

NEWS From GEORGIA TECH'S ENGINEERING EXPERIMENT STATION

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SOLAR ENERGY TEST FACILITY AT
GEORGIA TECH FACES TEST

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For Immediate Release

ATLANTA, GA.....The solar energy test facility on the Georgia Tech campus faces its first use by an off-campus organization during July of this year. The Department of Energy Advanced Components Test Facility (ACTF), as it is named, offers major support to this country's high temperature solar energy program which includes early commercialization of solar energy.

Final mirror field adjustments are being made in preparation for the testing of a 250,000 watt Brayton Cycle air receiver designed and fabricated by Sanders Associates of New Hampshire. The device will be similar to the gas turbines used by electrical utilities to generate electricity but will be fired by solar energy instead of fossil fuel. The unit will operate at temperatures up to 2000⁰F as it is tested on the "hot spot" located at the Georgia Tech solar site. The site includes a 550-mirror field, a test stand which provides the focus of sunlight into a zone almost 70 feet above the center of the mirror field, a control building, a cooling tower, a computer system and a heat rejection system.

Tech's Engineering Experiment Station has been designated as the operator of the facility by DOE, and solar division chief Nick Poulos states, "We have on campus one of the Department of Energy's two major solar test facilities in the United States -- and the third largest in the world. We

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cannot stress enough the fact that developing the use of solar energy is urgent, and we are well accustomed to changes resulting from research. Already we have dismantled last year's solar "power tower" for a more efficient general purpose test facility. The new tower can support a 20,000 pound test load whereas the former tower had a 1,500 pound capacity. This installation can achieve temperatures corresponding to 2500 suns and is available to industry, government and university agencies for testing purposes."

A 40-page illustrated and comprehensive user's manual is now available to potential users of the ACTF. Copies of the manual/management plan, which was prepared by Ralph Altman of Tech's Solar Energy and Materials Technology Division, can be obtained by writing or by calling (404) 894-3650.

Georgia Tech's Engineering Experiment Station researchers continue to be accessible to citizens of Georgia who seek advice on the practicality of solar energy as well as those needing professional technical assistance on solar heating systems design and evaluation, economical sizing of the system and methods of installation.