

AT THE EDGE



PHOTO: MARK ANKENBAUER; AERIAL PHOTO: GIL JEFFER

POLAR PERSPECTIVE

Scientific exploration has taken NJIT researchers to the harsh environment of Antarctica. Professor of Physics Andrew Gerrard is leading a multi-institutional project supported by the National Science Foundation to collect near-space weather data from Automatic Geophysical Observatory (AGO) stations

across the continent. This will increase vital near-space knowledge, including information about the disruptive interaction between solar phenomena and the Earth's magnetic field that impacts infrastructure such as communications systems, GPS and power grids.

NJIT personnel supervise instrument testing, upkeep and deployment, in addition to training field technicians

and hosting data-distribution services. Gerrard, who is also deputy director of NJIT's Center for Solar-Terrestrial Research, has created a Polar Engineering Development Center at the university, which seeks to develop instrumentation for remote operation in challenging polar conditions.

<http://solar.njit.edu>
<http://physics.njit.edu>

TOP: Visible on the approach to AGO 2 by air are the automatic observatory, personnel tents, emergency food cache, and a cache of aircraft fuel.

ABOVE: NJIT Research Engineer Gil Jeffer at AGO 3.