

Multi-aperture ion engine operating in hard vacuum.

ULTIMA THULE, ION PROPULSION AND BASIC RESEARCH AT EOS*

The ion engine is only one of the devices under development at EOS that is helping to push back frontiers, enabling us to delve deeper into physical phenomena. Being developed under contract, ion rockets will provide practical means of propulsion — helping achieve the *ultimate goals* of space travel.

A basic, inseparable portion of all division activities at EOS, research alone can supply the answers necessary to the completion of our advanced projects. State-of-theart solutions to specific problems are relatively easy to provide — taking only time and manpower. We prefer to follow the more exacting path illuminated by combining basic and applied research in reaching our objectives finding that the answers and information uncovered open broad new areas for investigation and opportunity.

*Electro-Optical Systems presently has positions on its Technical Staff for **PHYSICISTS**, **ELECTRICAL ENGINEERS**, **MECHANICAL ENGINEERS** who are interested in advanced research and development programs and are experienced in the areas of

Solid State Physics Materials Research Fluid Physics Electronic Systems Energy Conversion Advanced Power Systems Electrochemistry Quantum Electronics Re-entry Physics

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Scientists and Engineers are invited to contact Mr. Don Smelser at

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Books

The Air We Breathe

Edited by Seymour M. Farber, MD, and Roger H. L. Wilson, MD, in collaboration with John R. Goldsmith, MD, and Nello Pace, PhD

Charles C. Thomas, Publisher . . \$14.00

Reviewed by A. J. Haagen-Smit, professor of biology

This book is the record of a symposium held at the University of California Medical Center in San Francisco last year. The book is divided into five sections which cover phases of the air pollution problem: The "normal" atmosphere and its variations; the air pollution problem of industry; urban living and air pollution – smog and fog; specific problems (such as the effects of dust on the human lung); and factors in the study and origin of lung cancer.

I had the pleasure of attending this symposium and my impression was that the organizers succeeded in making this event most pleasant. Top men in the various fields covering the impact of changes in our environment presented factual material, while at the same time these summaries were made palatable by the injection of personal views and historical details, which are not to be found in the garden variety of books on air pollution.

From A to Z

The discussion ranged from a lecture on the composition and origin of our atmosphere by Dr. Harold Urey, to the hot subject of the effect cf cigarette smoking on longevity, and the controversial use of artificial ionization in ventilation or air conditioning. The problems of automobiles and smog, radioactive pollution, city planning, and other impacts of environment on our lives are briefly but intelligently covered in this record of the proceedings.

The symposium has been clearly written and is readily understandable by the educated layman. Its refreshing approach and the inclusion of partially corrected discussions adds to the value of the book and it makes clear to the reader the proper principles of how to live with and use our natural resources in the best way possible.

Engineering and Science