## **Citabria and Decathlon pilots have more fun**

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BY ALTON K. MARSH

### Slick ads and new-aircraft

displays entice you, but somehow, after the kids get their lunch money and the sport-ute is filled with gas, there isn't an extra \$130,000 or \$200,000 around for the purchase. So the goal becomes, as Bellanca-Champion Club President Robert Szego puts it, "access to the beauty of the sky" at an affordable price.



# Not a tailwheel or aerobatic pilot?

If you're an average AOPA member, you're not a tailwheel pilot. But the entrée to the fabric-covered tailwheel world is inexpensive. You'll need only 10 to 15 hours of instruction to master the skill, and 25 in the model you plan to purchase if you want to lower insurance costs. The tandem-seat Citabria and Decathlon are among the easiest of tailwheel aircraft to fly. Both have so much visibility from the forward cockpit that you don't have to S-turn while taxiing. When in flight, the view is like sitting in a glass house in the sky.

Used prices for the four older Citabria models (*airbatic* spelled backward) and the Decathlon range from \$29,000 to \$55,000. From the 1960s to 1980 Champion Aircraft and Bellanca built them, but since 1991 new models have been built by American Champion Aircraft in Rochester, Wisconsin. Those models—all of which have metal wing spars—start at \$50,000 for the entry-level Citabria and \$60,000 for a Decathlon. The newer aircraft are more difficult to find on the used market. Average out-of-pocket expenses based on 50 hours of flying per year, including fuel, maintenance, insurance, and tiedown, are \$3,500 for the Citabria and \$4,000 for the Decathlon. Cruise speeds for the two aircraft range from 90 knots for the Citabria—allowing time to enjoy the view—to 130 kt for the Decathlon.

Since you're an average AOPA member, you're also not an aerobatic pilot nor have you any desire to be upside down—but it's nice to know your aircraft is stronger than it needs to be. Citabrias can take 5 positive and 2 negative Gs, while the Decathlon is stressed for plus 6 and minus 5 Gs. The Citabrias lack inverted fuel and oil systems needed for extended upside-down flight, while most Decathlon models can keep you hanging from the belt for several minutes.

### Several models available

The first Citabria came off the line in 1964 at Champion Aircraft in Osceola. Wisconsin; the company was later bought by Bellanca. Eventually, the Citabria line expanded to four models: the 100-horsepower 7ECA (later powered with a 115-hp engine) has no flaps; the 7GCAA is basically the same as the 7ECA, but with a 150-hp engine; and the 7GCBC-the more popular model-has a 160-hp engine, flaps, and longer wings that provide more loadcarrying capability and shorter landing and takeoff distances. The fourth model, the 7KCAB, a 7GCAA with an inverted fuel and oil system, was abandoned by aerobatic enthusiasts in favor of the Decathlon 8KCAB because its wing offers better inverted flight performance. The 7-series aircraft are most often pressed into service as efficient little hamburger getters, while the Decathlon is considered the right aircraft for aerobatic enthusiasts.





The Super Decathlon (foreground, left) has a curved-bottom wing that aids in aerobatic flight. A Citabria sits behind it. Panels such as that on the Decathlon (above) feature a clean design.

Older Decathlons came in three flavors: the 150-hp Decathlon with a fixed-pitch propeller; the 150-hp Decathlon CS, the CS standing for *constant-speed propeller* (important for aerobatics); and the 180-hp Super Decathlon with a constant-speed prop.

### **Ready to shop?**

The easiest way to gather information is to call your AOPA Pilot Assistance Hotline at 800/USA-AOPA (800/872-2672) or check AOPA Online (www. aopa.org/members/vref). Members can get free subject reports on the aircraft of their choice, which include articles like the one you're reading, names and phone numbers of owner groups, and information from the aircraft operating manual. More serious shoppers can order a \$5 buyer's kit that includes a pamphlet on buying used aircraft, another on insurance costs, one on group ownership, and a fourth on taxes. In addition, the kit includes a bill of sale, registration forms, and

other information. Typical prices of various models are available from *Vref* on AOPA Online or by asking AOPA technical specialists.

Included in an AOPA subject report for this article was information on the Bellanca-Champion Club (www. bellanca-championclub.com) and the Citabria Owners Group (www.citabria. com), which offer numerous online resources.

### The wing spar AD

Be aware of wing spar Airworthiness Directive 2000-25-02. If you find an airplane you want to buy, but the AD has not been done (it doesn't have to be completed until the next annual inspection), you may want to offer to pay for the inspection—assuming no spar cracks are found. Over the years, a few of the Citabrias and Decathlons may have been ground looped. If the wing contacted the runway, there is a good chance that the wing spar has been damaged or is cracked.

The AD replaces a similar AD that was first applied to the Bellanca Scout tailwheel aircraft in 1998. Including Scouts, Citabrias, and Decathlons, the FAA says there are 6,700 wooden-spar aircraft that fall under the AD's inspection requirement. Compliance could cost \$1,000 or more, depending on the method. The initial inspection will be the most expensive, since additional inspection holes may have to be cut in the wing. After that, spars must be checked during each annual inspection-adding about \$300 to the cost because of the hours involved. The FAA has suggested that more than 20 inspection holes may be needed, including some on top of the wing where rain could enter the inspection hole cover. However, the number of inspection holes and their locations are not mandatory. Many owners are still seeking a better way to inspect than to cut more holes in the wing. The AD also allows the use of a flexible light for the inspection.

### **Alternatives in development**

American Champion dealer Larry Tague of Orlando Sanford Aircraft Sales at Orlando Sanford Airport, Florida, plans to explore just such alternatives. He'll use a Citabria from his used aircraft inventory to develop a new inspection method and then apply for a supplemental type certificate. Tague, a flight instructor, provided aircraft and pilots for the air-to-air photos with this article. Tague thinks hundreds of aircraft will be found to have spar cracks when all have been inspected. As you'll see later, he also offers some good tips on things to watch for when inspecting a Citabria or Decathlon for purchase. You can reach Tague by calling 800/276-6661 or 407/322-3662.

### What to do now?

There are several courses of action to follow with regard to the wing spar AD. You can e-mail Szego of the Bellanca-Champion Club (szegor@ bellanca-championclub.com) for information on how he complied with the AD when his Citabria was inspected, then follow his advice and have the inspection performed. Or, you can buy new aluminum spars and have



them installed. Finally, you can buy new wings with metal spars The pilot has excellent visibility over the nose, both for taxiing and while in flight—whether rightside up or upside down.

costs include up to 50 hours of work to install the spars and, if

from American Champion Aircraft. Aluminum spars are available from

Milman Engineering in Rochester, Washington, for \$3,950. Additional desired, 50 hours of labor to recover the wing. Milman can be reached at 800/782-7737 or 360/273-5080. Milman normally sells 15 sets of the



## You May Be At Risk for Hypoxia.

When flying at high altitudes, hypoxia can impair your ability to read, reason, think, see and even talk. These cognitive functions are necessary to fly you and your passengers safely. Depending on your age, overall health condition, etc. - symptoms associated with hypoxia can occur as low as 5,000 feet.

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predrilled spars a year, but this year the company sold that many by Cruise speed in the Citabria is around 90 knots, allowing pilot and passengers to enjoy the view.

March because of the AD's effect.

American Champion Aircraft is also noticing an increase in sales of complete metal-spar wings as a result of the AD. if desired, factory installation) to \$17,500 for Decathlons. Wings are also available for the Scout, the first model to come under scrutiny for wing cracks. Contact the company at 262/534-6315.

### No show-stopper

Bottom line: There has been no mass exodus of pilots from ownership of Citabrias or Decathlons because of the wing spar AD. "They take it for what it is, a political act," says Szego. So don't expect to find prices slashed as a result.

What other sorts of things should you watch out for when buying? Tague inspects trade-in aircraft daily and suggests several items. Look for evidence of water sitting in the tail, and check for hairline cracks in the empennage. Check control-cable fasteners to see if a cable is working itself loose. If the aircraft has aileron spades, scoops that sit below the aileron and use air pressure to aid in their movement, look for hairline cracks.

Also, check for play in the controls. Check the seats to see if they have cracks or are broken, and check to be sure the rear seat back has some means to prevent it from falling forward onto the rear control stick. It could lock the control stick in flight if it falls forward.

You may also want to thump the

from \$14,000 for

Citabrias (not in-

cluding paint and,

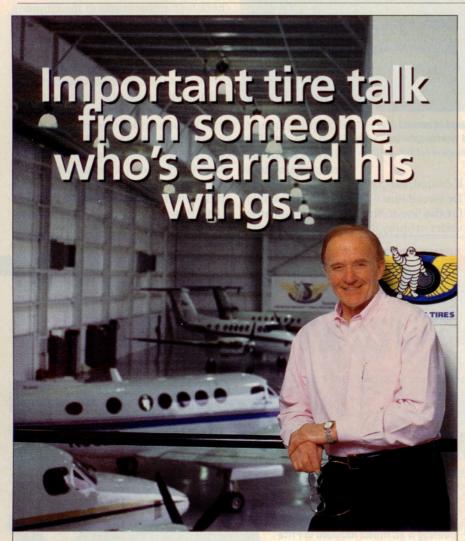
fabric on the bottom of the fuselage to see if anything thumps back. That is, passengers may have come aboard with film canisters, keys, change, and ballpoint pens that somehow got loose during flight and settled to the tail.

Finally, Tague suggests a vigorous shaking of the wings (or as vigorous as the present owner will allow) while listening for loose nails thumping in the wing. Wing ribs were nailed to the wooden spars of earlier aircraft, but over the years the nails may have backed out.

### **Vortex generators are popular**

The Bellanca-Champion Club's Szego says there are two aftermarket modifications you're sure to want. One is spades for the ailerons, and the other is vortex generators. Szego said that he can provide the names of manufacturers of spades, which include American Champion.

Since three of the Citabria models and all of the Decathlon models lack flaps, many owners want to improve low-speed performance. A vortex generator kit costing about \$700 (a 15-percent dis-



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The Super Decathlon has a 180-horsepower engine and a constant-speed propeller. The curved-bottom wing aids inverted flight.



count is available to Bellanca-Champion Club members) is "similar to adding flaps," say company officials at Micro AeroDynamics located in Anacortes, Washington. Vortex generators improve aircraft control at all speeds above a stall, the company said. To contact Micro AeroDynamics,

### PECSHEET

#### **Citabria 7GCBC**

Average used price: \$45,000 to \$56,000 with wooden wing spars

### **Specifications**

PowerplantLy	coming 0-320, 160 hp
	at 2,700 rpm
Recommended TBO .	2,000 hr
Propeller	Sensenich, 73-in dia
Length	
Seats	2, tandem
Cabin width	
Empty weight	
Useful load	550 lb
Payload w/full fuel	
Fuel capacity, std	.36 gal (35 gal usable)
	216 lb (210 lb usable)
Baggage capacity	

### Performance

Takeoff d	istance,	ground	roll, :	16-degree	e flap
setting					412 ft

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call 800/677-2370 or 360/293-8082.

### Back to the 'fun' thing

In addition to keys to the sky, a Citabria or Decathlon attracts attention whereever it goes—especially if you have a sporty starburst paint job (gawkers don't have to know you hate being

### Limiting and Recommended Airspeeds

Vx (best angle of climb)61	KIAS
Vy (best rate of climb)68	KIAS
V <sub>NO</sub> (max structural cruising)104	KIAS
V <sub>s1</sub> (stall, clean)44	KIAS
V <sub>S0</sub> (stall, in landing configuration)41	KIAS

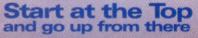
upside down). You will also have an aircraft with extreme versatility, whether you use short grass strips or long concrete runways.

Orlando pilot Bob Hereford recently bought a 1999 Decathlon for \$105,000 from Tague, and says he likes it better than his North American AT–6 Texan. For one thing, it is less expensive to operate, coming in at about \$50 an hour, versus hundreds of dollars per hour for the T–6. But that isn't why he bought the Decathlon.

"I can jump from field to field, do aerobatics, or land on a little grass strip," Links to organizations and companies mentioned, and additional information about purchasing a Citabria or Decathlon, may be found on AOPA Online (www.aopa.org/pilot/links.shtml).

Hereford said. He owns several aircraft, and finds the Decathlon to be the more versatile one. Tague is teaching him aerobatics. "I bought it because it is so much fun," said Hereford. If fun is your goal, then simpler is better.

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