



Rochester Avionic Archives

Newsletter

From the Curator

It was a sad end to 2016 with the death of Robin Sleight but it was good to see how many turned up for his funeral.

This year we are still planning a major upheaval of our main store room; what we would really like is a proper visitor centre but this may well be too much at present. We have gained some interesting items especially the Wimperis Accelerometer described in this Newsletter. The NCS1 story below shows that Rochester has had a long history supplying the Navy and and I have made some contacts with people who worked at the Lewisham site which was a major supplier of Gunnery Directors for the Admiralty.

The team welcomed Phil Holliman and welcomed back Norman Hicks so we have nine helpers now

Chris Bartlett

Curator

G.R.Sleight MBE, FRAeS 11 Nov 1937 - 1 Dec 2016

Sadly we have to report the death of Robin Sleight

Robin was born in Ayr, George Robin Sleight, and despite moving to the South of England in 1959, he always retained some of his south of Scotland accent. Growing up in Prestwick, he became fascinated by the aircraft operating from the busy Prestwick airport and this led to his life-long interest in all things aerospace whether model or full size. He attended Ayr Academy and went on to study Aeronautical Engineering at Glasgow University. Whilst at Glasgow University, Robin had the good fortune to join the Air Squadron – part of the RAF Volunteer Reserve. After graduating, Robin moved to Weybridge working for Vickers Aircraft on design of the VC-10. He always reckoned that his prime contribution to the UK's airframe industry was in determining the size of the VC-10 tailplane (625 sq ft for the record).



This picture of Robin Sleight was taken at his award of the MBE for services to the defence industry.

In 1961, as a young Systems Engineer, he joined Elliott Automation at Borehamwood. The Airborne Display Division was formed in late 1963 at Rochester with Kenneth Warren as Divisional Manager and the engineering team was led by Robin Sleight. In 1967 Elliotts was awarded the highly important A-7 HUD contract and with foresight in 1969 a support establishment called E-A Industrial Corporation was set up in Atlanta in Georgia U.S.A. Robin Sleight was posted to Dallas to support the A-7 HUD.

Robin was promoted to head the engineering department of Airborne Display Division at about the time (1975 onwards) that the Company started to develop the displays for Tornado and the first production version of the F-16 HUD system. Between 1985 and 1987 Robin was Divisional Manager of ADD and he briefly picked up that role again in 1992 between March and July. In 1989 Robin Sleight then General Manager was largely responsible for the Company winning the Eurofighter HUD contract.

In 1990 GEC-Marconi had acquired Ferranti Defence Systems and as the Assistant Managing Director of Rochester activity it was Robin's responsibility to merge the display groups. In 1998 after a few years in that job, Robin returned full time and was appointed Director of Business Strategy for Avionic Systems. When the Company formed a Business Acquisition and Customer Relations Directorate Robin was appointed Vice President. By the end of his career he had become Business Development Director for the entire GEC Avionics company. Alongside his work activities he was the Chairman of the Medway Branch of the Royal Aeronautical Society and very active in building and flying model aircraft.

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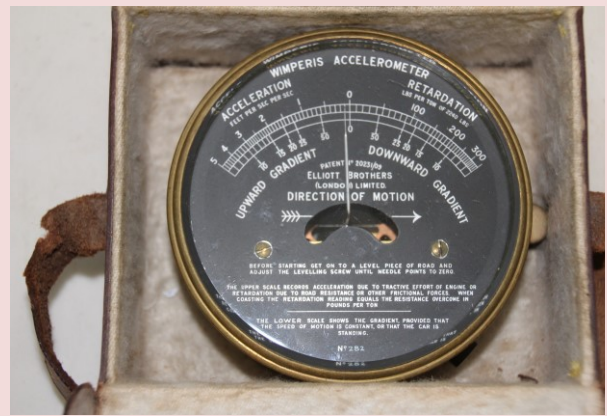
The Wimperis Accelerometer

In 1909 H.E. Wimperis, a scientist who was then doing work for the RNAS in a special department at Imperial College, sought a manufacturer for an accelerometer he had invented. This simple but ingenious device patented by H E Wimperis and G K B Elphinstone, was used for measuring acceleration, retarding force and gradient, whilst testing locomotives or motor vehicles and it was unaffected by directional change or track gradient.

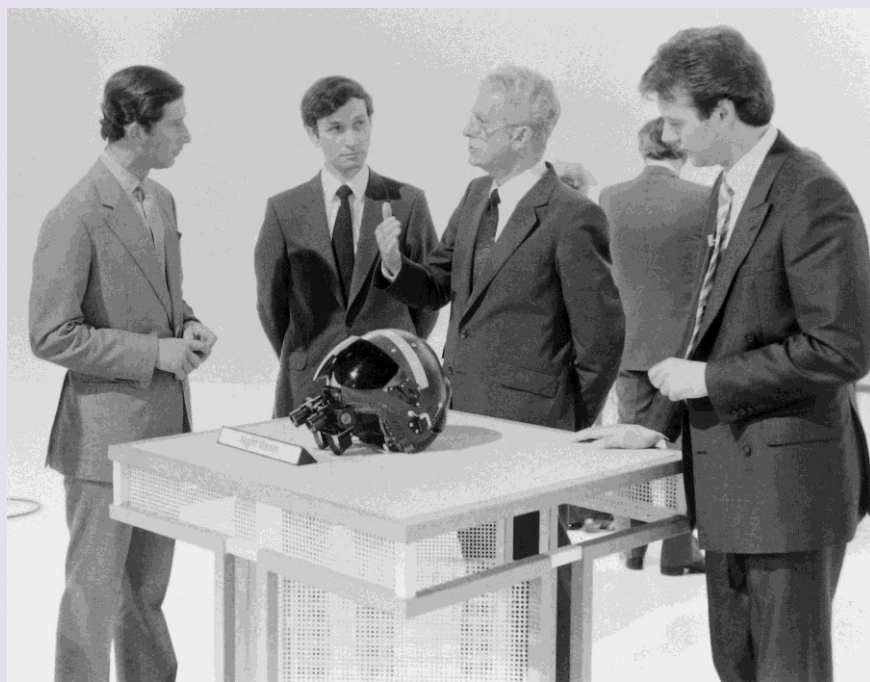
He was directed to Elliotts at Lewisham. In that same year at the exhibition of Physical Apparatus held at Imperial College, Elliott Bros showed a Wimperis accelerometer as well as a Harrison photometer and various ammeters and voltmeters. Many of these accelerometers were made by Elliotts for engineering use, particularly for trials and evaluation purposes, and an important relationship appears to have developed between Elphinstone and Wimperis through which

Elliotts became involved in several types of aircraft instrument for general use. The Wimperis accelerometer was available from Elliott Bros and H.E. Wimperis himself wrote to "The Times" in April 27th 1910 recommending the instrument "*This is a small portable instrument: (almost a pocket one)*" for measuring the horsepower of cars. Some accelerometers were sold over the period 1913 to 1921 and later in the 1930s Elliotts advertised a range of accelerometers including a model particularly for aircraft use.

This instrument was acquired from Dr D.J.Martin. It was owned by his late Father who had worked for the Solex Carburettor Company. Originally it belonged to M Louis Prat of Solex and is thought to have been made in about 1936.



A Wimperis Accelerometer



Jerry Fisher Staff Ellis and Brian Gotting meet the Prince of Wales in 1988. They are showing the Cats Eyes Night Vision Goggles

Cockpit instruments as used by R.F.C. aircraft
(photos by courtesy of Imperial War Museum)

1912

1962

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Elliott Bros Advertisements

(Left) 'Flight' 1962 shows a Fuel Flow instrument made at Elliotts Treforest factory, (Centre) from 'The Aeroplane' of 1954 and above from 'Flight' again in 1962. This last one shows two early RPM and an Airspeed instrument and on the bottom row a Transducer, Power Supply and Air Data Computer.

NCS1

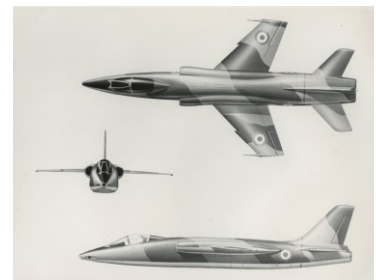


The Naval Compass Stabiliser NCS1 is a stabilised gyrocompass system designed to provide heading and vertical reference data for systems that use such data, on board a ship. Development of NCS1 started in 1971 and quantity production was underway by 1976 with 80 systems delivered to British and other Navies by 1984. NCS1 provides as standard outputs of Heading, Pitch, and Roll but with an additional card can give own ship acceleration and velocity. The ships Latitude and Longitude are continuously computed. There are three major units; Space Reference Unit (SRU), Electronic Pack (EP) and a Mount Assembly. Initial sea trials were carried out on HMS Antrim. NCS1 was designed and manufactured within the Guidance Systems Division at Rochester between 1976 and possibly beyond 1984.

This demonstrator rig was found recently; the ship bobs up and down and fires blue lights from the guns and radar. The little window near the bow (in what is called The Citadel) shows the location of the NCS1 system. Internally the model looks like an old 'automaton' with gear wheels, rods, motors and relays!



This is the Italian Fiat G.95/4 VTOL Test Rig which provided much valuable data from around 1963. Elliotts supplied autostabilisation equipment. By 1968 the project was officially abandoned as anything other than a research project.



The G.95/4 would have made a very attractive fighter.

Clare Relays

Clare, Inc., was founded by Carl P. Clare in 1937 as C. P. Clare & Company. The company designed and manufactured electromechanical relays for the rapidly growing power and telephony markets of the time. C. P. Clare & Company products found their way into aviation and communications products during World War II. During the 1960's Clare-Elliott Ltd was set up in the UK but by 1969 it was part of the Relay Division of Associated Automation at Willesden NW10. This site manufactured Clare-Elliott and Elliott relays.

C. P. Clare & Company, as Clare, Inc., was purchased by the IXYS Corporation in 2002.



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Life	1 million operations minimum at 1 amp.
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The Apprentice Scheme from about 1962

At the age of 15 an Apprentice would be paid £2 13s 6d per week.

A University Graduate, with little or no experience, aged 22 and employed as monthly staff would receive £650 per annum. A man with similar qualifications, but with experience in industry, might receive £850.

Students doing 'sandwich' courses, six months in the Works and six months at University or College, were usually paid about £6 weekly.

The Queen's Award for NAVWASS in 1975. There is a Jaguar aircraft in the background. If anyone knows where this picture was taken please let us know.

LIMERICK

They showed him the job,
Which couldn't be done
And said if he tried, he would rue it.
But he tackled the job, which couldn't be
done,
They were right — He could not do it!

Marconi Avionics News March 1979

The Lewisham Camera and Art Exhibition February 1939

In the Children's Knitted Garment section, the first prize went to Miss I. Stevens for the very charming- little frock in pale pink, finished with white angora wool. There was a tie for the second prize between Miss W. Cole (child's yellow suit) and Miss F. Cole (yellow frock and bonnet).

It is worth recording that the judges had no idea of the age or identity of any of the competitors, and were therefore, not aware that the two last named prize-winners were sisters, and—" curiouser and curiouser"—twins, so that the tie was peculiarly fitting !

This year, with four entries, it was possible to have a class for Dressed Dolls, and the prize was won by Miss Kemp for the baby doll dressed in a very complete "long- clothes " outfit. The black doll dressed by Miss Figes was highly commended.

Fire at Airport

Fire badly damaged the terminal building at Rochester Airport , Kent yesterday. No one was hurt but it took 40 firemen manning eight machines more than an hour to control the blaze. The control tower was believed not to have been damaged.

The Times April 14th 1971