

NEWS

From GEORGIA TECH'S ENGINEERING EXPERIMENT STATION

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GEORGIA TECH'S AIRPLANE READY
FOR RESEARCH PROGRAMS

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For Immediate Release

ATLANTA, GA.....Georgia Tech has a laboratory that flies! The research facility, known as the Airborne Electronics Laboratory, is a modified Convair 240 (T-29B) that is now available for any scientific programs which can use its capabilities. The plane was donated to Georgia Tech by the Air Force in early 1977.

According to the laboratory manager, Dr. Lee Edwards of Tech's Engineering Experiment Station, the research aircraft is now of proven capability, and more than 75 hours of successful test flying on radar ranges in the western U.S. have been logged this year. The plane is a twin-engine, transport-type, pressurized, all-weather aircraft. VHF, UHF and HF radios are incorporated along with other avionics equipment for operation under either Visual Flight Rules or Instrument Rules and from either civilian or military airports.

The electronics equipment racks have ample space for complex systems, data recorders, etc., and operators' chairs and seats for a few observers are installed in the spacious cabin. Sufficient electrical power is provided for operating test equipment and all other on-board electrical equipment and for main engine starting. Furthermore, two radomes are available -- one on the underside and one on the nose structure. Appropriate insurance policies are maintained.

A strict maintenance program is performed on the Convair 240 (T-29B)

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by qualified mechanics holding airframe and power plant FAA certificates with inspection authorization. Highly qualified pilots with extensive flight test experience are also employed.

Important characteristics of the flying research laboratory are: wing span 92 feet; length 75 feet; height 27 feet; empty weight 29,912 pounds; gross weight 43,575 pounds; maximum speed 266 knots; cruising speed 200 knots; initial climb 1,230 feet per minute; service ceiling 20,000 feet above mean sea level; and range 1,300 nautical miles.

Since January, Georgia Tech's EES has been conducting flight tests under contract with the Avionics Laboratory of the Air Force Systems Command. Electronics experiments are being run to determine effectiveness of several innovative, radar-related techniques using electronics designed, fabricated and assembled principally by Georgia Tech and General Electric engineers.

Although a number of other programs are under discussion, including atmospheric sampling studies, no definite commitments for the aircraft's use after August have been made. The present series of tests are expected to keep the airborne laboratory fully occupied until then, explains Edwards, who can be contacted at (404) 424-9661 for further information.