

27th October 1961.

NI/GP/61/47

M. Bowles

D631

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

11/2a

GENERAL PURPOSES COMMITTEE

Use of the Birmingham Proton Synchrotron by the Rutherford
Laboratory

Covering note by the Secretary

The Committee's approval is requested for the expenditure of £31,000 on beam transport equipment for NIRNS work with the Birmingham Synchrotron, as described by Dr Stafford in the attached note. There is adequate financial provision in estimates. Since the equipment is for use at Birmingham University it is expected to arrange for some of it, probably including the C magnets, to be designed and supplied by the University under EMR agreement. Other items, will be supplied from the Rutherford Laboratory.

I shall be very grateful if members will let me know by correspondence whether they approve of this expenditure. If there are no objections I will as usual ask the Chairman if he will give approval on behalf of the Committee.

A tear-off slip is attached for use in reply by members of the GPC if desired.

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

Circulation: Members of the GPC
Members of the Governing Board for information.

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Reply from

I agree/do not agree to the proposal to spend £31,000 on beam equipment for use in NIRNS experiments at Birmingham University.

Signed

Note to General Purposes CommitteeUse of the Birmingham University Proton Synchrotron by
the Rutherford Laboratory

1. During the next two years there will be a considerable amount of equipment being built by the National Institute in preparation for the nuclear research programme on Mimrod. The 1 GeV proton synchrotron at Birmingham University is a convenient source of particles for testing much of this equipment. The possibility of using the accelerator for this purpose has been discussed with Professor W. E. Burcham and he has generously agreed to make time available. In order not to interfere with the Birmingham University research programme, however, it will be necessary for the National Institute to set up a separate beam line.

2. Approval is requested for a sum of £30,000 to cover the cost of the necessary equipment. When it is no longer required at Birmingham University the majority of this equipment will still be of use in the Rutherford Laboratory.

3. Details of the estimated expenditure are given below.

(a) Two C-type magnets	£16,000
(b) Two sets of 6 inch aperture quadruple magnets	£ 5,000
(c) One additional set of small quadruple magnets	£ 1,500
(d) Steel floor for Magnets.	£ 750
(e) Generators and bus bars	£ 2,500
(f) Magnet controls and stabilisers	£ 1,500
(g) Expenses incurred by Birmingham University (Workshop, travel, etc.)	£ 1,000
(h) Contingencies (10%)	£ 2,800
	£31,050