

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

GENERAL PURPOSES COMMITTEE

11/2

Minutes of the meeting held at 5, Old Palace Yard,
Westminster, on 29th March, 1962.

Present: Lord Bridges (Chairman)
Sir Robert Aitken
Mr. A. E. Drake
Dr. F. A. Vick
Professor D. H. Wilkinson
Dr. T. G. Pickavance
Mr. P. Bowles
Dr. J. A. V. Willis (Secretary)

An apology for absence was received from Professor J. M. Cassels.

Colonel N. Wilson and Mr. G. W. Dixon of the A.E.A. Engineering Group's Southern Works Organisation attended for the discussion of the items reported in minutes 4, 5 and 6.

1. MINUTES OF THE LAST MEETING

The Committee approved the minutes of the meeting held on 9th January, 1962.

2. MATTERS ARISING FROM THE PREVIOUS MINUTES

Minute 6 (Atlas Computer building)

Dr. Vick said that the action decided on at the last meeting had been carried out, and that the Atlas Computer Committee had agreed on the request for additional funds for the building. Mr. Drake said that the request was now being submitted to the Treasury.

3. MATTERS DEALT WITH BY CORRESPONDENCE: Heavy Liquid Bubble Chamber Magnet

The Chairman said that after reference to the Committee by correspondence, he had approved the action recommended in paper NI/GP/62/10.

4. REPORT ON THE ENQUIRY INTO THE RUTHERFORD LABORATORY RESTAURANT SCHEME: Paper 62/9

The Chairman said that the Board of Enquiry had been given two tasks:-
(a) to reduce the cost of the scheme and (b) to find out how the unsatisfactory situation came about. The economies recommended in the report were estimated to reduce the total cost to £109,200. He had authorised a request to the Treasury for additional funds to complete the restaurant within this sum. As to the second task, the findings were set out fully in the report. He asked for a discussion directed particularly to bringing out any lessons for the future.

Dr. Pickavance said that a member of the Laboratory staff was designated as Project Officer for each major building project. He thought that the lesson for the Laboratory was that this duty must be taken very seriously, and that the Project Officer for a major building must be free to devote a substantial part of his time to maintaining the closest contact with the work on it.

Colonel Wilson said that he accepted full responsibility for the errors in estimating and financial control. The system should have made these errors impossible, but they had occurred. He did not wish to offer excuses, but he thought that the Committee would want to know what were the reasons in his opinion. Firstly, the scheme had been started just as the present system of control in S.W.O. was being established, and some of the early procedure had not been applied fully. Secondly, both the architect and the engineer concerned had changed during the progress of the scheme. Finally, the estimating section had been under heavy pressure at the time, and on each occasion when the estimate was due for review they had learned that the plans were under review, and had put off the full review in the expectation that the plans would shortly be finalised.

Mr. Drake said that he had known one or two other schemes (not necessarily in S.W.O.) in which the cost had "run away" in a similar way, and nearly always the reason was that full review of the estimate had been put off.

The Committee discussed the recommendation in section 14.5 of the report in which it was suggested that the A.E.A. should confirm that they would continue to object to use of Harwell's canteen by Institute staff. Mr. Drake was invited to make enquiries in the A.E.A., and to consult the Chairman if he found that there had been any change in the A.E.A.'s objection.

Action 1. The Committee endorsed the action already taken by the Chairman in authorising a request to the Treasury for funds to complete the restaurant at an estimated total cost of £109,200. They also approved the immediate resumption of work by S.W.O. on amending the designs to incorporate the economies recommended in paper NI/GP/62/9.

5. FEES CHARGED BY THE SOUTHERN WORKS ORGANISATION: Paper 62/15

5.1 Mr. Drake said that the Institute had the choice on any new projects of employing either:

- (i) the A.E.A. Engineering Group
- (ii) the Ministry of Works
- or (iii) an outside consultant.

Paper NI/GP/62/15 dealt with the cost of (i) which was designed to give a complete service. Colonel Wilson said that the service offered by the M.O.W. was similarly complete, but he suggested that the A.E.A. group had the advantage of proximity and existing close association with the Institute. He emphasised that while an outside consultant's fixed rate of fee might be smaller, for example 8%, a very great deal was excluded and would be charged for separately, for example quantity surveyors' work and site supervision.

In a general discussion, the following points were made:-

- (a) For standard types of building, money, time and effort could often be saved and a very satisfactory result achieved, by having a building to a contractor's standard design on a "package deal" basis. The A.E.A. Engineering Group would readily co-operate in schemes of this kind, using no more of their full service than the minimum required for the purpose, and thus automatically reducing the fees.
- (b) In most schemes it was desirable that the architect should first submit alternative ideas on type of construction etc. in rough outline, with preliminary rough cost estimates.
- (c) It was clear that the A.E.A. Engineering Group would have effort available to undertake the Electron Laboratory, and would like to do so. The Committee saw no advantage in going to the M.O.W. instead, but the possibility of going to an outside consultant could not be prejudiced in advance of approval of the project and appointment of a Director.

5.2 Turning to the detailed reassessment of fees on the Rutherford Laboratory Phase II scheme and the bubble chamber plant room, the Committee noted that the new figure now included the fees on the sub-station adjacent to the bubble chamber plant room, and nevertheless was £10,000 lower than the estimate in NI/GP/62/6. The new figure of £75,000 was considered reasonable.

Action 2. The Committee approved the increased estimate of £75,000 for fees for the Rutherford Laboratory Phase II scheme, the bubble chamber plant building and the sub-station adjacent to it.

6. TREATMENT OF THE LARGE SPOIL HEAP AT THE RUTHERFORD LABORATORY: Paper 62/18

The Committee noted that the scheme submitted in paper NI/GP/62/18 was the one which they had approved in principle on 2.10.61 and that the total estimated cost was the same as had been forecast then. They also examined photographs showing the present appearance of the heap.

Action 3. The Committee approved the proposal to treat the spoil heap as proposed in paper NI/GP/62/18 at an estimated cost of £22,000 including fees.

7. GENERAL FINANCIAL STATEMENT: Paper 62/11

The following points were made in discussion of paper NI/GP/62/11:

- (a) In Schedule I, the increase in the latest forecast of expenditure in 1961/62 was mainly due to an expected payment of £300,000 on the Atlas Computer. However, the payment would not be made in 1961/62 after all, so the forecast reverted to that previously made.
- (b) With reference to Schedule II, it had been agreed that increases over £1,000 in commitments due to the operation of cost variation clauses in contracts would be referred to the A.E.A. Finance Branch for approval. The 2nd, 3rd, 4th and 5th items listed in Schedule II had been approved in this way.
- (c) In Schedule IV there was an apparent forecast of £1 million over-expenditure in 1962/63. However this figure required adjustment by an amount related to the shadow cut. It was agreed that in successive forecasts the shadow adjustment would be expected to fall, as the remaining period in which unforeseen delays might occur was reduced. The Secretary said that he would like to put £600,000 as the present shadow adjustment, thus showing a present forecast expenditure of £7,036,000, i.e. £356,000 more than the expected grant.

8. NIMROD QUARTERLY STATEMENT: Paper 62/12

The Committee decided that they would not need to see the Nimrod quarterly statements in future, but they invited the Nimrod Project Committee to report to them any particular matters which that Committee thought the G.P.C. should consider.

The new commitments over £1,000 on the Nimrod project should in future be included in the general financial statement.

9. NIMROD VACUUM CHAMBER AND NIMROD ESTIMATES: Paper 62/13

The Chairman said that he had approved the action recommended in paper NI/GP/62/13. The financial situation appeared to be tight but adequate.

In reply to Mr. Drake, Mr. Bowles said that a great deal of work still had to be done by Rutherford Laboratory staff at Marston Excelsior's works, but there had been a reduction from 20 people to about 12. It would be most dangerous to relax this watch. The firm could not be effectively charged for this help, because of the costed basis of the contract.

10. EXTENSION TO BUILDING R.12: Paper 62/14

The Committee accepted the further information given in paper NI/GP/62/14 as reported at the last meeting, and agreed that the Treasury should be informed of the deletions from the scheme.

11. RUTHERFORD LABORATORY POWER DISTRIBUTION NETWORK: Paper 62/16

Action 4. The Committee approved the proposal in paper NI/GP/62/16 for additional capacity in the Rutherford Laboratory electric power distribution network, at a cost of £35,000 including fees.

12. BEAM TRANSPORT PLANT FOR NIMROD PARASITIC AREA: Paper 62/17

Dr. Pickavance said that the proposal for an initial supply of beam transport plant for the parasitic area was being put forward in the same way as the initial £1 million supply for the main experimental area, i.e. in the form of one large scheme. Like the £1 million supply, it would have to provide for a number of complete beams. Later requirements, which would follow on a continuing basis, would be supplementary, and probably would not arise as large schemes. Provision for all this plant had been made in the forecast estimates. The nature of the proposed beams in the parasitic area had been discussed in the appropriate scientific committees, and the Board was aware of the proposal, as they had approved the extension of the parasitic area.

The Committee agreed that a request to the Treasury for financial approval should be initiated. In view of the large sum of money involved they instructed the Secretary to bring this action to the attention of the Board.

Action 5. The Committee approved the proposals for provision of further beam transport equipment as specified in paper NI/GP/62/17 at a cost of £400,000.

13. FOREIGN TRAVEL AND DIRECTOR'S ENTERTAINMENT ALLOWANCE: Paper 62/19

The Committee considered and approved the proposals submitted in paper NI/GP/62/19.

Action 6. The Committee approved a budget of £20,000 for foreign travel in 1962/63.

Action 7. The Committee approved an entertainment allowance of £500 for the Director of the Rutherford Laboratory for 1962/63.

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

29th March, 1962.

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

GENERAL PURPOSES COMMITTEE

29th March, 1962

Notes for the Chairman

Expected: Lord Bridges, Sir Robert Aitken, Professor Wilkinson, Mr. Drake,
Dr. Vick, Dr. Pickavance, Mr. Bowles, Dr. Willis

Attending for discussion of papers 9 and 15: and 18:

Colonel N. Wilson (Manager, S.W.O.)
Mr. G. W. Dixon (Chief Architect, S.W.O.)

Apology: Professor Cassels

You may wish to take first the discussion on papers 62/9, 62/15 and 62/18
(and possibly return to them after Col. Wilson and Mr. Dixon have withdrawn).

Paper 62/9: Restaurant: As authorised at the last meeting, you have already
approved a request for more funds, to complete the restaurant within
£109,200. The Committee should endorse this action.

Paper 62/15: S.W.O. fees: The first part of this paper is the statement of
practice asked for at the last meeting.

The last paragraph deals with the Phase II building scheme. We had
asked for funds for £85,000 for fees, instead of the existing provision
of £43,000. The revised figures for fees are £75,000 which furthermore
include fees on the substation.

We need the Committee's approval of the revised increased fees.

Paper 62/18: Spoil heap: Estimate down; fees up: total the same as in the
rough figures on which approval in principle was given.

(S.W.O. should withdraw)

Minutes of last meeting:

Min. 3 (c) ✓ Didcot houses were approved.
Min. 4 ✓ Peach Croft houses not yet approved.
Min. 6 ✓ Request for increase for Atlas computer building
should have reached Treasury.
Min. 11 ✓ (Use of Merlin reactor) Contract negotiations with
A.E.I. are in progress. Will be reviewed by the
Research Reactor Committee on 16th May.

Matters dealt with by Correspondence

Paper 62/10 (Bubble Chamber magnet) Approved.

Financial Statement - 62/11: May I speak ~~you~~ on this.

Nimrod Statement - 62/12: I suggest that we now discontinue this statement.

Nimrod Vacuum Chamber and Estimates - 62/13: (Bowles)

You have approved the recommendations. The Committee should endorse this action.

Extension to R.12 - 62/14: (Willis)

This is the further information requested at the last meeting. We would like the Committee's approval of the action taken.

Electricity Distribution - 62/16: (Bowles)

This is one of several such schemes which will be needed in the next few years.

Beam Transport Plant - 62/17: (Pickavance)

We need to keep clear the relationship of this to:

- (a) The initial £1,000,000 beam transport scheme.
- (b) The parasitic area extension (75,000) and shielding wall (£125,000)
- (c) Future continuing requirements for beam transport plant.

Foreign Travel) 62/19 (Willis)
Entertainment)

Slight increase on the present year.

J. A. V. Willis

27th March, 1962.