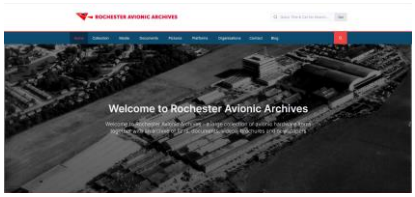
No.49 Q1 2024

Rochester Avionic Archives Newsletter

From the Curator

At last we are close to changing our website. The site could do with a facelift but the main reason for the change is that the software supporting it is obsolete now. Please be patient as there are bound to be some glitches in the transfer which we plan to take place rather appropriately on April 1st!



The Rochester site redevelopment has begun initially with a vast amount of planning and the rerouting of utilities must, of course, be seamless. The Phase III Building is now largely empty with all the stores transferred to a new warehouse off-site. At some point demolition will commence and as I mention below car parking will be an issue. We still have no certainty about the new home for the Museum! This year has already proved to be busy with visits by Scouts, Air Cadets and Work Experience youngsters. The planning has already started to celebrate 25 years since BAE Systems was formed.

Chris Bartlett

Car Parking

With the development of the Rochester site to begin shortly one of the biggest problems is to retain adequate parking for the employees and visitors while the work goes on. This is by no means a new problem as the EFA News No 9 of September 1968 (M0235) describes:

'Every working day some 2,000 cars are parked in the areas surrounding the factory and on the nearby dog track car park. Basically, there simply is not room for any more. Parking is arranged as follows: Divisional Chief Engineers or Production Managers upwards receive specific parking spaces. Others are authorised to use the car parks and receive badges coloured according to the area in which they may park.

It was established some years ago that no one living inside a clearly defined area extending to a maximum of two miles round the factory is given parking space. They have to rely on public transport or on two-wheeled vehicles. Parking space for motorcycles and cycles, incidentally, is unlimited and unregulated. Seriously disabled people are allotted space for invalid cars as close to their place of work as possible. No contract-hired people are given parking space.

There is at the moment a waiting list of about 500. As spaces become free, people on the waiting list are accommodated in strict rotation, without any consideration of seniority, length of service or similar factors. The basic problem is to find room for more cars. A scheme for building an upper deck over the existing park between the canteen and the airfield was investigated in detail but proved impracticable. It could provide room for only 50 or 60 cars at the cost of no less than £1,000 per car and threatened to infringe the clearances required for aircraft landing and taking off. The cost could not be recovered, because the company is by law not allowed to charge for parking.'

The picture in the continuing history of the site on Page 4 shows how many cars were on site in 1982.

e-mail: info@rochesteravionicarchives.co.uk **Website:** www.rochesteravionicarchives.co.uk

Concorde First Day Covers and Stamps

The first flight of Concorde was on the 2nd March 1969 and this is recorded on this First Day Cover and Stamps (Cat. No. C1604)

Initially the idea of a stamp had been seen by the Government as an excellent way of being associated with Concorde. Problems arose in that whenever there was a delay in issuing the stamp it fuelled speculation about the Government withdrawing from the Concorde project. Doubts had already been raised on the future of Concorde as early as 1967. These centred around its noise, so to gauge public opinion a series of sonic boom tests was held over London and the rest of Britain. These tests, in July 1967, consisted of unannounced sonic booms by Lightning fighters.

The instructions to the Royal Mail do not have any great detail and only state that the set was to comprise three stamps, 4d, 9d and 1s 6d. The designs must feature Concorde and symbolism of the co-operation of the two nations in the project. The French issue, a single stamp of Concorde in flight, did not include such symbolism.

A number of artists were officially invited to submit designs and there were two unsolicited designs...

The stamps shown here were from Harrison and Sons Ltd designed by Michael and Sylvia Goaman (top left) and David Gentleman (top right and bottom right)

Concorde BBDG

G-BBDG, known as "Delta Golf", was the British development Concorde built for evaluation testing. Along with the French Concorde F-WTSB, the aircraft was used to enable sufficient testing to allow for the Concorde fleet to receive certification.

The aircraft had its maiden flight on the13th February 1974 flying from Filton to Fairford. When British Airways and Air France retired their fleets in 2003, Brooklands Museum at Weybridge in Surrey accepted the aircraft as a museum exhibit.

Film Scripts

The RAA holds a few film scripts all of which involve the late Ron Howard (then Director and General, Manager., Marconi Elliott (later GEC) Avionics) but sadly the films, once held by the BBC and possibly the British Film Institute, have been lost.

Supersonic Adventure – This was a three-episode story about Concorde. We have two paper copies of the second episode broadcast on Wed 6th Sep 1967 which has the late Ron Howard as a participant. Unfortunately the BBC holds only a small amount of material for this short series, namely pre-filmed sequences for the first and third programmes, with no soundtrack for the first. The films of Concorde couldn't be copied to Ron Howard because the BBC feared he might show it and it noted that the aircraft flew totally under computer control and general public would not accept that!

VC10 – This is another film in which Ron Howard appears. We have a number of copies of scripts of various versions and there is a set of notes. This seems to be more of a presentation against a number of pictures. The programme went out sometime after the 4th August 1968 as that is the last markup date.

The BBC have not been able to locate the specific programme.

Safety in the Air. This appears to be an edition of a series called 'What's New in the Industry', which was recorded for the BBC World Service English language service for Europe. There is also some correspondence but nothing to say when the programme was actually broadcast; only when it was recorded. The BBC have not been able to find a broadcast date for this and there does not seem to be a recording of it in the BBC archives.

Another Queen's Award-1982

There was quite a gap from 1978 before this next Queen's Award was awarded but it was to be a splendid double award to the Maritime Aircraft Systems Division for Technology for the AQS 901/2/3, ASW system family and for Export. The notice from Jack Pateman reads:

'It has been announced that Marconi Avionics has won the Queen's Award for Export, by virtue of an 80% increase in our share of the world market for aviation electronics over the past five years, and that the Queen's Award for Technology has also been won for the company by the Maritime Aircraft Systems Division.

These bring to nine the total of Queen's Awards we have won, six of which have been for Export. These achievements are only made possible by the skill, imagination and dedication of our whole team in all its locations. Whatever our personal role may be and whatever the product or service of our Division or Department, we can all take pride in this outstanding achievement.'

J.E.Pateman Managing Director 21st April 1983

On the evening of Wednesday 21st March 1983 a Reception was held at Buckingham Palace to mark the Queen's Awards to Industry presented last year to Marconi Avionics. Six representatives attended from the Company and the occasion was in the presence of HM the Queen and Prince Philip, with the Duke of Gloucester, the Prime Minister, Norman Tebbit MP, Jack Jones and many other national figures present, with several hundred guests.
The Queen's Awards were formally presented by the Lord Lieutenant of Kent at the Company Open Day on Saturday, 12 November 1982. Employees and their families were joined by suppliers, guests from other parts of Marconi Avionics and GEC, and from the local community.

MonoHUD

Head Up Displays (HUD) had shown their merit in military aircraft but, little interest in this equipment had been shown by civil aviation up to 1979. In an attempt to break into this potential market, Marconi Avionics (MAv) developed this monocular HUD, named MonoHUD, to give flight guidance in the landing approach such that the pilot could stay head up the whole time. It was intended primarily for the retrofit civil market where space constraints introduced installation difficulties.
As part of the Economic Cat III programme, the MonoHUD was fitted to the Avro 748, XW750 (see top picture) at RAE Bedford to investigate its value for manual and automatic landings in low visibility. XW750 first demonstrated the MonoHUD in fog approaches and landings in runway visual ranges down to 200m at RAF St Mawgan, Cornwall, in conditions where landings would have otherwise been impossible. This was followed in May 1980 by demonstrations at Manchester and Thurleigh in RVRs down to 200m and at Birmingham Airport in 100m Runway Visual Range (RVR). In the middle picture the MonoHUD is installed on the left-hand side of the cockpit; the control panel for the Smiths Automatic Flight Control System (SEP6) is at the bottom of the centre console. The lower photo shows its operation by Sq. Ldr. Dennis Stangroom.

When not required, the MonoHUD could be hinged out of the pilot's field of view. With the introduction of flat panel electronic displays to replace dials in civil aircraft, as pioneered by the BAC1-11 XX105 aircraft programme, the principle of the MonoHUD was eclipsed. It did however find another market for helicopters.

Bedford Aeronautical Heritage Group (*BAHG*)

The Rochester Airport site of BAE Systems- More name changes.

In 1969 under Robert Telford, Managing Director of GEC-Marconi Electronics, four new market-oriented management companies were established each covering the activities of a group of existing GEC-Marconi companies. Mr Telford stated that '*The formation of these four multi-million-pound companies, oriented towards specific broad areas of the market, marks an important milestone in the development of this vast electronics business-the largest capital electronics business in Europe'*
As a result, the Company became Marconi-Elliott Avionic Systems Ltd (known irreverently as measles) comprising the Rochester and Borehamwood activities of Elliott Flight Automation, Elliott-Automation Radar Systems and the Basildon activities of the Marconi Aeronautical Division together with the Electro-Optical Systems Division. Dr Bernard O'Kane was Managing Director with Jack Pateman as Deputy Managing Director
In 1969 again, the company was renamed Marconi-Elliott Avionics (now with some minor confusion with Middle East Airlines).
In March 4th, 1970 Jack Pateman was awarded his CBE but heavy snow prevented him getting from Sevenoaks to London, so he actually received it on July 28th!
In July of 1971 there was a particularly high lay-off of skilled workers engaged in the electronics and computer field and in August Elliott Flight Automation announced 400 redundancies. The Company blamed a worldwide depression in the aerospace business which was aggravated by the delay in the go-ahead for the Multi-Role Combat Aircraft (a joint British, German and Italian project to become the Tornado). The redundancies were mainly among design engineers and draughtsmen. However, the MRCA contract was awarded and the redundancies announced were avoided.

The Company received another Queen's Award in 1975, this time for the Jaguar Navigation and Weapon Aiming system. As a result held the first Open Day at the Rochester site and these have sporadically continued. Two years later the Company took over the management of Rochester Airport; they expanded the avionics factory and allowed the construction of industrial development resulting in an hotel and superstores being built at the Flying School end of the Airport. The Company aircraft used the Airport for wide ranging European travel and the number of employees was around 4,000.

In 1978 the company was renamed Marconi Avionics Ltd with Dr Bernard O'Kane, Chairman and Jack Pateman, Managing Director. Once again, the Company won a Queen's Award for Export and with the continued growth a new building to be called the Corsair Building was opened in August 1978. By 1980 the new Phase III Building dedicated to the growing business in flight controls was operating and the Automatic Test Equipment Division was established in yet another building.
There was steady growth to nearly 12,000 employees in 1982. The name was again changed to GEC Avionics Limited in September 1984 although it was not until four years later that the trading name of Elliott Bros (London) Ltd was finally dropped. The picture shows an aeri[illegible] the name of GEC Avionics on the East side of Tower 1.

The Rochester Airport site of BAE Systems will be continued in the next Newsletter.

Guide Dog

A snippet from one of the old Company Newspapers
'Over Ihe past months members of ISD's stores team have raised £500 in aid of Guide Dogs for the Blind by means of raffles and other contributions and are already on the way to another sum. The £500 was handed over at the MAYDAY Eye Unit in Croydon just after Christmas The sum was gratefully accepted for the training costs of a guide dog who is already working with his new owner, and who has been named 'Marconi''.