The NEW

Riley Iwin

NAVION Custom CONVERSION

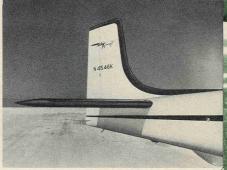


TWIN-ENGINE Safety and Utility
WITH SINGLE-ENGINE Economy









THE CONVERSION PROCESS

Standard Navion Becomes RILEY TWIN

The Navion, which won a pre-eminent position in the four-place business and personal plane category, is highly regarded for reliability, rugged construction, excellent handling characteristics and the ability to operate from short, rough-hewn runways,

making this North American-designed plane ideally suited to twin-engine conversion. The RILEY TWIN was designed to retain all the desirable qualities of the Navion while acquiring the added safety, performance and utility of larger, twin-engine executive transports.

New Beauty BASED ON Sound Aerodynamics

Basic airframe changes have been skillfully blended into outstanding aerodynamic beauty. Readily noted are—

- new graceful Nacelles
- new 140 hp Lycoming engines
- new Hartzell full-feathering, constant speed, metal propellers
- new enlarged Vertical stabilizer
- new wing and Tail Fillets
- new Nose Baggage Compartment

In addition, the following improvements and refinements are made:

- new custom interior
- new custom paint job
- new ultralite soundproof insulation
- new control quadrant
- new instrument panel with adequate provision for Radio Installation
- enlarged Toe Brakes
- Reinforced Wings
- new Heavy Duty Tires

Engineered for Mass Production

So extensive are the changes as Navion becomes RILEY TWIN, that over 2000 engineering drawings covering 1837 special parts are required. An active demand has fully justified the establishment of the production tooling and assembly facilities, which were put into operation in Ft. Lauderdale, Florida, in mid 1952. Early in 1953, a contract for a minimum of 100 Riley Twins was negotiated with TEMCO Aircraft Manufacturing Company to provide necessary productive capacity.

The DALLAS, TEXAS Greenville Overhaul Division

Known through the world as an outstanding center for the overhaul, conversion and rehabilitation of military and commercial aircraft, TEMCO has contracted to do this conversion work for the Riley Aircraft Corporation. The outstanding record of TEMCO is well known throughout the world and particularly in military and commercial aircraft circles.





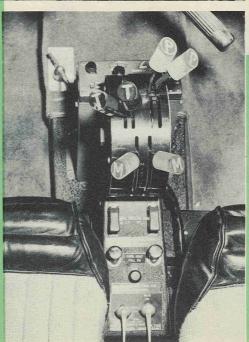
Individually Styled INTERIOR APPOINTMENTS

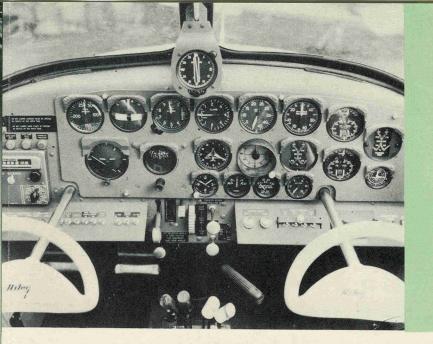
The finest upholstery materials are combined with deep, airfoam rubber padding in carrying out the owner's color specifications for the customized interior. Removal of the heat-producing engine from directly in front of the cabin, plus a more efficient heating and ventilating system, results in a far more comfortable cabin at all times.

Ultralite sound proofing, the quietness of the two small engines and metal, constant-speed propellers make for relaxed enjoyment aloft. Vibration is notably absent! Travel in the RILEY TWIN brings a new standard of comparison to the light plane category.

CONTROL QUADRANT

Airline-type control quadrant for throttle, mixture and propeller adjustments assures easy, positive command of these vital functions.





COMPLETE INSTRUMENTATION in Newly-Designed Advance Panel

Pilots say this is the answer to their prayers. Skillfully laid out to facilitate quick, easy reading of every instrument and to provide adequate space for switches and controls of radio equipment chosen by the customer, the new panel accommodates this very complete set of high quality instruments:

1-Turn and Bank Indicator

Ammeter (Single gauge with Selector Gauge)
 Fuel Capacity Gauge (6 Volt with Resistor

Single Gauge with Sel. Gauge)

-Rate of Climb Indicator -Cylinder Head Temp. Gauge (Dual)

Manifold Pressure Gauge (Dual)

-Tachometer Indicator (Dual)

-ADF Standard Indicator

Omniscope—Standard 3 in 1 Engine Gauge Unit Fuel Pressure

Oil Temperature

Oil Pressure

-Clock-eight day -Air Speed Indicator 1-Gyro Horizon

—Altimeter

Directional Gyro

1-Suction Gauge

UTILITY...24 Hours a Day!

Unhandicapped by darkness, as is a single-engine plane, a Riley Twin can easily provide its owner with forty per cent more utility! The importance of this factor is exceeded in the calculation of this plane's real worth only by its relative safety. Moreover, daylight instrument flights may be undertaken, when visibility is limited, with the assurance that an airport can be reached should one engine fail.

While it has the advantages of larger, twin-engine aircraft, the RILEY TWIN does not have one of their principal handicaps. This new light twin can readily operate from rough, newly-bulldozed, short landing strips near mines, oil wells or construction projects which would provide only an emergency landing for larger twins.

The RILEY TWIN'S 750 mile range and 165 mph cruising speed reduce traveling time between appointments to a minimum. It is a safe, easy plane for ownerpilots to fly.



ECONOMY

Twin-engine safety and utility at operating costs hitherto associated only with single engine aircraft. The Riley's twin Lycoming 4-cylinder engines cruise on approximately the same amounts of gas and oil used by single-engine planes carrying equivalent loads. Overhaul is required only about half as often. Simplicity, availability and ease of maintenance further contribute to competitive economy advantages. The durable airframe, protected by heavy-gauge dent and wrinkle-resistant, all metal skin and oversize shock struts, requires a minimum of upkeep. Extra strength in wings, fuselage and tail surfaces means lasting beauty and structural integrity. Depreciation is minimized.



HARTZELL

Full-Feathering, constant speed propellers make possible a 6,000' to 8,000' single engine ceiling, depending on load.



TO PROVIDE YOU WITH

Maximum Safety



Ultra-dependable twin Lycoming engines provide that priceless feeling of security plus the brute power to lift a fully-loaded RILEY TWIN at the rate of 1600 fpm. 280 horsepower to do the job 185 horsepower originally did!

Low landing speed of 54 mph with full-flaps and power on insures safe landings on smallest fields.

Landing gear of truck-like strength can absorb punishing, rough field landings without danger or damage.

Enlarged, powerful brakes with toe-control add further to landing safety.

Rugged, durable construction gives a measure of protection far in excess cf normal requirements.



PERFORMANCE DATA

Top speed -170 MPH

Cruising speed at 8,000 ft. - 165 MPH

Maximum rate of climb—sea level— 1600 feet per minute

Service ceiling-18,500 ft.

Fuel consumption—12-16 gallons per hour (total)

Range with 59.5 gallons of gas at cruising speed—500 to 700 miles

Cruising speed at sea level-160 MPH

Take off distance over 50 ft. obstacle 800 ft.

Landing distance over 50 ft. obstacle 1,000 ft.

Single engine ceiling 8,000 ft.

ALL-AROUND PERFORMANCE

Among the first to recognize the potential of the performance figures shown here have been the chief pilots for some of America's leading corporations. Orders have been received from large oil, tire, chemical, bank, and automotive corporation officials. Many Riley Twins have been in service for hundreds of hours. Certificated by the CAA in 1952, this unique, new aircraft has proved itself thoroughly in severe tests and competitive demonstrations all over America. May we show you what it will do?



FORT LAUDERDALE, FLORIDA

