

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCEGOVERNING BOARD

Minutes of the meeting held at 5 Old Palace Yard,
Westminster, on 6th December, 1961

Present : Lord Bridges (Chairman)
Dr. J. B. Adams
Professor F. W. R. Brambell
Professor J. M. Cassels
Professor P. I. Dee
Sir Alan Hitchman
Sir Harry Massey
Professor R. E. Peierls
Sir John Wolfenden
Dr. T. G. Pickavance
Dr. J. A. V. Willis (Secretary)

Apologies for absence were received from Sir Robert Aitken, Sir John Cockcroft, Sir William Hodge, Sir Harry Melville, Sir Keith Murray, Sir William Penney and Professor Wilkinson.

1. Minutes of the last meeting

The Board approved the minutes of the meeting on 18th September, 1961.

2. Committee Minutes

Atlas Computer Committee. The Chairman said that Dr. J. Howlett had accepted appointment as Head of the Atlas Computer Laboratory, and had taken up his duties on 1st December.

Research Reactor Committee. The Secretary said that he understood from the D.S.I.R. that they had not yet been able to take a decision on the three university reactor proposals which had been deferred.

3. The 5-Year Programme (Paper NI/61/22)

The Chairman said that the programme, revised as decided by the Board, had been strongly supported by the Minister for Science and accepted by the Treasury.

4. Progress at the Rutherford Laboratory (Paper NI/61/23)

Dr. Pickavance added the following points to his written report:-

(a) The first production outer vacuum vessel had been damaged by Marstons but could be repaired and would not delay the later vessels.

(b) After further consideration, the commissioning vacuum vessel, which was mentioned as a possibility at the meeting on 4th July, was not considered to be justified and would not be made.

(c) Mr. Gibbs, whose accident had been reported to the Board, was still doing well and was expected to make a full recovery. His memory of things connected with the accident was now returning. A summarised report by the Board of Inquiry into the accident would be submitted to the Board.

Discussion of Dr. Pickavance's report centred mainly on the alternators supplied by English Electric. Some uneasiness was expressed concerning the operation on pulsed and reversed loads of the No. 2 alternator at present at the Rutherford Laboratory. Dr. Pickavance explained that he was taking an extremely cautious attitude and insisting on a recommendation from Lloyds Register as well as from his own engineers and English Electric before he would allow operation on pulsed loads.

As regards the unsatisfactory poles of No. 1 alternator, the Board asked Dr. Pickavance and Sir Alan Hitchman to arrange for an enquiry to determine who was responsible for the bad workmanship not having been detected in the course of inspection.

5. C.E.R.N. and Rutherford Laboratory Expenditure (Paper NI/61/26)

The Secretary said that paper 61/26 had been written by Mr. Miller, the Accountant at the Rutherford Laboratory, in order to investigate the discrepancy between the trends of C.E.R.N. expenditure and of Rutherford Laboratory forecasts, which had been pointed out both to the General Purposes Committee and the Board. The broad conclusions seemed to be that there was no very great discrepancy over capital equipment but that serious doubt was cast on our forecast of a levelling-off in staff numbers at the time when Nimrod came into use.

Dr. Adams said that he was not convinced that the detailed figures demonstrated anything very clearly. However, in the case of staff numbers he recalled that a similar levelling-off of staff was being forecast at C.E.R.N. two years before the P.S. came into operation. He emphasised the particular danger of making an error in that direction when 5-year forecasts are being made.

The Chairman asked that the analysis should be further developed, note being taken of some further detailed points made in the discussion, and should be continued as later figures became available.

6. The Electron Laboratory

6.1 The Chairman said that Treasury approval for the Electron Laboratory scheme had not yet been received.

6.2 The Chairman read out a letter from the Minister for Science, dated 1st December, 1961, asking for the reasons which led the Board to recommend the Liverpool-Manchester area for the Electron Laboratory, because the Scottish office wanted to re-open the possibility of siting it in Scotland. Professor Dee said that he was surprised at this action. The Secretary of State for Scotland would, he thought, have been better advised to have pressed once more for the 100 MeV linac rather than to re-open the siting of the 4 GeV electron synchrotron.

The Board considered that having set up a special panel to consider the siting in the difficult circumstances of the postponement of the 100 MeV linac, and having accepted their recommendation at the meeting on 4th July, they should state the reasons only briefly in the formal reply to the Minister for Science, the two points being:-

- (a) Proximity to the two vigorous school of high-energy physics at Liverpool and Manchester.
- (b) Greater accessibility to other universities in the midlands and northern England.

The Board also considered that they should put forward once again their interest in Glasgow University's requirement for a 100 MeV electron linear accelerator. This had already been expressed, as agreed at the meeting on 9th March, 1960, in a letter from the Chairman to Sir Harry Melville. The Chairman read out a copy of this letter, and the Board agreed that it would be appropriate now to send a copy of it to the Minister for Science.

6.3 Siting. Owing to the absence of approval, and to a request from the Minister for Science to defer action on choosing a site for the moment, paper NI/61/26 was not discussed.

6.4 Organisation (Paper NI/61/25). In the discussion of paper NI/61/25, the Board accepted the recommendation that the post of Director of the Electron Laboratory should be offered to Professor A. W. Merrison on a five-year term and, if practicable, on secondment from Liverpool University. Action on this decision is, of course, dependent upon Treasury approval of the project. Professor Cassels said that he believed that the University would agree to secondment provided it was made clear that five years was a fixed term.

The Board also agreed on the following points:-

- (a) The functions of the Secretary of the Institute in relationship to the Electron Laboratory, mentioned in paragraph 2 of the paper, should be clearly distinguished from the functions of the Secretary of the Rutherford Laboratory. It should be clear that Electron Laboratory matters did not pass through the Rutherford Laboratory as such.
- (b) Paper NI/61/25 should be amended by the insertion of "Glasgow" in line 2 of paragraph 4 before the words "Liverpool and Manchester" and by deleting the second sentence of paragraph 5, i.e. "Special provision and Manchester".
- (c) The statement in paragraph 6 of the paper that the Director "should not carry a departmental load in the University" refers to an administrative load, and should not prevent him from doing any research or lecturing.

J. A. V. Willis,
Secretary,
Rutherford High Energy Laboratory.
HARWELL.

14th December, 1961.