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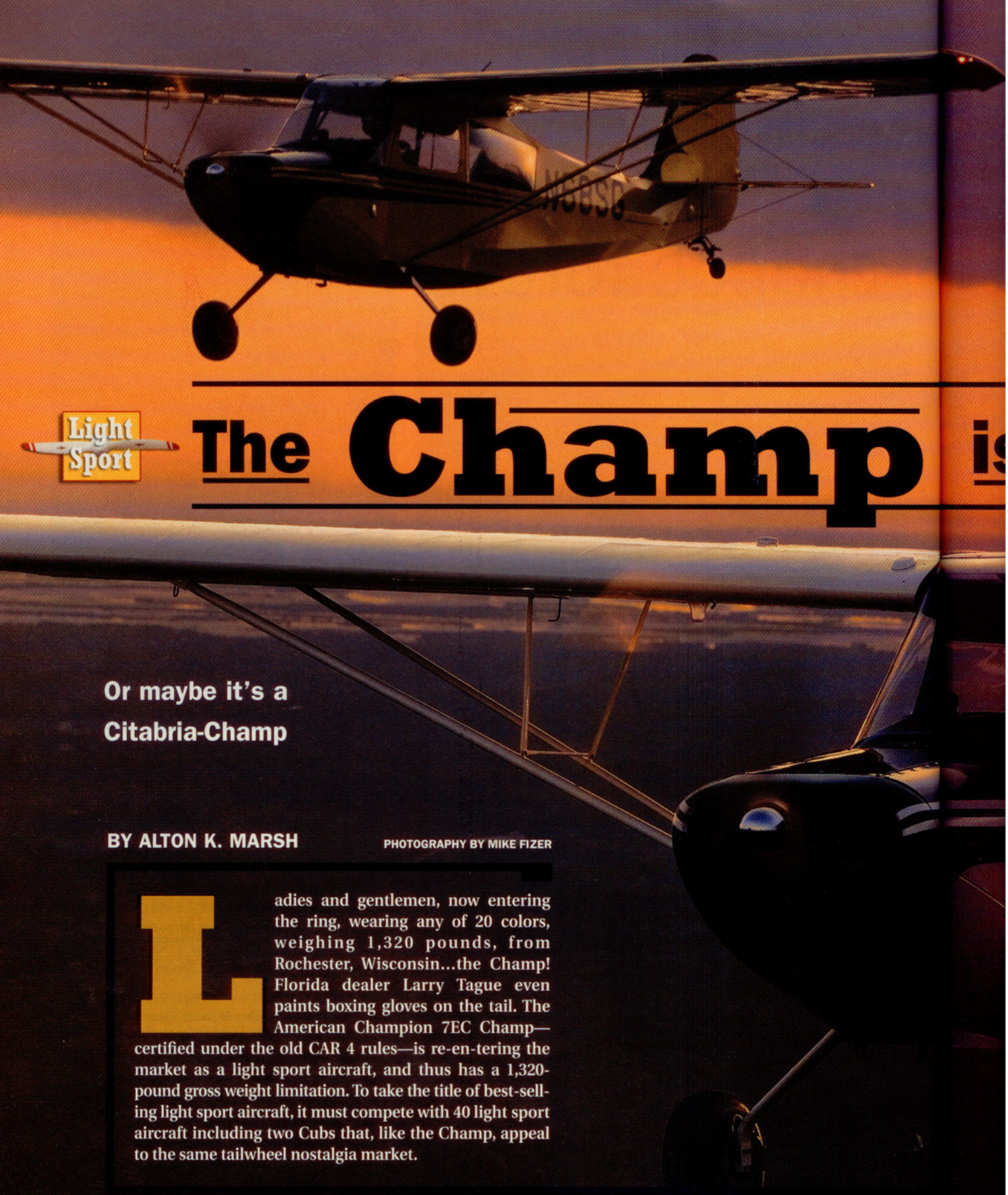
A pair of Champs from the American Champion Aircraft Corp. fly over the Florida countryside.



Light Sport

The Champ is

Or maybe it's a Citabria-Champ

BY ALTON K. MARSH

PHOTOGRAPHY BY MIKE FIZER

Ladies and gentlemen, now entering the ring, wearing any of 20 colors, weighing 1,320 pounds, from Rochester, Wisconsin...the Champ! Florida dealer Larry Tague even paints boxing gloves on the tail. The American Champion 7EC Champ—certified under the old CAR 4 rules—is re-en-tering the market as a light sport aircraft, and thus has a 1,320-pound gross weight limitation. To take the title of best-selling light sport aircraft, it must compete with 40 light sport aircraft including two Cubs that, like the Champ, appeal to the same tailwheel nostalgia market.

Is it really a Champ?

But, you say, the Champ was the 7AC and had a cartoon-like bulbous windscreen and a sliding window. You'll find neither of these features on the new Champ, so is it really a Champ? Originally the Champ included Aeronca's 7AC, 7BC (military L–16), and 7CC (Continental 90-horsepower C90 engine) and was built from 1945 to 1949. The 7DC (Continental C85 engine) and, yes, the 7EC with the Continental C90 engine—were the last Champs produced by Aeronca before it ended production in 1951. Then came the Champion Company, which resumed production of the 7EC Champ in 1955, according to Robert Szego, president of the Aeronca Aviators Club and the Bellanca-Champion Club. "Then began the magic journey with [the] 7FC that had a nosewheel, the 135- to 150-horsepower 7GC, the 7HC, and the 7JC with its strange tailwheel setup. These were all Champs," Szego said.

Ah, but what about the 100-horsepower engine on today's 7EC? Wasn't the 7EC a 90-horsepower airplane, you ask? In 1964 Champion Aircraft certified it with a 100-horsepower Continental O-200—setting the stage for the return of the Champ.

The model number and the engine are the same, but that is where the similarity stops. The tail, nose cowling, and fuselage sides are like the original Champ series, but the windows, interior, door, and windscreen are those of a modern Citabria that first appeared on the scene in 1964. The right wing is like that of today's 7ECA (now called the Citabria Aurora) because it has an 18-gallon wing tank, but the left wing is like that of the 7EC (identical to a Citabria wing) but without a fuel tank. To save weight, the aircraft carries only 18 gallons of fuel—17 usable. The Citabria-like aluminum landing gear—which Szego says is easier to maintain—did not need to be as heavy and robust as the gear used on the Citabria. "There are the [Champ] purists who do not appreciate the squared-off wingtips and rear windows, and the spring gear [of the new Champ]," Szego said. (It does, however, have a wooden propeller.)

"There are very few new Champs out in the field so far, but the few people that flew them are very satisfied. The big item is the fact that you can actually buy a new Champ, something that hasn't been available since the Citabria came out in 1964," Szego added.

How does it fly?

Except for the power difference it flies much like the 118-horsepower Citabria Aurora and the 160-horsepower Citabria Adventure. The aircraft is docile during stalls—and even when held in the stall it reluctantly drops a wing. The pilot's operating handbook says the aircraft will lose only 100 feet in a stall. Holding altitude was not difficult during steep turns, and, partly because of the excellent visibility, the flare during three-point landings was easily gauged.

The airframe is approved for plus 5 and minus 2 Gs, but you can't do aerobatics—like a loop—despite the impressive numbers. Aerobatic maneuvers are limited to spins in the utility category. To fly in that category you primarily ensure there is no baggage in the baggage compartment.

During a brief evaluation flight from Orlando Sanford International Airport there was time to conduct a true-airspeed test: The result was 81 KTAS, a few knots slower than the 87 KTAS reported by the factory. It was a hot July morning in Florida at only 1,800 feet msl. A busy traffic pattern required the tower to limit Tague and me to two landings (both three-pointers), but they were enough to prove the new Champ continues the company's tradition of building tailwheel aircraft that are easy to land.

The pilot's operating handbook says the fuel burn is 6.8 gph based on data from the engine manufacturer, but both the dealer and the factory offer a

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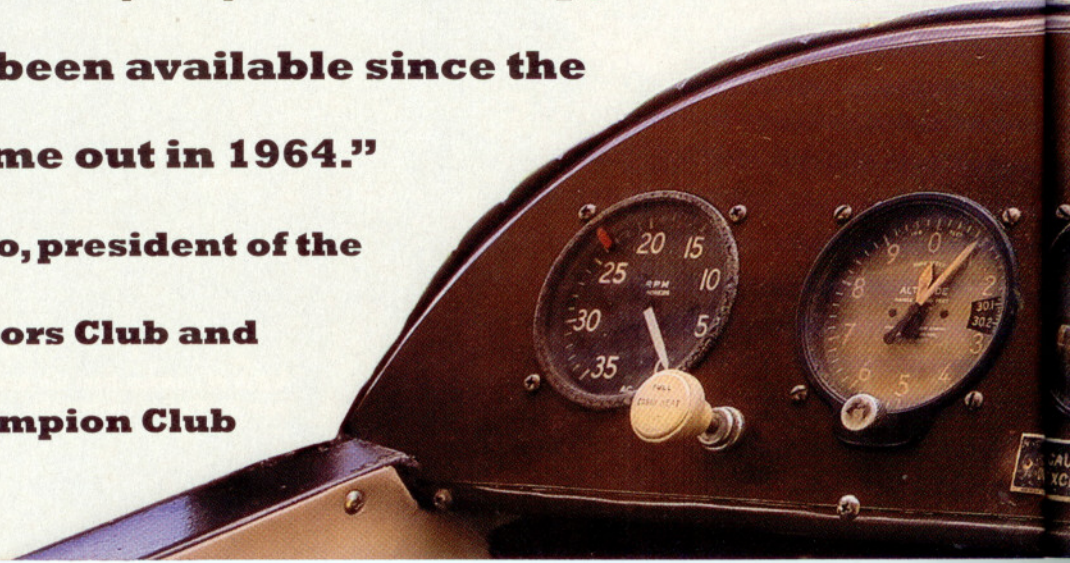


American Champion wanted to make the Champ partly new and partly old. It retains the old tail and engine cowling, but uses wings and other parts and tooling from the current model line. The old cabin windows were in plywood frames and were susceptible to rotting. A major decision was to put all circuit breakers and toggle switches on the front instrument panel (left). After the 25-pound-lighter Continental O-200-D engine is certified, it will replace the Champ's present O-200-A. Twenty-five have been sold. The author hand-props Jim Leavitt's 1946 Champ (right).

spirited argument that they have flown the model on long delivery flights burning only 5.9 gph...6, tops.

What's not to like?

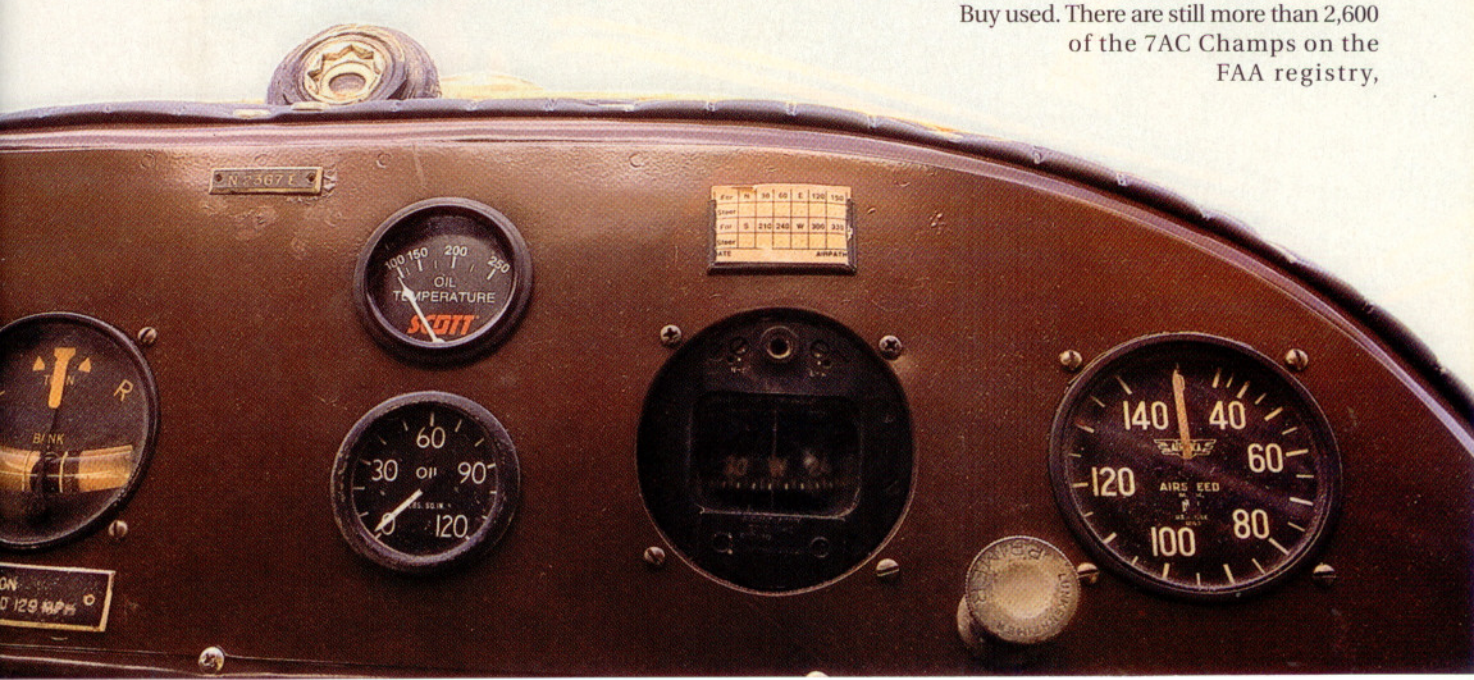
The payload with full fuel is the aircraft's biggest drawback, but many of the early customers seem not to mind since they mostly fly alone. With full fuel this is an adult-plus-child aircraft, and with half-full tanks both occupants must watch their diets. To provide a greater margin during the flight to Florida's east coast from Sanford for photos with this article, only one smallish pilot per airplane and full fuel was allowed.

Jerry Mehlhaff, president of American Champion, has lots of plans to improve the payload. He is hoping Continental will complete certification of its new O-200-D light sport engine this winter, which is lighter than the current O-200-A. Cessna is using the O-200-D in its Skycatcher. Mehlhaff could use lighter tires, a lighter tailwheel, and a lighter interior—he hopes the result will be a Champ of less than 900 pounds empty weight—a 50- to 70-pound improvement over the present one. You can't take out the floor carpet because there isn't any. Floors are mahogany-stained five-ply birch panels.

You can like or not like the present out-the-door cost for the Champ of $98,000 to $102,000 for most owner-ordered options; the base price starts at $89,500. Much of that cost, and much of the aircraft's weight problem, stems from loading up on options. Standard equipment will get you a no-radio day/VFR aircraft painted in a solid color with two stripes in a color of your choosing. Other paint schemes are offered as options. A night package that includes both interior and exterior lights is $1,295. Packages that include Garmin radios, transponders, and navigation capability range from $4,300 to $11,775—the latter one includes a Garmin 496 GPS, a Garmin SL-40 com radio, and the Garmin GTX-330 Mode S transponder.

What's the alternative?

Buy used. There are still more than 2,600 of the 7AC Champs on the FAA registry,



and American Champion's Mehlhaff estimates the average cost for one in good shape to be $35,000. (Szego estimates more than half of those are flying.) The other four Champ models show only 150 to 200 aircraft still on the registry for each model, so chances are good that you will end up with a 7AC.

That means you'll have the bulbous front windscreen that is subject to cracking, the sliding side window that, while it offers a delightful link to days gone by, lets in the cold winter air, and—oh, yes—no starter. There are some perfectly restored Champs out there with electric starters and a new lease on life from such restoration experts as Bill Pancake, who has customers from all over the world. Many have visited his shop in West Virginia. Pancake restored an Oshkosh champion Champ now flying in Michigan. You can find his tips for restoring or buying used Champs at the National Aeronca Association Web site (www.aeroncapilots.com). Click on "Technical Notes" for the article.

Jim Leavitt of Sanford, Florida, found quite a deal when he went shopping for a Champ in 1999: a Champ in apparently good condition with only 50 hours on an overhauled engine for $12,500. He flies 50 hours a year. The airplane provided him with fun for two or three years, and then an airworthiness directive on wooden wing spars called for an inspection. (New ones now have metal wing spars.)

As long as he was inspecting the wing spars, Leavitt decided he might as well replace the fabric. He went to Southern Aviation Services, which not only specializes in tube and fabric work, but is located at Bob White Field (X61) northwest of Orlando, where Leavitt bases his aircraft. Bob White Field features an exquisitely kept grass runway—perfect for tailwheel airplanes. (Also tied down there is serial number 1 of the pre-World War II Piper Cub J–4 line.)

Re-covering led to the discovery of mouse nests in the leading edge, and mouse urine had done its damage. Also, a wingtip was out of specification and had to be reworked. The final bill after the airplane was repaired, covered with new fabric, and painted came to $13,000.

Leavitt said his insurance is between $900 and $1,000 per year, and he pays $300 per month for a hangar. He does

SPECSHEET

American Champion Champ 7EC

Base price: $89,500
Price as tested: $102,000

Specifications

Powerplant	Continental O-200-A 66B 100 hp at 2,750 rpm
Recommended TBO	2,000 hr
Propeller	Sensenich wood W69EK48, 69 in dia
Length	22 ft 1 in
Height	7 ft 8 in
Wingspan	33 ft 6 in
Wing area	165 sq ft
Wing loading	8 lb/sq ft
Power loading	13.2 lb/hp
Seats	2, tandem
Cabin length	8 ft 10 in
Cabin width	2 ft 6 in
Cabin height	3 ft 11 in
Empty weight	950 lb
Empty weight, as tested	970 lb
Max gross weight	1,320 lb
Useful load	370 lb
Useful load, as tested	350 lb
Payload w/full fuel	262 lb
Payload w/full fuel, as tested	248 lb
Fuel capacity, std	18 gal (17 gal usable) 108 lb (102 lb usable)
Oil capacity	6 qt
Baggage capacity	100 lb, 10.4 cu ft

Performance

Aerobatic limit loading	+5, -2 Gs
Takeoff distance, ground roll	485 ft
Takeoff distance over 50-ft obstacle	970 ft
Max demonstrated crosswind component	17 kt
Rate of climb, sea level	716 fpm
Max level speed, sea level	108 mph
Cruise speed/range w/30-min rsv (fuel consumption), 2,500 ft @ 75% power	94 mph/165 nm (6.8 gph)
Service ceiling	12,000 ft
Landing distance over 50-ft obstacle	928 ft
Landing distance, ground roll	393 ft

Limiting and Recommended Airspeeds

V_X (best angle of climb)	52 mph
V_Y (best rate of climb)	67 mph
V_A (design maneuvering)	100 mph
V_{NO} (max structural cruising)	100 mph
V_{NE} (never exceed)	135 mph
V_R (rotation)	50 mph
V_{S1} (stall, clean)	46 mph

For more information, contact American Champion Aircraft Corporation, P.O. Box 37, 32032 Washington Avenue, Highway D, Rochester, Wisconsin 53167; telephone 262/534-6315.

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.

not keep an engine repair fund for his 65-horsepower Continental A65 engine, but annual inspections are $300. His fuel burn is about 4 gph, and he doesn't bother to record what he spends on oil since the amount is so small.

Performance? You're not really looking for performance if you are a Champ owner—you are looking for fun. That said, he cruises at between 80 and 85 mph true airspeed (70 to 74 KTAS). His climb and landing approach speeds are both 60 mph, and he slows to 70 mph on downwind.

"It's a sweetheart of an airplane," Leavitt said. "I never go above 1,000 feet and fly outside of airspace where radios are needed. It's not a mission airplane. Its mission is having fun." That can be said of the new Champ, as well. AOPA

E-mail the author at alton.marsh@aopa.org.

Links to additional information about the Champ may be found on AOPA Online (www.aopa.org/pilot/links.shtml).