



Plus— View the video.



Where
flying is

'still fun'



Kenmore Air celebrates
the joy of flight every day

BY JASON PAUR

There are only a handful of days before the Memorial Day weekend and at the north end of Lake Washington just outside Seattle, there is a buzz of activity surrounding a group of de Havilland Beavers



Passengers wait to board one of Kenmore Air's DHC-3 Turbine Otters at Friday Harbor on San Juan Island (above). The dock is one of several "boarding gates" where regularly scheduled service is available in the San Juan Islands. Installing a freshly overhauled Pratt & Whitney Wasp Jr. on a de Havilland Beaver (right).



and Otters. The lake is more than 20 miles long and for more than 65 years its northern tip has been home to the largest floatplane operator in the country. With the unofficial start to the summer season just days away, Kenmore Air is busy preparing its fleet of floatplanes for the busiest time of the year.

A turbine-powered DHC-3 Otter is tied to the dock ready to make the short, six-minute hop to Kenmore Air's Lake Union terminal at the north end of downtown Seattle to pick up passengers going to Victoria, British Columbia. Two of the company's 10 DHC-2 Beavers also sit in the water with just more than six gallons of oil warmed up inside their radial engines. One is going to take a group of passengers north, up British Columbia's inside passage, while another will follow the Otter downtown before flying to the San Juan Islands.

For most people, including many visiting pilots, a Kenmore Air experience begins with a flight aboard one of the company's Beavers or Otters (hopefully in the right seat) to an idyllic waterfront destination. They may be heading to a fishing lodge or for a whale-watching trip, or simply a relaxing island getaway. But the experience of getting there is usually one of the more memorable parts of the trip.

"What's different about us versus the airlines," says company President Todd Banks, "is that a lot of people feel like their vacation starts here."

Flying is still fun

Kenmore Air is family owned and operated, and Banks is the third generation to work here. "Flying is still fun with us," he says.

After checking in for your flight, you can sit at one of the picnic tables by the water that serve as boarding gates of sorts. Another option if you have a few minutes is to look around at one of the more interesting airports in the nation.

Kenmore Air was founded on this spot by three high school friends in 1946. Reg Collins and Bob Munro had purchased a wrecked Aeronca K project in 1944 while working as mechanics for Pan Am. They rebuilt the 40-horsepower floatplane with hopes of going into business for themselves fixing small airplanes. But when their friend and pilot, Jack Mines, returned home at the end of World War II, the business idea expanded to include flight instruction and charter work.

Munro's son and one of his daughters—along with Banks, his grandson—continue to operate the business. And the mix of aircraft repair and restoration along with instruction and passenger service continues on the same lakeshore where the company was founded with the tiny, underpowered two-seat Aeronca.

Today as passengers walk to the check-in desk to get a head start on the holiday weekend, they still get a glimpse of the entire operation, just as visitors did in the early years. They stroll by a 10-passenger Otter sitting on its floats

on the pavement awaiting the installation of a 750-shaft-horsepower Pratt & Whitney PT6A-135. A few feet away a forklift is carefully positioning a freshly overhauled Pratt & Whitney R-985 Wasp Jr. on the firewall of a Beaver. A pair of mechanics stands on the floats, ready to bolt the 450-hp, nine-cylinder engine to the airframe. Behind a large sliding door a turbine Beaver is being completely rebuilt, from the reskinned airframe to new avionics. And a Piper Super Cub is ready to be put in the water for a student who has a floatplane lesson later in the day.

There's a lot to see as you wait for your flight. And it all adds to the atmosphere of the company that has grown from three friends and the Aeronca K, to a fleet of 20 floatplanes and more than 250 employees.

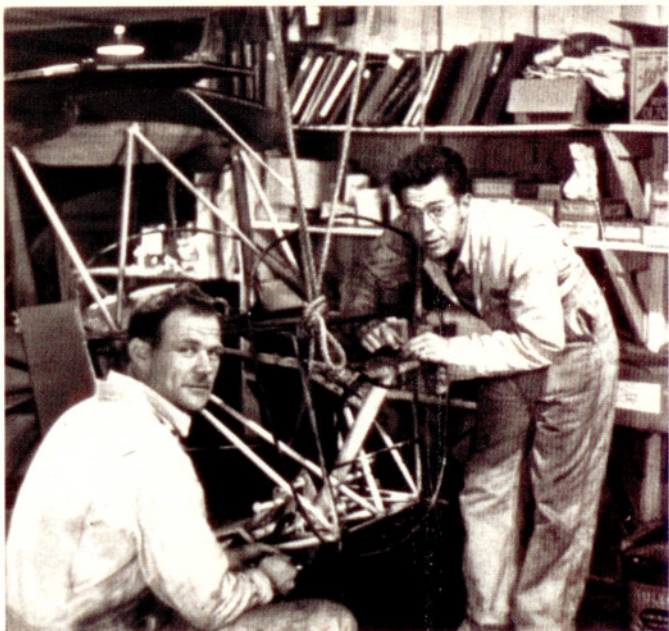
In addition to its own airplanes, the company maintains a large number of customer airplanes parked at its Lake Washington base. Kenmore also operates an engine rebuild shop that specializes in the R-985 that powers the Beaver, as well as the restoration shop that has rebuilt more than 135 DHC-2 Beavers over the years.

Kenmore Air's own floatplane fleet includes six turbine Otters, eight piston Beavers, two turbine Beavers, two Cessna 180s, and two Super Cubs. In addition to the floatplane operation, the company also operates Kenmore Express, which flies Cessna Caravans on wheels out of Seattle's Boeing Field.





The Munro children grew up on the Kenmore Air property—Leslie Munro Banks, office manager, and her brother Gregg, chairman and past president (above), circa 1960. Bob Munro (on left) and Reg Collins, co-founders of Kenmore Air, circa 1945 (right).



Today, turbine Otters—with their ability to carry 10 passengers—haul many of the 58,000 passengers who fly on Kenmore's floatplanes every year. But the Beaver has long been the workhorse of the fleet and continues to form the backbone of the company.

To the San Juans

One of the pilots who has plenty of time in both of the de Havilland floatplanes is Bill Whitney. After recently celebrating his fortieth anniversary as a Kenmore Air pilot, Whitney says he has flown more than 25,000 hours in floatplanes with the company. "It was supposed to be a summer job," he says, "but it was fun."

Whitney is 64 years old and still flies 500 to 600 hours a year—about half of what he says he flew in his early years. Like many people at Kenmore Air he wears more than one hat. A chief pilot in the past, he now is a quality control inspector for the company's EDO float manufacturing.

On a flight to the San Juan Islands, north of Seattle near the Canadian border, Whitney briefs his passengers sitting inside a turbine Otter before pushing the airplane off the dock. He hops into the left seat, buckles himself in, and pumps the flap handle a few times as he taxis away from the dock. Soon the big STOL plane is off the water

and climbing at 100 mph as it makes the left climbing turn to clear the bridge carrying rush-hour traffic on Seattle's Highway 99.

As we head north to Friday Harbor, Whitney checks the weather again.

"Wind on the dock is good," he says as we wait to hear the report, "off the dock, even just a little, can be tricky."

The winds are gusting to 17, off the dock.

Both the Beaver and the Otter are a delight to fly (see "At the Controls," below). They are stable, light on the controls, and designed to get off the water quickly. But like most floatplanes, they are giant weathervanes; docking in

At the controls

First flight as a Beaver pilot

Sitting on floats, a de Havilland Canada Beaver is an imposing airplane. But despite its size, here on the water the iconic seaplane—with a useful load of more than a ton—can be handled easily by one person.

Serial number 788, Kenmore Air's N6781L, is sitting at the dock at the company's base on Lake Washington. With the preflight complete, the airplane needs to be turned around and pushed out of a corner near shore before we can fly. After pinning the back of the left float against the dock, it's simply a matter of

grabbing the tail and slowly spinning the airplane around. Before it reaches the point of being perpendicular to the dock, it just takes a gentle push followed by a quick hop onto the float and an expeditious walk up to the front door to climb into the left seat.

Kenmore's chief pilot, John Govey, is sitting in right seat and offers a quick reminder of the start-up procedure as we continue drifting away from the dock.

"You need to get everything all set up because you don't have the luxury of time once you climb in," he said ear-

lier as we went through the checklist. "When you climb in, you have to start it and go."

Thankfully the wind is barely blowing and the experience is forgiving for a first-time Beaver pilot. With the center fuel tank selected and after a few quick push-pulls on the wobble pump and the throttle, I turn on the master switch, crank the starter through a few blades, and flip on the mags. With a gentle rumble the Pratt & Whitney R-985 Wasp Junior comes to life.

Continued on page 56



After departing Lake Union, a Kenmore pilot flies over Portage Bay (left) on the way back to the company's Lake Washington base, which is seen above, circa 1949. The well-worn power lever of a Kenmore Air Turbine Otter (below).

tricky winds is a challenge is for pilots at destinations with difficult parking.

"You know where you're going and you worry about docking the whole flight," Whitney says.

And there can be a lot of docking during the day. Kenmore Air pilots will often depart Seattle and fly six to 10 legs before returning home. "Fifteen legs is a busy day," Whitney says. Almost all of Kenmore Air's flights are saltwater destinations. Some are on open shores, some in sheltered bays and hills; mountains and trees all add to the challenge.

Arriving in Friday Harbor the wind has calmed down a bit, but it is still blowing off the dock. After a landing

so smooth the only indication we had touched the water were small bumps from the waves, we approach a dock filled with sailboats and yachts. Whitney slides into the right seat, where there is no yoke, and works the throttle and pedals to nestle the airplane up to the dock. After a quick go around, he gets the giant weathervane lined up, and while it continues to coast toward the dock, Whitney hops out and quickly ties off one of the lines attached to the float.

With a smile he helps passengers off of the Otter, as the next group stands waiting to return to Seattle.

"When I heard it was gusting to 17, I thought, 'Oh man, I'm in for it,'" he says.

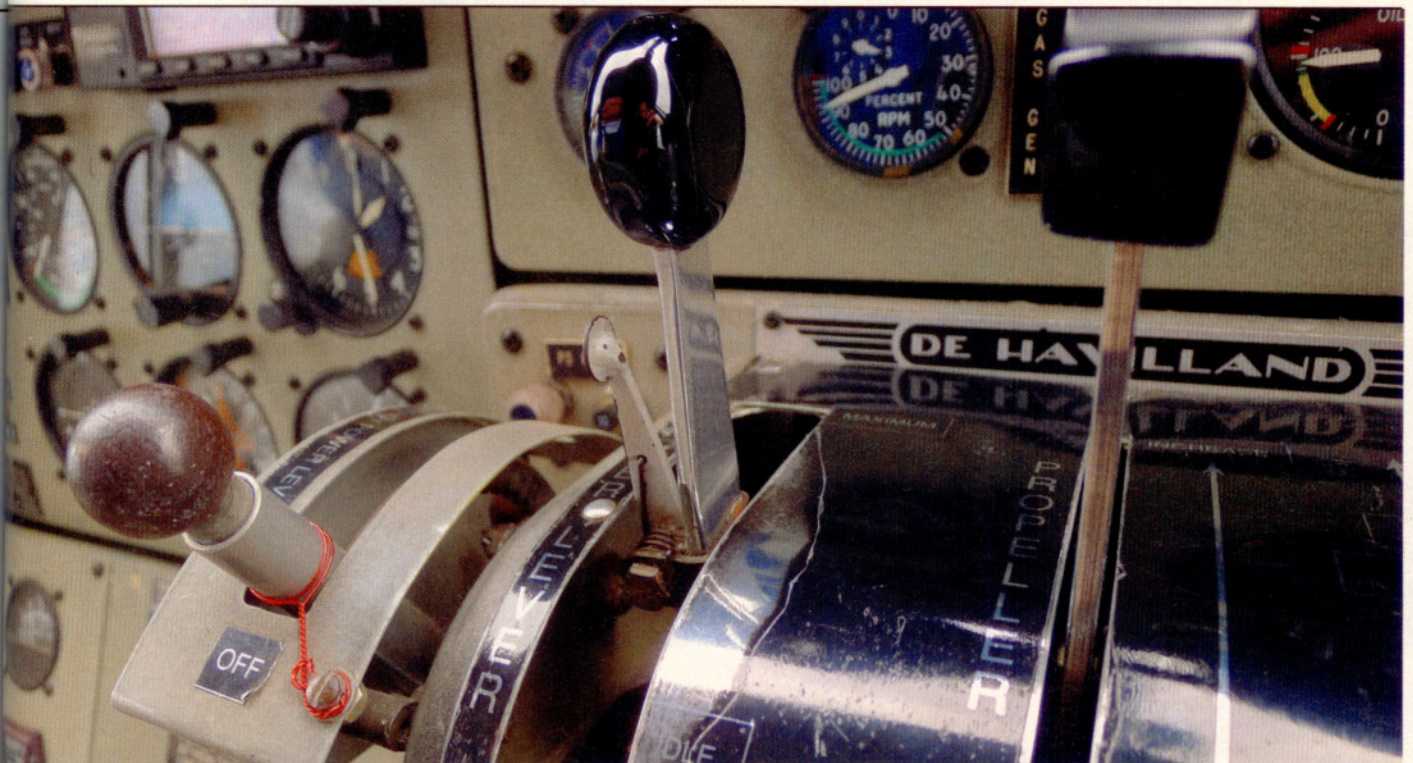
Instead, the passengers were completely engrossed looking out the large bubble windows until the moment the airplane was tied to the dock. Flying in a floatplane is too much fun for them to pay any attention to the challenge of the final few feet.

With a new load of passengers, Whitney pushes the Otter off the dock, repeats his fluid dance into left seat, and gives the flap handle a few pumps as we taxi out past the rocky shoreline and get ready to depart south for Seattle.

ACFA

Jason Paur is a freelance writer and GA pilot living in Seattle.

KENMORE AIR (1)





Large bubble windows have been added to Kenmore Air's Otters giving passengers a panoramic view of everything from mountains to Orca whales (above). Cargo for flights in a 1960s contract with the U.S. Navy included test torpedoes lashed to the floats (right).

SPECSHEET

1953 de Havilland DHC-2 Beaver N6781L s/n 788

Specifications

Powerplant	Pratt & Whitney R-985 Wasp Jr., 450 hp
Length.....	32 ft 9 in
Height	10 ft 5 in
Wingspan	48 ft
Wing area	250 sq ft
Empty weight	3,467 lb
Max takeoff weight....	5,600 lb with STC (stock 5,090 lb)
Max useful load.....	2,133 lb
Payload w/ full fuel	1,563 lb
Fuel capacity	95 gal (35 front, 35 center, 25 rear)

Performance

Takeoff distance over 50 ft sailboat mast	1,610 ft
Landing distance over 50 ft sailboat mast	1,510 ft
Rate of climb at max power.....	920 fpm, 740 fpm @ max continuous power
Range....	405 miles, 3.5 hours, 110 mph

Recommended Airspeeds

V_X	80 mph
V_Y	95 mph
V_A	125 mph
V_{FE}	105 mph
V_{S1}	60 mph

For 45 years the de Havilland Canada DHC-2 Beaver has served as the workhorse of the Kenmore Air fleet. Designed as a floatplane from the outset, the Beaver made its first flight on August 16, 1947. In the skies over Seattle, a Beaver on floats is as common as any airplane you'll see. In addition to those operated by Kenmore, there are several privately owned Beavers in the area and another seaplane air taxi service operates a small fleet of DHC-2s as well.

Sixty-four years after the first flight, we're ready to depart. The supercharged engine is limited to 36.5 inches of manifold pressure on takeoff for 60 seconds, but with miles of water in front of us and lots of neighbors, we keep it at 33 inches. Even during full-power takeoffs, Kenmore's quieter three-blade-propeller STC means the ear-splitting Beavers of the early days are forgotten.

With the yoke in my lap, the Beaver reels back on its floats as it accelerates. Moments later it reaches its high point and I relax the back-pressure to find the optimum spot on the step.

"Your work is done," Gowey says. "Just hold it right there."

Moments later we're airborne. With just two on board (there is seating for seven, six passengers plus pilot) the Beaver gets off the water quickly.

The power is pulled back to 30 inches and 2,000 rpm as we climb at 80 miles per hour. "Eighty is kind of the magic number for this airplane," Gowey says. "You make your approaches at 80, you climb at 80 for V_X , it just does things at 80."

For its size and reputation as a load hauler, the Beaver is surprisingly light on the controls. Or at least on the ailerons

and elevator. The rudder, which must be used faithfully, takes a bit more effort. After a handful of takeoffs and landings, we climb to 2,500 feet and make the short hop over to Lake Sammamish for some air work.

In cruise the Beaver can have a slightly nose-high attitude. By pumping the flaps down just a degree or two, the airplane levels off. "You can pick up a knot or two with that little trick," Gowey explains.

Kenmore typically cruises at 28 inches and 1,900 rpm. That yields a cruise speed between 105 and 110 mph, Gowey says. The Pratt & Whitney powerplant was actually a late change in the original design. A lighter, less powerful, 330-horsepower Gipsy Queen engine was the first choice. The late addition of the heavier R-985 is what gives the Beaver its short-nose appearance, and is a key factor in its heavy-hauling STOL success.

Stalls are typical of many STOL aircraft, with the airspeed needle dropping to the bottom of the indicator. There is a small amount of buffeting just before a mild break at 40 mph indicated in the landing configuration.

After a few stalls and with the power pulled back, we make a power-off descent to Lake Sammamish. Best glide occurs at 92 mph. With landing flaps deployed, the nose is pitched down noticeably and with a flare close to the water, the airplane can be held at a slight nose-high attitude until the water is felt through the floats.

The Beaver POH doesn't give degrees for the flaps settings, but takeoff is roughly at 30 degrees, landing is about 45, and full flaps are nearly 60 degrees. The POH does say full flaps are only to be used for emergency landings "in very

restricted areas." Most of Kenmore's locations are fairly open, although charter flights are regularly made to destinations that use all the Beaver's performance, something pioneered in the region by company founder Bob Munro.

Munro acquired his first Beaver back in 1966. The company currently owns both the last piston-powered Beaver off of the de Havilland assembly line produced in 1967 (N900KA, aka *Maggie*, pictured in this story), and the last Beaver ever made, a turbine, in 1968.

Over the years the company has developed a wide range of STCs for the Beaver and its reputation for rebuilding the legendary bush planes can often be seen when Beavers for sale are advertised as "Kenmore Beavers."

Gordy Barnes is the man who has spent his entire career helping to build that reputation. Barnes also recently celebrated his fortieth year with Kenmore Air. Pilot Bill Whitney and Barnes each say the other has been there longer; the difference is only about a week.

"Usually we do one or two a year these days," Barnes says of the rebuilds that take between 3,000 to 5,000 man hours. A peak year included five rebuilds. The company first started rebuilding airplanes for itself. The business expanded to air taxi operators in Alaska and elsewhere, then many of the fishing lodges in British Columbia and Alaska requested

rebuild Beavers. Since the mid-1990s many of Kenmore's customers have been private individuals, including actor and AOPA member Harrison Ford. More than 135 have been rebuilt on the north shore of Lake Washington.

There are two turbine Beavers currently undergoing restoration in Barnes' shop. "This one is completely reskinned,"

"There's a lot of times when I've had to land somewhere and I've just thought, 'I'm glad I'm in the Beaver today,'" Munro says.

he says standing next to a fuselage that spent 25 years in Nigeria. "It had huge amounts of corrosion."

When properly maintained, Barnes says the de Havilland Beaver rarely needs any type of airframe maintenance. "We run engines out, that's it." He says an airplane at Kenmore might go 10 to 15 years with only engine work and the replacement of basic consumable parts such as pulleys. Eventually, though, the airframes are rebuilt. Some of Kenmore's airplanes have been rebuilt more than once.

The company's first Beaver, N9766Z, was built in 1953 and has more than 37,385 hours as of August 10, 2011 (six to eight are being added each day). It's been through two rebuilds in the past 25 years. 66Z was the favorite airplane of company

founder Bob Munro and was one of the Beavers he used to ferry geologists and supplies to nearby Mount Olympus where he would land the floatplane on snow-covered Blue Glacier. Munro performed many floats-on-glacier landings around Washington as well as Alaska.

Bob's son Gregg continues to fly Beavers in addition to his position as

chairman at Kenmore. At 64, the younger Munro has more than 15,000 hours in Beavers and he says the company his father built wouldn't be the same without the DHC-2. "There's a lot of times when I've had to land somewhere and I've just thought, 'I'm glad I'm in the Beaver today,'" Munro says.

Taxiing back into Kenmore's docks, there is almost no wind, simplifying what is often the most difficult part of flying a floatplane. At less than 10 mph I pull the mixture, the engine falls silent, and we quietly drift in. With a gentle push of the right pedal we turn parallel to the dock, I climb down to the float, hop on the dock, and tie down the airplane. It's a perfect ending to a first flight in a local icon.

—Jason Paur



Bob Munro offered flight instruction in a Taylorcraft in 1949 (left). The leather-wrapped yoke of a DHC-3 Beaver (below), the airplane that has served as the backbone of Kenmore Air's fleet since the early 1960s.

