

Finding Aid to The HistoryMakers® Video Oral History with Christine Darden

Overview of the Collection

Repository:	The HistoryMakers®1900 S. Michigan Avenue Chicago, Illinois 60616 info@thehistorymakers.com www.thehistorymakers.com
Creator:	Darden, Christine M.
Title:	The HistoryMakers® Video Oral History Interview with Christine Darden,
Dates:	February 26, 2013
Bulk Dates:	2013
Physical Description:	8 uncompressed MOV digital video files (3:36:17).
Abstract:	Aerospace engineer Christine Darden (1942 -) former Director of the Aerospace Performing Center Program Office at NASA's Langley Research Center, conducted research in sonic boom minimization and led the development of the national sonic boom program for much of her career. Darden was interviewed by The HistoryMakers® on February 26, 2013, in Hampton, Virginia. This collection is comprised of the original video footage of the interview.
Identification:	A2013_045
Language:	The interview and records are in English.

Biographical Note by The HistoryMakers®

Aerospace engineer and mathematician Christine M. Darden was born on September 10, 1942 in Monroe, North Carolina. Darden was the youngest of five children born to Noah Horace Sr., an insurance agent, and Desma Chaney Mann, an elementary school teacher. Darden attended Winchester Avenue High School and then transferred to Allen High School, a Methodist boarding school (formerly the Allen School for Negro Girls), in Asheville, North Carolina. She graduated from Allen High School in 1958 as the class valedictorian and received a scholarship to attend Hampton Normal and Agricultural Institute. In 1962, Darden received her B.S. degree in mathematics education and her teaching certification from Hampton Institute. She went on to earn her M.S. degree in applied mathematics from Virginia State College in 1967, and her D.Sc. degree in mechanical engineering with a specialty in fluid mechanics from George Washington University in 1983.

From 1962 to 1963, Darden was a mathematics instructor at Russell High School in Lawrenceville, Virginia. She continued teaching at Norcom High School in Portsmouth from 1964 to 1965. After completing her M.S. degree program, Darden became a data analyst for NASA at its Langley Research Center. In 1973, Darden was promoted to the position of aerospace engineer; and, in 1989, she was appointed as the technical leader of NASA's Sonic Boom Group of the Vehicle Integration Branch of the High Speed Research Program where she was responsible for developing the sonic boom research program internally at NASA. She also maintained partnerships with and led an advisory team composed of representatives from industrial manufacturers and academic institutions. In October of 1994, Darden became the deputy program manager of The TU-144 Experiments Program, an element of NASA's High Speed Research Program; and, in 1999, she was appointed as the director in the Program Management Office of the Aerospace Performing Center at Langley Research Center where she was responsible for Langley research in air traffic management and other aeronautics programs managed at other NASA Centers. In addition, Darden served as technical consultant on numerous government and private projects, and she is the author of more than fifty publications in the field of high lift wing design in supersonic flow, flap design, sonic boom

prediction, and sonic boom minimization.

Darden received the Dr. A. T. Weathers Technical Achievement Award from the National Technical Association in 1985. She was awarded the Senior Executive Career Development Fellowship from Simmons College in 1994. NASA recognized Darden with the Certificate of Outstanding Performance ten times between 1973 and 2003. Not only has Darden received the NASA medals for equal opportunity and for achievement in leading the sonic boom program, she is also the recipient of the 1987 Candace Award for Science and Technology from the National Coalition of 100 Black Women, and the 1988 Black Engineer of the Year Award from the publishers of *U.S. Black Engineer & Technology* magazine.

Aerospace engineer and mathematician Christine M. Darden was interviewed by *The HistoryMakers* on February 26, 2013.

Scope and Content

This life oral history interview with Christine Darden was conducted by Larry Crowe on February 26, 2013, in Hampton, Virginia, and was recorded on 8 uncompressed MOV digital video files. Aerospace engineer Christine Darden (1942 -) former Director of the Aerospace Performing Center Program Office at NASA's Langley Research Center, conducted research in sonic boom minimization and led the development of the national sonic boom program for much of her career.

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:

Darden, Christine M.

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

Subjects:

African Americans--Interviews
Darden, Christine M.--Interviews

Organizations:

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

National Aeronautical and Space Administration

Occupations:

Aerospace 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 Christine Darden, February 26, 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 Christine Darden, Section A2013_045_001_001, TRT: 1:30:30 ?

Christine Darden describes her family background. Her maternal grandmother, Martha Chaney, was born a slave in Sumter County, Alabama on the Oakchia Plantation owned by Green Barry Chaney. Darden's mother, Desma Chaney, was born in August, 1903, in Pennington, Alabama. Her father, William H. Giles, was Caucasian, and lived next door to the Oakchia Plantation. Chaney began attending Knoxville Academy College in the ninth grade, where she met Darden's father, Noah Horace Mann, Sr. Mann was born in Curryville, Georgia, in November, 1898. He graduated from Knoxville College around 1928, and the couple married that year. Desma Chaney completed her college education in 1944 at Johnson C. Smith University in Charlotte, North Carolina. Darden shares the details of her ancestry, on her maternal as well paternal side of the family.

African American families--Alabama.

Women slaves--Alabama--Sumter County.

Plantations--Alabama.

Racially mixed people--Alabama.

African American parents--Education--Alabama.

Video Oral History Interview with Christine Darden, Section A2013_045_001_002, TRT: 2:28:53 ?

Christine Darden grew up in Monroe, North Carolina, where she began attending school at a very young age. Her parents, Desma Chaney Mann and Noah Horace Mann, attended Knoxville Academy and then Knoxville College in the 1920s. They met there, and married in 1928, before starting to work as teachers in Curryville, Georgia. The Manns moved to North Carolina soon after, where they established their family roots near Charlotte. Darden's mother continued to work as a school teacher, while her father established a career as an insurance salesperson. Darden describes growing up in Monroe during segregation. She talks about her parents' personalities, their family home, and her siblings. Darden also shares how her parents were able to realize their dream of building a new home in Monroe.

Childhood--North Carolina--Monroe.

African American educators--Husband and wife--Georgia.

Segregation--North Carolina--Monroe.

Dwellings--Construction--North Carolina--Monroe.

Video Oral History Interview with Christine Darden, Section A2013_045_001_003, TRT: 3:30:00 ?

Christine Darden attended second grade at Winchester Avenue School in Monroe, North Carolina, at the age of five. She describes her experience in school, and talks about her early interest in tinkering with bicycles and cars, rather than playing with dolls. In the eleventh grade, Darden attended Allen High School in Asheville, North Carolina, which was a boarding school. She describes her experience in Asheville, where she was influenced by her geometry teacher, Ruth Walther. Although Darden was initially homesick at Allen High School, she quickly adjusted to her new life and learned to be

independent. After graduating from high school, Darden attended Hampton University, where she earned her B.S. degree in mathematics in 1962. Darden describes her education at Hampton, and her interest in the physical sciences, which led her to minoring in physics.

African American girls--Conduct of life.

Bicycles--Maintenance and repair.

Geometry--Study and teaching.

Boarding schools--Students, Black.

Hampton University--Students.

Video Oral History Interview with Christine Darden, Section A2013_045_001_004, TRT: 4:30:05 ?

Christine Darden attended Hampton University, where she earned her bachelor's degree in mathematics in 1962. She describes the details of her education at Hampton, where she also received a certification to teach mathematics. After graduating from college, Darden began her first job as a teacher at Russell High School, where she met her husband, Walter Darden. While at Russell, she also began taking math courses at Virginia State College, and describes her experience there. When her husband began his graduate studies at Virginia State College, Darden accepted a research assistantship and began work on her master's degree in aerosol physics. She describes her dissertation on calculating light scattering, and her first experience with working with computers. After graduating from Virginia State College in 1967, Darden was recruited to NASA's Langley Research Center. She also describes her relationship with computer scientist and HistoryMaker, Katherine Johnson, who also worked at NASA.

Hampton University--Students.

Mathematics--Study and teaching.

African American educators--Husband and wife--Virginia.

African American graduate students--Virginia.

Langley Research Center--Employees.

Video Oral History Interview with Christine Darden, Section A2013_045_001_005, TRT: 5:28:57 ?

In 1967, Christine Darden was recruited to NASA's Langley Research Center, where she began her career assisting the engineering department. Darden discusses segregation at NASA until the late 1960s, and talks about the African American all-woman division who were known as the "West Computers." Darden worked for several years without receiving a promotion or a change in assignments, until she voiced her concerns to her supervisor. She describes her early involvement in the sonic boom problem, which was a major focus of her career at NASA. Darden details the sonic boom problem, and talks about the limited worldwide scope of supersonic flight. She also discusses the history of the major supersonic airlines, the Concorde and Tu-144.

Langley Research Center--Race relations.

Langley Research Center--Discrimination in employment.

Sonic boom--Research--United States--History.

Supersonic transport planes.

Video Oral History Interview with Christine Darden, Section A2013_045_001_006, TRT: 6:32:13 ?

From 1967 to 2007, Christine Darden worked at NASA's Langley Research Center, where she spent most of her research career on the supersonic flight'ssonic boom problem. In this section of the interview, Darden describes the details of her work at NASA. In 1973, Darden enrolled in the School of

Engineering and Applied Science at George Washington University in Washington, D.C., where she pursued a part-time doctoral degree in mechanical engineering, while continuing to work at NASA. She describes the findings and applications of her dissertation research, which remained focused on addressing the sonic boom problem. Darden talks about her colleagues at NASA as well as mathematicians such as Leonhard Euler and Antonio Ferri, whose mathematical contributions impacted her team's work on the sonic boom problem. She also describes about her involvement and leadership in the Presbyterian church, which influenced her leadership and service roles at NASA.

Sonic boom--Research--United States--History.

Langley Research Center--Employees.

African Americans--Doctoral students--Washington (D.C.).

Ferri, Antonio, 1912-

Presbyterian Church--United States--History.

Video Oral History Interview with Christine Darden, Section A2013_045_001_007, TRT: 7:26:49 ?

Christine Darden spent fifty years at NASA's Langley Research Center where she contributed towards research as well as administration. In 1989, Darden became the technical head of the Sonic Boom Group, and in 1994, she became the deputy program manager of the high speed research program. In 1999, Darden was appointed as the director of the Aero Performing Center, and later as the assistant director of the Center for Strategic Planning. Darden retired from NASA in 2007, as the director of strategic communications and education. She shares her perspectives on NASA's future, and the politics involved in funding its research. In this final section of the interview, she reflects upon her career and legacy, describes her concerns for the African American community, and the shortcomings of the current educational system in the U.S. Darden closes the interview by talking about her family and her involvement in church.

Aerospace engineers--Employment--United States.

United States. National Aeronautics and Space Administration--Administration.

United States. National Aeronautics and Space Administration--Evaluation.

African Americans--Education--United States.

African American families.

Video Oral History Interview with Christine Darden, Section A2013_045_001_008, TRT: 8:08:50 ?

Christine Darden describes her photographs.

Photographs.