



Percival Provost

The Proper Englishman

An airplane that's an all-around good sport

BY DAVE HIRSCHMAN

The Percival Provost is an odd object of anyone's affection.

It's big, ungainly, and imposing—and it seems strangely in conflict with itself. Does it mean to be sleek and agile as its flat wings and big ailerons suggest, or slow and awkward as its fixed landing gear, open wheels, and boxy canopy indicate?

For owner Mike Dale, however, such contradictions are beside the point.

PHOTOGRAPHY BY CHRIS ROSE

The former Royal Air Force cadet first soloed in a Provost in the early 1950s, and that connection matters more than the airplane's quirky shape or performance specs. Flying the Provost marked a turning point in Dale's life when he realized he could overcome his doubts and fears, and do what others told him he couldn't. It showed him the strength of his own will, and it's a tangible reminder that real life can far exceed his own ambition and imagination.

"I was 18 years old, homesick and airsick, when I first encountered a Provost, and it used to terrify me," says Dale, 76, in a melodious English accent that remains prim and proper despite having lived in the United States for four decades. "Flying this airplane made me believe, for the first time in my young life, that there was anything to me. It was my first real experience at achieving something that I seriously doubted I could do. It created a lifelong hunger to re-create that delightful, elusive, and fleeting sense of accomplishment."

Grounded

Dale was two weeks from becoming an active-duty fighter pilot in de Havilland Vampires when he was suddenly stopped by an insurmountable medical obstacle. A genetic inner-ear

condition (since surgically repaired) disqualified him from military flying.

He was crestfallen but redirected his energy to the automotive industry, and that led to positions at the Donald Healey Co., British Motor Corp., a move to the United States, and auto racing—where he became a production car national champion in the 1970s. His success on the track and at motivating racing teams eventually brought him to Jaguar, where his talents in marketing and business strategy propelled his rise to president of Jaguar North America. He retired in May 2000.

Dale began general aviation flying in the 1970s while still racing cars and owned a Cessna 177RG, then a Stearman biplane. He has logged about 3,500 civilian flight hours and earned instrument and multiengine ratings.

At Jaguar, he pioneered crossover promotions between the automotive and general aviation industries. He donated a new Jaguar for the EAA's Young Eagles auction, installed Jaguar interiors in Hawker Beechcraft King Airs, and displayed Jaguars at EAA AirVenture in Oshkosh in 1992—a practice that continues today with successor Ford Motor Co.

"It's a common misperception that car companies sponsor aviation events as some sort of charity," he said. "Don't believe it. I can tell you that Jaguar did very well at Oshkosh. Our car sales at the event more than paid for our sponsorship."

Dale flew a Stearman to airshows around the United States in the 1990s and served on the EAA board of direc-



For owner Mike Dale (above) the Provost marked a turning point in his life and was the key to his future success. The restored airplane is almost identical to the one in which he soloed as an RAF cadet. Flying over the Virginia countryside (right).

tors. Today he focuses on aviation endeavors closer to his home near Culpeper Airport (CJR) in rural Virginia, where he helps organize the facility's annual airshow.

Provost production

Percival produced about 460 piston Provosts, and they were used primarily in the United Kingdom as military trainers in the 1950s and 1960s. Then they were replaced by a jet version of the Provost that was the mainstay of RAF training for the next 30 years.

The 550-horsepower, 4,300-pound (max gross) piston Provost was designed in 1948 to demand proper handling that would indentify weak students right away. By drumming them out of flight training early, the RAF focused scarce resources on students more likely to make it through the tough program.

Dale made it, but not easily. He damaged the landing gear of a Provost during a flight with the training squadron commander and was told he'd be gone in two weeks or less. His replacement instructor, Jaroslav Sodek, was a Czech RAF veteran of World War II and spoke English poorly. But he went to bat for Dale and convinced higher powers that Dale had what it took to successfully fly fighters.

In the late 1980s, Dale began searching for a Provost to buy, but few of the airplanes had survived in flying condition. He finally found a project—the last piston Provost ever manufactured—and had it sent to Kampel Enterprises in Wellsville, Pennsylvania, in 1990. Larry Kampel, renowned for Stearman restorations, and his technicians fabricated an almost new aircraft during the next eight years. Each wing contains 30,000 rivets, and the hardware is a mix of metric and English sizes.

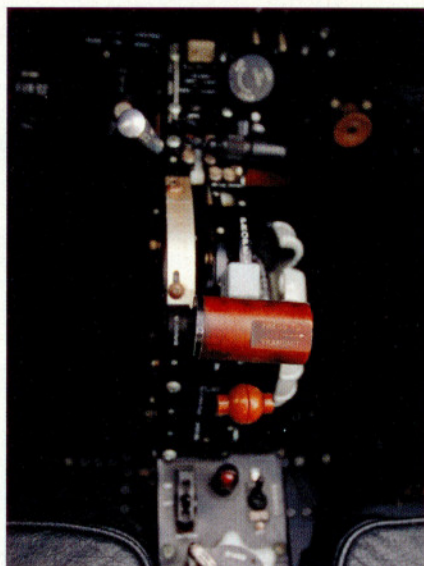
The quality and complexity of the workmanship is stun-

ning, and Dale keeps a photo scrapbook of the airplane's rebirth that documents the entire painstaking process.

Dale's wife, Mary, an enthusiastic proponent of his quixotic, costly, multi-year quest, had her name stenciled on the right side of the aircraft, followed by the letters A.A.G.S., a designation that stands for "All-Around Good Sport."

Dale has flown the airplane about 500 hours since its 1998 maiden flight, and it was named a Reserve Grand Champion that year, the first time it appeared at AirVenture. His hangar at Culpeper is stocked with a supply of spare Provost parts, and he habitually uses the Internet to troll the planet for more. When the Irish air force retired its Provost fleet, he purchased assorted parts that included extra cylinders, magnetos, air pumps, a frame to make new canopies, and more.





"I've got 10 sets of piston rings," he said. "I think I have just about everything I need to rebuild an engine if I have to."

There's a Commemorative Air Force squadron at Culpeper, and Dale occasionally flies formation with the group's T-6 and BT-13. Dale said the restoration cost for the Provost was about four times his most pessimistic estimate.

"It was a ridiculous amount of money to spend on something that's a pure amusement. But I don't regret it. I have a great time with this airplane. It suits me."

Flying the Provost

If the red, white, and blue rondel and ornate crown painted on the side of the Provost aren't enough to convey its British origins, the words stenciled onto the wing for ground handlers provide more clues.

"Do Not Tread Here" is painted next to the wing walk (instead of the shorter American "No Step"). And the relatively wordy phrase "Fill to Just Below Filler Neck Only" warns not to overfill the wing tanks.

Cockpit details including the canopy jettison handle, throttle quadrant, and leather stick grips (above, left to right) are all refurbished original equipment. The draggy paned canopy and open wheels (opposite page) show the design wasn't meant for high speed.



The geared Alvis Leonides radial engine turns a maximum 3,000 rpm with a reduction drive that reduces the constant-speed prop to 2,200 rpm. The prop also turns the wrong way for Americans, requiring left rudder on takeoff and during climb. Rudder trim is set slightly left, even in cruise, because the Leonides engine is more powerful than the original, and the designers chose not to alter the fixed angle of the vertical stabilizer.

A full-swivel tailwheel and weak pneumatic brakes (that have a habit of overheating) require getting the tailwheel off the ground quickly during takeoff.

It's a big step up to the wing, and stepping into the cockpit requires putting both feet on one of the side-by-side seats.

Runway 4 and launches into a clear, cool sky. The Provost doesn't require flaps for takeoff, and a cruise climb with full fuel and two people aboard nets 100 KIAS and a climb rate of 1,000 fpm.

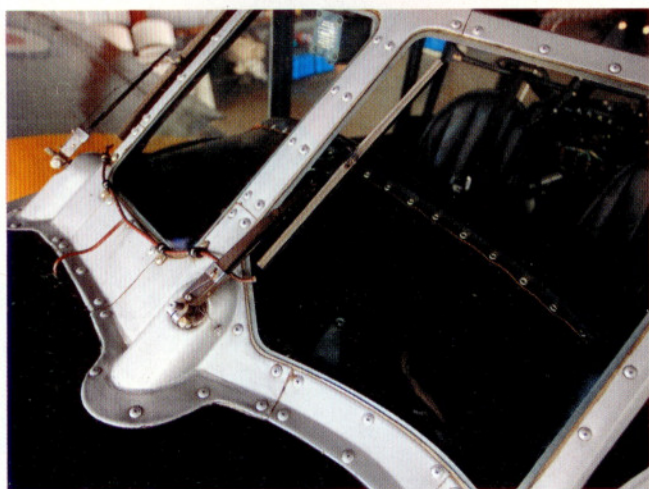
"I could double the climb rate with full power and a steeper pitch attitude," he said. "But I want to baby this engine as much as possible."

He climbs to 4,500 feet for a series of loops and rolls. He enters rolling maneuvers at 140 KIAS and looping ones at 160 KIAS. The airplane indicates 142 KIAS in high cruise, and 130 KIAS (and 25 gph) at the economy setting. Stalls are straight ahead at 74 KIAS at idle power with flaps up. The roll rate at full deflection is slightly more than 90 degrees per

the harsh conditions or rough use that it was designed to endure. Dale flirts with the temptation of someday owning a Stearman again because he enjoys the historic, open-cockpit biplanes and the community of pilots and craftsmen that animate such airplanes.

"I came to flying because I love the machines," he said. "I stayed for the people."

One of the many remarkable people Dale flew with was John Butterly, a former RAF instructor and a British Airways Concorde pilot. When Butterly asked Dale why he didn't wear his RAF wings, Dale told him about the medical issue that blocked him from completing flight training just prior to graduation.



There's a four-point harness, and a colorless steam-gauge cockpit with period directional gyros that turn the same way as a wet compass, and cageable attitude indicators. A gauge in the top center of the instrument panel shows the pneumatic pressure available to operate the flaps and brakes. The brakes are actuated by a bicycle-style hand grip on the stick.

The RAF fighter tradition requires pilots to know essential items by memory, and all engine starts and pretakeoff items were done in quick succession. "In a scramble, we didn't use cockpit checklists," Dale said, "and that carried over throughout our training."

Dale has his own cheat sheets in the cockpit, and his hands flow from left to right as he primes the engine, rolls the canopy closed, and starts the Provost. Taxiing requires deft rudder taps and quickly clenching and releasing the hand brake. Dale is careful not to squeeze too often so that the brakes stay cool.

Runup is conventional, and as soon as the oil is warm, Dale lines up with

second, and the airplane has inverted fuel and oil systems that allow up to 30 seconds of upside-down time. The push-rod ailerons and torque-tube elevator are silky smooth and well balanced, and the authoritative rudder requires timely footwork to keep the ball in the center. The Provost flies 90 KIAS on final and 80 over the fence. The engine has an automatic mixture control and requires no adjustments.

With the prelanding checklist complete, Dale touches down smoothly on the main wheels at about 75 KIAS. He works the rudder actively as the airplane decelerates and applies brakes sparingly at about 20 knots. He uses about 2,500 feet of runway in a normal landing in calm winds. The sight of sunlight glinting from the silver wings and rondels makes a lasting impression. "It's a sight I never tire of," Dale says.

One of a kind

The Provost receives loving care and regular maintenance and isn't subject to

Butterly told him he would have received an "above average" rating on his formation flying based on the multi-airplane flight they had just concluded. A few weeks later, a package arrived at Dale's home containing a certificate for meeting the standards required by the RAF and a set of actual wings. Dale now wears them on his flight suit.

Dale's Provost is the only one of only a half-dozen or so in airworthy condition in the world. It's the only one of its kind registered and flying in the United States, and he doubts anyone will build another because it makes no economic sense—and few share the personal history with the design that he does.

"I have no inclination of ever selling the Provost because the airplane and its restoration mean so much to me personally," he said. "It represents a pivotal point in my life. And on top of that, it's a damn fine airplane."

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