



FOUR *Oh* FOUR

*Martin's vintage airliner
survives in a new role*

General aviation is replete with special-interest groups. There are pilots fascinated and involved with homebuilts, seaplanes, warbirds, and so forth. Only a few, however, are passionate about piston-powered airliners. One of them is Jeffrey Whitesell. He is dedicated to saving as many such aircraft as possible before the cutting torch renders them extinct. His goal is to establish a flying museum, sort of a Confederate Air Force for the airliners of yesteryear. ■ Whitesell was raised in aviation. In 1961, his father, Capt. William C. Whitesell, retired from Eastern Airlines for medical reasons. He purchased and transformed a New Jersey farm into the popular Flying W Ranch, a unique fly-in resort with a Western motif. The elder Whitesell also ran a

BY BARRY SCHIFF

PHOTOGRAPHY BY MIKE FIZER

charter operation that at different times used five Martin 202s and 404s (originally designated as 2-0-2s and 4-0-4s). The last of Whitesell's Martins, N636X, had an executive interior that accommodated 16 passengers in luxurious comfort instead of 44 in airline configuration.

His customers included Muhammad Ali, Howard Cosell, Herman's Hermits, the Beach Boys, and film crews for *Monday Night Football*. Martins were popular in the early 1960s; Frank Sinatra, Ray Charles, and others owned them for personal transportation. This was the era in which young Whitesell's fascination and love for piston airliners began to grow.

Fast-forward 30 years. This is when Jeff Whitesell, now a captain for Delta Air Lines, was saddened by the disappearance of piston-powered airliners. With the encouragement of his wife, Ginger, he attempted to do something about it. Perhaps, he thought, he could find a Douglas DC-3 or DC-4 that he could restore and operate. But when two such aircraft appeared on the auction block in Billings, Montana, in 1994, they sold for more than he could afford.

Depressed by his lack of progress and while still in Billings, he discovered an ex-Eastern Airlines Martin 404 parked

in a remote corner of the local airport. The airplane had been used as a crop duster and was in deplorable condition. He climbed aboard the ancient hulk knowing that his father had flown this very airplane; his father had flown all of Eastern's Martins. Whitesell sat in the captain's seat, the very seat that his father had known so well.

An old-timer soon climbed aboard, flipped over a rusty five-gallon bucket, and sat where the first officer's seat had been.

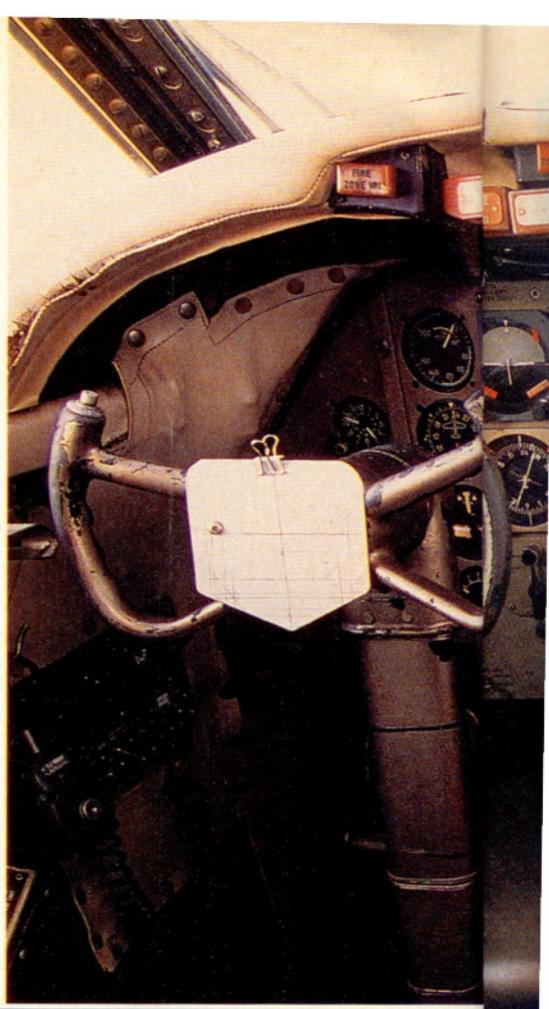
"Hey," the old man said with an impish grin, "bucket seats."

Both men were Martin aficionados and had little difficulty passing time by exchanging tales about these obsolescent aircraft. After awhile, the old man said, "Ya' know, there's another ol' Martin down in Pueblo. Got a real fancy interior."

Whitesell's eyes widened. "You wouldn't happen to know if it's 36X, would you?"

"Yup, that's the one," the old man said.

Whitesell arrived at the deserted, fog-shrouded ramp of Pueblo, Colorado's Memorial Airport at midnight. He discovered to his dismay that the once-beautiful Martin was only a decrepit reminder of its bygone glory days. There was no way, he thought, that he could possibly



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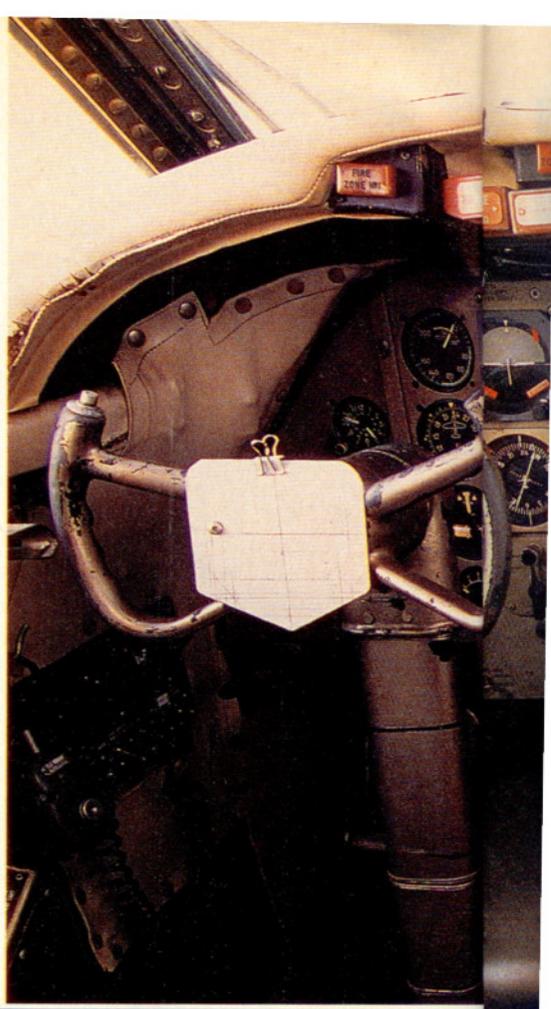
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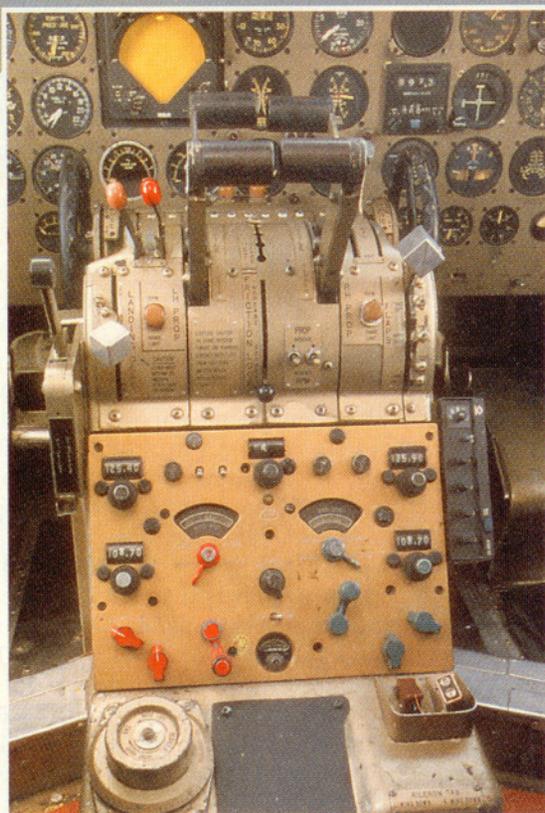




that various levels of training—including type ratings—were available from Airliners of America. My decision to train for a rating was sealed when I learned that Whitesell's airplane had been in service with TWA as *Skyliner Peoria* from 1952 to 1959. (TWA would not allow N636X to be painted in its corporate livery, which is why it currently displays the colors of Pacific Airlines, another 404 operator.)

The ground school that I attended last November at Camarillo (California) Airport was filled with 14 enthusiastic students. Four were previously qualified pilots attending for the purpose of recurrent training. Five were qualifying in the Martin for the first time. Four were volunteer maintenance workers auditing the course to learn more about the airplane. FAA representative Gary Hunt also was there to ensure that the course met all FAA requirements.

Hunt need not have been concerned. The course was thorough, albeit fast-paced. John Deakin, a captain for Japan Airlines, taught the first day's curriculum, and Whitesell taught the second. The intensity of the course reminded me of times when I attended similar but longer initial-training courses at TWA. In those days, I was



Power means pressure: For takeoff, the 404 checklist calls for 55 inches of manifold pressure.

paid well to absorb the required knowledge. It somehow seemed incongruous (and perhaps a bit masochistic) that I was now paying to endure similar academic torture.

Pilots are attracted to the Martin 404

program for a number of reasons. Penny Wilson, a private pilot and copilot trainee, typified the feelings of many: "I am intrigued by the romance of that era and the sounds made by those big radial engines. They have so much more character and personality than screeching turbines. Best of all is associating with people who share the same enthusiasm."

Kerry Bean, a Boeing 757/767 captain for a major airline, was there to sample the experiences of his predecessors. Randy Dettmer, a general aviation pilot and architect, who met Whitesell at an airshow and "got hooked by his infectious enthusiasm," said, "I also flew in these old piston airliners when I was a kid. I want to know what it is like to fly one."

After we completed ground school, Deakin taught us how to preflight the vintage airliner. Those wearing good clothes learned the hard way that the Martin spreads oil over itself almost as thoroughly as it consumes it. (Each engine has an oil capacity of 146 quarts.)

There are all sorts of access doors to open and a seemingly endless number of items to check. A thorough preflight inspection should take 30 minutes. If it



takes less time, you've missed something.

The cockpit was designed before design engineers knew much about ergonomics. Levers, controls, and instruments are distributed everywhere, seemingly without rhyme or reason. Some things simply went where they fit. The Off position of a switch might be up, down, left, or right. But there is an ambiance to the Martin's flight deck that is inexplicably alluring.

Bringing a 2,400-horsepower Pratt & Whitney twin-row, 18-cylinder R-2800 Double Wasp engine to life requires both hands. One is on the throttle, and the other reaches for the overhead panel, where it manipulates a series of switches like Van Cliburn playing the piano. Sequencing the starter selector, starter, primer, and magnetos at different times and with different fingers takes practice.

A starter is selected and engaged until nine or 12 blades of the three-blade propeller swing past any given point. This prestart protocol proves that oil has not pooled in one of the bottom cylinders and formed a hydraulic lock.



In an executive configuration, the Martin 404 offers gobs more room than most of today's larger business jets. The aft airstair is a design signature of 1950s airliners.

Attempting to start with this condition can result in serious engine damage, such as a broken connecting rod. The ignition is turned on and the primer is engaged, a procedure that is more art than science. If everything is done properly (and a silent prayer is answered), the prehistoric beast slowly awakens. It

coughs, belches, and stirs to life one or two cylinders at a time, all the while spewing great clouds of exhaust (and, of course, oil).

Taxiing is conventional for an airliner except that the nosewheel tiller, operated by the captain's left hand, is more sensitive than that of most aircraft so equip-

ped. The 404 has a maximum-allowable gross weight of 44,900 pounds, but N636X is limited to 41,500 because the engines' antidetonation-injection systems are deactivated. Empty weight for Whitesell's airplane is 32,570 pounds, which results in a useful load of 8,930 pounds.

TWA's run-up checklist for the Martin 404 contained 44 items to be completed before takeoff, twice as many as were required on the DC-3. One important task is to operationally check and arm the autofeather system. This ensures that a propeller will automatically feather should the power of its engine drop below a specified level. This occurs, however, only if the power loss lasts for more than a half-second. Otherwise, the propeller might feather at a time when the engine is only clearing its throat. If one propeller does feather automatically, the system is disabled so that the other propeller will not automatically feather for any reason.

After the aircraft is lined up with the runway, the throttles are advanced carefully, so as not to exceed engine limits: 2,700 rpm and 55 inches of manifold pressure. (Earplugs are recommended.) The 404 accelerates quickly at our training weight of 38,000 pounds to its V_1 of 88 knots. Shortly thereafter, the nose is rotated gingerly so that the aircraft lifts off at its V_2 of 100 kt. The gear is raised, and we accelerate at a shallow deck angle until reaching 120 kt. Power is reduced to 2,600 rpm and 48.5 inches (from 2,050 to 1,800 hp per engine).

We continue accelerating to 130 kt, and power is further pulled back to 2,400 rpm and 41 inches (1,400 hp). V_Y with both engines operating is 140 kt and results in an initial climb rate of 1,905 fpm.

After completing the after-takeoff checklist, I begin to relax and enjoy the antiquated anachronism. Ghosts of TWA captains past seem to bark at me from every corner of the cockpit: "More rudder, dammit!" "Keep the ball centered!" "Watch those temps! Yer gonna' roast the heads!" "What's the name of that little town down there at three o'clock?" They never let up on a new copilot.

The Martin 404 cruises at 240 kt, 85 kt faster than the DC-3. Fuel consumption during the first hour of flight (including climb) is 300 gallons. Thereafter it burns 185 to 200 gph. Fuel capacity is 1,000 gallons in each of the two wing tanks. The

404 has no bad habits and handles well as long as you don't expect it to change heading and attitude as sprightly as a smaller, lighter airplane.

It would be nice if a Martin crew included a flight engineer. The airplane is at least as complex and demanding of attention as many other aircraft that do have engineers. Oil and cylinder-head temperatures, for example, are critical, which means that the oil-cooler doors and cowl flaps have to be adjusted with almost every power and airspeed change.

After some stalls and engine-out drills, Whitesell directs me back to the airport. (Maximum landing weight is 40,200 pounds.)

While on a long final approach to

landing one is relatively easy.

After my first flight, I had more respect for the graybeards with whom I had flown early in my airline career. They operated a handful of airplane *in* the weather, not above it. This was when airmanship, instinct, and timing seemed to play larger roles than they do today. Flying a Martin 404 also makes one appreciate the increased reliability and relative simplicity of turboprop-powered airplanes.

Whitesell's goal is to collect, preserve, and keep flying as many piston airliners as possible. In the meantime, he is searching for a site that will accommodate the display of such aircraft, a place from which they also can be flown and maintained. When asked how he hopes



The 404 is a big bird: 44,900 lbs max takeoff weight, and 4,100 total horsepower.

Camarillo's Runway 26, I slow the Martin to below 165 kt and call for "gear down." Initial deployment of the slotted flaps is limited to 165 kt, and moving the handle to the second notch is allowed only below 130 kt. I expect a hefty pitch change when extending the flaps fully but am pleasantly surprised by only a mild pitching moment. This is the result of another Martin innovation. When the flaps are extended from the second to the third and final notch, the horizontal stabilizers automatically reposition to eliminate the large pitching moment that would otherwise occur. Also, a load-relief system prevents the extension of full flaps until below the maximum-allowable speed of 105 kt.

Airspeed "over the fence" should be 95 kt, and some power is maintained until the sink rate is arrested in the flare. The mains hopefully chirp, and the nosewheel is landed before commanding the propellers into reverse pitch. Maintaining airspeed between 95 and 105 kt on final approach can be challenging in a Martin (especially when having to burn off excess altitude), but

to achieve such an ambitious goal, he replies, "If you don't have a dream, how can you have a dream come true?"

Anyone interested may tour the aircraft, purchase a ride, log time in a vintage airliner that requires a two-man crew, or obtain a Martin 404 type rating. (Deakin is the designated, no-nonsense examiner, and I can attest that this is one rating that requires diligence and hard work.)

A first officer's course also is available. This includes a flight crew operating manual, ground school, flight time that includes three takeoffs and landings, and placement on a seniority list that allows you to fly as copilot to future air shows. The cost is \$1,500 (tax-deductible). □

i Links to other articles about vintage airliners may be found on AOPA Online (www.aopa.org/pilot/links.shtml). For more information on Airliners of America, contact Jeffrey Whitesell at Post Office Box 3343, Camarillo, California; telephone 805/388-7227 or e-mail topfun@ix.netcom.com