

SNIPPET: DUX-UNIVERSAL SETS No.70, 71, & 72

These add-on outfits, shown below, are listed in MCS but no details are given other than indistinct illustrations. Some of the parts in them are used in the standard sets 101-104, and are shown in MCS, but most in Nos.71 and 72 are new. The colours are generally as for the Second Period in 20/560.

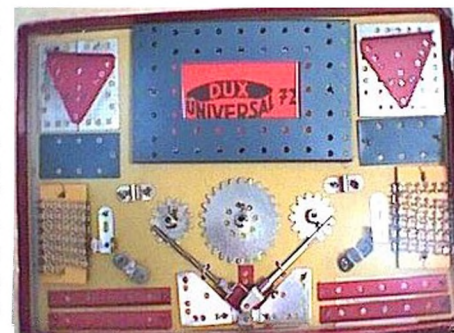


The No.70 (top) has some Strips, DAS, Plates, 4 Pulleys, and certain parts which were only in the largest standard set: a Grab 1059, a Handle Crank 1054, 2 large Trunnions 1051 (red), a Ring Spanner 1073a, a 22t Pinion 1031b, a 38t Gear 1032a, and a pair of Bevels 1065/1066. Also included is the large Circular Plate, with 2 rings of staggered holes, that was illustrated in 20/560. Like the Grab, it is not painted. What looks as it might be a centre boss in the photo may be a clip holding the part to the

backing card.

The No.71 has some of 'new' parts. The 7*9h Flanged? Plate is blue – its end rows of holes differ slightly from the others, and the edges of the Plate are well outside them. To the right is a Plate, about 85mm square, and on the left a Plate of the same size but differently perforated, or more likely two half-sized Plates. On top at both sides is a Large Triangular Gusset. All these are silver looking. Below the Large Trunnions are red Small Trunnions. In the centre is a brass Worm, with a gear either side, the 22t Pinion perhaps, or is one a Worm Wheel? At the bottom is a Rack Strip, with immediately above it, a small red Triangular Plate with at least two sharp pointed corners.

The No.72 has the blue 7*9h Plate too, & the same silver Plates on either side, but with Large Trunnions on top. A pair of the Large Triangular Gussets can be seen at the bottom, with a vee of shafts, joined by a Universal Joint, between them. Above are a 26t Sprocket with a 13t one on either side, all silver. Lengths of Chain, perhaps with a brass look, can be seen at the sides of the box.



SNIPPET: A Later ELEKTROMECHANISKAIS

A set with that Lettish name (EMK **KONSTRUKTOR**? for short), and parts generally very like MECCANO, was discussed in 4/188. Its red box lid is shown



above with the boy & model in full colour.

The corresponding Russian name can be seen top right, ending in the very familiar 'KONSTRUKTOR'. The outfit to the right may be a later, somewhat smaller set from the same system. Not all the lid can be seen but if it does not



carry a Lettish name, it could mean that the set was actually made in Russia itself. The EMK models were from the '62-'69 MECCANO range, and the Sports Car on the lid looks like the MECCANO 4.15 of that time. It is set on a green ground below a blue sky.

The parts in the box are blurry but look generally like the ones in the OSN 4 set, except that there are no A/Gs, Braced Girders, Semi-Circular Plates, or electrical parts. In particular the unusual 3" Pulley, with 4 long slots in the face, is similar. The only part obviously different is a wire Screwdriver instead of a flat one. The only significant differences in colour are the light blue Road Wheels and blue, instead of black, Flanged Plates – possibly following Meccano's 1970 change in colour scheme in that respect.

The manuals shown have more interesting looking covers than the very plain EMK one in MCS. The model on the top one could easily be the Estate Car in MCS.

SNIPPET: SPIROU CONSTRUIT In MCS it is said that this Belgian system is TEMSI made under licence, and that the range of sets, Nos.1-5, continued into the 1970s. In 1966 GMM wrote that Sets 1-4 were being imported into Belgium



by S.A. Sarma-Nopri, 13-15 Rue Neuve, Brussels 1. The manual cover left (yellow with a green Crane, an orange boy, and the name is a light blue panel) is similar to

the one in MCS except that the bottom part with the alternative Flemish name on it, ROBBEDOES AAN DE BOUW, is missing. Spirou isn't in my dictionary but the 'robbedoes aan de bouw' is given as 'tomboy (a bit odd that) at the building (work)'. The box with the manual is red outside, yellow inside, and the lid is mostly covered with a label identical to the manual cover (though again some of it can't be seen). The box is quite large, roughly 17" wide, and the parts sit between a number of partitions. The few that can be seen look just like TEMSI and are consistent with the contents of a No.2 TEMSI outfit.

ELEKTROMECHANICHEN KONSTRUKTOR 3.

Khelikopter

That is the transliteration of Електромеханичен конструктор 3. Хеликоптер, the name of the Bulgarian set to be described. It was made by фирма В. Петлешков (firma V. Petleshkov), the company from Bratsigovo which also produced MUSALA (a copy of MERKUR), RODOPI (TRIX inspired, see 26/751), & MLADOST (theme sets, see 25/720). Mladost means youth and it is on the present set's box, on a line before the company name, with Sofia after it - so perhaps it is the distributor, or an official agency (there is no clear indication of date but an official (OTKK) reference ends in '-86'). The 3 sets in the 'Elek Kon' series are listed on the box: the present No.3 for a Helicopter; No.1. Вятърна мелница (Windmill); & No.2. Самолет двуплощник (Biplane).

The parts were in a plastic bag inside an end-opening yellow box, 20½" 11" 4½" cm. The printed details are on the sides & the top has just 2 photos, the Biplane below, & under it the Heli-



1*2,1*4h A/B. •1x #1138 2h D/B with the side holes at 15mm pitch. •1x #1122 D/B, 21mm wide with (by mistake?) no holes in the arms. •3,1x 1*3*1, 1*4*1h DAS (both the same width, the holes in the 1*3*1h are at 11mm pitch). •Plates. •1,1x 3*15, 5*12h pale yellow clear pl. (The large hole in the 5*12h is 8½mm Ø, & those either side of it are 3mm.) •2x #1015, 30*50mm clear red pl with a slot in each top corner. •Triangular Plates (all with flat tops). •1,3x 3*3, 3*5h clear pl. 1x 3*5h Flanged. •1x 28mm Ø Bush

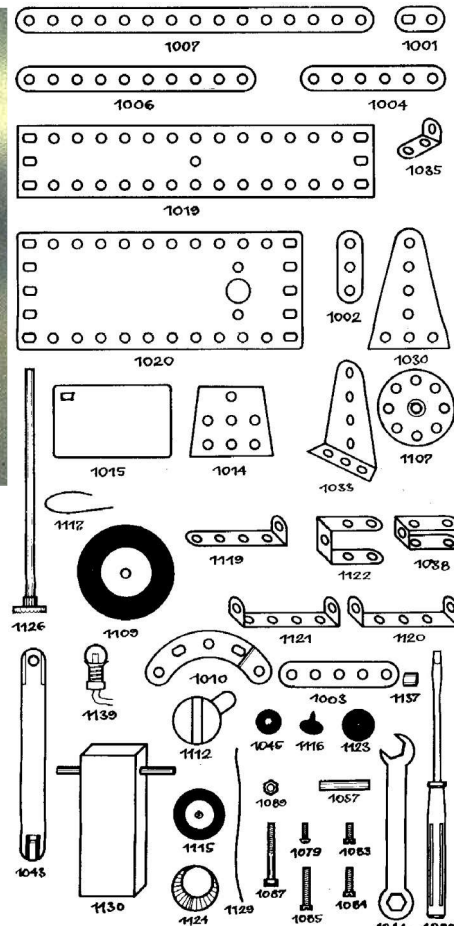
Wheel, with an 8mm Ø boss, s/t M3, & a RH Set Screw, 10mm u/h. •Wheels. 2,1x 45,23½mm Ø with black pl tyres on pl hubs. •N&B. •26,11,2,1x 6,8,10, 25mm u/h Bolts. The 25mm has a 7.8mm Ø c's'k head; the others are pan headed, 6.8mm Ø. The 10mm is dull plated. •43x hex Nuts, 6.9mm A/F. •Tools. •1 Spanner, 80mm o/a. •1 Screwdriver 110mm long o/a with light yellow pl handle. •1 Nut Holder, 111mm o/a. •1 Motor/Gearbox Unit. A 4.5v motor with 3 reduction stages in a brown pl 'box' 70*31*38mm deep with a black pl base. It does not have the output shaft shown. •1 Axle with Gear

#1126. 4mm axle, 95mm long, with end turned down to 2.7mm to take push-fit pl contrate/pinion (this Axle has the rotor at the top, & the contrate at the bottom meshes with the final gear in the gearbox). •1 Axle #1057, 3.5mm Ø & 20mm long. •1 Bulb. Not as shown, it has a smooth base below a flange and no holder or leads. It should push into the large hole in the 5*12h Plate but is too big to do so. •1 Lamp Cover

#1124. Clear blue pl dome, base 20mm Ø with 2x 3½mm Ø spigots which should pass through the holes on either side of the large hole in the 5*12h Plate but are too big to do so. This part is meant to hold the Bulb in place. •1 Switch #1112. Black pl with a steel contact arm. A 4mm Ø spigot on the back goes through a hole in a Strip, say, to locate it, & it is held by 1 of 2

unlisted, push-fit, 6mm o.d., 7mm long, brown pl Sleeves. •1 Disc #1123. Black pl 16mm disc with short 8mm boss; bore 3.5mm. Its use isn't clear. •Plastic Press Studs, with 6x #1116, 12mm Ø Male pieces with 3½mm Ø prong, & 9x 12mm Female discs #1045. •1 Wire #1129. 5mm Ø bare wire about 60mm long with a 3½mm loop at one end. •Connecting Wire #1117. Thin white pl covered: 1x 100mm; 1x 150mm. •2 Axle Stops. 7mm Ø, 3mm wide orange pl for 3.5mm Axle.

The Model Leaflet, all in Bulgarian, is 88*17½cm, folded to fit into the box. One side has the Illustrated Parts and a list of their names & quantities; the other has 8 building steps for the model with a very blurry colour photo, list of parts, & written instructions for each. There is an additional sheet, 19*19½cm, showing in more detail how to mount the modified Motor Unit actually in the Set.



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The parts are of reasonable quality and making the basic model wasn't difficult. But after that there were two problems in addition to the wrong sizes of spigots etc already mentioned. First, the gearbox needed attention before it would run, and the method of retaining one of the axles in it had to be changed. Secondly, there seemed no means of attaching wires to the Bulb and Switch. Perhaps all would have been clear if I had been able to read the instructions but I had to resort to some soldering. The clear Triangular Plates used at the end of the rotor blades looked rather strange, and the Plates #1015 used for the cabin doors did not have the red cross etc on them.



copter shown at the top of the page, about natural size. The Windmill is on the box's underside - its 4 blades are the Triangular Plates used in the Helicopter rotor, & its pitched roof is made from 5*5h Flanged Plates. All 3 models are driven by a Geared Motor Unit.

The Parts Top right the parts from the model leaflet, & each is listed below with comments & quantities. Except as stated plastic ('pl') parts are white, & other parts nicked steel. Holes are at 10.0mm pitch & are 4.1-4.4mm Ø in the various metal, & 4.4-4.8mm in the various plastic parts. The thread is M4.

•Strips. •2,8,10x 2,3,5h pl (#1001 has 2 round holes; 3 of the 3h are very thin). •2x 6h. •6x 10h (4x pl; 2x olive green, like RODOPI). •2x 15h olive green. •2x Curved. •Brackets. •1,1x

MAKUMAL to MAK-EM-AL MAKUMAL, a set from Granite City, Ill., was described in 18/519. It was rather like a larger version of MOBILO with $\frac{5}{16}$ " Ø wooden Rods. Two sets have been seen since, one to hand, perhaps unused, and one on Ebay. Together they show some points of interest.

My Set. Its cannister is identical to the OSN 18 one and the contents too except that it has only 60 Rods, 6 of each length, and the Set contained a Model Leaflet & 3 Tacks (Fig.1a, $\frac{3}{8}$ " long with $\frac{31}{64}$ " Ø heads). Tacks are not mentioned in the parts listed on the outside of the cannister but could be used to create a pivot joint that was needed for some models instead of the wood screws envisaged in the Patent. Probably both the Leaflet & the Tacks were simply missing from the OSN 18 set. A wire Screwdriver and a small Hammer (as in Fig.1c, $4\frac{5}{8}$ " & $6\frac{3}{8}$ " long overall) were also in the Set but may not have been original.

Some of the parts differed a little too: the wooden parts are plain not dyed; 6 of the Pulleys run freely on the Rods & 2 needed their bores enlarging to make them a push fit (both types are needed for the models); and the Clamp is: nickelled; only $\frac{1}{2}$ " wide (though with the same size slots); and has some sharp edges. Also most of the Clamps are incorrectly bent (see Fig.1b) giving an offset tapped hole and making the 2 slots out-of-line by over $\frac{1}{16}$ " – this last making building models more difficult, perhaps impossible in some cases. And all the tapped holes needed clearing before the Bolt would pass right through. One can see why the parts look unused.

The Model Leaflet

is a sheet folded to make 4 sides 214*140mm. As can be seen the front, right, is headed MAK-EM-AL, & though the maker was still The Makumal Toy Company it had a new address: 4600 Cornelia Avenue, Chicago, Ill, & underneath it: 'Subsidiary RED WING MODEL AIRPLANE AND SUPPLY CO. | NOT INC. | CHICAGO, ILL.'

p2 has 'DIRECTIONS' with the a diagram showing the different joints headed by 'Use a Clamp for a screw driver'. Included are the two free pivots in Fig.3, obtained by the methods shown in the Patent, a Rod held to a Clamp by a Wood Screw (though the latter isn't actually mentioned in the Leaflet). Presumably the Tacks in the Set were to be used instead.

p3 shows 22 models, of which it is said 'several of the small ones can be made with one set'. There is one drawing of each with no instructions or list of parts. Some of the models are much more ambitious than those on the cannister, including 2 large fairground rides and a Loco. Of the rest some are the cannister models but the others, even though quite small, are, excepting 5 swings of various sorts, more 'with-it', with numerous (mostly somewhat strange looking) vehicles and



Fig.2

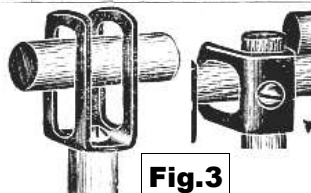


Fig.3

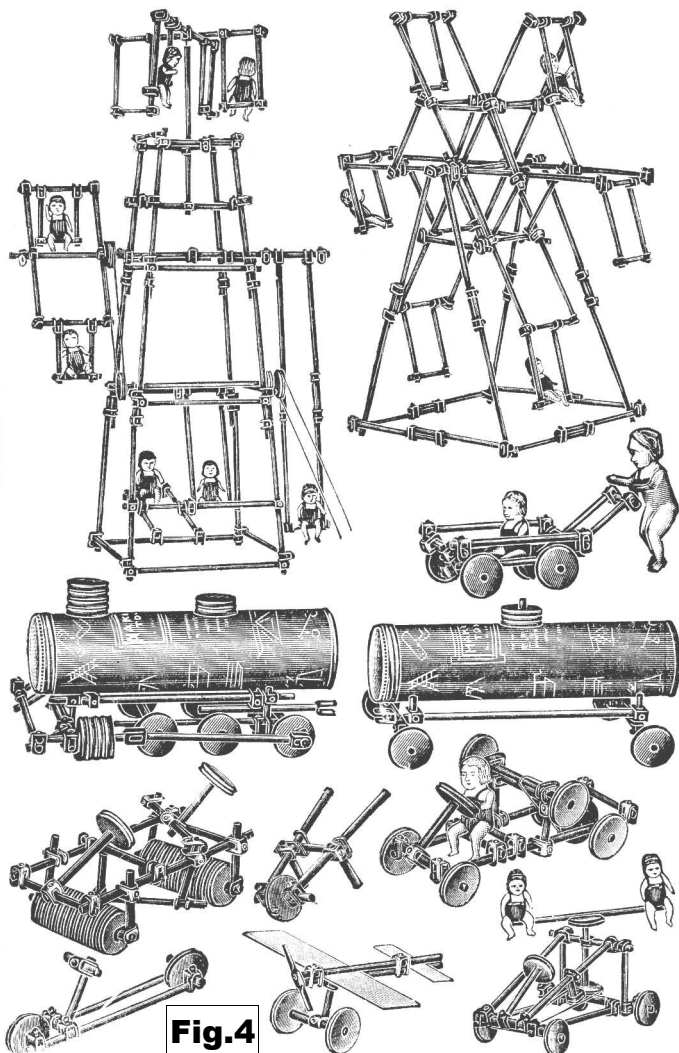


Fig.4

even a Monoplane, though nary a Crane or the like. The Monoplane was the only model to need non-system parts – apart that is from the cannister in the Loco & Tank Wagon, and the little figures (said to be jointed celluloid dolls which were to be pinned to the models). All the models mentioned by name are shown above plus a few others, all natural size.

p4 explains the virtues of the system length, leading to 'It is desirable to have several sets so that more elaborate pieces may be built.'

The Ebay set. It has the completely different cannister right and the set is now called MAK-EM-ALL, with the maker again The Makumal Toy Company, and at the new Chicago address. The cannister no longer has any details of the contents on it and the 8 models are a selection from the Leaflet including the large models & the Loco. The parts shown in the Ebay photos are plain wood Rods & Pulleys, plus Clips. For what it's worth 20 Clips can be seen & 8 Pulleys, but only 40 or so Rods. The Clips are the narrow type and look to be bent correctly. No sign of a Model Leaflet, or Tacks (or Tools), but all these of course are items prone to go missing over the years.

So it looks as if after the move from Granite City to Chicago, the new company hoped that a new name, a new cannister, a larger range of more interesting models, and perhaps some economies would boost sales. I wonder though – celluloid dolls, ugh!



Fig.5