

N. E. MARTIN

Marconi

companies and their people



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Marconi

An 'English Electric' Company

The Marconi Companies and Their People

Editor: L. W. B. Miller, M.A.I.E.

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Centre of Activity

The centre of a great deal of Marconi East African activity is Nairobi, a town of new, modern buildings six thousand feet up, in Kenya.

The Chairman himself visited Nairobi recently for the opening of the newly-built Ngong broadcasting station. Marconi broadcasting and communications equipment have been in operation there for many years. Nairobi is already linked with Jinja in Uganda and with Mombasa in Kenya and Dar-es-Salaam in Tanzania, by a Marconi-supplied VHF multi-channel radio system. Now a new expansion will complete a trunk ring between main centres. Marconi's have won a contract for this from the East African P. and T. Administration, worth £300,000.

FRONT COVER: B.B.C. Television featured the work of The Marconi Company, in the series *Made in Britain*. The film for this covered important aspects of our work and included an interview with our Managing Director, Mr. Telford. This shot shows B.B.C. cameraman Ted Bloomfield filming Bertram Mycock, B.B.C. Programme Editor, interviewing Mr. Telford. On the left is R. P. Raikes, Publicity Manager. Many people saw the B.B.C. film unit at work and other shots of this appear on page 14



Nobody believed we could do it . . .

If you are thinking that things couldn't be worse and you need a tonic, what about this?

'I want to say what faith we, in this Company, have in the future. There is an exciting time ahead, a time of risk-taking in a big way. I have tremendous faith not only in this Company, but in the electronics industry of this country', said Mr. Telford, speaking to a packed hall at the Apprentice Presentation Ceremony.

'We have got a tremendous fight on our hands to compete with the resources which the Americans, in particular, can throw in; but, we *can* compete.

'We are showing our faith in two ways: by enormous investment in research and development,

and more importantly, by investment in apprentices.

'We realize that many of our apprentices will not be fully effective, contributing members of the Company until well into the 1970s, but it is only by investing in men and research that we shall be able to produce things like this', and he pointed to the model of the Apollo aerial presented by the apprentices to the Guest of Honour. 'I take great pride in this Apollo project, and its forerunner the Seat, satellite communications station. Nobody believed that any company in this country could make a space station, let alone make it in a year. They didn't think we possessed the ability. But, by research we had already done, we were able to

LEFT: The Guest of Honour at the Apprentices' Prizegiving was G. S. Bosworth, the 'English Electric' Director of Education; he was presented with a model of the Apollo aerial by Marconi apprentices. Left to right: R. Telford, Managing Director of The Marconi Company, F. N. Sutherland, Chairman, G. S. Bosworth, E. R. L. Lewis, Controller of Education 'English Electric', F. R. J. Langridge, Education Officer of The Marconi Company, and J. E. H. Pease-Watkin, Manager of Central Personnel Services

RIGHT: The vote of thanks was proposed by Marconi apprentice R. H. Wade, seen here with Mr. Telford



prove that we could do it, and what is more prove, in terms of £-s-d, that we could do it cheaper than it could be done in America. In one year we produced three satellite ground tracking stations for the armed forces: we started with a clean sheet of paper, went through innumerable engineering stages, and finished with operational stations.

'We followed this by building the Apollo station for Ascension Island in something like nine months; and it went on the air several days before the completion date, which had been fixed in the early stages of the contract.

'We did this station for Cable and Wireless, and they insisted on placing a penalty contract on us because, of course, British industry is always late. But they forgot to place a penalty contract on the Americans who were putting the satellites into the air. So they ended up with a space station and no satellites for communication.

The Special Awards Winners



One other activity I would like to mention which is at the other end of our spectrum, microelectronics. Our ability to make our own microelectronic circuits was born of our own research. We are now in production, and we are building another completely new plant. Here again we are facing most bitter competition from the United States. But, if we have got the right people, and are training the right people for the future, we can succeed.'

In his report on training, J. F. H. Pease-Watkin, Manager, Personnel, said, 'There were 838 apprentices at Chelmsford and Basildon last year. Today the number is 993, and there are a further sixty at Gateshead, so that the Company total is now well over 1,000.'

'The past year has therefore been one of great expansion and activity.'

'You have seen the growth of the training facilities here. Similar expansion has taken place at

Basildon and there are now 170 training places in this centre.

'As well as growing in size the standard of the accommodation has also improved so that we are the proud possessors of a first-class centre. To handle the additional numbers some increase in staff has been essential, and again we have been fortunate in the number of good candidates. Sadly, Mr. Westlake died at the beginning of the year, and Mr. Whittaker, whom we shall badly miss, is to retire after thirty-one years' service. He has been in the training centre since its foundation in Broomfield Road, and has trained large numbers of boys in the arts of sheet metal work.'

Mr. Pease-Watkin said that there had been a number of changes to courses, particularly in block releases for craft and technician apprentices. The majority of craft apprentices now follow the instrument production rather than the mechanical, craft practice certificate course.

There are two further courses for student apprentices; computer science at Staffordshire, and business studies at Lanchester, colleges of technology. The second graduate project was in

BELOW: Frequency synthesizer sub-units being studied by student apprentice Alan Herriott, with his mother and father

BOTTOM: Explaining to his parents part of this year's Graduate Project is graduate apprentice R. Godbold





ABOVE: Some of the Company's mouldings are explained to visitors by Toolroom Foreman E. Parrish

LEFT: Work which apprentices learn in the training centre being shown to parents by M. Hume, left, and R. West

BELOW LEFT: Visitors being shown part of the Graduate Project by graduate apprentice D. Seddon

BELOW: Working a centre lathe in the training centre, as his mother and father watch, is Trevor Thomson

BELOW RIGHT: Many Marconi operators generously remained at their work for the interest of the visitors, one of them was D. Wager, seen operating a turret lathe



progress and the 'English Electric' manufacturing training centre had begun.

About 500 boys had been successful in examinations this year. Again, a number had transferred from craft to technician and student grades.

Marconi College had been attended by 700 students as against 540 last year. There were ten courses going on there at any one time. The Drawing Office School was now an Education responsibility. It had been necessary to expand it because of the need to train more people. Mr. Lightfoot had established a tradition of training of very high standard. The Education Department had also taken the training of operatives at Chelmsford under its wing. As many as 200 people, many new to industry, were following courses.

'This level of activity', said Mr. Pease-Watkin, 'could not be maintained without the assistance of many people and institutions. . . . We are very much aware of the help we receive and of the spirit of co-operation.'

BELOW: The Likely Lads. The two apprentices who made the Apollo model, L. Newman and A. J. Wager.





A 70-ton press being demonstrated to Pre-apprentice G. Ross and his parents by C. E. Beatwell

'Be prepared for change'

'We cannot resist change, we must in fact urge it along in order that we may be in front.

'We must not only be willing to accept change but we must be prepared for it', said Mr. G. S. Bosworth, Director of Personnel of the 'English Electric' Company, the Guest of Honour.

He saw the future of the young person entering industry today as an exciting prospect.

'Our civilization is now more complex and we need better education in order to be able to cope with it', he continued. 'Then we must have proper facilities for training in the techniques which are available to us.

'It is for this reason that 'English Electric' has over the years and throughout its subsidiary companies been a leader in providing facilities, particularly for its young people, to educate and train and now retrain themselves in mental and manual skills. This flexibility and adaptability is absolutely essential.

'The young person entering industry today', said Mr. Bosworth, 'will not retire until the next century; the job he will be doing when he retires in

all probability does not exist today. This is no cause for alarm or uncertainty, it is, I think, an exciting prospect for each of us for the future.'

He spoke of the rapid and increasing rate of change that had occurred since he was a student, with the emergence of radar, jet engines, nuclear energy, computers, mass communications and many other discoveries, culminating in the exploration of outer space. He said that learning at least something about all these things in order to carry out his daily work had proved exciting and interesting.

'Tremendous changes had taken place in the pattern of world trade as well', he said. 'Today, Britain's customers demanded up-to-date, reliable equipment, delivered on time and at a keen price, otherwise they would shop elsewhere.'

Mr. Bosworth, who is a member of the University Grants Committee and the Council for National Academic Awards, presented awards to twenty-four Marconi Apprentices. Christopher Evans, who gained a first-class degree in industrial engineering at Loughborough University this year, was the winner of two prizes, a £25 cheque for being the best student apprentice, and a £50 cheque, the Directors' Special Award, for being outstanding.

BOAC JET FLEET FITTED WITH DOPPLER

The entire BOAC jet fleet, including all the Boeing 707 aircraft, is now in the process of being fitted with Marconi Doppler navigators, type AD560. Another order for communication and navigation equipment for VC10s has been received.

SCAT MAN HONOURED

Congratulations to Alec Kravis, Manager, Administration and Technical Services, Baddow, on the award of the O.B.E. in the New Year's Honours.

Mr. Kravis was project Manager of the Scat programme when three satellite tracking stations were built for the Ministry of Aviation in the record time of one year. These stations have now been installed and will provide interference-free communications across the world.

Mr. Telford referred to this pioneering project when speaking to the apprentices. See page 2.

DOPPLER SALES PASS THE 200 MARK

After 1,000 miles of fault-free trial operation on South African Airways routes, the Marconi Doppler Navigation System, type AD560, has been chosen by South African Airways to equip their new fleet of Boeing 707s.

Over 200 AD560 systems have now been sold to international airlines, who have arranged to pool their spares holdings to provide a world-wide emergency replacement service.

LOGIC BY THE POUND— 'IT'S LOGIC THAT COUNTS'

All the first print order, 2,000, of the M.I. book *It's logic that counts* has been sold. A second edition has been printed and is available at £1 per copy.

This programmed learning book, written by M. J. Tant and C. Hooper, to provide training in counters, was introduced four months ago. So far, most of the sales have been in U.K., but substantial quantities have been ordered by M.I.'s Agents in U.S.A., Canada, Argentina, France and Italy.

MARCONI ELECTRONICS MANAGER, RESIDENT OF EUROCAE

At its Fourth General Assembly, the European Organization for Civil Aviation Electronics (EUROCAE) elected as its President for 1966-7 Dr. Bernard O'Kane, General Manager, Electronics, of The Marconi Company.

Marconi

news in brief

Dr. O'Kane, who was one of the architects of this organization, has also played a leading part in the Aviation Executive Committee of the Electronic Engineering Association, and was its Chairman from 1960 to 1963.

COMPUTER LIFTED THREE FLOORS AND IN BY THE WINDOW

This is how English Electric-Leo-Marconi installed a large KDF9 Computer in their London Bureau at Hartree House. This KDF9, together with all its peripheral equipment, is one of the largest installations in the country and will augment the LEO3 computer already in use at the bureau.

The new KDF9 has been installed to meet the increase during the past year of customers using the EELM Bureau Service in the South of England.

ANOTHER LONDON BOROUGH'S COMPUTER SERVICE

A second London computer centre has been set up for joint use by local authorities. Located in Hackney, the North-East London Computer Centre will service three large London boroughs, and its EELM LEO360 will deal with, among other things, the rating assessments for 242,000 ratepayers, and the payroll for the boroughs' 18,500 employees.

NEW ADVANCED BROADCASTING TRANSMITTER

A new transmitter which is expected to make a big impact on export markets has been developed by Broadcasting Division.

This 10 kW model is smaller and lighter than previous ones, and its price will be lower. The use of solid-state techniques improves its reliability and stability, and it is capable of operating in extremes of temperature which is important when siting a station to achieve the best propagation.

The transmitter is still in the prototype state but when production starts Marconi's foresee a good export trade for their latest model.

A STRONGER VOICE OF KENYA



PRESIDENT KENYATTA will today inaugurate the most powerful medium-wave transmitter in East Africa, when he opens the new Voice of Kenya broadcasting station at Ngong.

As a result the Voice of Kenya will be heard throughout Kenya and in much of East and Central Africa as well.

The wider voice is especially important now that the Voice of Kenya has started its vernacular service which brings it into touch, through the use of tribal languages, with all the people in Kenya.

The articles and pictures in the following pages illustrate the scope and organization of the new station.

New transmitters to reach every corner

IN the draft plan for V.O.K.'s improvements to transmission to be included in the Government's five-year Development Plan "Improvement to Medium Wave Transmitters" would be found the new Ngong station.

It is the most powerful medium-wave transmitter in East Africa, and its range will cover the whole of Kenya and much of East and Central Africa. It will be the first station in Kenya to be equipped with a full range of transmitters for the various languages spoken in the country, and to be able to broadcast in both English and Kiswahili.

The new station will be a major step forward in the development of the Voice of Kenya, and will enable the station to reach every corner of the country.



Below: An aerial view of the new station showing the three masts and the main building. The station is situated on a hillside overlooking the Ngong area.



Below: The control room of the new station, showing the various pieces of equipment used for broadcasting.

New VOK transmitter opened at Ngong

THE new radio transmitter opened at Ngong yesterday (March 7), when President Kenyatta inaugurated the station by making the first broadcast.

The station is the most powerful medium-wave transmitter in East Africa, and its range will cover the whole of Kenya and much of East and Central Africa.



President Kenyatta made a speech to inaugurate the new station.

Below: President Kenyatta speaking into a microphone during the opening ceremony.

The Voice of Kenya

In eight months, Marconi's installed and tested all the equipment for the new and most powerful medium-wave broadcasting station in East Africa at Ngong near Nairobi.

The station was officially handed over by the Chairman of the Marconi Company, Mr. F. N. Sutherland, and it was opened by President Kenyatta of Kenya. It is now transmitting three

separate 'Voice of Kenya' programmes with a considerable increase in coverage.

Mr. Sutherland made a special trip to Nairobi for the opening of the station, and an impression of the great welcome he received in Kenya can be gained from the press cuttings reproduced on these pages. The contract for the station was placed by the Government of Kenya about fifteen months ago,

Mrs. M^r

MOST E.A.A.

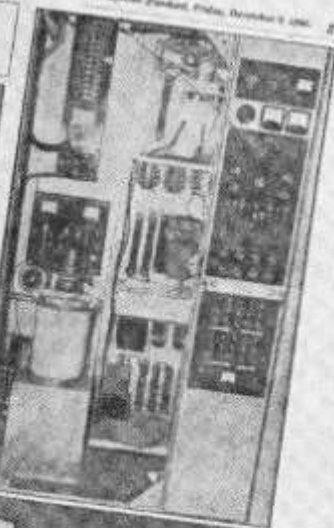
Mwendwa
praises
EAP and

**'LAW NOT
MADE
IN JEST'**

[illegible][illegible]

RHODESIA
FROM PAGE

Inside the Ngong station



THE MOST modern equipment is being used at the new station.

This picture top left shows the ultrasonic equipment.

Below center, the Newport Company installation engineer, Mr. H. Hargrave, explains the controls of one of the two engines.

On the left, the American Company manufacturing equipment in Rome. At the top, a picture of the new equipment of the company.

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Mr. A. Maurice Company
Installation Engineer, ME
65, D. Hargrave Road,
who arrived at Kani on 22
District in April.
A. Hargrave

A. Norrén—mod. 27, age 40, married, 10 children, in Sweden, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617,

Mr. O. L. Rowland, a
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in Kansas City.

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...some specimens
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characteristic of the
in two lines arranged
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are also in.



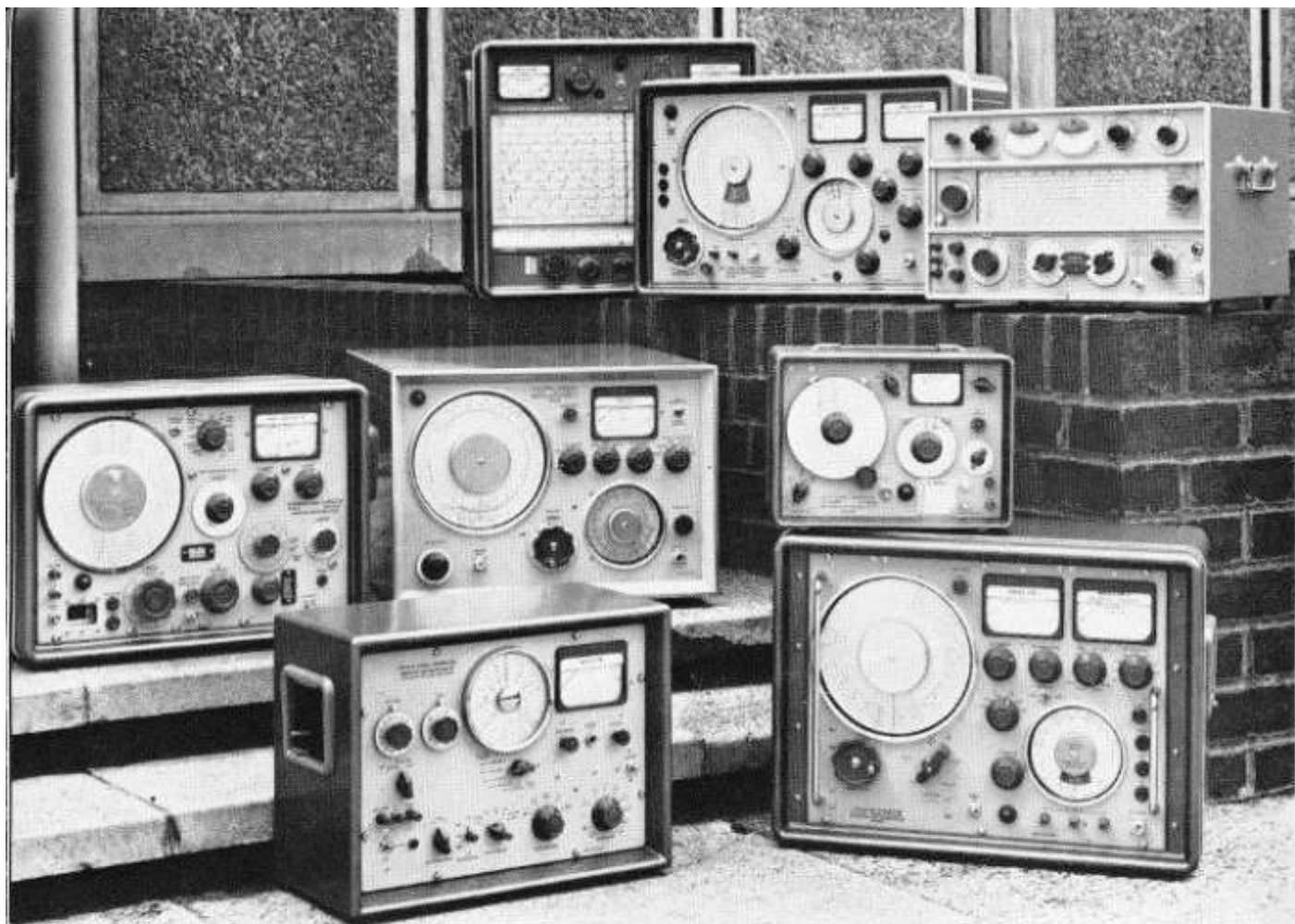
10



and the installation includes four 50 kW transmitters, aerial and masts, switchgear, power supplies and links between the station and broadcasting studios in Nairobi. Two of the transmitters have been connected in parallel to give 100 kW, and the other two can also be connected to double the power of output.

Mr. Sutherland at Ngong broadcasting station near Nairobi with G. Dyson, Marconi Technical Representative in East Africa, right, and M. D. Hargrave-Pawson, Marconi Installation Engineer





Our Bread and Butter

The hard core of M.I.'s success in the instrument industry has been its signal generators. Here are a range of eight signal generators in current production, providing a.m., f.m., and pulse modulated outputs over a frequency range of 30 kc/s to 1.25 Gc/s



Twenty-eight up

The twenty-eighth country to buy Marconi Self-Tuning (MST) Communications Transmitters and Receivers is Poland. The Polish Ministry of Communications has ordered MST equipment for a new merchant marine radio station near Gdansk. The system will consist of four 30 kW transmitters and five dual receivers, together with ancillary equipment. The transmitters will actually operate by remote control from the receiving station several miles away. Six Polish engineers will visit the Marconi College for training.

The Secretary's Department is acting as consultant on company, secretarial and legal matters to NADGECO Limited, formed by an international consortium of companies, including Marconi, as main contractors for NATO's NADGE project. LEFT: M. Henri Buttin, Assistant Secretary of NADGECO, left, with S. E. Lewis, Secretary of The Marconi Company, right, and B. H. Saunders, Assistant Secretary, during recent discussions

OVERSEAS IN A U.K. HAT

Dr. Stephen Forte of Microelectronics Division was selected by SHAPE, last month, to lecture on the state of the microelectronics art in the U.K. to Canadian and American audiences.

In his paper, 'Microelectronics in Aerospace Equipment', he described our latest airborne computer, our guided weapons work, and Space Communications Division's ground tracking station.

He spoke at two conferences: the first in the National Gallery at Ottawa, and the second in the main auditorium of the State Department, Washington—where President Kennedy held his press conferences.

Dr. Forte is Applications Manager of Marconi's Microelectronics Division, Witham. You will see on this page a photograph of him in the U.S.A.—without a hat.



Lecturing for SHAPE in the U.S.A. Dr. S. Forte, Applications Manager, Microelectronics Division, Witham, speaking in the auditorium of the State Department in Washington. See Overseas in a U.K. hat



*A. G. Wray,
M.I. Chief Engineer*

M.I. Chief engineer

A. G. Wray has been appointed Chief Engineer of M.I. Graduating from Emmanuel College, Cambridge, he joined M.I. in 1944, and has successively been Company Physicist (1952), Deputy Chief Engineer (1960) and Engineering Manager (1963). He has been concerned with atomic power station instrumentation, and the design of a wide range of multi-channel microwave test equipment.

A former chairman of St. Albans Rural District Council, he is a member of various committees of the British Standards Institution dealing with electronic measuring techniques. He is also a member of the Programme and Papers Committee of the Institution of Electronic and Radio Engineers.

mi

Wider use of the 'mi' symbol is giving a more unified and modern appearance to our stationery, literature, advertising and vehicles.

The new letterheadings, designed by W. R. Royle and Son Ltd., who were briefed by M.I. Publicity Manager C. Woodley, were awarded the first place in the die-stamping section of the Business Letter-heading Competition organized by the British Stationery Council and open to all printers in Britain.





Lady Nelson admires the work of 'English Electric' ladies during her November visit to Thorpe Hall. On the right, from Marconi, are Mrs. S. Lincoln (Waterhouse Lane) and Mrs. A. P. Childs (ETI Supplies, New Street). The ladies' efforts were a great success at Christmas bazaars in the Tendring area

FOR HALF A SIXPENCE

Behind the famous coastline of north-east Essex, with its renowned holiday resorts, lies the quiet, gentle countryside of the Tendring Hundred. Its undulating farmland, broken by tidal creeks and inlets, has both beauty and an atmosphere of peace. There is silence, disturbed only by the cry of the gulls and the throb of a distant tractor.

Four miles from the coast, surrounded by Tendring Hundred country, is Thorpe Hall, a handsome, eighteenth-century mansion with fourteen acres of magnificent grounds.

The Hall was obtained in 1952 by the late Lord Nelson, as The Lady Nelson Convalescent Home, for employees of the 'English Electric' group of companies needing to recuperate after illness.

Maintained by a staff of fourteen under the Matron, Miss Margaret Miles, the Hall's smooth running is immediately apparent to the visitor. Inside there is an air of warmth, graciousness, comfort and, overall, the sense of peace.

The lovely rooms have fine views, are delightfully furnished and gay with flowers; they include a bedroom for every guest, and dining, games, billiard, club and writing-rooms.



Lady Nelson talks with members of the Thorpe Hall staff, including, second from the right, Mrs. Mead, senior cook, and on Lady Nelson's left, Dr. Routledge, 'English Electric' Group Chief Medical Officer. On Dr. Routledge's left is Mrs. Bugg, Thorpe Hall's housekeeper

People are not 'organized' at Thorpe Hall, the idea is to take it easy. For outdoor exercise, bicycles are provided, but there can be no pleasanter way of taking the air than by strolling through the impeccably kept gardens and round the great lake.

In charge of the grounds is Mr. Ewen Macdonald. From his nine greenhouses and kitchen garden he provides all the fruit, vegetables and flowers for the Hall through the year. His particular pride is in his vines, peaches and nectarines.

On your stroll you will pass many different varieties of trees, rare species from other lands, and tall beeches, chestnuts, oaks and conifers. These and the flowers ring the changes of the year. In spring the daffodils and narcissi grow wild by the paths and in the coppices, summer is made heady with the scent of the five hundred roses in the sunken garden. Cypress, eucalyptus, rhododendrons and azaleas all lend their aid to the seasons' vistas.

Many kinds of duck have made the lake their home, beneath its surface huge, brilliant, goldfish flash and dart in the clear water.

Lady Nelson has the interests of the Hall close to her heart, and pays frequent informal visits. As our pictures show, these are indeed happy occasions.

In 1966 thirty-nine Marconi people spent a fortnight convalescing at the Hall.

Are you a contributor to the Thorpe Hall Fund? All you need to do is to contact the Welfare Department at New Street (Int. 337: Ext. 48). Contribute threepence a week, or half a sixpence, and, should you be ill a memorable holiday to health could be yours too.



One of the leading members of the Gateshead MASC committee, Bridget McKinney, centre, also helps with the children's outing, plans for which are going ahead. With her here are two more helpers, Mrs. Joyce Wales, right, a Magazine Correspondent, and Pauline Sievewright

How's this for luck?

William Morris of High Power Communications Design Office bought two tickets for the MASC Christmas Draw and won three prizes, a sheet prize and two lucky dips. He took home six bottles of wine, a box of liqueur chocolates and half a bottle of whisky. What Christmas Spirit!

The first person you meet inside the front door at Gateshead is Mrs. Elizabeth Thompson. She is the receptionist. She also looks after catalogues for Materials Control



When telephonist Paula Jones became Mrs. Steve Carey at All Saints Church, Maldon, friends at Beehive Lane presented her with an electric clock to mark the occasion [Karl Richter]



MADE IN BRITAIN

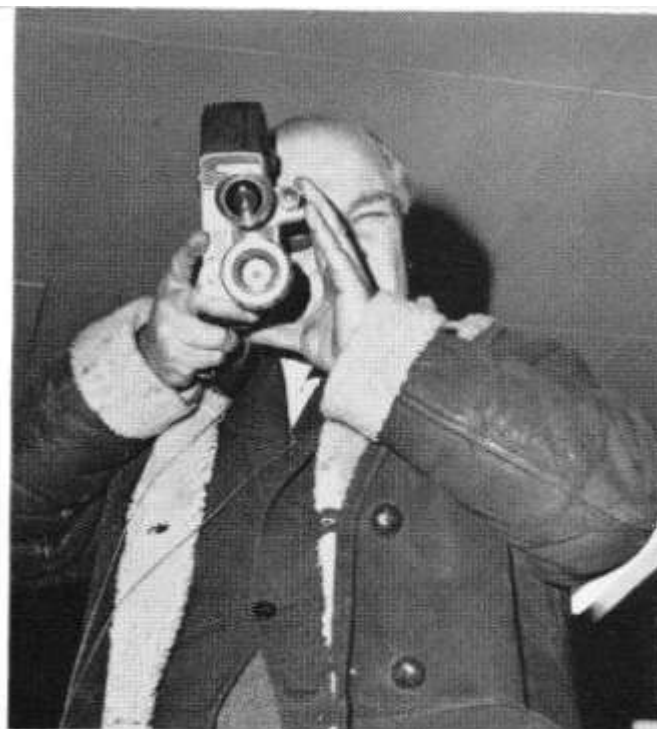
Marconi's featured by B.B.C.

The B.B.C. film unit came to Marconi's to shoot our products being made in works and laboratories. The result was a feature which was shown in the television series *Made in Britain*.

In this programme, the Editor, Bertram Mycock, spoke of Marconi's developments in radar and of our contribution to safety in civil aviation. 'In defence, radar is no less important', he said. 'Much of the work Marconi's do is secret. Less secret is radar in space research and satellite communications. The Apollo project on Ascension Island is a notable example', he continued. '... It will be one of the links by which the American astronauts will speak to their controllers while travelling all the way to the moon and back. In projects like this Britain and America work in harmony, but in the hard world of business and export there is no sentiment. Industrialists in Britain are aware of the huge resources deployed by their American rivals. I spoke about this with Marconi's Managing Director, Mr. Bob Telford'.

'Mr. Telford, your most serious competitor is the United States, but are you competing on equal terms?'

'The American Government are spending a colossal amount of money on electronics research and development—in fact, \$2,300,000,000 were spent in 1965. This is what we've got to compete with, because research and development is our life-blood.'



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'Do you want the British Government to give you similar help?'

'In the circumstances we can exist only if we get governmental backing for research and development.'

'How much are you spending, yourselves, in this field?'

'As a company, our total spend is seven million pounds.'

'What are the chances of the emerging countries eventually being able to compete with you?'

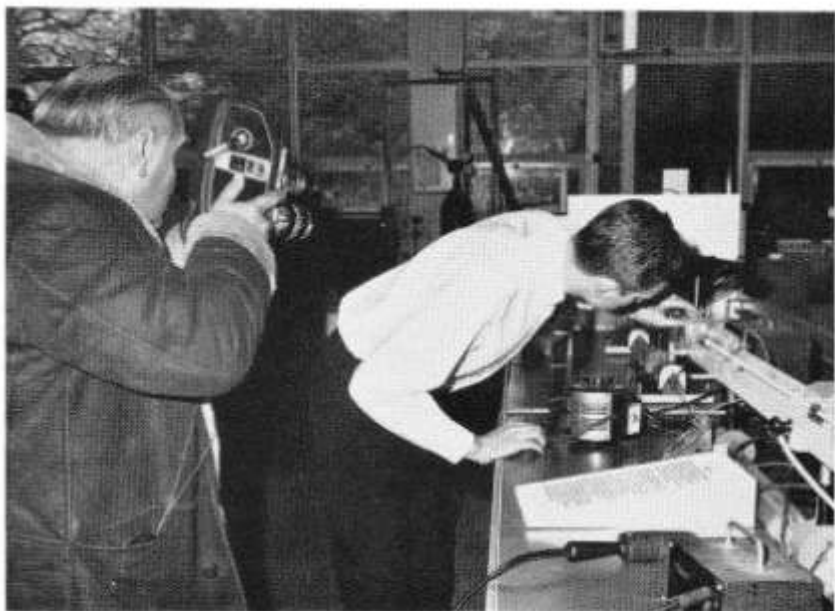
'Undoubtedly they will compete in the simpler forms of electronics. But, we've got to keep ahead. Again, I must stress the necessity of continual spend



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on research, and on the development of the technology of electronics. If we can do this we shall not be afraid of any competition.'

1. Marconi people come under the camera as Ted Bloomfield, B.B.C. cameraman for the *Made in Britain* film, shoots Marconi's at work.

2. Marconi MST communications equipment, the most up-to-date of its kind in the world, being filmed at New Street.

3. Radar displays at Baddow demonstrated by Peter Jefferies. The Myriad computers, of which he is Maintenance and Operating Section Leader, are coupled to this system, which predicts aircraft flight paths.

4. Television cameras in operation as the B.B.C. Unit films a sequence at the Waterhouse Lane studios.

5. Filming a laser used in holography equipment, which can project a three-dimensional image from a two-dimensional negative.

6. The very high-quality black and white, Mark V television camera has been sold throughout the world. This one, filmed at Waterhouse Lane, is linked with an outside broadcast vehicle.

7. Many 'spectaculars', such as Winter Olympics and General Elections, have been covered by Marconi Outside Broadcast units. This time it's Marconi's turn, as the B.B.C. camera films our staff at work in the latest monochrome/colour O.B. vehicle.

Crete—Island of hospitality

by Douglas Kennett of Radio Communications Division

'Can you ride a mule?' A strange question to be asked during technical discussions with a client, but a pertinent one when asked by Mr. G. Desipriss, Head of the Construction Department of the Hellenic Telecommunications Organization.

We were in Athens, and were departing the next day for Crete, to select a site for the Crete terminal of the Cyprus-Crete Tropospheric Scatter Radio System.

Recalling previous surveys in East Africa, where boulders had stopped the Land-Rover, and a long journey on foot had resulted, I was prepared to try a mule, despite my only previous experience of such transport being the donkeys at Margate.

The slower pace of life on the island of Crete,

compared with the scurry of Athens, is apparent as soon as one alights from the plane at Heraklion. It was early evening and the glorious sunset and complete quiet had a profoundly relaxing effect, and relax one must if the charm of this island is to be appreciated.

I was due to meet an O.T.E. engineer the next morning at Heraklion, and as I awaited his arrival from another part of the island I looked round the ancient Minoan Palace of Knossos, just south of the town. This was excavated by the British School of Archaeology, and, though some 4,000 years old, was fitted with running water through clay pipes, had a water-flushed sanitation system that discharged into the sea 5 km. away, and was so skilfully

Douglas Kennett, astride his mountain pony, and Mr. Andreas Georgopoulos, about to set off from the village of Xeros to view a possible site. In the background, behind the pony man, the rain-sodden raisin crop dries in the sun





The port of Sitia, where Marconi engineers will live with their Greek colleagues on the Cyprus-Crete Multi-Channel Tropospheric Scatter Radio System

designed that there was good lighting and ventilation throughout its several storeys. The red, and blue pigments used in the decoration and murals are still maintaining their colours today in the Heraklion Museum.

The small town of Sitia was to be the base for our survey, and on the way there by car the driver stopped at the monastery of Selirari to light a candle and kiss the figures inside to secure a safe journey. I noticed that one of my Greek friends lit a candle on my behalf.

Eight years ago a driver did not stop here and a short distance along the road his front-wheel bearing seized up and he was killed in the resultant crash.

Further on our way we paused to look at the Mines Beach Hotel at Nicolaos, a new tourist attraction of a complex of cottages in island style, gleaming white against the reddish, rocky surroundings. Furnished in traditional Greek style, with colourful Cretan rugs and pottery, the whole aspect overlooks the blue Mediterranean. Quiet and restful, it is an ideal place for a peaceful sun-bathing and water-skiing holiday.

Transportation in Crete is comfortable but slow. Cretan roads, in general, range from good two lane

asphalt highways to dirt tracks and wagon roads. All of these are narrow and winding, as they thread their way round the bays and over the hills.

After Nicolaos we left the tarmac for a dirt road that was being reconstructed prior to asphaltting.

On one occasion we had a rapid close-up of a stationary bulldozer one side and a sheer drop of 1,500 ft. on the other, but we reached Sitia safely.

Early next day we set out by car for the village of Xerolimni, where a lively old man of eighty-six provided us with mules and guides and we set off on the two hour trek to one of the possible sites.

By the time we had carried out the various measurements and returned to the village, it was about 6 p.m. We were very hungry, having had nothing to eat since an early breakfast of coffee, bread and honey.

The old man insisted that we join him in a glass of 'raki', a highly potent distillate made from the grapes after the juice has been crushed out. I was apprehensive of the effects of such a drink on an empty stomach but it was impossible to refuse. However, I need not have worried. To the toast of 'Yasu' I found, from the first sip, that its effect was warm and soothing, like the island it came from.



Inside the 4,000-year-old Palace of Knossos, Mr. George Desipriss, Head of the Construction Department of Hellenic Telecommunications Organization, left, and Mr. Andreas Georgopoulos, Head of Planning Department, H.T.O.

Much to my surprise we were then invited into another cottage, where we were regaled with a meal of boiled eggs, eaten in the hand, brown bread, goat-milk cheese and curdled goat's milk, eaten with a fork from a communal plate, the meal being completed by a superb local red wine.

The warmth and friendship of these homely mountain people made my evening one I shall never forget. The night was rounded off, on our return to Sitia, by a cheerful party. Traditional Greek songs

Xeros, this village is near to one of the possible sites for the Crete terminal of the System



by a local singer with a bouzouki, concluded with one of welcome and cries of 'Yasu Douglas'.

Next day another possible site was approached from the village of Xeros. It was a hive of industry when we arrived, unexpected rain had spoilt the raisins that had been left drying in the sun, and the villagers were busy trying to dry the crop. The dampness changes the tint of brown and greatly reduces the market price. However, we managed to find mules, small horses, and guides, and set off on the one-and-a-half-hour trek into the mountains.

The sun was setting when we completed the measurements, and by the time we had scrambled down the steep, rocky, outcrops and mounted the horses the moon was up. It was a memorable journey back to the village. The full moon slowly rose in a starry sky, progressively shortening the long shadows cast by the surrounding mountains.

One thought of the ancient history of Crete and mused that three or four thousand years ago the Minoans had used the same means of transport and enjoyed these same magnificent views.

The silence was broken by the sound of hooves on stone, and of loose stones being sent tumbling down the hillside, with the occasional tinkling of a bell tied round the neck of a mountain goat.

Our Greek friends started singing traditional songs and it was a gay, if tired, party that eventually clip-clopped back into the village that night.

The flickering oil lamps in the cottages lit up the faces of families sitting around their tables after their evening meal. This tranquil scene, symbolic of Crete, remains my lasting memory of this lovely island and its charming people.

Calling D.E.M.S. and M.M.R.A. O.'s

Strenuous efforts are being made to trace the present whereabouts of Officers who served with the Defensively Equipped Merchant Ships or the Military Maritime Royal Artillery 1939-45, with a view to holding a reunion in April 1967. Will anyone who has not been contacted please write to Capt. C. V. Marsden, R.N., The Martyns, Bishopsteignton, S. Devon, who is compiling a register.



'Who is enjoying their tea?' 360 children sat down at the M.I. party for the four-to-nine-year-olds

'Can you hear me, Mum?'

Imagine three hundred and sixty children with forty helpers all lustily singing 'Yellow Submarine' at the tops of their voices after attacking with considerable energy 1,500 chicken rolls, ham rolls and cakes, eight gallons of ice cream and 600 bottles of lemonade. It was, of course, the M.I. Social and Sports Club party for children between the ages of four and nine, held in the St. Albans canteen.

The canteen is being used more than ever this year, so the party was held on the last Saturday in November but although it came early the party was a great success.

Throughout the afternoon clowns Arthur Adolph, Sid Beck and Bill Walker kept things swinging along with the help of the seven girl Accordionaires. The children did full justice to the sumptuous tea which had been prepared by Harold Squires, Canteen Manager, and his band of helpers. Then Norman White, chairman of M.I.C.E., showed some films and proved that Donald Duck and other old

favourites still had the power to 'roll 'em in the aisles'.

The children, between making sure that uncles Arthur and Sid did not touch uncle Bill's cake—a tremendous cardboard affair with real icing presented by a local baker—sang with gusto. A favourite being 'Old McDonald's Farm' with animal prompt cards drawn by David Ankerman.

At 5.30 p.m., amid great cheering, Father Christmas arrived. At the last minute Jon Ebbs couldn't make it so Reg Collins gallantly stepped into the red breeches and handed out the gifts. There were different presents for all age groups from tea sets for four-year-old girls, to magic sets for nine-year-old boys.

And then they trickled away leaving the canteen so quiet.

Sid Beck, secretary of the Sports Club, would like to thank all of the helpers and especially the canteen staff, for making it such a super party.



Radar engineer Roger Tew and his bride Miss Jeanne Butler, centre, after their wedding in Akrotire, Cyprus. Signwriter Ron Heath, right, gave the bride away and radar engineer John Wilson was best man. See Cyprus Wedding

Dudley White at Labour Party Conference

At the Labour Party Conference at Brighton in September, Dudley White, technical author of Central Division, was one of the delegates, representing his local organization, the Harwich Constituency Party.

Dudley was selected by the standing orders committee to second one of the main resolutions, that in favour of the Prices and Incomes Policy.

He is seen on the rostrum, with the Prime Minister and the Chancellor of the Exchequer on the platform behind.



CYPRUS WEDDING

While working in Cyprus for the Company, members of Field Services, Radar Division, took leading parts in a wedding held at the Church of St. Paul the Apostle, Akrotire. The bride, Miss Jeanne Butler, who wore a dress and full length matching coat of white lace and carried a bouquet of pink carnations, was given away by Ron Heath, Bridegroom, Roger Tew, was for some years at Basildon. His best man was John Wilson.

New arrival

Congratulations to Mr. and Mrs. Vic Barker on the birth of their third daughter, Helen Mary. Vic is at Writtle in the Teleprinter Group of Lines Communications Division.

HACKBRIDGE HIGHLIGHTS

Greetings

Very best wishes for 1967 to all Social Club members and friends from Chairman R. G. Eaton and the Committee.

Slide lectures

In the present series of slide lectures at the Club Room, organized by Walter Cook, the date to remember is 10 February; this talk and display of slides is by Ernest Heimann, F.I.B.P., F.R.P.S., and is delivered by Walter Cook. The title is 'Table Top Again', and gives up-to-date examples and details.

Elizabeth Netley receiving her many gifts from the hands of Ray Allen, watched by (left) Ann Forsdick, Sarah Longueville, Doris Halford, John Netley and 'Jock' Urquhart (John Buckland)





IN MICROELECTRONIC CIRCLES

Two hundred and fifty Microelectronics people were drawn to the magnetic whirl of the Divisional Party at the Beehive Lane Club-house. This was the second dance, now voted an annual event. TOP LEFT: Some of the fun: ladies in circuit about "musical" chairs. BOTTOM LEFT: Pat and Rosemary Roper, Angela and John Denney and Mrs. Joan Baker. TOP RIGHT: Mick Denham, right, Roy Bezan and Joan Kendall, Personnel Officer, who with Derek Brumby of Quality Control, organized the party. BOTTOM RIGHT: Mrs. Porteous, S. J. C. Brown, Divisional Accountant, Mrs. Brown, M. D. E. Porteous, Operations Manager. There was dancing to the Tony Gilbey Trio, and the Freekind Folk Group entertained [Brian Preston]

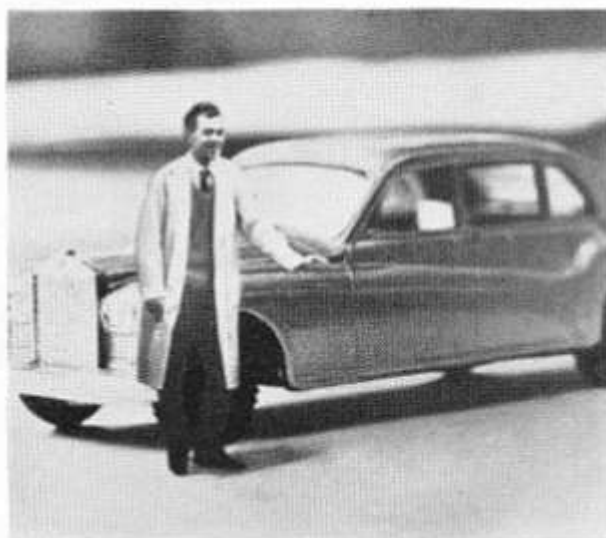
Leave taking

At a recent hilarious farewell to Elizabeth Netley of Accounts Dept., to prepare for the arrival of the Stork in February, Ray Allen, in charge of the accounts section, made the presentation of the gifts from many friends, together with some witty remarks which helped to relieve the occasion of many of the pangs of leavetaking.

Expectant father, John Netley, Order Control Department, was in close attendance.

A wonderful illusion

How would you like a Rolls Royce as a wedding present? David Brenner's friends in Microelectronics, Witham, gave him just that. Unfortunately the car was a toy—the illusion was created by M. Rignall





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INTRODUCING THE NEW



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CAMERAS

Special trains from Liverpool Street Station brought buyers of the television world to a four-day exhibition at Waterhouse Lane in December, when Marconi's latest cameras were introduced.

The guests, who included senior television engineers from the B.B.C., I.T.A. and overseas, together with members of the British technical press, saw the new Mark VI black-and-white camera and a further development of the 1965 Mark VII colour camera, sales and reservations of which have already topped two hundred.

The Mark VI is basically designed for tele-cine operation. By using additional units and a change of tube it becomes exceptionally versatile and suitable for all types of application.

Live demonstrations showed the extreme sensitivity of the Mark VII, which ensures perfect colour reproduction, even in the light levels of a black-and-white studio. Guests were also able to appreciate the outstanding depth and sparkle of the picture.

Before the first day of the Exhibition was over, Broadcasting Division's Manager, Tom Mayer, was able to announce the first sales success of the

Mark VI—an order for six of these cameras from Ulster Television, users of Marconi equipment since their inauguration in 1959.

On the Wednesday and Thursday evenings of the Exhibition over five hundred Marconi people and their guests saw the equipment that they had helped to make and market.

1. Deputy Studio Engineering Manager, Tony Heightman, 'chatting up the ladies' models Beryl Groome and Penny Riley on the set of the colour camera demonstration

2. Visitors on Wednesday evening included John Capers, Development Engineer, Derek Norman and Jack Coombes both of Forward Planning

3. Cyril Teed, leading member of the Broadcasting Sales Engineering team who has travelled extensively in the U.S.A. and other countries, looking on as his wife 'tries out' the Mark V camera

4. At the control desk of the colour camera are Pedro Martinez, Sales Engineer, and George Cooper, Section Chief, Camera Group B

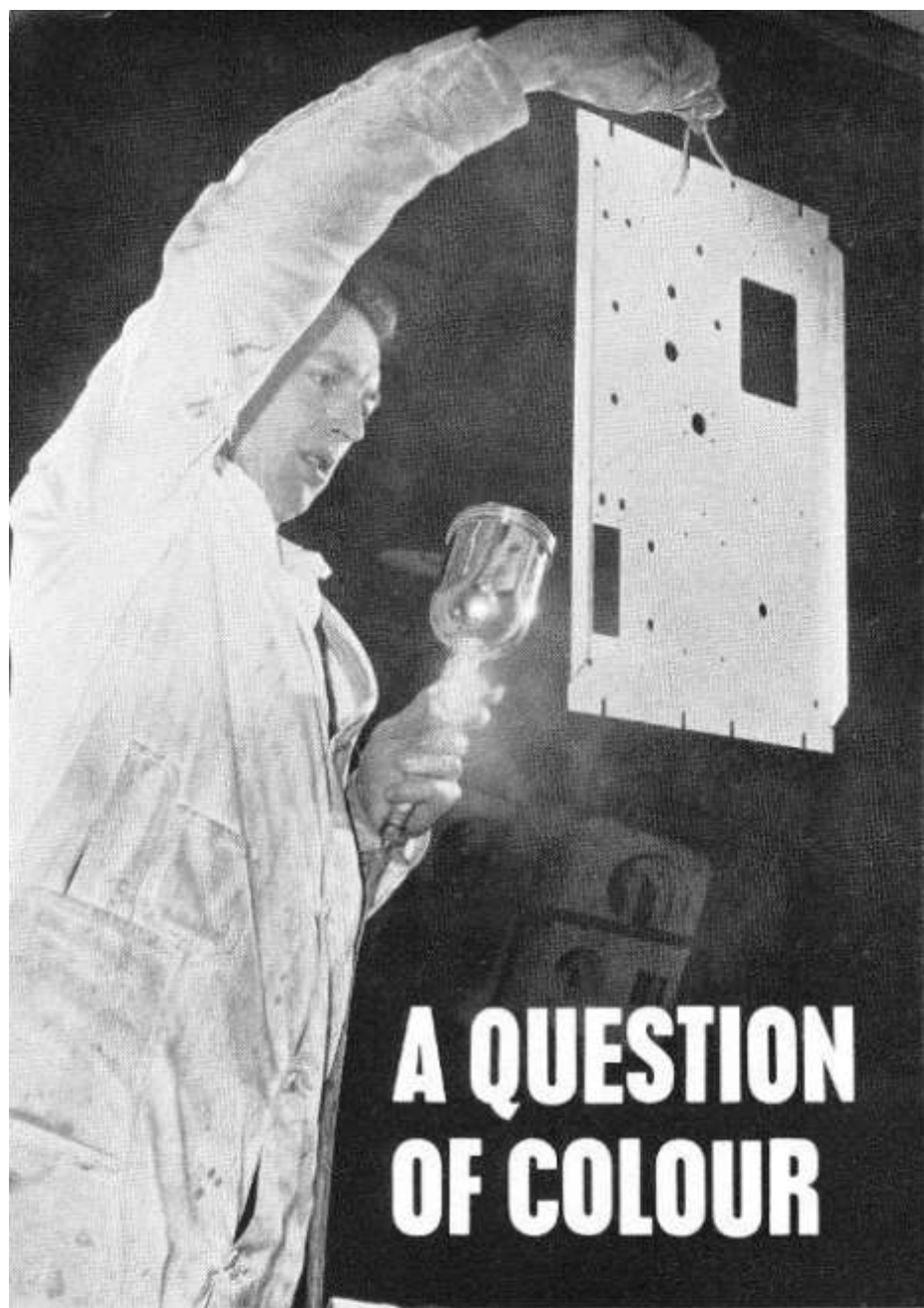
5. Looking over the shoulders of two enthusiastic visitors at the Mark VI camera, which his group designed, is Don Pay, Group Leader, Camera Group A

6. Looking down on to the studio from the control room are Eric Fewell, Chief of Forward Planning, and his wife

7. Looking on whilst his wife looks through the microscope at a microelectronics display is Roy Neville from Works Production Engineers

8. In the audience of the colour demonstration are Sam Bradley, Bunny Linge and Len Owers, all of Section 15

9. Among other visitors to the O.B. Van were Tony Condon from T.I.G., George Andrews of Works Inspection, and Owen Diplock of the Technical Demonstration Unit



A QUESTION OF COLOUR

What colour should an electronic instrument be? Pink panels with scarlet cases, variations of blues or greens? The majority of M.I. instruments are distinctive greys. But there are exceptions—special contract equipment made to the colour required by the customer.

Choosing a colour and finish for scientific equipment is not at all simple, for the colour or combinations of colour must be suitable for its place of use, be it laboratory, works, or in the open air. The finish must be easy to keep clean and there should be sufficient contrast between panel and lettering to make any marking clearly readable. From the sales point of view the colour of the equipment must also make it look like a precision instrument. Colour and finish are the work of the Spray Shop; it is here that cases and panels get their good looks.

When parts are received in the Spray Shop they are accompanied by drawings, and Frank Mullen, foreman, checks colour and target time, and the parts commence the painstaking process found through the years to be the most suitable.



ABOVE: 'These reactor screening cans will require masking', Frank Mullen, Spray-Shop Foreman, and Cyril Kerrison discuss the next job

LEFT: A finishing coat being sprayed on a new style TF791 panel by Mick Stratton. Gloss and colour are very closely checked by Quality Control

RIGHT: So that a very smooth finish can be obtained the undercoat is rubbed down with fine carbon paper. Bill Penny and Bert Coleman are experts at this

BELOW: 'Entry to authorized personnel only.' Spraying the final coat on a batch of TF995 panels are Sam Jones, Mick Stratton, Jim Stokes and Charlie Lawrence, leading hand



Many parts require masking before the etching primer is applied, then comes a primer undercoat, a spell in one of the huge ovens, rubbing down to a smooth surface, filling any pin holes, inspection, and back to one of the spray booths for its final coat of stoving enamel. Application of the spray, by the way, is not on a 'that-looks-nice' basis but by a measured even spray of a quantity of paint applied for a set time. The curtain of water at the back of each spray booth always attracts attention, the purpose of this circulating water being to carry away the paint fumes.

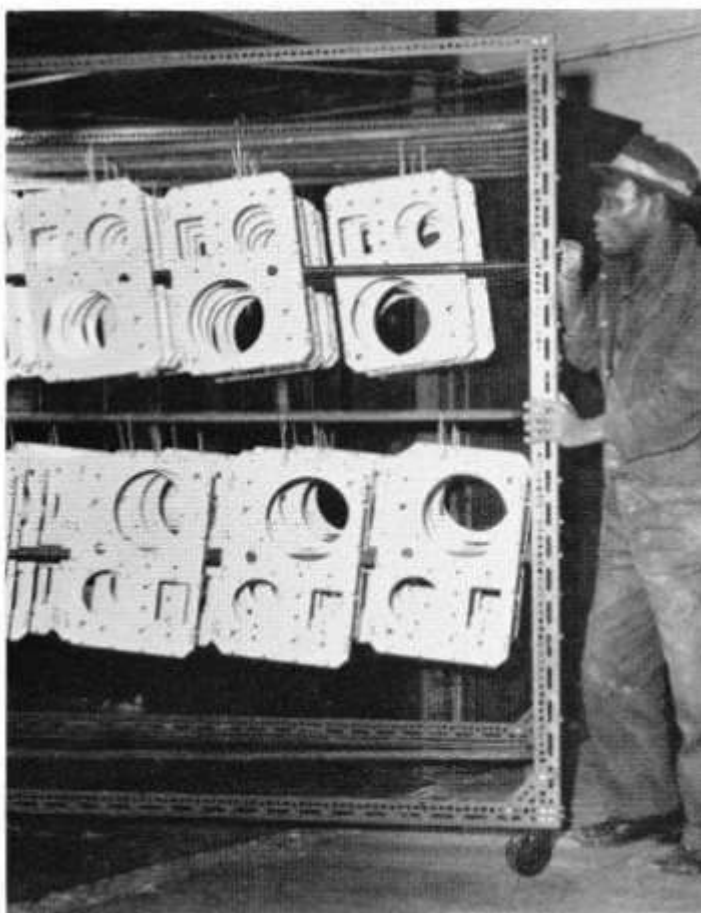
After more stoving in one of the great ovens and careful inspection, the cases, panels and other sprayed parts are now ready to give users of M.I. equipment years of hard wear under all kinds of conditions.



ABOVE: Tony Palmer of Spray shop, masking a strip on the insides of parts so that earthing connections can be made. Tony paints in his spare time, and two pictures of his are on the wall



BELOW: Sam Jones guides a full rack of TF1060/3 front panels into one of the ovens for their thirty-minute stoving at 250° F





An unusual picture of British World Champions Bill and Bobbie Irvine, who are normally seen in formal dress while dancing on television. Here they are arriving at the MASC, Beehive Lane, to give a demonstration of Ballroom and Latin-American dancing

MASC HIGHLIGHTS

What a year for entertainment—1966 was indeed a star-studded year at the MASC, Beehive Lane, with, among others, Comedian David Nixon, Television Personalities Jeanie Stevens and Tony Hillman, and Professional Dancing Champions Bill and Bobbie Irvine. Now plans are afoot for making 1967 an equally good year.

Already arranged for February 23 is a World Professional Snooker Championship Match between World Open Champion, Fred Davis, who defends his title against World Record Holder, Rex Williams.

During last year the Sunday Continental Evenings were voted such a success that seven more are planned for the early part of the new year, and another success hoping to be repeated is the professional dancing demonstration.

There will also be the usual dances but, for those who prefer to trip the light fantastic with a difference, Olde Tyme Dances are being arranged for the autumn. Any other helpful suggestions will be welcomed by Bob Adams, Club Secretary.

Where's the wife? Husband has found another bundle of charm—Jeanie Stevens, no less, pictured on Gala Night





*The grace of ballroom dancing shown by Bill and Bobbie Irvine during their visit to the Beehive Lane Social Club
Guests enjoy the dancing*

Top-of-the-Bill, David Nixon and Com-père Tony Hillman entertaining guests on Gala Night at the MASC, Beehive Lane



WITH BEST WISHES...



Retiring after twenty-seven years with the Company, a Black & Decker drill was the parting gift for Edward Lavery from his friends, and was presented by C. A. Nash, Foreman, Electrical Projects Group



LEFT: A gold watch was presented by Dr. T. W. Straker, General Manager, Telecommunications, to his secretary, Mary Sorrell, from her friends before she left the Company after nineteen years. CENTRE: Friends at Stevenage gave Mary Whitehead a pair of blankets before her wedding and the presentation was made on their behalf by F. Butler, Chief of Mechanical Inspection. RIGHT: Best wishes from M.I. Special Products when Veronica Jackson was married. They gave her an electric dryer, which was presented by J. Cooper, Manager of the department



LEFT: Retiring after twenty-six years with the Company, the last six of which were spent making up proto-type packs, Bill Hayden was presented with a cheque from his friends by R. W. Theobald, Chief of Package Design Section, Works Engineering Division. RIGHT: Twenty-one today so, on behalf of his colleagues, Geoff Harman, M.I. Apprentice, was presented with a pewter mug by D. Whitelock, Assembly Test Assistant Production Manager. Geoff currently writes the apprentice paragraphs for this magazine



LEFT: The love-bug bites again in R. & D. Workshops, and before his wedding Brendon Claypole is presented with a cheque by F. Watts, Senior Foreman, on behalf of his friends. CENTRE: Before his wedding Neil Keer received a clock and bottle of extra-large pills, presented by S. C. Church, Chief of Sales and Contracts Section, Spares Department, Central Division, Waterhouse Lane. RIGHT: A wedding presentation at Wilford for Harry Wilson who had recently transferred to Waterhouse Lane. Friends at both outstations gave him a tea service and infra-red wall-heater, presented by C. Rand, Supervisor, S Group Engineering



LEFT: Leaving Wembley before her marriage in Nottingham, a dinner- and tea-service were presented to Sweeney Taylor by W. R. Bateman, Foreman, Wiring Assembly. RIGHT: Mrs. Mavis Wilson, M.I. Group 831, has moved from the district, but before she went D. Whitelock, Assembly Test Assistant Production Manager, presented her with a table lamp on behalf of her friends in the Assembly Test building, many of whom knew her through her first-aid activities



LEFT: A clock and writing paper were the combined leaving and wedding gifts to Faheen Akhtar before he returned to Pakistan, and were presented by G. Greenhulgh, Supervisor, Manufacturing Section, Test Engineering Development Group, Faheen gave the Section a model hookah. CENTRE: After eleven years at M.I., Alan Stratton, Supplies Department, received a farewell presentation of a cheque from M. Thurlow (left), Supplies Officer. RIGHT: On leaving the production line to become training instructor, Wilfred Williams received gifts which included cuff-links, tie-pin and shirt, from friends at Birmingham, presented on their behalf by, left to right, Mrs. Dorothy Stevens, Constance Duckett, Maureen Palmer and Mrs. Violet Condon



HACKBRIDGE

Horticulture

Congratulations to Dimensioning Section Charge Hand Reg Brabham, who, at the late Autumn show of the Sutton Horticultural Society, in November, gained two Firsts, a Second and a Third Prize for his Chrysanthemums and a First Prize for a vase of Perennials.

Cricket

John Blackwell has every hope of forming a team for the 1967 season, and although we cannot hope to reach the standard of the local clubs in the recognized competitions, there is no reason

BELOW: Jack Offord, Contact man, receiving the Fours Knockout Cup from Mr. Telford. The rest of the 'four' are Jack Bruce, John Andrews and Arthur Shaw, with Harry Price, the Section's secretary, extreme right



why we should not get some regular friendly games with teams from Surrey business houses.

Football

Ray Hazell and Doug Davis tell us that they have high hopes of progress in the Croydon League in 1967 and express the fervent hope that more Hackbridge folk will come along to the matches to give the boys some encouragement.

We hear that the section are planning to put on an end-of-season social event; more news of this later.

Social Club

Hon. Secretary Doris Halford says that, looking forward, she is planning a Social and Dance at the end of January, a trip to see an Ice Show, also in January and, if possible, a monthly theatre outing. May we thank Doris and the committee for all their voluntary work towards our entertainment during the past year.

CHELMSFORD

Bowls—'Balling the Jack'

An enjoyable evening was spent by members and friends in the Waterhouse Lane Canteen when the Bowls Section held its annual dinner and dance. Mr. and Mrs. Telford were guests of honour, and Mrs. Telford was kind enough to present the various cups and prizes.

Catering arrangements were ably carried out by Mrs. Speed and her staff.

BELOW LEFT: Five Saturday and Sunday afternoon tea makers—reading from left to right, Mrs. P. Howlett, Mrs. L. Gurney, Keith Gurney, Mrs. W. Donald and Mrs. J. Fogg

BELOW: President of the Bowls Section Mr. R. Telford presenting the Pairs Championship Cup to Les Saunders (left) and his partner Harold Faint. Les Saunders is also Singles and Handicap Singles Champion



The Dr. John Morgan Trophy was won by members of the Bridge section at the Welsh National Congress, Porthcawl. LEFT TO RIGHT: Ed. Pacello, Maths Group, Baddow; Tony Edwards, Baddow Research; Mrs. Betty Telford; Ed. Cheng, Airborne Development, Basildon

Excellent music for dancing was provided by the Down Town Four under the leadership of Marconi Illustrator Robin Wilson, who also acted as M.C.

'Ware the Reds

Teams in the inter-departmental football league next Season beware.

This warning comes from John Sitch, manager of the newly formed Beehive Lane football team. Turning out in all-red strip, looking not unlike pillar boxes, they have already beaten Writtle Workshop and Central Division. Their record reads: played two, won two.

The cheer that accompanies them as they take the field, fades as the game progresses. 'Have you tried cheering and running with the ball at the same time?' asks Gary Garwood, a player who, it is rumoured Real Madrid are not interested in. Another human dynamo of the side, Bobby Lincoln, had to have a saliva test afterwards and was found negative.

Colin Cooper turned out at inside right and finished up inside out.

The talent is here with a wave of enthusiasm behind it. Friendly fixtures would be welcomed, please contact John Sitch, Beehive Lane.

Contributed by Hugh Cutmore (Beehive Lane Ext. 25).

Auto Club

A photo finish ended this year's Columbus Rally when Mrs. Telford presented the awards to successful competitors at the Annual Dance held in the M.A.S.C., Beehive Lane.

Mr. and Mrs. Telford were guests-of-honour, and over 200 members, wives and guests, attended the dance. As you



can see from the pictures, everyone enjoyed themselves.

The 150-miles Columbus Rally, M.A.C.'s major event of the season, was run in October and is well known to

other Essex Clubs who entered several of their own teams. However, M.A.C. drivers and navigators held their own and among the award winners were: Chris Gay, Mick Hopper, Martyn

Molyneux, Robin Lee, Laurie Thrower, Tony Delaney, Tony Hall, Clive Butler, John March, Pete Shirley, Mick Robinson, Denver Rowland, Trevor Rudkin and John Mathews.



ABOVE: Mrs. Telford presenting Columbus Rally awards to driver Tony Hall, on the right, and his navigator Clive Butler

LEFT: Les Girls doing a stately 'knees up'



ST. ALBANS

Golf

The golfing year of 1966 started with once-a-week instruction by professional Colin Cristofon in the canteen. This finished in May when the monthly medal matches started. Five of these exciting events took place and, also, throughout the summer there was the knock-out competition, for the rose-bowl trophy. It was won by J. Brooks, one of the two full associate members of the Sports Club.



The M.I. Golf Society met recently for the presentation of the rose-bowl awards. Bill Walker, chairman of the Social and Sports Club, is here presenting a trophy to runner-up Ken Hansen. J. Brooks, centre, was the winner

An outing was arranged in August to visit the West Herts Golf Club and this was enjoyed by all those able to attend.

In July the chairman wrote on behalf of the M.I. Society, through the Marconi Sports Club, to the Marconi Golf Club, challenging them to a match either at Chelmsford or St. Albans. We think they must have heard of our prowess as no reply has been received as yet.

The annual general meeting was held in November when C. Myers, secretary, retired and a new committee was elected. Members of the new committee are: R. A. Mödel, chairman, P. Fry, secretary, T. Bristow, treasurer, with L. Brooks and J. Auther.

Golf instruction started again on 23 November, but any new members of the club are welcome to come along to the canteen on Wednesdays from 7.30 to 9 p.m.

R. A. M.

Cine enthusiasts

Members attending meetings in the autumn quarter have been both informed



Another scene for the film on St. Albans. Frank Harwood, Alan Harvey and Peter Badock visit the Council offices to film the relief model of the centre of the City.

and entertained by speakers selected from the club membership.

Peter Badock illustrated his approach to 8 mm filming by demonstrating his equipment which consists of many wooden devices. The audience were convinced that he would show a film on vincer filmstock.

Jim Lees gave us a progress report on the St. Albans film project and illustrated the content of the finished film by showing 35 mm slides and film already shot. Although the film is behind schedule it should be complete by the Autumn of 1967.

John McHattie instructed us on the art of filming weddings, he being well qualified after being co-star in his own recent matrimonial production.

Hemel Hempstead and Potters Bar

cine societies were entertained and showed us some of their productions, several of which had gained national competition awards. We also showed them some of our productions and they gave us much encouragement as to their suitability for national competition entries.

Members took their cameras on holiday and there are now several hundred feet of film waiting to be edited ready for the club competition in February.

P. B.

Football

At the time of going to press the M.I. first eleven are second in the Premier Division of the County League having dropped two points, drawing 1-1 and 2-2, against two low-positioned teams.

Missed, but only just! Jim Whiting shoots for goal in the match against North Mimms which we won 4-1



The club has reached the last sixteen of the Herts Intermediate Cup, when they play senior team Bishops Stortford at home.

The reserves are in the top half of Division One and await the draw for the last sixteen of the Herts Junior Cup.

Looking back on 1966, the club must be well satisfied with winning the Herts Aubrey Cup and maintaining senior football for both teams. Let us hope 1967 will bring even greater success for the M.I. Football Club. G. W.

Horticultural Society

The society recently held its Annual General Meeting, and although it has over a hundred members the attendance was very poor. This is in direct contrast to the successful activities of the society. During the year a hut has been erected for the storage and sale of garden goods, two shows have been held, the summer one being among the best so far, a tour of the bulb fields was arranged, and several well-attended lectures were held in the spring. Its financial position is good.

The Floral Arrangement Section has increased its membership to fifty-five, has held monthly meetings and had a large number of attractive entries in the summer show. A successful year for which organizer Mrs. L. Creasey is to be congratulated.

H. Botwright, chairman, thanked the committee for their hard work, in particular Mrs. Joan Evans, who had been secretary, he also welcomed W. England as a new member. Other members of the committee are: Mrs. L. Creasey, secretary, W. Broughall, treasurer, A. Puckrin, R. A. Rogers, G. Dunk, R. Foreward, V. Knight, M. Mangan, J. Binney, Mrs. H. Dawson, J. Peek and Mrs. E. Peek.

RIGHT: *Marconi apprentice Alan Pinfrey, who is on a course at Braintree College and his girl friend 'enjoying themselves' at the Auto Club's Annual Dance*

Outside back cover

Picture of the Month. This new angle on Finchingfield was taken from the churchyard by George Davies of Mechanical Engineering Laboratories, Guys Farm, Writtle



