

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

GOVERNING BOARD

Minutes of the meeting held in the Treasury Buildings,  
Whitehall at 2.45 p.m. on Friday, 20th November 1959

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Present:

Lord Bridges (in the chair)  
Professor P. M. S. Blackett  
Sir John Cockcroft  
Professor J. Diamond  
Mr. J. C. Gridley  
Professor H. S. W. Massey  
Sir Harry Melville  
Sir Donald Perrott  
Professor R. E. Peierls  
Professor D. H. Wilkinson  
Dr. T. G. Pickavance  
Dr. J. A. V. Willis (Secretary)

Apologies for absence were received from Dr. Aitken, Dr. Schonland,  
Sir William Hodge, Professor Mott, Sir James Mountford and Sir George Thomson.

1. Minutes of previous meeting

The Board approved the minutes of their second and third meetings  
of 1959.

2. Progress at the Rutherford Laboratory

2.1 The Proton Linear Accelerator

Dr. Pickavance reported that although the accelerator had  
operated at 50 MeV, it had been found necessary to provide  
two RF power valves in parallel on tanks II and III before  
regular operation would be practicable. This was in hand,  
and he expected operation at 30 MeV in a few weeks and at  
50 MeV during the first half of 1960.

2.2 Nimrod

Dr. Pickavance reported that all the major items were now  
ordered with the exception of the vacuum vessel. The  
development on this was going well, but the contract for  
supply could not yet be negotiated. The difficulties  
previously reported over the magnet sectors had all been  
overcome, and sectors were being regularly delivered at six  
per week so that the original completion date should be met.  
The main magnet building was complete, and all the moveable  
shielding blocks cast. The experimental area was nearly  
complete, and one part was about to be partitioned off as a  
clean area for testing vacuum vessel sections.

2.3 Other Buildings (Canteen)

Dr. Pickavance said that the general building work at the  
Laboratory was going on steadily. Occupation of the main  
laboratory and office block of the original (Phase I) scheme  
was just being completed. He mentioned that the question of  
a canteen had been carefully discussed with the AERE and it



was recommended that there should be a canteen at the Rutherford Laboratory. He proposed to invite the adjacent Medical Research Council unit to use it and also certain students at the AERE Reactor School. This arrangement would be convenient to both the Rutherford Laboratory and the AERE. The Board recorded their general approval of the proposal to have a canteen in the Rutherford Laboratory.

#### 2.4 University Agreements

Dr. Pickavance mentioned two recent arrangements with universities as examples of interest. The first was an agreement with Imperial College covering a year's work under Dr. Newth on the development of novel particle detection apparatus, at a cost of £8,700. The second involved the purchase of a curve plotting machine costing £9,000 which would in the first instance be used at Oxford by Professor Wilkinson. Both these proposals had involved some discussion with D.S.I.R. as to the respective responsibilities of the D.S.I.R. and the Institute, and both, in view of their cost, had required reference to the Chairman before commitment.

#### 2.5 Staffing Plans

The Secretary reported progress on plans for staffing according to the policy decided at the last meeting (Paper NI(GP)(59)22). He said that while the university-like research staff (dealt with later in the agenda) should be able to move to universities and therefore should have pensions under F.S.S.U., the other and much larger group of staff would be similar to AEA employees and it was important to make the conditions of employment closely similar to those in the Authority, both in order to draw staff from the Authority and to avoid unnecessary separate negotiation of pay scales and conditions. A superannuation scheme like that of the Authority was therefore needed for this larger group of staff. Difficulties had arisen, which the Authority had overcome by seeking power, in a bill now before Parliament, to include Institute employees in their superannuation scheme. In this connection Sir Donald Perrott said that the Authority were not undertaking to include Institute employees in their superannuation scheme for ever, but would review the matter in a few years time. It was also made clear that though transfer would be facilitated when it was to mutual advantage, Institute employees would have no right of employment by the AEA.

The Secretary outlined the progress made in setting up an administrative organisation to undertake many of the administrative services at present provided by the AERE. He asked approval for the appointment of a senior officer to lead the scientific and technical services section. The Board considered that the post should be advertised.

#### 2.6 Housing

The Secretary said that he had had discussions with the Town Clerk of Abingdon and the Chairman of the housing committee. The council were now in difficulties owing to the resignation of their deputy engineer, and had a very urgent programme of work on water and sewage. While willing in principle to build houses to rent to Institute employees if the Institute would undertake to find tenants for 20 years, they said that they would expect to be very slow.

The Secretary said that the architects were meanwhile looking at possible sites. He was also trying to estimate the



probable requirement, which appeared likely to be for 50 - 100 houses in the next two years rather than the 25 for which he had already been instructed to prepare a scheme. The Board instructed the Secretary to make a further attempt to get the local authority to build the first 25 houses quickly.

3. Reactors for Universities

The Chairman outlined the conclusions of a meeting called by the Treasury four days previously to decide on responsibilities for small university reactors during the next few years until they could conveniently be treated like other items of university equipment.

Broadly, the decision was that the Institute would be responsible for formulating advice to the Government on what reactors should be provided, and where they should go. The Institute could also provide a management service for reactors where this was needed. The financing of reactors to be managed and administered by Universities would be provided by the D.S.I.R.

ACTION 1 The Board invited the Research Reactor Committee to prepare a short report containing their specific recommendations at this stage.

4. Membership of the Physics Committee

Sir John Cockcroft reported that the D.S.I.R. had now re-organised their Nuclear Physics Sub-Committee as a very small body, but proposed the setting up of a larger consultative panel for nuclear research consisting of 22 members, which would advise the Institute, as well as the D.S.I.R. research grants committee.

(Secretary's note: details are given in paper NI(59) 12)

Sir John recommended this proposal to the Board, and also proposed that the larger group of 22 should become the Institute's Physics Committee in future, and should when necessary meet separately as such. He recommended that when detailed consideration of a specific proposal was required, an appropriate group from the committee would be appointed to deal with it.

ACTION 2 The Board approved the proposal of a consultative panel for nuclear research as described in paper NI(59) 12, but requested that an invitation be conveyed to three additional members of the Board to attend its meetings, namely Professor Mott, Professor Peierls and Sir George Thomson. They decided that the same group should be invited to become their future Physics Committee.

5. Employment of Research Scientists by the Institute

After Dr. Pickavance had introduced paper NI(59)9, the following points were made in discussion:-

(a) Concerning fixed-term research appointments

- (i) The need to offer salaries based on AEA scales was recognised. At University rates, without the attractions and permanency of a university appointment, it would not be possible to get good staff. (Certain circumstances such as size of family, however, can lead to a different result. One candidate at least would have been worse off at the Rutherford Laboratory than in his university post).



- (ii) The Institute's policy must be in general to release the research workers, including the best of them, after their term of employment.
  - (iii) In some cases these men, if they then took up a University post would face a reduction in salary, whereas they could in many cases go to an American post at a higher salary.
  - (iv) It was not so much the actual rates of pay as blockage of promotion which made pay prospects inferior in universities.
- (b) Concerning permanent posts
- (i) If an Experimental Officer, for example, on permanent employment and attached to a nuclear research team were to develop into an academic research worker, he would, according to Dr. Pickavance's proposals, retain his permanent employment, and would thus be in a rather privileged position. The situation would be acceptable only if the number of cases was small.
  - (ii) The experience of the AEA, however, is that the number of such class-to-class promotions is very small, and the people concerned do not become problems. Further, they may not necessarily stay on research work for very long.
  - (iii) The wish was expressed that all proposed permanent appointments for academic research should be considered by the Board.
  - (iv) One member suggested that the senior research posts should be Authority appointments, so that if they became unsuited to the direction of research, they could move to other work in the Authority.

ACTION 3 The Board invited the Personnel Committee to consider paper NI(59)9 in the light of the above discussion and to make recommendations. Having regard to the nature of the issues concerned, the Board also thought that it would be appropriate to make some addition to the Personnel Committee and they invited Professor Mott to join the Committee.

## 6. Patents

In the discussion of paper NI(59)10, the view was expressed that in academic subjects such as nuclear physics patenting was undesirable, but that in the field of experimental devices there was a place for it. The policy proposed in the paper was quite compatible with this view.

ACTION 4 The Board adopted the patents policy recommended in paper NI(GP)(59)7 which is an attachment to paper NI(59)10.

## 7. Second Annual Report

The Chairman said that the draft circulated as paper NI(59)11 seemed generally suitable. The Secretary was asked to make paragraph 10 more specific with regard to the change in staffing policy, clearing



the wording with the AEA. Owing to lack of time, the Chairman asked members to communicate any other points to the Secretary.

ACTION 5 Subject to the change requested above, and any other points to be raised by members, the Board approved the draft report.

J. A. V. Willis  
Secretary

Rutherford High Energy Laboratory,  
Harwell.

30th November, 1959