National Institute for Research in Nuclear Science

RUTHERFORD HIGH ENERGY LABORATORY

Opening Ceremony
and
Inauguration
of
"NIMROD"

FRIDAY, 24th APRIL, 1964

PROGRAMME

10.30—11.15 a.m.	Reception in the Main Conference Room, Building R.1.
11.30 a.m.—12.15 p.m	"The Rutherford High Energy Laboratory." A colour film to be shown in the Lecture Theatre.
12.15 p.m.	Sherry will be served in the foyer of the Lecture Theatre.
12.30 p.m.	Luncheon and Opening Ceremony.

Speakers:

The Rt. Hon. QUINTIN HOGG, Q.C., M.P.
Secretary of State for Education and Science.

The Rt. Hon. THE LORD BRIDGES
G.C.B., G.C.V.O., M.C., F.R.S.
Chairman, The National Institute for Research in Nuclear Science.

Sir JOHN COCKCROFT
O.M., K.C.B., C.B.E., F.R.S.
Master of Churchill College, Cambridge.

Professor V. F. WEISSKOPF
Director-General, C.E.R.N.

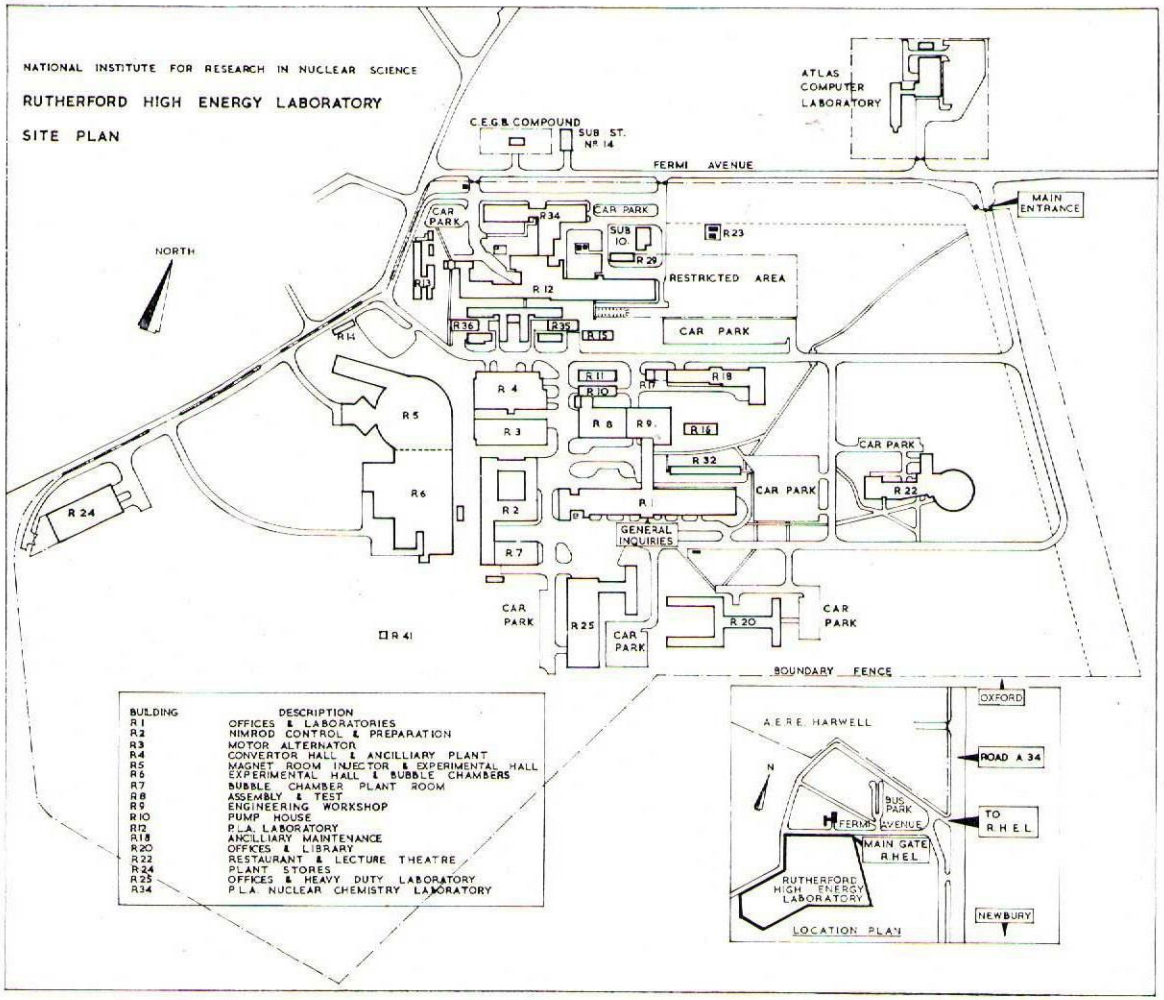
Dr. T. G. PICKAVANCE
Director, Rutherford High Energy Laboratory.

2.30—4.00 p.m.	Tours of the Laboratory.

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

RUTHERFORD HIGH ENERGY LABORATORY

SITE PLAN



BUILDING	DESCRIPTION
R1	OFFICES & LABORATORIES
R2	NIMROD CONTROL & PREPARATION
R3	MOTOR ALTERNATOR
R4	CONVERTOR HALL & ANCILLIARY PLANT
R5	MAGNET ROOM INJECTOR & EXPERIMENTAL HALL
R6	EXPERIMENTAL HALL & BUBBLE CHAMBERS
R7	BUBBLE CHAMBER PLANT ROOM
R8	ASSEMBLY & TEST
R9	ENGINEERING WORKSHOP
R10	PUMP HOUSE
R12	P.L.A. LABORATORY
R18	ANCILLIARY MAINTENANCE
R20	OFFICES & LIBRARY
R22	RESTAURANT & LECTURE THEATRE
R24	PLANT STORES
R25	OFFICES & HEAVY DUTY LABORATORY
R34	P.L.A. NUCLEAR CHEMISTRY LABORATORY

General Information for Guests

Information desks will be found in the main entrance to Building R.1 and the foyer of the Lecture Theatre. General information about the Laboratory will be available. Help can be given with transport and travel information.

Refreshments. Coffee will be served in the Coffee Annexe on the first floor of Building R.1 between 10.30 a.m. and 11.15 a.m. and in the foyer of the Lecture Theatre between 11 a.m. and 11.30 a.m.

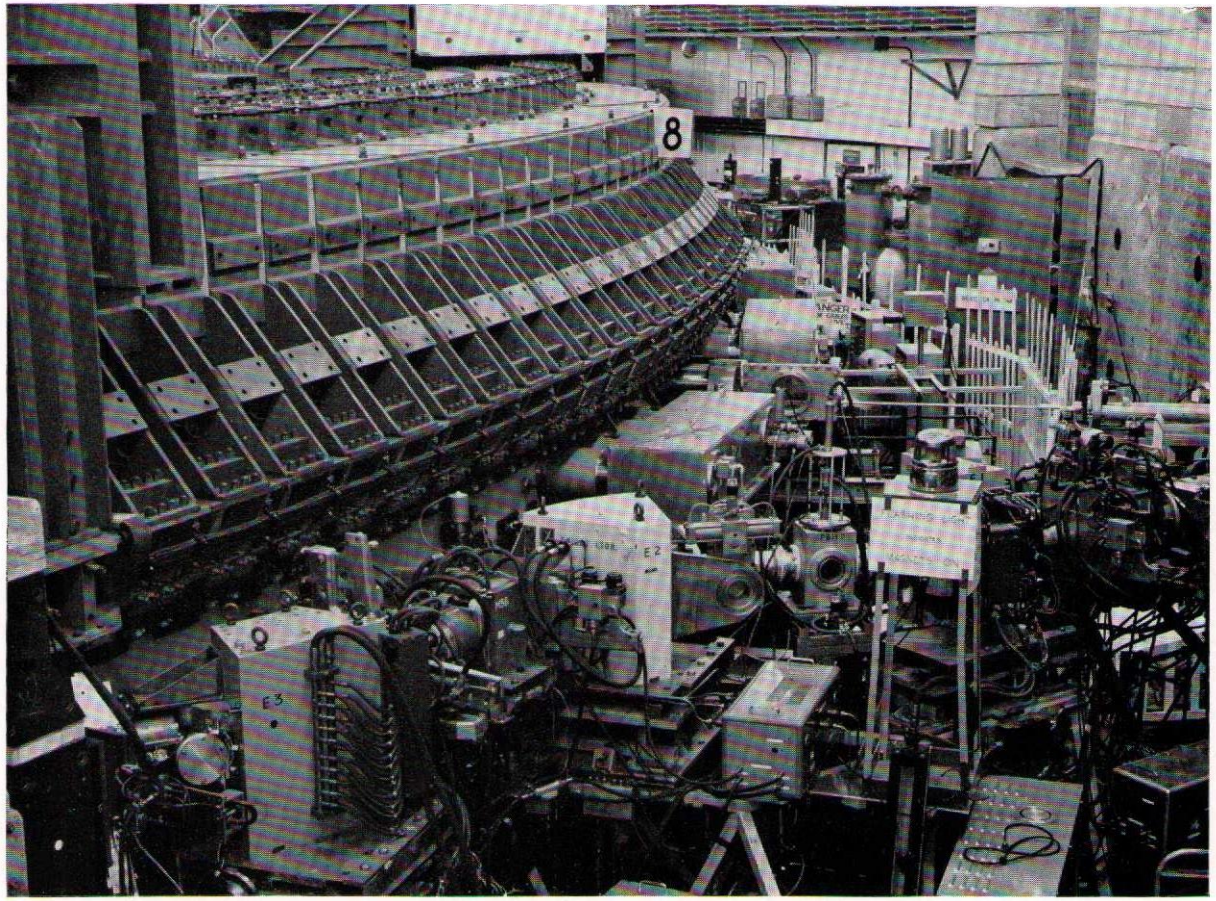
Exhibits will be on display in all parts of the Laboratory. Coloured directional signs will point the way to the main places of interest.

Guides. Rutherford Laboratory staff will wear name cards showing the Division of the Laboratory to which they belong. They will be glad to give help and information to guests.

Trains to London (Paddington)

Didcot Dep.	3.05 p.m.[B†]	4.02 p.m.[†]	4.29 p.m.[A]	5.08 p.m.[†]	5.29 p.m.[A]
London Arr.	4.05 p.m.	5.38 p.m.	5.55 p.m.	6.25 p.m.	7.00 p.m.

NOTES †—Through Service. A—Change at Reading. B—Buffet Car.



NIMROD

Magnet octant no. 8 and the beam line leading 15 MeV protons into the accelerator

Inauguration of NIMROD

Indicators in the Restaurant and Marquee show the state of the NIMROD magnet and beam. The amber warning light will show that the magnet is already energised.

To commence the operation of NIMROD the Secretary of State for Education and Science will ask the NIMROD Control Room to sound 'Message 4'.

A warbling tone will then be broadcast from the NIMROD Control Room, followed by 'Message 4.' This message, which lasts about a minute, is the final warning to staff in the NIMROD area that the synchrotron is operational.

On completion of 'Message 4' the Secretary of State will press a button whereupon red lights will appear on the indicators showing that the beam is on and the T.V. monitors will relay a signal from induction electrodes surrounding the proton beam inside NIMROD. This signal will show the circulating charge in the synchrotron throughout the acceleration. At the same time a pulsing sound will be heard at two second intervals signifying the commencement of each acceleration cycle. This will be faded out after a short time but the 'signal' from the proton beam will continue to be shown on the T.V. screens.

EXHIBITS

NIMROD. The Whole of NIMROD—Control Rooms, Power Supply House, Magnet and Injector Rooms, and the two Experimental Halls—is open to guests. Exhibits display various aspects of machine operation and special features of machine components. Four of the current high energy physics experiments are specially displayed in the Experimental Halls.

Proton Linear Accelerator. The P.L.A. Control Room, the machine and the experimental areas are open to guests.

Ion Source Work is displayed in Laboratory 6, Building R.1, the polarized proton target can be seen in the Heavy Laboratory, Building R.25. Electron physics work and the new type of high vacuum gauge is displayed in Laboratory 3, Building R.1.

Bubble Chambers. The Heavy Liquid Bubble Chamber is on display in Experimental Hall 1.

Spark Chambers. Visual spark chambers and a sonic spark chamber can be seen in Building R.2.

Orion Computer. Orion is on view to guests in Building R.1. The work of a scanning laboratory may be seen in conjunction with a visit to Orion.

Variable Energy Cyclotron. A model of a variable energy cyclotron is on display in Laboratory 2, Building R.1. Ion source work is exhibited in Building R.25.

Nuclear and Radio-Chemistry Laboratory. This Laboratory, in Building R.34, is open to guests and equipment will be specially displayed.

Electrostatic Generators. A display in Laboratory 7, Building R.1, depicts the story of the electrostatic generator. Photographs, diagrams, and descriptive literature of the present project at Oxford University will also be on show.

Engineering Exhibits are on display in Buildings R.8, R.9, R.16 and R.18.

General. A display of technical diagrams showing the main features of NIMROD is shown in the foyer of Building R.1. The colour film to be shown in the Laboratory has only recently been completed and gives a general outline of the work being carried out at the Laboratory with special reference to our two large accelerators—NIMROD and the P.L.A.

Technical leaflets will be available at the various Exhibits.

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