## SPEECH MADE BY DR. F. E. JONES IN OPENING THE MULLARD SPACE SCIENCE LABORATORY ON 3rd MAY

Sir Harrie Massey has made some very kind remarks in his introduction and I must confess that as the Managing Director of the Mullard Company I have a natural reluctance to perform this function this afternoon. Indeed, had I been given the choice I think I would have politely refused or at least have gently piloted the responsibility in someone else's direction! However, one of the joys of taking a few weeks' leave is that other people take decisions in your absence which otherwise you might have felt impelled to interfere in, and this what happened earlier this year, when I returned from holiday, not only to find that I had been drafted for the job, but that the invitation cards had already been printed.

It nevertheless gives me the greatest pleasure to have this task this afternoon as it marks in a sense the culmination of a personal story linking several of us here over a period of some 14 or 15 years. In 1953 there was a symposium on space research in Oxford which stimulated interest in this country, the proceedings of which were published under the editorship of Dr. R. L. F. Boyd and Dr. M. J. Seaton both of whom now hold chairs in the Department of Physics of University College, London. Subsequently there was an exchange of letters between Sir David Brunt of the Royal Society and the then Minister of Supply, and in 1955 an agreement was reached for a joint programme of rocket research, the rockets being provided by the Ministry of Supply through the Royal Aircraft Establishment, Farnborough, where I then worked, and the experimental equipment through the Gassiot Committee of the Royal Society. Chairman of the Gassiot Committee was Professor Harrie Massey and this agreement was reported in a letter to Nature signed by himself and myself as I at the time also served on the Committee. Since that time the Physics Department of University College, London, has been at the centre of the United Kingdom Space Research Programme and has taken part in many distinguished experiments. In the course of its work it has achieved many firsts including being the first group to make measurements of the stars in the far ultra-violet in the southern hemisphere and also being the first to have flown a solar scanning x-ray experiment. You will be able to see examples of their work during the course of the afternoon. One of the happiest features of the group's activities has been their relationship with American scientists over a period of years starting from the major part which the group took in instrumenting the first United States/United Kingdom co-operative satellite - Ariel I. This satellite was launched in 1962, and as the U.C.L. group also took part in instrumenting the ionospheric satellite Explorer XX launched in 1964 and the Explorer XXXI launched in 1965, it means that their instruments have been supplying ionospheric information continuously from April 1962 until the present time.

They have also collaborated with N.A.S.A. in various other experiments and will be contributing to the orbiting solar observatories, the orbiting astronomical observatory and the orbiting geophysical observatories over the next few years.

The U.C.L. group has also played an important part in the creation of the Esro organisation and in formulating the experimental programme. Indeed Esro I and Esro II satellites currently planned to be launched carry several of their experiments.

You will see therefore that Professor Robert Boyd and his group have gone from strength to strength since those early days and he now has a department which includes 23 scientists, 7 research students, 26 technicians, 3 secretaries and 8 administrative staff, bringing the total to 67.

Indeed I am reminded of John Lyly who lived in the latter part of the 16th Century and was at Magdalen College, Oxford. Lyly once wrote about the universities of his day (and may I remind you that then that meant only Oxford and Cambridge) "And let this suffice not to enquire which of them is the superior but that neither of them has their equal, neither to ask which of them is the most ancient but whether any other be so famous". I think you will agree that this remark can be applied to the space research group in this already famous

Physics Department of University College, London, except that there is no other research group in a University to rival it in this country. It has carved out for itself a position which is unequalled in England and which has a world-wide reputation making a contribution which even the Americans admire.

But like all rapidly expanding organisations they eventually ran short of money. We all know the problems of financing our rapidly growing universities and we are all aware of the difficulties of catering for the needs of those growth points in science which lie at the interface between established disciplines. And although I have no detailed knowledge I can well imagine the discussion and heart searching that went on between Sir Harrie Massey and Professor Boyd before they came to the conclusion that they must seek support outside the environs of normal university finance and of the many contracts under which they operate.

Now as some of you know, certain industrial firms, of which mine is one, believe that we can fill a gap by helping finance certain university mesearch activities which at the time of their need cannot properly be financed from other sources. The funds at our disposal are very slender compared with the vast amounts available from the Government but we do have an element of flexibility in our approach which enables us to fill gaps when we see them. The spending of these funds in a responsible manner demands very careful assessment but you will be surprised at the number of people who think that they are limitless and to be had for the asking.

Nevertheless, it gave us very great pleasure after Sir Harrie Massey and Professor Boyd had run the gauntlet of our cross examination, to provide the help which encouraged the College to establish Holmbury House as an outstation of University College to which they have very graciously attached the Mullard name.

I now have the greatest pleasure in declaring this Mullard Space Science Laboratory open.