplane, you can then choose to fly at higher or lower altitudes if you want to.

### III. Trimming Tips:

#### A. Turning:

- If you continually notice that the plane wants to turn better in one direction than the other, make certain the decals are down on the wings. If you notice they are beginning to lift, simply rub down the decals and use a small amount of tape if needed. (Also see the steps in the manual.)
- Prior to each flight, make certain that the trims are set to neutral. Then perform your pre-flight checks ensuring your plane is responding to the input you are giving your transmitter accordingly. If this does not happen, do not fly until the corrections are made. There are several sections in the manual that will advise you on how to make any needed trim adjustments/modifications.
- If you notice your airplane is not turning sharp enough in Standard Mode in one direction despite your transmitter input, make certain there is no slack in the lines when the controls are centered. (Example: for tightest left turning, no slack should be in the right line, for right turns, there should be no slack in the left line).

#### B. Porpoising (nose up and down oscillations):

- Constant or severe porpoising should be corrected by trimming the nose down as instructed in your manual. (If repairs have added weight to the tail, you may also add some weight in the nose.)
- If you notice that your airplane occasionally wants to porpoise (oscillate), pay careful attention to the timing of your throttle input. You can smooth out these oscillations by managing the throttle in a more- timely manner. Do not give additional throttle as the plane is sharply descending, but instead, add throttle as the plane is climbing and slowing down and reduce it if the nose is down and the plane is picking up speed. Often, just applying constant full throttle will smooth these out.
- Your Commander comes with a wing shim that fits between the bottom of the wing and the top of the fuselage (see page 23 of the Commander manual). This shim will cause you to fly faster due to the wing's reduced incidence angle. Use

this shim if you are experienced and choose to fly when the winds are gusting at more than 10 mph. Adding the wing shim can help reduce porpoising as well, especially in turbulent air. Note: Adding the wing shim will also cause the plane to fly faster, so be alert.

#### IV. Solutions to minor damage

- If you begin to notice that when you launch the airplane, it pitches quickly into the ground and it will not climb, there may have been some damage causing this. This may be especially true if you have had a recent crash or hard landing. Look inside the fuselage from the canopy opening and locate where the tail boom should be attached inside the plastic keeper (notch/cavity). This keeper can be easily located by looking into the fuselage just beyond the radio equipment. If you have found that the boom has indeed snapped out of the keeper, follow these simple instructions:
  1. Place the tail boom back into the keeper/housing. (Pressing on the bottom of the fuselage at the notch can help open it up to allow it to be snapped back in place)
  2. Find a long narrow stick (wooden dowel preferred)
  3. Mix up a small amount of 6 minute epoxy
  4. Carefully epoxy the top of the tail boom as well as the side area where the tail boom enters the keeper/housing making certain that none of the epoxy drips or comes in contact with the radio equipment.
  5. Let the epoxy properly cure. Once this is done, your Commander should be ready to once again take to the sky.  
(Some people have also made small holes above the boom and used a plastic zip tie to help secure the boom.)
  
- As noted in the manual, Packing tape and epoxy are good materials for minor repairs.