

DEPARTMENT of the INTERIOR

news release

GEOLOGICAL SURVEY

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SATELLITE DATA TO HELP INDIAN RESERVATIONS DEVELOPMENT

Tribes of the Salt and Gila River Indian Reservations in Arizona will use satellite and high altitude aircraft photography to aid in the management of reservation lands and resources, the Department of the Interior announced today.

The project, linked to the Interior Department's EROS (Earth Resources Observation Systems) program, technically administered by the U. S. Geological Survey, is aimed at using conventional photography and other remote sensing data that will be relayed by a NASA earth resources survey satellite, which is scheduled for launching before summer.

The data will be used to aid the Indians in a wide variety of environmental and resource problems including detection of land use configuration, solid waste deterioration, natural vegetation, and crop and grazing land conditions.

Dr. Arch C. Gerlach, chief geographer, USGS, Washington, D.C., said that the project resulted from briefings on the use of orbital and high altitude aircraft photography given to officials of the Indian communities by specialists of the Geological Survey and the Bureau of Indian Affairs at a recent meeting in Arizona.

"At the briefing," Gerlach said, "the Indians found such photography useful, and expressed a desire to initiate a project that could be geared to their region. They requested assistance from the EROS program, the Survey, and the Bureau of Indian Affairs to implement the project."

The project will involve repetitive coverage by aircraft and spacecraft of a 3,000-square-mile area in south central Arizona, and is in line with President Nixon's program of using scientific and technological techniques gained from space programs to solve environmental problems.

"By receiving repetitive views of such a large area," Gerlach said, "important changes of land and water features can be monitored on a seasonal or more frequent basis. By treating the region as a single ecological unit, coupled with a data bank that can be programmed for automatic machine mapping, the ability to predict probable results of alternative decisions concerning land and resource use, might be achieved."

(more)

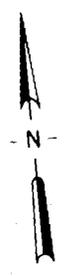
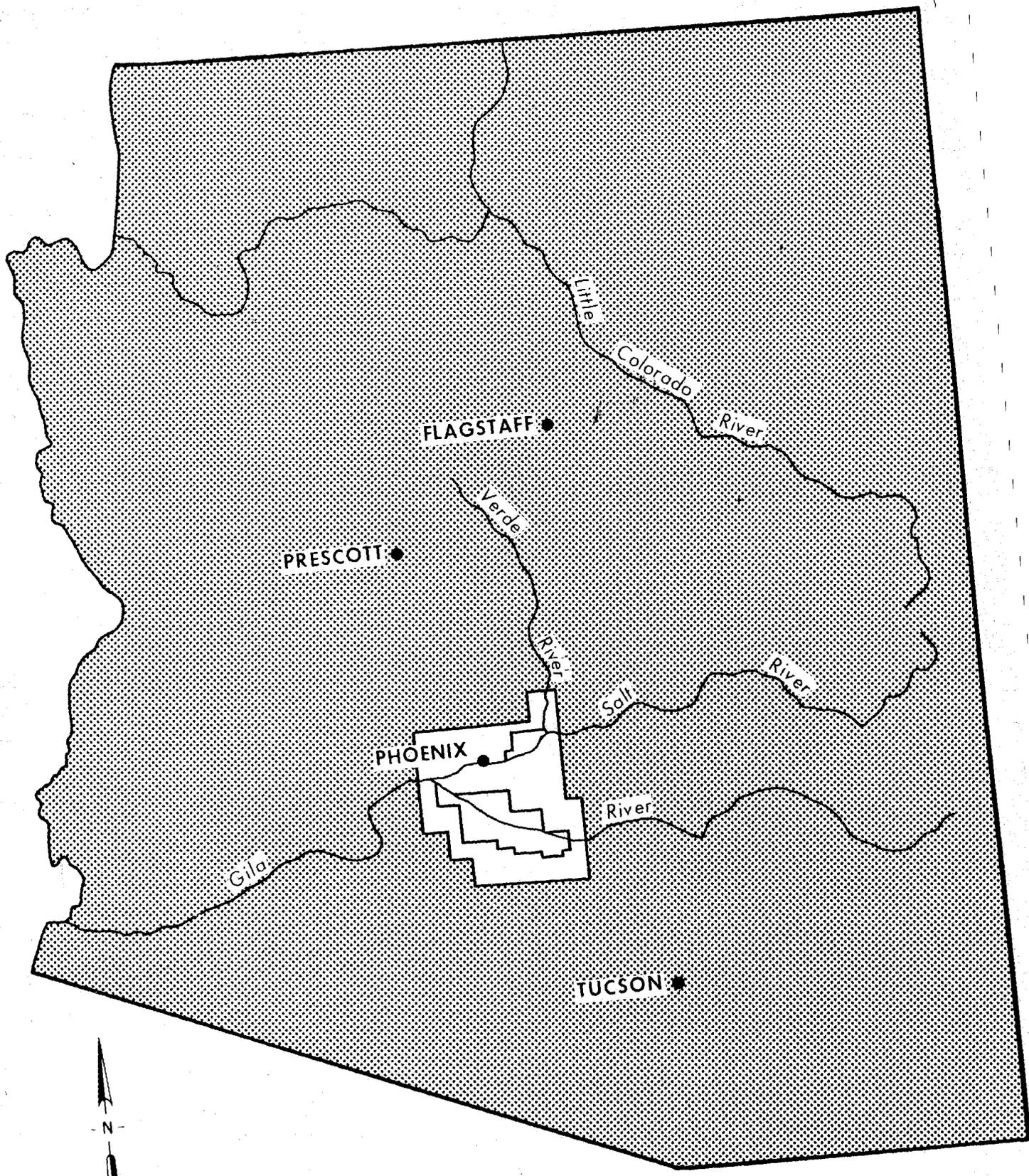
To help organization of data, Gerlach reported, "new base maps covering the two reservation areas are being prepared by the USGS Topographic Division. The maps will provide an accurate base on which to plot land use and environmental conditions revealed by the high altitude photography."

"The resultant products," Gerlach said, "will be digitized and computer-processed in order to manipulate information contained on various overlays."

Because most of the analytical work will be done by the Indians, related phases of the project will involve the training of Indians in the use of remote sensing data to assure continuance of the over-all program after the immediate project is completed.

Coordinating the project for the Interior Department will be George Loelkes, Geological Survey, and Arthur Woll, Bureau of Indian Affairs, Washington, D.C.

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