

CLASSIC WITH PUNCH

From garage clutter to prized possession: a unique Luscombe 8F

BY J. JEFFERSON MILLER

Like many airline pilots, T. William (Bill) Tinkler's love affair with lightplanes never ended. He learned to fly in a J-3 Cub when he was in high school, and flew a succession of light airplanes before signing on with an airline. From 1955 through 1979, Tinkler, AOPA 23570, flew for United Airlines, starting as a flight engineer on DC-7s and finishing his career as a 727 captain. During those years, he also owned and flew a number of lightplanes, preferring the slow, the elegant and the breezy to hermetically sealed aluminum speedsters. His prized possessions have included Stinsons, Stearmans, Luscombes and a Ryan PT-22 military trainer.

Today the Tinkler fleet consists of NC1594B, the Luscombe 8F shown on these pages. It is a special airplane, though not because of any great



historical significance, nor because it is the product of an immaculate restoration job. It is immaculate, but it is also highly modified.

It is special simply because no pilot who comes within 10 paces of it can resist its charm. It is so cheerful-looking that you can't help stopping in your tracks to gaze at it sentimentally.

To some, it is an object of nostalgia; to others, an object of curiosity. The big yellow S on the cowling must suggest to some younger pilots that they are examining a Stinson of some kind. Actually, the S stands for Silvaire, a name selected for the Model 8A and all subsequent Luscombes in a Luscombe employees' name-the-airplane contest.

Part of the airplane's charm, no doubt, is that it seems rather quaint by today's standards. In its time, however, the Luscombe, which was introduced in

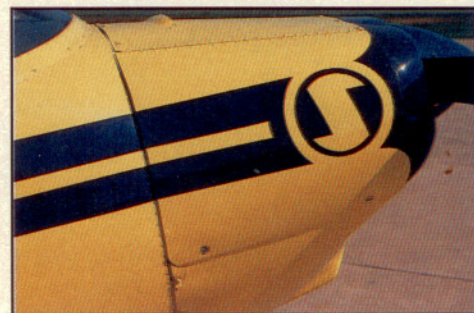
1939, was advanced for a lightplane. It was one of the earliest light aircraft to have an aluminum semi-monocoque fuselage. Cruise speeds of over 100 mph (87 knots) made the 65-hp Luscombe 8A seem sporty in comparison to competing models, such as the tandem-seat Aeronca 7AC Champ and the Piper J-3 Cub, both powered by the same 65-hp Continental as the Luscombe.

The Luscombe was a popular airplane. More than 6,000 were sold. Almost all of them, however, were built in 1946, the boom year in which Luscombe, Piper, Cessna, Aeronca and others flooded the market with two-place trainers.

Under a slightly different set of circumstances, the Luscombe logo could have been as ubiquitous on airport ramps today as Cessna's or Piper's. But the Luscombe Aircraft Company did not

LUSCOMBE 8F

The Silvaire, with its all-aluminum structure, was one of the most attractive airplanes of the post-war period.





the conglomerate known today as the LTV Corporation.) The Silvaire Aircraft Company built another 86 Luscombes. They were the last of the Luscombe line. (For more on Luscombe history and service information, see "Basic Beauty," February 1983 *Pilot*, p. 64.)

Today Luscombes are revered by some pilots the way sports car enthusiasts cherish old MGs: They aren't the most comfortable or best handling two-seaters around, but they are fun.

Tinkler found his Luscombe in 1969 on the general aviation ramp at Denver Stapleton International Airport. The thin upper wing skins were slightly hail-battered (you can still see the dimples), but the airplane was airworthy. So he bought it as a trainer in which to teach his two sons to fly. He also used the airplane for a commute from his home in Annapolis, Maryland, to Warrenton, Virginia, where he was restoring a Stinson Reliant. When the Reliant was completed in 1971, the Luscombe was moth-balled in the family garage.

There the airplane sat for eight years before it was put on a trailer and hauled to the shop of Moody A. Larsen of Belleville, Michigan (313/482-0694) for extensive overhaul and modification. Larsen holds the type certificates and tooling for the Luscombe and maintains a large stock of Luscombe parts. For an owner in a bind, he says he will fabricate any airframe part he does not already have on hand. Certain new Luscombe parts also are available from Univair Aircraft Corporation of Aurora, Colo-

rado (303/364-7661) and Wag-Aero, Incorporated, of Lyons, Wisconsin (414/763-9586).

Tinkler left the Luscombe at Larsen's shop with instructions to give the old airplane the works. Larsen agreed, but gave Tinkler an instruction in return: "Don't rush me." The airplane's renovation was completed in 1983. And, in his estimation, it was worth the wait.

Larsen substituted a 150-hp Lycoming O-320 for the 8F's Continental C-90, a modification for which Larsen has received a supplemental type certificate. He has converted 16 Luscombes to the Lycoming engine.

Along with the new engine came a Prestolite 35-amp alternator, replacing the C-90's generator, and a vacuum pump, enabling the Luscombe to be equipped for IFR flight. A new panel was cut and new instruments were installed in the standard T-arrangement. An alternate air source was installed for the pitot-static instruments. The modifications also included panel lights, a dome light and push-to-talk switches on the control sticks.

Larsen gave the Luscombe a tasteful gray velour and Naugahyde interior. The baggage compartment was enlarged, creating room for a couple of duffle bags and a removable 20-gallon auxiliary fuel tank. The 8F's standard fuel capacity is 30 gallons, carried in two 15-gallon wing tanks.

At Tinkler's request, Larsen designed a four-point shoulder harness arrangement for both seats. Tinkler became a

survive the big plunge in aircraft sales that occurred in the late 1940s. Luscombe was, essentially, a one-design company and had nothing to fall back on when the market for two-place airplanes became saturated. The company did bring out, in 1948, a four-seat model called the Model 11A Silvaire Sedan—a sort of bloated Model 8. But it met with little buyer enthusiasm. Eighty-two were built before the company filed for bankruptcy in 1949.

Other companies tried with limited success to resurrect the Luscombe design in the 1950s, but its glory days had passed. The Texas Engineering and Manufacturing Company (Temco) built about 50 Luscombes. (Temco also took over the production of the two-seat, retractable-gear Swift from the Globe Aircraft Company. In 1959 Temco was acquired by Ling-Altec, which grew into



A retired United Airlines captain, T. William Tinkler prefers Luscombes over Boeing 727s.

firm believer in shoulder harnesses in 1946, when the lack of such restraints in another Luscombe nearly cost him an eye: "I hit some power lines going into a little field," Tinkler recalls, "and added power, thinking I might be able to fly through them. But that just sent me into the ground faster. The Luscombe was absolutely destroyed. The cockpit structure was the only thing intact. It is a very strong structure."

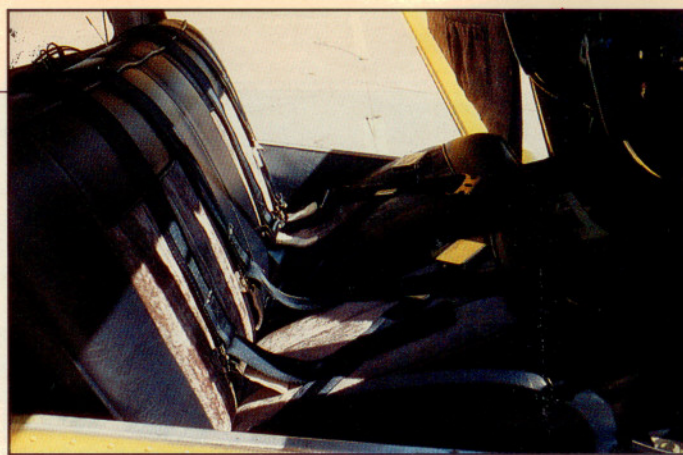
The only work Larsen did not do on Tinkler's Luscombe was the installation of radios and an intercom system, which was handled by Henson Avionics in Hagerstown, Maryland, and the application of the paint, which was performed by C. E. Sanderson Aircraft Refinishing of Downingtown, Pennsylvania.

Through all of these efforts, Tinkler gained the best of both worlds, an IFR-capable airplane in a beautiful, nostalgic

wrapping. With 150 hp available on takeoff, the Luscombe lifts off the ground quickly, using no more than 400 or 500 feet. Rate of climb at 70 knots is about 1,500 fpm. According to Larsen, the airplane can climb to 10,000 feet in 10 minutes and has a service ceiling of

22,000 feet. Maximum cruise speed is 122 knots at 7,000 feet. At 2,200 rpm, Tinkler's Luscombe will cruise at 109 knots at 3,000 feet.

Those considering the purchase of a Luscombe will find few, if any, as well equipped as Tinkler's. Of the nearly



An unfortunate accident convinced T. William Tinkler to install shoulder harnesses in NC1594B.

LUSCOMBE 8F

The full Larsen modification gives aging Luscombes new life.



2,000 Luscombes registered with the FAA, most are 65-hp Model As that are not equipped with electrical systems. Many are restored beauties, others the victims of benign neglect. The average price for an 8A, according to the *Aircraft Bluebook Price Digest* is \$7,000. Average price for an 8F is \$8,500.

There are two associations that can provide information on maintaining or restoring a Luscombe: the Luscombe Association, 6438 West Millbrook Road, Remus, Michigan 49340 (telephone: 517/561-2392); and the Continental Luscombe Association, 5736 Esmar Road, Ceres, California 95307 (telephone: 209/537-9934).

Some pilots in the market for a vintage taildragger may be dissuaded from purchasing a Luscombe because of the airplane's reputation for twitchy ground handling. Many pilots today think of the Luscombe as a ground loop waiting to happen. While acknowledging that it is sensitive to rudder inputs, Tinkler says its reputation is undeserved: "Thousands of people soloed in Luscombes, many in eight hours or less. People simply have not learned to pay attention to what their feet are telling them."

Tinkler was kind enough to allow me to fly the Luscombe on two occasions to judge the airplane's handling qualities for myself. Influenced as I was by tales of ground-looping Luscombes, I was concerned that I might accidentally swerve the airplane into the runway lights. It was a pleasure and a relief to find that the Luscombe was not quite the little imp it was purported to be.

As with any taildragger, ground handling in the Luscombe presents more of a challenge to pilots who fly tricycle-gear airplanes. Proper tailwheel training, however, can minimize the chance of a ground handling mishap.

The heel brakes on Tinkler's airplane are quite effective for maneuvering in tight spaces. Once out on the taxiway, the airplane tracks nicely with just slight pressures on the rudder pedals to work the steerable tailwheel.

The controls in the Luscombe do not fall easily to hand. The stick, instrument panel and windshield all seem uncomfortably far away. As a consequence, I found myself tending to hunch forward while flying the Luscombe.

Pilot and passenger sit well back beneath the wing, which obstructs vision in a turn. The skylight in the roof is fine for brightening the cockpit and helps you see where you are going in a turn to

the right. But it is useless in a left turn, at least from the pilot's side. When flying a Luscombe, it is important to develop the habit of raising one wing for a traffic check before banking in either direction.

Control harmony is poor, but it does teach you to think about control coordination. The rudder requires only the lightest of pressures, while the ailerons require muscle. The elevator is light, but not overly sensitive.

The long wings of the Luscombe (35 feet) make it float on landing, unless speed is properly established. Sixty knots is a good approach speed—any faster and you will not make it into a short strip. The approach attitude is rather flat. The Luscombe has no flaps to steepen the attitude. As is standard practice in older, no-flap aircraft and modern ones such as the Christen Eagle, you will have to slip the airplane to lose altitude

if you are too high on the approach.

After a half-dozen landings into a slight quartering crosswind without any problems, I was beginning to feel a bit cocky. However, the next time I flew the Luscombe, I had my comeuppance. It was a gusty day with stiff crosswinds at every airport we visited.

Coming in for one landing at a grass strip along the eastern shore of the Chesapeake Bay, I hit the burbling wind currents close to the ground, and the Luscombe seemed to go several directions at once—up, down and sideways. No one could have mistaken the landing as one made by an old tailwheel pro. At least it was not a ground loop.

The Luscombe can humble you on occasion, but it also will delight you with a good landing. Tinkler's Luscombe will delight you, whether you are flying it or just staring at it. □



1948 Luscombe 8F
Modified by Larsen Industries

Specifications

Powerplant	Lycoming O-320A2B, 150 hp
Recommended TBO	2,000 hr
Propeller	McCauley two-blade, metal
Length	20 ft 7 in
Height	6 ft 3 in
Wingspan	35 ft
Wing area	140 sq ft
Wing loading	10.5 lb/sq ft
Power loading	9.8 lb/hp
Seats	2
Cabin length	5 ft 8 in
Cabin width	3 ft 1 in
Cabin height	3 ft 5 in
Empty weight	1,031 lb
Gross weight	1,470 lb
Useful load	439 lb
Payload w/full fuel	259 lb
Max takeoff weight	1,470 lb
Max landing weight	1,400 lb
Fuel capacity, std	180 lb/30 gal
Fuel capacity, w/opt Larsen fuselage tanks	300 lb/50 gal

Oil capacity	8 qt
Baggage capacity	75 lb

Performance

Takeoff distance, ground roll (sl, 70°F)	400 ft
Rate of climb, sea level	1,500 fpm
Max level speed, sea level	125 kt
Cruise speed/Range w/45-min rsv, std fuel (fuel consumption, ea engine) @ 75% power, best economy	5,000 ft
	120 kt/360 nm (48 pph/8 gph)
Service ceiling	22,000 ft (estimated)
Landing distance, ground roll (sl, 70°F)	600 ft

Limiting and Recommended Airspeeds

Vx (Best angle of climb)	60 KIAS
Vy (Best rate of climb)	70 KIAS
Va (Design maneuvering)	100 KIAS
Vno (Max structural cruising)	100 KIAS
Vne (Never exceed)	125 KIAS
Vso (Stall in landing configuration)	45 KIAS

Specifications are based on manufacturer's calculations and the owner's flight evaluations. All performance figures are based on standard day, standard atmosphere, at sea level and gross weight, unless otherwise noted.

LUSCOMBE 8F FLYING THROUGH HISTORY

Retracing the old transcontinental airmail route



Bill and Christine Tinkler spent two years researching the route flown by the early airmail pilots before starting on their own airmail flight.



CHRISTINE TINKLER

The grass strip at Sunbury, Pennsylvania, was once an emergency airmail landing field.



Midway Airport in Chicago was not an airmail strip. The first Chicago airport is gone.

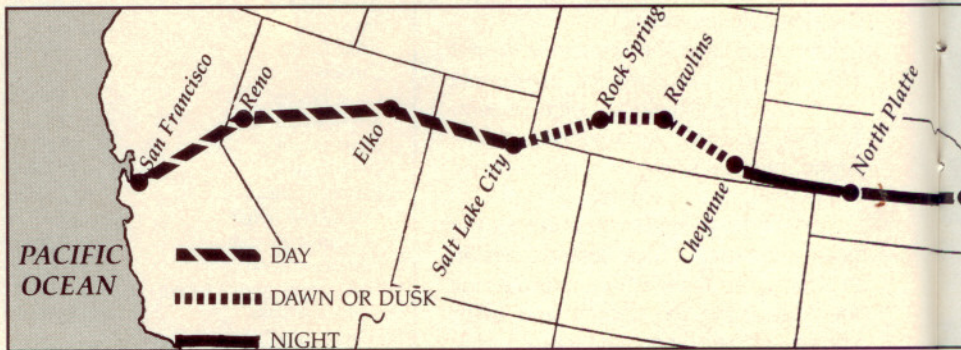


The Luscombe in a vintage setting on the Lee Airport in Annapolis. The flight office building dates back to the 1930s, when it was a farmer's home.

The airmail hangar in North Platte, Nebraska, dates back to the early 1920s. Several of the original airmail hangars are still standing.



The route of the original transcontinental airmail. Under optimum conditions, pilots flying de Havilland DH-4s were able to fly the route in 34 hours westbound and 29 hours eastbound, making 16 stops enroute. This is the 1924 map. In 1925, stops were added in Sacramento and Des Moines. The Tinklers flew the route in 16 days, flying just a few hours every morning.



On June 16, 1984, the morning rush of departing airliners at Newark International came briefly to a halt to make way for one rather unusual departure, a jaunty little yellow and blue Luscombe bound for San Francisco.

For the Luscombe's crew, T. William (Bill) Tinkler and his wife, Christine, it was the beginning of a novel experiment and a long-planned adventure. Their intent was to retrace the original transcontinental airmail route as a way of commemorating the sixtieth anniversary of coast-to-coast "through" airmail service (that meant that the airmail was flown around the clock: Daylight transcontinental airmail service began in 1920).

The Tinklers carried with them special airmail letters that would be postmarked at each of the 16 stops along the route. For navigation, they would rely on the only source available to airmail pilots in 1924—a copy of *The United States Air Mail Pilots' Directions, New York-San Francisco*. The book is, essentially, a collection of pilots' notes made in the first years of the airmail service.

The Luscombe headed west out of the terminal control area. Once released by air traffic control, Tinkler turned south to locate Hadley Field in New Brunswick, New Jersey, the first waypoint after Newark. As the Tinklers were to find many times on their journey, the landmark was a bit difficult to spot: Today, an industrial park occupies the site of the old airfield.

But the second major landmark, Belvidere, New Jersey, a small town on the Delaware River 35 miles further west, appeared much as it did 60 years earlier. From there, the Tinklers flew on to Bellefonte, Pennsylvania, the first stop for the transcontinental airmail. You can't miss Bellefonte. According to *Pilots' Directions*, it's the town located five miles west of the bald spot on Bald Eagle Mountain.

From Bellefonte, the Tinklers flew to Cleveland and Bryan, Ohio; Chicago, Illinois; Iowa City, Iowa; and 11 other cities across the continent, one stop a day, ending their trip 16 days after they began. The airmail pilots of 1924, flying de Havilland DH-4s through the night, made the trip in about 34 hours, westbound, and 29 hours, eastbound. And they did so with surprisingly few delays, according to Tinkler. The early airmail pilots crossed the mountains in daylight and flew the plains in darkness. Between Chicago and Cheyenne, Wyoming, there were 289 flashing airway beacons to guide them, one every three miles. The beacon system no longer exists, save for a single beacon located on a ridge south of Harrisburg, Pennsylvania's Capital City Airport.

The transcontinental airmail route is of particular interest to Tinkler, a former United Airlines captain. United was formed by four airlines: Boeing Air Transport, National Air Transport, Pacific Air Transport and Varney Airlines. Boeing Air Transport flew the mail between San Francisco and Chicago. National Air Transport flew the mail between Chicago and New York. Pacific Air Transport and Varney Airlines flew feeder routes for the early transcontinental airmail.

The railroads were indispensable navigation aids to the early mail pilots. Sixty years later, the Tinklers found they could still navigate by the same railroads. Near Hamilton, Ohio, they picked up the tracks of the old Wabash Railroad. From there to Lake Michigan (108 nm), it was only a matter of following the rails. Tinkler found that even where track had been torn up, he could still make out discolorations or depressions in the earth.

As the Tinklers flew the sparsely populated country of the West, manmade landmarks were fewer and natural land-

marks dominated the landscape—a landscape as remarkable for its areas of majestic beauty as for its barren near-moonscapes. Bill Tinkler reports that one stretch of territory between Salt Lake City and Reno, Nevada, described in the guidebook 60 years ago as 100 statute miles of "uninhabited and desert country," is still uninhabited and desert country.

The Tinklers followed the path of the airmail pilots over mountains described in the pages of *Pilots' Directions* in bleak terms: "Elk Mountain [is located] to the north of the Medicine Bow Range, a black and white range of mountains, the black parts of which are forests and the white, snow-covered rocks. Elk Mountain is 12,500 feet high. Fly to the north of this conspicuous mountain over high, rough country." Recommended altitude for crossing the Sierra range was 15,000 feet—not a pleasant route to fly in the winter in an open-cockpit DH-4 without oxygen.

Many of the airports along the original airmail route are gone now. A hospital complex stands on the site of the original Chicago airmail field. A golf course has replaced the airmail field in Reno. Others simply have been swallowed by urban sprawl. But some of the old airmail hangars remain. In Bryan, Ohio, the Tinklers found, the old airmail hangar is now used to house a home improvement company.

Some of the early sod runways have been transformed into major airports or military installations, such as Salt Lake City International and Offutt Air Force Base in Omaha, headquarters of Strategic Air Command. The Tinklers were surprised to discover that the flight operations building at Offutt is the original airmail hangar.

Some grass strips, such as the emergency landing field that the Tinklers came across on an island in the middle of Susquehanna River in Pennsylvania, are still used by light airplanes.

The couple reached San Francisco on schedule, 60 years to the day from the inauguration of through airmail service. They were greeted at San Francisco International by John R. McKean, chairman of the board of governors of the U.S. Postal Service, to whom they handed over the letters they had carried. For the U.S. Airmail, it was the end of the line. For the Tinklers, it was the end of an adventure.

—JJM

