Aviat's Husky Pup simplifies bush flying

Ready to play

BY NATHAN A. FERGUSON

Some airplanes are considered time machines because they're extremely fast. Others are time machines because they transport your mind. I'm thinking about the latter as I fly high above the Nevada desert in a little yellow Aviat Husky Pup, which through its simplicity sorts out the complex world, reducing it to stick, rudder, and throttle.

We blast out of Palm Springs, California, and head for the Pup's home in Afton, Wyoming, racing to beat a cold front and the sun on a short October day. The climb rate is an easy 1,000 fpm with two people on board, full fuel, and baggage on a warm morning at near sea level. There are no flaps, no constant-speed prop, and no navigational equipment except a portable GPS and a compass.

This is real flying.

The cross-country flight gives me an opportunity to evaluate how the first conforming airplane, representative of the production model, flies in its element: thin air, big mountains, and blue skies. With a carbureted, 160-horsepower Lycoming engine we're making a solid 114 knots groundspeed at 85-percent power with a moderate

PHOTOGRAPHY BY MIKE FIZER

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headwind. In no time we're over Las Vegas at 11,500 feet, the altitude reducing the great Luxor Pyramid to an almost flat surface. Lin Thomas, a company vice president, is in the backseat of the Pup and Aviat Aircraft President Stu Horn is following in the Pup's brother, a Husky A–1B. At least one of us, not to be pointing fingers, has to shrug off the urge to make an emergency gambling trip.

The airplane feels solid and robust as a good bush airplane should, but light and crisp on the controls. When trimmed properly, the Pup flies well on its own, not requiring too much effort unless it gets bounced around as the High Desert rolls up into ridges in southern Utah and the sun sends thermals radiating vertically into the sky thousands of feet above. The interior is comfortable and roomy, and the only nit I can find is a minor one—the location of the compass above the pilot's head, requiring me to stretch back to see it.

In the world of tailwheel flying, the approach to the airport starts with trying to figure out what in the heck the wind is doing. After dialing up the AWOS (automated weather observation system) several times, we know the winds are calm in Provo, Utah, the historic site of my first landing attempt in the airplane or what I have worked up in my mind as a Vegas crapshoot. But we don't trust the artificial voice over the radio. Catching a glimpse at the limp windsock makes me, a relatively new tailwheel pilot at the time, feel better. Time to roll the dice. I quickly find out just how slippery the Pup is, behaving more like a glider than an airplane. In calm winds, Aviat recommends a minimum final approach speed of 52 knots, a speed at which the controls become uncomfortably sluggish until you get used to them. Without flaps, I come in high and fast, requiring some power to arrest the descent rate for a semi-beautiful, 69-percent-perfect three-point landing. With its 43-knot stall speed, the Pup comes in slow and doesn't eat up much runway.

After picking up fuel we fly through Provo Canyon and then it's almost a straight shot to Afton as the headwinds slowly pick up. With the throttle shoved forward at 8,500 feet, paralleling the Wasatch Mountains to the west, we make it to Afton before civil twilight and my second landing is, to my surprise, a greaser. Our average fuel burn was around eight gallons an hour out of the two 25-gallon wing tanks. After six and a half hours in the saddle, though, I don't have any aches or pains, and the airplane is beginning to grow on me in ways that only a tube-and-fabric tailwheel airplane can.

With the Pup, Aviat has continued in the heritage of building fun airplanes, meaning they are tailwheel configured and respond like puppets on strings, yet are hardworking enough to keep an eye on cattle. The Husky line, conceived as an improved Piper Super Cub, with its modern features, is a more utilitarian kind of airplane compared with Aviat's eye-crossing aerobatic Pitts Special. Huskies are flown by the likes of Chuck Yeager and Harrison Ford. The Pup is designed as a variation on the Husky theme in response to buyers who wanted a simplified and less expensive airplane, going for a base price of $115,535 compared with the A–1B that starts at $139,700 (in 2003 dollars). The base model day-VFR-only airplane we are flying is equipped with a Horizon Instruments digital tachometer, Becker radio, and Garmin Pilot III GPS, but it has no gyros or turn coordinator. Many options on the regu-

lar A–1B, such as the aft baggage compartment, are not available on the Pup because of the change in the center of gravity from the lighter engine and fixed-pitch prop up front. Some options will be available in the future, although Aviat didn't intend for the Pup to be an IFR airplane, unlike its more powerful brother.

The Pup was certified in August 2002 under an amended Husky type certificate. The original A–1A was introduced in 1987, followed by the A1–B with its 90-pound maximum gross weight increase. Huskies are not currently subject to any airworthiness directives, and the Pup has fewer parts so there's even less to go wrong with the airplane. Aviat plans to build a dozen Pups for the first year of production.

Husky owners have rated the airplane high for fit and finish and attention to detail. To keep it looking nice, Aviat shields the cockpit area with metal skins for those forays to favorite fishing spots on scrub-brush strips and for float fly-

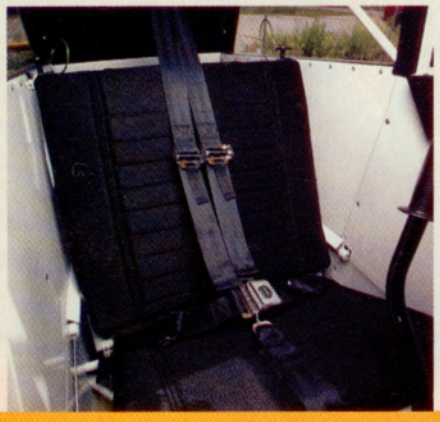
With its light weight and 160-horsepower engine, the Pup has plenty of punch to get you in and out of the backcountry. And with its mechanical simplicity, there isn't a lot to go wrong or break.

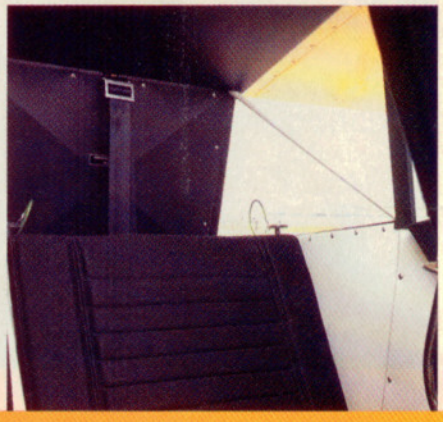
airplane should....

ing, while the rest of the airframe is covered in fabric. All the fittings are beefy enough for backcountry work.

When I first saw the Pup from a distance I knew there was something different, but what? A company representative pointed out that it has a different cowling than a regular A–1B, a modified curvy one borrowed from the Aviat Eagle kit biplane instead of the flatter Pitts version on its predecessor. Besides the sleek cowling and lack of flaps—eliminating the need for exposed flap hinges and gaps between the flaps and the wings—the Pup has another drag-reducing trick, redesigned wing tips. To test out the new wing tips, company test pilot Mark Heiner flew the Pup with the old upturned version on one wing and the new more efficient down-turned version on the other. By taking his hands off the controls, he found that the airplane did what he thought it would do; it turned toward the draggy old-style wing tip the way a canoe turns if you stick a paddle in the water as you float along. The wing tips, coupled with the rest of the changes, enable it to actually cruise a couple of knots faster than the 180-hp A–1B, although the more powerful airplane edges out the Pup by a few knots in top speed. This is not to say that the extra power and constant-speed prop don't make a big difference, particularly in the mountains. The A–1B takes off in less than half the distance of the Pup and climbs more than 30 percent faster.

The plan is to fly the airplane some more, but the cold front brings light snow and destroys visibility over the Star Valley for the next few days. A cleaning lady at the motel I'm staying at says, "We have two seasons in Wyoming: winter and hunting." Can't argue with that. But later Horn and I are able to wring out the Pup during a hole in the





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bad weather. There is so little to do in the Pup during runup that you feel like you forgot something.

I learn to fly the airplane the Aviat way. Soloing from the front seat, the company suggests taking off in the three-point position and letting the airplane leap into the sky when it's ready to fly. It's hard to believe there's only 160 hp under the cowling, and this is at an airport elevation of 6,201 feet. From his experience as a Pitts pilot, Horn likes to lift the tail about a foot on takeoff to get better visibility, particularly when he's flying from the back with two on board. Regardless of whether you keep the tail on the ground or raise it slightly, the visibility is good up front and the takeoff run is short enough that there isn't much time to contemplate whether you saw Elvis.

We maneuver around the valley and the airplane is remarkably stable, even in cross-controlled situations. Without flaps, this is a good thing, because landings in the Pup require a slip until you get used to the proportions and account for the wind. This is also part of the fun. Like a puppy, it demands a lot of attention and in return you get a lot of joy. Pretty soon our hole closes up and it's time to stop playing with the Pup.

I meet up with Horn later in the week in Heber City, Utah, to play with the Pup some more. The airplane has gentle stall characteristics; it stumbles, then goes back to flying with minimal fuss. The Pup has a lot of adverse yaw, requiring the pilot to lead off with the rudder when executing a turn to make it extra clean, another gliderlike quality. Horn, who is also a glider pilot, has me practice a variety of tight power-off three-point landings—the way I like to do them—requiring steep slips so that we use aerodynamic forces to bring us down rather than the old power-reduction/flap-extension combination.

As we're messing around, the wind picks up, gusting up to 18 knots, 30 degrees off the nose. I have a healthy aversion to ground looping—especially when I'm flying serial No. 1—and am surprised to see how well mannered the airplane is. With a little crosswind correction, the robust landing gear plants the small tires on the asphalt. The next trick is to fly it back to the tiedown area in the swirling wrath.

After picking up some fuel, it's time for Horn to head back north to the factory as storm clouds are making a mess of the big blue canvas. He'd better hurry. The days are growing shorter and even the Pup needs to rest. AOPA

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was something different, but what?

The Pup is a happy little airplane that leaps from whatever surface you happen to be flying from and takes to the sky in a hurry. It's as playful as it's sturdy.

i Links to additional information about Aviat aircraft may be found on AOPA Online (www.aopa.org/pilot/links.shtml). Keyword search: Aviat.

SPECSHEET

Aviat Husky Pup
Base price: $115,535
Price as tested: $115,535

Specifications

Powerplant	160-hp Lycoming O-320-D2A
Recommended TBO	2,000 hr
Propeller	Sensenich 2-blade, fixed-pitch, 74-in dia
Length	22 ft 7 in
Height	6 ft 7 in
Wingspan	34 ft 10 in
Wing area	183 sq ft
Wing loading	10.9 lb/sq ft
Power loading	12.5 lb/hp
Seats	2
Cabin width	2 ft 4 in
Empty weight	1,153 lb
Empty weight, as tested	1,172 lb
Max ramp weight	2,000 lb
Max gross weight	2,000 lb
Useful load	847 lb
Useful load, as tested	828 lb
Payload w/full fuel	547 lb
Payload w/full fuel, as tested	528 lb
Max takeoff weight	2,000 lb
Max landing weight	2,000 lb
Zero-fuel weight	1,153 lb
Fuel capacity, std	52 gal (50 gal usable) 312 lb (300 lb usable)
Oil capacity	8 qt
Baggage capacity	50 lb, cu ft

Performance

Takeoff distance, ground roll	683 ft
Takeoff distance over 50-ft obstacle	1,198 ft
Max demonstrated crosswind component	15 kt
Rate of climb, sea level	1,050 fpm
Max level speed, sea level	128 kt
Max level speed, 7,000 ft	122 kt
Cruise speed/endurance w/45-min rsv, std fuel (fuel consumption) @ 75% power, best economy, 7,000 ft	113 kt/6 hr (45 pph/7.5 gph)
Max operating altitude	17,000 ft
Service ceiling	17,000 ft
Landing distance over 50-ft obstacle	1,658 ft
Landing distance, ground roll	464 ft

Limiting and Recommended Airspeeds

V_R (rotation)	48 KIAS
V_X (best angle of climb)	58 KIAS
V_Y (best rate of climb)	61 KIAS
V_A (design maneuvering)	103 KIAS
V_{NO} (max structural cruising)	103 KIAS
V_{NE} (never exceed)	133 KIAS
V_{S1} (stall, clean)	43 KIAS

For more information, contact Aviat Aircraft Inc., 672 South Washington Street, Post Office Box 1240, Afton, Wyoming 83110; telephone 307/885-3151; fax 307/885-9674; or visit the Web site (www.aviataircraft.com).

All specifications are based on manufacturer's calculations. All performance figures are based on standard day, standard atmosphere, sea level, gross weight conditions unless otherwise noted.