

them are out of Canada, I noticed that. What happens to what I call the non-permanent staff; what happens to these people? Are they employed by industry in Canada or by universities once they leave the National Research Council?

Dr. Tupper: Mr. Chairman, I will endeavour to field this question; let us start the wrong way around, with the Post-doctorate Fellows.

This is a program designed by Dr. Schneider's predecessor once removed, Dr. Steacie, shortly after the war, to accomplish two purposes, the first to provide a core of young, energetic scientists who wouldn't grow old on the job so that you would have a definite fraction of youth continuously in your spectrum, even though you were not growing or had not reached a steady state where people were retiring at one end and coming in at the other. These men are given a small stipend; currently it is \$6,000 a year for a single man and \$7,200 for a married man, which is income tax free. The normal appointment is for one year and it may be renewed for a second and thereafter they disappear from our establishment, except that we occasionally take one of them on to our regular staff. So much for Post-doctorate Fellows.

Of the remainder of the staff, the National Research Council is perhaps unique in hiring a large fraction of its employees using term appointments. The original term is usually for one year or for 18 months and if the employee's services are satisfactory subsequent term appointments are for three years.

I think at the present time we probably have about 80 per cent of our total staff on three year term appointment.

There is, however, the circumstance that since the end of the second world war, while there have been a few periods of time when there was a shrinkage, by and large the strength and size of the National Research Council has grown with time; it has indeed spawned whole organizations like the Crown company, Atomic Energy of Canada Limited, which up until about 1952 or thereabouts was a portion of the National Research Council.

So that, although we have many three-year term appointees, there has been no cut-back in work of a major nature that has required us to release these people because their jobs have disappeared. Term appointees may be let go because their services are found to be unsatisfactory, of which they are given plenty

of warning before such termination actually takes place. I think it is perhaps unreasonably assumed by our staff that an NRC term appointment is just as secure as an appointment "at pleasure," although from the strict documentary facts of the case this is not so; it is a three-year appointment, and unless it is renewed it would terminate.

Senator Yuzyk: Is there an attempt made to place these researchers after they have completed their term? After they have completed their project or whatever they have been working on what happens?

I am particularly interested in those who are non-permanent; what happens to these scientists, where do they go?

Dr. Tupper: Mr. Chairman, to avoid any possible misunderstanding, the PDF'S are with us for one or two years and then they are released. In the market that has existed during the last few years one did not have to assist in placing the PDF's; there has been more demand for persons with doctors' degrees in universities and elsewhere than there was supply, so there has been no problem of this kind.

With the employees of our Council generally who have the three-year term appointment. These appointments have normally been renewed. These employees are not with us just three years and then out. They have normally had continuing employment through term appointments which were renewed every three years.

Senator Yuzyk: A supplementary question please, regarding bachelors; I notice that there are bachelors, 140; masters, 165; and doctors, 493. Are these with Bachelor of Science degree, I imagine mainly: Are they employed for just a term, or are some of them permanent also?

Dr. Tupper: Mr. Chairman, there is no simple quick answer to that; in some of our laboratories the work is of an applied nature and we hire engineers as well as physicists, chemists, biologists. Many of the engineers have only bachelors or masters degrees and do not have doctors degrees. The doctor's degree in engineering until fairly recent times was quite uncommon, so that to some extent that division by degrees is also a division by discipline in that the 140 I think would be quite predominantly engineers rather than physicists, mathematicians or chemists.