Finding Aid to The HistoryMakers ® Video Oral History with Jesse Russell, Sr.

Overview of the Collection

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

info@thehistorymakers.com www.thehistorymakers.com

Creator: Russell, Jesse E., 1948-

Title: The HistoryMakers® Video Oral History Interview with Jesse Russell, Sr.,

Dates: May 16, 2012

Bulk Dates: 2012

Physical Description: 7 uncompressed MOV digital video files (3:29:20).

Abstract: Inventor and electrical engineer Jesse Russell, Sr. (1948 -) is a pioneer in the field of

cellular and wireless communications, holding over 100 patents. Russell was interviewed by The HistoryMakers® on May 16, 2012, in New York, New York. This collection is

comprised of the original video footage of the interview.

Identification: A2012 111

Language: The interview and records are in English.

Biographical Note by The HistoryMakers®

Inventor, electrical engineer, and business executive Jesse E. Russell, Sr. was born on April 26, 1948 in Nolensville, Tennessee to Mary Louise Russell and Charles Albert Russell. He was raised in inner-city Nashville along with his ten siblings. In 1972, Russell received his B.S. degree in electrical engineering from Tennessee State University. As a top honor student, Russell became the first African American to be hired directly from a Historically Black College and University (HBCU) by AT&T Bell Laboratories. The following year, he earned his M. S. degree in electrical engineering from Stanford University.

After the completion of his education, Russell continued to work at Bell Laboratories as a pioneer in the field of cellular and wireless communications. In 1988, Russell led the first team from Bell Laboratories to introduce digital cellular technology in the United States. He was a leader in communication technology in cellular devices and some of his patents include the "Base Station for Mobile Radio Telecommunications Systems," (1992), the "Mobile Data Telephone," (1993), and the "Wireless Communication Base Station" (1998). Russell held numerous posts while employed at AT&T, including director of the AT&T Cellular Telecommunication Laboratory and chief technical officer for the Network Wireless Systems Business Unit. From 1996 to 2000, Russell served as vice president of Advanced Communications Technologies for AT&T and Chief Wireless Architect for the AT&T Company. In 2000, Russell became the president and CEO of incNETWORKS®, Inc., a company devoted to developing fourth-generation broadband wireless communications devices and wireless voice, video and data communications equipment.

For his innovation and leadership, Russell has won a number of prestigious awards and he was invited to participate in numerous professional conferences and organizations. In 1980, he received the Outstanding Young Electrical and Computer Engineer Award from Eta Kappa Nuand. In 1992 he was named the U.S. Black Engineer of the Year for the best technical contributions in digital cellular and microcellular technology. Amongst other memberships, he is a fellow of the Institute of Electrical and Electronics Engineers, Inc. and a member of Eta Kappa Nu. In 1995, Russell was inducted in to the National Academy of Engineering. Russell is married to

Amanda O. Russell, and they have raised four children: Tina, Jesse, Jr., William, and Catalina.

Jesse E. Russell, Sr. was interviewed by *The HistoryMakers* on May 16, 2012.

Scope and Content

This life oral history interview with Jesse Russell, Sr. was conducted by Larry Crowe on May 16, 2012, in New York, New York, and was recorded on 7 uncompressed MOV digital video files. Inventor and electrical engineer Jesse Russell, Sr. (1948 -) is a pioneer in the field of cellular and wireless communications, holding over 100 patents.

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:

Russell, Jesse E., 1948-

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

Subjects:

African Americans--Interviews Russell, Jesse E., 1948- --Interviews

Organizations:

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

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 Jesse Russell, Sr., May 16, 2012. 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 Jesse Russell, Sr., Section A2012_111_001_001, TRT: 1:31:02?

Jesse Russell describes his family background. Russell's mother, Mary Louise
Glenn Russell, was born in Nolensville, Tennessee. Her parents, Bertha and
Henry Glenn, owned land there, and worked as farmers, until her father's

premature death in a fire on the farm. She and her mother then moved to Nashville, Tennessee, where she spent the remainder of her life. Russell's father, Charles Albert Russell, was also born in Nolensville, and worked as a sharecropper. Russell's parents separated when he was very young, and his mother raised ten children by herself. He talks about his mother's strong personality, her dedication to her family, and her influence on shaping his life and personality. She worked two jobs to provide for her family and was a committed member of the Primitive Baptist denomination. Russell and his siblings were raised with close ties to the family church.

Affirmative action programs.

Video Oral History Interview with Jesse Russell, Sr., Section A2012 111 001 002, TRT: 2:29:39?

Jesse Russell and his siblings were raised by their mother in Nashville, Tennessee, where she worked two jobs to support her family. He recalls their life in government housing developments, and having to move frequently. He describes the struggles of poverty, and talks about the dire financial situation that his family was thrown into when his mother met was injured at her dry cleaning job. Russell's older siblings gave up school to support the family. His family's hardships made Russell want to focus on his education and to pursue a better life. Although he did not perform well academically until high school where he was influenced by his chemistry teacher, Russell had always shown a keen interest in mathematics and electronics. He describes his experience in school. Russell also describes his close relationship with his mother, and her influence on his life.

Affirmative action programs.

Video Oral History Interview with Jesse Russell, Sr., Section A2012 111 001 003, TRT: 3:29:16?

Jesse Russell attended high school at Pearl High School in Nashville, Tennessee. He describes his rough experience there and when he got into a fifth and his mother transferred him to Cameron High School in South Nashville. He displayed a talent for repairing electronics, and an interest in mathematics and science. Russell's academics improved at Cameron, and with help from his chemistry teacher, he attended the Upward Bound Program at Fisk University. His program teacher at Fisk sparked his interest in electrical engineering, and with her guidance, he was able to attend the Thirteen College Curriculum Program, a remedial program at Tennessee State University. He then enrolled in the School of Engineering there. Russell also talks about his childhood dream of becoming a football player, the dynamics of Jefferson Street in Nashville, and the poor college counseling that he received in high school.

Affirmative action programs.

Video Oral History Interview with Jesse Russell, Sr., Section A2012_111_001_004, TRT: 4:28:46?

In 1967, Jesse Russell graduated from Cameron High School in Nashville, Tennessee. Here he excelled in the eleventh and twelfth grades, but his overall grade point average suffered because of poor grades from his previous schools. While in school, Russell also worked part-time in manufacturing and became a supervisor. He then attended the Thirteen College Curriculum Program, a remedial program at Tennessee State University, and a year later, enrolled in the engineering program there. Russell describes his rich experience in engineering school, where he was mentored by Professors Devgan, Malkani, Tanner and Carlisle. He also describes being recruited to Bell Laboratories in 1972. In 1973, after earning his master's degree in electrical engineering at Stanford University, Russell began working at Bell Labs. He also talks about marrying his high school sweatheart and their having their first child in 1972.

Affirmative action programs.

Video Oral History Interview with Jesse Russell, Sr., Section A2012_111_001_005, TRT: 5:28:42?

In 1973, Jesse Russell joined the research and development team at Bell Laboratories, where he began his career integrating microprocessors on an old electromechanical switching system. Russell talks about his problem-solving skills. He also describes his work using microprocessors for the design of telecommunications systems. In 1984, Russell began working on the mobile telephone system at Bell Labs, as head of the Cellular Base Station Software Design Department. In 1988, he led the first team at Bell Laboratories to introduce digital cellular technology. In this section of the interview, Russell describes the history of cell phone technology at Bell Labs, and his team's pioneering work that led to the introduction of digital cellular technology, and smaller cell phones.

Affirmative action programs.

Video Oral History Interview with Jesse Russell, Sr., Section A2012_111_001_006, TRT: 6:33:11?

Jesse Russell was appointed as the director of the AT&T Cellular Telecommunications Laboratory in 1986, and he became AT&T's chief wireless architect in 1992. Russell discusses his contributions towards the digitalization of telecommunications. From 1996 until 2000, he served as the vice president of AT&T Advanced Communications Technologies. He explains how he conceived the idea of creating a spin-off company of his own, incNETWORKS, Inc., which specializes in creating personalized digital networks for consumers. Russell also explains the concept of generations in telecommunications technology, and the idea of 4G telecommunications networks. He also reflects upon the future of cellular telecommunications, and the trends in the United States' investment in innovation and intellectual bandwidth.

Affirmative action programs.

Video Oral History Interview with Jesse Russell, Sr., Section A2012_111_001_007, TRT: 7:28:44?

Jesse Russell talks about his company, incNETWORKS, Inc., and building personalized cellular networks. In this final section of the interview, Russell reflects upon his life choices and his mother's role in his life. He also reflects upon his legacy, and how he would like to be remembered. Russell talks about his work in the African American community, and his hopes and concerns for the community. He also talks about his four children and their careers.

Affirmative action programs.

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