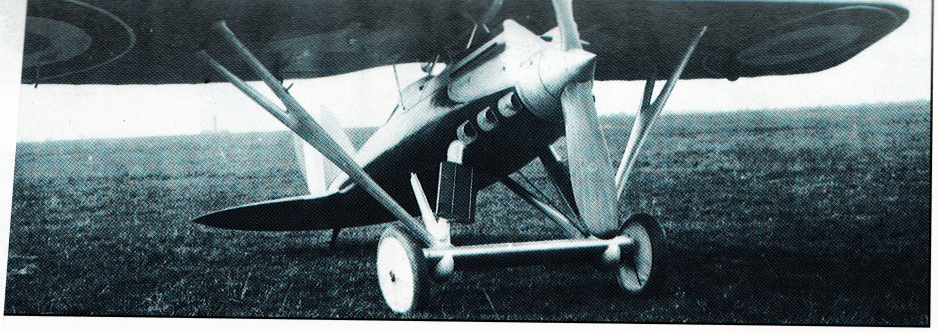


and below) was a lightweight in the 1926 "Jockey" programme.

ed in favour of the latter.
m/h) at sea level. Time to 16,405 ft
ndurance, 2.0 hrs. Empty weight,
aded weight, 3,796 lb (1 722 kg).
D 42 apart from overall length of

LAGE 46 France

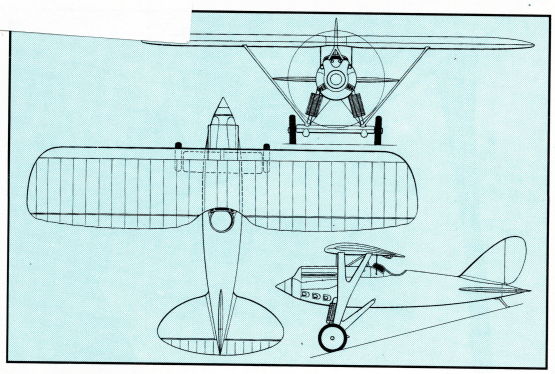
scribed Ni-D 44, the Ni-D 46 dif-
essentially in the type of engine
500 hp Hispano-Suiza 12Gb 12-
er-cooled unit with a similar
al radiator to that of the Ni-D 44.

entally similar fighters, the Ni-D
1923 programme contender.

nament, it was lighter than the
e Ni-D 44, but, again, level speed
were inferior to those of its pro-
udged the winning contender in
i-D 46 prototype was, in fact, the
series of 25 Ni-D 42s, manufac-
the official contract. *Max speed,*
at 3,280 ft (1 000 m). Time to
5.25 min. Endurance, 2.0 hrs.
lb (1 194 kg). Loaded weight,
ensions as for Ni-D 42 apart from
1⅝ in (7,30 m).

LAGE 48 France

the Ni-D 42 apart from being of
her than sesquiplane configura-
a competitor in the 1926 *pro-*
égers, known unofficially as the
he Ni-D 48 was first flown early
gned around a 400 hp Hispano-
Vee-type liquid-cooled engine
ment of two 7,7-mm (0.303-in)
guns, the Ni-D 48 was effec-
d refined Ni-D 42 with full-span
section fuselage, there being no
the types. Three Ni-D 48 air-
rst of these being used for static
1926, and the first flying proto-
underwent official trials during
second flying prototype, desig-
appeared in September 1927
Suiza 12Hb engine, but official
evealed little performance im-
climb – over the Ni-D 62, which,

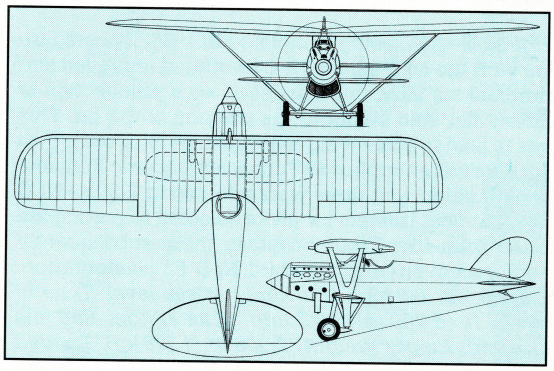


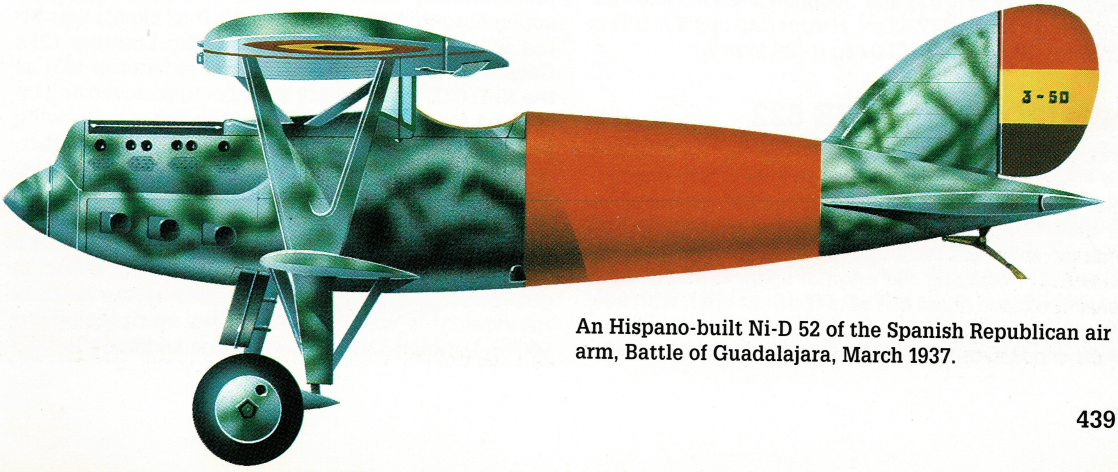
by that time, was already in production. On 3 July 1929, the Ni-D 48 prototype was flown to Etampes for use as a trainer, and, in the summer of 1930, the Ni-D 48bis prototype was re-engined (as the Ni-D 481) with a 240 hp Lorraine Algol Junior nine-cylinder radial as a civil aerobatic aircraft. The following data relate to the HS 12Jb-powered Ni-D 48 No 1. *Max speed, 171 mph (276 km/h) at sea level. Time to 16,405 ft (5 000 m), 16.26 min. Endurance, 1.5 hrs. Empty weight, 2,275 lb (1 032 kg). Loaded weight, 2,844 lb (1 290 kg). Span, 32 ft 9⅔ in (10.00 m). Length, 20 ft 11⅞ in (6,40 m). Wing area, 197.85 sq ft (18,38 m²).*

NIEUPORT-DELAGE 52 France

Evolved in parallel with the Ni-D 62 (which see) as a progressive development of the Ni-D 42, the Ni-D 52 was rolled out in prototype form during the closing weeks of 1927. Some pitch-up with consequent inadvertent stalls and spins experienced with the Ni-D 42 had led to the introduction of a number of changes which were applied to both the Ni-D 52 and Ni-D 62. The chord of the main wing was adjusted to reduce area by 4.3 sq ft (0,4 m²) and the tailplane was enlarged. In the case of the Ni-D 52, a further change was a reduction of 14.53 sq ft (1,35 m²) in the area of the auxiliary wing. Apart from this last-mentioned modification, the Ni-D 52 differed from the Ni-D 42 and the Ni-D 62 in using light alloy tubing, rather than wood, for the wing ribs, and metal in place of tulip wood for the fuselage monocoque. The Ni-D 52 was thus, effectively, a metallised Ni-D 62, and retained the same 500 hp Hispano-Suiza 12Hb 12-cylinder Vee-type engine. The Ni-D 52 was not ordered by the French government, which elected to procure the Ni-D 62 owing to its closer commonality with the Ni-D 42 and consequent lower cost. However, earlier in 1927, the Ni-D 42 had been pronounced winning contender in a *Concurso de Aviones* held to select a new fighter for Spain's *Aviación Militar*, and the Spanish government procured a manufacturing licence for its Ni-D 52 derivative. The production programme was undertaken by the Guadalajara facility of La Hispano (later La Hispano-Suiza) which was awarded an order for 125 Ni-D 52s – subsequently known as "Hispano-Nieuports" – of which the first 34 were assembled from component kits supplied by the parent company, deliveries to the *Aviación Militar* commencing in 1929. The Hispano-built Ni-D 52 differed from the prototype in replacing the Lamblin radiators with a single external Corominas chin-type radiator, and its armament comprised two 7,7-mm machine guns. Ninety-one were entirely manufactured in Spain and at least 10 more were later assembled from 20 complete sets of spares also produced. When hostilities commenced in Spain in July 1936, 48 remained in government hands and eight were acquired by the Nationalists (to which three were later added when a government *patrulla* inadvertently landed at a Nationalist-held airfield), but most had been with-

(Above) The prototype and (below) the series Ni-D 52 which was manufactured under licence in Spain.





An Hispano-built Ni-D 52 of the Spanish Republican air arm, Battle of Guadalajara, March 1937.