

The new buildings at the College in use

College Training

BY DAVID HAMPSHIRE

THERE HAS been and still is a shortage of trained electronic engineers. This Company must not only train engineers for its own future, but it must also instruct overseas people in the operation and maintenance of the equipment sold to them. Our training programmes have been steadily outgrowing the College building, and foundations for a new and larger one were laid in April 1953. We have watched its growth with interest, and last September it was ready for the winter courses to move in.

The new College building lies up Arbour Lane behind the two older ones, in pleasant surroundings near the prison. Its layout is in the form of a

capital E, and it has been suggested that this is because we are part of the English Electric Group.

In the first wing we come to are the offices associated with the Education and Technical Personnel Department. R. E. Burnett, Principal of the College and Manager of the Department, has his office here, distinguishable by its venetian blinds. J. L. Scott, Chief of Technical Personnel Recruitment, and J. Drinkall his assistant also work in this wing. Their walls are decorated with numerous charts and indicators, which give immediate information about recruitment and training programmes within the Company. These look very decorative by modern artistic standards

A corner of the library in the new College building. J. K. Saggerson, left, and R. C. Trussler from Canada are both trainees from English Electric at Stafford



R. E. Burnett, right, Principal of the College, and R. G. Hulse, centre, Deputy Principal and Director of Studies, with a student, Major H. Omreng, Norwegian Army





The new College buildings are well planned and right up to date. Here outside one of the laboratories students from the AD 200 course raise the aerial for equipment tests

The general office is along the corridor and here A. W. Brewster, a mine of information to students and staff alike, copes with an all-female staff. There is a great deal of paperwork, and he is assisted by Muriel Hayes, Vera Woloszczuk and Pat Thorogood, while Una Harris keeps the phone bells ringing from her switchboard.

Before leaving this part of the building we must mention Jane Wilson, Mr. Burnett's secretary. She shares a room on the ground floor with Judith Cooper, who compiles statistics about recruitment of staff, and salaries. They say that anything may be proved by statistics.

However, let us investigate upstairs.

At the top is a wide lounge landing, which has been furnished in the contemporary manner. You can often see here a nervous victim waiting for an interview. At the end of the corridor is the library, in which walnut shelves contain a host of textbooks and journals. Current copies of periodicals are placed on reading desks along the wall.

In the old building there was little space available for writing laboratory reports or making notes from reference books, but next the new library there is a special reading room.

The lecturing staff have their rooms in this part, carefully chosen as being furthest from the laboratories. R. G.



Radio course students working out the results of a circuit design. J. Knudsen, Norway, standing, Captain Balasubramanian, Indian Army, and F. R. G. Mitchell, Airborne Dev.

Hulse, Deputy Principal of the College and Director of Studies, has his room here, in which students may discuss with him their progress and future programmes. On the other hand, if admonishment is required, an ample carpet is provided.

The next place of interest is the lecture hall, on the ground floor, which has its own cinema screen and projection room. It can accommodate about fifty students, and there is also room for a lecturer.

The power room contains a mammoth English Electric switchboard, which controls all the power and lighting circuits in the building. In here also are the control circuits for the various motor generators supplying power to any laboratory, the internal telephone exchange, and a junction board for coaxial cables, by means of which it is possible to connect any laboratory to any aerial on the roof. The rest of this wing is used by the Drawing Office School, where E. B. Lloyd, with his two assistants, G. Watson and F. Solder, has at present thirty students receiving full time instruction. There is close liaison between

D.O. School and the staff of the College. By taking on work for the College the trainee draughtsmen have a more realistic job, and everyone benefits by the arrangement.

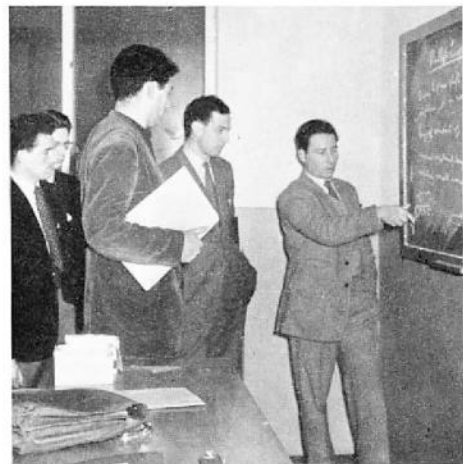
At the bottom of this corridor is the College Workshop. Here two apprentices are kept busy constructing equipment for the College, and they also carry out maintenance work in the laboratories and on their equipment.

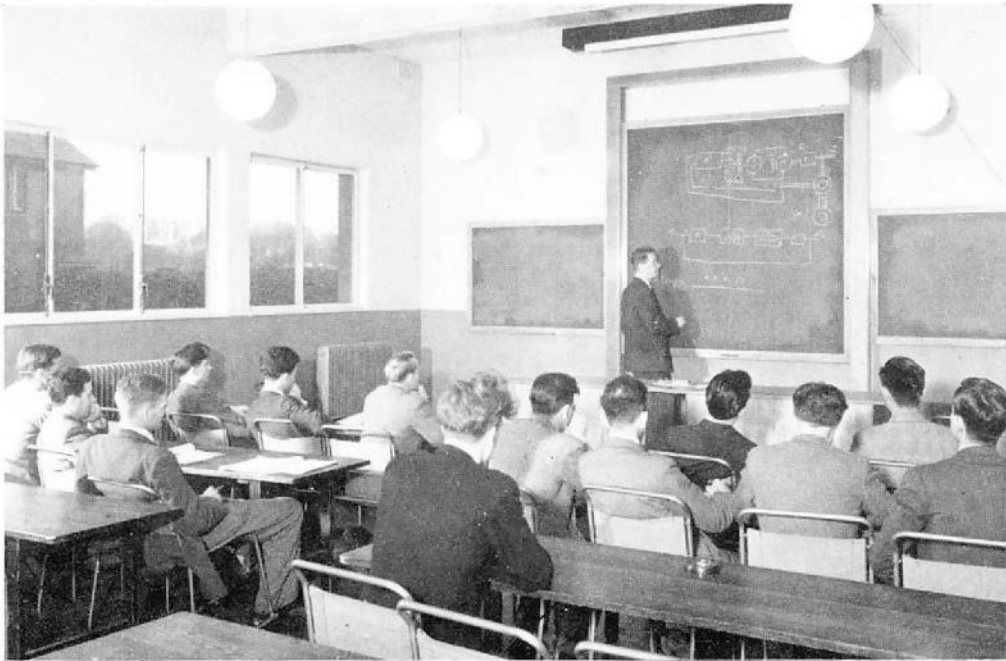
We like to be a self-contained unit, and to this end much of the equipment we use is designed by the College staff, drawn in the D.O. School and produced in the College Workshop.

We have now described one wing and the main arm of the building. The remaining two wings are shared by the Radio and Radar Courses, although there are very often others proceeding at the same time.

However, first things first. Were you coming on a comprehensive course at the College, you might start off by attending the Basic Principles Course, sometimes known as the Principals' Basic Course. It lasts for ten weeks, and

Lecturer David Hampshire, author of this article, goes into details of a knotty problem, to work out a query which has arisen after his Radar Course lecture





In the main lecture hall Dr. I. Cochrane lectures on servo systems used to control mechanical components. The hall has a cinema projection room and screen

precedes the main courses, rather like soup before meat or a dry sherry to whet your appetite. For this you would come under the benign eye of Arnold Clegg, who is our expert on basic, and the physicists and mathematicians would be introduced to valves and to some of the annoying habits of electrical circuits.

You get used to talking about Elsie and Ours at the end of a Queue, you find the library, and the best place to hide from lecturers, you get used to the particular type of brew in circulation at 10 a.m. and 3 p.m., and you meet Charlie Burr. Charlie is our caretaker. He arrives before anyone else in the morning and leaves after all have left at night. If there is a floor that needs sweeping or polishing, or if the radiators have gone cold, then Charlie is the man to call for. But you will probably find that he is already on the job.

At the end of the Basic Course physicists and mathematicians are assumed

capable of joining engineers on the five-month Radio Course, which is now in the process of being overhauled and brought up to date. The range of syllabus is wide—from a transistor to an output stage for a transmitter. There are normally between fifteen and twenty students on this course, and three of the lecturing staff, R. G. Hulse, D. G. Greenhalgh and R. A. Woodrow, are ready to lighten or enlighten their days. The present course is like its fore-runners in that its students are from many lands, including South Africa, Egypt, the Sudan, India, Pakistan and Ireland.

After taking the Radio Course some students stay on for a further five months to attend the Radar or the Television Courses. The former is ably presided over by I. Cochrane, D. W. Hampshire, and R. G. Crosby who is ex Marconi Apprentice Association Chairman and the man who carried the bucket at the

Lord Mayor's Show. In the early stages, the Radar and Television Courses are run on similar lines. Later, Eric Hitchen deals with the intricacies of modern TV equipment with the TV Course, while the Radar Course carry on transmission lines until they eventually wave guide bye.

However, there's time and Laplace for everything, and at the end of a five-month course at Marconi College, most students are capable of taking on a share of the work in a development or research department.

Some people may need to stay for equipment training. The College is gradually installing a number of equipments, upon which there is a considerable demand for training. In time it is hoped to transfer this training load from

Development and Test Divisions so that they are free to carry out their true functions.

At present we can offer training on the AD 200 (when you can Tug along with Harry Wilson) and VHF multi-channel equipment presided over by Eric Hitchen. These courses are of variable duration to suit individual requirements.

A new venture which is proving successful is a five-month course on industrial electronics. It is being run for English Electric personnel, and is staffed by the Radar Course lecturers.

And so the College has entered a new phase in its long life. Long may it continue, and long may M.W.T. be the biggest company attached to a College.

The day-to-day story

GLANCING casually through old newspaper cuttings is apt to go to the head. It engenders a quite unjustified self-satisfaction like beer used to do in the days when it was 2d. a pint. "Look at this one!" springs all too readily to the lips. It is all so obvious when you have seen the answers.

In the Publicity Manager's office at Chelmsford there is ample material for such indulgence. For there in serried ranks of resplendent red leather volumes now rest the selected press cuttings on wireless in general, and the Marconi Company in particular, dating right back to 1897 when public interest had been stirred by the arrival of a young Italian with his mysterious black box of tricks. It represents an exceptional assembly of contemporary information on half a century of progress and development in a field which has contributed a major part to the revolutionary changes in the pattern of our lives.

Here is no mine of technical information. The newsman addresses the man in the street and it is the latter's day-to-day interests that are recorded. Hopes, ambitions, doubts, successes and failures, the clash of interests, debates in Parliament, editorial comment and prognosis, this is the multi-coloured web by which the pattern is slowly woven across the warp of time.

The dilettante alone is exposed to a false sense of omniscience as he comes across something which the light of today reveals to have been a "brick". Of these there are many, but a broader survey can be rewarding.

In thirty years from now, what will be known of the birth pangs of the system of wireless communications, fathered by the Company, that links the Commonwealth today, a travail that started in 1908 and only ended some twenty years later? What will be known of the lusty youngster's influence on his big brothers