

Office of the Secretary

"Facts on the distribution of needed minerals, our water supplies and the extent of water pollution, agricultural crops and forests, and human habitations, can be obtained on a global basis, and used for regional and continental long-range planning," he said.

Secretary Udall named Dr. William T. Pecora, Director of the U. S. Geological Survey, to head the program.

"A team of knowledgeable scientists and resource data users will guide government and private agencies in making their data needs known, and to help plan a major effort in the exploration of the earth for human benefit," Udall said.

Pecora and his earth science colleagues described space-sensing of the earth as "the ability to 'see' more easily beneath the water and forest or soil cover, and the ability to view areas of the earth repetitively at various times and seasons. Another basic advantage is the fact that comparable observations can be made all over the earth."

"Although we are now gaining valuable information from existing satellites," Pecora said, "none are capable of providing global coverage of the type required for successful resource application."

"We visualize EROS as an evolutionary program," said Pecora, "beginning with television cameras flown in an orbit that will cover the entire surface of the earth repeatedly, under nearly-identical conditions of illumination."

Pecora said that "we plan to fly the first satellite in 1969," and that "the cost of launching the first EROS vehicles is not expected to exceed \$20 million - far less than the cost of photographing the earth by conventional aerial means."

"What we have learned from photographs taken recently from orbiting spacecraft," the Survey Director said, "indicates that the lands can be examined, evaluated, and mapped, and the type and vigor of plants can be determined. "In addition to the cameras that will provide the photographic record, the first vehicle will also have a small telecommunications unit so that we may relay data to and from ground stations that will aid in interpreting the television images. These relayed ground data will include seismic and other information that, hopefully, will enable us to predict some natural disasters."

Pecora explained that "future sensing systems will employ heat-measuring devices to monitor the earth's volcanoes and search for sources of geothermal power, radar that will 'see' beneath the clouds, and eventually cameras with sufficient resolving power to permit timely up-dating of our national topographic map series."

Office of the Secretary

"In addition to savings in the cost of updating these maps," said Pecora, "the availability of updated maps will result in a savings of over \$100 million annually to the American public. Applied on a global basis, the savings would exceed a billion dollars a year."

The earth scientist emphasized the importance of feasibility experiments that have been carried out by his agency with NASA and other research and technical agencies. "These experiments enable us to start the EROS program with confidence in its useful application for the benefit of man," he said.

In announcing the EROS program, Secretary Udall pointed to the huge national requirements for natural resources needed to feed our technologic society as well as the need to conserve the Nation's lands. "We must insure that we use our resources wisely," he cautioned, adding that "the information gained from EROS vehicles will be synthesized and made generally available; it will help us achieve maximum use of our resources with minimum waste."

"We firmly believe," said the Interior Secretary "that the use of the Earth Resources Observation Satellite will provide technological support for the continuation of our society of 'plenty' for generations to come. EROS will be just the beginning of a great decade in land and resource analysis for a burgeoning population."

#