Chairman's introduction

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This Discussion Meeting dedicated to the late Sir Harrie Massey, F.R.S., is timely. It is almost exactly 50 years ago that his interest in atmospheric science was aroused by his old Professor, T. H. Laby, Head of the Department of Natural Philosophy at Melbourne University. Laby had long been concerned with the physical problems of telegraphy and telephony. He was one of the four executive members of the Australian Radio Research Board and Director of Research on Atmospherics. Because of this he knew a member of the staff of the Board, D. F. Martyn, who was engaged in outstandingly original research on the upper atmosphere including \textit{inter alia} the loss and gain of the electrons in the F layer by attachment and associative detachment. Aware also of Chapman's theory on the great abundance of negative ions in the E layer, Laby saw that the physics that was unfolding was well suited to the expertise possessed by his most brilliant former student Harrie Massey, who in 1935 was already a co-author of a book on atomic collisions and was shortly to commence a book on negative ions. Accordingly, when Laby next visited the United Kingdom, bringing with him a copy of a paper 'The temperature and constituents of the upper atmosphere' that Martyn had written with O. O. Pulley, he contacted Massey (then Head of the Department of Mathematical Physics at the Queen's University of Belfast) and suggested that he take up ionospheric physics. In the 1980 Laby Memorial Lecture, Massey said

I had no hesitation in agreeing to Laby's suggestion, whereupon he sent me a list in his own handwriting, of some of the key papers and secured an invitation for me to attend the meeting at the Royal Society [on the Martyn-Pulley paper] and contribute to the discussion. This I did and met the two great figures in upper atmospheric physics at the time E. V. Appleton and S. Chapman.

Massey's interest persisted throughout his life. His chapters on various aspects of atmospheric physics and chemistry in volume 1 of the compilation \textit{Applied atomic collision physics} (ed. H. S. W. Massey, E. W. McDaniel & B. Bederson (1982)) are the last major surveys he wrote.

Massey advanced atmospheric science not only through his research, his writings and his students. He initiated and guided events and developments connected with the field for over thirty years. As Chairman of the Gassiot Committee of the Royal Society he instigated in 1947 the first post-war international conference on 'The emission spectra of the night sky and aurora', and in 1954 an international conference on 'Rocket exploration of the upper atmosphere'. Early in the following year he learned that the Royal Aircraft Establishment had plans to develop a high-altitude rocket, the Skylark, and took action that ensured that groups in British universities could use the Skylark for research. He gave generously of his time as Chairman of the British National Committee on Space Research, Bureau Member of COSPAR, Chairman of an informal Commonwealth Consultative Space Research Committee, President of a Preparatory Commission for European Space Research, Chairman of the ESRO Council...
and Chairman of the Standing committee on Space Research of the European Science Foundation. He was also involved in many other science policy matters.

Because of his heavy committee work it was inevitable that tall stacks of papers reached his desk regularly. I once asked him how he was able to avoid being overwhelmed by them. He smiled and said

I don't read most of the papers. Nearly always they are banal, obvious. I've a rather brutal technique. When the minutes arrive I merely turn the pages over to see if there's anything I don't already know. At a meeting I can pick up the important issues very quickly and then deal with any problems.

People who served on committees he chaired have left me in no doubt but that his performance was masterly.

Massey was a skilful man of affairs and had a steely resolve that right for science be done. An illustration of this has been given by H. H. Atkinson who has reported

I was representing the United Kingdom on a committee of European governments drafting the convention for the proposed new European Space Agency. At one meeting it was proposed that science should not have a special place in the new agency which was to be devoted mostly to applied projects. Only the United Kingdom disagreed and I found myself in a minority of one. On my return from Paris I went to see Sir Harrie in London, finding him behind one of many piles of books in his room at University College. I told him the position. Over the next few weeks he got in touch with scientists in each of the other European countries. By the time of the committee's next meeting every delegation had been lobbied by its own scientists and a miracle occurred: the previous decision was reversed – and unanimously.