

Charles E. Livingstone received the B.Sc. degree in physics in 1965 and the M.Sc. degree in geophysics in 1967 from the University of British Columbia; he received the Ph.D. degree in physics in 1969 from the University of Western Ontario.

From 1969 to 1976, he was an Assistant Professor of Electrical Engineering at the University of Western Ontario. Since 1976, he has worked at the Canada Center for Remote Sensing. During this time he has been involved in the specification and development of hardware for radar remote sensing and has led a number of research projects on the microwave signatures of sea ice. His present activities are focussed on the commissioning of an advanced remote sensing SAR operating at X- and C-band.

A. Laurence Gray (M'85) graduated in physics and applied mathematics from Queens University, Belfast, in 1964. He received the M.Sc. degree in biophysics in 1966 and the Ph.D. degree in experimental physics in 1971, both from the University of Calgary.

Between 1971 and 1974, he worked on laser light scattering in the Physics Department of the University of Guelph, Ontario, Canada. In 1974, he joined the Canada Center for Remote Sensing and has worked since then principally on ice and cold ocean reconnaissance. On a leave of absence from CCRS during 1979-1980, he was a Guest Professor at the Technical University of Denmark, and from 1980 to 1983, was chairman of the CACRS Ice Working Group. He was one of the principal investigators in the Shuttle Imaging Radar (SIR-B) experiment. Between 1981 and 1987, he was a member of the AMI team advising the European Space Agency on the design and use of the SAR-Scatterometer sensor system known as the Active Microwave Instrument, which will be flown on the ESA remote sensing satellite ERS-1.

---