### FACTS ABOUT THE RYAN NAVION "L-17" LIAISON PLANE

### The Plane

The Ryan Navion L-17 "flying staff car" is a thoroughly demonstrated, multi-purpose liaison plane of the U. S. Army Field Forces and National Guard. Procured "off-the-shelf" for these Services by the Air Force from among all four-place air-craft in the United States, with no special expenditure for new design required, it is the military version of the commercial Ryan Navion. Approximately 250 L-17's are now in operation in this country, Europe, Asia and South America.

An all-metal, low wing, single engine, cabin monoplane, the Ryan Navion L-17B has a cruising speed of 150 m.p.h. and a maximum range of over 750 miles on a 60-gallon fuel capacity. It is equipped with complete dual controls and retractable, tricycle landing gear.

The power plant is a Continental E-185-3 six-cylinder engine whose take-off rating is 205 h.p. at 2,600 r.p.m. for one minute. For continuous operation, the engine is rated 185 h.p. at 2,300 r.p.m. The propeller is a Hartzell hydro-selective variable pitch.

Overall length is 27 feet 3 inches. Wing span reaches 33 feet 4-1/2 inches. Wing loading is 14.6 pounds per square foot, and power loading is 14.6 pounds per horsepower. Gross weight totals 2,750 pounds -- 1,020 of which are "payload" (including four passengers, full fuel and normal luggage allotment). Removal of seats and reduction in passenger load allow cargo capacities of up to 590 pounds.

Originally designed by North American Aviation, the L-17 since 1947 has been manufactured by the Ryan Aerona itical Company, San Diego, California.

# The Job

First order for 83 L-17A's was placed in 1947 after the Army and Air Force had conducted a competition for four-place liaison planes to be used for reconnaissance, personnel and cargo carrying, light transport operations, courier service, general communications assignments and utility work. For many of these "flying staff car" assignments light planes are too small and the operation of multi-engine aircraft is not economical.

One of the basic requirements for liaison planes in the four-place class is the ability to operate efficiently from small, rough fields such as the military services must use for this type flying. In this respect the Ryan Navion has repeatedly been demonstrated to have no peer. Other factors in the selection of the Navion were the plane's widely hearalded safe, easy flying characteristics, rugged construction, roomy interior, adaptability to cargo carrying and all-around pilot vision.

### Re-orders

In August, 1948 the Air Force -- again acting as procurement agent for the Army and National Guard -- purchased an additional 158 Ryan Navions L-17B's to augment the original group of L-17A's. This contract also called for components and spare parts which in dollar value were equivalent to approximately another 60 complete Ryan Navions.

About one-third of this second purchase-group were assigned to Army Occupation Forces abroad, another third to Army Field Forces in the U.S., and the remaining third to National Guard units.

Of the planes assigned to foreign service, one large contingent operates under the Commander-in-Chief, European Command, in Germany. They are used principally by the constabulary of the Occupation Forces. A slightly smaller number, assigned to the Far East Command in Japan, have distinguished themselves in Korean combat operations, working closely with Army and Air Force units. In Korea the L-17's are being used to spot targets and lead F-51 Mustang and F-80 Shooting Star (jet) fighters into the attack. In such front line tactical air control work these liaison planes are individually logging up to 100 hours per month. Take-off from the flight decks of U. S. Navy escort carriers is also included in their scope of operations.

Among other commands using the L-17 is the Joint Brazilian-U. S. Military Commission in Rio de Janeiro.

A special consignment of five L-17's, procured through the Air Force's Air Materiel Command at Wright Field, and built by the Ryan Aeronautical Company following completion of the previous order for 158 Navions, has been shipped to Greece for use in that country.

## Off-the Shelf Aircraft

The history of the Ryan Navion L-17 shows how the Military Services, through careful investigation of existing commercial aircraft, were able to obtain "off-the-shalf" a liaison plane with substantially the same performance and utility of an entirely new airplane they would otherwise have had especially designed at great expense for their needs. Successfully circumventing major engineering and development expenses in this way, they were able to buy the planes for approximately one-third what they would have cost if built especially to full military standards.

In their decision to use the Ryan Navion, the Services were also able to benefit from the accumulated experience of hundreds of private Navion owners who -- using their aircraft for essentially the same purposes the L-17's are flown -- had

already put this plane through a long and severe proving period. Thus a costly "shake-down" process was virtually eliminated.

Wide use of the Navion among oil companies, farmers, contractors, manufacturers and others had shown that the plane possessed the ability to cope with the heavy flight schedules and extensive short field operation which it would come up against in Service usage. The experience of these owners had proved that the Navion was as thoroughly at home on a rough, unimproved strip alongside an oil drilling rig (or field bivouac) as on a concrete airport runway. And although these firms had largely utilized the Navion as a fast, comfortable executive transport, they had frequently found advantage in quickly converting it to a rugged, half-ton flying truck that hauls anything from a refrigerator to an electric organ.

These and a host of other desirable liaison characteristics were established for the Navion on the proving ground of hard, everyday all-purpose flying by scores of private owners from every business, industry and profession. It was thus demonstrated in advance that safety, performance and utility had been built into the Ryan Navion to a degree which would amply satisfy the strictest requirements of the Service.