

PSPC/P.58

KIMROD PROJECT

QUARTERLY STATEMENT NO.9

1. This report shows in Appendix I the Kimrod Capital Estimate to the 30th September 1959 compared with the original estimate and the present Treasury Approval.
2. The estimate has not been increased since the last Quarterly Statement, but two further items which have been approved since the 30th September 1959 are noted.
3. The total estimate at the 30th September 1959 therefore remains at £8.298 M.
4. A further review of the estimate will be made in January and it is intended to submit a Statement to the 31st December 1959 to the G.P. Committee of U.I.R.N.S. at their next Meeting. This will be circulated to members of the Project Committee for approval before submission to the G.P. Committee.
5. Appendix II shows actual and predicted expenditure by years compared with the Treasury Grant. The figures are unchanged since the last Statement.
6. Appendix III shows the expenditure and commitments up to the 12th September 1959, which is the end of the last U.K.A.E.A. Accounting Quarter for which Returns are available.
7. Appendix IV shows anticipated contract action up to the 31st December 1959.

D. W. FRY

Chairman, PROJECT COMMITTEE

22nd December 1959

NITROD PROJECTRevised Cost Estimates - 30th Sept. 1959

Item	£ Million		
	Original Estimate approved by Treasury	Present Treasury Approval	Revised Cost Estimates at 30.9.59.
1. <u>Magnet</u>	2.60	2.652	2.823
2. <u>Injector</u>	0.30	0.450	0.450
3. <u>R.F. Equipment</u>	0.15	0.150	0.150
4. <u>Vacuum Equipment</u>	0.40	0.780	0.905
5. <u>Power Supply</u>	1.30	1.300	1.300
6. <u>Controls</u>	0.15	0.150	0.150
<u>Cooling System</u>	0.10	-	-
	5.00	5.482	5.778
7. <u>Buildings</u>			
<u>Main & Ancillary</u>			
Building Works	1.40	1.591	1.591
Engineering & Services	0.40	0.587	0.667
Fees	0.10	0.232	0.232
Furniture & Fittings	-	0.030	0.030
	1.90	2.440*	2.520*
<u>TOTAL</u>	6.90	7.922	8.298

* This figure for the total Building Estimate does not include the estimated effect of the cost variation clauses (C.V.C.2).

Since the above date, approval has been given for the following:-

1. Tunnel for future extension of experimental area - £10,000 (Paper H.I.(G.P.) (59) 41 refers).
2. Increase in estimated cost of Foundation Block from £40,000 to £60,000 (Paper H.I.(G.P.) (59) 46 refers).

APPENDIX II

MIROD PROJECT

Actual and Predicted Rate of Expenditure as at 30.9.59. and Treasury Grant

Item	1957-58 Actual £	1958-59 Actual £	1959-60 Predicted £	1960-61 Predicted £	1961-62 Predicted £	Total Predicted £
Plant	66,575	361,047	1,970,000	2,770,000	588,378	5,773,000
Buildings	265,187	658,578	750,000	550,000	96,235	2,520,000
TOTAL	£333,762	1,239,625	2,720,000	3,320,000	684,613	3,298,000

Item	Treasury Grant for 1959-60 £	Provision in 1959-60 Estimates for 1960-61 £
Plant	2,235,000	2,220,000
Buildings	1,000,000	250,000
TOTAL	£3,235,000	2,470,000

NIROD PROJECT

Appendix III(1)

Recorded Commitments and Expenditure up to 14th Sept. 1959

Item	£ Commitment	£ Expenditure	Remarks
<u>Plant</u>			
<u>Magnet</u>			
Sectors	1,485,063	493,197	
Coils	445,796	56,053	
Pole Pieces	226,950	-	
Pole Face Windings	-	-	
Installation	11,032	1,900	
	2,168,841	551,230	
<u>Injector</u>			
D.C. Gun Supplies	37,504	24,973	
D.C. Gun	18,125	12,798	
Low Energy Drift Space	5,120	-	
Linear Accelerator	165,911	899	
R.F. Drive Power	30,483	4,102	
High Energy Drift Space	7,680	-	
Inflector	1,989	1,989	
Local Control System	1,366	535	
Miscellaneous Equipment and Installation	11,895	3,725	
	280,073	49,021	
<u>R.F. System</u>			
Accelerator Unit	71,114	31,209	
Bias Supply	3,525	-	
Drive Chain	2,428	2,428	
Primary Frequency Generator	106	91	
Beam Control Unit	2,670	1,784	
Local Controls	-	-	
Installation	-	-	
	79,843	35,512	
<u>Vacuum System</u>			
Curved Sections	325,032	5,890	
Straight Sections	-	-	
Pumping Units	170,790	62,747	
Local Control System	-	-	
Connections	-	-	
Ancillaries	2,018	934	
Installation	50	-	
	497,890	69,571	
<u>Power Supplies</u>			
Rotating Machinery	486,465	10,000	
Converter Equipment	599,282	104,400	
Miscellaneous	-	-	
Ripple Filtering Equipment	-	-	
Installation	-	-	
	1,085,747	114,400	

NEUTRON PROJECT

Appendix III (2)

Item	£ Commitment	£ Expenditure	Remarks
<u>Plant</u>			
<u>Control System</u>			
Control Equipment	7,695		
Control Cabling	1,175	784	
Remote Control Panels	832	200	
Components for Advance Ordering	2,655	2,418	
Installation	5	5	
	12,362	3,407	
Plant -- Grand Total	4,124,756	623,140	
<u>Buildings</u>			
Architects Services	1,246,335	1,118,104	
M. & E. Services	474,574	281,372	
Fees	232,955	105,496	
Furniture	3,868	3,868	
Buildings -- Grand Total	2,057,732	1,508,840	

New Commitments entered into since previous Quarterly Statement
valued at £500 and over

Item	£ Value	Firm	Remarks
<u>Plant</u>			
<u>Magnet</u>			
Pressure Pads	10,546	Silvertown Rubber Co.	
Magnet Positioning Gear	3,100	Sandall Precision Co.	
Main Pole Pieces	230,460	English Electric Co.	
Adjustable Mounting Blocks	4,830	J.G. Meakes	
Th. Bars & Washers	1,160	J. & R. Rose Ltd.	
7 way Flow Monitors	610	Rotameter Manf. Co.	
Sole Plates	32,242	J. Sankey & Son	
Magnet Sectors	3,200	J. Sankey & Son	Amendment of Contract
<u>Injector</u>			
Drift Tube Assemblies	55,703	B.O. Morris Ltd.	
<u>R.F. System</u>			
Amplifiers	507	Livingston Laborat- ories.	
<u>Power Supply</u>			
Rotating Machinery	2,880	English Electric Co.	Amendment of Contract
Converter Equipment	37,552	British Brown Boveri	Amendment of Contract
<u>Control System</u>			
Public Address System	3,806	Tannoy Products	
<u>Buildings</u>			
Variations on Main Civil Contract	57,000	W.E. Chivers	Amendment of Contract
11/3.3 K.V. Transformer	7,500	Yorkshire Electric Transformer Co.	
Sewage Pumping Plant	510	Tuke & Bell Ltd.	
Heating & Hot Water Services	1,472	Z.D. Berry & Sons	Amendment of Contract
415 V Switchgear	8,406	A. Reyrolle & Co.	Amendment of Contract
Distribution Fuseboards	1,738	English Electric Co.	Amendment of Contract
Lighting & Small Power	12,360	N.G. Bailey	Amendment of Contract
Furniture	1,921	A.E.R.E.	

LITROD PROJECT

Appendix IV

Known and Anticipated Contract Action from 1.10.59 to 31.12.59

Item	Estimated Value	Firm	Remarks
	£		
Flexible Bellows Units for Vacuum Chamber	18,000	Teddington Aircraft Controls Ltd.	Tenders due in early 1960
Pressure Pads for Coil Clamping	10,545	Silvertown Rubber Co.	Contract placed on 5th October 1959
Gate Valves for Vacuum Chamber	25,000	Competitive tender	Tenders being studied by Group
Beam Control Unit	7,450	A.P.V.	Contract placed on 27th October 1959
Octant End Bracket Assembly	42,462	Newburgh Engineering Ltd.	Contract to be placed shortly
Bridge for Magnet Coil Clamping System	29,000	Competitive tender	Tenders due in by 1st January 1960
Clamping Plates for Lip Conductors	30,000	Competitive tender	Tenders due by 1st January 1960
Clamping brackets for Lip Conductors (including End Coil Clamp Brackets)	14,000	Competitive tender	Tenders due in by 1st January 1960
End Coil Clamps	17,000	Competitive tender	Tenders due in by 14th December 1959
Packing Blocks & Strips for Lip Conductors	17,000	Competitive tender	Tenders due in by 4th January 1960
Sector Side Bracket Assembly	15,500	Competitive tender	Tenders being studied by Group