

PARKFLYERS.COM

# Hybrid-AIR

by Thayer Syme



Electric park flyer for land, sea and air

**W**ho can resist a seaplane? After almost 30 years of RC flying, some of my most vivid memories remain those about sitting on a dock on a warm summer evening with my toes dangling in the lake and a transmitter in hand. There is just something magical about flying off the water. The new Hybrid Air from ParkFlyers.Com offers you the chance to try out this unique side of our hobby with a very reasonable investment, and almost no assembly effort.

Almost everything you will need comes in one box. You only need to add a set of eight AA batteries for the transmitter. The kit even includes a 3S 1800mAh Li-Poly battery and dedicated Li-Poly wall charger.

The Hybrid-Air can be set up with removable wheels, but to be honest, I didn't bother. As soon as I saw this model, I knew I would dedicate it purely to flying off the water, and didn't want to complicate the prep work, or add the slight amount of extra weight, for a feature I didn't plan on using. If you are so inclined, adding the wheels really isn't much work. You simply epoxy plastic clips to the underside of the wing and snap the wire legs into them. You can then remove the gear whenever you want to head out to the lake.

This kind of flexibility will appeal to many pilots.

#### TIPS FOR SUCCESS

Glue the wing panels on one at a time to ensure that they properly align with the wing roots molded into the fuselage. I used five-minute Z-Poxy on my model, and cleaned any squeeze out with a paper towel and denatured alcohol before it could cure.

Balancing the propeller is very important. If the prop is out of balance, you can lose significant amounts of power just shaking the airframe. I balanced my prop using the Top Flite Power Point Balancer. After cleaning the obvious flash by scraping the prop with a single-edge razor blade, I carefully applied clear packing tape to the back of the light blade. With a little trial and error, I was able to get the prop running quite smoothly. It also was pulling harder, while drawing less current than before, and not trying to shake the model apart.

The canopy and upper motor cowl are attached with rare earth magnets. This is a simple and effective way to attach these parts,

PHOTOS BY WALTER SIDAS

#### SPECS

**PLANE:** Hybrid-AIR

**MANUFACTURER:** Art-Tech

**DISTRIBUTOR:** ParkFlyers.Com

**TYPE:** Amphibious electric RTF

**FOR:** Intermediate pilots

**WINGSPAN:** 36.5 in.

**WING AREA:** 240 sq. in.

**FLYING WEIGHT:** 15.5 oz.

**WING LOADING:** 9.3 oz./sq. ft.

**LENGTH:** 27.5 in.

**RADIO:** 4 channels required; flown with a Park Flyers R/C transmitter, Park Flyers R/C receiver, (4) Park Flyers R/C servos



**POWER SYSTEM:** BM 2408-21 brushless outrunner motor, 8x4 prop, 20-amp speed control, 3S 1800mAh Li-Poly battery

**FULL THROTTLE POWER:** 11.8 amps, 87.4 watts, 5.64 W/oz., 90.3 W/lb.

**TOP RPM:** 7,395

**DURATION:** 15-18 minutes

**MINIMAL FLYING AREA:** Ball field or pond

**PRICE:** \$184.99

**COMPONENTS NEEDED TO COMPLETE:** 8 AA batteries

#### SUMMARY

The Hybrid-Air is a compact park flyer that will be equally at home in your local sports field or pond. The unusual configuration gives it a unique visual appeal, and the ability to fly off the water. While not suitable for an outright beginner, this model does offer a lot of fun to the more experienced pilot.

## AIRBORNE

Take a good look at the configuration of this model, and think for just a moment what might happen when you throttle up. The motor sits high on a pylon, well above the aerodynamic center of drag. Below that, the fuselage is dragging in the water, creating even more resistance. Because of this layout, the Hybrid will not handle like a conventional design. Don't get me wrong, it is a lot of fun to fly, but I just want you to be aware of its unique personality before your first flight. The main consideration is that it wants to pitch forward with full power due to the thrust and drag.

Spend a little time with that first battery playing on the water. Get used to how it handles, what it takes to steer it at different speeds, and what it takes to get up on plane. The wing is very close to the water, and in this case, that is a good thing. It is very stable when maneuvering, showing no signs of wanting to turn over. In several sessions at our local lake, I have yet to see the wind catch the wing and upset the model as often happens with high wing models on floats. Once you feel comfortable, it is time to turn this boat into an airplane.

Throttle up smoothly while holding full up elevator, easing the stick forward again as you gain speed. Because of the short fuselage, steeply rising tail boom and high thrust line, don't be surprised if the model starts porpoising oscillation in pitch. With a little practice this can be controlled by balancing the elevator and power settings. Once it is skim-



ming across the tops of the waves, simply ease the stick back a little and let it rise off the water on its own accord. I have found that reducing the power ever so slightly at this point will help pick up the nose and complete the takeoff. Don't worry about the loss of power, this model has plenty in reserve. Climb to altitude and play around a little to get used to its handling. Its capabilities may surprise you.

The Hybrid-Air may be a flying boat, but that doesn't mean it flies like a barge. It is fully aerobatic, and capable of looping and rolling from level flight. Sustained inverted flight is no trouble, and with the thrust now well below the center of drag, it requires much less down elevator when inverted than a more typical model. The pitch trim does change with every power change, so you will find you are flying a combination of pitch and power throughout your aerobatic regime.

Instead of aerobatics, I have found the most challenge and enjoyment when simply cruising about as smoothly as possible, easing off the power a little to descend for a splash-and-go, and tickling in the power again to climb back out for another trip around the pattern. Little is as gratifying as smoothly settling onto the water then climbing back out again. I can practice this type of realistic flying until the batteries are depleted and still not be bored. Water is softer than hard ground and hence more forgiving to sloppy technique, but then again, every misstep also gets amplified by splashing spray and lingering ripples.

allowing easy access without tools. The only problem is that this is a seaplane, and these parts do not float on their own. I recommend attaching a few small bits of foam to the inside of these parts so that if they get knocked off or dropped at the lake they will not sink. I simply cut a few small sections from the box and glued them inside the parts with foam safe Zap-O CA. A sink full of water will let you know how much foam you need.

Think safety. If you are flying from a body of water of any size, please consider some

sort of retrieval system. Swimming after a model dead in the water can challenge even the strongest swimmers. A small canoe, inflatable boat, or even a fishing reel and tennis ball can save a lot of anguish.



The brushless motor and ESC are both mounted in the pylon. The cowl is also retained with magnets.



The servos and receiver, sealed in a balloon, are easily accessible through the main cockpit. The cover is retained with rare earth magnets.

## CONCLUSION

I encourage any pilot to try flying off the water at some point in their career. Whether you are an old hand looking for something new in the hobby, or are starting to get bored with your trainer, the Hybrid-Air from Park Flyers R/C offers a unique and enjoyable flying experience that you won't soon forget. 🌀

### Links

Park Flyers R/C,  
www.parkflyers.com,  
(732) 363-6181

ZAP is manufactured by Pacer Technology, www.zapglue.com

For more information, please see our source guide on pg. 177.