

Finding Aid to The HistoryMakers® Video Oral History with Marshall Jones

Overview of the Collection

Repository:	The HistoryMakers®1900 S. Michigan Avenue Chicago, Illinois 60616 info@thehistorymakers.com www.thehistorymakers.com
Creator:	Jones, Marshall
Title:	The HistoryMakers® Video Oral History Interview with Marshall Jones,
Dates:	August 4, 2012
Bulk Dates:	2012
Physical Description:	9 Uncompressed MOV video files (4:25:59).
Abstract:	Mechanical engineer and inventor Marshall Jones (1941 -) was a pioneer in the laser technology, receiving fifty United States patents. Jones was interviewed by The HistoryMakers® on August 4, 2012, in Schenectady, New York. This collection is comprised of the original video footage of the interview.
Identification:	A2012_157
Language:	The interview and records are in English.

Biographical Note by The HistoryMakers®

Mechanical engineer and inventor Marshall G. Jones was born on August 1, 1941 in Southampton, New York to Mildred and Dallas Jones. While his father served in the Navy during World War II, Jones and his brother lived with his great aunt and uncle in Aquebogue, New York on their duck farm. Although he had to repeat the fourth grade because of his reading skills, Jones excelled in math and science. Jones attended Riverhead High School and graduated with his diploma in 1960. Two years later, he received his A.A.S. degree from Mohawk Valley Community College. Jones then received his B.S. degree in mechanical engineering from the University of Michigan in 1965. In his graduating class, he was the only African American student in the engineering school. Following work as a development engineer at Brookhaven National Laboratory (BNL), Jones went on to attend the University of Massachusetts at Amherst, where he received his M.S. and Ph.D. degrees in mechanical engineering in 1972 and 1974, respectively.

Jones entered into industrial research in 1974, working with General Electric Global Research in New York. Jones was one of General Electric's first scientists researching laser material processing and he soon became the manager of the Laser Technology Program. In 1982, Jones started research on high-power laser beam transmission through optical fibers. His research allowed for the passage of high power laser beams with high efficiency. Jones continued to specialize in laser technology, becoming a major pioneer in the field. His work included the use of lasers to join two dissimilar metal combinations together. He received fifty United States patents, thirty-one foreign patents and wrote over 45 publications. Jones

served as an adjunct professor at SUNY of Albany and Schenectady County Community College. He is the subject of the children's book, 'Never Give up: The Marshall Jones Story'.

Jones won a number of awards for his groundbreaking work. He is the recipient of the General Electric Company's highest honor, the E-GR Coolidge Fellow. Jones was named the 1994 Black Engineer of the Year for his technical contributions to industry. One year later, he received the Distinguished Achievement Award for Professional and Community Service from the University of Massachusetts. Jones went on to receive the Pioneer of the Year Golden Torch Award from the National Society of Black Engineers (NSBE) in 1999. He was also elected into the National Academy of Engineering (NAE) in 2001 for his contributions to the application of high-power lasers in industry. Jones was a fellow of the American Society of Mechanical Engineering (ASME) and the Laser Institute of America (LIA).

Marshall G. Jones was interviewed by 'The HistoryMakers' on August 4, 2012.

Scope and Content

This life oral history interview with Marshall Jones was conducted by Larry Crowe on August 4, 2012, in Schenectady, New York, and was recorded on 9 Uncompressed MOV video files. Mechanical engineer and inventor Marshall Jones (1941 -) was a pioneer in the laser technology, receiving fifty United States 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:

Jones, Marshall

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

Subjects:

African Americans--Interviews

Jones, Marshall--Interviews

African American engineers--Interviews.

African American inventors--Interviews.

Organizations:

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

General Electric Research and Development Center

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 Marshall Jones, August 4, 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 8/3/2014 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, August 4, 2012

Video Oral History Interview with Marshall Jones, Section A2012_157_001_001, TRT: 1:29:24 2012/08/04

Marshall Jones describes his maternal family background. Jones was born in 1941 in Southampton, New York, and named after his maternal great-grandfather, Marshall Jackson. His mother, Mildred Green, was born in 1923 in Richmond, Virginia. Jones' grandmother, Ollie Jackson, died at childbirth, and his mother was raised by her maternal aunts, Hattie Jackson and Mary Jackson. Mildred Green graduated from high school in Richmond, and then married Jones' father, Dallas Jones, before he enlisted in the U.S. Navy. Green moved from Virginia to New York to stay with her aunt and uncle, Mary Jackson and Lawrence Miller, when she became pregnant with Jones. Jones spent his childhood living with the Millers on their duck ranch on Long Island, and he attributes their important role in his upbringing.

African American families.

African American mothers--Virginia.

African American grandparents--Virginia.

Childhood--New York (State).

Southampton (N.Y.).

Video Oral History Interview with Marshall Jones, Section A2012_157_001_002, TRT: 2:29:32 2012/08/04

Marshall Jones describes his father's family background. Jones' father, Dallas Jones, was born in New Kent, Virginia, and traced his ancestry back to slavery in the United States. Soon after getting married, Dallas Jones followed his dream of joining the U.S. Navy, and served as a submarine chaser during World War II. After retiring from the Navy, he moved to New York City, and established a career at the United States Postal Service. Jones' parents had two children during their marriage, but separated shortly thereafter. After his parents' separation, Jones' mother, Mildred Green, went away to support the family, and Jones and his younger brother were raised by their maternal great-aunt and great-uncle, Mary and Lawrence Miller. Jones describes his relationship with his father, and his childhood memories on his great-uncle's duck ranch on Long Island, New York.

African American fathers--Virginia.

African American families.

United States. Navy.

Childhood--New York (State).

African American grandparents.

Video Oral History Interview with Marshall Jones, Section A2012_157_001_003, TRT: 3:29:26 2012/08/04

Marshall Jones and his younger brother grew up in the small bay-side town of Aquebogue, Long Island, New York, on their great-aunt Mary and great-uncle Lawrence Miller's duck ranch. Jones' mother, Mildred Green worked in New York City. She re-married and moved to Springfield, Massachusetts after her separation from Jones' biological father, Dallas Jones. Jones and his brother were raised by the Millers, and developed a very close relationship with them. Jones attended Aquebogue Elementary School until eighth grade, where he performed well in math, but repeated the fourth grade. Jones believes that repeating the fourth grade placed him at the correct academic pace to succeed as a student. He attributes his math skills to the early attention that he received from his great-uncle.

Education--New York (State).

High school athletes.

Mentoring in education.

Mohawk Valley Community College.

Mechanical engineering.

Video Oral History Interview with Marshall Jones, Section A2012_157_001_004, TRT: 4:30:36 2012/08/04

Marshall Jones received a strong foundation in mathematics at Aquebogue Elementary School, under the instruction of his seventh grade teacher, Mr.

Ross. Mr. Ross also influenced his participation in little league baseball, and Jones continued to pursue sports in high school. In 1956, Jones began studies at Riverhead High School, where he was very involved in athletics, especially basketball and wrestling. Jones' ambitions of becoming a pilot were cut short upon learning that he was near-sighted; his plans of going to college on a wrestling scholarship were also thwarted by a knee injury that he suffered in his junior year. Following the advice of his high school guidance counselor, Jones decided to attend Mohawk Valley Community College to pursue coursework in mechanical engineering technology.

Death.

Father figures.

Mechanical engineering.

Mohawk Valley Community College.

Brookhaven National Laboratory.

University of Michigan.

Winer, W. O. (Ward O.).

Video Oral History Interview with Marshall Jones, Section A2012_157_001_005, TRT: 5:30:21 2012/08/04

While Marshall Jones was a junior at Riverhead High School, he lost his great-uncle, Lawrence Miller, who had been his closest mentor as well as a father-figure to he and his younger brother. After graduating from high school, Jones decided to attend Mohawk Valley Community College, to pursue an associate's degree in mechanical engineering technology. While at community college, Jones was influenced by his design professor, Mr. Dyer; Jones' design drawings secured him a co-op position at the Brookhaven National Laboratory. Motivated by his friend, Jack Fogarty, Jones decided to further his training in mechanical engineering. He transferred to the University of Michigan in 1963 to earn his bachelor's degree in mechanical engineering, where he was mentored by his fluid mechanics professor, Ward Winer.

University of Michigan.

Mechanical engineering.

Brookhaven National Laboratory.

University of Massachusetts (Amherst campus).

Marriage.

African American mothers--death.

Video Oral History Interview with Marshall Jones, Section A2012_157_001_006, TRT: 6:30:14 2012/08/04

Marshall Jones earned his bachelor's degree in mechanical engineering from

the University of Michigan in 1965. Jones then accepted a position as a developmental engineer in the high energy physics department at Brookhaven National Laboratory, where he worked on designing and operating particle accelerators and the largest bubble chamber in the world. Jones met his future wife, Annie Jones, while working at Brookhaven, and the couple married in 1969. Jones and his wife began their graduate training at the University of Massachusetts, Amherst, in 1969, where Jones earned his M.S. and Ph.D. degrees in mechanical engineering in 1972 and 1975, respectively. Under the tutelage of the material scientist, Carl Nelson, Jones' dissertation research focused on the development of metal-metal composites that had superior vibration damping characteristics than cast-iron. His doctoral studies were affected by the unexpected death of his mother in an automobile accident in 1972.

General Electric Company.

Laser pulses.

Mechanical engineering.

Fiber optics.

Awards.

Video Oral History Interview with Marshall Jones, Section A2012_157_001_007, TRT: 7:29:55 2012/08/04

Over the course of his career at the General Electric Global Research Center, Marshall Jones has been involved in developing and patenting several cutting-edge laser-based applications. In the 1980s and 1990s, Jones was involved in the development of pulse laser pre-treated machining, high power laser beam transmission through optical fibers, and laser-based underwater cladding for use in the repair of nuclear reactors. In recognition of his contributions, Jones received a distinguished engineering alumni award from the University of Massachusetts in 1986 and an honorary doctorate of science degree from the State University of New York, in 1988. In 1985, Jones' work on laser fiber optic robot systems was voted one of the nation's top 100 innovations of the year by Science Digest magazine.

General Electric Company.

Minorities in engineering.

Mechanical engineering.

Fiber optics.

Mentoring in science.

Video Oral History Interview with Marshall Jones, Section A2012_157_001_008, TRT: 8:32:06 2012/08/04

Marshall Jones has worked as a developmental engineer at the General Electric Global Research Center for over thirty years. At the time that he began working at GE in the 1970s, he was one of approximately eleven African American Ph.D. graduates in mechanical engineering in the United States, and one of only two African American Ph.D. graduates at GE. He believes that his greatest contributions towards laser technology and science lies in his early work with lasers and fiber optics, material processing, and thick section welding. Alongside his research responsibilities, Jones has also been involved with mentoring school and college students in the area of engineering. He has also remained interested in competitive running.

Reminiscing.

African American families.

General Electric Company.

Autobiography.

Video Oral History Interview with Marshall Jones, Section A2012_157_001_009, TRT: 9:24:25 2012/08/04

Marshall Jones reflects upon his legacy and describes his photographs. Jones has spent his career as an engineer and researcher, and believes that his legacy lies in the technology that he has helped to develop and in his service and commitment to his community. He and his wife, Annie Jones, have two sons; inspired by Jones' career at General Electric, his younger son also joined the company in the healthcare service sector. In 1999, Jones wrote a book, 'Never Give Up - The Marshall Jones Story', which was inspired by local teachers and parents whom he interacts with in Schenectady, New York.

Childhood--New York (State)--Long Island.

Ranch life--New York (State).

Divorce.

Education, Primary--New York (State).

African American families.