## INGLEWOOD'S EXPORT FIGHTERS

DRAWING FROM THE SUCCESS OF THEIR NA-16 DESIGN, NORTH AMERICAN ENGINEERS WOULD CREATE THE LIMITED PRODUCTION NA-50 AND NA-68 FIGHTERS

## BY JAMES THOMPSON

As world tensions mounted during the late 1930s, foreign orders for American designed and built aircraft began to increase (as can be seen in "When Mustangs Went to War" elsewhere in this issue). For numerous manufacturers, these orders were financial windfalls. At Burbank, Lockheed was having a hard time keeping the monetary balance in the black — until Britain's massive orders for the rugged Hudson brought a huge infusion of cash along with a greatly expanded workforce and the rush to build more manufacturing space.

To the south at Mines Field, North American Aviation was doing a bit better but Dutch Kindelberger and his staff were keeping a

collective

eye open for increased aircraft sales, knowing full well that the best way for larger profits was to modify an already existing design for a new role. The company's NA-16 had morphed into a bewildering series of aircraft (nearly 70 distinct types) that could fulfil multiple roles and would eventually result in over 17,000 being built, with the majority being the immortal Texan.

Design work on what would become the NA-16 started in late 1934 when

Dutch, Lee

Atwood, and H.R. Raynor began the basic drawings for an extremely rugged training aircraft. The NA-16, with numerous modifications, would have a massive growth potential and this fact was not lost upon NAA as the company developed variants to fit the specific needs of customers. Using some components from one variant to aid in producing another not only cut down on time and cost but also increased profit.

Military tensions were building in Europe but also in the Far East and Latin America. Some of these countries could not afford first-line fighter or attack aircraft, but North American had an answer and that answer was to develop such machines from the basic NA-16. Using company funds, NAA created the NA-44, which could best be classified as a light attack aircraft.

The NA-16 had turned into the BT-9 and BC-1 for the Air Corps and these planes were easily identifiable since their steel-tube fuselages were covered in fabric. With the NA-44, the fabric disappeared in favor of aluminum



This is how it all started — the NA-16 prototype wearing the civil registration X2080. It is somewhat difficult to imagine, but this rather unassuming design would result in over 17,000 aircraft built in at least 70 variants but the most populous was the AT-6 Texan.

panels while the wing was modified for retractable landing gear and a Wright R-1820-F52 Cyclone of 875 horsepower was added for power and various internal fittings helped increase overall airframe strength. The NA-44 was designed to carry up to four fixed .30-caliber machine guns along with a similar weapon in the rear cockpit. Bomb racks were added under the stout center section and on the outer wing panels so the NA-44, especially for a Latin American nation, could be a very significant weapons platform.

Since company money was being used to design and build the NA-44, the civil registration of NX18981 was obtained and once the drawings were finalized, construction proceeded at a very fast pace. Completed in 1938, a Latin American tour was planned so with NX18981 completed and tested, company pilots, mechanics, and sales personnel in place, the tour began. It must be remembered that, at this time,

the Germans and Italians
were making big inroads
in Latin American
countries so NAA
faced some stiff
opposition. As
the small NAA
staff visited
the various

Photographed at Inglewood, a gleaming NA-50 shows off the contours of the little fighter to advantage. The craft is fitted with an Aldis gunsight, an elongated tube with a series of lenses sealed within the tube, which was filled with an inert gas to prevent fogging. The main advantage over the traditional ring and bead sight is that the shooter's eye position is not all that important. With the ring and bead sight, the pilot's eye had to be in direct alignment but with the Aldis as long as the aiming rings were placed on target, then the pilot was pretty much guaranteed a hit. For the photo, the aircraft has also been fitted with streamlined underwing bombs.