



# Rochester Avionic Archives Newsletter

## From the Curator

**Firstly apologies for the long gap in these Newsletters. I am moving house (Yes I know I was doing that before but I enjoyed it so much I am doing it again!).**

**Our new Website is up and running but please be patient as we iron out some of the 'bugs'. The web developers, Netsite and Heliocentrix, have produced a Press Release which has gone out to various Kent newspapers and business papers. The picture of the team is given below. Now we can concentrate on loading new data on the new site as there was not much point until now. This is a massive job as is adding descriptive notes to each item in the Collection. This is why we appreciate your comments on items as the experience of the team does not unfortunately embrace all products. We are still finding Brochures around the site and these contain really useful notes.**

**Our Proposal for the new Museum in the Fuel Flow Test House has almost certainly been delayed for financial reasons but may happen next year.**

Chris Bartlett

## Curator

New website that is helping preserve precious history takes off

Netsite have recently partnered with another Kent company, to create a world-beating role in helping to preserve aviation history.

Netsite and their technical partner Heliocentrix were commissioned to design and build a web-based archive retrieval system for the curators of Rochester Avionic Archives (RAA), which is part of global aerospace, security and defence company BAE Systems' efforts to preserve the significant avionics heritage and historical achievements of its Rochester, Kent, location.

The RAA curators wanted a new website content management system that could safely archive and easily retrieve the thousands of items ranging from videos to brochures and aircraft equipment, and enable people to search in complex ways. They soon learned that their vision for the website was unique and not available from even the very large museums.

The beneficiaries of the new site [www.rochesteravionicarchives.co.uk](http://www.rochesteravionicarchives.co.uk), which was funded by BAE Systems, will include historians, writers and researchers wanting to find out about aircraft equipment manufactured at Rochester Airport Works by famous names from Elliott Bros through GEC Marconi to the present day BAE Systems.

The Rochester Avionic Archives, located within BAE Systems' Rochester facility, began in 2005 to preserve a record of aviation-related products and generate pride in the people who helped create them. Its first website was designed shortly after RAA efforts began, so an updated design was needed.

Retired BAE Systems employee and current RAA Curator Chris Bartlett said: "We are very pleased with the new design which is clean and much easier to navigate. Behind the design is a software engine that offers a much better search function and allows people to link items together when they are searching. We were very surprised to find we were breaking new ground, and no one else had done anything quite like this."

Chris added: "BAE Systems is dedicated to preserving the heritage of our past and present manufacturing sites, not just for research purposes but also for education. The ethos is that we can learn through researching what we've done in the past."

Netsite's Senior Website Designer Neville Palmer said: "Designing the site for Rochester Avionic Archives was an exciting challenge. On the surface it looks like a standard website but the database behind it is extremely complicated and the number of items that have been archived is mind-boggling. It's now very easy for the curators to update as they acquire new items. We're very proud to be helping to preserve local aviation history."



The RAA Team with our website developers from Netsite and Heliocentrix.

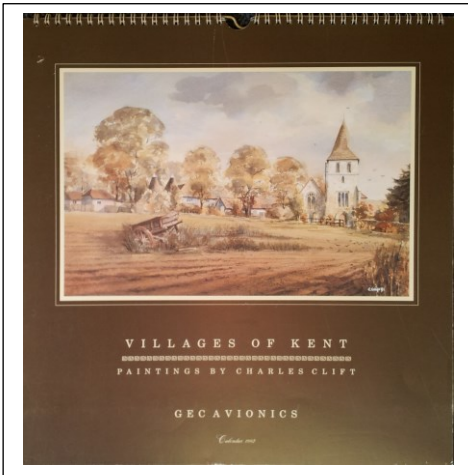
From L-R Martin, Ann, Geoff, John, Paul, John (Heliocentrix), Neville (Netsite) and Chris

Chairman: Chris Bartlett. Secretary Geoff Harvey

Tel: 01634 203321

e-mail: [curator@rochesteravionicarchives.co.uk](mailto:curator@rochesteravionicarchives.co.uk)

Website: [www.rochesteravionicarchives.co.uk](http://www.rochesteravionicarchives.co.uk)



We have started archiving our calendars and apart from the obvious ones with aircraft on we have some of the lovely prints and line drawings done by company employees such as Chas Clift. In 1992 for the third year running a Company Calendar was exhibited at the National Business Calendar Awards Show in London. The 1992 calendar was awarded a Certificate of Merit

## **Around the Divisions (2) : Maritime Aircraft Systems Division**

MASD was formed in 1973 from the Airborne Computing Division (ACD). ACD was responsible for introducing computers into aircraft projects. It developed the Navigation and Tactical Systems for the Jaguar and the Nimrod MR Mk1 and the Digital Waveform Generator for Head Up Displays installed in the American Corsair A-7 aircraft.

By the late sixties advances in digital technology, and their application to signal analysis, permitted an advanced acoustic processing system to be designed. The requirement called for a more comprehensive, sensitive, flexible and reliable system than was available to locate and track submarines. The challenging task of developing an improved system was contracted to GEC Avionics by the Ministry of Defence (MOD).

This new system, known as AQS 901, was at that time the UK's largest single avionics systems contract, required to increase significantly the anti-submarine capability of the RAF's Nimrod aircraft. Such importance was attached to the project that MoD insisted the task be given to a division devoted solely to the programme and so MASD was created.

The AQS 901 proved very successful in squadron service, from about 1979, with both the Royal Air Force (Nimrod MR Mk2) and Royal Australian Air Force (P3-C Orion). It led to the development of lightweight acoustic processing systems (the AQS 902 series) and tactical processing systems for Anti-Submarine Warfare (ASW) helicopters such as the Sea King Mk5 and smaller maritime patrol aircraft such as the Atlantic and Grumman A2. The AQS 902 systems met with similar success. Development of AQS 903 commenced in 1983 and was ordered into production for EH101 in 1985.

In 1983, MASD was the first division to be awarded the Queen's Award for Technological Innovation for its successful acoustic processor developments over the past ten years.

In 1993 MASD became MASG as part of the Displays Division under Peter Kenyon. The following year it was part of the Mission Systems Group.



This is a Sonobuoy Receiver for the AQS903 system fitted to the EH101 Merlin.

In 1995 GEC acquired Ferranti's share of Ferranti Thomson Sonar Systems business which created Thomson Marconi Sonar (TMS) into which the Rochester activity was incorporated and located in the Corsair Building. With the merger of Marconi Electronic Systems and British Aerospace in 1999, BAE Systems acquired Marconi's share in TMS. In 2001 BAE Systems exercised an options agreement which forced Thomson, renamed Thales, to purchase its stake in 2001 and the Sonar systems work at Rochester was transferred to Thales Underwater Systems.

The Directors of MASD were:

1973-1980 Paul Rayner, 1980-1982 David Clews, 1982-1984 Robert Wilkinson,

1984-1987 LHampson 1987-1991, A Gallagher 1991- 1995 Sue Wood



### Rochester Cathedral Flower Festival

In 1981 Marconi Avionics sponsored a Flower Festival at Rochester Cathedral which amazingly was only the second such event since the founding of the Cathedral in 1130; the previous being in 1973. One of the winning entries from the National Association of Flower Arrangement Societies Maidstone Branch was called 'Britain and the Strong Pound' Competitors were given the class title of 'Foreign Exchange'.



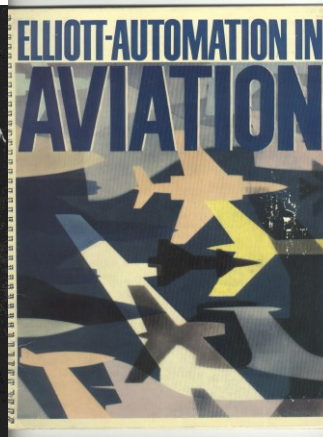
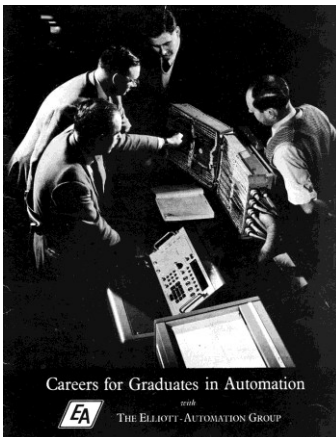
General Dynamics Land Systems Bino HMD Trials

Nothing like wearing a 'lightweight' helmet!  
From the FARL Report for 1988

### Rochester Cathedral Flower Festival 1981

In praise and thanksgiving

"... each generation has gloried in the flowers of field and garden; they provide a bond across the centuries as real as the Cathedral Church itself."



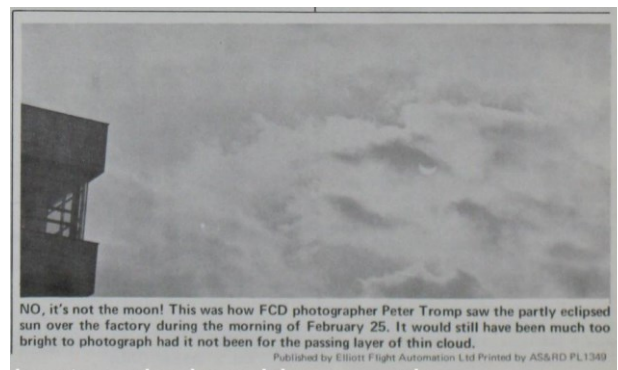
We hold a range of Company Brochures from the 60's to the present

From EFA News



The overnight demonstration by Pat Arrowsmith and her pacifist group outside Elliott-Automation's London head office on November 3 and 4 was much more modest than had been expected. Here, the demonstrators spend the last hours on the pavement, with a row of policemen between them and the front door of 34 Portland Place. Work went on as usual.

'Arrowsmith again ran afoul of the obstruction doctrine in 1968 when she was convicted of the offense during a sit-down demonstration in London outside the firm of Elliott-Automation, which was supplying equipment to American forces for use in Vietnam. Refusing to pay the £50 fine or be bound over, she was sentenced to six months' imprisonment. 'The Ethical Record Vol 73 No 11 December 1968



EFA News April 1971  
The partial eclipse of the sun



## Autotestare

In the early 1960's contracts were placed with Elliott Brothers (London) Ltd for a First Line Aircraft System Tester for the J37 Viggen which was being developed by SAAB. ATE produced the Elliott system and such were the penalty clauses that a three shift system was run. The Project manager was Don Price (later of FARL). The electronics used 'Minilog' modules from Borehamwood which were made from potted discrete components. Ultimately the Swedish Finance Minister announced that the contract had been awarded to Ericsson! Some of the Elliott system was used in an ATE called 'Mermaid' for AUEW

## The Concorde at Rainham



The Pub sign in 2013 in a back garden in Rainham

## DRINK CONCORD(E)

THERE'S a Concorde pub now at Otterham Quay Estate, Rainham, brand new and with all the modern trimmings. And TACD played a good part in the launching arrangements. It so happens that then TACD Chief Buyer Charles Berry's daughter works in the Whitbread-Fremitt office in Maidstone. She appealed to her father, who arranged for Richard Cummings (TACD Tech Pubs) and Malcolm Moulton (TACD Sales) to provide pictures for the pub sign painter and produce the large, framed montage of a Concorde flying over the EFA factory shown below.

The launching ceremony was performed on Guy Fawkes day by Lord Cornwallis, who is chairman of the brewery as well as Lord Lieutenant of the County. Lord Cornwallis recorded TACD's part in Concorde as well as their contribution to the pub in the most generous terms before



Lord Cornwallis formally downs the first pint after unveiling the Concorde pub sign. Concorde is spelled with an 'e' on the far side of the sign. Picture by "Evening Post."

unveiling the sign and formally downing the first pint, above. The word Concorde is without the final 'e' on this side of the sign, but with it on the far side.



A Framed picture of Rochester Airport from our archive

Airport Development: The planning application for the paved runway and other works has been submitted and on the 4<sup>th</sup> February 2015 Medway Council approved the planning application for a paved runway and refurbishment work together with new hangars. The Plan was due for approval by Tonbridge & Malling Council but it has now been removed from that Council's agenda owing to a Judicial Review claim made against Medway Council. This action could result in a delay of at least 3 months. At some point a proposal will be submitted for Heritage Lottery funding for the Aviation Medway project.



Mr H. Woodman, landlord of the new Concorde pub, inspects TACD's montage of Concorde flying over the Rochester factory. Picture by "Evening Post."

## Museum Piece Already?

Far from it! The dual-mode HUD system was developed in under a year from receipt of contract, destined for the USAF's F-16C and F-16D Fighting Falcons. This \$75m contract is keeping ADD very busy at the moment.

A very recent distinction is the inclusion of the cockpit display unit in an exhibition at the Victoria and Albert Museum in London. Known as the "Boilerhouse Project", this collection of artefacts has been formed from one hundred Good Design items, selected as such by a poll of Britain's leading designers who were asked to nominate the "best ever" product in the very subjective field of design. As asked in the catalogue:

for the exhibition, how can some product designs be intrinsically better than others? Is it that some things are agreed to be more beautiful, work better, are more ingenious or simply just excite the spirit more than something mundane?

This list of 100 Best Ever Products includes objects ranging from a ceramic decorated plate of around 1560AD, a century-old clock, button-front Levi jeans originating in 1850, the Mini, to Post-it Note Pads, aluminium beer cans and cameras.

The whole project is under the auspices of The Conran Foundation.



An F-16C/D PDU was placed in the Victoria and Albert Museum in early 1985 in an exhibition known as the Boilerhouse Project a collection of 100 items of Good Design selected by a poll of Britain's leading designers. It was sponsored by The Conran Foundation.



EFA News July 1971

## THIS IS TEXAS

It is rather disappointing to think that parts of Texas look quite like Bluebell Hill (before the road "improvement"), but this picture is genuine Texas. Making like cowboys astride genuine Texas hayburners are, right to left, Robin Sleight, ex-ADD Dallas Manager of EA Industrial Corporation, with his son David on board, Liz Machin, Jim Machin's wife, Roger Mayhew of ATED and visiting Marconi man Peter Herbert. Jim Machin took the picture on horseback!