

Dr. Miller
NI/62/Second Meeting
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NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

GOVERNING BOARD

Minutes of the meeting held at the Rutherford High Energy Laboratory on 22nd May, 1962.

Present: Lord Bridges (Chairman)
Dr. J. B. Adams
Sir Robert Aitken
Professor J. M. Cassels
Professor B. H. Flowers
Sir Alan Hitchman
Sir Harry Melville
Sir William Penney
Professor D. H. Wilkinson
Sir John Wolfenden
Dr. T. G. Pickavance
Dr. J. A. V. Willis (Secretary)

Apologies for absence were received from Professor Brambell, Sir John Cockcroft, Professor Dee, Sir William Hodge, Sir Harrie Massey and Sir Keith Murray.

1. MINUTES OF THE LAST MEETING:

The Board approved the minutes of the meeting on 9th March, 1962.

2. COMMITTEES:

2.1 No points were raised on the minutes of the Personnel Committee or the General Purposes Committee, which had been circulated.

2.2 Dr. Pickavance said that the composition of the Physics Committee had been under discussion for some time. Originally it consisted of those Board Members who were physicists, with a few additions, but it had been expanded in December, 1959 to have common membership with a new joint consultative panel advisory both to D.S.I.R. and to N.I.R.N.S. Sir John Cockcroft, its Chairman, had supported the suggestion that while the joint consultative panel, suitably reconstituted, should be retained for discussion of matters of wide interest, the Physics Committee should now be re-formed on the original basis of membership.

After discussion this proposal was agreed subject to the Institute's Physics Committee coopting additional members as appropriate in each case, when considering particular proposals. (The appointment of assessors is an additional, or sometimes alternative, procedure which the Committee already uses.)

Another point made in discussion was that the joint consultative panel ought to remain, and that the determination to rotate the membership of it should be maintained.

Dr. Pickavance said that the membership suggested by Sir John Cockcroft was: Members of N.I.R.N.S. Board:- Sir John Cockcroft, Dr. J. B. Adams, Professor Cassels, Professor Dee, Professor Flowers, Sir Harrie Massey, Sir William Penney, Professor Wilkinson.

Other members:- Professor Peierls, Dr. T. G. Pickavance; also Professor Merrison when his appointment as Director of the Electron Laboratory can be made.

The Board approved this list, subject to the possibility that one or two further names might be suggested by members.

ACTION 1: The Board decided to re-establish the Physics Committee with the membership indicated above, and with power to co-opt additional members for the consideration of specific items. They wished to retain the Joint Consultative Panel as such, but to cease to use this latter body as the N.I.R.N.S. Physics Committee.

3. RESEARCH REACTORS:

Sir Harry Melville told the Board of the offer of the A.E.I. Merlin reactor as a gift to D.S.I.R., and in Sir John Cockcroft's absence, Dr. Pickavance then reported on the discussion at the Research Reactor Committee meeting on 17th May. Minutes of this meeting will be circulated to the Board shortly. The Research Reactor Committee had set up a working party to study what would be the cost of running Merlin at various alternative power levels, and in each case what would be the additional cost of the training and research work which would be done with the reactor by London University and other universities in the south of England. The Research Reactor Committee would consider the working party report on 15th June, and any recommendations for action by the Institute would be submitted to the Board.

4. PROGRESS AT THE RUTHERFORD LABORATORY: Paper NI/62/5

In addition to the points mentioned in the paper, Dr. Pickavance reported that financial approval to complete the restaurant had now been received. He confirmed that the date for the start of tests of Nimrod was still September, 1963.

5. THE ELECTRON LABORATORY:

The Chairman said that after the last meeting he had written to Lord Hailsham in strong terms about the Electron Laboratory, enclosing the letter from the five professors, and had also had an opportunity to discuss the matter rather fully with him, and believed that this had been helpful. Subsequently, he had been told that his letter had been sent on from Lord Hailsham's office to the Treasury, with the report of the "Cockcroft Committee" referred to below and with a request for an early decision. However, no decision had yet been given, and the Chairman concluded that the Electron Laboratory was being kept waiting for a decision on the question of total expenditure on nuclear physics. He therefore proposed that the Board should next discuss that item in conjunction with the Electron Laboratory.

6. FUTURE NATIONAL EXPENDITURE ON HIGH ENERGY PHYSICS RESEARCH:

Dr. Pickavance reported on the recommendation of the working party set up by the Minister for Science with Sir John Cockcroft as Chairman, which was referred to at the last meeting (in the second paragraph of Minute 5). The working party had been asked to say how total expenditure on nuclear physics could be kept level while accommodating a 10% per annum increase in C.E.R.N. Although they had given the answer that on this premise the Electron Laboratory would have to be cut out, and university centres of nuclear physics killed off one after another, they had added that they must not be represented as recommending such a course. On the contrary, an increase in expenditure must be allowed for.

The Chairman said that he had seen a copy of the report, which he considered fair, strong and persuasive.

All the Members present expressed their total disagreement with the suggestion that expenditure on nuclear physics research should be kept constant. In a general discussion, the following points were also made:-

(a) The position may be worse than was envisaged by the "Cockcroft Committee". They assumed 10% p.a. increase at C.E.R.N., but the latest forecast is 10% to 14% p.a.

(b) The 4 GeV electron synchrotron scheme having been delayed for 1-2 years might not now be the best choice. If we were starting now we would probably put forward a much larger and more expensive machine. But to make a fresh start now on a project for a larger machine would involve considerable further delays, and the prospects that such a project would be approved would not be good. Further a change now to a larger machine would also leave the northern university nuclear physics departments without modern facilities for too long a period for them to survive.

(c) It was also suggested that the confidence needed to support the sustained effort of putting up any big project was being rapidly lost.

Summing up the discussion, The Chairman said that he fully agreed with the Board's view that it was ridiculous to propose holding the expenditure on nuclear physics level. He would make known the Board's view and the strength of their feelings.

7. DUTIES OF THE SECRETARY:

The Chairman said that when the Electron Laboratory was approved a new situation would arise and it would be necessary to be clear what duties were performed by the Secretary as Secretary of the N.I.R.N.S. as a whole, and what duties as Secretary of the Rutherford Laboratory. It might indeed be necessary to have a secretary of the Institute who was not also secretary of the Rutherford Laboratory. The first step in consideration of this matter should be to circulate for comment a note suggesting what duties in the new situation would be appropriate to the Secretary of N.I.R.N.S. and to consider whether these made up a whole time job. Whatever solution was reached it was essential to avoid setting up a weighty central organisation.

J. A. V. Willis,
Rutherford High Energy Laboratory,
Harwell, Didcot, Berks.

28th May, 1962.