

Marconi News

SIR NEIL SUTHERLAND TO RETIRE THIS MONTH —KNIGHTHOOD SETS SEAL ON GREAT CAREER



Sir Neil Sutherland, C.B.E., C.Eng., F.I.E.E., F.B.I.M.

On 31 January Sir Neil Sutherland retires as Chairman of Marconi. The conferring upon him of a Knighthood in the New Year's Honours, for his services to export, sets the seal of recognition on, and marks the culmination of, a truly distinguished career.

In the twenty-one years since he became general manager of the Company in 1948 he has been responsible for the expansion of the Company from an order book of less than £4 million in 1947 into Britain's largest single exporter in the capital electronics field, with orders in 1967 worth some £70 million.

The Company's export performance has risen from less than a quarter of sales in 1947 to an average of over 50% throughout the past five years.

Sir Neil became managing director in 1958. In 1962, he was appointed deputy chairman, in addition to his responsibilities as managing director, and in 1965 he became chairman of the Company.

sophisticated radar defence chain which remained secret for over ten years.

Civil and military radar has formed a major export activity throughout Sir Neil's time with Marconi. The Company has been responsible for some seventy military systems throughout the world, including much of the NATO radar defence system in Europe.

Also during his time as managing director, Marconi established a position as the world's largest exporter of professional sound and television equipment, particularly in North America, the most competitive market in the world. Well over 500 black-and-white cameras have been sold there. More recently the Company has won orders in this market for over 200 colour cameras.

He has seen the Company cited in the Queen's Award to Industry for each of the three years that the Award has been in existence—citations covering export performance and no less than five separate technological achievements.

A firm believer in the philosophy that a Company is as good as the people it employs, under his influence the number of apprentices has gone up from about 100 in 1947 to over 1,500 at the present time.

We wish Sir Neil and Lady Sutherland every happiness in the future.

Initial Reorganization

As general manager, the chief executive post in the Company, Sir Neil's first task was to define the markets, and to plan and create not only the product lines, but also the commercial organization necessary to exploit these markets. It is a tribute to his foresight, that the Divisional organization of the Company which he created in those early years, remained almost unchanged until 1965, when he introduced his second major reorganization to cope with the tremendous expansion of the Company, which was by then bringing in annual sales of over £30 million.

Major successes

In the early 1950s, Marconi won the largest radar contract ever placed in the U.K., a giant project which covered the whole of the United Kingdom and its approaches with a

Formation of GEC-Marconi Electronics

Mr. Telford heads Britain's largest electronics Group

The major professional electronics interests of GEC, AEI, English Electric and Elliott-Automation have been brought together with the formation, last month, of GEC-Marconi Electronics Ltd., a new management company with Mr. Robert Telford as managing director. Mr. Telford also continues as managing director of The Marconi Company.

Existing trading names and companies will continue, in order to secure the maximum advantage in world markets.

With a turnover well in excess of £100m., GEC-Marconi Electronics will be, by far, Britain's largest and most comprehensive electronics organization. GEC-Marconi Electronics covers the fields of aerospace and defence equipment, communications

and navigation systems for land, sea, air and space, and broadcasting and television systems.

The new grouping strengthens the position of the individual companies particularly in radar, in airborne navigation and communications systems, in broadcasting and television, and in all aspects of radio and space communications, including satellite systems.

Two areas of considerable importance for the future are included in the new group. On-line computers are playing an increasingly important part in many of the companies' activities, and a major position will be established in the production and application of real-time, on-line computer systems for application within GEC-Marconi. Both the Marconi Myriad and Elliott 900 series

machines are the responsibility of GEC-Marconi Electronics, and will form the foundation of this expanding activity.

In microelectronics, GEC-Marconi already has a major stake in this vital development, with Marconi-Elliott Microelectronics based at Witham and Glenrothes. This will continue to expand.

With the announcement of the new formation, Mr. Telford emphasized that the strength of the combined group will provide a vital impetus to the expansion of the export trade in electronic equipment, and will help to ensure the continued prosperity of all of the units within the organization.

GEC-Marconi Electronics Limited will be responsible for the management of the following units:

The Marconi Company Limited and its subsidiaries, comprising:

The Marconi Company Limited (Chelmsford and district, Basildon, Billericay, Gateshead, Hackbridge and Wembley).

including Marconi Instruments Ltd. (St. Albans and Stevenage), and all Marconi subsidiary companies overseas.

Marconi-Elliott Microelectronics Ltd. (Witham and Glenrothes).

Eddystone Radio Ltd. (Birmingham)

from GEC-AEI

GEC-AEI (Electronics) Ltd. Radar, Aerospace and Defence Division (Stanmore, Portsmouth, Leicester and Watford).

GEC-AEI (Electronics) Limited, Communications Division (Coventry).

from Elliott-Automation

Elliott Flight Automation Limited (Rochester)

Elliott-Automation Radar Systems Ltd. (Borehamwood, Hillend).

Elliott Space and Weapon Automation Limited (Frimley, Borehamwood, and Hillend).

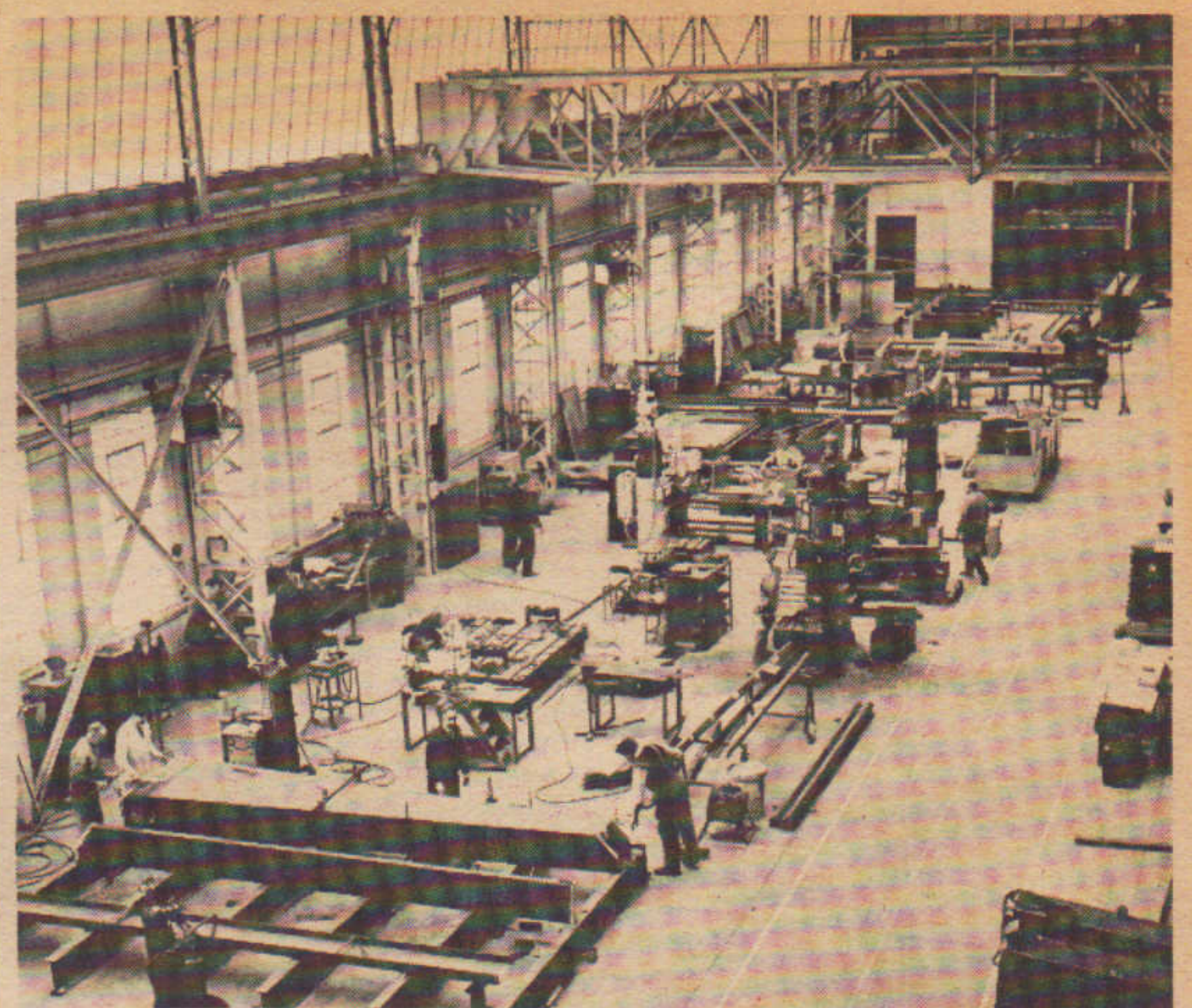
E-A Space and Advance Military Systems Limited (Camberley).

GLC AT AUTOMATION DIVISION



The Executive Director and members of the Transport Department of The Greater London Council visited Automation Division last month to examine their equipment, ordered last April, for extending the experimental facilities for the control of road traffic in West London. Seen seated at the control panel of a Myriad II computer is Mr. A. Morris, the Executive Director of Transport. The computer will be at the centre of a unique display system at New Scotland Yard, supplying operators with visual information on traffic conditions at any of the road junctions under control.

Ahead of Schedule at Crompton Works



A bird's eye view of production at Crompton Works.

Last month saw the first of fifteen 'U' frames for the NADGE aerial despatched from Marconi's Crompton Works for stress relieving and machining, before returning to Marconi for completion of processing.

'Despite starting eight weeks late, due to transfer from Gateshead to Crompton Works, and allowing for

the fact that heavy fabrication is new work for Fabrication Division, the project is now running ahead of schedule,' reports W. J. Roberts, Fabrication project co-ordinator at the Crompton Works. 'The recruitment of ex-Crompton employees has certainly helped to keep the programme to time,' he added.

£17.4m. Trading Profits Announced

The General Electric and English Electric Companies announced last month that estimated results of GEC, excluding English Electric but including AEI, show group trading

profits, including investment income, of £17.4m. in the six months to September 30, 1968. The figure for the corresponding period of 1967 was £9.3m. excluding AEI.

Hydrus is not Greek for Hangover



Speakers at the mini-symposium, left to right: R. K. Robertson, supervisor (HF Systems); B. W. Bardwell, regional manager UK & Europe Region; and R. L. J. Awcock, engineering manager. (Low Power).

According to the Pocket Oxford Dictionary a symposium is an Ancient Greek drinking party. It was with interest, therefore, that we learnt that Radio Communications Division had recently held a mini-symposium in Room 335, New Street. An assurance has, however, been given by a Divisional spokesman that this was not a hectic little session with some ancient alcoholic Greeks but a highly successful meeting of potential customers from London who were presented, not with gin and tonics, but

with the Division's Hydrus receiver. It was, in fact, the first stage in a sales drive which will eventually cover the world, with sales engineers of the Division giving on-the-spot demonstrations of the receivers' capabilities.

Speaking with cautious enthusiasm, the spokesman said: 'Selling is a hard and difficult task calling for a delicate mixture of deviousness and technical and social competence. Hard selling and drinking do not go together.

£1.2m EAST AFRICAN SPACE CONTRACT SIGNED

The £1,200,000 contract between the East African External Telecommunications Company and Marconi for the satellite communications earth station near Mount Margaret in Kenya's Rift Valley was signed in November by the Chairman, Sir Neil Sutherland. Work on the earth station, 27 miles north of Nairobi, has now started.

The full project is due to come into operation in early 1970 when the earth station is complete.

Flame-viewing in Pakistan

Electro-Optical Systems Division is supplying three closed-circuit television camera channels for boiler flame viewing and water level indication for a new 125MW extension to the Korangi Power Station, near Karachi, the principal seaport and industrial centre of West Pakistan. Commissioning of the equipment will take place early this year, and will comprise Marconi industrial television vidicon cameras.

Mr. A. Shaikh, the assistant instrument engineer at Korangi Station, spent a fortnight last June with Electro-Optical Systems Division at Basildon familiarizing himself with the contract equipment.

fact only management and staff training is outside his control. The development of the Company's training system has been his responsibility. 'I have never been influenced by the way other companies tackle the job, I have formed my own opinion on the way to go about it. I regard myself as a co-ordinator. I have a splendid team, only post graduate people report to me, and I purposely delegate as much responsibility as possible. If you do not delegate how can you expect others to become interested in their work. Responsibility is character building, it teaches self reliance and brings out the best in people. It is necessary to shape the organization to the abilities of its people.'

Mr. Langridge casts his net nationwide for the highest standard of youth to train; only 40% of the technical apprentices come from Essex. All the time the task gets tougher and the competition for youth becomes more intense. 'Four years ago craft apprentices were glad to come for an interview; today we have to tempt them in and we must be constantly on our mettle. I would like to see more female apprentices, of which at present we only have a handful, though we do our utmost to recruit them. I am sure there is a tremendous waste of female ability, but it is hard to break the conviction that factories are dirty places.'

Rise in Intake

The fact that the annual intake of apprentices has doubled in three years to nearly 600, would seem to indicate that Marconi is holding its own in this competition for youth.

'Youth today is taught to be critical, and we must take advantage of criticism. We do this through the notebooks issued to every apprentice and by holding sessions at which the boys can criticize their training constructively.

'Of course we have the built-in advantage that our people are training for a definite purpose, and instilling into them identification with the Company and the opportunities it gives is a vital part of our training.

'We have comprehensive operator and apprentice training schemes at all our factories. But there is much to be done in the future. I want to get modular training going for craftsmen and to establish a programme instruction centre and typewriting centre for clerical staff at Crompton Works. These are just some of the things I want to build into our system. Only lack of time holds us back.'

Freddie Langridge's enthusiasm for the training of youth is underlined by his work outside the Company. He serves on the engineering advisory committees of the Mid-Essex Technical College; the Chelmsford and the Baintree Colleges of Further Education; and is a member of the East Anglian Regional Advisory Committee for Further Education, representing the industrial interests in Chelmsford; the Essex Branch of the Schools Council's Technological

TAPED TO THE WORLD



Left to right above: Bernard Blake, Ken Ginn and Oliver Prince-White.

The latest in a long line of tape recordings made by the Central Office of Information to assist the overseas publicity of Marconi activities was put 'in the can' recently. The recording, which describes some of the latest equipment produced by Radio Communications and Aeronautical Divisions, will be offered to Broadcasting authorities throughout the world. Oliver Prince-White of the C.O.I.,

recorded conversations with Ken Ginn, Controller, Marketing Services, Radio Communications Division, and with Bernard Blake, the publicity officer for Aeronautical Division. And the equipment discussed? — the 'Piccolo' telegraph equipment recently installed aboard the QE2, and Aeronautical's new airborne moving map, perhaps the most advanced equipment of its type in the world.

Fifty-one Years of Photography

R. J. DAVIES RETIRES



A career in photography stretching back five decades ended last month with the retirement of R. J. Davies section chief of Photographic.

In addition to the countless industrial events that he has covered through the years his work involved him in such historic occurrences as the R101 air disaster and the arrival in Britain of both Charles Lindbergh and Jim Mollison at the end of their solo flights across the Atlantic. He first started photographing for Marconi in the days when pictures were taken with flash powder and there was only one other Company photographer, L. H. Blouet. Mr. Davies became head of Photographic Section on Mr. Blouet's death in 1962.

With Mr. Davies' retirement, Leslie Dyer has been made acting chief of the Section.

Profile

F. R. J. Langridge

Chief Training Officer

'Youth today is taught to be critical. We must take advantage of this criticism.'



'Every person is different, thank goodness, that's what makes our job so interesting.' The speaker was F. R. J. Langridge, whose concern is with people. As the Company's chief training officer he will be responsible this year for training into Marconi nearly 2,000 young men and women.

Beneath a relaxed personality, blessed with a keen sense of humour, F. R. J. Langridge is a man of firm and individual opinions; it was only by chance that he entered the field of education and training. Leaving school at the end of the war, and unable to enter university because most of the places were taken by ex-servicemen, he joined the Post Office; 'because my father thought it would be interesting for me.'

Firmly believing in the value of early responsibility, this came to him personally within three years of starting work, when he was seconded to the Control Commission in Berlin, to control the telegraph network of the three western sectors. On returning to Britain he worked in the G.P.O.'s Dollis Hill Acoustic Group gaining his engineering qualifications through an evening course at Battersea Polytechnic.

In 1952 he was seconded again—to the Colonial Service on the Gold Coast. As district engineer at Accra, in charge of a team of 200, he was responsible for installation and maintenance covering the whole of the Accra area.

Two years later Freddie Langridge began his career in training, when he was appointed, 'for no apparent reason', first master of the G.P.O.'s Accra Engineering School. 'Frankly, I took the job with mixed feelings, but to my surprise I caught the 'training bug' in a big way. It was terribly frustrating because I could see what was needed but the run-down of the Colonial Service had started and there was no money or scope to develop.

'When Marconi opened the Nigerian Training School outside Lagos I accepted their offer to be the Principal Training Officer. The contrast could not have been greater. We started with a clean slate, our students were young and once we had gained their confidence they would work hard and well for us night and day.

'Our job was to train Nigerians

of GCE 'O' level standard to take over from Europeans the installation and maintenance of the Country's radio system. When I left at the end of five years we had a four stream intake to specialize after four years' of being in telecoms., radio, power plant or maintenance, and as many lecturers as we originally had students—23. The number of students had risen to 250 and over 450 of my boys qualified during my time. In 1966 we handed it over as a complete entity, with trained Nigerian lecturers. It was one of the few schools of its kind in the world; now unhappily it is gone, the civil war has wiped it out and it is now difficult to locate the trained engineers left in Nigeria. Some of my old students are now with Marconi.'

Determined to stay in education but wishing to bring his family home after eleven years abroad, Freddie Langridge joined the New Street education office in 1963, and within two years became its head. 'From 27 staff and 650 trainees, with no operator training, we now have 70 staff, 1,600 apprentices and 300 operator trainees; a growth vital to the Company's rapid development. This and the money and resources for the widening training facilities have been made possible by the support of a forward looking management.'

New Technologies

'What we teach our young people, during craft and technician courses lasting on average four years, will stand them in good stead for up to ten years. During that time they must always be learning to keep up with new technologies. For example, the last ten years have seen the emergence of the completely new technology of microelectronics for which the Company has two large factories.

Last year 650 people were given advanced evening courses to help this re-training arranged by Mr. Langridge's department, and over 400 did day release and other evening courses; the level will be the same this year. 'Over 30 different courses are currently under way to satisfy the requirements of individuals and also of the many departments where the individuals work.

Another of his responsibilities is clerical and commercial training. In

WORLD-WIDE MARKETING OF 'CARTRAC' CONVEYOR SYSTEM

As the first step in a world-wide sales drive by Elliott-Automation for the sophisticated 'Cartrac' programmable conveyor system, the Swedish and British manufacturers have jointly established a two-man international marketing team. The team left Britain last month for the United States,

where it is hoped to negotiate manufacturing licences for the whole of North America.

Members of the negotiating team are Bengt Skrufve, sales manager of Borgs Fabriks AB, the originators of the 'Cartrac' system, and F. Humphreys of Elliott-Automation.

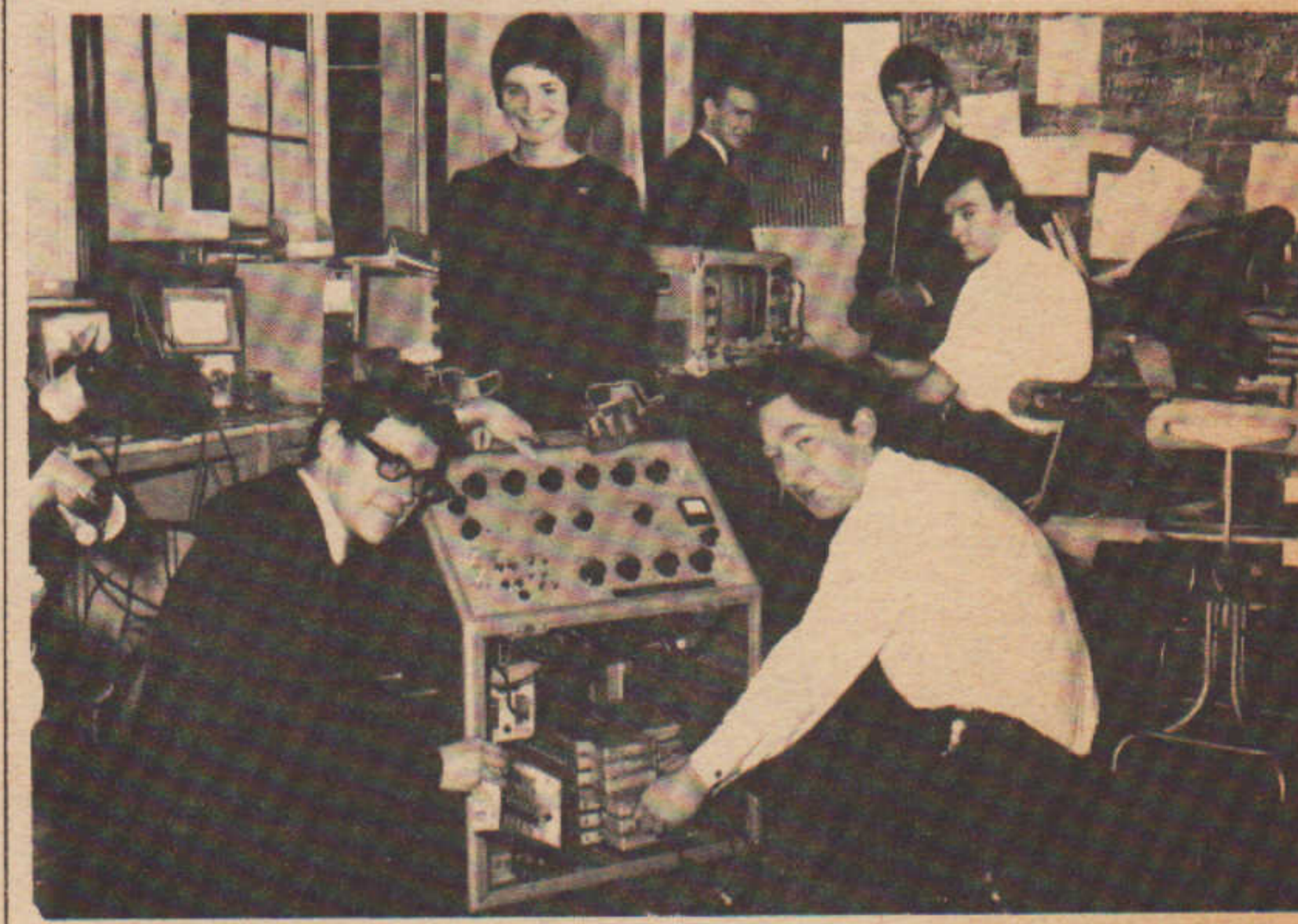
Graduate Project Completed

Sub-units being fitted to the 1968 graduate trainees' 'Project', an ionospheric simulator, at the New Street training centre last month.

The project took sixteen weeks to complete and will be used in the Communications Research Area at Gt. Baddow.

Members of the team are, left to right: D. Coveney, J. Harper, R. I. Dow, J. A. E. McNally, R. C. A. Thwaites and B. C. Buckle.

'They have all worked hard on this' states H. Catton, senior training officer of graduates and students.



Project Schools Committee; and the Chelmsford College's Commerce Advisory Committee. He is also a Governor of Chelmsford Technical High School.

His ability to see the lighter side of life and not take himself too seriously helps his many commitments to ride easily on his shoulders. But, not surprisingly, he says: 'I

really have no time for hobbies, my relaxation is my family and home.'

Bringing the best out of raw material and moulding it to be of the most use to the Company and the Country, is how Freddie Langridge sums up the real value of his work. 'I am astonished when I remember that it all began by chance.'

'YOUR CRAFTSMANSHIP IS A WATCHWORD ROUND THE WORLD'

Presenting the 1967/68 Marconi Apprentice Awards at New Street last month, the Postmaster-General, the Rt. Hon. John Stonehouse, M.P., told a large gathering of apprentices, their parents and Marconi staff that he was delighted to be at Marconi: 'because your Company has such a magnificent success in new inventions and in particular in the export drive.

'Last year you received orders of £42 million from abroad... the equipment you are supplying is the foremost of its type in the world,' he continued, 'and your craftsmanship is a watchword round the world...'

Praising the Company's apprentice training scheme, he said it was a model to other firms.

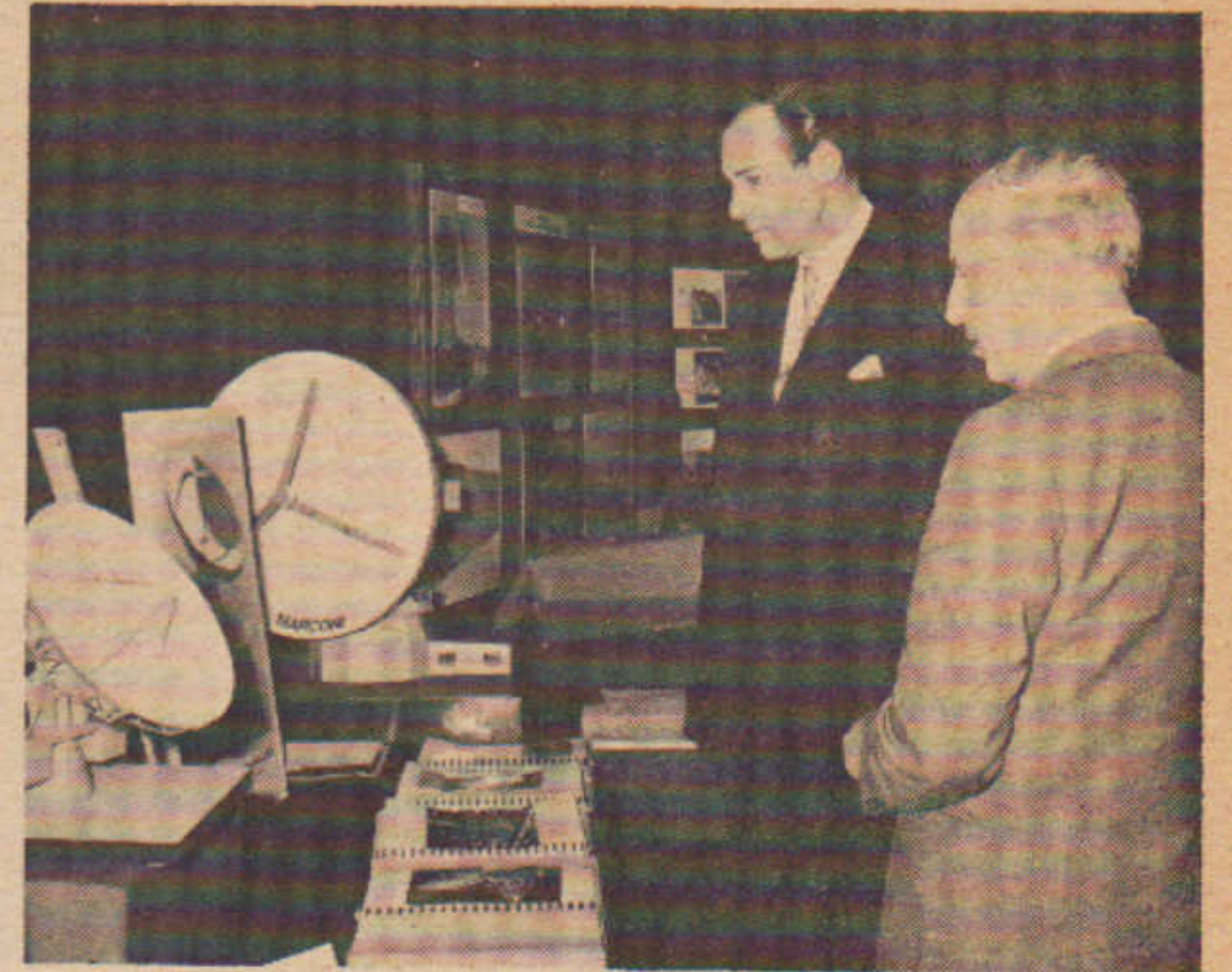
Earlier Mr. Stonehouse had been shown demonstrations of their developments by Line, Space and Radio Communications Divisions and by Automation and Electro-Optical Systems Divisions at the MASC.

The visit ended with a tour of the apprentices training area, when he

saw projects being carried out by apprentices.

Outstanding Apprentice

The Director's Special Award for the outstanding apprentice of the year was won by P. J. Cavill: joining the Company as a technical apprentice in 1962, Mr. Cavill's work was so outstanding that he was moved on to a student apprenticeship, subsequently graduating with 1st Class Honours in Electrical Engineering from Loughborough. He is now reading for an M.Sc. with Marconi sponsorship, at Southampton University.



PMG Sees Divisional Demonstrations

Top left: A. P. Young, Automation Division Manager, left, and Ivan Richardson, Divisional sales and contracts manager, show the Postmaster General, right, a model of a new Video Data Terminal Display. Top right: W. J. Quill, Space Communications Division manager, right, shows the latest design for a 90ft. intelsat earth station, right, and a 40ft. transportable military design earth station. Centre left: V. Prior, Electro-Optical Systems Division sales manager, left, shows an advanced, fully automatic V322B view finder camera. Bottom left: P. R. Keller, Line Communications Division manager, right, shows the PMG with Mr. Telford, left, an element from the new TDM telephone exchange. Bottom right: W. J. Morcom, Radio Communications Division manager, shows the PMG, with Mr. Telford, a small cabinet able to contain the equivalent of an entire rack of equipment.

TV CENTRE CONTROL ADVANCE AT GRANADA

One of the most sophisticated television centre control systems in Europe has been installed by Broadcasting Division at the Manchester TV Centre of Granada Television. The total value of the contracts is £1 million, and the system is now in operation, enabling personnel in

a single control suite to select, assemble and distribute the whole station's output. The photograph shows the control suite; the operator on the right controls the station output to the network, and the operators on the left deal with the assembly of individual programmes.



Swedish TV Conversion

Colour broadcasting equipment, to play a major role in the launching in 1970 of Sweden's colour television service, has been ordered from Broadcasting Division by the Swedish Telecommunications Administration.

The equipment comprises 46 colour correction units which will be incorporated into existing Marconi 500W, 4kW and 10kW black-and-

white transmitters, to enable them to transmit colour pictures of high quality. The units will be installed in 23 v.h.f. transmitting stations to form part of Sweden's first programme service. Delivery of the equipment will start this year.

Half of Sweden's existing television and f.m. sound broadcasting stations are Marconi equipped.

The 'Daily Telegraph' on the Forenoon Watch

When the difficulties at present besetting the new luxury liner QE2 are overcome, and she goes into service, passengers will, for the first time ever on a ship at sea, have at their breakfast table an up-to-the-minute edition of a national newspaper which has been printed on board ship.

This will be made possible through a unique error-free radio system, linking the Daily Telegraph in Fleet Street with Cunard's QE2. Called

Piccolo - the system has been developed and manufactured by the British Diplomatic Wireless Service and is being marketed by Marconi. Teleprinter messages will be accurately received at signal strengths and interference levels which would prevent any normal speech or teleprinter messages from being received at all.

Pioneer News Service

Sixty-nine years ago an experimen-

tal news service to transatlantic liners was carried out by The Marconi Company and by 1903 a limited news service had been established from its pioneering stations at Poldhu, Cornwall and Glace Bay, Nova Scotia, to big luxury liners. This initiated the printing of daily news bulletins on board ships of the Cunard Line, the first to be printed being the 'Cunard Daily Bulletin' on the R.M.S. Campania.

1969 Period Calendars and New Accounting Year

Changes in accounting periods are being introduced in line with those generally applying in the General Electric and English Electric Companies. The 1969 Period Calendars, which have already been issued, are no longer accurate and must be amended as follows:

PERIOD 1 (Weeks 1-5) will now cover the FIVE weeks ending 1 February.

PERIOD 2 (Weeks 6-9) will now cover the four weeks ending 1 March.

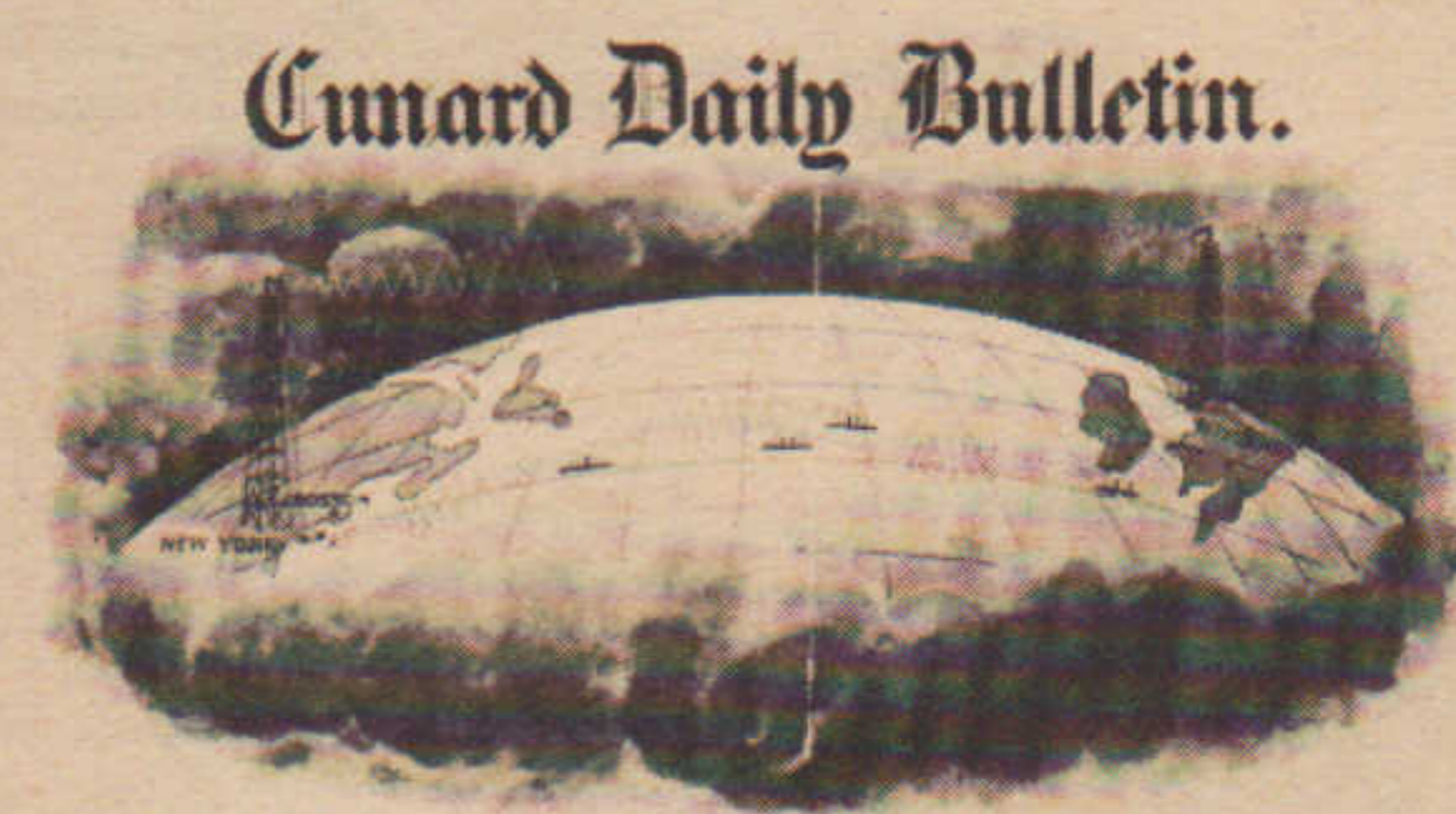
PERIOD 3 (Weeks 10-13) will now cover the four weeks ending 29 March.

Information affecting the remaining periods in 1969, and thereafter, will be given as soon as possible.

Statutory accounts will be prepared for the fifteen months ending 31 March.



Members of the Electronics Development Council and the National Economic Development Council are seen above at Waterhouse Lane during their recent visit to the Company.



No. 32. Vol. II.] R.M.S. "CAMPANIA," JUNE 6, 1904. [PRICE 2½d. OR 5 CENTS.

The history of all great and successful undertakings, show in addition to uniform progress, certain points of development which stand out in bold relief from the steady onward advancement. In the annals of the Cunard Line, July 4th, 1840, when the "Britannia" commenced her career, was a memorable day in the history of steam navigation. Sixty years later came another history-making epoch when the Cunarder "Lucania" interchanged messages with the land by means of wireless telegraphy. The wonderful invention which was then a matter of experiment has now been gradually developed and improved until it was found possible to publish on board the steamers of the Line the "Cunard Bulletin." In progress, however, there is no finality and concurrently with Mr. Marconi's

demonstration that it was possible to keep in communication with a steamer by means of wireless telegraphy during her whole voyage across the Atlantic, the Bulletin becomes a Daily Newspaper containing in concise form the news of both old and new worlds. This development, marked and consistent, but it is only evidential of the general scheme of Cunard progress. The present building programme includes not only two 21,000 ton steamers—the Caronia and Carmania, the latter of which will be a Triple Screw Turbine Steamer, but two twenty-five knot Express Boats, which will also be propelled by turbine engines. These vessels will be the largest and fastest steamers in the world, and in their passenger accommodation also they will mark the latest step in naval architecture.

A 1904 edition of the 'Cunard Daily Bulletin.'

A model of the Cunard's QE2.



NEW SERVICE DEPOT FOR LONDON'S AIRPORTS

A new centre for the rapid repair and replacement of key electronic equipment on board airliners at London's major airports, will be one of the main results of a rationalization programme involving part of the avionics equipment interests of Elliott-Automation and Marconi's activity in airborne navigation and communication systems.

Aeronautical Division will take over responsibility for a range of

audio systems, formerly products of Elliott-Automation's Communications Division. These give the pilot instant radio-telephone communication with his crew, passengers and the ground.

Development of audio systems will continue at Elliott-Automation, and additional new products are planned to be introduced there in the months ahead, but sales and field support activities are being transferred to Aeronautical Division at Basildon.

Aeronautical Developer Dies

The death has occurred of Mr. L. A. Sweny, who played a significant role in the building up and managing of Aeronautical Division between 1936 and 1959.

Mr. Sweny, who was mentioned in despatches in World War I for his work on anti-submarine patrols, joined Marconi in 1936 and within a year was appointed manager of the then Aircraft Department. He later reorganized the Department for War

Service, when one notable achievement was the supply and installation of over 80,000 transmitting and receiving equipments to the allied forces.

In 1942 he rejoined the Fleet Air Arm, returning to the Company in 1946 as manager of Aeronautical Division, and introduced many notable equipments, including the first two of the Marconi series of doppler navigators.

£183 FOR MAYOR'S FUND

MAYOR'S PARLOUR, CIVIC CENTRE, CHELMSFORD.

MAYOR
ALDERMAN EDMUND A. WILKES



TELEPHONE NO. 41731

19th December, 1968.

Dear Mr Telford

What a magnificent response the employees of your Company have made in their collection on behalf of the Christmas Cheer Fund for Old Folk. This really is wonderful and I am thrilled by it. I do hope that it will be possible for you in some way to convey to all who contributed an expression of my deep sense of gratitude for their generosity.

With renewed thanks and kindest regards,

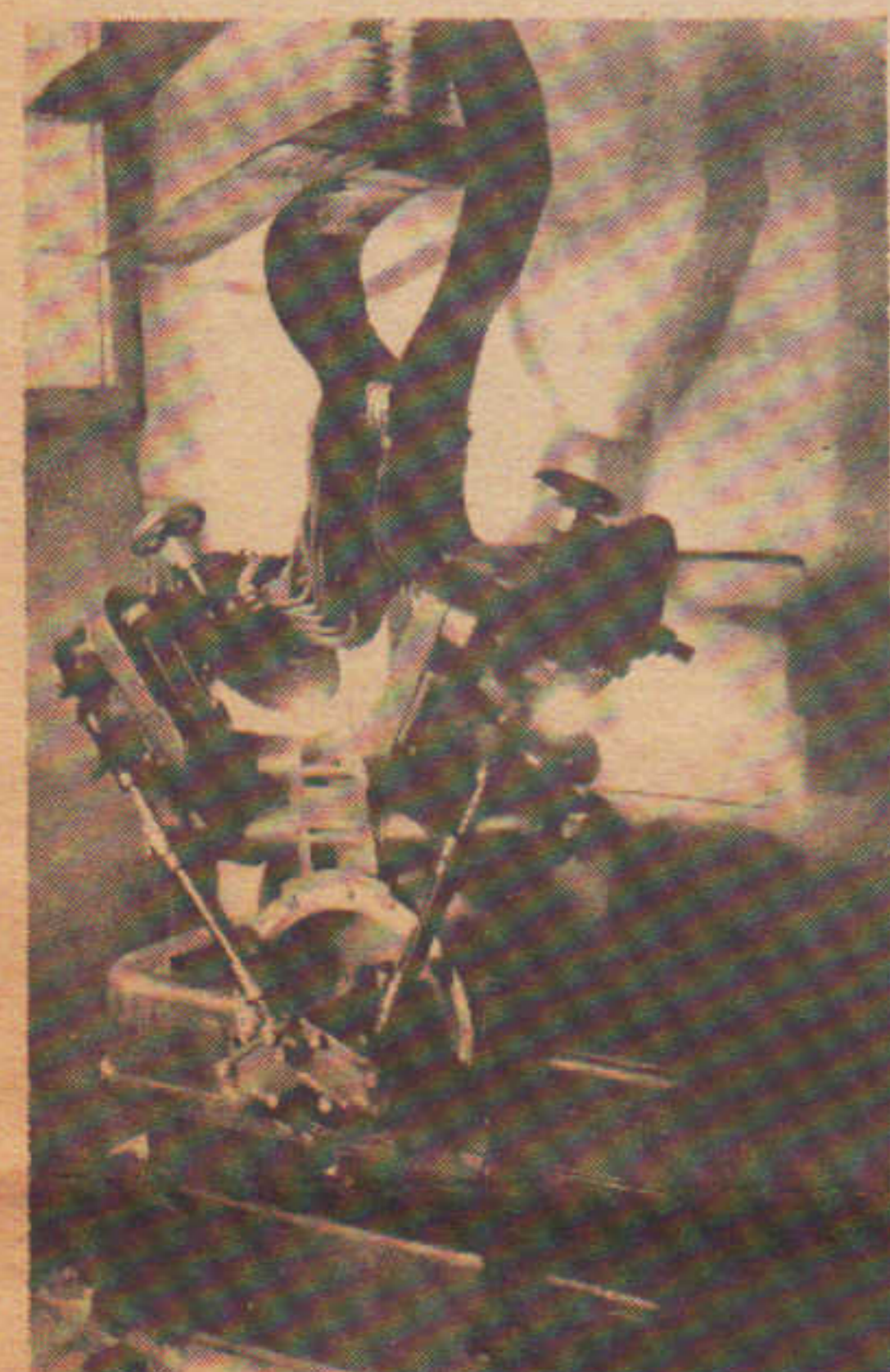
Very Sincerely
Edmund Wilkes

R. Telford, Esq., C.B.E.,
Managing Director,
Marconi Company Limited,
Marconi House,
CHELMSFORD.



Alderman Edmund A. Wilkes.

WHAT HAVE WE HERE?



Last month's picture was obviously not such a puzzle after all! A flood of 100 per cent correct answers poured in—so many, in fact, that we regret it has not been possible to carry out our usual practice of writing to acknowledge each answer individually.

Many thanks, therefore, to the dozens of readers who sent us the answer to the picture, which was, indeed, of one of the Company's Fisholow hot drink vending machines.

One reader wrote: "I was wondering when you would include a photograph which the many non-technical members of the Company could identify, and am glad you have done so now."

"After all, it is not only the Company boffins who can appreciate the thrill of being able to say 'Ah! I know what it is!'"

Here then is the first puzzle picture of 1969 and we will wait with interest to see what happens this time!

Please send your answers to: The editor, Marconi News, St. Mary's House, Victoria Road, Chelmsford.

Danish Shipping Personalities Visit 'Elettra III' Inspection of New Marconi Marine Radar

Representatives of Danish shipping and shipbuilding interests visited the Marconi Marine demonstration and research vessel, 'Elettra III' at Tower Pier on the Thames recently. The occasion marked the first live demonstration of Marconi Marine's new 'Raymarc 8.'

The Ministry of Defence has ordered another large batch of Elliott-Automation '900 Series' computers for artillery fire control in the forward area.

MOTHER SHIP EQUIPPED

When the 'Mother Ship' to the British fishing fleet, the 1,574 ton trawler, Orsino, left Hull recently, to take up her station in the fishing grounds north of Iceland, where she will be keeping a continuous radio watch until April, she carried extra radio equipment supplied by Marconi Marine.

GEC-AEI AID TO SPACE RACE

GEC-AEI (Electronics) has more electronic equipment in space than any other manufacturer outside the USA.

The European Space Research Organization spacecraft 'Aurorea', successfully launched recently, is the latest in a series of successful experiment contracts won by the Company, demanding the highest possible standard of reliability. Previous contracts include the UK2 and UK3 satellites, for which the Com-

pany developed a large proportion of the electronic equipment.

'Aurorea' is the second in a series of satellites for scientific experiments under ESRO control. Experiments are being carried out for the Radio and Space Research Station at Slough in Bucks, this work being a continuation of the close association between GEC-AEI (Electronics) and the Research Station.

The space vehicle structure incorporates a highly complex digital data handling and measuring equipment which has been designed, tested and manufactured by GEC-AEI (Electronics). The experiments to be performed by the space vehicle include the measurement of the number and energy of electrons and protons in its orbit and the equipment supplied by the Company reduces the output of the particle sensors to a form suitable for telemetry to ground stations.

SIR GORDON RADLEY RETIRES

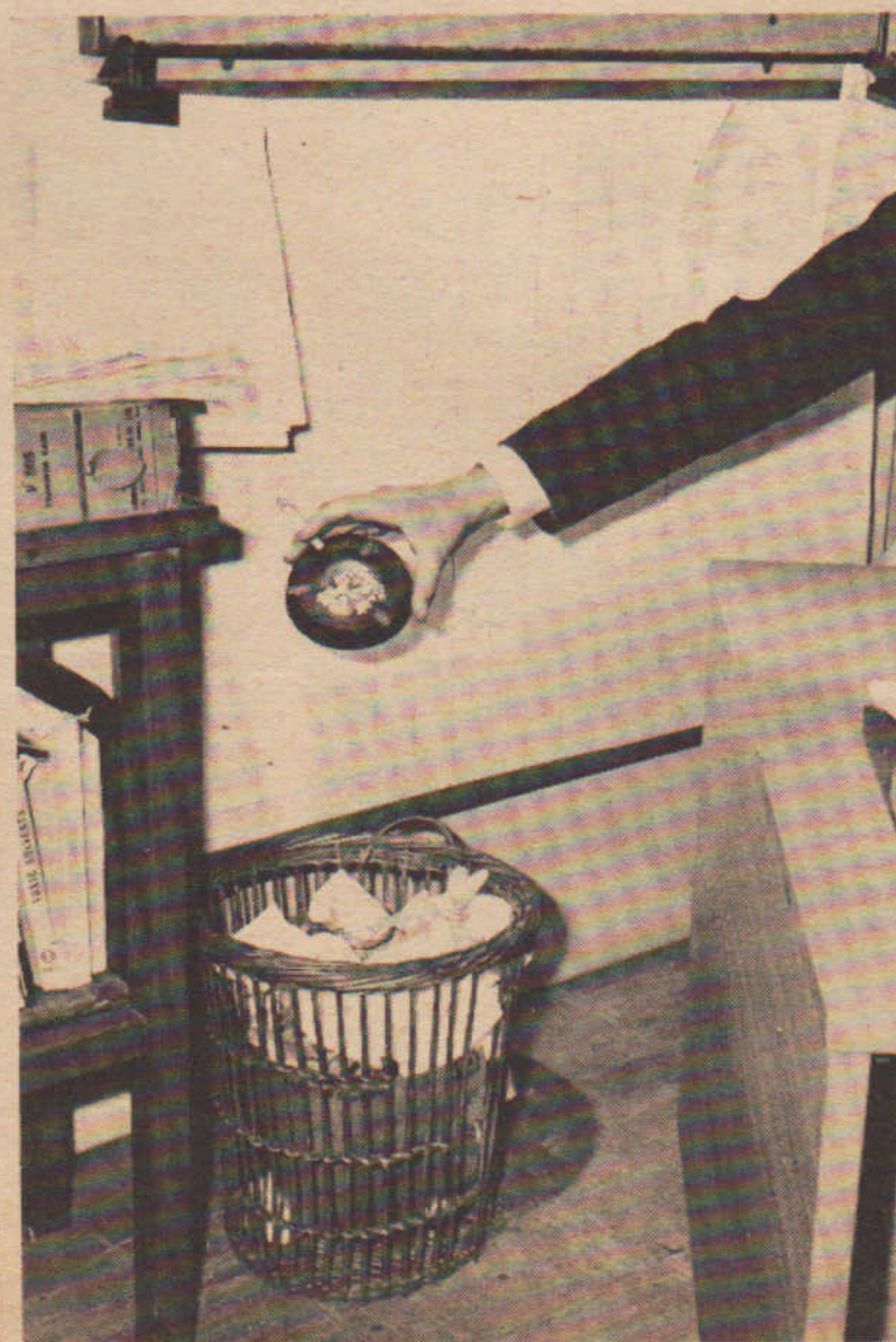
Sir Gordon Radley, past chairman of Marconi, has retired from English Electric, having completed his computer responsibilities with the Company, and has also retired from the Boards of Marconi and English Electric Valve Company. He will continue as chairman of Marconi Marine.

SAFETY POINT

Many readers were quick to spot the hazards in last month's desk drawer, the first reply coming from Miss Rosemary Norton, of Broadcasting Divi-

sion. Dangers to wrists and hands included razor blades, opened scissors, a staple remover, bent clips and uncovered pens. It was also pointed out that the exposed lock of the desk drawer could cause the drawer to jam on shutting and shoot the contents out of the shallow tray inside. Below are some further dangers. The lady doing a "Sherpa Tens-

ing" to reach the "filing" could come a very nasty cropper, especially if she fell through the glass pane on her right. The practice shown on the right is an obvious fire risk, particularly with this sort of wastepaper basket, but people often do just this as they leave the office at the day's end, setting the scene for a possible midnight conflagration.



Exhibition of Manufacturing Facilities

Central Production Engineering Services are organizing a Management sponsored exhibition at the Crompton Works Social Centre from 20 to 31 January.

Aimed chiefly at the Company's design force, the exhibition will display the capabilities of all our factories. Both production facilities and the advantages offered to designers

by new techniques will be illustrated by examples, photographs and diagrams. Also presented will be the economic aspect and examples of the problems and pitfalls that still remain.

For further details contact W. J. Sapsford, chief of Central Production Engineering Services at New Street, Int. 650, Ext. 540.

M.I APPOINTS SERVICE REPRESENTATIVE

The re-organization and expansion of M.I's repair and calibration facilities have been underlined by the appointment of John Locke as the Company service representative. Following this recent re-organization, which included the formation of a new servicing unit at Luton to concentrate on Government servicing, M.I has now announced a new maintenance policy which includes a clear commitment to customers on turn-round times for instrument repair and the supply of spares.

Mr. Locke will assist customers with specific servicing problems, and will advise them on making use of the expanded facilities now available.

£350,000 GPO Order for Elliott Stamp Vending Machines

A £350,000 order for 10,000 postage stamp vending machines has been received by Elliott-Automation from the GPO to replace existing installations in time for the 1971 decimal changeover.

NEW DETECTOR

A new wideband detector has been developed by Sanders Division of M.I. Intended for use in coaxial systems, it has flat frequency response, high sensitivity and excellent square-law characteristic.

New Microwave Frequency Meter

A new, direct-reading, precision frequency meter for use either as an absorption or transmission wavemeter has been produced by Marconi Instruments. It can be employed not only with its standard coaxial mount, but also in conjunction with optional waveguard attachments covering the entire frequency range.

72 YEARS AGO

From a Technical Journal on 12 October, 1897:

"The wireless telegraph is trying to keep pace with the horseless carriage. Prof. Slaby, assisted by the military balloon corps, and experimenting with Marconi's system of wireless telegraphy, succeeded at Berlin, last week, in spite of adverse atmospheric conditions, in exchanging messages without wires at a distance of 21 kilometres. A kilometre is the equivalent of 3,280.8 feet, or 0.621 of a mile, making a total distance of over thirteen miles traversed by the electric signals without a metal conductor.

This corroborates the belief of scientists that the exploration of electrical science is far from exhausted."

SITUATIONS VACANT

RESEARCH DIVISION

A technical cost clerk is required to fill a new position in the Aerial Department. The successful applicant will be responsible for: (1) Obtaining costs from period returns and recording these for cost monitoring. (2) Obtaining approval from senior engineers for all costs incurred and investigating anomalies on their behalf. (3) Maintaining up-to-date cost forecast records on all jobs.

The successful applicant will be required to work independently and be able to co-operate with all levels of personnel. 'O' level English and Mathematics, or equivalent, is preferred. Prior knowledge of accounts is not essential.

Applications should be addressed to A. C. Horsnell, personnel officer, Central Personnel Services, New Street, quoting reference DS/ACH/4753, and should give details of qualifications and experience.