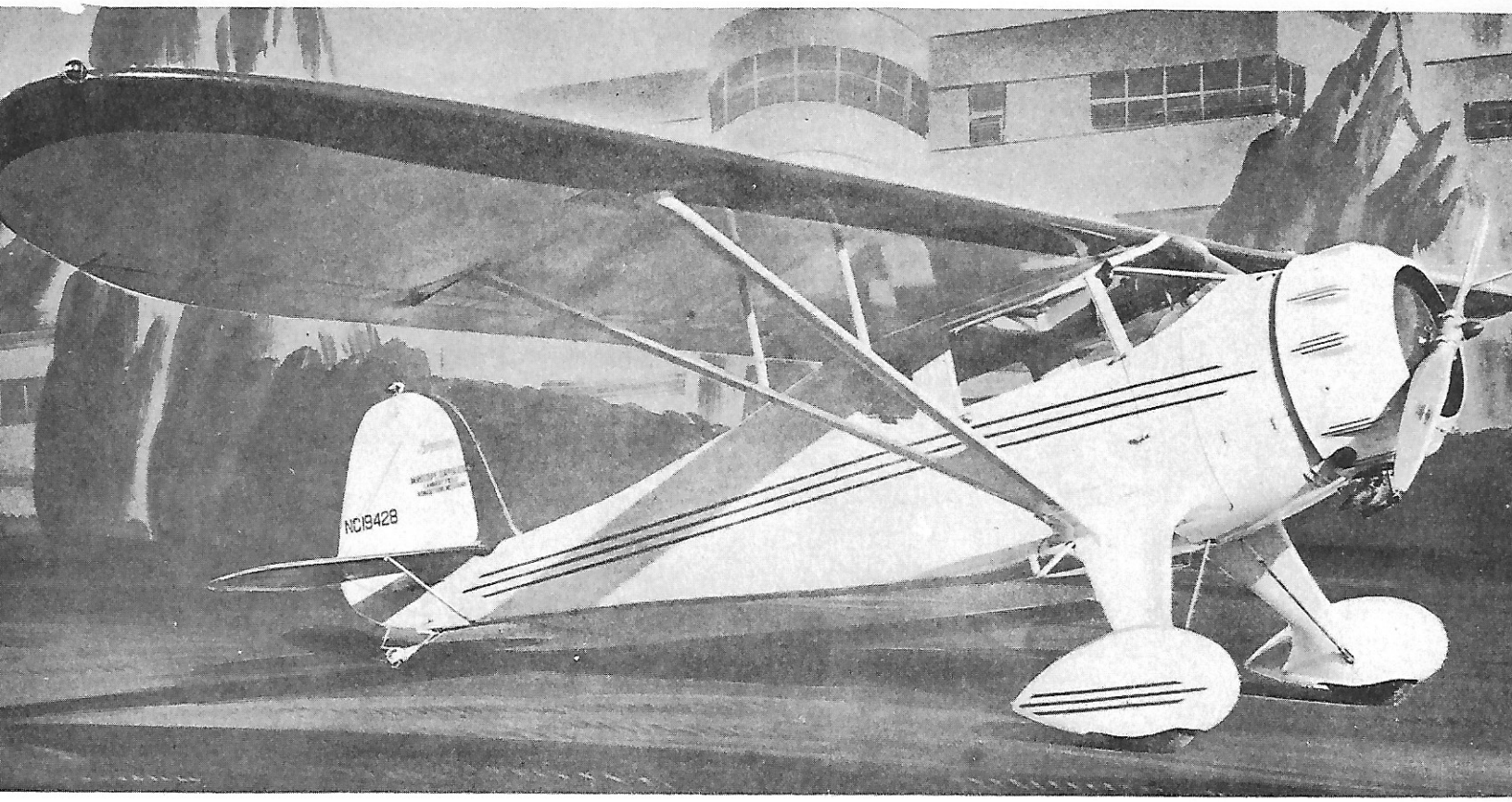
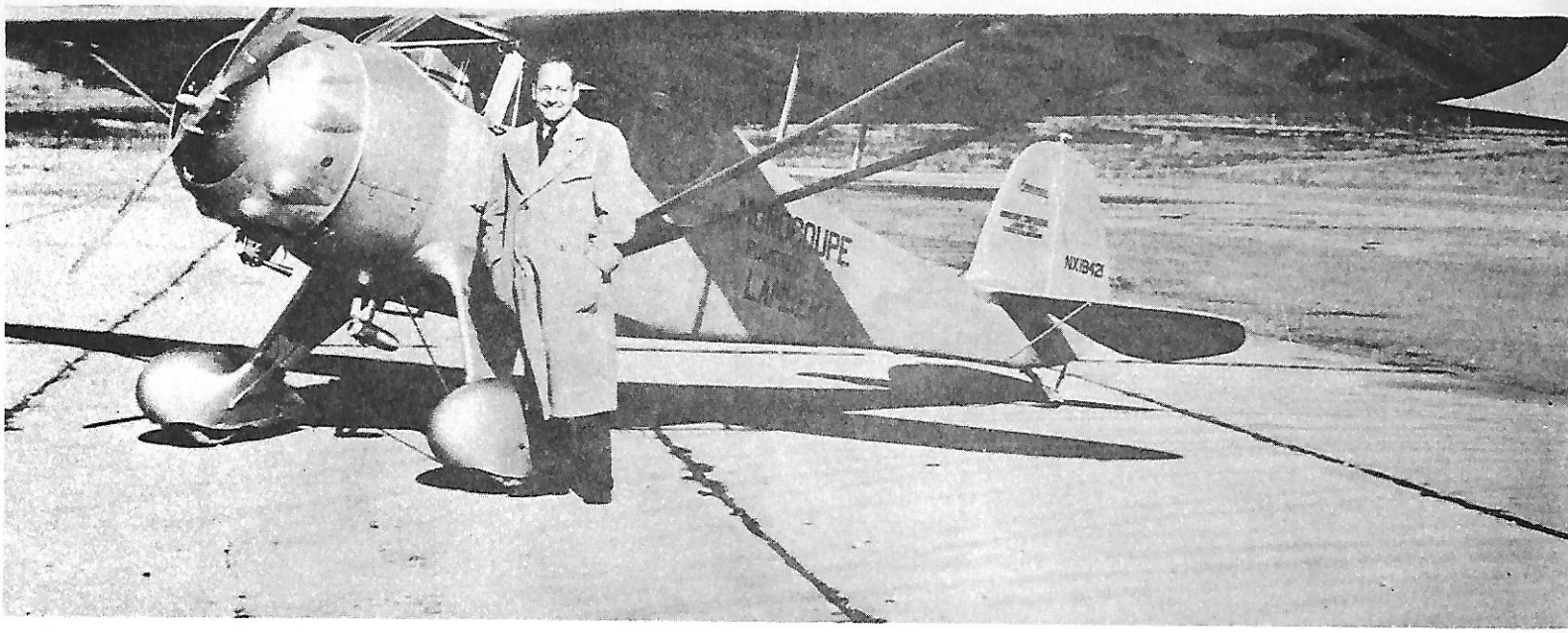


THE Monocoupe

AMERICA'S FINEST 2-PLACE CABIN PLANE



Only Monocoupe offers **ALL** *the features desired by the private owner . . .*

There are more 2-place cabin planes manufactured in this country than any other type. There are also more different makes in this classification than any other. Yet—with all this selection—the prospective purchaser has a very limited choice if he demands the features which combine themselves into an airplane which will really spell satisfaction of ownership.

Most of the 2-place cabin planes in America are comparatively limited in their utility. Designed primarily as trainers, they do not offer the cruising range, payload, speed, climbing ability and structural ruggedness essential for private-owner operation. Despite optimistic advertising* to the contrary, a private-owner cannot enjoy the real advantage of personal air transportation unless he has more power, more speed and more cruising range than offered by anything in the 50-75 H. P. class. The limitations of low horsepower airplanes for cross-country flying are more than an inconvenience: there are frequent occasions where inadequate climb or ceiling or range may actually prove hazardous. A truly safe private-owner airplane must have *more* than the safety to be found in good aerodynamic characteristics alone; more than the ability to land slowly in a small space. It must be able to cover 400-600 miles at about 2 miles per minute without stopping; climb rapidly to get out of small fields surrounded by trees, obstructions or hills.

It must have enough service ceiling to operate satisfactorily from airports 5,000-7,000 feet above sea level; fly high enough to cross mountain ranges reaching up to 13,000 feet and higher. It must have enough payload to carry not only its occupants, and their full quota of luggage—but also enough weight allowance to accommodate the extra instruments and radio equipment which most private owners deem desirable. Lastly, the ideal personal plane should be so designed and built that it will easily withstand the violent strains of aerobatics—especially as performed by non-professionals. Though this extra strength may be seldom utilized, its advantages come to light when the airplane is many years old, after many hundreds of hours of flying—and still as structurally sound and airworthy as ever. The savings in maintenance and depreciation far more than offset the extra initial cost.

Experienced private-owners agree that the above specifications are ideal. They also agree that few 2-place cabin ships can qualify. Among this group are hundreds of Monocoupe owners who enthusiastically proclaim that our plane can meet all these requirements with ease; that Monocoupe alone stands supreme in giving the private-owner more than any other plane in the 2-place cabin class; that Monocoupe "gives a lot for a little", flies farthest—fastest—cheapest.

*Advertised performance figures are seldom guaranteed by most manufacturers. Frequently the figures quoted represent optimum conditions such as *maximum* cruising speed at best altitude (in some cases using 87% power); *maximum* range at reduced power; gallons per hour (usually obtainable only at much slower cruising speeds than advertised). *All Monocoupe figures are guaranteed to be actual and are obtained under normal flight conditions with full load.* Owners usually *exceed* our advertised cruising speed and cruising range.

Excels in Speed, Cruising Range, Service Ceiling, Maneuverability and Economy of Operation . . .

The new Monocoupe 90A De Luxe model is not a converted trainer. Instead, it is the ultimate refinement of a basic design which was originally offered to the private-owner thirteen years ago. The new Monocoupe does not incorporate anything which has not withstood the test of years of satisfactory operation. Its fine aerodynamic features are the result of gradual development instead of radical experimentation. The plane we have today is in reality the final out-growth of hundreds of suggestions by owners, scores of speed refinements by famous racing pilots and dozens of alterations, improvements and additions by company engineers. In its every feature it is a thoroughly tried and proven airplane—an airplane which will definitely outperform anything in its class.

PERFORMANCE

Our performance specifications quote a guaranteed top speed of 130 M. P. H., a cruising speed of 110 M. P. H., a service ceiling of 16,000 feet and a normal cruising range of 600 miles. Furthermore, our advertised cruising speed is obtained at 67% power, whereas competitive planes usually are figured at 75-87%. The same conservative claims — claims which can be *proven* — apply to rate-of-climb, ceiling, take-off distance and landing speed. Of particular importance to the private-owner is the normal cruising range of 600 miles. Most 2-place cabin planes fly about half this far non-stop. With most of them a 1,000-mile trip involves at least three landings for refueling. The consequent loss of time is not the only disadvantage. Much worse, is the frequent inability of these planes to reach an alternate field in the event of bad weather. Under such conditions a long cruising range represents a *safety* feature for which there is no substitute.

FLIGHT CHARACTERISTICS

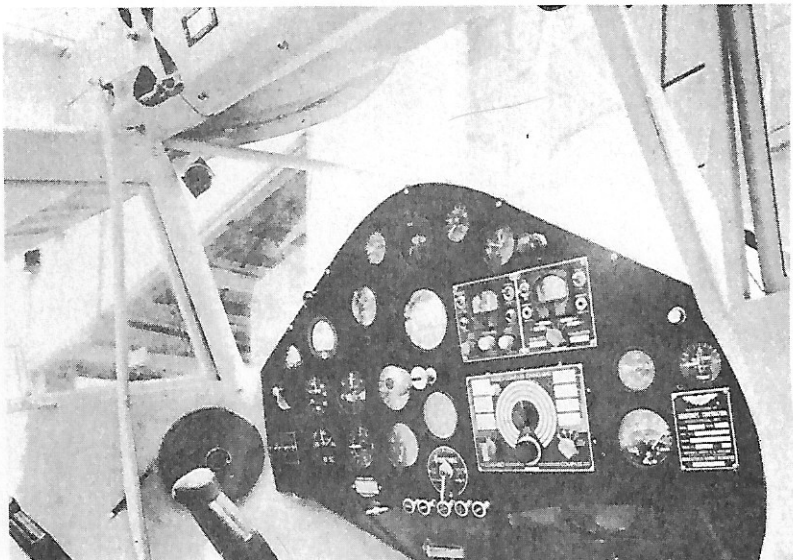
There is only one way to appreciate the ultra-fine aerodynamic characteristics of the new Monocoupe—that is, by actually flying the plane. Regardless of your flying experience, you will quickly detect a perfection of controllability that is a revelation to the novice as well as the 10,000-hour veteran. Responding instantly to any control movement, it can be compared to a fine violin which produces better tones for the beginner and yet is capable of flattering the brilliance of the impressario. It is the only 2-place cabin plane which can and will do anything you demand of it. It can be slowed down to 45 M. P. H. in the air and landed at 40. Its top speed is 130 M. P. H., but in tests it has reached diving speeds of 250. It will fly hands off, but this stability has not been attained at the expense of speed and maneuverability. Control areas are not exaggerated in their proportions or limited in their travel to produce so-called anti-stall or anti-spin characteristics at the sacrifice of controllability which, under certain conditions, may be very desirable. The Monocoupe has no tricks of any kind. It is sensitive and responsive—which can sometimes be confused with trickiness when the ship is overcontrolled by anyone unfamiliar with it. A few minutes behind the stick, however, quickly correct this impression. It is just as safe and easy to fly as anything in its class. But—it does have the ability to perform an aerobatic routine which will amaze any thrill-seeking audience and delight the expert who appreciates the precision of flight perfection. The private-owner who has a Monocoupe can truly boast that his airplane knows no limitations; that it can do anything demanded of it *better* than any other 2-place cabin plane of equal horsepower.

ECONOMY

An extremely important requirement demanded by private-owners is economy of operation. Here, again, advertised figures can be very deceiving. Fuel costs are quoted in gallons per hour (usually at slow speeds). The real comparison should be in miles per gallon at advertised cruising speeds. Such comparisons quickly show that the Monocoupe is again the leader in its class. Our quoted gas consumption of 4.5 to 5 gallons per hour will actually carry two people 110-115 miles in that hour. This means 23-24 miles per gallon. This figures about 1c per mile . . . or ½c per passenger mile. Not even our lowest priced automobiles can equal such economy. Gas consumption alone, however, is only a partial answer to real operation economy. Oil consumption, top and major engine overhauls, airplane maintenance and resale value are even more important. The sum total of these represents true operation cost — and again Monocoupe excels. Here is where the rugged strength, fine quality of materials and superb workmanship incorporated in the new Monocoupe pay big dividends.

DE LUXE FEATURES

The new Monocoupe is a complete airplane. It has two doors, wide cabin, spacious enclosed baggage compartment, carpet, double ventilators, preparation for heater, ample space and weight allowance for extra instruments and two-way radio (as illustrated below) wide landing gear, equipped with Goodyear airwheels and brakes, parking brake, wheel pants and exceptionally complete fairing, high-gloss hand-rubbed wings and fuselage, optional choice of colors, efficient, quick-operating flaps, steerable tail wheel and Hamilton-Standard metal propeller. In addition, there is, of course, a complete group of flight and engine instruments, dual controls, fire-extinguisher and first aid kit, engine tools, log books, navigation lights, etc. In short, the Monocoupe is a truly complete, De Luxe airplane at the list price figure.



Specifications and Performance

CONSTRUCTION

Fuselage—Welded steel tubing of exceptional strength, primed, faired and fabric covered. The rigidity and ruggedness of structure is a great safety feature to occupants in the event of a forced landing on bad terrain.

Wings—Spruce spars, solid, routed and reinforced with plywood laminations at points of major stress. Ribs, Clark-Y section built of basswood and spruce cap strips. Metal compression members and steel tie rods. Fabric covered.

Empennage—Welded steel tube throughout and fabric covered.

Landing Gear—Tread 78 in. 18x8x3 Goodyear airwheels and Goodyear disc mechanical brakes. Parking brake and steerable tail wheel.

Controls—Ailerons—wood and fabric covered with cable connection to dual controls in cabin. Rudder cable connections with spring adjustment for torque. Elevators, push-pull tube connections with Bungee trimming mechanism for longitudinal trim. Flaps, wood construction, fabric covered with positive push-pull control for instantaneous operation. Variation of positions permits glide selectivity and shortens take-off run.

Cabin—Side-by-side seating with spacious baggage compartment aft. Pyralin windshield and windows in doors, side and top. Sunshade for roof, window, ample space for extra equipment on instrument panel.

EQUIPMENT

Airspeed — Altimeter

Tachometer — Compass

Oil Pressure and Oil Temperature Gauges

Carburetor Heat and Mixture Controls

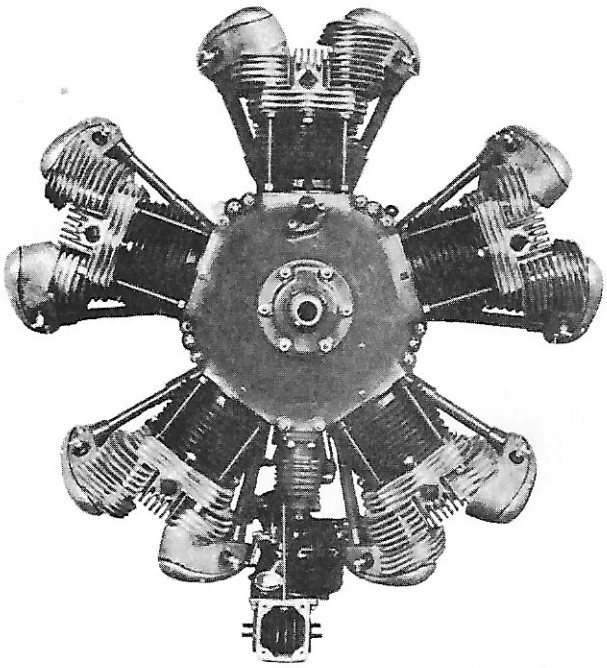
Choke — Navigation Light Switch

Parking Brake — Dual Controls

NACA Cowl — Wheel Pants

Complete Fairing and Filleting, High-Gloss hand-rubbed Finish throughout, Optional Color choice, Cabin Carpet, Direct Action Flaps, Airwheels, Goodyear disc Brakes, Parking Brake, Steerable Tailwheel, Hamilton-Standard adjustable metal Propeller, Fire Extinguisher, First Aid Kit, Log Books, Navigation Lights, Door Locks, Sunshade, Removable Seat Cushions, Large Baggage Compartment and Shelf for hats and overcoats, Map Pocket, Dual Ventilators and Provisions for Heater.

	Landplane
General Data	
Approved type certificate designation	Deluxe 90-A
Span	32'0"
Length overall	20'6"
Height overall	6'11"
Power Plant	
Make engine	Lambert R-266
Rated horsepower	90
R.P.M.	2375
Fuel capacity (gals.)	28
Normal range (mi.)	600
Fuel consumption at cruising (gals. per hour)	4.5 to 5.0
Oil capacity (gals.)	2.5
Weight (lbs.)	
Wing loading	11.9
Power loading	17.6
Weight empty	973
Pay load	286
Gross weight	1610
Areas (sq. ft.)	
Wing	132.3
Ailerons	13.5
Fin	4.1
Rudder	5.8
Stabilizer	10.6
Elevator	9.2
Flap area	11.25
Max. flap angle	27 deg.
Performance	
High Speed (m.p.h.)	130
Cruising speed (m.p.h.)	110
Landing speed (m.p.h.)	40
Climb at sea level (ft. per min.)	900
Service ceiling (ft.)	16,000
Normal range (mi)	600



The Lambert R-266

The Lambert 90 H. P. engine can truly boast of time-tested reliability. Like the new Monocoupe, all its present features are the result of gradual development. It develops its power output through adequate displacement rather than high R. P. M. Its economy is brought about by a power reserve which allows a much lower percentage (67%) to cruise our plane at the speed we advertise. The simplicity of its design and high quality of its construction has achieved a reputation for long-life performance which has no equal in its power class.

Of prime importance to the private-owner is the exclusive replacement policy which is not offered with any other engine:

(1) Your Lambert engine will be completely rebuilt or replaced with a completely rebuilt engine in which all worn parts are replaced the same as new after any amount of normal time for $275.00—installed at the factory.

(2) An overhaul kit containing 5 cylinder barrels, 5 pistons with rings fitted, complete set of valve guides and rocker arm bushings, cylinder gaskets and 10 spark plugs—packed in box—$125.00.

All Lambert engines are equipped with 2 Scintilla magnetos and a Stromberg NA-R3 carburetor, with carburetor heater attachment.

Monocoupe Corp. - - Robertson, Mo.