

Towards an Integrated Surveying Profession

The surveying profession is fragmented, and, in many respects, is submerged in other areas of endeavor and in other professions. Only the land surveyors are genuinely visible to the general public. Land surveying is a specialty requiring a limited body of legal knowledge and proficiency in a limited sphere of surveying. The areas of surveying that require a higher scientific knowledge and make the greatest use of the science of metrology are mainly located in the public service, or are in the domain of engineering surveys. Engineering surveying is practised within the engineering profession, but is not clearly classified as surveying and is thus not sufficiently known to the public.

There are straws in the wind to indicate that industry and engineering are more and more inclined to turn their measurement problems over to land surveyors and, in consequence, more of the land surveyors' time is absorbed in engineering surveys. From some points of view, this is desirable, but from others it poses real problems.

In the first place, land surveyors are not qualified to cope with all aspects of engineering measurement and they can be confronted with problems beyond their competence. In the second place, there is no legal requirement in the provinces that a client seek out a professional surveyor, or a professional engineer, to make surveys, except land surveys. This results in many inadequately qualified persons being engaged to do survey work that is beyond their competence. The full recognition of surveying as a branch of the engineering profession would be a solution for engineering surveys, but would still leave the surveying profession divided.

A better solution is to be found in the establishment of a surveying profession, deeply rooted in mathematics and physics and broadly based on the elements of planning and engineering, as a body of general practitioners. Its members can be engaged to carry out general surveying practice and serve as a source of recruits to be qualified by additional education and directed training for specialities.

Here is an opportunity for the surveyors in the provinces to move carefully and cautiously towards an integrated surveying profession serving all the needs of the public, of engineering and of industry. Such a profession can become the custodian of an integrated survey system and can exploit and develop its maximum potential. It will be a surveying profession in fact and in name and, as such, it can best serve the public. It can enlighten the public and industry about the benefits and availability of all types of professional surveying services, reducing the use of non-qualified persons in the provision of these services.

This proposal calls for much discussion and study. At the present time, only the basic concepts can be outlined. The final structure will be determined by the course of events and the careful shaping of the profession by its leaders and its members as time and opportunity permit.