

RUTHERFORD HIGH ENERGY LABORATORY OPENING CEREMONY

Notes of a meeting held in R.1 Conference Room on Friday, 10th January 1964.

Present:- F.M. Telling
Mr. T. Walsh
Mr. B. Southworth
Mr. E.G. Higgins representing Eng. Division
Mr. F. Harden " NIMROD Eng. Group
Mr. P.J. Jones " NIMROD Physics Group
Mr. P.P. Starling " NIMROD General Physics Group
Mr. D.C. Salter " H.E.P. Division
Mr. P.S. Rogers " V.E.C. Group
Mr. C.L. Roberts " Atlas Laboratory
Mr. C.J. McDonald " Admin. Group
Mr. P. Seager " Bubble Chamber Group
Mr. W. Burrells " Radiation Protection

Apologies for absence received from Mr. K. Davies (H.E.P. Eng. Group), Mr. D.A. Harrigan (Theoretical Studies) Mr. Wallis (P.L.A. Eng. Group).

1. The meeting was called to brief the group representatives on the general arrangements for the Laboratory opening ceremony.

The following programme of events was tabled:

Tuesday, 21st April	Press Photographers
Wednesday 22nd "	Press Correspondents
Thursday 23rd "	Rehearsal for opening ceremony
Friday, 24th "	Opening Ceremony
Saturday, 25th "	Open day for Laboratory personnel

2. The representatives' terms of reference were to coordinate the preparations to receive visitors within their respective groups during the above days.
3. An official programme of events is being prepared by Mr. T. Walsh. The representatives were asked to provide a precis of the work being carried out within their groups with reference to any particular exhibits. (The content to be technical but not too specialised.) To allow time for printing and distribution it was necessary to have this programme detailed by the 24th February. It was therefore agreed that representatives would let Mr. Walsh have their write-ups before the 29th January.
4. A contract will be placed to deal with the artwork requirements, and any diagrams, sketches, literature, notices, etc. can be provided if the essential information is fed through Mr. Telling. The latest date for receiving this work is the 1st April.
5. A number of photographs of apparatus and equipment have already been taken and use can be made of these if required. Any further requests for photographs to be taken can be routed through Mr. Telling if desired. It is essential to have the negative number of any photograph displayed during this open period as an aid to the press representatives.
6. The question of a general costing code against which to book the time and materials used within the groups to prepare exhibits etc. would be taken up with Dr. Valentine and information given at the next meeting.

7. Representatives were required to cover the following groups:-

- (i) High Magnetic Fields
- (ii) Radio-chemical Laboratory
- (iii) P.L.A. Nuclear Physics Group
- (iv) P.L.A. Machine Group
- (v) NIMROD Beams Group

An approach would be made to the Group Leaders to provide nominations.

8. The next meeting would be held on Wednesday, 5th February at 3.15 p.m. in R.1 main conference room to discuss the draft material for the official programme and consider any further points that may arise.

(Please note revised time of meeting)

F.M.T.

13.1.64.

Mr. P. Seager
R1

RUTHERFORD HIGH ENERGY LABORATORY OPENING CEREMONY

Meeting held on Wednesday, 5th February, 1964

Present:-

T.R. Walsh
F.M. Telling
B. Southworth
T.F. Gubbins (P.L.A.)
F. Harden (Nimrod NE)
M.J. Newman (Nimrod PB)
P.J. Jones (Nimrod MP)
✓ P. Seager (Bubble Chamber Group)
D.C. Salter (HEP Division)
K. Davies (Nimrod HEPR)
D.A. Harragan (Theoretical Studies)

1. Time and materials used in the preparation of exhibits etc. to be booked to the costing code generally used within the groups. A special costing code has been set up to cover items such as artwork, reproduction of technical handouts which are done via F.M. Telling or T.R. Walsh. It will help if material for artwork etc. is fed to F.M. Telling as soon as possible rather than all the material arriving at the same time near the closing date of 1st April. It will also be appreciated if the material is typed.
2. Information (title, location, person responsible) on exhibits which will be set up for the week of the Opening Ceremony is now available from almost all groups. A list of the proposed exhibits is attached to this note for all groups representatives who were not present at the meeting.

In an attempt to standardise the technical handouts they will be edited and reproduced via T.R. Walsh. The write-ups should be with T.R. Walsh by 17 February.

3. T.R. Walsh will check whether any exhibits need to be manned on the day of the Opening Ceremony itself.
4. About 80 people are expected on the day of the Press Visit and tours of the Laboratory in ten groups of eight people are being organised by B. Southworth. Two periods of 1½ and 1¼ hours are allocated to the tour and the amount of time which can be spent in any one area will be very limited. Whenever possible exhibits should be brought together for it is almost certain that no time will be available to visit isolated exhibits. Exhibits which are not toured on the Press Visit are still desirable for the day of the Opening Ceremony and for Open Day. A proposed programme for the tours will be prepared as soon as possible and circulated to all group representatives.

B. SOUTHWORTH

Next meeting:- Wednesday, 19th February, at 3.15 p.m. in Conference Room No. 4.

Distribution:-

Those present
E.G. Higgins (Central Engineering)
P.P. Starling (Nimrod GP)
P.S. Rogers (VEC Group)
C.L. Roberts (Atlas Laboratory)
C.J. McDonald (Administration)

Mr. P. Seager, - For information (para. 5),
Building R.1

Opening Day Guided Tours

1. After the Nimrod Inauguration Ceremony a small Ministerial Party will leave the Restaurant to tour part of the Laboratory.
2. When the Minister's party has left Dr. Valentine will explain the arrangements for the remaining guests. These are described below.
3. About five minutes after the Ministerial party has gone a further party of about 50, including distinguished guests and civic dignitaries, will leave accompanied by Division Heads and their wives.
4. There will remain about 100 outside guests who may like to visit parts of the Laboratory. Laboratory guests are asked to act as guides for this purpose making up small parties from those seated near them and including their wives. A circular service provided by buses will be available but it is not necessary for these tours to follow any special order. About 40 Laboratory guests are expected so there is no need for additional guides as requested in my previous note of 16th April.
5. Exhibits should be manned for the second party (para. 3) and subsequent groups but not for the Ministerial party unless specially requested.
6. Further details can be discussed if necessary at the briefing session arranged for Laboratory guests on Thursday, 23rd.

B. Southworth

21st April, 1964.
Building R.20

Bubble Chamber Exhibits

Bubble Chamber Data processing laboratory
Demonstrator: Dr. C. Fisher

Diagram of Imperial College
measuring machine
1.5M H₂ Chamber and
pictures of events.

Measuring Laboratory, R.1
Demonstrator: K. McKee

Diagram of University College
measuring machine and
pictures of events.

Heavy Liquid Chamber, R.6
Demonstrator: J. H. Foster

Sectional Drawing of Chamber
Diagram of Chamber operating
sequence
Diagram of Group operations
and photographs of typical
H. L. events.

Freon Chamber
Demonstrator: R. Elliott

Diagram of Chamber and
photographs of tracks

Information on Tours

Monday 20th April

Tour from 10.30 - 12.00 noon. Exhibits to be manned by the demonstrator until after the party has visited.

Tuesday 21st April

Exhibits to be manned from 12.00 - 1.30 and 2.30 - 4.00 from a safety point of view and to supply captions for pictures.

Wednesday 22nd April

Exhibits to be manned by the demonstrator from 12.00 to 1.30 and from 2.30 - 4.00.

Thursday 23rd April

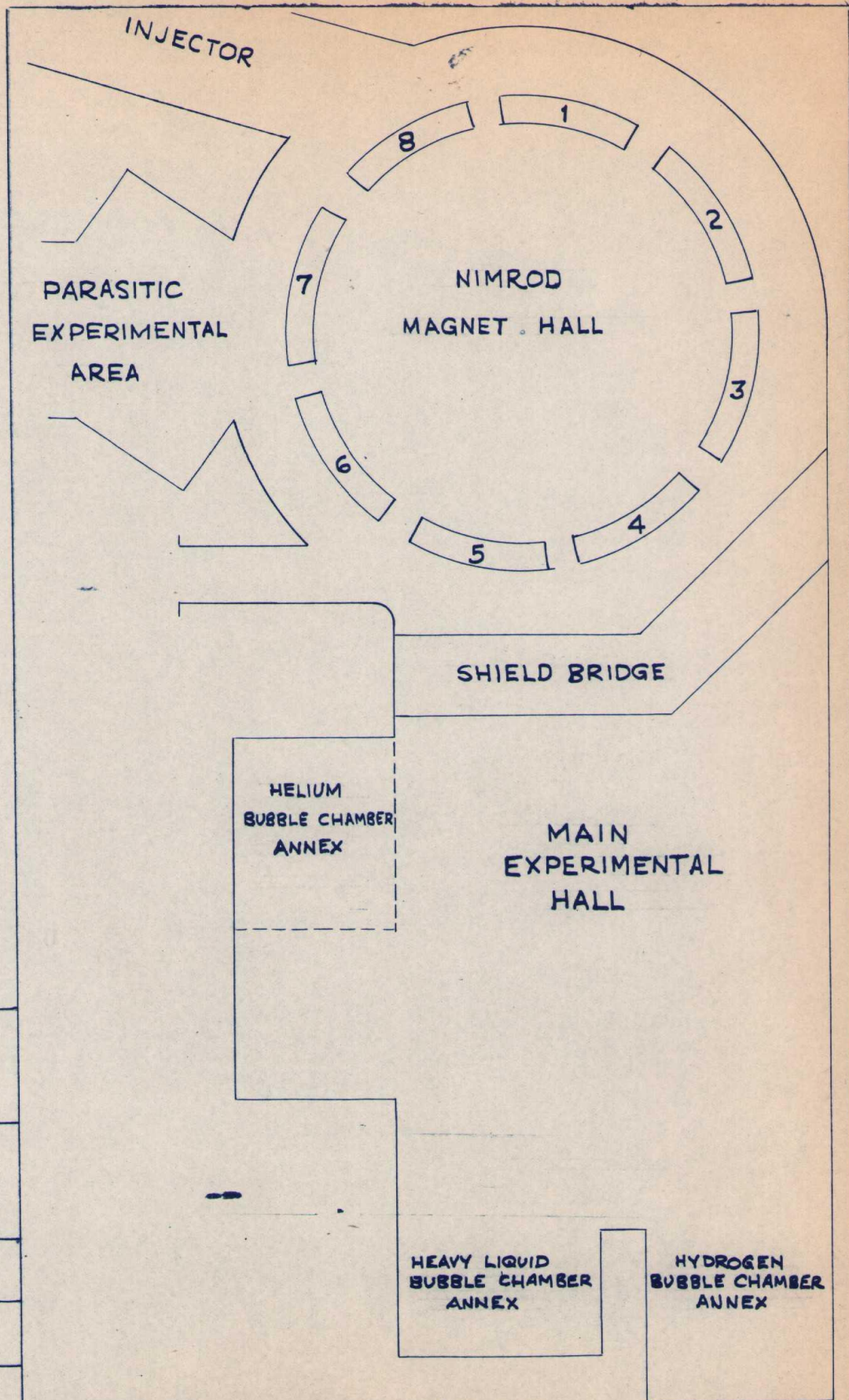
Nimrod is operating all day.

Friday 24th April

Exhibit to be manned from a safety point of view from 10.30 - 11.45 and after the opening until 4.30 p.m.

Saturday 25th April

Exhibits to be manned from 2.00 p.m. - 6.00 p.m.



DRAWN
BC.

TCD.

CHKD.

APPD.
BC.

N.I.R.N.S., RUTHERFORD LABORATORY,
 CHILTON, BERKS.

TITLE
 BLOCK DIAGRAM OF NIMROD &
 EXPERIMENTAL AREAS.

SCALE 1" = 40'-0"

DWG. No. **A.R. 021596**

Handouts by 17/2/64.

750 words
10 groups
8 per group

1 1/4 am
1 3/4 pm.

RUTHERFORD HIGH ENERGY LABORATORY

Proposed exhibits for the Press Visit and Opening Ceremony
(21st - 25th April, 1964)

A. NIMROD DIVISION

Nimrod Machine Physics

- | | | | |
|-----|--------------------------------|------------------------------------|-------------------------------|
| A1 | Pre-injector and L.E.D.S. | (TH) Injector Room | H.Wroe, K.D.Srivastava |
| A2 | Injector beam monitoring. | (TH) ? | J. T. Hyman |
| A3 | Linac, buncher and debuncher. | (TH) Injector Room | N.D.West |
| A4 | H.E.D.S. and inflector. | (TH) Injector Room
Magnet Room | R.Billinge |
| A5 | Magnet and vacuum vessel. | (TH) Magnet Room | R.Morgan, P.Jones, G.Grossart |
| A6 | Power supply. | (TH) Generator House | H.Brooks |
| A7 | R.F. system. | (TH) ? | W.Boyd |
| A8 | Targets and extraction system. | (TH) Magnet Room | R.Bennett |
| A9 | Control Room. | (TH) Control Room | R.Russell |
| A10 | Control system. | (TH) Control Room
Injector area | J.T.Hyman |

Nimrod Beams Physics

- | | | | |
|-----|-------------------|------|----------------------|
| A11 | Separators | R.25 | (TH) Means Data Lab. |
| A12 | Target mechanisms | R.25 | (TH) |

Nimrod High Energy Physics Engineering

- | | | | | |
|-----|--------------------------------|------------------------|---------|-----------------------|
| A13 | Liquid hydrogen target systems | (TH) Experimental Area | P.D.Hey | J. Delany
H. Hicks |
| A14 | | | | |
| A15 | | | | |
| A16 | | | | |
| A17 | | | | |

Nimrod General Physics

- | | | | | |
|-----|-----------------------------|----------|------|-----------|
| A18 | Space charge neutralisation | R1-Lab.3 | (TH) | P.H.Banks |
| A19 | New high vacuum gauge | R1 Lab.3 | (TH) | G.A.Regan |

Nimrod General Physics (Contd)

A20	Liquid Helium Level Indicator	R1 Lab.3	(TH)	G.A.Regan
A21	Reaction Time Tester	R1 Lab.3		W.K.Ho
A22	New Nimrod R.F. Ion Source	R1 Lab.6	(TH)	H.Wroe & J.C.Sutherland
A23	Lens Box etc.	R1 Lab.6		R.G. Fowler
A24	Harmonic Pendulum	R1 West StairWell		H.Wroe
A25	Long Spark	R25		R.G.Fowler

Nimrod Machine Engineering

- A.26 Power Supplies. (see. A6.)
 A.27 Mech.
 A.28 Elect.

B. HIGH ENERGY PHYSICS DIVISION

Counters

B1	$\pi 1$ Beam line	}	(TH)	Nimrod Parasitic Area	JJ Thresh
B2	$\pi 2$ Beam line			Nimrod Experimental Area	Hyman.
B3	$\pi 3$ Beam line			Nimrod Experimental Area	Clegg.
B4	N1 Beam line			Nimrod Experimental Area	Manning
B5	Visual spark chamber			R1	Thresh.
B6	Visual spark chamber			R2	Hyman
B7	Sonic spark chamber			R2	C Whitehead.

Bubble Chamber Research

B8	Freon bubble chamber see e3			Nimrod Experimental Area	R. Elliott
B9	Scanning and measuring machines (TH)			R1	A.H. Segar.
B10	Emulsions			R1	P. Loring

Electronics

B11	Fast Electronic techniques			R25/Nimrod Experimental Area?	Willie
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C. APPLIED PHYSICS DIVISION

Bubble Chambers

- C1 Scanning Rooms *Film processing scanning & measuring lab. Lab. 8. C. Fisher*
C2 Heavy Liquid bubble chamber *Experimental area. J. Posten*
C3 Freon bubble chamber *Nimrod Experimental Area - R. Elliott*

Theoretical Studies

- C4 Data Reduction (TH) Orion Computer J. Sparrow

Variable Energy Cyclotron

- C5 Small cyclotron.
C6 Model of V.E.C.
C7 Ion source.
C8 How a cyclotron works.

High Magnetic Fields out.

~~Theoretical Studies~~

D. P.L.A. DIVISION

Nuclear and Radiochemistry

- D1 - - Cave and automatic readout N & R wing
D2 Rare earth separation N & R wing

Nuclear Physics

P.L.A. Machine

P.L.A. Engineering

E. ENGINEERING DIVISION

Central Engineering

E1 Typical project (TH) R9 E.G.Higgins

F. ADMINISTRATION DIVISION

F1 Nimrod Display R1 Main Entrance F.Telling

Radiological Protection

F2 Perspex cloud chamber
F3 Penetration of radiation
F4 Treasure hunt
F5 Charged girl.

T. R. Walsh

Rutherford Laboratory

5th February, 1964.

Proposed Tour of the Laboratory

Period 1	12 - 1.30	1 1/2 hours
Period 2	2.15 - 4.00	1 3/4 hours

Organised for about 80 people in 10 groups of 8 ; groups labelled A - J

Exhibit Areas

- 1 Main Control Room
 - 2 Experimental Area
 - 3 Magnet Room
 - 4 Parasitic Area
 - 5 Infector Hall
 - 6 Power Supply House
- } NIMROD

- 7 R2 (Spark chambers)
- 8 R25 (Heavy lab.)
- 9 Lab 2) Cyclotron
- 10 Lab 3) C
- 11 Lab 6) R1
Gen Physics
- 12 Lab 8) Scanners
- 13 Scanning Rooms, ORION
- 14 Nuclear and Radioch. Lab.
- 15 P.L.A.
- 16 R8, R9 (Workshop)

A	1 (10)	2 (20)	3 (25)	4 (10)	5 (15) $\text{T} \leftarrow$	6 (10)
B	6	1	2	3	4	5 $\text{T} \leftarrow$
C	2	3	4	5 $\text{T} \leftarrow$	6	1
D	$\text{T} \rightarrow$ 5	4	3	2	1	6
E	6	$\text{T} \rightarrow$ 5	4	3	2	1

$\text{T} \leftrightarrow$ Transport to or from the tunnel to the Injector Control Room

F	15 (40)	14 (20)	16 (10)	8 (15)			
G	14 (20)	15 (40)	7 (10)	9 (10)	10 (10)		
H	13 (25)	14 (20)	15 (40)				
I	8 (15)	11 (10)	12 (10)	13 (25)	9 (10)	10 (10)	7 (10)
J	7 (10)	16 (10) (20)	9 (10)	10 (10)	11 (10)	8 (15)	13 (25)

Estimated times at each exhibit area in brackets

A becomes F, and vice versa, in Period 2

B becomes G etc.

Any comments to B. Southworth as soon as possible, please