

HOBBY LOBBY

Gee Bee Y

Fly this classic with gas, glow, or electric by Jason Carter



When most airplane enthusiasts hear the words “Gee Bee,” they think “death trap.” I always viewed the Gee Bees as great-looking planes no matter what the model, and I always wondered why they were so difficult to fly. With contrasting scalloped trim schemes and smooth, swoopy lines that echo those of the fat-fendered vehicles of the time, the Gee Bees are beautiful. Fewer than 40 Gee Bees of various models were produced, and most were destroyed in crashes that killed their pilots. Whether this was a design flaw of the Gee Bee or a matter of pilots pushing it beyond its limits by installing higher-horsepower engines, flying too fast and inducing flutter or just exhibiting inexperience in piloting, one thing can’t be disputed: the Gee Bees are good-looking.

Green Models now produces an 84.5-inch version of the Gee Bee Y Senior Sportster with NR718Y markings (distributed in the U.S. by Hobby Lobby). One of only two Gee Bee Ys produced, NR718 was raced by Florence Klingensmith in the 1933 Chicago International Air Race. As Klingensmith flew past the grand-



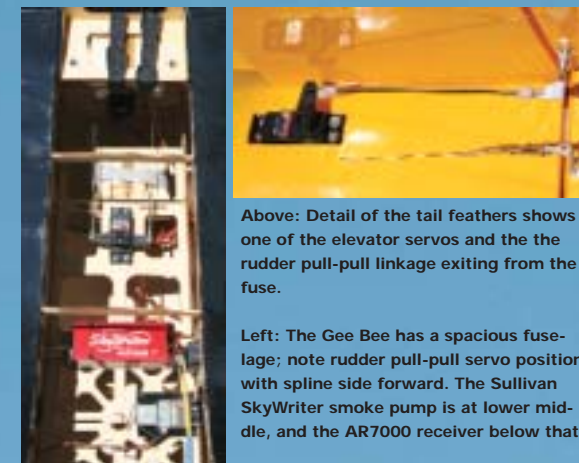
stands, spectators spotted a piece of red coming off the plane. Stories about the incident vary from covering coming off the fuse to covering coming off the wing. In the end, it didn’t matter. Klingensmith was killed, and NR718Y was destroyed in the crash.

Would the Hobby Lobby Gee Bee Y prove to be as difficult to fly as its 1:1 counterpart? There was only one way to find out: build it and put it into the air.

TIPS FOR SUCCESS

There are three switch-mounting locations on the Gee Bee. I used the two switch locations at the instrument cluster for the receiver and smoke battery switches, and I installed the switch and charge jack for the ignition battery in the forward portion of the fuse.

Aileron differential is important when you set the control throws on the Gee Bee, so you’ll need a programmable transmitter with this feature, or you’ll have to build differential into the linkage assembly by playing with servo-arm placement relative to the hinge line.



Above: Detail of the tail feathers shows one of the elevator servos and the rudder pull-pull linkage exiting from the fuse.

Left: The Gee Bee has a spacious fuselage; note rudder pull-pull servo position with spline side forward. The Sullivan SkyWriter smoke pump is at lower middle, and the AR7000 receiver below that.

SPECS

PLANE: Gee Bee Y Senior Sportster
MANUFACTURER: Green Models
DISTRIBUTOR: Hobby Lobby
TYPE: Sport scale
FOR: Intermediate to advanced pilots
WINGSPAN: 84.5 in.
WING AREA: 1,207 sq in.
WEIGHT: 18 lb. 12 oz.
WING LOADING: 35.7 oz./sq. ft.
LENGTH: 62.5 in.

RADIO: Spektrum DX7 transmitter, AR7000 receiver, (5) Hitec 635HB servos for ailerons, split elevator and rudder; (2) JR ST47 standard sport servos for throttle and choke
ENGINE: Zenoah 26ei with Slimline Pitts muffler
PROPELLER & SPINNER: Master Airscrew 18x8, Higley Safety Spinner Hub
TOP RPM: 7,100
FUEL: Gas mix 32:1 with Zenoah oil
ONBOARD BATTERY: 5-cell NiMH receiver pack, 4-cell NiMH ignition pack, 4-cell NiMH smoke pack

PRICE: \$429.90

COMPONENTS NEEDED TO COMPLETE: 4-channel radio with 5 servos, servo extensions, power system with propeller and spinner. Also used, Sullivan Skywriter smoke pump

SUMMARY

The Hobby Lobby Gee Bee Y Senior Sportster is a beautiful plane that flies gently. Takeoffs are uneventful, landings are slow and steady, and its in-air flight characteristics are similar to those of a trainer. Whether you power it with electric, glow or gas, the Gee Bee is spectacular.

PHOTOS BY JASON CARTER

AIRBORNE

You couldn't have asked for a better day for the Gee Bee's maiden flight. It was nice and sunny with very little wind and blue skies ahead of the front that was coming through. With the fluids topped off and the preflight complete, it was time to take to the skies.

After the Zenoah roared to life and had settled down to a nice, throaty idle, I taxied out and headed into what little breeze was present for takeoff. I climbed out, banked right and settled into level flight to check the trims and get the big bird tracking true. A few clicks of left aileron and a couple of clicks of elevator and the Gee Bee flew itself. I increased the throttle, climbed high, flipped the smoke on and did a quick victory roll. Overall, it was an impressive sight, but I thought that I had over-propped the G26 with the 18x8. Although the Gee Bee climbed well for a while, its climb rate tapered off. Performance improved after I switched to an 18x6.

Even though the plane wasn't flying particularly fast, it was still an impressive sight. I made several passes just feet off the ground. I was flying at Fort Gordon's Barton Field, and I found myself in the air at



the time that the flag was taken down. I throttled back almost to idle and pointed the nose slightly downwards to maintain flying speed. I flew past the soldiers and brought the Gee Bee in for a slow, close camera pass. I stayed at idle and flew as slowly as the big bird would allow.

It was at this point (about 10 feet above the deck) that I found the Gee Bee's stall point. Stalls are gentle; the tail actually started to fall out before the wings. I blipped the throttle just enough to get more air flowing over the tail surfaces and continued the slow pass. Then I realized how comfortable I was with this plane. It flies like a big trainer, but it has the cool looks of days gone by. With the Gee Bee's slow flight attitude filed away in my memory, I made a few more slow passes and let my big bird ham it up for the camera. With nearly 81/2 square feet of wing area on tap, there's plenty of lift in the wings. I brought the Gee Bee in for a nice three-point landing. (I know: mains and then tail). Overall, the Gee Bee has gentle handling characteristics and is a pleasure to fly.

ASSEMBLY

My early version of the Gee Bee came with a simple three-page instruction manual that consisted mostly of small colored photographs and very little text, but updated instructions should be available by the time you read this article. Assembling the Gee Bee starts with the strut and wing assemblies; strut construction is fairly simple:

remove the mounting plate from the struts, insert the struts into the wheel pants, slide the upper portions of the wheel pants over the lower sections, and reinstall the struts' mounting plate. The included 4 1/2-inch foam wheels are held in place on the wheel axle with two body clips per wheel. An additional two body clips keep the wheel axle located laterally within each wheel pant. The ends of the wheel axles are threaded to accept acorn nuts that tighten each wheel pant against the outer portion of the struts.

Hobby Lobby sells the Gee Bee as a "conversion plane" complete with mounts for its recommended AXI outrunner. Those who wish to go gas or glow will find a fuel tank included with the kit along with a neoprene fuel line and stopper for use with gas. Velcro straps are already installed in the fuse to hold the LiPo packs in place, but the fuse lacks an access hatch. This means that builders who choose to go the electric route will either have to modify the fuse or remove the wing for battery access.

I chose to use a Zenoah 26ei Slimline Pitts



muffler with a smoke fitting and a Sullivan Skywriter smoke pump. Instead of using the stock tank, I bought two Sullivan 16-ounce slanted tanks. I installed them next to each other inside the Gee Bee's nose, and they fit as though they were made for the application. I ran vent lines from the tanks to the firewall with Tygon fuel line and 1/8-inch brass tube. I installed Du-Bro Kwik-fill

fittings on each side of the fuse—one for smoke oil and one for fuel. With the tanks mounted in the nose, the rest of the space inside was now easily accessible for maintenance and wiring.

I installed a Hitec 635HB servo at each control surface and a couple of JR STS47 standard servos for the throttle and choke. The Gee Bee fuse has a throttle-servo mounting location on the right side of the fuse. I mounted the servo there and used a Nylon Sullivan Gold-N-Rod for the throttle pushrod. Since there isn't a mounting location for a choke servo, I either had to cut a slot in the cowl to operate the choke manually or come up with a servo mount. I dug through my bin of RC crawler parts and found a servo mount from RC4WD that is intended for use on the T-Rex 60 axles. I mounted the choke servo with 3mm hardware and nylon locknuts. I used a short length of 2-56 threaded rod and ball ends to connect the servo arm to a Du-Bro nose-wheel steering arm that I mounted on the shaft for the choke plate.

Differential is important, so I enabled flaperons and set differential in the DX7, and all was good in the world. I used two jacks on the AR7000 receiver for ailerons, so I needed an Expert Electronics reversing Y-harness for the elevator servos.

CONCLUSION

The Green Model Gee Bee Y from Hobby Lobby brings great scale looks to the airfield and gentle flight characteristics to the flight line. Couple its scale appeal and great manners in the air with a gas engine, a Pitts exhaust and a smoke system, and you have an aircraft that will impress everyone at the field. For me, the Gee Bee is nearly perfect: it looks great in the air, it handles well in the air and on the ground, and it commands attention at the field. If you've been debating whether to buy a new Gee Bee or this one in particular, don't hesitate. It's *that* nice. ☺

Links

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

Hitec RCD USA, www.hitecrd.com
(858) 748-6948

Hobby Lobby Intl. Inc.,
www.hobby-lobby.com, (615) 373-1444

Master Airscrew, distributed exclusively by Windsor Propeller Company,
www.masterairscrew.com (916) 631-8385

Slimline, www.slimlineproducts.com
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For more information, please see our Source Guide on page 169.