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# Rochester Avionic Archives Newsletter

The team at Rochester Avionic Archives send their best wishes for a Happy Christmas and a peaceful New Year to all our readers.

Apart from the regular features this edition explains why the access road to the site has a bend, some interesting history of the Elliott Automation HQ in London and a rather unusual Barometer. The early ideas for VTOL aircraft would certainly have kept the jet engine makers in business!

#### The bend in Marconi Way

In 1956 a Gloster Meteor landed at Rochester from West Malling and presumably took off again with no problems! Five years later a Canberra arrived, also from West Malling. It stayed for several years while undergoing a complete overhaul and fitting of a ventral tank (Shorts later manufactured these). To ease the take-off, the main runway was extended to the East side of the current factory beside the Maidstone Road, resulting in the curve in that road. The Canberra was lightened by simply giving it enough fuel to get to Southend. As far as is known this extension has never been required since.



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# Vertical Take Off





The Fighter Jet Take-Off Platform was a concept platform that would rise vertically from the ground and allow an aircraft to take-off from its back, allowing planes to operate from small airstrips or narrow forest clearings. English Electric developed the P17A jet to fulfil the purpose of a tactical strike and reconnaissance jet, and rather than attaching a heavy vertical take-off and landing system to the aircraft, they collaborated with Shorts, who created the P17, a platform that would stay steady above the ground and allow the P17A to take-off from its surface.

With no less than 56 jet engines, the P17 gave the P17A the desired effect of being able to take off from tight spaces. On its own, the P17 would also have been able to fill the role of a VTOL freight transport, able to deliver equipment and supplies to less-accessible locations. It was not, however, picked for further consideration by the Air Ministry at that time due to the complexity of its operation and a lack of available budget.

In February 1963 Elliott Flight Automation published a aper in Flight Magazine on 'Auto Control for Jet and Fan-Lift VTOL' by Ron Howard in which a various configurations of VTOL military and Civil aircraft are shown including a transport aircraft with 28 vertical lift engines and 4 propulsion engines!

## 34 Portland Place, London

34, Portland Place was for some time the London Headquarters of Elliott Automation. The Company occupied various of the buildings in Portland Place including Nos 21 and 29. Portland Place was originally laid out by Robert and James Adam for the Duke of Portland in the 1770s and drew widespread praise at the time for its unprecedented scale and vision.

No 34 has a particularly interesting history. The story begins with an Oxford graduate, published author, horse breeder and amateur archaeologist named Thomas Douglas Murray (1841-1911), who had been visiting Cairo since 1866. Sometime around 1889, he and two colleagues were shown a remarkably well-preserved mummy case by an Arab, supposedly excavated in the 1880s. The hieroglyphics described the owner as a high priestess of Amen-Ra. Douglas Murray may have purchased the coffin lid in Cairo in 1910. Ever since the lid is believed to have a curse on it. Carnegie, who sold the lid to Murray, is rumoured to have died of cancer before the cheque even cleared. Murray himself suffered as did many who came in contact with the lid. The story involves the Titanic but none of it can be verified; the real mystery is why did Douglas Murray promote the story of a curse?

At some time the coffin lid was kept at 34 Portland Place



https://darkestlondon.com/tag/34-portland-place/

#### Another Queen's Award-1978

The commanding position in world markets built up by Marconi Avionics Limited, enabled the Company to win a seventh Queen's Award to Industry, in recognition of its best-ever export performance.

At the presentation of the Queens Award for export achievement to Marconi Avionics Limited, one hundred employees from each of the company's principal factories at Borehamwood, Basildon and Rochester participated in the ceremony at Airport Works, Rochester. The Lord Lieutenant of the County of Kent, acting on behalf of Her Majesty the Queen, made the presentation in the presence of distinguished quests from all three communities.

Before making the presentation of the Award replica and citation certificate. Lord Astor spoke of the extent and diverse products of the Company, and in congratulating every member on its success, expressed his belief that, with such a foundation solidly built, the future was bright and that greater successes would be achieved. He then presented the Award replica to Mr D. E. Newman of Basildon, an employee of 33 years, and the citation certificate to Mr. Jack Unwin of Borehamwood. On behalf of the Rochester organization, Mrs. A M. Fisher (Welfare Officer) briefly thanked the Lord Lieutenant for graciously making the presentations.

The Block and Certificate are missing, but as the site is redeveloped, they may yet appear.

# **Elliott Stick Barometer**

This rare stick barometer is comprised of an oak body with exposed tube and graduated urn type cistern cover. The ceramic scale plate is screwed to the domed top and is painted with weather indications to the left and a small scale measuring 27 to 31 inches of barometric pressure to the right. The maker's name, 'Elliott Bros, 449 Strand, London' is inscribed across the top. The scale indicator is a brass collar secured around the barometer tube which can be slid up and down according to changes in weather patterns.

Aside from its unusual form, the scale plate also has a registered design stamp on the back which dates the barometer to the 18th of December 1863. Further research for an Elliott Brothers design for this date proved unfruitful until it was noticed that the Birmingham Company of Thomas Pemberton & Sons had lodged a design on that day for a set of door furniture. On closer inspection of the barometer, the scale plate is actually formed from a cut down finger plate for an interior door.

How the Elliott Brothers came across this ingenious idea remains unknown but it is clear that the barometer was designed and manufactured around the ceramic plate as the oak body mimics the edge design. Perhaps the cost of creating specific ceramic plates was considered too high and the desire to manufacture with this material drove the brothers to seek alternatives. Either way it is an ingenious reuse of materials but perhaps not something one would expect from this powerhouse of Victorian scientific instrument manufacturing. © Jason Clarke Antiques





A C-141 over Tower 1 in 1984! It must be a fake picture as we have no record of the event and something that big and low flying over could not have gone unnoticed!

#### The Rochester Airport site of BAE Systems- More mergers.

In July 1967, English Electric made an uncontested bid for Elliott-Automation units which included Elliott Flight Automation formed at Rochester from the Aviation Division of Elliot Brothers (London) Ltd.

In March 1968, English Electric began to rationalise its business by announcing a new subsidiary to be called English Electric (Electronics and Automation). This company would embrace the automation work of Elliott-Automation and Marconi and the industrial control and automation already within English Electric. The Chairman was Lord Nelson of Stafford, the Deputy Chairman was Sir Leon Bagrit and the Managing Director was Mr R. Telford. In February 1968, a group of senior Elliott-Automation Directors gave a briefing to 15 other companies at English Electric House in London on how to sell to the Americans. By now Elliotts had contracted for the Head-Up Display for the LTV A-7 Corsair; the Energy-Management Analogue Computer for the Lockheed C-5 and for the same aircraft the Under-carriage Crosswind Steering Computer.

In September 1968, yet another merger occurred this time between the rapidly expanding GEC and English Electric. On September 13<sup>th</sup> 1968, the Board of Trade approved the merger after a meeting of some 20 Ministers under the chairmanship of the Prime Minister. It was welcomed by the Governments Industrial Reorganisation Corporation but Plessey, who had put in an alternative bid for English Electric, stated that their offer was still open. During December 1968 GEC undertook to group its activities to match the competition abroad for size and resources. GEC announced '*A streamlining of industrial-automation activities and an expansion into new areas of electronics*'. The GEC, AEI, English Electric and Elliott-Automation electronics companies were forged into two major groups; GEC-Elliott-Automation and GEC-Marconi Electronics. The latter incorporated Elliott Flight Automation where Aerospace and defence were identified as key growth areas.

In September 1969 'FLIGHT INTERNATIONAL 'carried a full-page family tree which commenced with 'The General Electric and English Electric companies Ltd'. This flowed down to GEC-Marconi Electronics Ltd of Marconi House, Chelmsford, Essex, which had a total group employment of 30,000. One branch then went to Marconi-Elliott Avionic Systems Ltd at Airport Works Rochester and further down to Elliott Flight Automation (EFA).

In November 1968 Elliott Flight Automation received the Queen's Award to Industry but the EFA name did not disappear from the Company organisation charts until about five years after the GEC takeover.

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

## **Snippetts**

In the early 1950s the Turbomeca Palas turbojet engines for the experimental Short Sherpa SB.4 were often tested at Rochester Airport and the intense howling was a cause of some annoyance to local residents.

Were the Air Raid Shelters really used to grow mushrooms after WWII?



The picture at the top Right-Hand side of the front page is from EFA NEWS Issue 19 of 1971. Did you spot that it is from Avio Nick!