



WILLIAM T. PECORA AWARD

DR. WILLIAM J. CAMPBELL

In recognition of his outstanding scientific contributions and his leadership in international experiments that have applied remote sensing methods to the study of the cryosphere.


Dr. Campbell has devoted most of his career to using and encouraging the use of aircraft and satellite remote sensing methods to studying the interrelationships of polar ice caps, glaciers, sea ice, ice sheets, and snow packs to climate and the hydrological cycle. He was a pioneer in recognizing the need for satellites to obtain global coverage and for use of the microwave part of the spectrum to obtain data during all weather conditions and during periods of darkness. His contributions to the understanding of glacier flow dynamics, sea ice dynamics, and the use of remote sensing to measure ice characteristics and monitor ice dynamics have earned him an international reputation in these fields.

Dr. Campbell has played a major role in coordinating remote sensing and surface measurements for several major international sea ice experiments. These experiments involved the use of drifting stations, ships, and remote sensing aircraft and satellites. These experiments include the Arctic Ice Dynamics Joint Experiment (AIDJEX), the joint U.S./U.S.S.R Bering Sea Ice Experiment (BESEX), the SKYLAB Snow and Ice Experiment, the Canadian Surveillance Satellite Experiment (SURSAT), the Norwegian Remote Sensing Experiment (NORSEX), and the international Marginal Ice Zone Experiments (MIZEX). In addition, after the record snow pack in the upper Colorado basin in 1983, Dr. Campbell initiated a project with the National Aeronautics and Space Administration (NASA) and the Soil Conservation Service to use microwave data from satellites to map the water content and accumulation of snow packs. Weekly satellite maps of snow covered areas offer immense possibilities for predicting flooding and managing the use of available water.

In addition to being a leader in organizing and conducting experiments and in the analysis of the results, Dr. Campbell has served as chairman of the Ice and Climate Experiment (ICEX) of NASA's Science and Applications Working Group, delegate to the U.S. National Committee to the International Union of Geodesy and Geophysics (I.U.G.G.), member of the International Commission of Polar Meteorology of the I.U.G.G., cochairman of the Panel on Oceans and Ice of the International Astronautic Federation, and a member of the National Academy of Sciences' Committee on Glaciology.

For these exceptional accomplishments, the Department of the Interior and the National Aeronautics and Space Administration take great pleasure in presenting the 1988 William T. Pecora Award to Dr. William J. Campbell.


Secretary of the Interior


Acting Administrator, National Aeronautics
and Space Administration