OVERVIEW OF THE COLLECTION

Title: Jose L. Hernandez-Rebollar Innovative Lives Presentation

Date: August 3, 2005

Extent and Forms of Material: .25 cubic feet, including audio cassettes and one CD-ROM.

Creator: Jose L. Hernandez-Rebollar and the Jerome and Dorothy Lemelson Center for the Study of Invention and Innovation

Abstract: Jose L. Hernandez-Rebollar was born in the state of Puebla in Mexico. He is the inventor of the AcceleGlove, a prototype device which can translate the alphabet and over 300 words into American Sign Language. The collection contains original and reference audio cassettes of Dr. Rebollar’s presentation, “The Process of Invention: The AcceleGlove,” a transcript of the presentation, photocopies of his power point presentation slides, and a CD-ROM containing digital images taken at the presentation.


Collection Number: AC0917

Processing Note: Processed by Alison L. Oswald, January 2006.

INFORMATION FOR USERS OF THE COLLECTION

Conditions Governing Access: The collection is open for research use.

Physical Access: Series 1: Original Audio Cassette may not be used by researchers.

Conditions Governing Reproduction and Use: Copyright held by the Smithsonian Institution. Collection items available for reproduction, but the Archives Center makes no guarantees concerning copyright restrictions. Reproduction permission from Archives Center: fees for commercial use.

Preferred Citation: [Title and date of item], Jose L. Hernandez-Rebollar Innovative Lives Presentation, August 3, 2005, Archives Center, National Museum of American History, box number X, folder number XX, digital file number XXXXXXXXX

For additional information, contact the Archives Center at 202.633.3270 or archivescenter@si.edu
IN-DEPTH INFORMATION ABOUT THE COLLECTION

Administrative/Biographical History: Dr. Jose L. Hernandez-Rebollar was born in the state of Puebla in México. He completed his B.S. in electronics at Benemérita Universidad Autónoma de Puebla in 1993 and received his masters in Electronics Engineering from the Instituto Nacional de Astrofísica, Optica y Electrónica (National Institute of Astrophysics, Optics and Electronics) in 1997. In 1998, Dr. Rebollar obtained a Fulbright scholarship to pursue a Ph.D. at The George Washington University. He was awarded his Ph.D. in Science in Electrical Engineering in 2003. He majored in Signals and Systems with a minor in Micro-Electro-Mechanical Systems (MEMS) and Bioelectronics.

Dr. Rebollar’s invention, an electronic glove, called the AcceleGlove, can turn American Sign Language (ASL) gestures into spoken words or text. The glove is placed on the hand and strapped to the arm, allowing sensors on the glove to generate signals from the movement, orientation, and positioning of the hand and the fingers in relation to the body. These signals are analyzed by a micro-controller to find the position of the fingers and hand trajectory. The AcceleGlove translates the alphabet and over 300 words in American Sign Language.

The Jerome and Dorothy Lemelson Center for the Study of Invention and Innovation was founded in 1995 at the Smithsonian Institution's National Museum of American History through a generous gift from the Lemelson Foundation. The Center’s mission is: to document, interpret, and disseminate information about invention and innovation; to encourage inventive creativity in young people; and to foster an appreciation for the central role invention and innovation play in the history of the United States. The Innovative Lives series brings together Museum visitors and American inventors to discuss inventing and the creative process and to experiment and play with hands-on activities related to each inventor’s product. This collection was created by the Innovative Lives Program of the Jerome and Dorothy Lemelson Center for the Study of Invention and Innovation.

Scope and Content: Collection documents Dr. Jose L. Hernandez-Rebollar’s invention prototype of the AcceleGlove. In his power point presentation The Process of Invention: The AcceleGlove, Rebollar discusses his childhood in Mexico and his educational background, emphasizing his Ph.D. work on the AcceleGlove at The George Washington University. Dr. Rebollar describes his research and his attempt to solve communication and translation problems associated with turning American Sign Language into spoken words and text. Rebollar also discusses American Sign Language and its applications. A demonstration of the AcceleGlove is given. The presentation concludes with a question and answer period.

For additional information, contact the Archives Center at 202.633.3270 or archivescenter@si.edu

**System of Arrangement:** The collection is arranged into 5 series.

- Series 1, Original Audio Cassette, August 3, 2005
- Series 2, Reference Audio Cassettes, 2005
- Series 3, Transcript of Presentation, August 3, 2005
- Series 4, Digital Images, 2005
- Series 5, Power Point Slides, 2005

**Acquisition Information:** This collection was made for the National Museum of American History on August 3, 2005.

**Custodial History:** Transferred from the Lemelson Center for the Study of Invention and Innovation to the Archives Center on January 30, 2006.

**Access Points:**

**Subject/Topical:**
- American Sign Language
- Inventors
- Inventions
- Engineering
- Engineers
- Deafness

**Subjects/Names:**
- Jerome and Dorothy Lemelson Center for the Study of Invention and Innovation
- Jose L. Hernandez-Rebollar

**Form/Genre:**
- Audio cassettes
- CD-ROM
- Interviews—1980-2000
- Oral History—1990-2000

For additional information, contact the Archives Center at 202.633.3270 or archivescenter@si.edu
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