Club Magazine

AUTUMN EDITION 2022

Luton & District MBC

.... a club NOT just for boats ....

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EDITORS NOTE

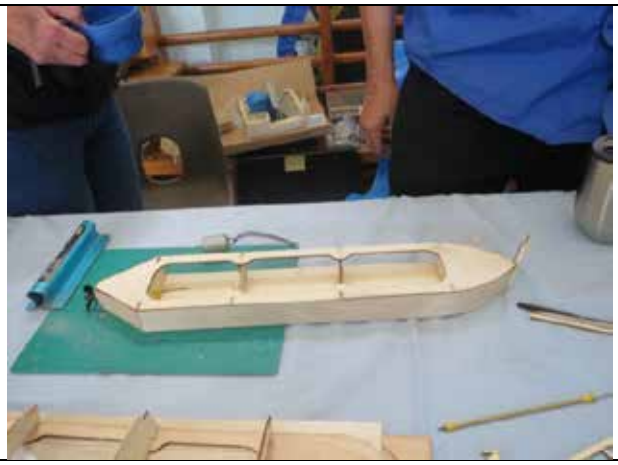
Yes, the autumn edition of the club Magazine is a little late all due to me the editor, having been a little un-well in early September, that's my excuse. The St Albans show was approaching so I thought I would delay it even further in order to include a report on the aforementioned show which has returned after a short absence.

SECRETARYS REPORT

A big thank you to all those who attended and exhibited at the St. Albans Show this year. Tony Dalton won the Roy Davis cup for his Krick type VIIb Submarine.

Our Club aim over the show weekend was to build a simple RC boat and sail it. This was achieved by Sunday lunchtime. Thanks to my 'show wife' Maureen, and her real hubby Dave. Watching Maureen with a scalpel was something to behold! I will endeavour to finish the painting and correct the ballasting the week following the show. The canal boat will be called 'Maurpee'. Some photos follow.

Maurpee Under Construction



Maurpee Under Construction


Maurpee on Sea Trials

BLACK PARK MBC OPEN DAY 2022

I have been provided with a few photographs of the day the Club visited Black Park MBC (Slough) on their open day on the 4th September this year. I have visited Black Park once many years ago, as I remember it is a long walk down to the lake from the car park and the lake is very large.


Black Park Lake

STEVENAGE MBC OPEN DAY 2022

I have been provided with a few photographs of the Stevenage MBC open day of which a number of our club members visited. I have been to Fairlands Valley Lakes where Stevenage sail, a number of times, easy access but not a lot a parking available. Access to the water is good but be respectful of the wild life.

L&DMBC OPEN DAY 2022

This is our first open day since 2019 all delayed mainly due to the covid pandemic, however in order to achieve a successful day, the lake area required a good clean. The secretary put out a call for willing volunteers and the usual mob turned up on Saturday morning to commence operations. There were leaves to be cleaned from the water as best one can, general weeding of the flower beds, sweeping the paths and standing areas and the removal of any large tree branches to allow for some reasonable sailing. The paved/seating area was also extended. When completed all looked very impressive.

Terry at a loss without his sandwiches

Pete is off into the jungle

Clearing surplus vegetation	Digging out ready for new slabs
	
Heavy lifting brigade	
	
Water can be seen to be very low	
	
The Big Strip off?	Club display area all cleaned up

SUNDAY - THE OPEN DAY

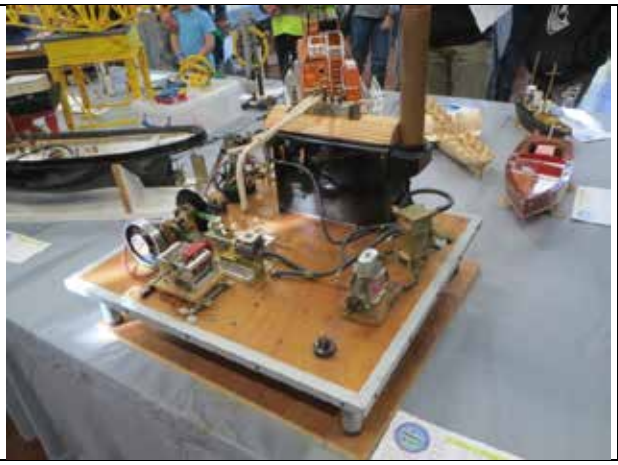
Early Sunday morning (I do not know what time as I was probably still in bed) there was the setting up to be carried out which entailed putting up the Gazebos which turned out to be some sort of puzzle on how to put them together and then a ‘TUG of WAR’ putting them together, as can be seen from the pictures below.

The design layout was for the model display tables to be positioned within the fenced off area and a couple of Gazebos with tables set up on the other side of the main pathway as a covered seating area with items for sale on the tables.

I arrived at about 12pm complete with boat and by this time there were a considerable number of people present. Unfortunately, there were only a few boats on the water mainly due to its leafy condition, the leaves etc coming and going dependent on the wind direction; however, this did not stop a number of visitors viewing the fine display of models and asking lots of questions. We were joined by members of the Stevenage, Northampton, Lakebank MK and Wicksteed model boat clubs which certainly swelled the numbers. The following pictures show the range of models that were on display together with members, friends and visitors attending.

THE BIG St. ALBANS MODEL SHOW

At last, the St Albans Model Engineering Exhibition is back, with most of the exhibitors in attendance. The beauty of this particular show is that there is something for everyone, from children playing with the ‘Have a go boats’ buying and flying simple gliders/aeroplanes to the more serious enthusiasts looking for ideas or advice regarding their next project. I hope the following pictures will give readers some insight as to the scale and breadth of the types of modelling on display at this show.




St Albans MES


St Albans MES


Welwyn Garden City Society of Model Engineers

USS Missouri By Steve Briancourt

Luton & District MBC

Luton & District MBC


Luton & District MBC


Luton & District MBC


Stevenage MBC

Stevenage MBC

Stevenage MBC

MOORHEN MBC

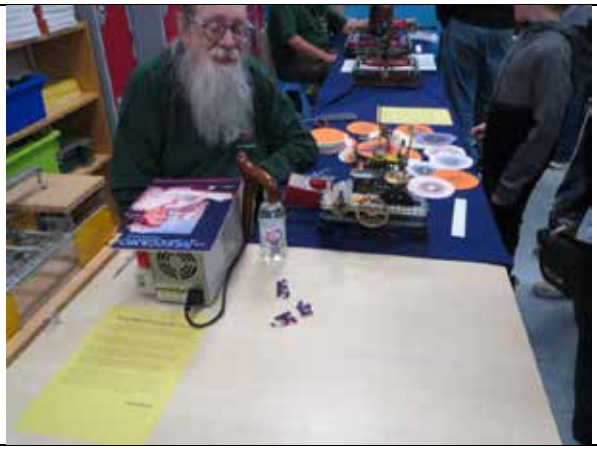
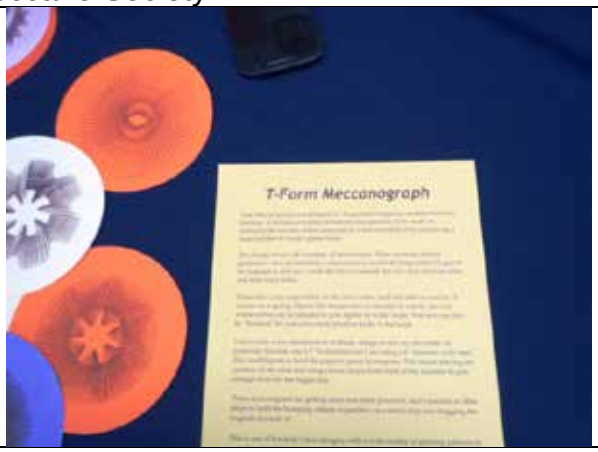
MOORHEN MBC

Large Scale Train Layout

Large Scale Train Layout

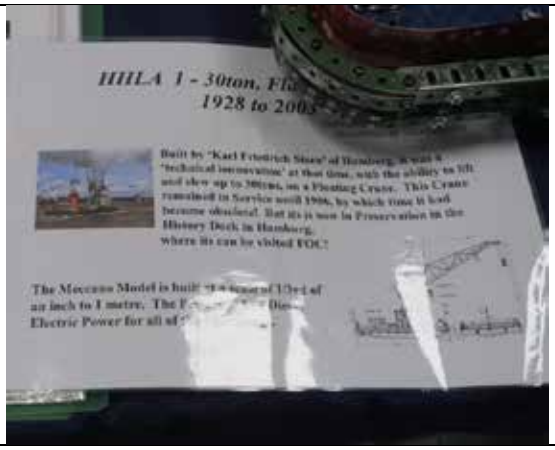

The Spithead Review


North East Meccano Society

T-Form Meccanograph

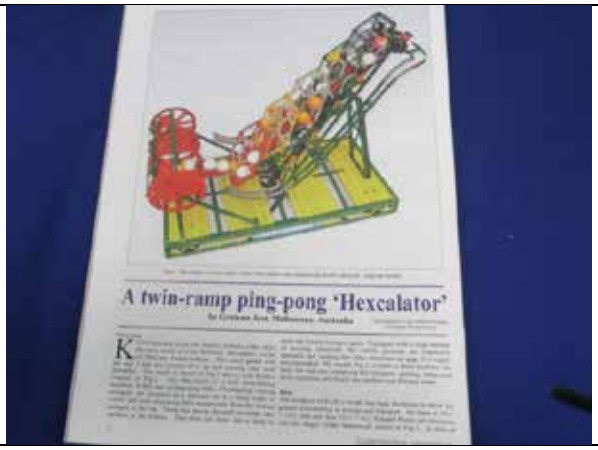

Red Dwarf Orrery



HHLA 1 – 30ton Floating Crane

Tower Crane

Demonstration Motor Chassis



A Twin-ramp ping-pong 'Hexcalator'

Car

Large Gantry Crane

	
Trucks ‘have a go area’	Excavation
	
Trucks	Trucks
	
Trucks	Trucks

Luton & District MBC Sailing on the Pond

BATTLESHIP TSESAREVICH

Early in 2020 I was scanning the internet for my next building project when I came across an unusual Russian battleship ‘Tsesarevich’. It was unusual because its hull was constructed using a ‘Tumblehome’ design. If you are not familiar with the word ‘tumblehome’ it means that the upper part of the hull above the water line becomes narrower as it rises towards the main deck. This reduces the centre of gravity of the vessel by lowering the weight above the waterline, which is one of the reasons it remained common during the age of sail. In addition, the sloping sides of a ship with an extreme tumblehome (45 degrees or more) increased the effective thickness of the hull versus flat horizontal trajectory gunfire (a straight line through a sloped hull faced more material to penetrate) and increased the likelihood of a shell striking the hull being deflected. Steel warships of the early 1880s demonstrate tumblehome. France particularly promoted the design, advocating it to reduce the weight of the upper deck, as well as making the vessel more seaworthy and creating greater freeboard.

France built the pre-dreadnought battleship *Tsesarevich* for the Imperial Russian Navy at the end of the 19th century. The ship's design formed the basis of the Russian-built Borodino-class battleships. She was based at Port Arthur, northeast China, after entering service she fought in the Russo-Japanese War of 1904–1905. Tsesarevich was torpedoed during a surprise attack on Port Arthur and was repaired, to become the flagship of Rear Admiral Wilgelm Vitgeft in the Battle of the Yellow Sea and was interned in Tsingtao after the battle.

After the war, the ship was transferred to the Baltic Fleet and helped to suppress the Sveaborg Rebellion in mid-1906. While on a Mediterranean cruise, her crew helped survivors of the 1908 Messina earthquake in Sicily. Tsesarevich was not very active during the early part of World War I and her bored sailors joined the general mutiny of the Baltic Fleet in early 1917. Now named Grazhdanin, the ship participated in the Battle of Moon Sound in 1917, during which she was slightly damaged. The ship was seized by the Bolsheviks during the Russian Revolution in late 1917 and decommissioned the following year. Grazhdanin was scrapped in 1924–1925.

The Tsesarevich 1/350 scale plastic kit is manufactured by Trumpeter. I initially purchased the kit from 1001 Hobbies, after waiting just over two weeks I enquired as where the kit was, after an exchanged of E-Mails it turned out that the kit was not available from stock and the supplier agreed to refund my money. I then placed an order with eModels and the kit arrived within three days. I also ordered some replacement metal gun barrels from Model Hobbies (manufactured in Poland) and laminate wood decking from BNA Model World (Australia). By the time all the parts had been received it was the end of February. A month later and we were all in ‘Lock Down’ due the COVID 19 pandemic – at least now I had a project to work on.

The Tsesarevich, as it would have appeared in 1904, is shown in **Photo 1**.

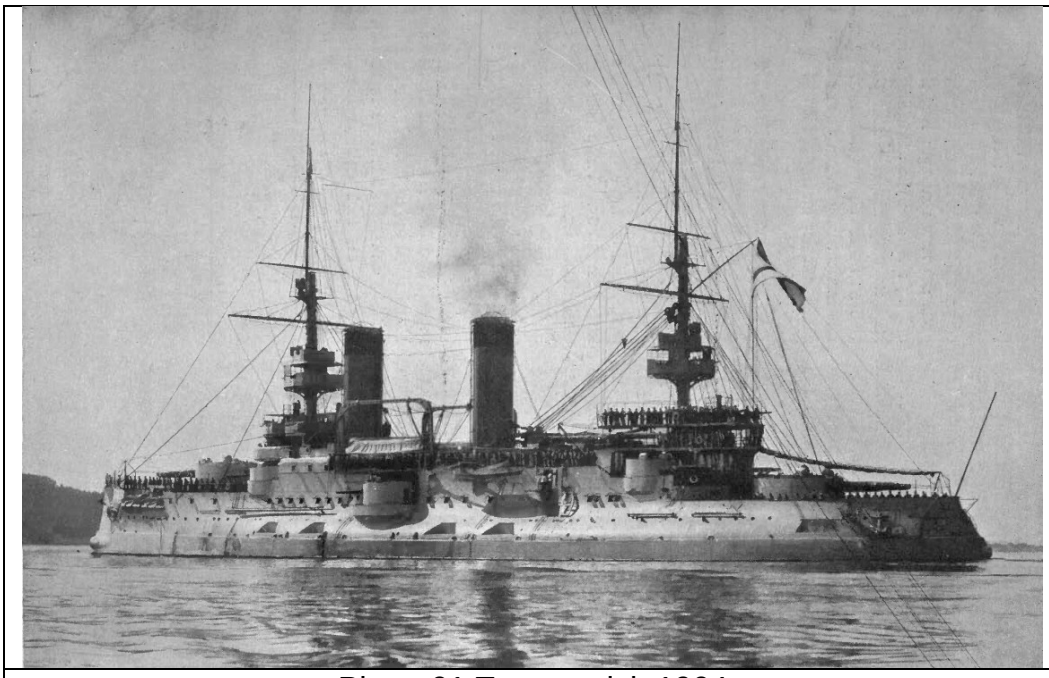


Photo 01 Tsesarevich 1904

It was 118.5 metres long and had a beam of 23.2 metres. The model size, at a scale of 1/350 comes out at 340mm x 66mm (13.5” x 2.75”) quite small. The kit box is shown in **Photo 2** followed by all the packaged parts in **Photo 3**. Etched brass detail sets **Photo 4**, metal gun barrels **Photo 5** and finally the wood deck laminations in **Photo 6**. According to the information contained within the kit there are 396 parts on 11 sprues plus 227 photo etched parts.

Photo 02 Kit Box

Photo 03 Packaged Parts

Photo 04 Etched Brass Parts

Photo 05 Machined Gun Barrels

Photo 06 Wood Deck Laminations

As this plastic kit was to be modified to sail in the water under power the first step was to design some replacement propeller shafts, running tubes and a rudder. I planned to make all of these replacement items from brass.

The moulded hull comes in two halves and I decided to carry out the motor and propeller shaft installation prior the gluing the two hull sections together. A package of telescopic brass tubing (1.3 to 1.7mm o/d) was purchased for the running tubes and 1mm diameter brass bar for the propeller shafts. Two motors were selected from my stock of 3-volt motors which allowed the design of the propeller shafts to proceed.

The 1mm diameter brass propeller shafts were cut to the required length and the propellers drilled 1mm to suit them. They were then bonded to the end of the shafts. The running tubes were made in three sections using the telescopic brass tubing. For the first section 1.3mm diameter tube was used as this was small enough to allow the ‘A’ frames

to be drilled to accept this size of tube. Where the small tube enters the hull, it was re-enforced by the slightly larger tubes which were soldered over the small tube to add to the running tubes strength.

The rudder shaft was made from 2mm diameter brass rod having a groove cut into one side to accept the rudder blade which was made from 1mm thick brass plate and then soldered into the groove. The rudder down tube was made from 3mm brass bar and drilled through the centre to accept the rudder shaft. Solid propeller shaft couplings were made from 2.5mm diameter brass rod drilled through its centre to suit the propeller and motor shafts all these parts may be seen in **Photo 7**.

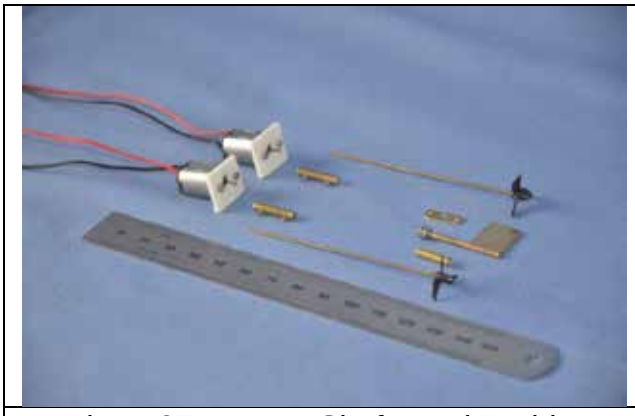


Photo 07 Motors, Shafts and Rudder

With all the propulsion parts made, the two hull halves had pilot holes drilled into them to accept the propeller shaft running tubes, these holes were then elongated to allow the running tubes to be fitted and aligned with the motors. When satisfactory alignment had been achieved the shafts, ‘A’ frames and motors were bonded into position **Photo 8**.

Photo 08 ‘A’ Frames and Motors fitted

The next stage was to bond the two sections of the hull together but before doing this there were two moulded bulkheads to be fitted **Photo 9.** In order to gain as much access to the inner hull as possible I decide to machine out the centre of these bulkheads as shown in **Photo 10.** With this modification completed the two bulkheads were bonded to one half of the hull and when they were secured into position the other half of the hull was fitted and bonded to its mating half, ensuring that all was correctly aligned. The hole for the rudder down tube was then drilled allowing the rudder assembly to be fitted into position

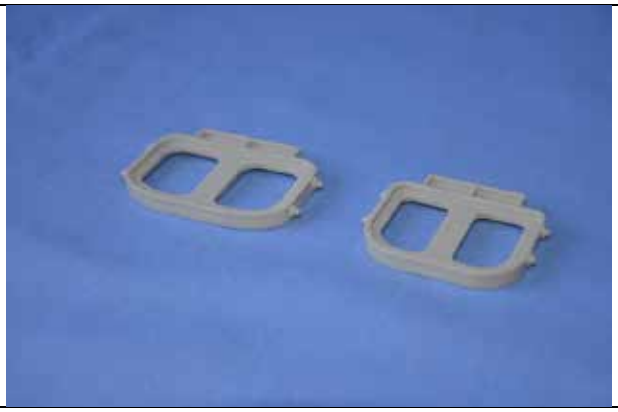


Photo 09 Original Bulkheads

Photo 10 Modified Bulkheads

Next job was to design the control system and purchase the necessary parts. I decided to use an Mtronics 10Amp speed controller, LiPo dual cell 1300mA battery, 2.4GHz FRSKY receiver (to match one of my transmitters) and a small mini servo for the rudder. A mounting bracket was made for the servo using plasticard and a plasticard divider system created within the hull for housing the speed controller, battery and receiver. The complete and wired control system may be seen in **Photo 11.**

Photo 11 Control System Installed

The build of the model was progressing well and it was now time to consider building a stand in order to protect it. Reviewing the stand provided with the kit it appeared to be acceptable with minor modifications. I added two felt lined sections to the top of the stand to prevent the model from sliding off and getting damaged. **Photo 12** shows the model on the new modified stand

Photo 12 Painted Hull

After fitting and gluing some parts to the inside of the hull including two Gun Mountings it was time to start painting, however whilst looking at the laminated decking and reading the instructions, there was a note stating that there was an error in the hull moulding design and that a section of the foredeck Bulwark was required to be cut away as the moulding design supplied is for the 1904 version. The modification was duly carried out followed by the removal of the propeller shafts and rudder to allow the hull to be painted. The basic hull was initially painted grey (Tamiya XF19) all over. When this was dry the upper half of the hull was masked above the water line and the lower half painted with Halfords Red Oxide primer, including the rudder blade. A final coat of Humbrol clear satin varnish completed the painting process of the hull see **Photo 13**.

Photo 13 Painted Hull

Fitting the two decks was relatively easy, just had to trim the edges of the plastic mouldings and press them into position in the hull (not glued). The laminated decks being self adhesive just required to be peeled away from the backing sheets and then place them into their respective positions on the moulded decks, however, I always add some Cyano to the glued surface to assist in keeping the laminated decks firmly in position **Photo 14**.

Although it was planned that the decks would be removable it would be better if the power switch was positioned so that access could be gained through the deck. I decided that the best position to achieve this was at the stern of the upper deck. A bracket was made to support the switch shown in **Photo 15** and an excess hole cut in the deck complete with replacement cover, to allow access to the switch (**Photo 16)** this also reveals that I had assembled and secured a number of superstructure parts to the main deck.

Photo 15 Power Switch on Bracket

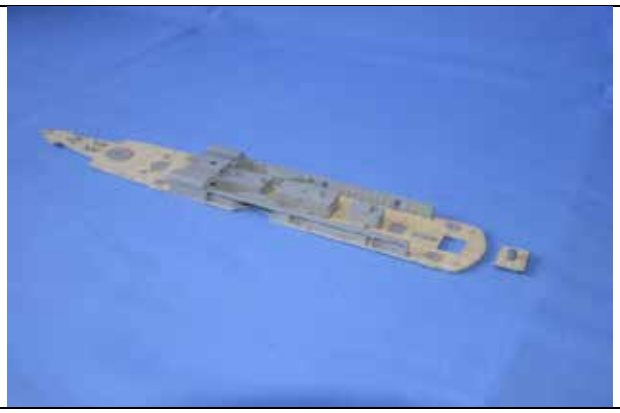


Photo 16 Access Hatch & Cover

Assembly of some of the photo etched parts was quite fiddly as can be seen from **Photo 17** this shows four small winches which have been placed alongside a steel rule to aid in size comparison.

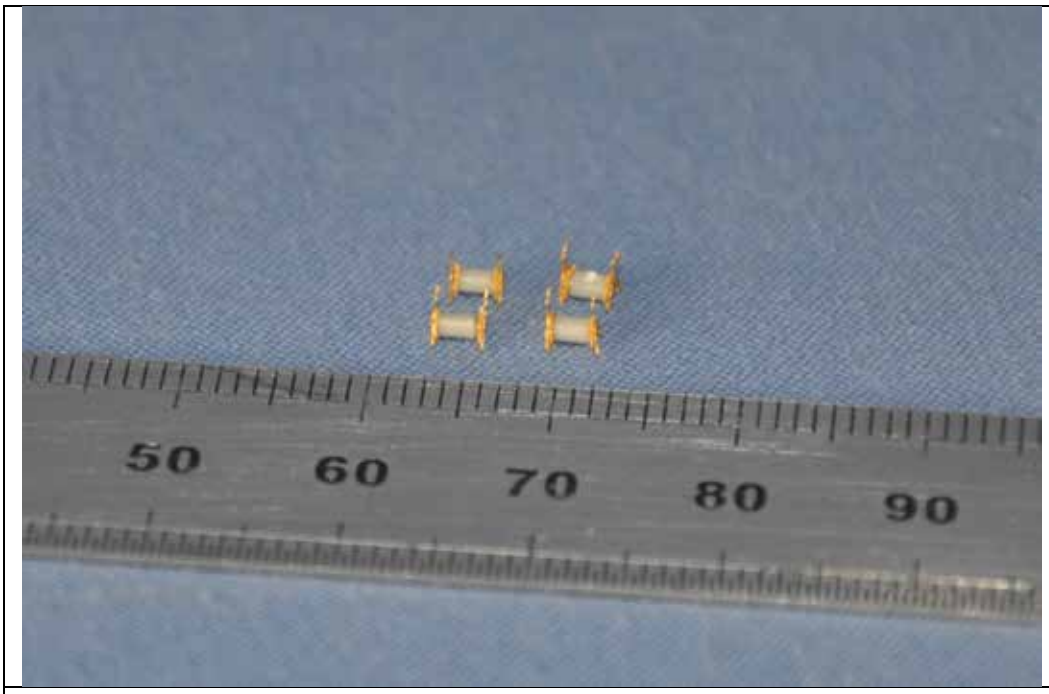


Photo 17 Photo Etched Winches

Photos 18, 19, 20 and 21 show construction of some of the superstructure parts including a number of photo etched access ladders and guard rails which were all individually formed and painted prior to their assembly during the build up of the superstructure.

Photo’s 18, 19, 20 and 21 Superstructure Assembly

Photo 22 shows the ten rowing boats, some of which had wood laminate decking fitted between the bench seats, and four steam launches all completed.

Photo 22 The Rowing Boats and Steam Launches

Construction of the steam launches also involved building some very small guns. The following description and pictures describe what was involved.

Photo 23a shows the three basic parts from left to right the Gun mounting, Gun shield and the Gun body.
Photos 23b, c and d show the sequence of forming the mounting into a tripod.
Photo 23e shows the mounting of the Gun Shield onto the plastic gun body.
Photo 23f is the gun/shield assembly now mounted on the tripod mount and finally
Photo 23g is the completed gun mounted on the aft section of the Steam Launch.

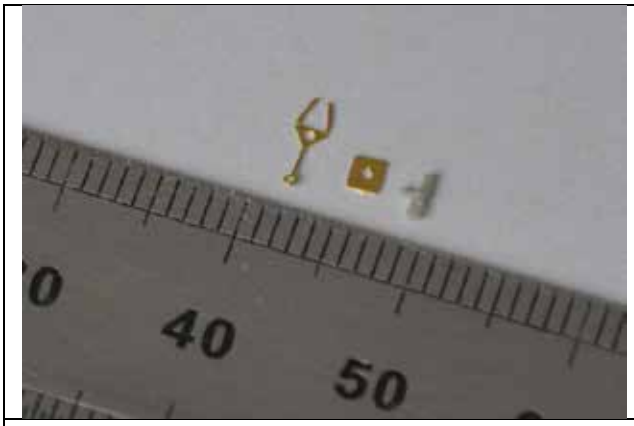


Photo 23a Three Basic Parts

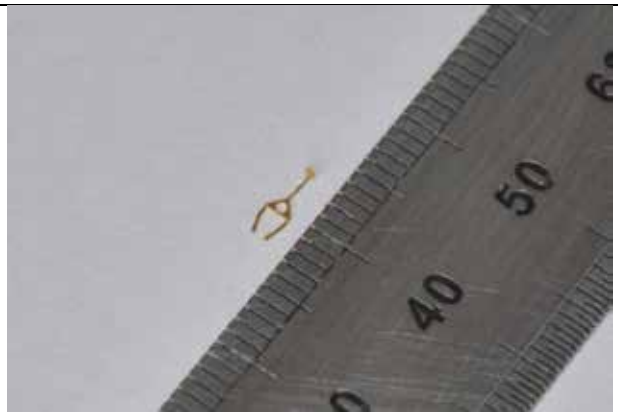


Photo 23b 1st Stage forming the Mounting

Photo 23c 2nd Stage Forming Mounting

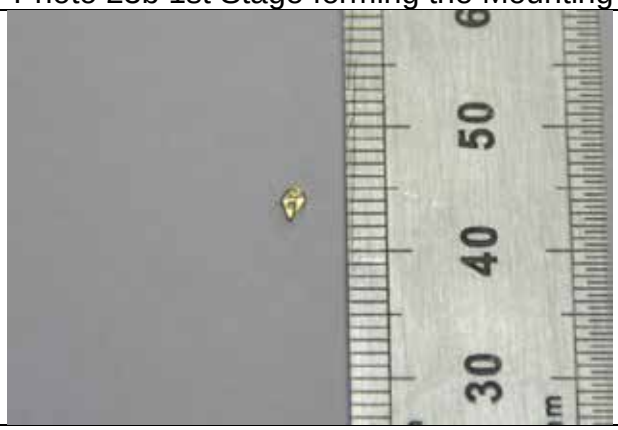


Photo 23d 3rd Stage Forming Mounting

Photo 23e Mounting Gun to its Shield

Photo 23f Gun Mounted onto Tripod

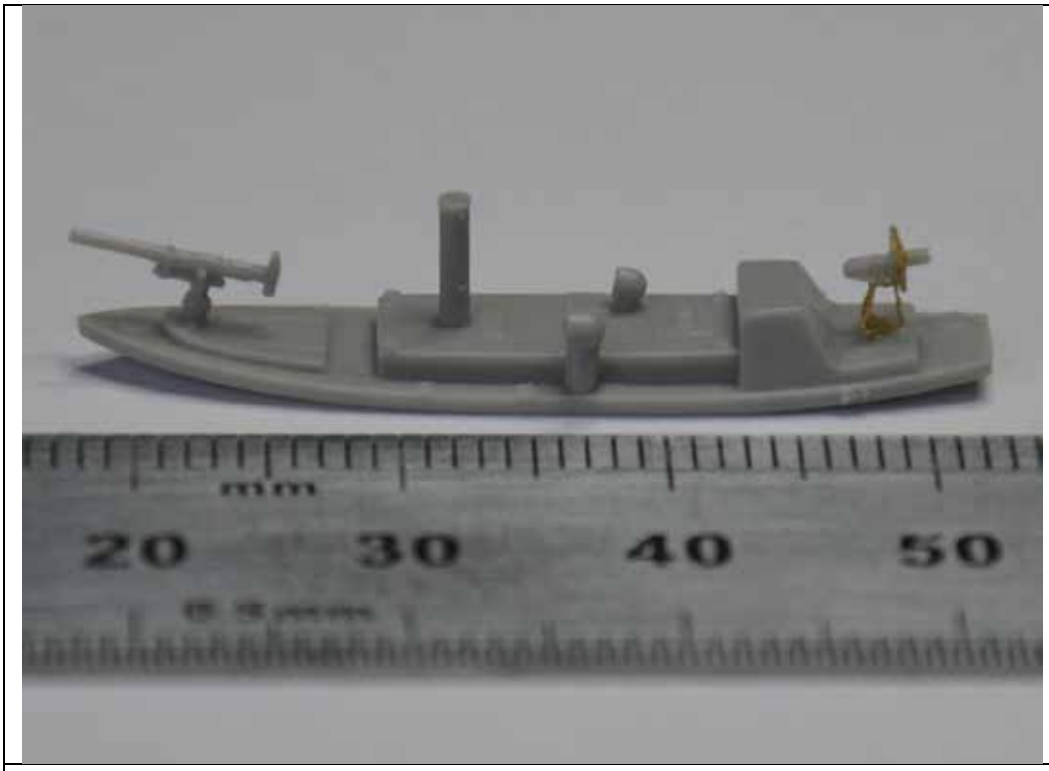


Photo 23g Gun Mounted on the Deck

Photo 24 shows the funnels fitted to the superstructure and the auxiliary boats installed on the boat deck.

Photo 24 Funnels and Auxiliary Boats Fitted

Next it was time to construct the big guns; the plastic barrels were all removed from their pivots. The pivots were then drilled to accept the mounting spigots of the new machined metal barrels. The spigots were then bonded into position on the pivots and the etched

brass handrails formed and bonded to the tops of all the turrets. All parts were then painted grey and then assembled into their respective turrets. The completed guns are shown in **Photo 25**.

Photo 25 Completed Main Guns

All the assembled guns were then mounted into their respective positions and bonded into place **Photo 26**. All that was left to do was to fit the remaining parts including the upper masts. Instead of gluing the top sections of the mast into position short lengths of brass tube were bonded to the tops of the base masts. This allowed the upper masts to be inserted into the short lengths of tubing and thus removed for transportation **Photo 27.**

Photo 26 All Guns Mounted into Position

Photo 27 Modified Upper Masts Fitted

To make certain that adding the entire superstructure had not caused any instability a buoyancy test was carried out in the test tank (the bath) I am glad to report that all was satisfactory as can be seen in **Photo 28**.

Photo 28 Buoyancy Testing in Bath

As with all vulnerable and delicate plastic models and in order to protect them from damage a protection/transport box was made. To do this I used the kit box supplied plus some corrugated cardboard sheet, inserted into the sides to increase the box height to allow for the mast height. The modified box was partly lined with foam sheet to protect the model during transportation. The completed box with the model installed **Photo 29.**

Photo 29 Model Fitted to Transportation Box

The completed model is shown in **Photo 30. Photo 31** shows the model with the etched brass access gantries temporarily attached; these will always be removed when being sailed.

Photo 30 Completed Model

5

Photo 31 Model with Etched Brass Access Gantries Fitted

The final action was to launch the vessel on our lake in Wardown Park Luton in order to take some ‘on the water’ photos **shown below.**

Tony Dalton