

NEWS

From GEORGIA TECH'S ENGINEERING EXPERIMENT STATION

Atlanta, Georgia 30332

CONTACT: Mark Hodges/Ray Moore
(404) 894-3405

TECH HELPS PENTAGON

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DESIGN AWESOME MISSILE

For Immediate Release

ATLANTA, GA....Georgia Tech is helping the Pentagon to develop technology which could change battlefield tactics by the 1990's.

Tech researchers are designing the "smart electronics" for a missile which would seek and destroy enemy tanks in battle with awesome efficiency.

The missile would be small enough to be fired by a foot soldier. Special radar and a microprocessor computer in the missile's nose cone would guide it to its target, under adverse weather conditions. Engineers in Tech's Radar and Instrumentation Laboratory (RAIL) are designing these components under contract for the Department of Defense.

The weapon may be ready for use by the early 1990's. U.S. military leaders believe the missile could offset the Soviet Union's tank advantage in any future European ground war.

Tech was selected for work in this area because of its expertise in millimeter wave technology, a form of radar well-suited for military needs. Millimeter wave radar systems allow smaller components to be used than other types of radar, a characteristic which makes them small enough for soldiers to carry. Millimeter waves also can penetrate rain, fog or dust and focus on single objects, such as tanks, with extremely high accuracy.

"Funding for our millimeter wave program has grown consistently over

(more)

the last four or five years,' says RAIL director Ed Reedy. 'Half of our lab's business base is tied to millimeter waves in one form or another.'

RAIL is one of the nation's leading research organizations in investigating 'what the world looks like through the eyes of a millimeter wave radar system,' according to Reedy. These tests make it possible for the 'smart electronics' in a missile to distinguish between a tank and another object.

Millimeter wave technology is still in the developmental stages and only a few manufacturers make components for millimeter wave radar, Reedy says. For this reason, demand for these parts is so great that normal delivery times have often doubled.

RAIL is part of Tech's Engineering Experiment Station, an arm of Georgia Tech which finds practical uses for technology in fields such as electronics, energy and computer science.

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