## **DAN DARE and the AJET Mystery** by David Hobson

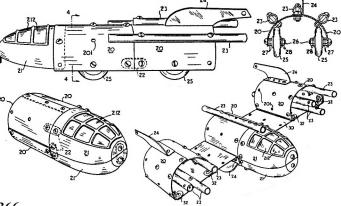
Rumours about unidentified flying objects led me to Mr. Len Champion, and through his good offices I have been able to photograph the box lid from a JUNIOR AJET set, and examine some of the AJET parts he has collected.

What is more, an advert from a trade journal has turned up which offers a 'Codeg AJET Constructional Set'. Dealing with this first, the text states that 'the outfit will make practically any type of jet aeroplane by following the simple instructions contained in the illustrated leaflet'. The size of the box is given as 18\*14\*134", and the price as 54/- (£2.70). The reproduction in the advert is not too clear, but an open two-layer box can be seen, and on the lid, under the heading 'AJET for the young aero engineer', there is an airfield scene with a number of models of military style jet aircraft. Three are shown in flight and one distinctly resembles an Avro Vulcan, one of the V-Bombers of the the 1950s - 60s. Codeg was a trade name used by Cowan de Groot Ltd., and according to British Tin Toys, they mainly traded in imported toys, but also had some toys made for them by specialist British firms in the post-WW2 years.



To return to Len's set lid and his actual parts - the lid (above) is very similar to the one in the advert, but the word 'JUNIOR' is printed in smaller type above 'AJET' Any such word in the ad might not be visible, but it seems likely that there was more than one outfit, with a larger set called perhaps the 'Senior', or just plain 'AJET'.

Also on the actual lid is the patent number 738423. This Patent was granted to Max Bartram Holloway, with a priority date of 27 April 1953, and the object was to 'provide a kit of components for constructing toys of ultra-modernistic design such as simulations of space ships, aircraft and land vehicles adapted for rocket or jet propulsion'. It was clearly taken out in the first place to cover the DAN DARE Space Ship and Rocket Builder sets. For example the two models shown in the patent drawings (below) subsequently ap-



peared in the DD manual as the Jet Coach Mk.1, and the Interplanetary Battle Cruiser Mk.1. Even the preferred colours for certain parts stated in the Patent match those used for the DD parts.

This Patent has perhaps a special significance for those of us who are interested in that side of OS, because as far as I can find out, it seems to be the last example of the invention of a 'new' metal constructional system, before plastics swept the field.

The DD system is covered in MCS but the following additional information may be of interest. The inventor was presumably a director of A & M Bartram of Birmingham, who manufactured the sets. The outfits were linked with the Dan Dare space adventures which were the front page feature of the 'Eagle' comic, and the name was used by permission of the publishers. The Spaceship Builder set seems to have been sold first through mail order adverts in the Eagle during the pre-Christmas period of 1953, at a price of 27/11. It is not known when the system ceased to be available.

MCS lists two sets - the Spaceship Buider and the Rocket Builder. Some parts were common to both, the main difference being that the curved Spaceship parts formed a  $2\frac{1}{2}$ " diameter fuselage, while the corresponding Rocket parts gave a diameter of only  $1\frac{1}{2}$ ". By 1954 Bartrams were advertising outfits Nos. 0, 1, 2, and 3, at 19/11, 27/11, 35/11 and 55/11, and they were available from 'all leading toy shops and stores'. By courtesy of Martin Hills, the four sets are as follows:

- No.0 The Rocket Builder set; a relatively small box with poor artwork; the parts limited the models to the smaller diameter rockets such as The Dart and The Whizz-bang.
- No.1 The Spaceship Builder set; a larger box with better artwork; parts to build the larger diameter models such as the Jet Coach and Interplanetary Battle Cruiser already mentioned.
- No.2 The Spaceship and Launch Pad set; as set No.1, but with angle girders and plates which allowed launching ramps and more elaborate models such as the Space Transport Mk.1, to be built.
- No.3. The Spaceship and Rocket Builder set; a combination of sets No.0 and No.2.

To return to AJET, the relationship with the DD system is obvious when the parts are seen. However thanks to the introduction of some new parts and some cosmetic changes, the AJET jet aircraft did not look too much like converted DD spaceships or rockets. It is not known if AJET was available at the same time as DD, but it seems more likely that it followed on in the late 1950s, and was possibly manufactured by A & M Bartram and factored in the toy trade by Cowan de Groot.

Many of Len's parts, the new ones and those which resemble the DD Spaceship parts, can be matched with those pictured in the advert and on the box lid. In addition there are some which are similar to the DD Rocket parts, and these turned up in the form of a model of a jet fighter aircraft. It seems that there were probably two classes of AJET parts - the ex-Spaceship type that were more suitable for the larger bomber aircraft, and the ex-Rocket ones intended for smaller fighter aircraft.

Notes on the AJET parts known so far follow, using the DD names and PNs for reference where possible. Unless stated the DD and AJET parts are identical apart from their colours.

Nose 1 & 2, Curved Plate 3: DD aluminium (Al) paint;
AJET pastel blue paint.

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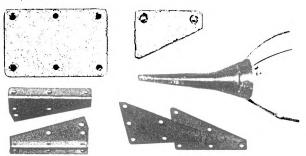
- · Tube 4: DD black paint; AJET red paint.
- Tube 5: DD black paint; there does not seem to be an AJET equivalent.
- Fin 6 & 7, Flat Plate 8, Angled Plate 9: DD red paint; AJET Al paint.
- Nose 01: both nickel plated but AJET version has a half-hole at front so the probe can be bolted to the nose.
- · Curved Plate 03: both nickel plated.
- Fin 08, 09, 10: DD red paint; AJET Al paint, with red/white/blue tail flashes on some 08 and 09.
- · Flat Link: both probably nickel.
- · Angled Link: no AJET version seen may not be needed.
- Nuts and Bolts: seem to be the same for both systems with hex nut <sup>5</sup>/<sub>16</sub>" A/F, and roundhead 4BA bolts of various lengths, all of brass plated steel.

The following parts are thought to be unique to AJET:

- Small rectangular plate (opposite): 2\*3" with 6 holes; Al paint; cf No.8, 21/2\*31/2", 9 holes.
- Flanged wing root, handed (opposite): 3½" long; Al paint.
- Large triangular plate: 2½\*3½" (2 opposite overlapping);

Al paint; some may have roundel marking.

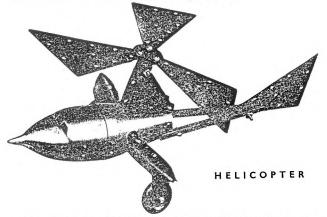
- Small triangular plate: 2\*1½" (below); 2 holes; Al paint.
- Hinged undercarriage assembly: may be in large and small sizes only the hinge of small version has been seen so far, one arm measures 3/4\*5/8".
- Nose probe (below): moulded orange plastic; in two parts, the probe proper is tapped and is held by a bolt to the small nose, or to the large nose with a base unit between.
- Wheel: about 1½" diameter; balloon type moulded in black plastic.



And some Notes on SUPERSONIC system with parts comparable to those of DAN DARE. It was originally listed in MCS as a DD outfit but was separated in PART 5 in the light of later information. No set is known but thanks to Geoff Osborn, a photocopy of the manual is to hand, and I've been able to examine some parts, courtesy of Ed Furness.

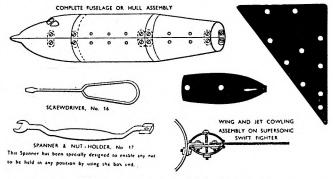
The manual measures about 200\*145mm and has 8 pages plus covers. On the front is the full name of the set, THE SUPERSONIC JET-CRAFT & SPACE ROCKET BUILDER, and it was 'A MOKO Product, Made in England by Konstrukta Mfg. Co.' No address is given but MCS also contains a simple system with MECCANO-style parts called KONSTRUKTA, made by a company with the same name, of 14 Vesey Street, Birmingham.

Also on the cover is 'Patent and registered design applied for'. Inside are 8 models, mostly jet planes but also a Jet-Car, a Jet Speed-Boat, and a rather futuristic looking Helicopter (below). The fuselage parts are much the same size as the DD Spaceship ones and the main differences are the shape of the nose, and the tapering sections that are used for the rear fuselage - the sketch opposite, taken from the inside back cover of the Manual, shows these parts. Half-Tubes were used instead of the DD Tubes and this type of part was mentioned in the DD Patent but not included in the sets. A useful part was the Half Jet Cowling, pairs of which can be seen on the sides of the Helicopter supporting the undercarriage. The latter was retractable, as in the AJET, with the Wheels mounted on hinged arms.



The parts are shown quite clearly in MCS and so only the colours and other points of interest will be noted.

- The Upper Half Nose has 3 pierced windows, one looking forward and two shorter, angled ones. It, like the Main Fuselage section, is about 4½" long: the Tail End is 3½". All the body parts are painted silver.
- The Large Wing (below) is bright red and some of its holes don't show in MCS. The Small Wing is light green.
- The Jet Cowling (below) is 3.1" long and is painted a darkish blue; the Undercarriage is light green with light blue Wheels, 1½" dia; the Half Tubes are black, about 6" long by .42" wide, with the 3 holes at 2" pitch.
- The Brackets, Axle, Spring Clip and 4-hole Bushed Wheel haven't been seen, but the colours of the parts have been written in on the Manual, with the Bushed Wheel red. The square Nut and roundheaded Bolts shown in MCS haven't been seen either, nor have the Screwdriver and the unusual Spanner (below). The Screwdriver looks very similar to one shown in a photo of an unused DD set from Martin Hills.
- All the main parts are made of .024" steel. Most of the holes are at 1" pitch with a diameter of about 4.2mm, but those in the Nose and Cowling sections are 4.5mm.



No indication of the date of SUPERSONIC is known, but the lines of several of the models in the Manual remind one of aircraft from the late 1950s.

MAAKEETS The date for this South African system is given in MCS as '? to 1970s'; in the Meccanoman's Guide issued in 1969 it says it was withdrawn in 1960 but reappeared in 1965. In 1973 Phil Ashworth visited S. Africa and afterwards wrote in the Midlands Meccano Guild N/L that he had seen it on sale and noted 'the atrocious finish on the parts and their flimsiness'. Athough some unusual parts are shown in MCS, the sets that Phil saw were 'very similar to MECCANO, both in respect of number and type of parts in a given size of set, and flat box packaging with expanded polystyrene and transparent cover'.

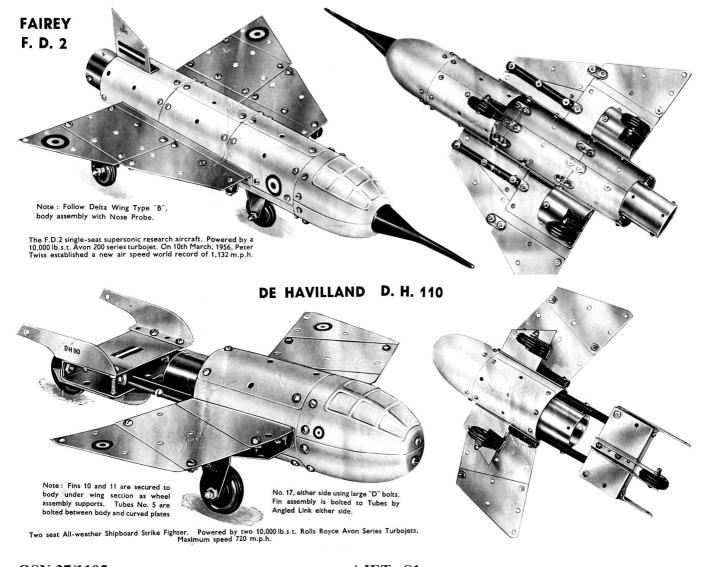
**More on AJET** Something on this post-WW2 UK system appeared in 14/366 and now, thanks to David Hobson, a manual is to hand, plus some parts that were with it. The manual cover below, 220\*137mm, had been detached by its



previous owner and stuck onto the lid on the box he kept his parts in. The 20 unnumbered, stapled, inside pages seem intact and there is a loose sheet, probably the back cover. Of the 20 pages, 1-4 show how to make the different shapes of wing used in the models - 3 delta shapes, & a swept wing as on the D.H.110 below. p5 has details of the undercarriage parts. Then there are 6 models of 1950s British jet aircraft from VICKERS VALIANT to Saunders Roe S.R. 53, and among them the 'Vulcan' on the box lid in OSN 14. 2 pages are given to each model, one with a photo of it & brief notes on the full-size machine, while the second, facing page has a photo of the model's underside and a few constructional notes. Even accepting the usually incorrect representation of the cockpit,

and the rather fat fuselage, some of the models are less successful than others and one of each type is shown across the bottom of the page, about ½ full-size. Several of the models, like the F.D.2 below, have no bottom half to the rear fuselage. Most of the 'missing' Plates could be added, assuming there were enough parts in the Set, but perhaps the idea was to give the impression of a tapering fuselage. The last model is a CORPORAL missile, with just one photo on p20. None of the models has any real likeness to any of the DAN DARE models, or those of SUPERSONIC (see 14/367); even the Corporal is different with the smaller diameter section at the tail, an AJET feature on most of the models. One side of the 'back' page explains how to make the nose & first body section, the other has the Illustrated Parts shown right, with the parts at their original size but rearranged.

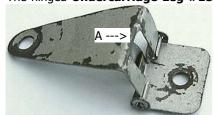
Now some notes on **the parts** that were with the Manual, plus those in two separate lots - they confirm most but not all of the details given in OSN14. Unless otherwise stated the parts are the same as their DAN DARE (DD) counterparts in either the Rocket or the Spaceship set, as appropriate. Thus most **holes** are at ½" pitch or multiples thereof, and vary from 3.7 to 4.2mm in diameter, with most of the larger sizes in parts #1-3. The Nose parts #1 & 2, and the Plate #3 are painted light blue instead of silver. The Tubes #4 & 5 are red instead of black. Fins #6, 7, 10 & 11, and Plates #8 & 9. are silver instead of red. The Flat & Angle Brackets are nickel, as in DD. The N&B are 4BA brassed steel. The Bolts seen have 6.3-6.4mm Ø round heads and are 7, 13, 161/2, & 251/2mm u/h. The hex **Nut** is pressed, 8.0mm A/F & 2.4mm thick. The Wheels are the 11/2" Ø blue DD balloon type, but the one Wheel in the third lot is the black moulded OSN 14 type shown on the models in the Manual. It is 35mm Ø and

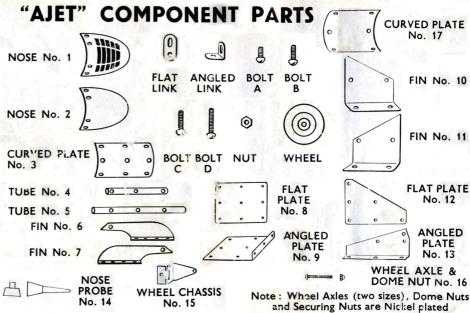


OSN 37/1105 AJET: S1

from its smell is rubber rather than plastic.

The **new parts** are #12-16. **Plates #12 & 13** are silver. The **Nose Probe #14** is red plastic and the 'spike' pushes onto the spigot on the base. The method of attaching the base to the nose isn't shown in the Manual - in the parts to hand the shanks of two bolts embedded in the base pass into the front holes of the Nose parts and are held there by Nuts. Overall the Probe is about 6cm long. The hinged **Undercarriage Leg #15** 





above has a tongue pressed through from 'A' and it engages with the right-angled tab on the inner edge of the mounting plate to hold the leg in the up & down positions. The mounting plate is 3/4\*5/8", and the leg is about 35mm long o/a. (The larger U/C Leg mentioned in OSN 14 may have been the SUPERSONIC version, an example of which is now to hand. It is generally similar but has no method of positive locking, it relies on the hinge being very stiff. It is painted green, the mounting plate is 1\*1/2", and the leg is 38mm long.) The **#16 Axle & Dome Nut** have not been seen but the thread is 4BA. The **Curved Plate #17** is not new, it is the nickel DD Rocket part #03. The **Screwdriver** may be similar to the wire type shown for SUPERSONIC in 14/367.

Some of the parts mentioned in OSN 14 are not in the

present lots, and are not needed for the Manual models. They are the DD Rocket Nose #01, the DD Rocket Fins #10 & 11, and the Small Rectangular and Triangular Plates. If these were indeed AJET parts they would presumably be in another set - it will be recalled that the OSN 14 box lid had 'Junior' on it. There is no mention of a set name in the present manual. A pointer to the possible existence of an AJET Rocket Nose is the mention is OSN 14 of the half hole in the front of the part, so that there would be a full hole in the pair forming the nose and this would allow a suitable Probe to be attached. In one model seen the Probe is a slightly modified version of the #14 Spike. It has a small bore beyond the bottom of the spigot recess into which a Bolt is screwed from the inside of the nose.

AJET: S2 OSN 37/1106

Snippet: MECCANICO(?) ITALIANO In recent years the Italian firm Bral, later Bres, has sold sets under the name BRAL, but earlier MECCANICO was often used, usually preceded by IL COSTRUTTORE, often in quite small letters. Manuals generally had the name that was on the lid but sometimes IL COSTRUTTORE BRAL was used on manuals with 'MECCANICO'

No lid is shown for the set opposite but the name of the manual (shown slightly enlarged in the top right corner) looks like MECCANICO ITALIANO although the 'IC' has to be taken on trust. So is this another BRAL alias or a different system?

outfits.

As far as can be seen most of the parts could be BRAL including the light blue Conical Discs & what may be a brass look Chimney Adapter in the bottom left corner of the top tray - the BRAL part is about half the depth of its MECCANO counterpart. The silver Plate in the bottom tray is most likely a BRAL Aero Centre Wing, and the 2 silver Wheels near it could again be Aero parts. The black Tyre on the red Pulley could be BRAL but I'm not sure about the white Rubber Ring near it - Bral listed such a Ring but I've never seen it, nor any white rubber BRAL part. The most un-BRAL-like parts are in the bottom tray: the green Trunnion in the bottom left corner doesn't have the



characteristic BRAL flat top, and the red 5\*7h Flexible Plate doesn't have the slotted holes of the BRAL Plate. But these parts could of course easily be 'foreigners'.

Can any reader throw more light on MECCANICO ITALIANO?



# **OTHER SYSTEMS NEWSLETTER**

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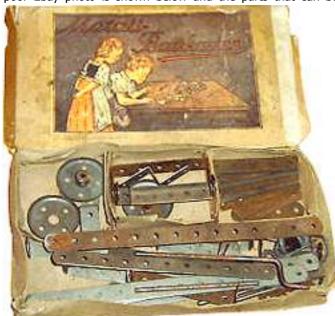
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**EDITORIAL** Nothing to report so 'steady as she goes', and with luck I'll be able to keep to the recent near yearly interval between Issues.

### Shorter NOTES, with thanks to all contributors.

1. Snippet. 'New' System: METALL-BAUKASTEN. The poor Ebay photo is shown below and the parts that can be



seen are, with 'probables' daggered: 4, 5†, 11, 14h Strips; 1\*5\*1 & 1\*3\*1h† DAS; 2\*1\*2 Z-Bracket; Pulley Discs with & without boss (unless the latter's boss has simply fallen out); Axle; Crank Handle.

The Ebay ad mentioned a printer, Emil Bethge of Hagen (a town 15km south of Dortmund), and the PR included 11/46. So, no doubt, one of the many small sets which appeared soon after WW2, very soon in this case, so it's not inconceivable that this system existed before the war.

#### **METALL-BAUKASTEN [8]: S1** [51/1548]

2. **Snippet. More on GERNER.** Since the notes on p1573 Urs Flammer has sent details of some parts, nearly all of a set, he has obtained. They are as described except that the Square

Tube, right, is as shown in the manual, an extrusion, 20\*20mm, with no join. The Wheels are the earlier, turned type, but the Flanged Plate is the later pattern with alternate round & slotted

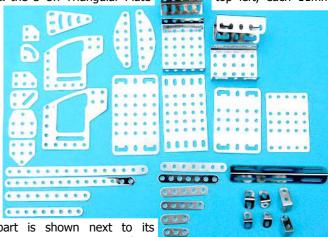
Urs had also found a small ad from 1948 saying that sets in various sizes would soon be available to wholesalers



for export. It was from a Franz Kauer, (20a) Letter/Hann., Postfach 6. It will be recalled that GERNER was made in Letter.

**GERNER: S2** 

3. 'POLYLONG' 11mm Pitch Parts. It was noted in 42/1266 that some Happy People set parts have holes at 11mm pitch rather then the usual 10mm. David Hobson mentioned that he had found a selection of these in various lots and kindly sent the A/G bottom right, the photo below. Except for & the 3\*5h Triangular Plate top left, each 11mm



part is shown next to its nearest 10mm equivalent.

Holes in the 11mm parts are 4.1mm and the Strips are smooth on one side and very slightly rough on the reverse.

**POLYLONG: S21** 

[51/1548]

4. AJET. Some parts & a manual (all were as described in 37/1105) were offered by a auction house and it was said that AJET was made by Payne & Holloway of Birmingham. A web search gave nothing on this firm. Equally nothing has emerged since OSN 37 over whether there was a set other than the 'Junior'. A any information on either of these aspects would be most welcome.

AJET: S3 [51/1548]

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