

attempt to fail to respond to any pertinent information.

**Senator Grosart:** No, I don't doubt that at all; I was merely assessing our own questionnaire, because a good deal of time was spent on it and it does project into the future as to the general validity of this questionnaire with respect to those who will come before us.

**Professor Bonneau:** Could I enlarge a bit on the feed back mechanism, that you asked whether it existed in that there is a review of all the progress which is going on. The President has just explained that a new post with a staff has been set up and will be operating, but there has been for many years another system, which is working well in many instances, and those are advisory committees.

For instance, in the building industry you have architects, you have engineers, you have building contractors, you have people from the Central Mortgage; all these people get together and review quite frankly and quite critically once or twice a year, or sometimes more often the work of a division on the committee for the mechanical engineering division there is a man from the shipping industry, another one from the railway industry, another from the aircraft industry etc. They get together, and they work quite hard. They ask very difficult questions of the director of the division on the existing programs, what are the results, and other relevant questions.

I don't want to give you the impression that all those advisory committees are equal in their tasks, but some of them are doing very good work and I think that the division which profits by the work of that committee is quite lucky, because it does keep that division on their toes.

**Senator Grosart:** I think we are all agreed that it is very hard to stop any project anywhere in the general realm of the public service once it has started and, secondly, I think we are all aware that it is very difficult at any particular time to assess the continuing validity of a research program but, having said that, could you venture a guess as to the percentage of termination of projects as a result of these reviews that have been going on, or is this question germane at all? I don't know.

**Dr. Schneider:** If you are talking about major programs and, of course, research is

not something that you can turn on and off; it takes time to build up a research team and then by the time they really get hold of the problem and something comes out it may be another five years.

**Senator Grosart:** Excuse me, but sometimes when they are turned off they are on the front pages for a long time.

**Dr. Schneider:** Yes, but of course with the smaller projects, these come and go; there is quite a large turnover but let us say for example, as we have mentioned before, the National Aeronautical Establishment, which provides back-up research for the aircraft industry; now, that is a continuing, if you like, activity but yet there are individual projects that come and go; projects are completed, a new one is started, and so on.

So I think some of these methods, review methods that you have referred to, are not always applicable to some of these individual activities.

**The Chairman:** Senator Yuzyk has been waiting for hours.

**Senator Yuzyk:** My question is about the researchers, particularly the National Research Council and I have before me a review in 1968 and I note that there are 788 scientists employed by the National Research Council: 264 in engineering and architecture; 221, these are the largest, in chemistry; 189 in mathematics and in physics.

My question is this: Has the staff of the National Research Council been increasing every year, annually? One thing.

How much of this staff is permanent and how many of them are non-permanent? I am particularly interested in the non-permanent staff, that is employed for research work. What happens to those who are employed for a period of one or two or whatever period they are employed for, what happens to these scientists? That is another question.

**The Chairman:** Could you break it down?

**Senator Yuzyk:** Am I asking too many?

**The Chairman:** Yes, I think so.

**Senator Yuzyk:** Well, it is all in the same line.

I notice a large category and I don't know how many of them there are in this category, post doctorate fellows. Now, there are quite a number of them and a large proportion of