

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

GENERAL PURPOSES COMMITTEE

Minutes of the meeting held at No. 5, Old Palace Yard, Westminster, London, S.W.1 on 20th November, 1962.

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

1. MINUTES OF THE LAST MEETING

The Committee approved the minutes of the meeting held on the 20th September, 1962.

2. MATTERS ARISING FROM THE MINUTES

(a) Minute 5 (a) (Estimates 1963/64)

Mr. Drake said that it seemed likely that a formal addition to the estimates would have to be made to provide for the cost of the National Hydrogen Bubble Chamber on its transfer from the D.S.I.R. on 1.1.64. This would not make necessary an equivalent saving elsewhere.

(b) Minute 5 (e) (Estimated expenditure on the Electron Laboratory)

Professor Merrison said that he had now completed his first plans and estimate. He had tried to keep within (i) the approved sum of £3.29M for the main capital project (ii) the approximate capital sums estimated for each main section of the project in paper NI/61/16 (as amended by the Board) and (iii) the total capital plus non-capital expenditure over five years estimated in the latest 5-year forecast NI/GP/62/29. He had succeeded in all these aims, but to achieve (i) and (ii) he had been forced to omit some building which he believed would soon be essential, in particular the second experimental area. He had somewhat increased the provision for the injector from £250,000 to £300,000 but it would have improved the accelerator if still more money could have been afforded for the injector.

On the rate of expenditure on the capital project, Professor Merrison said that his plans were for completion in 4 years, whereas the 5-year forecast had spread the expenditure over 5 years. He believed that his plans were realistic. They indicated expenditure approximately as forecast in 1963/64, but about £1 million greater than forecast in 1964/65 and correspondingly less than forecast in the three subsequent years.

It was agreed that the Treasury should be informed that it had been necessary to cut out some building work in order to keep within the approved sum. It was also agreed that before building plans, particularly for the second experimental area, were finalised the physicists who would be using the accelerator should be consulted, since one of the points made had been that being rather late in the field, we must have very convenient arrangements for experiments, to give us the best chance to catch up with other laboratories.

(c) Minute 6: Five-Year Forecast of Expenditure

The Secretary reported that after the further discussion with Mr. Drake and his staff some changes had been made in the 5-year forecast (paper NI/GP/62/29):-

- (i) Provision for support of university use of A.E.A. computers reduced by £310,000 in 1963/64 and by £160,000 in 1964/65.
- (ii) Rutherford Laboratory stores materials and services reduced by £90,000 in 1964/65.
- (iii) Shadow cut reduced by £200,000 in 1965/66.
- (iv) Small items totalling £30,000 deleted in 1965/66.

The forecast was exactly consistent with our interpretation of the promised grant for nuclear physics work in the first three years, but in 1966/67 and 1967/68 it included additional items raising the total above the 2% p.a. increase level, and the Minister for Science's letter to the Chairman of 13th July, 1962 made it clear that a decision whether these could be afforded was deferred.

Mr. Drake said that the amended 5-year forecast had now been transmitted to the Minister for Science's office preparatory to discussion with the Treasury.

In view of Professor Merrison's estimate of the rate of expenditure on the Electron Laboratory, reported above, it was agreed that a further letter should be sent to the Minister's Office, giving notice that we would probably wish to ask to transfer some of the planned expenditure from 1965/66 and the two next years to 1964/65.

(d) Minute 7: Electron Laboratory

- (i) The Chairman said that Professor Merrison now wished to establish a Project Committee for the Electron Synchrotron project (including buildings), including representatives of the universities concerned, the Rutherford Laboratory and the A.E.A. This was agreed.
- (ii) The Committee approved a budget of £1,000 for visits abroad on Electron Laboratory business, at the discretion of the Director, for the remainder of 1962/63.

3. MATTERS DEALT WITH BY CORRESPONDENCE

The Chairman said that after reference to the Committee by correspondence he had approved on their behalf the proposals made in the following papers:-

Extension to building R.18 at R.H.E.L. - paper 62/32
House building contract at Rush Common - paper 62/33

4. FINANCIAL STATEMENT - Paper 62/34

(a) Schedule I: The Secretary said that the latest forecast was that the over-expenditure in 1962/63 would be £365,000, i.e. just the increased amount payable this year for the Atlas Computer. It was pointed out that an under-expenditure of £85,000 on the Atlas Laboratory non-capital is forecast, but this is counter-balanced by an increase in the forecast Rutherford Laboratory expenditure.

Mr. Drake said that the £365,000 could be found within the Atomic Energy vote if authority for virement were given by the Treasury.

Dr. Pickavance said that within the forecast Rutherford Laboratory expenditure it was necessary to ask the Authority for an additional £50,000 for stores from the A.E.R.E.

(b) Schedule II: The Chairman commented on the further substantial list of running contracts at the Rutherford Laboratory and Dr. Pickavance confirmed that he was keeping a close watch on this matter.

(c) Schedule III: Referring to the Atlas Computer and buildings project, the Secretary said that Dr. Howlett wished to make a minor change in the equipment, substituting two fast printers of a newly available type for those at present specified, and adding a separate control console required for use in maintenance of the machine because of the layout on two floors. The total additional cost would be £27,000, and an increase in the total sum approved by the Treasury would be required. The technical case for the changes was extremely strong: for example the new printers besides being faster were much more economical in their use of the computer's central equipment, so that they would release valuable time for computation. Sir William Penney wished this proposal to be put to the Atlas Computer Committee, but had said that it seemed to him probable that they would endorse it.

The Committee took note of the proposal as reported by the Secretary, and agreed to approve it if it was recommended by the Atlas Computer Committee.

5. APPROVAL POWERS FOR THE ATLAS COMPUTER LABORATORY (Paper 62/35)

The Chairman said that the proposals in paper 62/35 dealt with the relationship between the Atlas Computer Laboratory and the rest of the Rutherford Laboratory. Although in a sense a separate unit, it was not intended that the Atlas Laboratory should be entirely independent. The actual levels of delegated financial power could be reviewed later if necessary, but the amounts proposed seemed suitable at present.

In discussion, it was agreed that the question of delegation of responsibility for the selection of staff should be referred to the Personnel Committee. The Committee approved the other proposals in the paper.

The Committee approved a budget for overseas travel on Atlas Laboratory business of £500 for the remainder of 1962/63.

The Committee approved a budget for entertainment in connection with the Atlas Laboratory of £100 for 1962/63.

6. RUTHERFORD LABORATORY LECTURE THEATRE - Paper 62/36

Dr. Pickavance said that paper 62/36 gave a project estimate for the lecture theatre, including an increase of 610 sq. ft. in the size of the entrance hall, which he was sure had been previously cut down too much. He pointed out that the building was an extremely simple and economical one. In discussion it was remarked that the cost had been reduced to less than half that of the original proposal, showing the value of very hard work at the planning stage. The building would not of course equal the more expensive design in all respects, but it would be adequate for its purpose.

The Committee approved the proposal submitted in paper NI/GP/62/36 for a lecture theatre at the Rutherford Laboratory at a cost not exceeding £50,000.

7. ELECTRICAL POWER DISTRIBUTION AT THE RUTHERFORD LABORATORY - Paper 62/37

Mr. Bowles said that the work proposed in paper 62/37 was the next

step in the planned development of electric power distribution in the Rutherford Laboratory, but some changes had been made in the type of equipment in the light of recent experience. The work would be done by the A.E.A. Southern Works Organisation through contractors. After discussion, the Committee approved the work proposed in paper NI/GP/62/37 at a cost of £39,000 inclusive of fees.

8. PROGRESS WITH NIMROD VACUUM VESSELS

Mr. Bowles reported that the contract with Marston Excelsior for vacuum vessels was now nearing a successful end. The firm had delivered 9 of the 10 outer vessels, 7 of the 10 inner vessels and 1 of the 4 header vessels. Deliveries were expected to be complete by mid-February and the final cost was expected to be within the sum at present allocated in the estimate. The storage or disposal of the various different items of manufacturing equipment owned by the Institute was at present under discussion.

9. MEETINGS IN 1963

There was a brief discussion of dates for meetings in 1962 on which suggestions had been circulated.

(Note by the Secretary: the following dates were later fixed, all at 5, Old Palace Yard in the afternoon:- 18th February, 13th May, 16th September and 5th December.)

J. A. V. Willis,
Secretary.