

# Utility aircraft

## Quest Kodiak: A mountain rocket

When you absolutely, positively have to get off that mountain

BY ALTON K. MARSH

**Q**uest Aircraft Co. pilot Kelly Mahon pointed out a 1,000-foot section on the approach end of the runway at Sandpoint Airport, Idaho, and then landed his company's Kodiak utility airplane in less than 500 feet. Once stopped, he set the flaps to 20 degrees, promised to be off before the 1,000-foot marker, and invited me to follow through on the controls. This wasn't a stunt; it's a requirement for any turbo-prop destined for the backcountry.

I jammed my feet into the toe brakes as the power setting on the Pratt & Whitney PT6A-34 engine climbed toward 1,200 foot-pounds of torque. Mahon called for release and the acceleration moved us back in our seats. Just as Mahon fine-tuned the power to 1,600 foot-pounds of torque (out of 1,795 available) we were off—it took only 300 feet, still 200 feet inside Mahon's self-imposed limit.

During the prototype's early flights Mahon said he routinely lifted off in 225 feet with 200 gallons of gas and four people aboard. The aircraft was lighter than it would be in service,

**S**everal piston- and turbine-powered single-engine utility aircraft are arriving in the marketplace. Two, one from Australia and another built by a New Zealand-Canadian partnership, are FAA-certified, while certification of the U.S.-built Quest Kodiak is in progress. A fourth, the Aerocomp Comp Air 8-52XL, offers a kitplane alternative (there are no plans for a certified production model). Here are four examples from this emerging group of aerial trucks. —The editors



PAUL BOWEN

### SPECSHEET

	<b>Quest Kodiak</b> Base price: \$1.111 million	<b>Comp Air 8 SS52X</b> Kit price: \$99,995 plus engine (\$350,000 as tested)	<b>GA8 Airvan</b> Base price: \$485,000 (IFR equipped)	<b>Pac 750XL</b> Base price: \$1.3 million
<b>Powerplant</b>	Pratt & Whitney PT6A-34 750 shp	Walters M601D turbine 657 eshp	Lycoming IO-540 K1A5 300 hp	Pratt & Whitney PT6-34 750 shp
<b>Max payload, full fuel</b>	1,256 lb	1,280 lb	1,273 lb	2,880 lb
<b>Takeoff distance, ground roll</b>	700 ft	600 ft	825 ft	886 ft
<b>Rate of climb, sea level</b>	1,700 fpm	1,500 fpm	790 fpm	1,600 fpm
<b>Cruise speed/range w/45-min rsv (fuel consumption)</b>	174 kt/6.7 hr/1,250 nm (282 gph/42 gph) (70% power; 10,000 ft)	184 kt/1,044 nm (37 gph) (max power; 21,000 ft)	118 KTAS/6 hr/730 nm (14.8 gph, no reserve) (normal cruise; 4,000 ft)	169 kt/5 hr/582 nm (45-min reserve) (max cruise; 10,000 ft)
<b>Service ceiling</b>	25,000 ft	21,000 ft	20,000 ft	20,000 ft
<b>Landing distance, ground roll</b>	750 ft	800 ft	580 ft	866 ft

**i** For complete specification information on each utility aircraft featured, visit the Web site ([www.aopa.org/members/pilots/utilityaircraft.com](http://www.aopa.org/members/pilots/utilityaircraft.com)).





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**Quest Kodiak**





The Quest Kodiak is expected to receive FAA certification this year and was expected to be tested on floats. Since these photos were taken, entry steps have been made for the copilot's door. While the airplane is marketed as a personal-use aircraft, it was primarily built for the special needs of hauling cargo into rough, unimproved airstrips.

since it had no interior or final panel configuration installed.

Then we flew to a grass runway hidden among some trees that is approached from inside a rocky river gorge.

The Kodiak had never been to Allison Ranch on the Salmon River in central Idaho before, and I was along for the first arrival. It is a restricted, private grass runway at the base of a mountain (but 200 feet above the Salmon River) that serves a missionary retreat.

The approach starts with an overhead pass just above the trees atop the 6,000-foot mountain peaks that line the Salmon River. Within sight of the ranch are peaks that reach 8,500 feet, so this is not a scud-running destination. You then parallel the river downstream (a downwind leg) and make a 180-degree turn to descend into the narrow gorge. You'll slow the Kodiak to 63 KIAS (fully loaded, the Kodiak approaches at 70 KIAS), and keep in mind that the 1,400-foot runway is 200 feet above the river.

Cozy up to the sheer rock wall on the right side of the river to make room for the turn to final, but not so close that you need to watch for wingtip clearance from the rocks. That distraction could kill you. Some pilots count dead trees called "snags" as they fly along the river—the third one on the right means you're ready to turn left to the runway—and other pilots look for the windsock that marks the 35-foot-wide runway. If the windsocks at the approach end and the opposite end are showing winds in different directions, better not land today.

The sun can be blinding. If you're not an early bird and the sun has risen higher than the peaks, you will be unable to see the runway. A go-around means you continue along the river, climb, and start all over. We had left Sandpoint at 5 a.m.

because Mahon wanted to be out of the mountains by 10:30 a.m., before the turbulence could start.

The windsock at Allison Ranch had been removed for the Kodiak's arrival just in case the aircraft's 45-foot wingspan needed extra room, and Mahon was using his knowledge of the area to find the runway. The landing took only a few hundred feet. Takeoff an hour later was accomplished in the opposite direction by first taxiing up a 400-foot upslope, then charging down the mountainside toward the 200-foot drop-off. The Kodiak, however, was off in a few hundred feet and had climbed above the mountains in short order at 1,700 fpm.

### Special niche market

The aircraft was designed to meet the special needs of missionary groups, but for the business plan to work, the aircraft must be a commercial success. Quest Chief Executive Officer Paul Schaller has targeted, in addition to the missionary and humanitarian market (good for perhaps 200 sales), the adventure segment (private individuals), the air-charter market, corporate users, and special-use aircraft (government agencies). At this writing, the company had received commercial orders of seven aircraft for personal use with three more sales pending, two orders from charter operators, two from small businesses, and commercial deposits from missionary groups for two aircraft.

Quest has an additional 15 noncommercial-sales \$750,000 deposits from international missionary groups that are members of what is called the Quest Team. Quest Team member deposits are available to the company for development of the airplane, but in return the members will purchase an aircraft at a



discount. For each discounted aircraft ordered, Quest needs to sell nine at full price to make up for the discount. The total budget for developing, flying, and certifying the Kodiak is set at \$25 million, and fund-raising efforts are still in progress. Certification costs are budgeted to be only \$5 million of that amount.

### Meet the customers

Franklin Graham, son of evangelist Billy Graham, operates Samaritan's Purse International Relief and uses several aircraft in his work. One of those in the future will be a Kodiak, and if the aircraft performs as expected he may purchase two additional aircraft to use in the high temperatures and altitudes of Sudan. What sold him was a demonstration in which Mahon took off in less than 300 feet and maintained a climb rate of 4,500 fpm to 1,500 feet. While Graham's organization operates Cessna Caravans, he said the Caravan doesn't have the short-field performance of a Kodiak. "I've watched



its development and it offers quality plus toughness," Graham said. An enthusiastic pilot, Graham is type-rated in the organization's turbine DC-3 and flies a Cessna 185, but his favorite is his 1956 160-horsepower Piper Super Cub.

Another Kodiak customer, Salmon Air in Salmon, Idaho, which operates to backcountry destinations with 13 airplanes, including Cessna 206 Stationairs, Piper PA-34-350 Chieftains, and a Britten-Norman Islander, has placed an order for a Kodiak. JoAnn Wolters, former owner of Salmon Air and co-owner of a company that will lease aircraft to Salmon Air, said she and her husband, Dan Schroeder, are buying one with options for two more. The main reason is the Kodiak's TKS icing system (anti-icing fluid seeps through microscopic holes in the leading edges and is routed to the propeller). While it is smaller than a Caravan (maximum gross weight is 1,250 pounds less), the engine has 75 more horses, and it can take off from a backcountry landing strip at maximum gross weight.

#### Meet the designer

The Kodiak began in 1985 when Mission Aviation Fellowship pilot David L. Voetmann met Tom Hamilton, designer of the Glasair and GlaStar, and described an airplane design needed in the bush country of Africa. Hamilton has done some mission work in the past and went to work on a design. Yes, the Kodiak looks a lot like a Caravan, but is not based on it, Hamilton said. Hamilton described several of the aircraft's main features:

- The aircraft has a discontinuous leading edge near the wing tips. The leading edges droop to keep the outboard wing flying through a stall.
- The cowl is pointed to maximize takeoff thrust, and the four-blade, 96-inch propeller contributes to that goal.
- The propeller has 19 inches of clearance for taxiing in rough terrain.
- The wingspan was restricted intentionally so that the aircraft could turn in the tight confines of small landing strips.
- The exhaust stacks face rearward. If the stacks faced downward, they might ignite tall grass in the backcountry.
- The gear was designed to be removed easily for a quicker conversion to float operations. The wing struts and engine mounts were designed from the start to accept float landing loads.

#### Marketing strategy

There are four options packages that are still in the planning stage. The first is the

basic airplane. The second is a utility airplane that can be quickly changed from cargo to passenger service or half and half. The third is the Adventure Package, which has more of a sport-utility-vehicle interior. It will have a durable interior so you can go fishing and throw your fish into the back and not damage the interior. The last is the executive or VIP option with a luxury interior. "We will have certain suggested options to match each of those packages. We don't have prices yet," Schaller said.

The Garmin G1000 glass cockpit will be standard equipment on the Kodiak.

Certification is expected to be completed in the first quarter of 2006. Production rates were expected to be 36 in the first two years, and one a week after that.

#### The flight test

I did slow flight, stalls, and steep turns. It's trucklike—after all, it is a cargo air-

plane and a people hauler, where stability is a plus. There were long periods of time when I could leave my hands and feet off the controls, yet there was no autopilot. When doing stalls, I first used the conventional method of raising a dropped wing with the opposite rudder (thinking the ailerons would be ineffective at that point), but learned that thanks to the discontinuous leading edge you can use the ailerons to raise the wing.

My notes at the time say something about a "flying bank vault" because of the aircraft's toughness and sturdy construction. But if it's a bank vault, it's one with a rocket engine.

For more information, contact Quest Aircraft Co., 1200 Turbine Drive, Sandpoint, Idaho 83864; 208/263-1111; [www.questaircraft.com](http://www.questaircraft.com). **AOPA**

E-mail the author at [alton.marsh@aopa.org](mailto:alton.marsh@aopa.org).

## Aerocomp Comp Air 8: Build to suit

### A kitbuilt turboprop, as you like it

BY JULIE K. BOATMAN

**T**he Merritt Island, Florida-based Aerocomp is making a niche for itself in the kitbuilt market with a buffet-style inventory of airplanes, from the two-place Merlin (the first kit it offered—now classified under the

new Experimental Light Sport Aircraft category) to a very light jet currently in flying prototype.

The Comp Air 8, the company's do-all midline model—powered by a Walters 601D free-turbine engine driving a





three-blade Avia V508 (or optional five-blade V510) propeller—is a tough airplane for the do-it-yourself buyer.

### Composite roots

Ron Lueck was a young buck flying the Air Shark, a floatplane he codesigned with his Navy-pilot father, back in 1987 at the Sun 'n Fun Fly-In. In fact, he set a speed record for amphibious aircraft in its class during the show that year. While Lueck built four of those airplanes, he considered it a bit of a hot rod to market to the average builder.

Local real estate developer and pilot Steve Young, frustrated by operating costs and the middle-of-the-road performance of the production aircraft he had owned, teamed up with Lueck to build an Air Shark. After completing the project, the pair identified a niche in composite aircraft floats, developing a design that was—and remains—remarkably efficient, dubbed SuperFloats.

The two also saw opportunity in the kitbuilt industry. Their first design, the Merlin, which debuted in the late 1980s (when the company was known as Merlin Aircraft; Aerocomp was founded in 1994), was met with enough enthusiasm that they pressed on with composite four-place and six-place piston and turbine designs—parlaying their experience with fiberglass materials in float building.

To date, Aerocomp has sold nearly 600 kits, and Young estimates that 170 turbine-driven and 200 piston-powered aircraft have been completed and are flying. The model list keeps expanding, starting with the two-place, rag-and-tube Merlin and four-place Comp Monster; it continues with the piston-driven Comp Air 3; Comp Air 4; and Comp Air 6; and the piston- or turbine-powered Comp Air 7 and 7SLX; turbine Comp Air 8; and twin-vertical-stabilizer turbine Comp Air 10. Work continues on the Comp Air 12, a turbo-prop powered by a Lycoming T53 turbine engine (a variant of the same engine used on the Grumman OV-1 Mohawk), and the Comp Air Jet.

The company initially sold its kits as



A choice of configurations (both interior and panel) means you can make the Comp Air 8 match your mission.



tailwheel or float airplanes (amphibious and straight floats), but began offering a nosewheel option with the Comp Air 6 in 2000.

If anything, the kits appear overbuilt. During a walk-through of the various buildings on the Merritt Island Airport that comprise the Aerocomp factory, it became clear that each successive model is a stretched-out and plumped-up brother to the one before. The 8 comes in three widths: the 46-inch standard version, a 47.5-inch option, and a 52-inch-widebody that was test-flown for this article.

The kit components are manufactured almost exclusively at the facility in Merritt Island, then are either shipped off to the customer or, through the company's builder assistance program, the owner comes to the kit. Sky Build, which is on the field at Merritt Is-

land, is a separately owned business that Aerocomp has contracted with to provide a facility, tools, and expert assistance to builders who wish to construct their aircraft either more quickly or in a more structured fashion than they might be capable of alone.

### Stable, heavy flier

With my impression of the airplane as a utility hauler firmly in place, we took off from Merritt Island and made a sweeping right turn to climb out away from both the temporary flight restriction in place for the space shuttle Discovery (which sat on the pad about 17 nautical miles to the north of the Merritt Island Airport) and the military airspace surrounding Patrick Air Force Base to the southeast. The 8 I was flying, N89RD, was a heavy version of the model, because of the stretched cabin and its well-equipped nature. The air-conditioning unit alone accounted for an additional 48 pounds.

Rotation and climbout was solid and stately—rather sedate compared to a later takeoff in the company's Comp Air 7 demonstrator, a veritable rocket. We managed to climb in excess of 1,000 fpm to the scattered cloud deck, at which point I dialed it back to spiral up through the layer at 700 fpm at 140 knots indicated airspeed (KIAS).



At slow speeds the adverse yaw was but a minor inconvenience (those long ailerons), and minimal rudder was necessary to keep it coordinated—a good thing because those pedals are heavy. While the controls were ponderous on maneuvering (which the company later attributed to an improperly installed aileron bushing), especially at higher speeds, this quality added to the airplane's stable feel in cruise.

At 5,000 feet we saw 155 KIAS at power settings of 682 degrees Celsius ITT (interstage turbine temperature), an  $N_1$  (fan speed) of 99.1, and 1,930 propeller rpm at a fuel flow of 35 to 37 gph. Max ITT is 690 degrees C. Bringing ITT back to 662 degrees C and rpm to 1,860 only cost us 2 knots. Lueck reports a maximum of 185 knots true airspeed (KTAS) at 15,000 feet, and 193 KTAS at 21,000 feet, the airplane's service ceiling.

Slowing down to traffic pattern speeds posed no problem—the flaps are reasonably effective and slips are allowed if necessary. Going from 150 KIAS to 100 KIAS for the downwind leg involved pulling back the power; prop rpm also can be dialed back for inspired descents. Lueck had me acquire 80 knots for final, and the airplane responded well. Touchdown was normal, on the mains followed by the nosewheel, and we easily stopped within 2,000 feet by use of beta only.

Taxiing in required use of differential brakes and took a little getting used to. The biggest ding I could find was the brakes—they just weren't effective enough for both the idle power setting and the weight of the airplane. Lueck admitted that more powerful brakes were in order for the heavier Comp Air 8.

### Power to the people

Aerocomp offers the Czech-built Walters engine in two states. The first is an "on condition" state, in which the engine has been pulled from commercial service in Let 410 turboprops used by Eastern European, African, and South American operators. While the engines are relatively low time (and cost accordingly—current price is \$58,995 including accessories and auto start system), they aren't a known quantity, so Aerocomp also has teamed with engine rebuilder Diemech Turbines, of Deland, Florida, to offer a firewall-forward package complete with an IRAN (inspect and repair as necessary) reconditioned engine for \$87,995. Most customers opt for the peace of mind that the IRAN option brings.

Factory-recommended times between overhauls range from 2,250 to 20,000 cycles, depending on the type of service and engine series, from 1,500 to 3,000 flight hours, and five to eight calendar years. Aerocomp recommends an

IRAN reconditioning at 1,500-hour intervals, with 300-hour periodic inspections including oil change, filter and screen cleaning, compressor wash, and boroscope inspection.

### Panel options

Aerocomp has teamed up with Sebastian Communication, an avionics shop also on the field at Merritt Island. You may have seen Sebastian's work in these pages (the company installed the avionics package for the 2004 AOPA sweepstakes Twin Comanche; see "AOPA's Win-A-Twin Sweepstakes: Black Box Bonuses," October 2004 *Pilot*). Standard avionics from Garmin, PS Engineering, S-Tec, and Chelton are featured, along with additional choices from OP Technologies, which is a leader in the experimental electronic flight information system (EFIS) field, and from TruTrak, known for its Socerer autopilot. Installation is additional and must be counted against the 51-percent rule (in that 51 percent of the aircraft must be completed by the builder) if Sebastian performs the work.

For more information, contact Aerocomp Inc., 800 Kemp Street, Merritt Island, Florida 32952; 321/453-6641; e-mail [info@aerocompinc.com](mailto:info@aerocompinc.com). AOPA

E-mail the author at [julie.boatman@aopa.org](mailto:julie.boatman@aopa.org).

## GA8 Airvan: Reliable workhorse

A heavy hauler that  
minds the bottom line

BY STEVEN W. ELLS

**C**hrysler's minivan changed the face of the auto industry when it was introduced in 1983. Gippsland Aeronautics' GA8 Airvan is too conventional an airplane to change the utility-airplane industry, but it certainly fills a gap between time-tested backcountry performers such as the Piper Cherokee Six, Cessna 206, and the bigger and more expensive Cessna Caravan.

While the Airvan may look conventional from the outside, maintenance technicians and dispatchers will quickly grow to love this airplane because the design is a well-thought-out blend of simple systems applied with a good







The GA8 Airvan cabin measures 4 by 4 by 7 feet (left). A one-piece cabin/cargo door slides forward on rails, giving unobstructed access to the 42-by-42.5-inch opening. It's legal to open the door in flight at speeds up to 100 mph. The GA8 Airvan is designed for bush-style operations with twin goals of utility and economy (below).

measure of ingenuity. At first glance, system after system appears to be constructed from crude 1930s-era technology. Why would a modern airplane company wishing to compete in the twenty-first-century market still have a 12-volt DC (direct current) electrical system, manually operated flaps, and fixed landing gear with a spring-cushioned nose landing-gear strut? Simply because the two designers of the Airvan—George Morgan and Peter Furlong—have seen many a revenue dollar lost when a system component, such as an electric flap motor or switch, fails and isn't easily field repairable. Take the 12-volt electrical system. It's impossible to find a 24-volt battery at remote landing strips in Australia, Alaska, or Argentina, but it's a certainty that there will be a 12-volt car or truck nearby. That all-too-familiar mechanic's lament, "What were they thinking?" will rarely be heard around an Airvan.

### The details

The Airvan is a strut-braced, high-wing, single-engine, eight-place airplane of traditional riveted aluminum construction. It's powered by one of Lycoming's tough and torquey six-cylinder, fuel-injected, 300-horsepower IO-540 K1A5 engines. The cabin is 4 by 4 feet and a little more than 7 feet long. Payload is advertised at 1,800 pounds or 180 cubic feet. The two cockpit doors open forward, pivoting 180 degrees to permit unlimited access to floats for docking and maneuvering. The passenger/cargo cabin has one huge opening that measures 42.5 by 42 inches. A single



handle opens the cargo door, which rides on a pair of sturdy fuselage-mounted rails that permit the door to slide forward along the fuselage and lock in an open position. This rail system is dependable, is lightweight, and prevents door damage during windy conditions. The door can be opened in flight at speeds up to 100 mph.

Fuel capacity is 92 gallons with 87.7 gallons usable. Full gross weight takeoff distance over a 50-foot obstacle is reported to be 1,800 feet—landing distance over the same obstacle is said to be

1,200 feet. Flying qualities are reported as "boring," which translates into stable and conventional.

The GA8 Airvan is certified under FAR 23, amendment 54. These regulations incorporate many safety improvements. For instance, certification required that the Airvan fuel system automatically balance fuel flow from the right and left wing tanks. The design philosophy at Gippsland accomplished this task using low-cost, readily available, FAA-certified, and time-tested carburetor parts from Precision Airmotive. There's also a regu-



latory requirement that the fuel-tank venting system be designed so that fuel cannot run overboard out of a tank vent when terrain requires parking with one wing lower than the other.

The Airvan isn't speedy but does have enough performance to hold its own. Harry Fenton is the U.S. representative for Gippsland Aeronautics and has quite a bit of Airvan time. "The Airvan can fly in and out of the same strips as a Cessna 206 but will carry twice the weight," said Fenton. The Airvan was certified by the FAA in mid-2003. In late 2002, the U.S. Civil Air Patrol (CAP) put a couple of Airvans through an extensive evaluation program in and around the mountains of Colorado—the CAP was so impressed that nine airplanes were ordered to replace its aging Cessnas and Pipers. Today the CAP operates 15 Airvans.

Sales efforts in the United States have been slow because of some disagreements between the manufacturer and the distributor. These were resolved late in 2005, so the chances of arranging for a test flight and buying an Airvan will soon increase. "There are 19 privately owned Airvans in the U.S. right now, and over 90 in service around the world," said Fenton. The airplane options package is still growing. "We have a belly pod, a heavy-duty 7.50-by-6 nose tire, and IFR certification right now. We're working with Lycoming on a turbocharged engine installation and with Wipaire on float engineering and certification. These are going to happen." An Airvan was delivered to Honeywell Bendix/King in Olathe, Kansas, in early January for autopilot engineering and certification.

Fenton went on about avionics, "Gippsland is very flexible—we've sold airplanes with one nav/com. The basic IFR avionics package is Honeywell Bendix/King. The price of the airplane with a KMA 24 audio panel, a KMD 150 GPS/multifunction display, a KX 165 nav/com, a KY 97A com, and a KT 76C digital transponder is \$485,000."

It's no minivan, but the Airvan fills the bill for those who need a tough, money-making, single-engine workhorse of an airplane.

For more information, contact Gippsland Aeronautics USA, Cottonwood Airport, 5105 Auburn Street, Rockford, Illinois 61101; 815/965-8037; [www.gippsaero.com](http://www.gippsaero.com).

AOPA

E-mail the author at [steve.ells@aopa.org](mailto:steve.ells@aopa.org).



## PAC 750XL: More than a skydiver's airplane

Quick turns are a specialty

BY STEVEN W. ELLS

**T**he PAC 750XL may not have traditional lines, but another crank-wing airplane didn't receive a rousing welcome either. That airplane, known as the F4U Corsair, went on to glory and fame.

The New Zealand-built PAC 750XL also has crank wings—it looks like the designer remembered that stable, well-mannered airplanes should have some wing dihedral, so the last 4 feet of each wing is slanted skyward. The 750XL is not as pretty as its crank-wing cousin, but it climbs like a monkey after a coconut, is simple to fly, and has proven to be a moneymaker.

### An airplane designed for skydivers

The 750XL is the result of two pilots who brainstormed a list of the qualities needed for a good skydiver's airplane. One of these pilots had emigrated from New Zealand and knew that New Zealand-based Cresco built tough, well-engineered airplanes.

The pair was soon on its way to the land of the kiwi with a feasibility study and a plan. The study revealed that the value of the existing airplanes used by skydiving drop centers was more than \$111 million and that 30 percent of the aircraft were turbine powered—and that no one was currently building an airplane for that market. Intrigued, Brian

Hare of Pacific Aerospace Corp., Ltd. (PAC) traveled to drop zones to investigate. His research convinced him that he could build an airplane for the world skydiving market. On March 10, 2004, 52 months after the initial drawings were finished, the PAC 750XL was certified under Part 23 by the FAA.

What features were on the list that started it all? There were some skydiver-only items such as a jump step, a pilot-controlled jump door, round-trip times of no longer than 15 minutes to 13,000 feet, an external rail—a "floater rail" in skydiver parlance—and reinforced tread areas on the left flap and wing, but many of the items were everyday working-airplane features. Try left and right crew doors, removable copilot seat and stick, FAR 23 certification, rugged interior, IFR certification, and a super-dependable Pratt & Whitney PT6-34 turboprop powerplant.

The PAC 750XL is a big fixed-gear airplane—nearly 40 feet long with a 42-foot wingspan. The airplane was originally certified with a maximum takeoff weight (MTOW) of 7,500 pounds and a useful load of 4,280 pounds. At the end of December, 2005, the FAA issued an emergency airworthiness directive (AD) that reduced the MTOW to 7,125 pounds. An ultimate load test conducted at PAC showed that the wings might not meet load requirements at the original





The PAC 750XL cabin door measures 50 inches wide (above). The simple panel features analog instruments (right).

MTOW. A PAC mod kit that addresses the AD calls for the removal of 14 rivets in each wing. These are replaced with bolts. The mod can be accomplished in the field by an A&P.

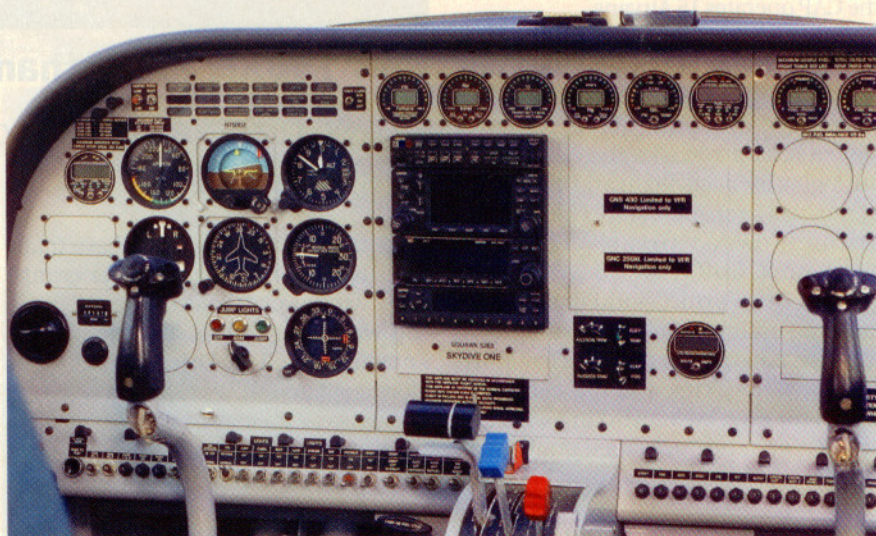
The cabin is 55 inches wide by 56 inches high by 158 inches long with a volume of 220 cubic feet. The cargo pod is large enough and strong enough to carry 50 4-by-8-foot sheets of half-inch-thick plywood in 113 cubic feet of volume.

Visibility is excellent and the airplane is very easy to fly. Cruise speeds average 155 to 160 knots.

### Jumpers boogie for the 750XL

Skydivers are a passionate group. They love to jump out of airplanes. But they're willing to pay only \$19 to be hauled up to 13,000 feet, which is the typical drop altitude at most jump zones. A critical profit-determining factor for jump-zone operators is the time it takes to get a jumper, or a full load of jumpers, which in the PAC 750's case is 17, to 13,000 feet and back down again to pick up another load. The PAC 750XL does this faster than any other airplane.

Skydivers celebrate by coming together in what they call a "boogie" to jump out of airplanes together. One of the big boogies is the 10-day-long World Free Fall Convention in Rantoul, Illinois. Last year Ray Ferrell and Phil Esdaile—the two pilots mentioned earlier—flew a PAC 750XL to Rantoul. They flew 239 loads and averaged 12 jumpers per load. "I now know that we can average four loads per hour to 13,000 feet," said Ferrell.



One reason for the quick turns is the fuel system. Fuel capacity is 221 gallons usable in four tanks. An automatic fuel load-leveling feature lets operators pump fuel into one main tank—this often takes place with the engine idling as the jumpers are loading up. "We can fill one wing main tank to 70 gallons and by the time we taxi to the end of the runway, the fuel load is evenly balanced," said Ferrell.

The airplane also has a very wide center-of-gravity range.

### Hidden beauty

Because of its experience gained producing agplanes, PAC goes to extraordinary lengths to protect the 750XL from corrosion. All aluminum is treated before being painted with epoxy paint. All external skin lap joints are treated with an additional sealer before riveting. Additional corrosion protection is applied before all holes are sealed at the factory.

The choice of engine instruments gives insight into the philosophy and serviceability of the 750XL. Rather than installing gauges that are only available from a single source such as the manufacturer, PAC chose to use off-the-shelf digital instruments from Electronics International, of Bend, Oregon.

"Analog flight instruments were chosen because they're easier to service in the field, and remote operators can't afford the loss of income if a glass panel goes black," said Esdaile. He and Ferrell are the U.S. distributors for 750XL.

"There are seven in the U.S. right now and 24 are in service worldwide," said Esdaile. "A VFR model will sell in the U.S. for \$1.3 million in 2006. An IFR version with the belly pod will cost around \$1.45 million."

There's a reason that Americans haven't heard too much about the 750XL. The company doesn't employ a large public relations firm. "We're modest in our goals because we want to make sure that we can meet them before telling everyone what they are. So far we've met all our goals," said Esdaile.

The most immediate future goal is an ice-protection system. For future updates and a closer look at the cranking airplane that has proven it can make money in the tough skydiver market, go to the Utility Aircraft Corp. Web site ([www.utilityaircraft.com](http://www.utilityaircraft.com)). It won't be long before the waiting line for a 750XL starts growing.

For more information, contact Utility Aircraft Corp., Post Office Box 1235, Woodward, California 95776; 530/750-3226; [www.utilityaircraft.com](http://www.utilityaircraft.com). **AOA**

E-mail the author at [steve.ells@aopa.org](mailto:steve.ells@aopa.org).