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VOTRAX is being used as the audio in the following application.

Kurzweil Computer Products, Inc., Cambridge, Mass., and The National Federation of the Blind, Washington, D.C. issued the following news release on January 13, 1976.

After five years of development, a machine which "reads" a wide variety of printed matter and then "speaks" it in normal full-word English at a rate of 200 words per minute will be demonstrated and explained on Tuesday, January 13, at the laboratory of Kurzweil Computer Products in Cambridge, Massachusetts.

Raymond Kurzweil, 27-year-old founder and president of Kurzweil Computer Products, a company whose major effort has been the development of the reading machine, will direct the demonstration.

James Gashel, chief of the Washington Office of the National Federation of the Blind (NFB), will participate in the presentation. Jerry B. Monroe, president of the National Blinded Veterans Association and head of the New Jersey chapter of the NFB, will also participate.

The National Federation of the Blind, a membership organization of the blind with 50,000 members and affiliated state groups and local chapters in the fifty states and the District of Columbia, has endorsed the development of the device and is seeking funds for further specialized testing. Its president, Dr. Kenneth Jernigan, is director of the Iowa Commission for the Blind.

Kurzweil Computer Products has been awarded a contract from the Bureau of Education for the Handicapped of HEW for the production and testing of the machine. Under this contract, units of the reading machine will be placed at the Perkins School for the Blind and the Boston School System.

The demonstration will be the first general disclosure of the machine's capabilities and technical processes. Two key technical breakthroughs have made the machine possible.

- A highly efficient digital logic recognition system capable of recognizing printed characters in any of the commonly used typefaces in books, magazines, typewritten and other printed materials.

- A compact computer program capable of determining the correct pronunciation of English words.

It does not read handwriting, decorative or ornamental type-styles, or poorly printed materials.

The user operates the device by placing a page of printed material face down on a glass plate. An optical scanner, controlled by a mini-computer contained within the device, searches out and finds the first line of type. It scans the line and automatically returns to the next line, continuing to the end of the printed text. The computer, together with other special purpose electronics, recognizes the letters, groups the letters into words, computes the pronunciation of each word, and then enunciates the words in sentences, with appropriate stresses and pauses.

The relatively low cost of the machine will place the first production models within the purchasing range of such multi-user organizations as universities, libraries, places of work, and blind service agencies. Most of the total cost of the unit is in its computer components. In the future, the anticipated continuing sharp decline in the cost of memory chips and other computer components, as well as economies of larger scale production, are expected to bring the cost of the unit within reach of individual users.

In deciding to aid in the development of the device, Dr. Jernigan has pointed out that the availability of this device will substantially assist the blind in their efforts to achieve full participation in society. "Not only will this device put current reading matter needed for daily acitivities at the disposal of the blind, but potentially it will facilitate the personal advancement of every blind student and worker, whether lawyer, teacher, or clerk," Dr. Jernigan has said. The Federation is now seeking foundation funds to provide a wide range of user tests to assure that the production models adhere as closely as possible to the practical requirements of the blind themselves.

Unlike earlier reading aids, the Kurzweil machine offers the advantage of going directly from printed matter to spoken language with no intermediate interpretation required by the user. Devices which depend on touch or musical tones to interpret print material have been shown to be of limited value because of the slow rate at which they yield intelligible information, even in the hands of the most skilled and highly trained user. To achieve useful results at rapid reading rates with the Kurzweil machine, only a basic familiarization with the "accent" of its synthetic voice is required.

You Can See VOTRAX At These Locations

Vocal Interface Division will participate in the following shows:

Federal DP Expo '76, Washington, D.C. — March 2 & 3
Third Annual State Wide Conference on Computing in Higher Education, — Rutgers University, New Jersey — March 22 & 23
Interface '76 — Miami, Florida — March 29-31
Electro '76 — Boston, Massachusetts — May 11-14
National Computer Conference — New York, New York — June 7-10

Scope Electronics, Inc. will also be displaying VOTRAX along with their own Voice Recognition System at the International Conference on Acoustics, Speech & Signal Processing in Philadelphia, PA on April 12-14.

Multitone Electric Company, Ltd. will be displaying VOTRAX at the Hanover World's Fair in Germany on April 28 - May 6.

If you desire additional information, please check the box at the margin and return to Vocal Interface, 500 Stephenson Hwy., Troy, Michigan 48084.

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VOTRAX SPEAKS YOUR LANGUAGE