

## SCIENTIFIC AND ENGINEERING MANPOWER TRAINING AND MOBILITY

The Committee made a number of recommendations on manpower requirements, training, and mobility. We proposed that MOSST appoint a task force to forecast the number and distribution of qualified scientists and engineers required by the industrial sector in 1970s. There was almost complete support for this suggestion. Alcan Aluminium Ltd. mentioned "periods of extreme distortion of the relationship between supply and demand for technically trained personnel" and the CMA asserted that if such estimates had been made in the past, the present surplus of trained people in certain disciplines might have been avoided.

Bell-Northern Research argued, however, that "industry cannot forecast its future requirements for QSE's because of the uncertain industrial environment." The Committee is aware of the shortcomings of forecasts but agrees with the APEO that they are useful as broad guidelines, even if they are not too accurate. Approximations are better than ignorance or hindsight. And of course the Committee is still concerned by the lack of data on the future needs for scientists, engineers, and technologists. Even now, manpower policy for highly skilled personnel appears to rest on three factors. First, universities tend to react too passively to demand pressure without adequately informing students of job prospects. Secondly, when scarcities develop, it is left to immigration to fill the gap. Thirdly, when surpluses occur in certain fields, it is assumed they will be absorbed by emigration, mainly to the United States, or that the specialists affected will be able to shift easily to other fields. This laissez-faire policy is creating tragedies for a growing number of young Canadians.

The Committee is pleased to note that MOSST has recently accepted this recommendation. We hope the task force will work in close collaboration with the Canadian Engineering Manpower Council, which has just completed a study of demand for Ph.D.s in engineering in Ontario, and with similar groups concerned with other disciplines. Collaboration is essential to the success of the undertaking. Moreover, when the study is completed it will be necessary to keep it up to date. This permanent service should be provided by the Department of Manpower and Immigration.

These forecasts should be publicized so that universities and students can also use them. It is imperative that they should be used to determine government scholarship and fellowships programs. Some years ago the National Research Council prepared forecasts that proved to be good approximations but the Committee is not aware that they had any significant impact on financial assistance programs.

This is why we recommended that MOSST "initiate a thorough re-appraisal of all the Canadian government's scholarship and fellowship