

THREE'S THE CHARM

The classic of classics is rescued from the bone yard.

BY VINCENT CZAPLYSKI

the ripe old age of 51, N25673 has been reborn. . In the half-century since this DC-3 rolled out of the Douglas Aircraft Company plant in Santa Monica, California, it has amassed more than 72,000 flight hours and flown in the colors of several airlines. The airplane lost its civilian livery in favor of olive green when it served most of World War II with the U.S. Army Air Force. Now, completely rebuilt and in like-new condition, it is the flagship of the Continental Historical Society, a nonprofit organization devoted to maintaining and flying the classic aircraft. Like most DC–3s, this one has a colorful past. It first saw duty with American Overseas Airlines (AOA), operating there from 1940 to 1942, until being pressed into wartime service, where it and its brethren earned the moniker "Gooney Bird." Returned to AOA at war's end, it was placed into storage for two years. In November 1947, it was purchased by an upstart regional carrier, Trans Texas Airways, where it flew the line from Hobby air-

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port throughout Texas and neighboring states for 22 years. By 1969, Trans Texas had become Texas International Airlines, which retired its DC–3 fleet in favor of jet aircraft. N25673 was sold to Tradewinds Aeromotive, Incorporated, an aircraft brokerage company in San Antonio, and was again placed in storage, this time for five years.

In 1974, Provincetown-Boston Airlines (PBA), a commuter carrier, purchased it. Reregistered as N130PB, it operated as part of a 12-ship DC-3 fleet until 1988. That year, PBA placed all its DC-3s in storage while undergoing a merger with Bar Harbor Airlines. After the merger, which ended in a purchase by Continental Airlines, newly formed Continental Express put the DC-3s up for sale. The flying was being left up to modern turboprop equipment. The old Douglas ships were ferried to Marco Island, Florida, and parked, an uncertain future ahead.

The market for DC–3s is not brisk, and two years later, many of the aircraft were still parked.

Enter Jim Minor, an airline pilot who had flown these same DC-3s in the 1950s and 1960s while working for Trans Texas Airlines. Now a DC-10 captain for Continental, and with two sons flying at another major carrier, he retains a love and fascination for the Gooney Bird. He has logged more than 7,500 hours in DC-3s and is also an FAA DC-3 designated examiner. With such a background, he was an appropriate person to lead an ambitious project to restore one of the aircraft to original condition. In addition to his natural professional interest in the restoration, he felt it had great merit as an employee-involvement project at Continental that would generate the kind of support needed to see it through to completion.

The convoluted path of airline mergers and buyouts resulted in ownership of most of the parked DC–3s passing to Continental, as parent company of Continental Express. The DC–3s were still on the auction block, but Continental agreed to lease one to the Continental Historical Society for \$1 a year and offered other help to the fledgling society. Minor made a trip to Marco Island to choose one of the aircraft for the project.

"When I got there, some of the planes were in bad shape," Minor remembers. "I narrowed the selection



At age 51, N25673 has been reborn. Completely restored and in like-new condition, it now is the flagship of the Continental Historical Society.





down to three, N25673 being my second choice. The tailwheel was broken off, and it was looking pretty sad. By the time I made it back to Houston from the trip, two of the three airplanes had been sold to a Mexican airline, so it quickly became my first choice." Minor returned to Marco Island to retrieve the aircraft, after first replacing the tailwheel and two damaged engine cylinders.

What followed was a complete refurbishment, aimed at authentically restoring it to perfect flying and display condition. PBA had performed some major alterations to the aircraft, including removal of the overhead racks, lavatory, and cargo bin. These needed to be replaced. Corrosion had damaged large areas of the skin as well as some support members. Even the props were wearing thin and in need of replacement.

The work was performed by an allvolunteer force made up of airline pilots, mechanics, and other interested persons, all founding members of the fledgling society. Their first chore was to strip the paint and remove the interior furnishings. Next, corrosion-damaged sections were removed. Zinc chromate was applied to ward off further corrosion. The bare fuselage was then ready to be completed in circa-1950 style (the period during which DC–3s flew at Continental).

Obtaining authentic replacement parts in good condition became the next challenge. According to McDon-



nell Douglas representative Bruce Cunningham, the aerospace giant no longer stocks DC-3 parts. However, it maintains the production certificate for the aircraft and can complete a custom order for virtually any DC-3 part needed. And with more than 10,000 of the old aircraft built in this country, and an unknown number of others assembled in the Soviet Union and elsewhere, there are still plenty of good used parts in circulation. In fact, Cunningham, who serves in the volunteer position of vice president of the Douglas Historical Foundation, which itself recently completed a five-year restoration of one of only two DC-2s flying in the world, estimates the number of DC-3s still flying at nearly 2,400.

Eventually, the needed parts were found through a network of used parts suppliers. One source provided the majority of items, including templates for construction of new bulkheads and support members. Six propeller blades were located at another for \$600 each ("quite frankly, pretty reasonable," says Minor).

Restoration of the avionics required a more contemporary approach. The old nav/coms were replaced with modern radios, and a dual transponder system replaced the former single unit. A loran system is being installed as well. The new equipment will be especially useful for some planned visits to European air shows.

The final repainting was completed a year after the project was started. Sporting its original N number, the







finished aircraft made its maiden trip to the Hillsborough Air Show in Portland, Oregon, in June 1990. This summer, it was seen at numerous shows across the United States, including Oshkosh, where it flew away with the "Outstanding Antique Transport Award."

Ten complete flight crews are qualified to fly the aircraft. Pilot check-outs involve a two-day ground school, written exams, and flight training to proficiency. Captains must have a minimum of 3,000 hours as pilot in command in DC–3s to be considered. First officers need not have previous DC–3 experience.

In-flight service is provided not by flight attendants, but by "hostesses" who wear authentic 1950s-style uniforms and offer passengers interesting background information on the old airplane. N25673 is operated under Federal Aviation Regulations Part 91 and thus is not for hire, but free rides are arranged for groups and individuals on a limited basis.

The two-year-old Continental Historical Society has about 300 members and is based at Hobby airport in Houston. There are no dues; a regular newsletter is in the planning stages. Membership is open to any interested person, but for insurance reasons, only active or retired Continental pilots and flight attendants are eligible to serve as crewmembers. The organization depends heavily upon private donations for funding. (For membership information, contact society Chairman Jim Minor at 4123 Hockaday Drive, Dallas, Texas 75229.)

Although airborne, the society still has some large obstacles to clear. The

ongoing Chapter 11 difficulties at Continental Airlines, which has been the largest corporate sponsor of the society's efforts, have recently resulted in a significant loss of funding to the group. This in turn resulted in a major reduction in the amount of flying done with the aircraft. While still available for special events, when not at Hobby, the airplane is spending much of its time these days in a climate-controlled hangar graciously offered by the Lone Star Air Museum in Galveston, Texas. Meanwhile, the society is taking advantage of abundant inhouse talent by beginning restoration on vet another DC-3, N18121, which, with more than 90,000 logged hours, is believed to have more flight time than any other transport aircraft.

To see the crew preparing the airplane for takeoff, it's easy to imagine that this could be a morning 30, 40, or 50 years ago and that a long day of flying the line between the small towns and cities of Texas lies ahead.

There is a sense too of poetic justice that the half-century-old airplane has come to roost at Hobby airport. "If an airplane has to be put out to pasture, this is how it should be done," says Minor. "It's back where it spent 22 years of its life, and it's in the good hands of some folks who really love it." With continued tender loving care, the sound of the old Douglas should continue to be heard in the skies of Houston and elsewhere for many more mornings to come.

SUMMERTIME DOUGLAS MEMORIES

My own experiences with N25673 were had one memorable summer season, flying as copilot for Provincetown-Boston Airlines on Cape Cod, Massachusetts. I was based at Provincetown airport on the very tip of the Cape. The old-fashioned field was made up of a single paved runway, a tiny terminal building, and an ancient hangar, surrounded by sand dunes and beaches. Nothing much had changed there in decades, making it the perfect setting for the airplane. N25673 was known then as N130PB, and it was part of a fleet of similar DC-3s we operated. We referred to



Ready for a refurb is N36PB, another DC-3 owned by the Continental Historical Society. When restored, it will bear an early Continental livery.

them simply as "3s" or "Douglases." A scan of my logbook shows I flew N130PB along with half a dozen other 3s that summer.

Never having flown an airplane as large as the 3 before, I remember my first landings vividly. George Davies, the check pilot, talked me around the touch-and-go pattern at nearby Hyannis Barnstable airport. During the first couple of attempts, George had his work cut out for him, his shouts and gestures rather than any innate skill on my part getting us around the pattern. But after becoming comfortable with the power settings and speeds, I began to make slow progress. A moment of enlightenment occurred when I first started to appreciate the aircraft's crosswind capability. which is excellent. Although the 3 seemed big and ungainly at first, its large rudder easily controlled the aircraft in the stiff crosswind. The proper flare point was harder to find, as I was unaccustomed to sitting so high up in a cockpit (the pilot's eye view being nearly 16 feet above the runway at touchdown). I tended to bounce the ship back into the air as the mains contacted the runway sooner than planned. However, I was to learn later that the aircraft, with its big, soft tires, was often capable of the gentlest touchdowns I have felt before or since in any airplane. Once down, half the challenge of the aircraft was in mastering the nuances of ground handling. Like sailors, new Douglas pilots quickly became attuned to the effects of wind anytime the aircraft was in motion.

Davies finally signed me off as being good enough to fly revenue flights, and so began five months of enjoyment, shuttling between Boston, the Cape, and the islands of Nantucket and Martha's Vineyard. On nice days, we sometimes flew with the cockpit side windows open, elbows out in the slipstream. When it rained, closing the windows didn't help much, as steady rivulets of water usually ran down the inside of the windscreen and onto the pilots. We regularly flew with earplugs in and David Clark headsets clamped firmly around our ears to keep the noise level bearable. In-flight check lists were usually wordless affairs, performed with nods and elaborate hand signals.

Everything about the Douglas was oldfashioned, nothing more so than the instrument panel. Although a few of the aircraft had received limited avionics upgrades, most of the fleet was equipped as outfitted by the previous owner. Trans Texas Airways, in the late 1950s. Directional gyro, horizontal gyro, and turn and bank indicator were all vintage instruments from this period, powered by a simple vacuum system. The DG looked much like a wet compass, displaying a directional range of about 90 degrees at a time in a side-to-side fashion, unlike modern designs that allow an "overhead" view of the entire 360 degrees of direction on the instrument face. VOR receivers were singleneedle types. To someone accustomed to RMIs and flight directors, the panel took getting used to, back course approaches in particular requiring special mental gymnastics. We flew without weather radar too. which, because of a grandfather clause in the Federal Air Regulations, was not required on the aircraft in commercial operation.

In flight, the Douglas had a solid, if at times sluggish, feel to it. Once pointed somewhere, it plodded along under its own inertia and tended to be very stable. Its large ailerons and unboosted flight controls resulted in control forces definitely on the heavy side of the spectrum, the airplane feeling very much like the lumbering airliner it was.

New DC-3 copilots at PBA were treated cautiously by more senior pilots. Until a neophyte demonstrated an ability to consistently make good touchdowns on the long runways, the captain made the landings on Provincetown's 3,500 imes 100-foot strip. Besides being a fairly short runway, its width and the 3's 95-foot wingspan, nearly identical to a DC-9's, demanded centerline touchdown and precise footwork on the rudders to avoid an ignominious encounter with sand dunes along the runway's edge. A 5-knot tailwind restriction for landing was scrupulously observed to avoid departing the runway's end, especially during heavy-weight landings.

Climb performance was not stellar compared with later-day aircraft, and on

hot days, takeoff from Provincetown with a full passenger load had our undivided attention. The takeoff field length limitation chart indicated the runway was very nearly the minimum required length for our typical weights. Initial climb rates on such days hovered around 550 feet per minute at takeoff power settings, dropping to 350 fpm when reducing to climb power. The possibility of engine failure was thus never far from our minds. During training flights at lighter weights, the aircraft's single-engine climb capability seemed, if not exceptional, at least adequate, requiring a great deal of rudder input. We knew that there was no margin for error at Provincetown and that, in theory, a perfectly executed takeoff with a failed engine would barely give an anemic climb. I was personally glad not to have had to test the theory.

At every stop, the routine was "check the fuel and top off the oil," for the 14cylinder, 1,200-horsepower Pratt & Whitney R-1830-92 engines consumed prodigious amounts of lubricant. We learned that the quickest way to ruin a white uniform shirt was to stand behind a Douglas with engines running. This often resulted in a fine black polka-dot pattern appearing suddenly on one's shirt when power was applied at the start of taxi. Equally harmful to a wardrobe was the preflight walkaround. It seemed oil dripped continuously from the engines, and black, gooey streaks often adorned the wings and fuselage.

Engine runups were performed one at a time with the control yokes pulled all the way back to avoid raising the tail. This was especially important with a light payload. One unfortunate crew earned time off without pay when they attempted to run both engines up at the same time in an empty airplane. The 3 promptly lowered its nose to the ground, loudly shaving several inches from both propellers.

We got to meet some interesting passengers flying the 3. Some expressed fear of flying on such an old aircraft, while others just wanted to know why the nose pointed upward. More typically, there was genuine interest in the airplane. Many took the time to tell us tales of their own DC–3 experiences from years past, both as pilots and passengers. More than one customer made a point of saying they had booked their flight solely to experience a ride on the classic airplane. I'm sure the turbinepowered crowd couldn't claim that.

As early fall came and the tourist season ended, so did my short tenure on the 3. I left N130PB and its sister ships behind, taking with me some valuable flying lessons as well as terrific memories of a venerable old airplane. In the small world of aviation, it is good to cross paths once again. -VC

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