

# Georgia Tech Sponsored Research

<b>Project</b>	K-10-651
<b>Project director</b>	Goldthwaite          John
<b>Research unit</b>	CRT/REHAB
<b>Title</b>	Access to Mohawk Carpets Workstations for Blind Employees
<b>Project date</b>	5/3/1999



# Georgia Institute of Technology

College of Architecture

Center for Rehabilitation Technology

A MultiDisciplinary Center for Assistive Technology and Accessible Environments

K-10651  
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July 26, 1999

Mr. Tim Gray  
Mohawk Carpets  
P.O. Box 1448  
Dalton, GA 30722

Dear Mr. Gray:

We have completed the installation and setup of Mr. Joe Norton's computer and customization of his JAWS for Windows software to read the screens of the Mohawk sales order system. The majority of the work was completed by March 5 so that Mr. Norton could begin work as scheduled on March 8. I delayed a second trip until early this month so that Joe would have time to learn the system and see if there were additional data screens that he need to access. He did find several and we programmed those on July 7. The project required the full 40 hours of work due to the second trip and some debugging required by the new version of JFW 3.3.

It's was pleasure to work with Joe since he is so professional and proficient in his use of the computer and his speech system. Joe has my number and electronic mail address and I will be providing support to him as needed. Please call on Georgia Tech at any time if we can be of assistance.

Best regards,

John Goldthwaite  
Research Scientist



Center For Rehabilitation Technology

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## Final Report: Mohawk Carpets Workstation For a Blind User

In this project, Mr. John Goldthwaite from the Center for Rehabilitation Technology at Georgia Tech set up a computer for a blind employee at Mohawk Carpet's Chatsworth office and programmed the employee's screen reading software to make Mohawk's sales software accessible.

Mr. Steve King of Mohawk's Information Systems Department shipped a computer to the Center for Rehabilitation Technology and Mr. Goldthwaite installed the JFW speech software on it. Mr. Goldthwaite downloaded EMU, Mocha W32, Powerterm IBM 5250 terminal emulation programs from [www.tucows.com](http://www.tucows.com) shareware site. He tested these with JFW and found that EMU and Mocha did not work but Powerterm did with a minor error. Mr. King provided an Internet address so that Mr. Goldthwaite could test JFW 3.2 with the customer service software via the Internet from Georgia Tech.

Mr. Goldthwaite installed the computer at Mohawk Carpet in Chatsworth on Thursday March 4. Mr. Goldthwaite tested IBM Client Access software which Mohawk uses with other employees. He found that it worked perfectly with the JFW screen reading software and used it instead of Powerterm. On March 5, Mr. Goldthwaite installed the client's braille display and began customizing the screen reading software for Mohawk's sales software. Mr. Goldthwaite created routines to recognize each of the major screens as they are displayed on the PC display. The screen reading software was instructed to read a message aloud to let the client know that the screen had changed. He also created announcements to detect when three menus appear on the screen on top of the regular data. Mr. Goldthwaite worked with the employee on March 5 to instruct him in the use of the customized JFW software. The employee was able to work effectively by the end of the day and began work the next Monday.

Mohawk purchased a copy of the JFW software but it had not arrived by March 5<sup>th</sup> so Mr. Goldthwaite had to schedule another trip to install it. Because a major revision of JFW was scheduled for release on June 15<sup>th</sup>, we delayed the installation until the new version arrived. Mr. Goldthwaite returned on July 7 and installed Mohawk's copy of JFW. In the interim, the employee found four additional screens that he needed to use. Mr. Goldthwaite created new JFW scripts to announce those screens.

Unfortunately, the new version of JFW 3.3 handled automatic detection of new text on the screen differently than JFW 3.2. This new version read each item three times rather than once as intended. This slowed the employee too much and was obviously unacceptable. Mr. Goldthwaite had to re-write the detection routines using a different approach and re-test it. The corrected version of the program was sent by electronic mail to the employee and he installed it.

<u>Task</u>	<u>Time required</u>
Set up computer, test terminal emulators	8 hours
Install computer and customize software Mar 4 and 5	16 hours
Complete customization July 7	4 hours
<u>Fix problem with detection in JFW 3.3</u>	<u>8 hours</u>
Total	40 hours

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