Special Trainee 1958

By Evelyn M. E. Murray

I HAVE mainly considered the training I and other girls have been given by our firm, and the prospects of jobs we are given at the end of training.

Last January I completed a two-year apprenticeship with the Marconi Wireless and Telegraph Company Limited, who manufacture electronic equipment ranging from radar networks to frequency measuring devices; and now I am on the permanent staff of one of their development laboratories. The training con-
sisted of four months in the Marconi College workshop, to learn the handling of tools and simple mechanical construction, then several months in various test departments, ranging from components to commercial receivers. This was followed by a two-month course on the principles of radio at the College. This covered the ground between ordinary level physics to the design of amplifiers and superheterodyne receivers, including the basic working and use of the more common examples of test equipment. Afterwards I went to a development section working on crystal filters. This was followed by a further period in a test department, this time radar, before going to my present department and job, which is in the Drive Section of Transmitter development. The work at present consists mainly of tests on prototype crystal ovens, and on the ageing of quartz crystals in different types of drives.

The firm allows apprentices, and those on the staff who have not yet completed their studies, one-day release to attend the Mid-Essex Technical College. With one other girl trainee, I am studying for Higher National Certificate, in applied physics, by this method.

This training is typical of that which the firm gives to girls who on leaving school have science passes in ‘O’ level G.C.E. and possibly one or more ‘A’ level. The training really divides into two categories: category go straight into jobs, usually as mathematicians or physicists, not as engineers.

As you well know, even now there are many difficulties to be surmounted by girls who would like to make engineering a career. Firstly our education and general training at school; the attitude of still too many schools and parents is that the only suitable careers for girls are in the medical or teaching professions, the latter on the arts side. Also many of the methods of teaching mathematics and physics are out-dated for present requirements, so that it is quite a struggle to catch up with boys of the same age group in technical subjects.

Secondly there is the attitude, not so much of employers whose age-old cry of “Oh, a woman will only get married and leave” is dying a natural death, as with full employment women are working after getting married; but it is the men we are in direct contact with during the day’s work. My friends and I find that rarely is one able to do a job without interference, or given anything really interesting to do, as all the best jobs are given to men. This has an obvious effect of dampening enthusiasm. Also I find that often a suggestion is ignored, but later used when put forward by someone else. In other words, the fact that we are making engineering our career is not taken seriously; as one apprentice (male) very aptly put it—girls in industry are only a distraction!
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(1) Those who have at least two ‘A’ level passes, for example mathematics and physics; they can enter into a five-year student apprenticeship, which alternates six months at the Technical College with six months practical in the firm, obtaining the Higher National Diploma at the finish. There are a few on this course, one of whom sits for her final examination next spring.

(2) Those who want a shorter training join as special trainees, for approximately two years, and study for either O.N.C. or for City and Guilds Institute Certificate, continuing their studies after the end of apprenticeship if they wish. At the end of two years appointments are found in research or development departments, or in any of the test divisions, the type of job depending on the individual and the vacancies available. There were seven or eight girls taken last year as special trainees, one of whom has left to study full time at Battersea Polytechnic. Also a few girl graduates are taken for a two-year apprenticeship, which includes a six-month radio or radar course at the College, otherwise their practical training is much the same. However, most girls in this

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so that the coming generations can have a better scientific background. Another is the revision of the academic and technical standards, bringing both on to comparative levels. At present universities will not recognise institute examinations, although the latter can be equally as difficult.

Nevertheless, despite all obstacles, I still feel that a worthwhile career can be enjoyed in industry by any girl who has a bias towards mathematics and physics; provided that she is prepared to ignore the opposition she will doubtless come up against.