

## From GEORGIA TECH'S ENGINEERING EXPERIMENT STATION

Atlanta, Georgia 30332

CONTACT: Mark Hodges/Ray Moore

(404) 894-3405

"R2-D2" COMPUTER TERMINAL

August 18, 1980

TO HELP BLIND READ FASTER

For Immediate Release

ATLANTA, GA....A computer terminal which "talks" like the robot R2-D2 may allow the blind to read three times faster than with braille.

Georgia Tech rehabilitative engineers have programmed a computer to play musical tones which the experienced listener can translate easily into words. This new musical language is organized so that actual words sound pleasing to the ear while verbal gobbledygook is inharmonious.

"The way we have it set up, a simple phrase like 'This is' sounds like the opening notes of the theme from the movie, 'The Sting'," says Gary Kelly, director of the R2-D2 project at Tech's Engineering Experiment Station. "On the other hand, playing the alphabet A through J is quite discordant."

To use the R2-D2 program, a visually handicapped person must have access to a \$2,000 to \$2,500 Apple II microprocessor computer terminal. By punching terminal keys, the operator could get the terminal to read out a variety of information in musical language.

The vocabulary developed by the operator is limited by definition, but Kelly says most written materials that workers are called on to digest don't use many words anyway.

The R2-D2 approach does promise to increase the speed with which the blind read.

"Studies lead us to believe that a person using this method could read faster than one reading with braille," Kelly says. "The average comprehension

(more)

with this computer music approach could be as high as 300 words a minute.

That's three times as fast as the average braille reader -- and only slightly slower than a normal reader."

The Veterans Administration is sponsoring Kelly's research. The Georgia Tech engineer believes these computer terminals will be ready for use within six months.

At that point, Kelly says, the visually handicapped practitioner of the R2-D2 method could successfully do almost any job involving computer programming or operation.

# # #