

- (c) Taken from a speech by an American Senator when speaking to an Engineers' Registration Bill —

The term "professional engineer" means one engaged in work—

- (i) Predominantly intellectual and varied in character as opposed to routine mental, manual, mechanical, or physical work.
- (ii) Involving the consistent exercise of discretion and judgment in its performance.
- (iii) Of such a character that the output produced or the result accomplished cannot be standardised in relation to a given period of time.
- (iv) Requiring knowledge of an advanced type in a field of science or learning customarily acquired by a prolonged course of specialized intellectual instruction and study, as distinguished from a general academic education or from an apprenticeship or from training in the performance of routine mental, manual, or physical processes.

- (d) As incorporated into the Engineers' Registration Act of each of the provinces of Canada (slightly modified)---

The practice of professional engineering means the carrying on for hire, gain, or hope of reward of any branches of civil, mechanical, or electrical engineering, including the reporting on, designing, or directing the construction of any works which require for their design, or the supervision of their construction, or the supervision of their maintenance, such experience and technical knowledge as are required for registration or for admission by examination to membership of a chartered engineering institution or recognized engineering body; but the execution as a contractor of work designed by a professional engineer, the supervision of construction of work as a foreman or overseer or superintendent, or the superintending of operation or maintenance does not in itself constitute the practice of professional engineering.

3. METHOD OF INQUIRY

5. The general method of inquiry was easy to lay down. In approaching the Government to have this investigation carried out the New Zealand Institution of Engineers had in effect asked for a frank discussion with representatives of educational organizations so that the Institution could set out what it would like done to overcome apparent weaknesses and to effect improvements in engineering education in this country. It was then for the educational organizations to give their views as to whether the apparent weaknesses were in fact real, what the causes were and whether they were capable of control, and whether improvements suggested by the Institution could be implemented.

6. The Committee therefore called evidence first of all from the New Zealand Institution of Engineers and the Engineers Registration Board and referred this evidence to the University of New Zealand, the Deans of the Schools of Engineering who, in fact, were the representatives of the University on the Committee, the New Zealand Secondary Schools' Association, the New Zealand Technical School Teachers' Association, and the Education Department. These organizations were asked to comment on the points raised in the submissions of the Institution and the Board and were at the same time invited to make any fresh comment on any matters within the Committee's order of reference. This evidence was in turn referred to the Institution and the Board for their further comments.

7. The members of the Committee decided at an early stage that, on balance, it was desirable for them to act as far as possible in a judicial capacity. Accordingly, where it could be conveniently arranged, submissions by the organizations which had nominated members were made by other members of these organizations.