USED AIRCRAFT REPORT

Taylorcraft F21B a good bet

N4418Y began life as a gambler

BY ALTON K. MARSH

Taylorcraft serial number 1521, an F21B tailwheel model, began life in the fast lane in 1988, hanging from the ceiling of the Stardust Hotel and Casino in Las Vegas. Pull a handle, win an airplane. ■ Taylorcraft sold it to the casino for $36,463. Taylorcraft owner George Ruckle needed to raise money to save his struggling company. But the sale

PHOTOGRAPHY BY MICHAEL P. COLLINS

of N4418Y and other discounted aircraft failed to rescue the company from bankruptcy proceedings, leading to a court-ordered sale of the entire company in 1989. It struggled on under new owners and produced new models of Taylorcraft as recently as 1994.

Both N4418Y and the company have bounced from one owner to the next over the past few years. The airplane was won at the casino by a nonpilot who sold it immediately. The aircraft is up for sale again by its present owner, Gary Milano of Frederick, Maryland. And the parent company—now just a bunch of type certificates in a drawer and locked hangars full of tooling and parts in Lock Haven, Pennsylvania—was acquired late last year by Airborne Marketing in Greensboro, North Carolina.

The newest iteration of Taylorcraft is now controlled by Dave Gordon, owner

The design has survived as a no-nonsense workhorse since the late 1920s.

of a graphics company; Lee Booth, who has previous experience in the aviation industry; and Hooman Bahrani, a young flight instructor from Iran, who will be the company's chief pilot. Booth said that the company will be named BG (for Booth/Bahrani and Gordon) Taylorcraft Aerospace and do business as Taylorcraft. The plan is to make parts and eventually aircraft. Airborne Marketing has an office in one corner of a former air freight building at Greensboro's Piedmont Triad International Airport.

Until the company's hopes are realized, pilots wanting cheap wings afforded by the Taylorcraft will have to search the used market. Depending on the year, prices for used Taylorcraft can cost the same as a car, ranging from $13,500 for a 1940s vintage model to $16,500 for a currently advertised 1975 F–19 model. As for performance, Tom Eggert of New Haven, Missouri, said that his 1946 Taylorcraft BC–12D will cruise at 83 knots on 4.3 gallons per hour. "With its 65-horsepower engine, I can out-climb and out-cruise a 220-horsepower Stearman on a hot Missouri day," Eggert said. He also owns a 1979 F–19. "The F–19, with 100 hp, is much better in the climb and

will cruise at nearly 95 knots, burning 6 gallons per hour."

Taylorcraft also built the newest model, the F22, from 1991 to 1994. Expect to pay more than $60,000 for these latest designs, which feature larger doors. The F22A and F22C (only one F22C was built) are tricycle gear models.

The story of the Taylorcraft is one of evolution, not revolution. The basic design has changed little over the years. The F21B is similar to the F-19, for example, except for the change in powerplant to a 118-hp Lycoming O-235 engine, an increase in gross weight to 1,750 pounds, a baggage area capacity increase to 200 pounds, relocation of the battery to the firewall, and skylight options for the top of the cabin and lower door panels.

Prices have held up well. The 1988 F21B flown for this article was originally sold at a discounted price of $36,463. The average used price of the aircraft today is $33,000, not much below the emergency sale price. It was the third-from-last F21B manufactured. (The second-to-last F21B, made in 1990, is offered for sale by Bob Coil of Wall Lake, Iowa, for $40,000—it has a low-time engine. The last F21B made was exported to Australia.)

The Taylorcraft company and the aircraft design have survived in one form or another since the late 1920s. The present design had its genesis as a practical, no-nonsense workhorse with low operating costs in order to appeal to a Depression-era market. If William T. Piper and C. Gilbert Taylor had not had a disagreement, the Piper Cub we know today might have been the Taylor Cub.

Piper, an oil executive, entered the aviation industry when he saved the Taylor Aircraft Company from bankruptcy in 1930. He put more than $90,000 of his own money into the company, which showed no profit up to 1935. However, Taylor and Piper had a falling out over the redesign of what was then known as the Taylor Cub.

Chet Peek, who wrote *The Taylorcraft Story* and has just completed *The First Cub* (referring to Taylorcraft, not Piper), explains what happened.

"Taylor had not been able to be at the plant working for much of the fall of 1935," Peek said. "He mentions 'being away' and an 'operation' in one of his letters. Walter Jamouneau and Ray Carlson were doing a makeover of the Cub into what would become the J-2 [despite popular myth, the J was just a natural progression down the alphabet

and did not stand for Jamouneau]. Taylor was having some input on this, via telephone. The final dispute came about when Taylor berated the engineers for not being able to get a satisfactory stress analysis ready, as required by the Civil Aeronautics Administration. Taylor then suggested the stress analysis be done by an MIT professor, '...which will only take a couple of days.'

"This prompted an acrimonious exchange of memos between Taylor and Piper on November 29, 1935," Peek said. "The upshot was that one would buy the other out. This agreement, ultimately signed on December 18, 1935, would have allowed Taylor to take over sole ownership of the company if he would pay off an $80,000 debt owed by the company to Piper. Of course, Taylor could not pay this amount, so he sold his share (of a company with a minus net worth) to Piper for $5,000."

Taylor later started his own company and continued building the Taylorcraft we know today. Over the years the design has evolved slowly, increasing the fuel load and the maximum gross weight, adding a more powerful engine and tricycle gear, and even enlarging the door.

It is the size of the door and the cockpit that explains a major reason why Milano wants to sell his treasured F21B. He feels that his father will be more comfortable in a larger cabin, and he wants an aircraft with a larger payload. (Peek said that the F21 design came in a bit heavier than planned.) The F21B carries about 450 pounds with full fuel, Milano said. Future business activities will require Milano to travel frequently to visit rental properties, which means that a faster aircraft will be needed.

Milano flight plans for 95 miles an hour (83 knots) but expects 75 to 80 if the air is turbulent or the day is hot. He approaches at 65 mph (56 knots) unless he is at maximum gross weight of 1,750 pounds, and then he uses 70 mph (60 knots).

While the aircraft, like many conventional-gear aircraft, can be landed in a very short distance, he prefers to keep a bit of power on to reduce the sink rate, and he lands in about 1,000 feet. The airplane does not have flaps and tends to float, as was evident during a test flight. It was brought in on final at 68 knots with a 90-degree, 9-knot crosswind, with bit of hopping and skipping. The aircraft also tended to float, consuming thousands of feet of runway. With proper attention paid to airspeed on a second landing, it easily stopped

An expanse of plexiglass gives the Taylorcraft F21B's cramped cabin an open feel; the aircraft's steel tube framework, control cables, and elevator trim system are visible. Cockpit details include the elevator trim handle and visual fuel indicators (opposite page).

Taylorcraft F21B
Base price: $37,398
Current market value: $33,000

Specifications

Powerplant	Lycoming O-235 L2C, 118 hp @ 2,800 rpm
Recommended TBO	2,000 hr
Propeller	Sensenich two-blade, metal, 72 in dia
Length	22 ft 3 in
Height	6 ft 6 in
Wingspan	36 ft
Wing area	184 sq ft
Wing loading	9.5 lb/sq ft
Power loading	14.8 lb/hp
Seats	2
Empty weight, as tested	1,064 lb
Gross weight	1,750 lb
Payload w/full fuel, as tested	446 lb
Fuel capacity, std	42 gal (40 gal usable)
Baggage capacity	200 lb

Performance

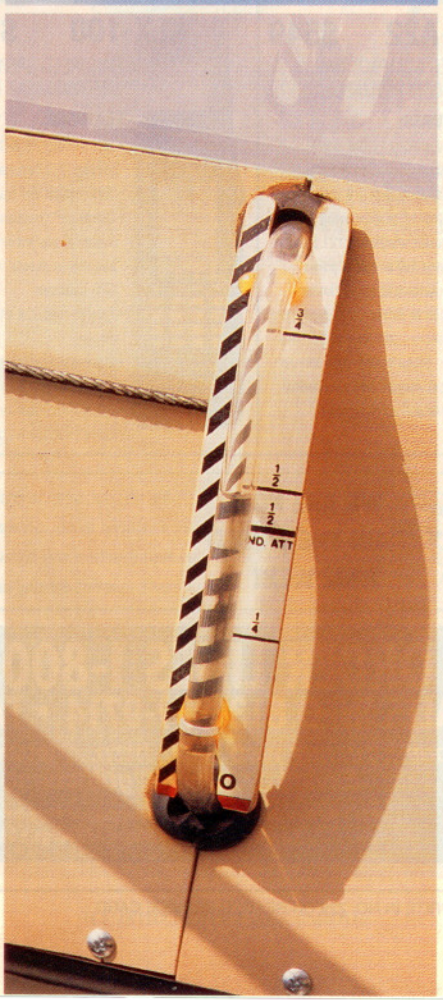
Takeoff distance, ground roll	720 ft
Takeoff distance over 50-ft obstacle	1,140 ft
Rate of climb, sea level	750 fpm
Cruise speed/endurance w/30-min rsv, std fuel (fuel consumption)	
@ 75% power, best economy	100 kt/6 hr (6.6 gph)
Landing distance, ground roll	500 ft

Limiting and Recommended Airspeeds

V_X (best angle of climb)	54 KIAS
V_Y (best rate of climb)	58 KIAS
V_A (design maneuvering)	81 KIAS
V_{NO} (max structural cruising)	102 KIAS
V_{NE} (never exceed)	128 KIAS
V_{S1} (stall)	42 KIAS

For more information, contact Airborne Marketing at 910/668-2878; fax 910/668-7890; e-mail the company at tcraft@nr.infi.net or see the Taylorcraft web page (www.taylorcraft.com). For additional information, contact the Taylorcraft Owner's Club at 12809 Greenbower, N.E., Alliance, Ohio 44601. Chet Peek's books may be obtained by writing him at 1813 Danfield Drive, Norman, Oklahoma 73072, or e-mailing to RBaron18@aol.com. The Taylorcraft Story *sells for $24.95;* The First Cub *is $17.95. Include $3.95 for shipping and handling.*

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.



in the first 1,000 feet.

"There is lots of rudder authority," Milano said. "I have landed in a 10- to 12-knot crosswind blowing at 60 to 90 degrees to the runway. It landed, but was not a happy airplane. It tends to skip a lot in gusty conditions."

As for operating costs, Milano plans for a fuel burn of 5.5 gallons per hour and generally flies at 2,350 rpm. His annual inspections fluctuate between $250 and $450; but once every 3 years, he finds a $1,000 annual inspection necessary. Insurance runs $800 a year.

Adding up the aircraft's pluses, the low operating expense is perhaps the aircraft's greatest advantage over flashier, faster aircraft. As an inexpensive ticket into the air, the Taylorcraft is hard to beat. Additionally, it is a proven design that evolved over 60 years.

In the minus department, at least for the F21B, is that smallish door size that Milano's father dislikes. Despite the fact that it has two doors, it was obvious during a flight with instructor Craig Brown that there is room in the cockpit for only one person at a time to enter and get seated. Exiting the aircraft followed that same rule but seemed more difficult than entry. However, the F22A (118 hp) and F22C (180 hp) models solved the problem.

Tailwheel aircraft are not for everyone, since they require more attention to rudder use than a nosewheel aircraft. In fact, rudder use in simple turns may have some characteristics that are unique to the F21B flown. Brown, who has given instruction in the aircraft used for this article, said that rudder pressure must be increased as the aircraft rolls into the turn, then decreased as the roll is stopped. "You have to practice to get the feel of how much rudder to apply," Brown said.

Two nosewheel F22 models were flown for comparison during a visit with the new Taylorcraft owners in Greensboro; entering and exiting the aircraft was found to be no more difficult than in a Cessna 152. A groundspeed check using a handheld GPS indicated the F22A to be a 95-knot airplane, while the F22C was a 115-knot aircraft. As in the F21B, visibility seemed a bit restricted for taller pilots. Views out the side window require a limber neck.

Still, the Taylorcraft may be just the answer for pilots in need of cheap wings. Grab one if the opportunity arises, because, as Will Rogers once said about land, they aren't making any more of them—at least for now. □