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## (8) REFRESHER COURSES AND SUMMER SCHOOLS

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186. With the rapid development of engineering practice and theory the provision of means whereby the practising engineer can be kept abreast of the requirements of his profession becomes increasingly important. Short post-graduate courses to meet this need would act as an important stimulus to the teaching staff, and would enhance the reputation of the schools. Summer schools, at which courses might be conducted by visiting lecturers either from overseas or from important State and private engineering undertakings in New Zealand, could do much to promote post-graduate study.

## RECOMMENDATION—

That the schools of engineering provide, from time to time, short post-graduate courses in special branches of engineering in which important recent developments have taken place.

## (9) THE SCHOOLS AND THE PROFESSION

187. It is most important that the University schools of engineering should not lose touch with current engineering practice. Even in the training of students there is a need to ensure that work done in the schools is closely interwoven with the practical work which the student is required to perform in industry as part of his course. The Committee was informed that there was already some co-operation between the staffs of the schools and the engineers under whose supervision the students are gaining practical experience, but it considers that there is room for an extension of this practice.

188. In the selection of teaching staff, too, care should be taken to ensure that a reasonable proportion have had wide practical experience. There is also room for a scheme that would permit of the interchange of staff between the schools and practising engineers. The Committee thinks that the value of University teachers of engineering would be enhanced if they were able to return to active practice for short periods. There are admittedly difficulties to be overcome in putting such a plan into practice, but they should not be insuperable even in the case of the University schools. In the higher branches of work in the technical schools such a plan is imperative. The Committee accordingly recommends—

## RECOMMENDATIONS-

That means be provided to permit engineering teachers at University schools of engineering, and technical schools to return periodically to active practice.

That the possibility of engineering specialists giving short lecture courses be explored, and that greater use be made by the University schools of engineers who would lecture on a part-time basis and practise part time.

That there be a greater amount of co-operation between University college engineering staffs and engineers under whom students are carrying out practical work to ensure that students are making the best possible use of the time spent in practical work.

189. In making these recommendations the Committee is thus suggesting an extension of the principle of liaison already established at the Auckland and Canterbury University Colleges. The engineering schools at both colleges already have advisory committees which include practising engineers. At Auckland the College Council has set up an Engineering Sub-Committee, on to which are co-opted members of the engineering profession. At Canterbury there is also a special sub-committee of the College Council consisting of Council members, two of whom are engineers, and the three Professors of Engineering. To provide a link between the College Council and the profession there is an Engineering Panel, made up of Council members, the three Professors of the School, and leading engineers of the city. It is obviously desirable at the college level that the plans adopted should be those best meeting local conditions and the Committee sees no reason to suggest any alteration in the present arrangements.