GA AIRCRAFT · *Reimagined*

Filling a void in the marketplace

AMONG THE MANY EXOTIC AIRCRAFT at the world's largest airshow, a once-common Cessna 152 trainer at the AOPA tent at AirVenture drew more than its share of curiosity.

What's so special about this airplane? Who restored it to as-new condition? And is it going to be given away in the 2015 AOPA Sweepstakes?

The answers seemed to capture the imaginations of pilots, aircraft owners, and others at EAA AirVenture 2014 interested in seeing general aviation thrive again.

This "Reimagined" Cessna 152 is the first in an AOPA test to find out whether refurbished aircraft can provide a notable value to flying clubs and flight schools. If the answer is yes, perhaps these tough, proven airplanes that already have trained two generations of GA pilots can be updated and continue providing affordable access to aviation for many more pilots in the years to come. And yes, one of the much-talked-about yellow 152s rebuilt for AOPA by the craftsmen at Aviat Aircraft in Afton, Wyoming, will be the 2015 AOPA Sweepstakes prize.

BY DAVE HIRSCHMAN
PHOTOGRAPHY BY CHRIS ROSE

VIDEO EXTRA
Fly along with us in the Reimagined 152 in this AOPA Live this week video.

AOPA also will put other Aviat-restored 150s and 152s to work around the country visiting flying clubs, appearing at aviation events, creating new pilots, and keeping existing ones in the air.

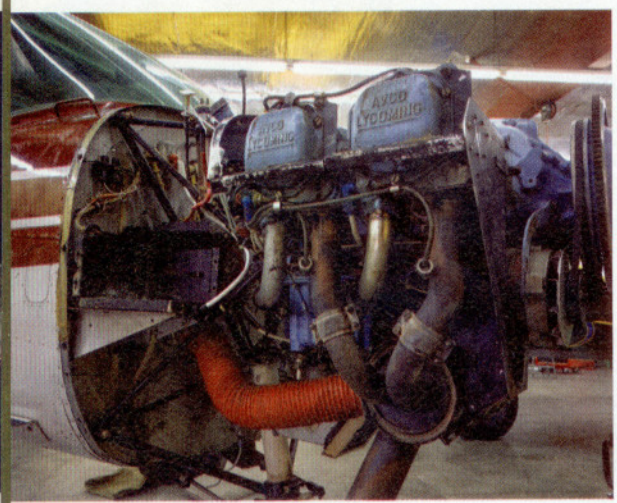
By negotiating in advance with banks and insurance underwriters, AOPA is opening the doors for flying clubs, flight schools, and partnerships to be able to affordably insure and finance a reimagined aircraft.

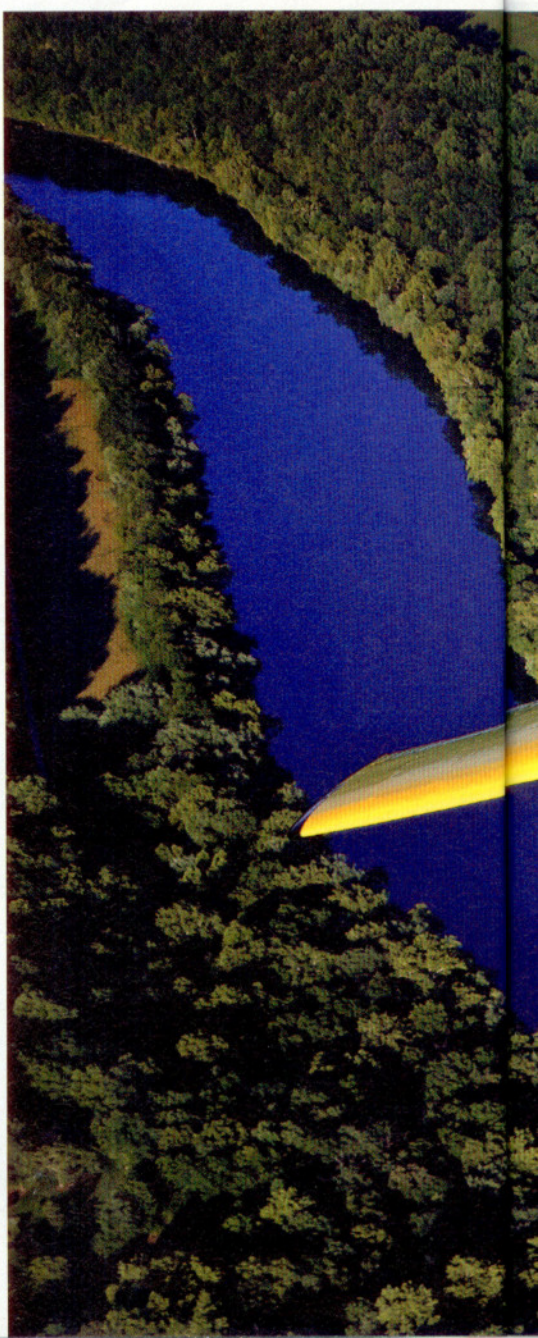
The base price for a newly refurbished Cessna 152 from Aviat, for example, is $99,900. And while that may seem astronomical compared to Cessna's retail price of $40,900 in 1985, the last year the Kansas company manufactured them, it's close in inflation-adjusted dollars—and significantly less than many newly manufactured aircraft, and a fraction of new FAA-certified trainers.

AOPA President Mark Baker learned to fly in a Cessna 150 when he was a student at the University of Minnesota. His first airplane purchase in 1978 was a 10-year-old Cessna 150 that he flew all over the upper Midwest, most memorably on hunting and fishing trips with his father. (Baker later bought another Cessna 150 in which his dad learned to fly.)

"I paid $4,400 for my first airplane and had lots of great adventures in it," Baker said. "My dad and I flew it on grouse hunting and ice fishing trips, and I remember several times we landed at airports that had closed for the day and had to hitchhike to town for gas. I kept that airplane [N22997]

A METAL INSTRUMENT PANEL (below) is an improvement over the original plastic. The flight instruments are overhauled—and the Garmin radio stack reflects 30 years in avionics advancements. N152UC has undergone a metamorphosis since Aviat Aircraft technicians disassembled the once-haggard trainer (bottom) at their factory in Afton, Wyoming.





for four years, and it broke my heart that I couldn't keep it."

The price of avgas had surged to $1 a gallon in 1981, and Baker was married with a growing family. Even with a partner, and then moving the airplane from a hangar ($45 a month) to a tie-down ($15 a month), he couldn't make the numbers work.

"I'm very sensitive to the cost of flying and its impact on attracting student pilots and keeping pilots current and attached to the aviation community," he said. "That's why we are so focused on making this as affordable as possible."

FOR THE COST OF A CAR PAYMENT

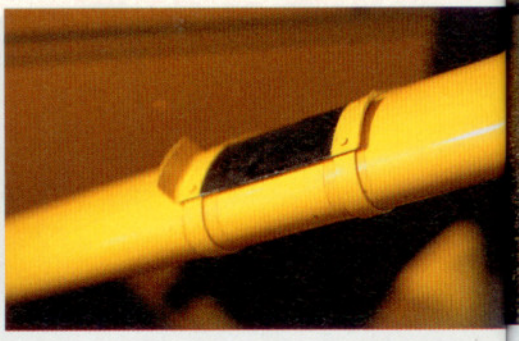
Ten-year bank loans for refurbished Cessna 152s, for example, will typically be available for about $680 a month with a 30-percent down payment, Baker said. Also, established flying clubs will be able to secure loans without having the principals cosign, and each airplane (and engine) will be covered by a comprehensive Aviat warranty. The fully loaded cost to own and operate is about $65 per hour. Divide the monthly payment among eight or 10 pilots and it becomes quite affordable.

"We've met with a number of institutions to negotiate the best possible terms for our members," Baker said. "We've assured the banks that they can have confidence these airplanes are being restored by quality rebuilders to the highest standards using repeatable processes that create real

SPEC SHEET

Cessna 152

Base price in 1985 | **$40,900 (refurbished today $99,900)**
Top speed | **109 kts**
Rate of climb | **715 fpm**
Max range | **370 nm**
Service ceiling | **14,700 ft**
Gross weight | **1,670 ft**
Useful load | **566 lb**
Total number of Cessna 150s manufactured | **23,948**
Total number of Cessna 152s manufactured | **7,585**



value. It's also important that flying clubs are able to get no-recourse loans so that the principals don't have to cosign, and we've done that."

More than 16,000 Cessna 150s and 152s are registered in North America. By comparison, U.S. manufacturers built just 255 new single-engine piston aircraft last year.

"There's a void in the marketplace for a rebuilt, high-quality trainer for under $100,000," Baker said. "AOPA doesn't make any money on this program, and we're not going to get into the aircraft restoration business. But we are going to make people aware of what it's possible to do with the existing fleet of trainers, and we're going to get pilots access to them on favorable terms," he said.

"Cessna 150s and 152s are the best trainers ever been built. They're the Piper J-3 Cubs of our generation—and their time has come, again."

FLYING N152UC

Seeing N152UC after its restoration evokes a powerful sense of déjà vu.

Virtually all U.S. pilots have been around Cessna 150s and 152s before, and many of us who began our flight training in them know them intimately. Relatively few of us, however, have ever stepped inside a new 152 before (or a bright yellow one)—and if we have, it's been a very long time. And the airplane's newness makes the familiar surroundings feel novel.

Poking your head inside the cabin, the pervasive new-car smell of the interior is at odds with memory. The pungent smell of old, hard-flown trainers—an instantly identifiable mix of sweat, avgas, spilled oil, leaky brake fluid, and upholstery cleaner—is conspicuously absent. The newly re-covered woven seats seem impossibly narrow but fit like a familiar glove. A yellowed, plastic-covered checklist is the only tactile carryover from the original airplane.

On the panel, there are hints of modern. A Garmin GDL 39 on the glareshield provides FIS-B weather to a Garmin aera 560 GPS in the panel, the sole means of navigation. Plastic headliners are new, but the decorative material harkens to the disco era in which Cessna 152s were originally made.

The preflight inspection ritual of climbing onto the steps on the fuselage and wing struts to visual check the fuel quantity seems almost quaint.

I'm going solo on this brief, get-reacquainted flight, but I don't feel alone. Getting in, closing the door with the unceremonious slam it demands, and starting the Lycoming O-235 engine conjures memories of my primary instructor, Steve Pirani, a broad-shouldered former national arm-wrestling champion who had to fly with his left arm slung over my seatback just to wedge himself inside. I can almost see my then-20-something wife, Martha, my first passenger, trustingly seated in that now-vacant space.

A normal (no flaps) takeoff on a muggy day with full tanks (26 gallons) results in an 800-foot ground roll. At 70 KIAS, the airplane settles into an 800 fpm climb at 2,400 rpm. At an altitude of 2,000 feet, I level off and let the airplane accelerate to 115 KIAS—and that's as fast as it will go.

I pitch up 30 degrees with the throttle wide open and let the airplane slow until it

eventually stalls. The stall warning goes off about 10 knots before airflow over the wing separates at 40 KIAS. With flaps down, the power-on stall comes at 35 KIAS.

Steep turns at 60 degrees of bank and full power are level at 95 KIAS. Chandelles are crisp and fun and result in altitude gains of just 500 feet at maximum effort. Lazy eights are similarly enjoyable, and small, with the highest point just 400 feet above the lowest.

The ailerons are crisp and taut, and slightly heavier than the elevator and rudder. The seating position feels odd with my feet so close together and left calf resting against the bulkhead. All of these observations seem like rediscovering something I should have remembered. But when I learned to fly decades ago in a similar airplane, I had no frame of reference. The open vents provide plenty of air flow, even on a humid summer afternoon.

The colorful moving-map GPS showing FIS-B weather is a quantum leap from the single, cantankerous, vacuum-tube VOR I remember, and the Garmin GTR 225 radio provides audio clarity I wouldn't have thought possible back then.

In the landing pattern, there's a slight nose-up moment when the electric flaps fully deploy to 30 degrees, a smidge of power holds the VASI glideslope at 60 KIAS, and the airplane touches down without any drama on the mains. On the next circuit, I try one of my former instructor's favorite forms of precision punishment: holding exactly 60 knots on climb-out, crosswind, downwind, and final. The obedient airplane makes this once-taxing exercise a breeze.

I feel like a hand in a glove by the time I taxi back to the ramp and shut down, even though the entire flight added just 0.5 hours to the tally on the Hobbs meter. This little airplane packs a lot of action, and enjoyment, in only five gallons of avgas per hour.

It's not going to be easy for a 35-year-old design like the Cessna 152 to compete against newer aircraft made from modern materials with glass-panel avionics, but don't count them out. This first batch of tough, proven, and resilient trainers to emerge from the Aviat factory will have a conspicuous presence at aviation events around the country, and they're likely to be followed by many more. And when pilots of my generation see these beautifully restored trainers, they'll feel an immediate attachment to them, they'll want to fly them, and they'll want their sons and daughters to do the same. **AOPA**

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MEMORIES RUSH BACK to pilots who learned in Cessna 150s or 152s, and flying one after a long absence likely will remind you of the formative flying experiences you haven't thought of in a very long time—send us your recollections (pilot@aopa.org). The airplane's flying characteristics are as forgiving, revealing, and enjoyable as ever. With some skillful attention, these still-plentiful airframes can be restored and help shape another generation of pilots.