



**SPECS** 

PLANE: Waco UPF-7

MANUFACTURER: Super Kraft

**DISTRIBUTOR:** Kangke Industrial USA,

TYPE: 20% sport scale aerobatic biplane

FOR: Intermediate or advanced pilots

WINGSPAN: 72 / 64 in.
WING AREA: 1,480 sq. in.

**WEIGHT:** 224 oz. (14 pounds)

WING LOADING: 21.8 oz./sq. ft.

LENGTH: 62 in.

RADIO: 4 channels required with 6 or 8 servos; flown with Futaba 9C transmitter, Futaba 148DF receiver, 5 Futaba 148 servos (ailerons and throttle), 3 Hobbico Command CS-70MG servos (elevators and rudder)

**ENGINE:** 1.2 to 2.4 ci gas or glow; flown with Brison 2.4 gas engine, CH Electronics

muffle

**PROPELLER/SPINNER:** APC 18x10 and 20x8 prop, Tru-Turn 3.5-inch spinner

ignition system, Bisson inverted smoke

**TOP RPM:** 7,480 / 7,220

**FUEL:** Unleaded gas, Zenoah 2-cycle oil, 100:1

ONBOARD BATTERY: Futaba 600mAh NiCd, receiver; Duralite 2800mAh 7.4V Lithium Ion with Duralite 6.0V regulator, servos; Duralite 2000mAh 7.4V Lithium Ion with 5.1V regulator, ignition; I4C Isolator between batteries and receiver

**PRICE:** \$499.99

COMPONENTS NEEDED TO COM-

**PLETE:** a 4-channel radio with 6 servos is minimum. Computer radio with 8 servos is ideal, engine, 3 "Y" connectors, 4 16-inch servo extensions (servo for each aileron), CA and epoxy, 1.2 to 2.4 ci gas or glow engine, with fuel tubing and prop

# SUMMARY

Classic airframe

a more fun project for me to attack.

Jimmy Franklin's graphics expertly reproduced

Easy to construct

Wide open, easy access to all components

ING-I couldn't have picked a nicer day to fly for the camera. The temperature was comfortable and the winds were taking a nap. The 2.4ci Brison fired right up and was warm and ready to fly in a minute. Releasing the bird from the holddown, I taxied around to get the feel of the aircraft and to check for ground looping tendencies. I felt like I was driving an RC car with a prop. Just below liftoff speed it tracked straight with no ground looping. On one of the runs down the field, I just kept goin', pushing to full throttle and lifting off. I held in slight up ele-

vator, and the Waco climbed out straight and level, without incident. After I had some altitude, I made a few minor trim adjustments so the Waco flew straight and level, hands-off at half throttle. Bringing this bird home to roost is no more difficult than landing a large trainer. On final, I idled down, let her settle in, and then used throttle to control the rate of decent.



LOW SPEED—At slow speed, the Waco did the memory of the Golden Age proud. It is as graceful as it is pretty. Flying some lowspeed passes for the camera was like flying



comfortable with the Waco in a very short time. At stall, the beak of this bird mushed over without dropping a wing, and recovery just took some throttle and up elevator.

**PEED**—When flying fast, the Waco scoots around the sky exhibiting absolutely no bad tendencies. At full throttle, I pulled full up elevator and the only thing the Waco did was a perfect loop.

AEROBATICS—As soon as Walter had enough shots for the article it was time to have some fun. All of sudden I was Jimmy Franklin and it was show time! I did everything possible to tear up the sky, and this bird took everything I dished out. The net damage from all the loops, rolls, tail slides, avalanches, and maneuvers that have no names was a loose cowl. Some of the mounting screws vibrated out, but few drops of thread lock resolved this issue.

## **TIPS FOR SUCCESS**

The documentation is excellent with plenty of construction photos. There is no guessing about what to do or how to do it. My kit had an instruction addendum; the strut brackets were slotted. These slots allow you to change the incidence of the top wing to tune your aircraft to your flying style. These have to be bent to 80 degrees. A piece of scrap wood cut with an 80degree angle makes a good template for consistent bends.

If you do not use a computer radio and still want to mount the elevator servos in the tail (the easier of the two installations) a Futaba SR10 servo reverser will

help. This is an electronic "Y" harness that will reverse the direction of one of your servos so both elevator halves move in the same direction.

I ordered my Tru-Turn spinner for a 10inch pitch prop even though I started out with an 8-inch pitch. This gave me some room to play with.

If you go gas, use a larger tank than supplied. I used a Du-Bro #690, 32oz. tank with gas stopper. I would rather de-fuel after fly-



The Brisson 2.4 is a perfect engine for the Stearman. Easy starting, it provides plenty of power and a great sound in the air, and barely protrudes from the cowl.

ing than goin' dead-stick due to flying out of fuel. I tend to lose track of flying time when I am having so much fun. One of these days I'll program my transmitter countdown timer.

### CONCLUSION

A certain amount of expectation comes with previous experience with a product line. This is my sixth Super Kraft airplane and it sure lived up to my expectations. The Waco is not for beginners, but if you are a comfortable intermediate flier, you will be able to handle this aircraft. When you are ready to try something larger than the traditional .40-.60 size aircraft, and want a classic biplane, give Kangke's Super Kraft Waco a long hard look. ②

APC Propellers, distributed by Landing Products, www.apcprop.com, (530) 661-0399

Du-Bro, www.dubro.com, (800) 848-9411

Futaba, distributed exclusively by Great Planes Model Distributors, www.futaba-rc.com, (800) 682-8948

Kangke Industrial USA Inc., www.kangkeusa.com, (877) 203-2377

Tru-Turn, www.tru-turn.com, (281) 479-9600

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



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