

9th October, 1959

NI (GP) (59) 32

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

GENERAL PURPOSES COMMITTEE

NUCLEAR EQUIPMENT STATEMENT No. 1.

(Report by the Nuclear Equipment Project Committee)

NUCLEAR EQUIPMENT

Quarterly Statement No. 1

1. This report is submitted in accordance with the decision taken at the 1st Meeting of the Nuclear Equipment Project Committee on 18th June, 1959 to present quarterly financial statements to the G.P. Committee of the National Institute.
2. At present the Nuclear Equipment Project Committee is considering the Services for the Hydrogen Bubble Chamber and this is therefore reported in detail. It is, however, intended to extend the functions of this or alternative committees to cover other aspects of Nuclear Equipment and hence a complete summary of estimates is given.
3. Appendix I shows the latest Estimate for Hydrogen Bubble Chamber Services compared with the present approved Estimates.
4. Appendix II shows a Summary of Estimates for Nuclear Physics capital items for which provision has been made in the National Institute approved estimates.
5. Appendix III shows the predicted expenditure by years on the Hydrogen Bubble Chamber Services.
6. Appendix IV shows the commitments and expenditure up to 13th September, 1959 on Hydrogen Bubble Chamber Services.
7. Appendix V shows the anticipated contract action to the 2nd January, 1960.

L.B. MULLETT
Nuclear Equipment Project Committee

1st October, 1959.

APPENDIX I

HYDROGEN BUBBLE CHAMBER SERVICES

COST ESTIMATES - 13th SEPTEMBER, 1959

Item	Present Treasury Approval £	Latest Estimate £
Magnet Supplies		110,000
H ₂ Liquifier Supplies		70,000
Safety System & Sundries		20,000
PLANT TOTAL	200,000	200,000
<u>Building</u>		
Architects		44,000
Engineers		4,000
External Services		2,000
Fees		<u>5,000</u>
	55,000	55,000
TOTAL	£255,000*	£255,000

NOTE:- *Original Treasury Approval of £250,000 increased by £5,000 to provide for fees on Building.

This estimate does not include the Bubble Chamber Annexe to the Experimental Area which is covered in Nimrod Estimates.

APPENDIX II.

SUMMARY OF ESTIMATES FOR NUCLEAR PHYSICS

CAPITAL PLANT FOR USE WITH NIMROD

		<u>Approved</u> <u>Estimate</u> £
1.	Hydrogen Bubble Chamber Services	200,000
2.	Plant for Research & Development	
	(a) Visual Techniques	450,000
	(b) Electronic Techniques	450,000
	(c) Propane Bubble Chamber	300,000
	(d) Beam Handling Plant	<u>1,000,000</u>
		2,200,000
3.	Minor items of expenditure within delegated powers	290,000
	<u>TOTAL</u>	<u>22,690,000</u>

APPENDIX III

NUCLEAR EQUIPMENT

HYDROGEN BUBBLE CHAMBER SERVICES

PREDICTED RATE OF EXPENDITURE AS AT 13th SEPTEMBER, 1959

Item	Predicted 1959-60	Predicted 1960-61	Total Predicted
	£	£	£
Plant	-	200,000	200,000
Building	20,000	35,000	55,000
Total	£20,000	£235,000	£255,000

Item	Provision in Original 1959-60 Estimates	Provision in Original 1959-60 Estimates for 1960-61	Total Provision in Original Estimates
	£	£	
Plant	40,000	160,000	200,000
Building	30,000	20,000	50,000
Total	£70,000	£180,000	£250,000*

*NOTE:- Treasury Approval has now been increased by £5,000 to provide for Fees on Building.

APPENDIX IV

HYDROGEN BUBBLE CHAMBER SERVICES

RECORDED COMMITMENTS AND EXPENDITURE UP TO 13th SEPTEMBER, 1959

Item	Commitment	Expenditure
	£	£
<u>PLANT</u>		
Magnet Supplies	49,467	-
H ₂ Liquifier Supplies	15,984	-
Safety System and Sundries	-	-
<u>PLANT TOTAL</u>	65,451	-
<u>BUILDINGS</u>	7,071	-
<u>TOTAL</u>	£72,522	-

COMMITMENTS ENTERED INTO VALUED AT £500 AND ABOVE

Item	Value	Firm
	£	
250V, 1000K.W. D.C. Generators (4)	49,467	General Electric Co., Ltd.
Hydrogen Compressor Units	15,984	Peter Brotherhood, Ltd.
Steelwork	7,071	Rubery Owen, Ltd.

NUCLEAR EQUIPMENT

APPENDIX V.

HYDROGEN BUBBLE CHAMBER SERVICES

KNOWN AND ANTICIPATED CONTRACT ACTION DURING 13th SEPTEMBER, 1959 TO 2nd JANUARY, 1960

Item	Estimated Value	Firm	Remarks
H ₂ Supply High Pressure Storage Cylinders	3,500	Chesterfield Tube Co., Ltd.	Contract to be placed by end of December, 1959
" Gas Holder	2,000	Competitive Tender	Tender action to be completed by early Jan. 1960
Purification System Oil Filters	1,000	" "	" " " " " "
" " Silica Gel Dryer	1,000	" "	" " " " " "
" " De-oxo Units	2,000	Baker Platinum	" " " " " "
Vacuum Pumps	5,000	Competitive Tender	" " " " " "
Liquid N ₂ Storage Vessels	11,000	" "	Contract to be placed by mid December, 1959
Safety System Vessel	10,000	" "	" " " "end of October, 1959
" " Pipelines	1,000	" "	" " " " December, 1959