INTRODUCTION

At a Work Group 2 workshop meeting held in Washington, DC on December 16, 1980, a wide-ranging discussion occurred regarding the most important areas in the atmospheric sciences which were closely connected with the use of long range transport models. From that discussion emerged several topics on which Work Group 2 would prepare reviews for their May 15, 1981, Phase II report. The purpose of these reviews would be to highlight the state of knowledge in the particular topic areas, and to indicate how that knowledge is reflected in various models being used by this Work Group. The reviews were to be brief, comprehensive, reflect recent literature and work in progress, and written in a manner which is comprehensible to the educated layman.

The initial topics chosen are described briefly below, and the lead authors are identified. First drafts of the write-ups were to be distributed to all Work Group 2 members for discussion in the last half of February, 1981.

1) Sulfur and Nitrogen Chemistry in LRT Models

   (A.P. Altshuller) Homogeneous and heterogeneous reaction mechanisms will be reviewed. The degree to which models can treat sulphur chemistry as being first-order and independent of other atmospheric cycles (e.g., oxidants, nitrogen, particulates,