# Finding Aid to The HistoryMakers ® Video Oral History with James West

## Overview of the Collection

**Repository:** The HistoryMakers®1900 S. Michigan Avenue Chicago, Illinois 60616

info@thehistorymakers.com www.thehistorymakers.com

Creator: West, James E., 1931-

Title: The HistoryMakers® Video Oral History Interview with James West,

**Dates:** February 13, 2013

Bulk Dates: 2013

**Physical Description:** 8 uncompressed MOV digital video files (3:29:20).

**Abstract:** Electrical engineer James West (1931 - ) is known for his patent of the electret

microphone, which revolutionized communications technology and is used in all modern day cell phones. West was interviewed by The HistoryMakers® on February 13, 2013, in Baltimore Maryland. This collection is comprised of the original video footage of the

Baltimore, Maryland. This collection is comprised of the original video footage of the

interview.

**Identification:** A2013 039

**Language:** The interview and records are in English.

## Biographical Note by The HistoryMakers®

Electrical engineer James Edward West was born on February 10, 1931 in Farmville, Virginia to Samuel Edward and Matilda West. At various points, his father worked as a funeral home owner, an insurance salesman, and as a porter on the Baltimore and Ohio Railroad. His mother was a school teacher and worked at Langley Air Force Base during World War II, later losing her job because of her involvement in the National Association for the Advancement of Colored People. West has one brother, Nathaniel. West's interest in electricity resulted from his work with his cousin to put electrical wiring into homes in rural Virginia when he was twelve years old. After graduating from George P. Phenix High School, West went on to attend Hampton University in Virginia with plans of attending medical school. Nevertheless, West was drafted and sent to serve in the Korean War, where he was awarded a Purple Heart. West later became a pacifist and transferred to Temple University in Philadelphia. He decided to change his concentration and went on to receive his degree in physics in 1957.

West was hired at Bell Laboratories, where he began his studies to obtain his Ph.D. degree. During the second year of his doctorate program, West and a colleague, Gerhard Sessler, constructed a small microphone that did not require the use of a battery. This electret microphone replaced the carbon microphone and revolutionized communications technology. West's invention was used in such devices as hearing aids and space technology. Even in 2011, 90% of microphone technology had its foundation in West's development of the electret microphone. In addition to his research, West co-founded the Association of Black Laboratories Employees (ABLE) at Bell Labs in 1970. West retired from Lucent Technologies as a Bell Laboratories Fellow in 2001. He has continued to do research, joining the Whiting School of Engineering at Johns Hopkins University in 2002. His research interests include, among other things, finding new technology that will replace the electret microphone.

West's inventions and contributions in electrical engineering have garnered him a great deal of recognition. In 1999, West was the fourth African American selected to join the National Inventors Hall of Fame for the invention of the electret microphone. He also received the U.S. National Medal of Technology in 2006. He has forty-seven

U.S. patents, over 200 foreign patents, and has written over a hundred academic papers. West and his wife Marlene have four adult children, Melanie, Laurie, James and Ellington.

James E. West was interviewed by *The HistoryMakers* on September 10, 2012.

## **Scope and Content**

This life oral history interview with James West was conducted by Larry Crowe on February 13, 2013, in Baltimore, Maryland, and was recorded on 8 uncompressed MOV digital video files. Electrical engineer James West (1931 - ) is known for his patent of the electret microphone, which revolutionized communications technology and is used in all modern day cell phones.

## Restrictions

## **Restrictions on Access**

Restrictions may be applied on a case-by-case basis at the discretion of The HistoryMakers®.

#### **Restrictions on Use**

All use of materials and use credits must be pre-approved by The HistoryMakers®. Appropriate credit must be given. Copyright is held by The HistoryMakers®.

## **Related Material**

Information about the administrative functions involved in scheduling, researching, and producing the interview, as well as correspondence with the interview subject is stored electronically both on The HistoryMakers® server and in two databases maintained by The HistoryMakers®, though this information is not included in this finding aid.

#### **Controlled Access Terms**

This interview collection is indexed under the following controlled access subject terms.

#### Persons:

West, James E., 1931-

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

## Subjects:

African Americans--Interviews West, James E., 1931---Interviews

## **Organizations:**

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

Bell Laboratories; John Hopkins University

## Occupations:

**Electrical Engineer** 

## HistoryMakers® Category:

**ScienceMakers** 

## **Administrative Information**

## **Custodial History**

Interview footage was recorded by The HistoryMakers®. All rights to the interview have been transferred to The HistoryMakers® by the interview subject through a signed interview release form. Signed interview release forms have been deposited with Jenner & Block, LLP, Chicago.

#### **Preferred Citation**

The HistoryMakers® Video Oral History Interview with James West, February 13, 2013. The HistoryMakers® African American Video Oral History Collection, 1900 S. Michigan Avenue, Chicago, Illinois.

## **Processing Information**

This interview collection was processed and encoded on 5/30/2023 by The HistoryMakers® staff. The finding aid was created adhering to the following standards: DACS, AACR2, and the Oral History Cataloging Manual (Matters 1995).

# Other Finding Aid

A Microsoft Access contact database and a FileMaker Pro tracking database, both maintained by The HistoryMakers®, keep track of the administrative functions involved in scheduling, researching, and producing the interview.

# **Detailed Description of the Collection**

#### **Series I: Original Interview Footage**

Video Oral History Interview with James West, Section A2013 039 001 001, TRT: 1:28:56?

James West talks about his family background. His maternal grandparents were born slaves and his grandmother was granted property after Emancipation. His grandfather was a skilled carpenter. His mother, Matilda Omega Miller, was born in Farmville, Virginia around 1900. She attended Hampton Institute in Virginia and later became a school teacher. West's paternal side has Jewish and Native American ancestry. His father, Samuel Edward West, was born in the late nineteenth century in Virginia. After leaving his family farm to work at the Baltimore and Ohio Railroad, he later became an entrepreneur. One of his business ventures was owning a small funeral home. West talks about his earliest childhood memories and his childhood hobbies.

African American families--Virginia.

Slaves--Emancipation--Virginia.

Hampton Institute--Alumni and alumnae.

Baltimore and Ohio Railroad Company--Employees--History--20th century.

African American business enterprises--Funeral homes.

Video Oral History Interview with James West, Section A2013\_039\_001\_002, TRT: 2:30:27?

James West was born and raised in Farmville, Virginia. His household consisted of his brother, his parents, his uncle, and his grandmother, who he credits as having had a major influence on his life. Although his grandmother was very religious, West grew to be distrustful in organized religion after his childhood mentor, Dr. Baker, died. He did not find religious perspectives to be comforting or particularly logical. As a child, West was very inquisitive and enjoyed taking things apart. He was also fascinated by electricity, even after being electrocuted at eight years old. West attended Robert R. Moton Elementary and High School, where his interest in math and science was cultivated.

African American families--Virginia.

African American grandmothers--Virginia

Children--Religious life.

Childhood and youth--Virginia.

Electrocution--Virginia--Anecdotes.

Video Oral History Interview with James West, Section A2013 039 001 003, TRT: 3:28:54?

James West attended Robert R. Moton Elementary and High School in Farmville, Virginia. Due to segregation and the declining quality of public school education in Prince Edward County, West's mother moved the family to Hampton, Virginia. There, he attended George P. Phoenix High School, which was formerly known as Hampton Institute. West talks about the political discourse regarding education during his childhood, important figures from the Civil Rights Movement, his teaching philosophy, his learning process, and his experience in school.

Segregation in education--Virginia.

African Americans--Education--Political aspects--Virginia.

African American high school students--Virginia.

Civil rights movements--United States--History--20th century.

Problem solving--Study and teaching.

Video Oral History Interview with James West, Section A2013\_039\_001\_004, TRT: 4:31:59?

James West credits his mischief during his childhood and adolescence to his inquisitive nature. His affinity for logic and reason inform his political views on immigration and healthcare today. After graduating from George P. Phoenix

High School, West was accepted to Wilberforce University intent on pursuing a career in medicine. However, West was drafted to serve in the U.S. Army during the Korean War. After two Purple Hearts and almost two years of service, West was discharged from the Army and enrolled at Temple University in Pennsylvania. He decided to pursue physics and interned at Bell Laboratories during his summer breaks. His work was in the area of acoustics. West talks about his experiences at Temple University and at Bell Labs, as well as his personal attitude towards formal education.

Childhood and youth--Virginia.

Korean War, 1950-1953--Participation, African American.

African American soldiers--Purple Heart.

Temple University--Students.

Bell Telephone Laboratories.

Video Oral History Interview with James West, Section A2013 039 001 005, TRT: 5:24:49?

James West majored in physics at Temple University in Philadelphia, Pennsylvania. He interned in the acoustics department at Bell Laboratories during his summer breaks. After receiving his B.S. degree in 1957, West joined Bell Labs as an acoustical scientist. In 1962, West and his colleague and friend, Gerhard Sessler, invented the foil electret microphone. Since then, the device has been utilized in varying capacities in billions of telephones, microphones, and other gadgets around the world. West talks about his experience working at Bell Labs, his friend Gerhard Sessler, the impact of his developments, and the applications of foil electret technology.

Physics--Study and teaching (Higher).

Bell Telephone Laboratories. Acoustics Research Department--Employees.

Sessler, G. M. (Gerhard Martin), 1931-

Microphones--Design and construction.

Electrets.

Video Oral History Interview with James West, Section A2013 039 001 006, TRT: 6:28:56?

James West began his career at Bell Laboratories during his years as an intern at Temple University. He was later brought on as an acoustics scientist and has since contributed to a number of notable scientific innovations. Despite Bell Labs' reputation for an environment that encourages innovation and research and having had broken the color line in 1942 with hiring its first African American scientist, William Lincoln Hawkins, there were still barriers to the progression of African Americans at Bell Labs. In 1970, West co-founded the Association of Black Laboratory Employees (ABLE), which was formed to address the placement and promotional concerns of Black Bell Labs employees. West talks about his professional activities, professional awards, and his disinterest in being in a managerial role.

African American scientists--Employment.

Bell Telephone Laboratories--Social conditions.

African Americans--Professional associations.

Diversity in the workplace--United States.

Video Oral History Interview with James West, Section A2013 039 001 007, TRT: 7:30:51?

James West is best known for inventing the foil-electret microphone. He has received numerous honors and awards for his inventions and other scientific contributions, including the Inventor of the Year Award from the State of New Jersey (1995), honorary doctorate degrees from the University of Pennsylvania

and Michigan State University, the U.S. National Medal of Technology and Innovation (2006), and the Benjamin Franklin Medal in Electrical Engineering (2010). West wants to work for as long as he can. After leaving Bell Labs in 2002, West joined the G.W.C. Whiting School of Engineering at Johns Hopkins University. He continues his interdisciplinary research, which is focused on noise in hospitals and multi-media for the visually impaired. West reflects upon his legacy and life choices and shares his hopes and concerns for the Black community.

African American inventors.

Science--Awards.

Johns Hopkins University. School of Engineering--Faculty.

Acoustics--Research.

Technology--Minority employment--United States.

Video Oral History Interview with James West, Section A2013\_039\_001\_008, TRT: 8:04:28?

James West talks about his family and reflects on how he would like to be remembered.

African American families.