John W. R. Taylor's Plane of the month

The L.W.S.-3 MEWA

IN his description of the 1938 Paris *Salon* in *The Aeroplane*, the incomparable C. G. Grey commented on the "assortment of Polish machines, very slotted and full of ideas, as Polish aeroplanes always are."

It was a vintage year for the products of Poland's aircraft industry. Among new types displayed were the twin-engined *Los* bomber, able to cruise at 236 m.p.h. with a ton and a half of bombs, the *Sum* single-engined long-range reconnaissance bomber, the *Wilk* twin-engined light ground-attack fighter which could fly at nearly 300 m.p.h. on less than 600 h.p., and a neat single-engined observation monoplane named the *Mewa* (Gull).

"C.G." said of the *Mewa* that it bore "unfortunate resemblance to the Westland *Lysander* in that it does neither itself nor the *Lysander* credit." Just what he meant by this we can only guess, but the resemblance to the *Lysander* was coincidental rather than deliberate.

Design work on the *Mewa* had been started in 1935, to meet Polish Air Force specifications for an army co-operation monoplane. The primary requirements were an ability to operate from even the smallest military airstrips and a good all-round field of vision. The *Mewa's* brilliant design team met the latter requirement by positioning the wing mid-way up the side windows of the large cockpit glass-house. This enabled the pilot and observer to see both over and under the wing, as well as forward and rearward. To improve their view still further, the chord of the inner wings was reduced progressively, and this is why so many people regarded the *Mewa* as a copy of the *Lysander*, which had a similarly-tapered wing.

As shown at Paris, the *Mewa* had plywood-covered wooden wings and a steel-tube fuselage, the rear portion of which was fabric-covered. The fixed tail surfaces were of wood; all flying control surfaces were of fabric-covered steel-tube construction. Handley Page slots were fitted along the entire wing leading-edges, the inner sections being linked with the flaps and the outer sections fully-automatic.

In this prototype version, the 725 h.p. Gnôme-Rhône 14Mo 14-cylinder radial engine drove a two-blade wooden propeller. Armament comprised a fixed machine-gun inboard of each wheel spat, controlled by the pilot, and a movable machine-gun at the rear of the observer's cockpit.

Because of its slotted and flapped wing, the *Mewa* had a remarkable low-speed performance and its makers claimed a speed range of 5 : 1. It was clearly just what the Polish Air Force wanted and an order was placed for 200 production models. These were to introduce several refinements, including a redesigned engine cowling and a three-blade variable-pitch propeller.

The first 40 *Mewas* were scheduled for completion in the summer of 1939, but were held up by late delivery of their engines. As a result, only two or three had flown by the time Germany invaded Poland at dawn on September 1st that year. These were delivered to front-line units, but had little opportunity to show their worth in the face of the overwhelming attack of the *Luftwaffe*. As the Germans approached Warsaw, the Polish workers at the factories destroyed every aircraft on the assembly lines—and the brief story of the *Mewa* was ended.

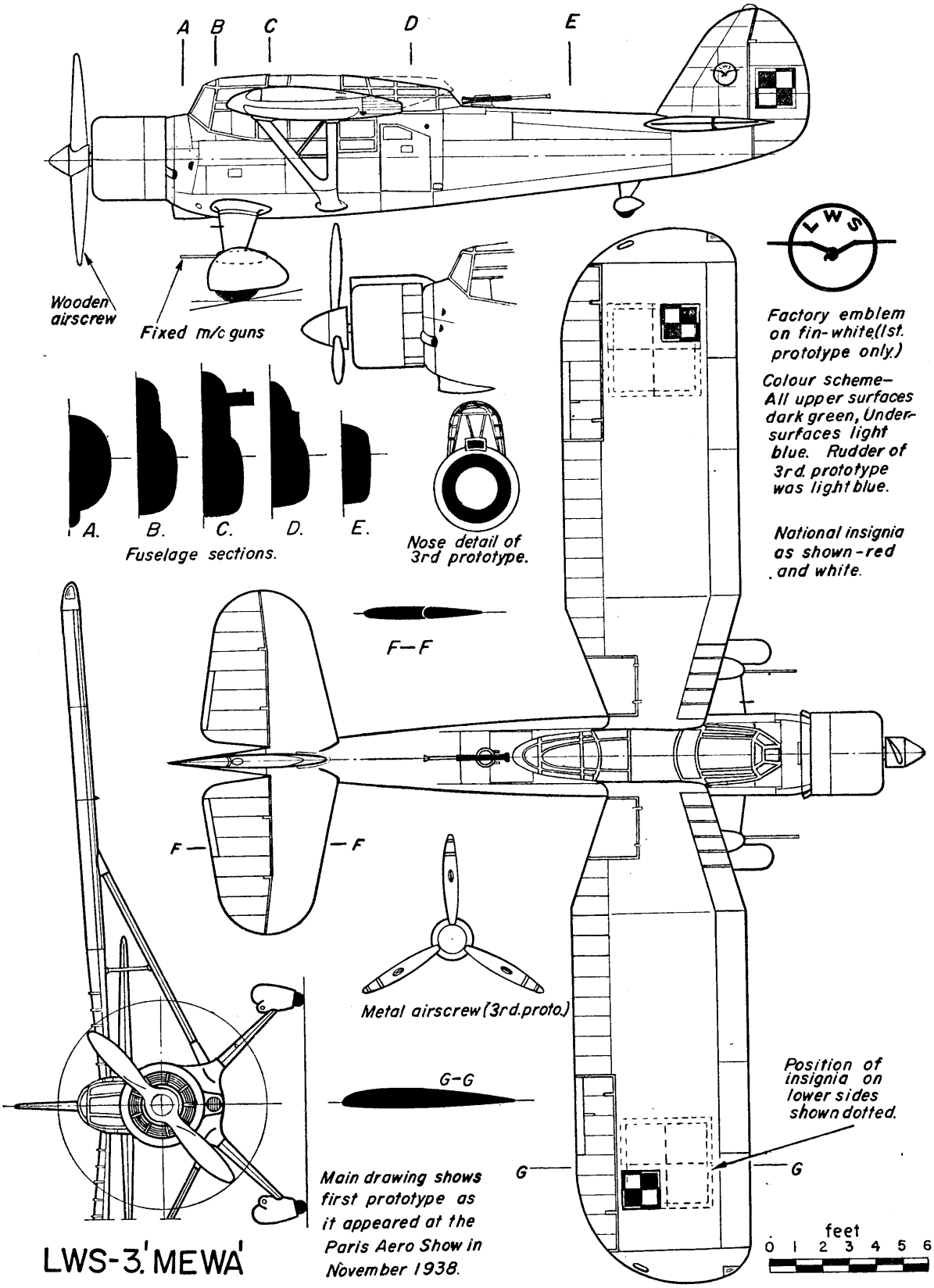
Data: Span 44 ft. 1½ in.; length 31 ft. 2 in.; height 8 ft. 8 in.; wing area 290.5 sq. ft.; weights, empty 3,855 lb., loaded 5,335 lb.; max. speed 223 m.p.h. at 11,000 ft.; cruising speed 192 m.p.h.; climb to 12,000 ft., 9 min.; service ceiling 27,880 ft.

FOOTNOTE

Before the war, as at the present time, the products of Poland's aircraft industry were marketed under the name of the P.Z.L., the country's nationalised industry. For that reason the *Mewa* has invariably been described as the P.Z.L. *Mewa*. It was, in fact, a product of the Lubelska Wytwornia Samolotow at Lublin and is designated correctly the *LWS-3 Mewa*.

Heading photo shows the first prototype as it appeared at Paris in 1938. (*Flight* photo).

Below and right: the third prototype. Note the modified cockpit, absence of armament, and three-bladed metal propeller.


A
B
C
D
E
Wooden airscrew
Fixed m/c guns
A.
B.
C.
D.
E.
Fuselage sections.
Nose detail of 3rd prototype.
Factory emblem on fin-white (1st. prototype only.)
Colour scheme– All upper surfaces dark green, Under-surfaces light blue. Rudder of 3rd. prototype was light blue.
National insignia as shown-red and white.
F—F
F—
—F
Metal airscrew (3rd. proto.)
G-G
Position of insignia on lower sides shown dotted.
G
G
Main drawing shows first prototype as it appeared at the Paris Aero Show in November 1938.
feet
0 1 2 3 4 5 6

LWS-3. 'MEWA'