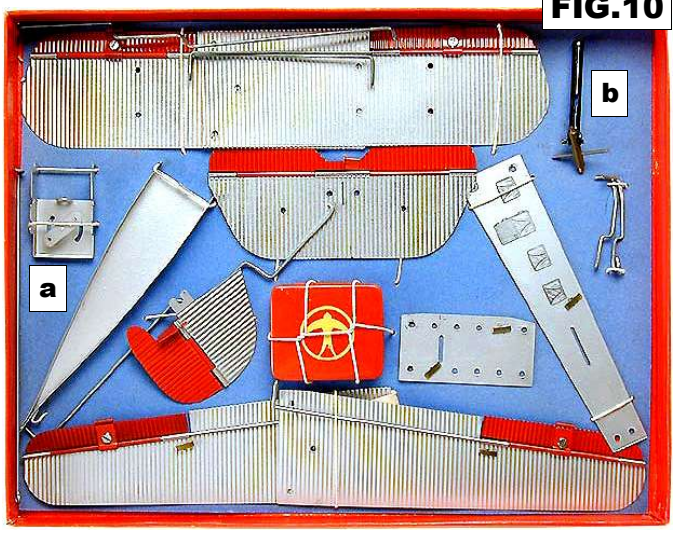

FIG.10

would be a pair of unmodified parallel chord Wings, the Z-Interplane Struts, and the Wire Links to connect each pair of upper & lower ailerons. All these parts were in the linking set 106a but none can be seen in the 106d. Perhaps they are under other parts, or was a Set 106a also needed to build the model on the lid? If so only a Low Wing Monoplane would be possible with Sets 106+106d.) A Tailplane is also included in the Set but apart from having 2 extra holes, it looks identical to the one in Sets 106 & 108. Other main parts are a Rear Underside Plate; Rear & Centre Side Fuselage Plates, slotted for the Control Rods; & a Mounting Plate (at 'a'), which possibly replaces the Centre Underside Plate, to carry the Joystick & Rudder Pedals. The Mounting Plate has a double arm crank pivoted to it (it can just be seen at 'a') as rudder pedals, and looks to have lugs fore & aft to carry the brass fitting at the bottom of the Joystick (see 'b'). Each end of the brass fitting's small diameter cross rod probably engages with the right-angled end (U-shaped, see Fig.9) of a long Aileron Actuating Rod, and so the ailerons rotate when the Joystick is moved sideways, and in the correct sense, one up & one down.

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Sets 108, 110, & a C/W Motor

The main characteristics of **Set 108** have already been mentioned and the photo right is included merely as a reference to the standard parts in the system. The Set's lid, below, is the pattern used for all the sets seen except 106b, c, & d, although in a few

FIG.12

cases there is no set number, and some sets have different models in the circle.

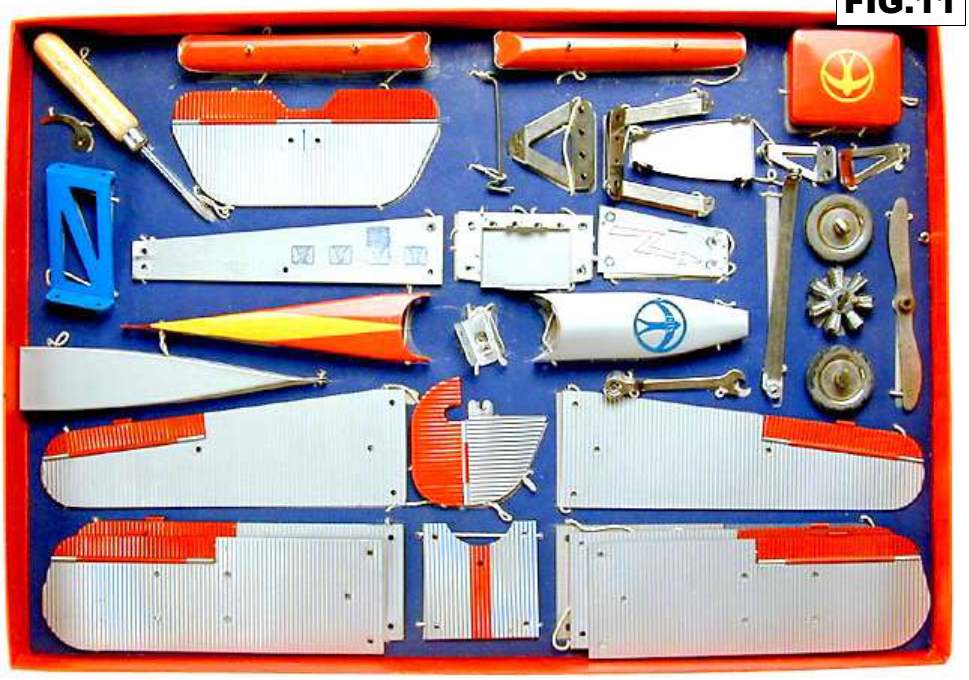
FIG.11

Set 110 is referred to in the manuals seen for lesser sets but with no details. However the Set did have the 106d Steuerwerk parts because the Ebay 106d lot included a photo of a manual headed 'DUX – Metallflugzeug – Baukasten 110', and it included an illustration of the Biplane on the 106d lid fitted with the Steuerwerk parts and entitled 'Metall-Flugzeug mit Steuerwerk'. Beyond that it is conceivable that the 110 also contained some or all of the new parts in the Set 109 described below.

The Motor, right, includes a contrate drive to a pinion on a special Axle. Just visible above it in the photo is its red box, and on it in 7 languages is, in the English version, 'Clockwork Motor for Aeroplanes'.


FIG.13

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Set 109 Flugboot Right the only, very poor, photo available of this outfit. The 1933 manual says that it is a set to make the Dornier Do.X & various other Flying Boats. A model almost certainly made from the parts is shown in Figs.15-17, and it is the featured model in the circle on the box lid. With a little imagination many of the parts can be seen in the box. The standard parts are probably the top of the fuselage, apart from the red cabin, the Wings outboard of a short Centre Section above the cabin (apart from some extra holes and being one hole longer because the root flange is left unmade), and the Tailplane. The new parts are the one piece Fuselage


FIG.14

Bottom, the Fuselage Side Panels, the lower Stub Wings, the lower Under Tailplane, the Engine Nacelles (3 diagonally in each top corner of the box) and the Propellers.

Parts in the box that can't be seen in the model are the silver rectangular 'box' with convex sides between the Wings; the round part midway up the right side, sitting on top of the red Cabin; the Radial Engines on either side of the Stub Wings; and the 8 black cone shaped parts along the top – possibly nacelles for a radial engine, or more likely, half nacelles. If so, they are perhaps a little too small to match the Radial Engines already mentioned. These 'extra' parts, particularly the Engines and the black 'Cones', are presumably used in the other Flying Boats, and the 1933 manual says that several large aircraft can be made by combining the 109 parts with those in the 106 and 108.

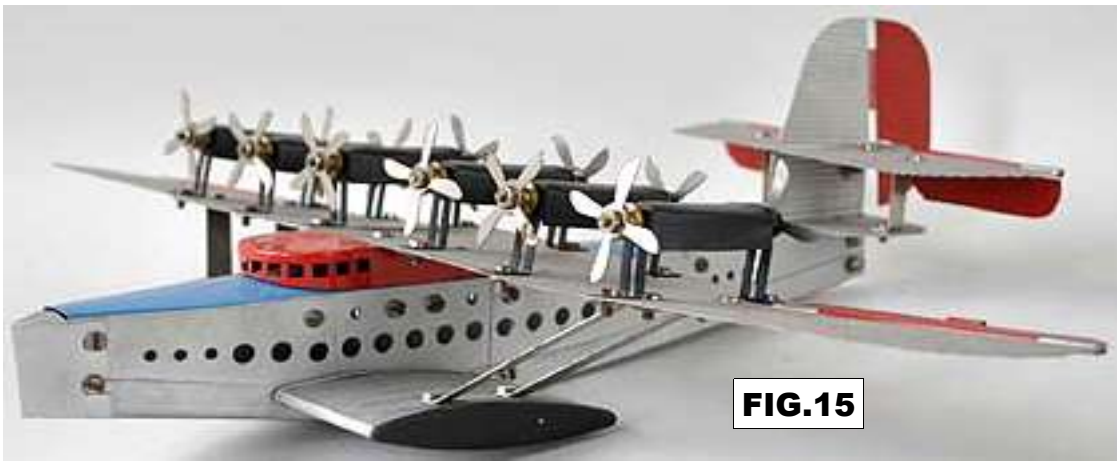
FIG.15

To my mind the model is rather impressive and is obviously the Do.X. It looks the part although it's not exactly to scale: in particular the wings outside the engines need to be longer, as does the fuselage behind the wing, and the chord of the Fin and Tailplane are oversize. That last though is true of most DUX models, and I wonder what prototype the designer of DUX Aero had in mind when sizing the various basic parts.

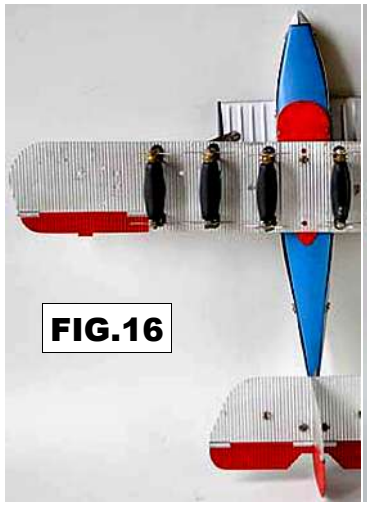
FIG.16

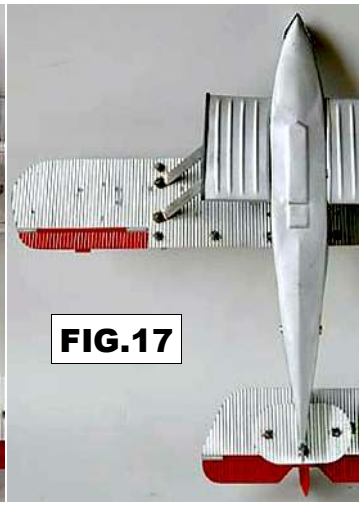
FIG.17

DUX AERO: S4 **OSN 42/1272**

Snippets. LEONARDO A note about a Leaflet advertising the 5 LEONARDO sets, Alpha to Epsilon, of this large Italian system appeared in 16/446. Since then the only additional material seen is 2 Ebay items, one a set in a wooden box and the other a Motor.

The Set was said to contain over 3000 parts, including 2 each of 220v & low voltage Motors, though it wasn't clear if some or all of these were part of the Set or extras. The manual with the Set was a '1946 edition'. The 3 Ebay photos, all very blurry, were the general view right; one of the 4 trays; and one of the manual page bottom right. Points of interest include:

- The Set matches the Epsilon described in OSN 16 fairly exactly. Of the 4 trays, the 2 which fit into the side of the box look to be full length; the 2 in the top are shorter, by about 20%.
- All the parts appear to be unpainted, and are perhaps nickelled. The parts in one of the longer trays seem to include extra long parts, possibly 49h A/Gs. Otherwise all that can be seen at all clearly are the 6-Spoke Wheels, some double Braced Girders, probably 25h long, and what might be a black cylindrical Motor sitting on the top of the lower of the 2 top trays.
- The parts that can be seen on the manual page include a Digger Bucket top left (& on re-examination one can also be seen in the Epsilon set in the Leaflet); a Dredger Bucket bottom left; 3 Pulley Blocks bottom centre; a 6-Spoke Sprocket Wheel top right; & a Triangular Girder Frame alongside it.

The Motor, right, looks conventional except that it has 3 pins on its connection panel. I wondered if, with suitable internal wiring, this would allow forward & reverse with the voltage applied across different pairs of pins, but I don't see how it could work. Another photo showed that the output shaft extends out from each sideplate.

LEONARDO: S1 **OSN 42/1272**

Snippets. More on DUX Aero Sets To start with, when did the various sets appear? What follows is from lists of sets in several manuals, leaflets, etc that have dates in their PRs.

Sets 104, 106, 106a, & 108 were shown in a Nov 1932 manual (the year the Aero sets were introduced) together with the Flywheel Motor (Kreiselmotor). See 10/248 for notes on the Sets & 12/330 for the Motor.

From a Sept 1933 brochure the items added were Sets 106b (Elektro), 106c (Autogiro), 109 (Flying Boat), & the C/W Motor (Federmotor). See 42/1270-2 for notes on all these.

From another, Aug 1935, brochure, the new sets were Nos. 102, 103, 110, & 106d. 102 & 103 were for smaller 32cm span, models. The 102 looks to be the same as the Nr.50 in 42/1269 except that the 102 on its lid replaces 50. The 103 (Figs.1 & 2) has parts for either of the models on the lid. The Seaplane floats on its oversize Floats & it taxies along thanks to a C/W Motor driving an oversize Prop. The land-plane has the same Prop and presumably can also taxi along.


Fig.1

Models for the 110 are similar to the 108's but include movement of all the control surfaces (ailerons, elevators, rudder) from the 'joystick' & rudder in the cockpit. The linkages are wire rods preformed to suit. Google translates part of the description of the 110 as 'The Dux 110 was built on behalf of the Ministry of Culture'. Set 106d adds the 110 control functions to the 108 models (the joystick does move the elevators, not as stated in 42/1270).

Fig.2

The sets listed in a June 1938 manual are: 102, 103, 104, 106, 108, 110, 106a, 106d, & C/W Motor. Thus the 109, 106b, 106c, & Flywheel Motor seem to have been dropped. In an August 1939 manual the 102, 103, & 106d have also gone. It would be good to confirm these changes from a brochure, etc.

OTHER SETS Figs.3-6 are from two 90L sets offered on Ebay recently. The Set has parts for the single-engined model on the lid (Fig.3) with the set number, 90L, at top right. The model though has just DUX-90 on the sides of the fuselage & wings. It's not clear how the sides of the fuselage & fin, and the upper & lower surfaces of the wings & tailplane are held together. No doubt the 20 M2.6, 3mm long countersunk Screws, & 8 hexagon M2 Nuts that are in the Set are used but perhaps some of the parts just push or clip together. All the control surfaces are hinged and can be moved by hand. A C/W Motor drives the prop & landing wheels.

Fig.3

Fig.4

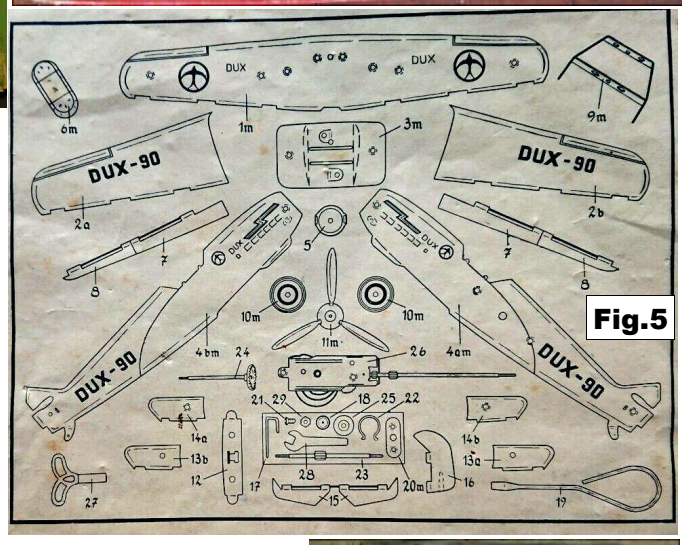

Fig.5

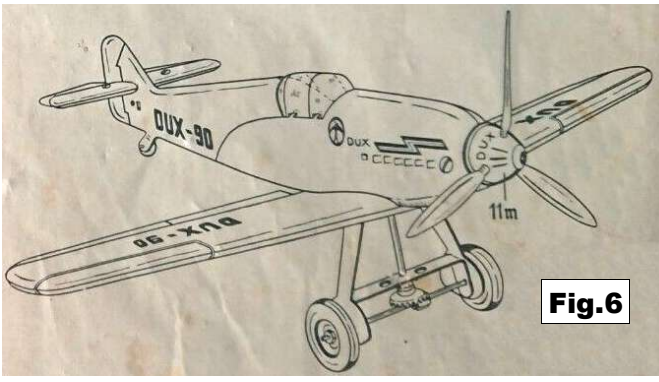

Fig.6

The twin-engined model on the lid has DUX-92 on the fuselage but nothing else is known of it.

When did the 90L (& perhaps the 92) appear? If after 1939 one might have expected that at least the 'Me.109' would be in military colours. A set to make a realistic Ju 87 in military livery was produced at some stage. Fig.7 shows the model leaflet.

Fig.7