

# Finding Aid to The HistoryMakers® Video Oral History with Johnny Houston

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## Overview of the Collection

<b>Repository:</b>	The HistoryMakers®1900 S. Michigan Avenue Chicago, Illinois 60616 info@thehistorymakers.com www.thehistorymakers.com
<b>Creator:</b>	Houston, Johnny
<b>Title:</b>	The HistoryMakers® Video Oral History Interview with Johnny Houston,
<b>Dates:</b>	February 25, 2013
<b>Bulk Dates:</b>	2013
<b>Physical Description:</b>	12 MOV HD video files (5:46:22).
<b>Abstract:</b>	Mathematician Johnny Houston (1941 - ) is the founder of the Computational Science and Scientific Visualization Center and the African Studies Program (TLMP) at Elizabeth City State University, and co-founder of the National Association of Mathematicians, Inc. (NAM). Houston was interviewed by The HistoryMakers® on February 25, 2013, in Elizabeth City, North Carolina. This collection is comprised of the original video footage of the interview.
<b>Identification:</b>	A2013_046
<b>Language:</b>	The interview and records are in English.

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## Biographical Note by The HistoryMakers®

Mathematician, education administrator, and research director Johnny L. Houston was born on November 19, 1941 in Sandersville, Georgia to parents Catherine Houston Vinson and Bobby Lee Harris. After graduating from Ballard Hudson High School in Macon, Georgia in 1960, Houston went on to earn his B.A. degree in mathematics from Morehouse College in 1964 and his M.S. degree in mathematics from Atlanta University (Clark Atlanta University) in 1966. Houston studied at the Université de Strasbourg in Strasbourg, France from 1966 to 1967. He then earned his Ph.D. degree in mathematics from Purdue University in 1974.

In 1974, Houston joined the faculty at Savannah State University; and, in 1975, he was appointed as the chair of the Atlanta University Math and Computer Science Department. During his leave from the University, he served as the Calloway Professor of Computer Science at Fort Valley State University. In 1984, Houston was appointed the vice chancellor of academic affairs and professor of math and computer science at Elizabeth City State University (ECSU). He was named senior research professor in the ECSU Department of Mathematics and Computer Science in 1988. Throughout his career, Houston has held several positions as a specialist in mathematics and computer science. He served as a member of the National Institute of Health's MARC Committee from 1980 to 1986; a member of the Board of Governors of the Mathematical Association of America from 1992 to 1995; and, a member of the Human Resource Advisory Group for the Mathematical Sciences Research Institute from 1993 to 1998. In 1996, Houston established the Computational Science and Scientific Visualization (CSSV) Center at ECSU; and, in 2002, he established the African Studies Program (TLMP) at ECSU. Houston served as the director of both programs until 2008. Houston is co-founder of the National Association of Mathematicians, Inc. (NAM), and served as NAM's executive secretary from 1975 until 2000. Throughout his professional career, Houston has authored more than forty books and articles in the fields of science, mathematics, and education, including "The History of NAM, the First 30 Years; 1969-1999" (2002). He has given scholarly presentations, or traveled, on six continents, more than fifty countries – twenty-five in Africa-

as well as throughout the United States. Houston received more than \$15 million in grant funding to support his scholarly work.

Houston has received many recognitions, including, the University of North Carolina Board of Governors Teaching Excellence Award in 1996; NAM's Lifetime Achievement Award in 1999; and, the Purdue University BCC Pioneer Award in 2009. He has also been included in biographical listings of well-known scientists, such as "American Men and Women of Science," "Who's Who Among Black Americans," "Who's Who in America," and the "World Directory of Mathematicians". In 2010, Houston was named professor emeritus at Elizabeth City State University after twenty-six years of service.

Houston married Virginia Lawrence of Macon, Georgia. They have two daughters: Dr. Mave Talibra Houston and Kaiulani Michelle Houston.

Mathematician, education administrator, and research director Johnny L. Houston was interviewed by The HistoryMakers on February 25, 2013.

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## Scope and Content

This life oral history interview with Johnny Houston was conducted by Larry Crowe on February 25, 2013, in Elizabeth City, North Carolina, and was recorded on 12 MOV HD video files. Mathematician Johnny Houston (1941 - ) is the founder of the Computational Science and Scientific Visualization Center and the African Studies Program (TLMP) at Elizabeth City State University, and co-founder of the National Association of Mathematicians, Inc. (NAM).

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## 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®.

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## 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.

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## Controlled Access Terms

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

Persons:

Houston, Johnny

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

### Subjects:

African Americans--Interviews

Houston, Johnny--Interviews

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### Organizations:

HistoryMakers® (Video oral history collection)

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The HistoryMakers® African American Video Oral History Collection

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Elizabeth City State University

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### HistoryMakers® Category:

ScienceMakers

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## 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 Johnny Houston, February 25, 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 7/30/2013 by The HistoryMakers® staff. The finding aid was created adhering to the following standards: DACS, AACR2, and the Oral History Cataloging Manual (Matters 1995).

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## 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.

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## Detailed Description of the Collection

### **Series I: Original Interview Footage, February 25, 2013**

Video Oral History Interview with Johnny Houston, Section A2013\_046\_001\_001, TRT: 1:29:24  
2013/02/25

Johnny Houston describes his family background. His mother, Catherine Houston Vinson, was born in June of 1919 in Sandersville, Georgia. Although she only attended school until the fourth grade, she was passionate about education and instilled that into her children. She left Sandersville when Houston was a toddler, to search for employment opportunities in Atlanta, Georgia. During his mother's intermittent absence, Houston was raised primarily by his maternal grandmother, Ruth Heard Houston. Houston's father, Bobby Lee Harris, was born in November of 1906, also in Sandersville. He attended Thomas Jefferson Elder High School and after graduating, he briefly attended college. Harris later worked in the funeral business and participated in other entrepreneurial activities. Houston talks about his relationship with his father and his paternal aunts' memories of Elijah Muhammad.

African American families--Georgia.

African American mothers--Employment.

Grandparents as parents--Georgia.

African American fathers--Family relationships.

Elijah Muhammad, 1897-1975.

Video Oral History Interview with Johnny Houston, Section A2013\_046\_001\_002, TRT: 2:29:59  
2013/02/25

Johnny Houston was born and raised in Sandersville, Georgia. Due to his mother's intermittent absence during the early part of his life, Houston was raised by his grandmother, Ruth Heard Houston, until she died when he was nine years old. Houston talks about his grandmother's influence on him and on the community, as well as her career as a domestic worker. Houston lived in the Brownville community in Sandersville, where he attended T.J. Elder Elementary School. He excelled in all of his classes at school. His eager attitude towards his academics was well appreciated by his teachers, who often called upon him to run errands for them. Houston talks about his siblings, his early childhood memories, the experience of a life of poverty in the South, and the racial tensions in the deep South.

African American grandmothers--Influence--Georgia.

African Americans--Household employees--Georgia.

African Americans--Education--Georgia.

Poor children--Georgia.

Race relations--Southern States.

Video Oral History Interview with Johnny Houston, Section A2013\_046\_001\_003, TRT: 3:32:26  
2013/02/25

Johnny Houston talks about the impact of his grandmother's death when he was nine years old. His eldest sister died two years later. At this time, his family continued to struggle financially. In an effort to become more self-reliant and contribute to the household, Houston sought work by doing odd jobs for his

neighbors, such as picking their fruit, doing their grocery shopping, and running other errands. Houston's mother then decided to move his family to Macon, Georgia, where they settled in the Tindall Heights projects. In spite of the strains of his personal life, Houston's focus on his academics did not wane. He completed his elementary school education at B.S. Ingram Elementary School and then attended Ballard-Hudson Junior High School and Ballard-Hudson High School. Houston talks about his junior high and high school teachers, the importance of communication skills, and his math and science instruction in high school.

Children and death--Psychological aspects.

Poor families--Georgia.

Child labor--Georgia.

African American students--Education--Georgia.

Video Oral History Interview with Johnny Houston, Section A2013\_046\_001\_004, TRT: 4:29:21  
2013/02/25

Johnny Houston attended Ballard-Hudson High School in Macon, Georgia. He appreciated the challenging teaching style of his algebra teacher, Carrie Wright, which intensified his desire to excel in math. Houston talks about his extracurricular activities and working during high school. After graduating sixth in his class, he decided to attend Morehouse College, where he received a tuition scholarship. He struggled to attain the money to pay for room and board and other educational expenses, but managed to procure it after working and saving persistently and using a \$300 loan that his mother received. After his freshman year, Houston spent the summer working at The Homestead luxury resort in Hot Springs, Virginia. His work ethic and charming attitude towards the patrons enabled him to earn good tips and helped him pay for his education. Houston talks about his decision to major in mathematics, and learning chemistry from Henry C. McBay at Morehouse College.

African American high school students.

Mathematics--Study and teaching (Secondary).

African American universities and colleges--Scholarships.

Summer employment--Virginia--Hot Springs.

McBay, Henry C.

Video Oral History Interview with Johnny Houston, Section A2013\_046\_001\_005, TRT: 5:31:49  
2013/02/25

Johnny Houston studied mathematics at Morehouse College in Atlanta, Georgia. He talks about some of his favorite professors, including Claude B. Dansby, his math professor, and Henry C. McBay, his chemistry professor. Houston also talks about his impression of Benjamin Elijah Mays, who was a minister and president of Morehouse College during his time there. After receiving his B.A. degree in mathematics in 1964, Houston was appointed as a high school teacher at E.E. Smith High School in Fayetteville, North Carolina. A year later, he decided to pursue his M.S. degree in mathematics at Atlanta University (now Clark Atlanta University). Houston talks about the professors at the Atlanta University Complex and shares his memories of the Civil Rights Movement.

Mathematics--Study and teaching.

African American universities and colleges--Faculty.

Mays, Benjamin E. (Benjamin Elijah), 1894-1984

African American graduate students--Georgia.

Civil rights movements--Georgia--Atlanta--History--20th century.

Video Oral History Interview with Johnny Houston, Section A2013\_046\_001\_006, TRT: 6:29:08  
2013/02/25

Johnny Houston received his M.S. degree in mathematics from Atlanta University in 1966. Under the guidance of Lloyd Williams, Houston's thesis, titled 'Topologies for Function Spaces', focused on how abstract functions relate to one another. After earning his M.S. degree, Houston received a fellowship to study abroad in France at the University of Strasbourg for one year. While there, his studies were involved in the areas of topology and Lie theory. He received a certificate for his coursework in 1967. Houston talks about his experience learning French, his desire to become well informed about the United States, his experience at the University of Strasbourg, and his travels through Europe.

African American graduate students--Georgia.

Topology--Study and teaching.

Foreign study--France.

Universitei de Strasbourg.

Europe--Description and travel.

Video Oral History Interview with Johnny Houston, Section A2013\_046\_001\_007, TRT: 7:28:48  
2013/02/25

Johnny Houston was appointed as a mathematics instructor in the Stillman College Department of Mathematics in Tuscaloosa, Alabama in 1967. Houston describes the influence of his first exposure to computers during his tenure at Stillman, when he attended an IBM workshop to learn to program in Fortran. In 1969, Houston was accepted into the doctoral program in mathematics at Purdue University, and attended the Summer Institute for College Teachers of Math at the University of Georgia en route to Indiana. The same year, Houston married Virginia Lawrence, his girlfriend of ten years and was one of the co-founders of the National Association of Mathematicians (NAM). He describes the history, philosophy, objectives, and the reasons surrounding the conception of NAM. He also talks about his experience at Purdue and the other African Americans who studies mathematics there.

Mathematicians--Intellectual life--20th century.

Universities and Colleges--Faculty.

FORTTRAN (Computer program language).

Purdue University--Students, Black.

National Association of Mathematicians (U.S.)

Video Oral History Interview with Johnny Houston, Section A2013\_046\_001\_008, TRT: 8:28:42  
2013/02/25

From 1969 to 1974, Johnny Houston pursued his Ph.D. degree in mathematics at Purdue University, where he worked under the tutelage of Eugene Schenkman. Houston describes his experience as a doctoral student, and talks about the mentoring that he received from Dr. Schenkman. Houston also provides a detailed explanation of his doctoral dissertation, titled 'On the Theory of Fitting Classes in Certain Locally Finite Groups', and describes its impact in the field of mathematics. He also taught mathematics at the Krannert School of Industrial Management while at Purdue. After earning his Ph.D. degree in 1974, Houston taught mathematics at Savannah State University for one year, and then accepted the position of Chair of the Department of Mathematics and Computer Science at Atlanta University in 1976. He describes

himself as a computational scientist, and discusses the significance of studying pure or abstract mathematics.

Purdue University--Doctoral students.

Schenkman, Eugene.

Mathematics--Study and teaching (Higher).

Atlanta University. Mathematics and Computer Science Department--College department heads.

Video Oral History Interview with Johnny Houston, Section A2013\_046\_001\_009, TRT: 9:29:24  
2013/02/25

Johnny Houston was elected as the National Secretary of the National Association of Mathematicians (NAM) in 1975. He served as Chair of the Atlanta University Department of Mathematics and Computer Science from 1975 to 1981, where he was involved in developing master's degree programs in computer science for students and for college faculty. In 1979, Houston was appointed as a Visiting Scientist on the Computer Graphics Project at the Lawrence Livermore National Laboratory. He describes his experience there and at the National Center for Atmospheric Research (NCAR). In 1981, Houston became an associate professor at Fort Valley State University, where he developed three academic computing laboratories and bachelor's degree programs in computer science and computer information systems. In 1984, Houston became Professor and the Vice Chancellor of Academic Affairs at Elizabeth City State University (ECSU). He talks about the history of ECSU and his role in the computerization of the university.

Universities and colleges--Curriculum planning--United States.

Lawrence Livermore National Laboratory.

National Center for Atmospheric Research (U.S.)

Elizabeth City State University--History.

Elizabeth City State University--Educational technology.

Video Oral History Interview with Johnny Houston, Section A2013\_046\_001\_010, TRT: 10:29:08  
2013/02/25

Johnny Houston describes the growing applications of mathematics and computer science in scientific research, and talks about his publications on the general applications of mathematics. He then discusses the modern age of computerization, and how it affects the ease of scientific collaboration in academia. Since 2003, Houston has been involved in the USAID-funded President's Africa Education Initiative: Sub-Saharan Africa Textbooks Project, and he describes his extensive involvement with developing textbooks in science and mathematics for students in Senegal. He describes the two phases of the project - Textbook for A General Society (TAGS) and Textbooks and Learning Material Program (TLMP), his collaboration with Senegalese educators in the United States including HistoryMaker Paul Gueye, and his interaction with educators at the University of Cheikh Anta Diop in Dakar, Senegal.

Mathematics--Scientific research.

Computer science--Scientific research.

Africa--Education.

Science--Textbooks.

Educators--Africa--Senegal.

Video Oral History Interview with Johnny Houston, Section A2013\_046\_001\_011, TRT: 11:29:55

2013/02/25

From 1997 to 2008, Johnny Houston was funded by the U.S. Department of Education on a Computational Science Initiative project at Elizabeth City State University (ECSU). He describes his involvement with improving how mathematics was taught, and talks about teaching students to think critically to solve problems. Houston also highlights the contributions and the significance of pioneering African American mathematicians, Benjamin Banneker, Elbert Frank Cox, Euphemia Lofton Haynes, Evelyn Boyd Granville, Marjorie Lee Brown, J. Ernest Wilkins and David Blackwell. He also talks about the differences between a career in academia and one in industry, and discusses current employment trends amongst mathematicians.

Federal aid to colleges--North Carolina--Elizabeth City.

Critical thinking--Study and teaching.

African American mathematicians.

Mathematicians--Employment--United States.

Video Oral History Interview with Johnny Houston, Section A2013\_046\_001\_012, TRT: 12:18:18  
2013/02/25

Johnny Houston reflects upon his contributions to the field of mathematics. He describes his involvement in the establishment of the Black Culture Center at Purdue University and the African Studies Program at Elizabeth City State University. In this final tape, Houston also talks about his family, his career choices, his hopes and concerns for the African American community, and how he would like to be remembered.

Purdue University. Black Cultural Center.

Elizabeth City State University--African-American studies.

African American families.

Education.