No.5 Q4 2010

# Rochester Avionic Archives Newsletter

***From the Curator***

***We are definitely on the move again! The RAA will move before Christmas to a new location in the Main Hanger (where the IT people are currently located). In fact this is very close to where the collection was first held in one small room when it was first brought down to the main site. Since then the RAA has grown and we are heading for 1000 objects in the collection.***

***As the Rochester site shrinks we find the odd item; the old Fuel Flow buildings have proved a fascinating and very dirty place especially for old Test Equipment, however there are still some product lines not represented in the collection. It is possible that the Bodleian Museum at Oxford may donate a few duplicate items from the original Elliott Collection.***

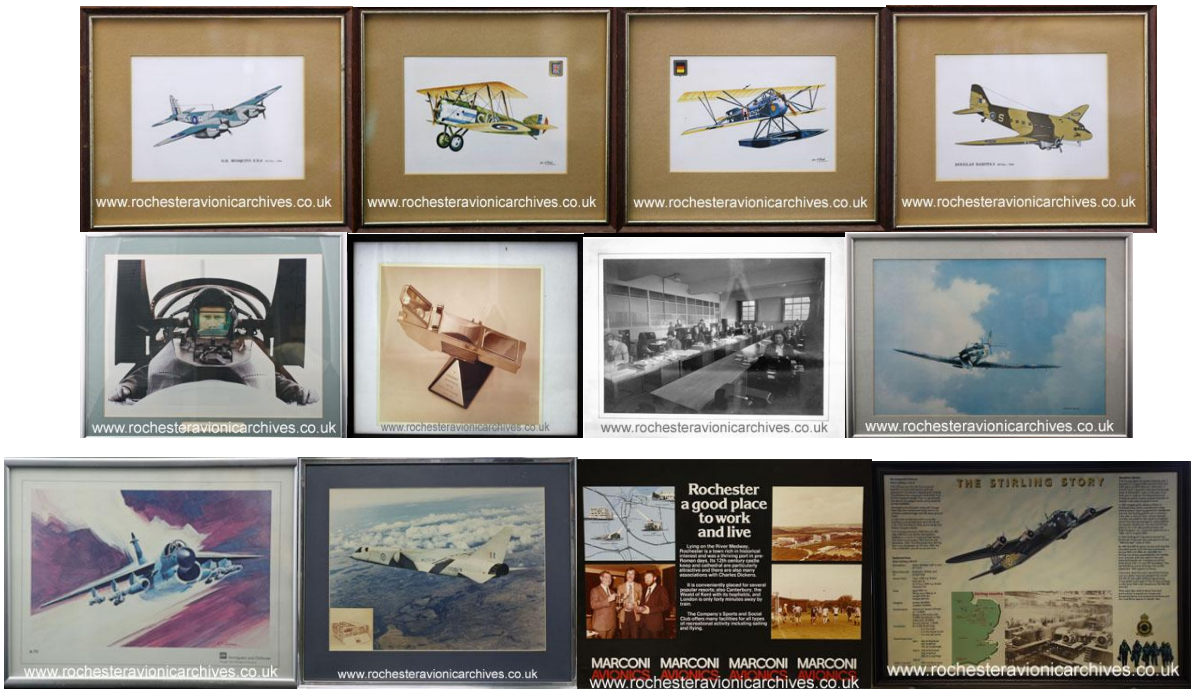
***The website has been expanded and a new volunteer is making a cataloguing of Brochures and over 100 Framed pictures are being added to the website. We can offer a search on most of our Negative archive but sadly there are just too many to scan onto the website.***

***Please search your cupboards and attics for old Company Newspapers as these are so interesting. Most of all we do need your help to identify many of the items we hold. There is a contact email below and on our website.***

***We get a few contacts through the Website from ex-employees which is always pleasant. We also are contacted by other collectors who require drawings in order to get their items working again. Sadly we cannot help with this information.***

*Chris Bartlett*

## Some of our Framed Pictures

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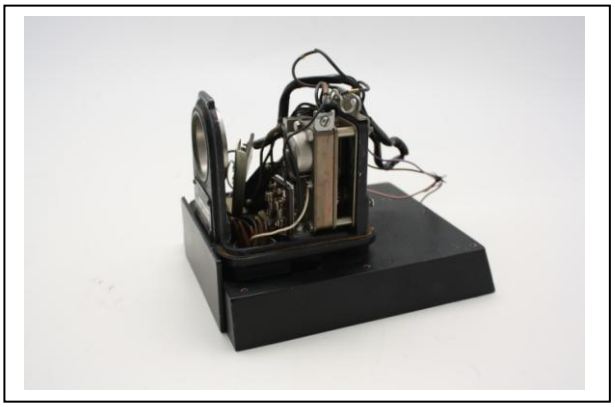
Located at BAE Systems, Airport Works, Marconi Way, Rochester, ME1 2XX

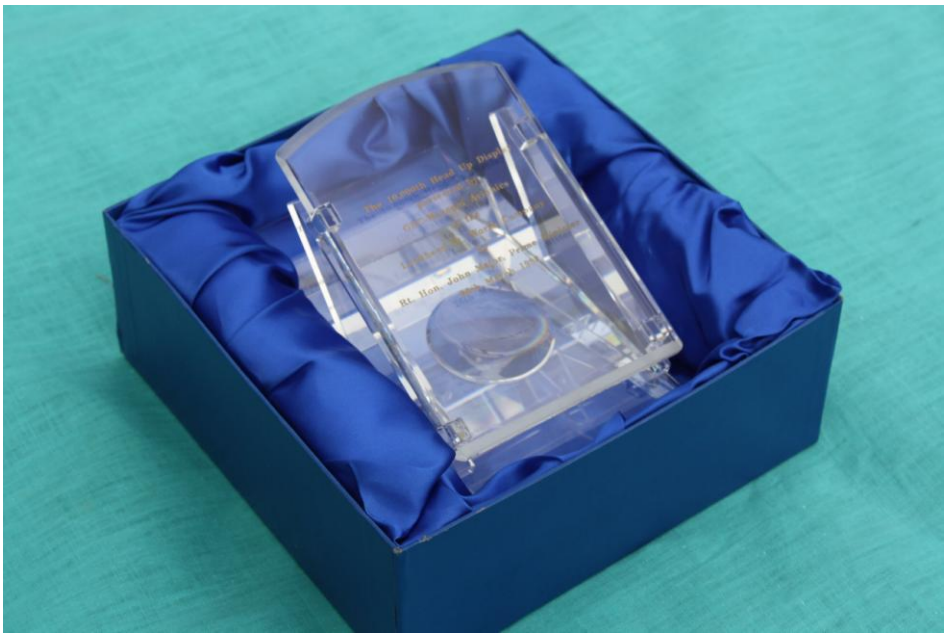


## Type C-1 Auto Pilot Formation Stick

The Formation Stick was used when the aircraft was flying in formation with others, typically in WWII on a bombing run. The aircraft would be set on Autopilot but the Formation Stick allowed the pilot to make small adjustments to maintain formation with the minimum of effort. Usually there were two such Sticks, one to the pilot's left and the other to the co-pilots right. Only one stick was engaged at a time and a switch on the top allowed control to be transferred from one stick to the other.

The Stick has various modes. In OFF naturally the Formation Stick has no function. In ON SERVO BOOST the Stick directly controls the servo units of the Autopilot and the aircraft is flown as if it had no Autopilot. This setting is used in close formation flying. With the function selector On the Stick works rather like the Autopilot turn control Knob except that it also provides elevator, aileron and rudder control. Such a setting would be used in loose formation flying, solo flight or when little maneuvering is needed. The ON ELEVATOR only setting gives control of attitude in pitch only. This was used on a bombing run in place of the elevator centering knob to control altitude. A microphone switch was also fitted to the Stick.

It is not known why this item was found at Rochester although there was a strong link between Elliotts and Bendix, who made many of these Sticks under licence from Jack & Heintz Inc.



## Presentation Glass model of F-16-C/D optics

On the 26th March 1993 the then Prime Minister John Major (now Sir John Major ) visited the Rochester site where he presented the 5,000th Head Up Display for the F-16 to Dr Vance Coffman Executive Vice-President of Lockheed Martin. The occasion also marked the manufacture of the 10,000th HUD made by the company and in honour of this both the PM and Lockheed Martin were presented with a glass model of the F-16C/D PDU optics.

This model was recently retrieved from the 10 Downing Street archive. Further details will be found in the following Newspapers on our Website, Topic April 1993 (DDCN0501 and Vision Issue 1 (DDCN0700)

I wonder where the silver models of the A-7 PDU are now? (Picture on first page). These were presented in August 1974 in recognition of the 1000th A-7 unit delivered. Another lovely model recording the 1000th F-16A/B presented in June 1982 has also disappeared.

Do you recall this item from the last Newsletter? It is called an Adjustable Gap Transfer Tool. It is actually a Current Transformer and is placed around a live A.C. cable and a current is generated in the coil on the device which can be read on a meter calibrated to read the current in that cable


A Three-axis Rate Gyro. The legend says it all!

## From the Newspapers

# On being Identifiable

Identification badges are a must
You still wear yours, or so I trust,
But summer dress means innovations
And now they're worn in fresh locations.
There are those types who draw attention
To nether parts one should not mention
And some who think it is a must
To sport them on an ample bust.
(A few there are, you may have seen them
Who tend to wear it in between 'em !)
Some of us, the not too few
Wear them so they're in full view
But bashful types you soon can tell
You'll find their face behind lapel
And then there's those like Mr X
Who keep 'em in their office desk
It matters not red, blue or green
They should be worn so they are seen
For after all, we have to show
We've been to Fenn Clark's studio ! ! !

*Geoff Rands*
*IN Division*

There can be no comment other than to state that wearing a Company Badge some where visible when on-site is just as important nowadays!


*With the RAF's 50th anniversary on April 1, much on their mind, the RAF Central Servicing Development Establishment detachment produced this alarming picture of our tower blocks. The RAF unit crest on the notice board belongs to "RAF Rochester". The crest is two queens of clubs and two of spades, and the motto "Chassez la Chienne"*

This is a spoof picture from the September 1970 issue of EFA News but who knows what name will appear next?

*Joe Stonestreet of transport department drives the Company Humber through the floods outside the personnel gate on Saturation Sunday, September 15. The water flowed down through the factory after collecting in this area.*

In September the heaviest rain for some 200 years washed out the Rochester site and the Farnborough Air Show The Works Engineers were called in to fight flooding in the main works where several inches of water flowed off the newly surfaced car park, into the Fisher delivery area and on into the lower levels of the main works and down into the huts. For many. Monday morning was another mopping up operation after a wet weekend at home.

Some mysterious holes appeared in the playing field alongside the towers and were tentatively attributed to a stream which had been diverted when the towers were built. A brief unexploded bomb scare brought the Army bomb disposal squad into the picture, but the sinister object courageously removed by Mike Bunce under the watchful eye of Mr Benger, turned out to be a plastic coffee cup with cardboard fins, well disguised with insulating tape and mud.

Everyone using the roads has tales to tell and journeys to Farnborough turned into day-long nautical adventures. The hired 20-seat bus taking the Elliott secretaries, Jack Rann (MACD), Brian Teather (lND) to Farnborough took six hours to make the Journey frequently negotiating several feet of flood water. The girls swear they saw water from blocked up drains flowing up hill!

Mr Alexander, Joint Managing Director, covered over 90 mile, to make the 45 mile journey, was stopped by flood water several times and reports that he used three boxes of tissues drying out his ignition (Jaguar reliability?).

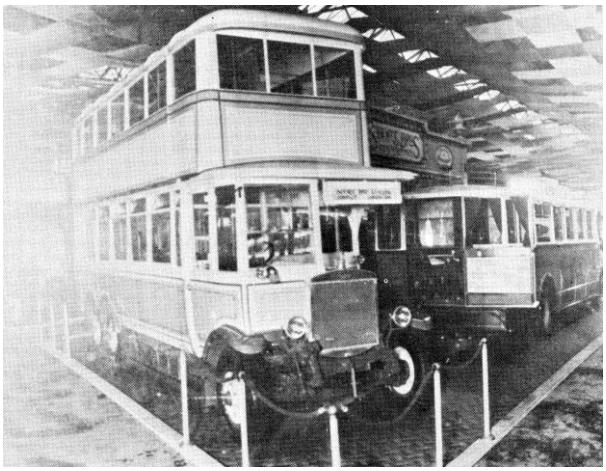
The Angel Hotel in Guildford ( where the EFA team stayed) looked more like a refugee camp with people sleeping wherever they could find room. The flood waters nearby reached a depth of more than six feet!

For those already at Farnborough on the Sunday, the successive reports of flooding and power failures became more and more threatening throughout the day. The indoor tent lost electrical power during the afternoon just as an engineer arrived to make final adjustments to the working 920 Computer and displays.

It was a credit to all concerned that the exhibition stand was complete and manned on the Monday morning. The ladies turquoise mini-dresses looked coolly attractive but the Monday sunshine mocked the heavy-weather gear which most people had by then managed to organise.

We can all do without repetition of such weather for another 200 years. EFA News Nov 1968

## Negative Archive



Shorts moved into the Airport site in 1933/34 and made bus bodies until about 1936. The first two Hangers were not erected until 1934 and the tall Hangers Nos 3 and 4 were built around 1939.So my guess is that the picture was taken at the Esplanade Works. The chassis was provided by Dennis.

W.A. Stevens (later Tilling Stevens) was established in Maidstone, Kent in 1897 and had by 1906 built its first petrol-electric vehicle using designs patented by Percival (Percy) Frost-Smith. A petrol engine drove an electric generator providing traction current for the drive motor. One of the reasons was that it avoided the need for a gearbox.
So some links with the present work on hybrid buses at the Rochester site.

## Odds and ends

### Haskett Trophy

The Trophy was presented from 1977 to 1990 in memory of Fred Haskett who was for many years an executive of the company. This trophy was awarded for the innovative engineering designs which are judged most likely to lead to improved and more competitive products.
This important award was found recently in a shopping trolley in a room beside the Company Restaurant!

Winners:
1977: G Brown, D. Carron, A Gallagher, B. Halsall, R Loveless

1978: A J Fordham, M.D. Stephenson, W. A. J. Waller
Measuring wing-mounted pod orientation (PLOD-FLEX sensor system)

1980: A. R. Dicey, A. J. Fordham, D. G. Steward
New method of using computers in the design of the very latest type of pilot's display.

1981: E. H. Oetzmann
Updates to LAPADS to enable aircraft to locate submarines more quickly.

1982: M. L. Busbridge
A Moving Map Facility for Malfunction Displays - a Practical Solution.

1983: R. D. Beasley, M. P. Earl

1984: D. Salvage, N.G. Wright, C. L. Wisdom, D. J. Buchanan

1985 K. P. Dawson, A. M. Lenton, M. A. Stimson, C. C. Whyton, M. P. Earl and F. Faulkner, D. T. Humphreys

1986: A. J. Fordham, A Taylor and K. N. Norton, J. R. Little

1987: M. J. Ewer, K. Harvey, A. A. Cameron

1988: J. C. Old, C. P. Osborne, M. V. Swoboda, G. L. Woodley
A fault tolerant Primary Flight Control System designed to operate throughout the service life of an aircraft.

1990: R. K. Howard, J. Kelsey, J. P. Freeman, W. R. Townsend