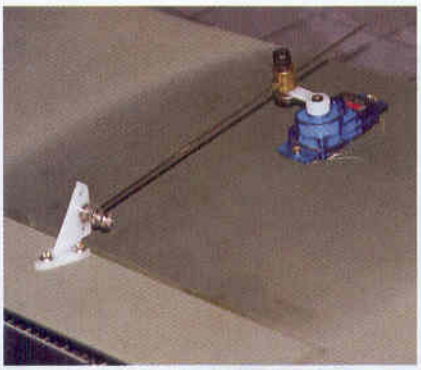

Each wing's aileron is activated by a separate servo which is mounted in the provided servo tray. HS-55 servos fit perfectly into the tray.

but the power produced by the motor makes it worth the additional weight.

Note that the unusual wing length and short fuselage make the Predator's CG very critical; for the best flight performance, take special care to make it slightly nose-heavy. I plan to add a small video transmitter to the nose to make it even more like its full-size counterpart. The camera will add weight to the nose and make the Predator more stable.

CONCLUSION

Most of the assembly was easy, but having the motor in the rear and the radio gear in front does require careful wire routing, and that takes some time and patience. It took me about five evenings to complete the Predator.

The body seems really short compared to the wingspan, but it has incredible lift for its weight. The Predator B UAV looks absolutely military—a distinctive look that's alluring—and flying it is a joy. The Predator is just great. ⊙

CONTROL THROWS

V-TAIL ±1/2 in.; no expo

AILERON ±1/2 in.; 30% expo

GEAR USED

DRIVE SYSTEM Cermark CEM 2814-1030 outrunner

RADIO SYSTEM Hitec Eclipse 7 w/Hitec Micro 555 receiver and 4 Hitec HS-55 servos and ESC

BATTERY 11.1V 1320mAh LiPo

See the Source Guide on page 92 for manufacturers' contact information.

IN THE AIR

The Predator can take off and land in an area about the size of a soccer field. It flies smoothly and looks great while doing it. Its long wingspan and relatively light wing loading make it a great thermal glider. It moves through the air with all the style and grace of its full-size counterpart. The military color scheme makes it easy to see in the air, and the length of the fuselage that's in front of the wings helps to make its orientation obvious when it's far away.

The takeoff is one of the Predator's strong points. I roll on the throttle, and it quickly gains speed before it jumps into the air in about 50 feet. It will climb out at a 45-degree angle and remains stable when airborne. It is important to keep the speed up so it doesn't slip-stall into a side. I used an 11.1V 1320mAh LiPo pack, and I have averaged 8- to 10-minute flights when I can't find any thermals to ride.

Landing the Predator is a very pleasant experience. Its shallow glide ratio allows it to sink very gradually back to earth, and a little flare bleeds off sufficient speed for you to touch down like a pro. I like to start my descent quite a way out and let it glide on in for a landing.

STABILITY The Predator is nice and stable in the air, but it is also very responsive to the ailerons. I added a little exponential to the ailerons to damp the speed of their response. At altitude, the plane is stable and responds very predictably to the controls.

TRACKING It willingly goes where commanded.

AEROBATICS This great-flying plane is not an aerobat, but you can do gentle loops with it. It is really more for finding and riding thermals.

GLIDE & STALL PERFORMANCE It glides exceptionally well, and if you find even a hint of lift, it can stay aloft for quite a while.

PILOT DEBRIEFING The Predator is really a thermal glider disguised as a cool military spy plane. It rides lift nicely, and you can soar all afternoon if the conditions are right. It gets plenty of attention at the flying field and is a real blast to fly. It you want a cool plane that flies great and attracts the attention of your flying buddies, this is the beauty for you.