

Finding Aid to The HistoryMakers® Video Oral History with Wesley Harris

Overview of the Collection

Repository:	The HistoryMakers®1900 S. Michigan Avenue Chicago, Illinois 60616 info@thehistorymakers.com www.thehistorymakers.com
Creator:	Harris, Wesley
Title:	The HistoryMakers® Video Oral History Interview with Wesley Harris,
Dates:	April 26, 2013
Bulk Dates:	2013
Physical Description:	9 MOV HD video files (4:18:35).
Abstract:	Aerospace engineer Wesley Harris (1941 -) head of the department of Aeronautics and Astronautics at MIT, was elected as a Fellow of the National Academy of Engineering for his contributions to the understanding of helicopter rotor noise, the encouragement of minorities in engineering, and service in the aeronautical industry. Harris was interviewed by The HistoryMakers® on April 26, 2013, in Cambridge, Massachusetts. This collection is comprised of the original video footage of the interview.
Identification:	A2013_004
Language:	The interview and records are in English.

Biographical Note by The HistoryMakers®

Aerospace engineer Wesley L. Harris was born in Richmond, Virginia on October 29, 1941. His parents, William Harris and Rosa Harris, worked in Richmond's tobacco factories. As a child, Harris was intrigued by airplanes and learned to build different models. In the fourth grade, he won a career goals essay contest with a paper on how he wanted to become a test pilot. After graduating in 1964 with honors and a B.S. degree in aerospace engineering from the University of Virginia, Harris enrolled at Princeton University. There he earned an M.S. degree in aerospace and mechanical sciences in 1966 and a Ph.D. degree in aerospace and mechanical sciences in 1968.

After completing his Ph.D. at Princeton, Harris taught at the University of Virginia and at Southern University. He then went on to join the Massachusetts Institute of Technology (MIT) in 1972; where he served as a professor of aeronautics and astronautics. Harris established MIT's first Office of Minority Education in 1975 to help retain minority students and improve their performance. In 1985, Harris was appointed Dean of the School of Engineering at the University of Connecticut. From 1990 to 1995, he served as vice president and chief administrative officer of the University of Tennessee Space Institute and associate administrator for aeronautics at NASA. In 2003, Harris was named head of the department of Aeronautics and Astronautics at MIT.

Harris' honors and achievements include serving as either chair or member of the National Research Council, the National Science Foundation, the U.S. Army Science Board, and several state governments. He is a Fellow of the American Institute of Aeronautics and Astronautics, and the American Helicopter Society. He was also elected as a Fellow of the National Academy of Engineering for his contributions to the understanding of helicopter rotor noise, the encouragement of minorities in engineering, and service in the aeronautical industry.

Wesley L. Harris was interviewed by The HistoryMakers on April 25, 2013.

Scope and Content

This life oral history interview with Wesley Harris was conducted by Larry Crowe on April 26, 2013, in Cambridge, Massachusetts, and was recorded on 9 MOV HD video files. Aerospace engineer Wesley Harris (1941 -) head of the department of Aeronautics and Astronautics at MIT, was elected as a Fellow of the National Academy of Engineering for contributions to the understanding of helicopter rotor noise, the encouragement of minorities in engineering, and for service in the aeronautical industry.

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:

Harris, Wesley

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

Subjects:

African Americans--Interviews

Harris, Wesley--Interviews

Organizations:

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

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 Wesley Harris, April 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 8/7/2013 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, April 26, 2013

Video Oral History Interview with Wesley Harris, Section A2013_004_001_001, TRT: 1:28:21
2013/04/26

Wesley Harris describes his family background. He was born October 29th, 1941 in Richmond, Virginia. His mother, Rosa Minor, was born on April 15th, 1914 in Chesterfield County, Virginia. Harris can trace his mother's side of the family to Matilda, a slave sold in 1939 on Franklin Street in Richmond. After the Civil War they worked as sawmill workers in Chesterfield County and moved to Richmond during the Great Depression to work in the tobacco factories. His mother did not graduate from high school and married Harris' father as a teenager. Harris' father, William McKinley Harris, was born in Powhatan County, Virginia. He moved with his family to Richmond, Virginia,

where he met Harris' mother. Harris' father was a chef and owned his own restaurant, the Norfolk Grill, which served the workers at the tobacco factories.

African American families--Virginia.

Slaves--Virginia.

African American teenagers--Marriage.

African American cooks--Virginia.

African American business enterprises--Virginia.

Video Oral History Interview with Wesley Harris, Section A2013_004_001_002, TRT: 2:31:58
2013/04/26

Wesley Harris describes the personalities of his parents, Rosa Minor and William McKinley Harris, and who he takes after. He talks about his older siblings, Mary Elizabeth Harris, Roosevelt Harris, and Sylvester Harris. He also has a twin brother, William Harris Jr., with whom he is very close. Harris remembers his first dog, an Airedale terrier named Jack, Sylvester teaching him how to ride a bicycle, and teaching his brother William how to tie his shoes. He also remembers the sights, sounds, and smells of his childhood. In order to get to and from school in Richmond, Virginia Harris and his siblings had to fight their way through a white district. He discusses his mentors in school. Harris recalls winning first place in the African American Virginia State science fair but only winning third place in the white Virginia State science fair.

African American parents.

Twin brothers.

Childhood--Virginia--1940-1960.

Race relations--Virginia.

Science fairs--Virginia.

Video Oral History Interview with Wesley Harris, Section A2013_004_001_003, TRT: 3:30:58
2013/04/26

Wesley Harris describes his high school science fair project, which involved creating a cloud chamber to observe the trajectory of alpha particles. His teacher and advisor on the project, Eloise Bose Washington, encouraged him to attend the University of Virginia in Charlottesville, Virginia. Harris attended the University of Virginia from 1960-1964 and majored in engineering, the only major available to African Americans. Harris discusses the racial discrimination that he faced from both students and teachers. George B. Matthews and John Edward Scott, both professors of Harris, encouraged him to become an honors student. They also encouraged him to attend graduate school at Princeton University in Princeton, New Jersey. Harris served as chair of the Thomas Jefferson Council on Human Relations, a group that worked to promote interracial equality. In 1963 Harris brought Dr. Martin Luther King Jr. to speak at the University of Virginia.

High school--Science fairs--Virginia.

Mentors in education--Virginia.

University of Virginia--Students.

Engineering--Study and teaching (Higher)--Virginia.

Discrimination in education--Virginia.

Video Oral History Interview with Wesley Harris, Section A2013_004_001_004, TRT: 4:27:48
2013/04/26

Wesley Harris remembers meeting Dr. Martin Luther King, Jr. in 1963 when the Thomas Jefferson Council on Human Relations brought him to speak at the

University of Virginia, Charlottesville, Virginia. He also recalls attending the March on Washington. The U.S. Space Program started gaining momentum during Harris' lifetime, which greatly impacted his education from the high school to the graduate level. His doctoral education at Princeton University in Princeton, New Jersey was funded by a National Aeronautics and Space Administration traineeship. Harris attended Princeton University from 1964 to 1968. He talks about his thesis advisor, George Bienkowski. Harris' doctoral dissertation involved creating a theoretical model for strong shockwaves and gas mixtures, describing how the shockwaves from a probes descent into an atmosphere affects its readings of the atmosphere's gas content. Harris describes how he was eventually recruited as a professor at the Massachusetts Institute of Technology in Cambridge, Massachusetts.

King, Martin Luther, Jr., 1929-1968--Public appearances--Virginia.

March on Washington for Jobs and Freedom (1963 : Washington, D.C.).

United States. National Aeronautics and Space Administration.

Princeton University--Doctoral students.

Bienkowski, George K.

Video Oral History Interview with Wesley Harris, Section A2013_004_001_005, TRT: 5:28:03
2013/04/26

Wesley Harris describes how his dissertation, a theoretical model on the effects of shockwaves and gas mixtures on probe readings, explains issues in the field of aeronautics and astronautics. After graduating in 1968 from Princeton University, Princeton, New Jersey, Harris taught at the University of Virginia in Charlottesville, Virginia. Harris also became a professor at Southern University in Baton Rouge, Louisiana from 1970-1971. He describes the physics department at Southern University and explains why he left to teach at the University of Virginia again. Harris discusses being a professor at the University of Virginia, the university where he received his undergraduate degree. In 1972 Leon Trilling convinced Harris to become a professor at the Massachusetts Institute of Technology in Cambridge, Massachusetts. He also talks about how he met his first wife, Myrtle, their six children, and their move to Newton, Massachusetts.

University of Virginia--Faculty.

Southern University and A & M College--Faculty.

Massachusetts Institute of Technology--College teachers--Recruiting.

African American families--Massachusetts.

Video Oral History Interview with Wesley Harris, Section A2013_004_001_006, TRT: 6:29:01
2013/04/26

Wesley Harris describes researching and teaching at the Massachusetts Institute of Technology (MIT), starting as an associate professor in 1972. While at MIT Harris researched helicopter rotor acoustics to make helicopter quieter and more efficient as well as the unsteady transonic flow problem, where at certain speed pockets of transonic flow form and produce shockwaves. In 1975 Harris worked at the National Aeronautics and Space Administration to increase their capability in computational fluid dynamics through supercomputers. Harris received the Irwin Sizer Award from MIT for significant improvement to education because of the program he developed that determined the performance level of first year students. Harris left MIT in 1985 to spend five years building the engineering department at the University of Connecticut in Storrs, Connecticut. Harris became a professor at the University of Tennessee Space Institute in Tullahoma, Tennessee in 1990. Harris talks about the history

of Tennessee Valley.

Massachusetts Institute of Technology--Faculty.

Rotor (Helicopter)--Aeroacoustics.

Massachusetts Institute of Technology--Education--Awards.

Aerospace engineers--Intellectual life--20th century.

Universities and colleges--United States--Faculty.

Video Oral History Interview with Wesley Harris, Section A2013_004_001_007, TRT: 7:28:21
2013/04/26

Wesley Harris discusses the University of Tennessee Space Institute in Tullahoma, Tennessee, and why he decided to become vice president and chief administrative at the Space Institute. In 1992 Harris was selected by President Bill Clinton to serve as the associate administrator for aerodynamics at the National Aeronautics and Space Administration (NASA), where he managed a \$2 billion budget and NASA's aeronautical programs. While at NASA Harris was made a fellow of the American Helicopter Society. He reflects on his work in NASA and explains why he decided to leave NASA due to an altercation. Harris returned to the Massachusetts Institute of Technology in Cambridge, Massachusetts in 1995 and became a part of the Lean Aerospace Initiative. In 2000 he developed the Lean Sustainment Initiative. Both initiatives are focused on decreasing costs and increasing the performance of aircraft by eliminating waste.

University of Tennessee (System). Space Institute.

United States. National Aeronautics and Space Administration.

American Helicopter Society.

Massachusetts Institute of Technology--Research.

Airplanes, Military--Design and construction--Costs.

Video Oral History Interview with Wesley Harris, Section A2013_004_001_008, TRT: 8:28:18
2013/04/26

Wesley Harris describes becoming a member of the National Academy of Engineering in 1995, during the same time period that he was leaving the National Aeronautics and Space Administration (NASA). The same year Harris became a professor for the second time at the Massachusetts Institute of Technology (MIT), Cambridge, Massachusetts. In 2000 Harris spent a year as the Berry Goldwater Chair of American Institutions at Arizona State University in Phoenix, Arizona. Harris discusses the aeronautics and astronautics department at MIT and describes the James Sherley incident. In 2001 Harris was appointed as the Charles Stark Draper Professor of Aeronautics and Astronautics at MIT. Harris testified before Congress in 2012 on NASA's flight test capabilities. Harris predicts the future of NASA and talks about STEM (science, technology, engineering, and mathematics) education in the United States.

National Academy of Engineering.

Massachusetts Institute of Technology--Faculty.

Arizona State University--College department heads.

African American college teachers--Massachusetts--Cambridge.

Science--Study and teaching--United States--Evaluation.

Video Oral History Interview with Wesley Harris, Section A2013_004_001_009, TRT: 9:25:47
2013/04/26

Wesley Harris describes his research on the fluid dynamics of blood flow,

which was inspired by diabetes and sickle cell anemia. He shares his hopes and concerns for the African American community. Harris talks about his ex-wives, his six children, and his grandchildren. In high school Wesley Harris was the captain of the football team, and he remembers the time he spent on the team. Harris reflects on his life, legacy, and how he would like to be remembered.

Fluid dynamics--Research.

Blood flow.

African American families.

African American high school football players.