

# Finding Aid to The HistoryMakers® Video Oral History with Joseph Monroe

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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>	Monroe, Joseph, 1936-
<b>Title:</b>	The HistoryMakers® Video Oral History Interview with Joseph Monroe,
<b>Dates:</b>	May 7, 2013
<b>Bulk Dates:</b>	2013
<b>Physical Description:</b>	6 uncompressed MOV digital video files (2:40:28).
<b>Abstract:</b>	Computer scientist Joseph Monroe (1936 - ) was the first African American to earn a doctoral degree in the field of computer science, and went on to become the first African American appointed as a full professor at the U.S. Air Force Academy. Monroe was interviewed by The HistoryMakers® on May 7, 2013, in Greensboro, North Carolina. This collection is comprised of the original video footage of the interview.
<b>Identification:</b>	A2013_075
<b>Language:</b>	The interview and records are in English.

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## Biographical Note by The HistoryMakers®

Computer scientist Joseph Monroe was born in North Carolina. Monroe received his B.S. degrees in mathematics, English, and French from North Carolina A & T State University in 1962. He then enrolled at Texas A & M University and graduated from there with his M.S. and Ph.D. degrees in computer science in 1967 and 1972, respectively. Monroe was the first African American to earn a doctoral degree in computer science in the United States.

Upon graduation, Monroe was commissioned as a Second Lieutenant in the U.S. Air Force and appointed as an associate professor of computer science at the U.S. Air Force Academy. From 1978 to 1987, he held various positions at the U.S. Air Force Academy, including as the Dean of the Faculty, chair of the Department of Electrical Engineering, chair of the Computer Science Department. Monroe went on to become the first African American appointed as a full professor at the U.S. Air Force Academy. While there, he was responsible for developing computer software systems such as the U.S. Air Force Manpower System, the U.S. Army Personnel System, U.S. Air Force Logistics systems, and the Armed Forces Intelligence Data Handling System. In addition, Monroe designed accredited computer science programs for the Egyptian Air Force Academy, and the Royal Thai Air Force Academy.

In 1987, Monroe joined the faculty at Fayetteville State University and served in various academic and administrative positions. He returned to North Carolina A & T State University in 1991 and was named Ronald E. McNair Endowed Professor and Chair of Computer Science. In 2000, Monroe assumed the additional role of Dean of the College of Engineering. Under his leadership, the Department of Computer Science and the Department of Engineering grew in size, increased funding, and hired the most tenured African American engineering professors in the United States. Monroe was a founding member of the first computer science honor society, Upsilon Pi Epsilon, which is now an international society. He served on the board of directors for the Industries of the Blind, the board of directors for Computing at NASA, and the board that governs the practice of Engineering and

Surveying in North Carolina.

Monroe was awarded the U.S. Department of Defense Superior Service Medal for Superior Service and Teaching in 1987, and the U.S. Air Force Legion of Merit Service Medal for Outstanding Teaching and Research in 1974, 1978, and 1982. In 1992, he was named National Technical Achiever of the Year by the National Technical Achievers Association.

Monroe is married to the former Sally McNair Monroe. They have two sons: Joseph Monroe, Jr. and Col. Robert Bruce Monroe.

Joseph Monroe was interviewed by *The HistoryMakers* on May 7, 2013.

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## Scope and Content

This life oral history interview with Joseph Monroe was conducted by Larry Crowe on May 7, 2013, in Greensboro, North Carolina, and was recorded on 6 uncompressed MOV digital video files. Computer scientist Joseph Monroe (1936 - ) was the first African American to earn a doctoral degree in the field of computer science, and went on to become the first African American appointed as a full professor at the U.S. Air Force Academy.

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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:

Monroe, Joseph, 1936-

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

# Subjects:

African Americans--Interviews  
Monroe, Joseph, 1936- --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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United States. Air Force, North Carolina A & T State University

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# Occupations:

Computer Scientist

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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 Joseph Monroe, May 7, 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).

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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

Video Oral History Interview with Joseph Monroe, Section A2013\_075\_001\_001, TRT: 1:28:40 ?

Joseph Monroe describes his family background. Monroe and his parents were born in Rowland, North Carolina. His mother, Cilla Jane Baker Monroe, was born in 1911. She attended school until the sixth grade, which was the extent of schooling for African Americans in Rowland during that era. Although she regretted not having completed her education, she taught at Sunday school, and was known for her talent in singing. Monroe's father, Willie Birth Monroe, was born in 1909. He attended school until the fourth grade and then continued the family tradition of sharecropping. Monroe describes his father's strong work ethic and his interest in baseball. He also describes his childhood in Rowland, where he and his nine siblings worked on the farm, their family home, and the racial demographics and dynamics of Rowland. Finally, he describes his childhood interest in tinkering with gadgets, taking them apart, and putting them back together.

African American families--North Carolina.

African Americans--Education--North Carolina.

Sharecroppers--North Carolina.

Childhood--North Carolina--Rowland.

Race relations--North Carolina--Rowland.

Video Oral History Interview with Joseph Monroe, Section A2013\_075\_001\_002, TRT: 2:28:20 ?

Joseph Monroe attended Rowland Southside School, where he excelled academically until the third grade. Between the fourth and tenth grades, his responsibilities on his parents' farm kept him from attending school regularly. Monroe recalls staying abreast of his studies during his family's daily gatherings around learning activities. At the age of sixteen, he was recruited to drive the school bus, which allowed him to attend school more regularly. He describes his interest in mathematics in high school, where he became the proxy math instructor. Monroe joined the U.S. Air Force after graduating from high school in 1954, and describes how he learned to speak Russian and Turkish, as well as his experience in Turkey until 1959. He recalls the racial dynamics in Rowland, North Carolina in the 1950s, watching the second Joe Louis versus Max Schmeling boxing match with his grandfather, and Jackie Robinson's entry into Major League Baseball.

African Americans--Education--North Carolina.

Mathematics--Study and teaching (Secondary).

United States--Air Force--Participation, African American.

Race relations--North Carolina--Rowland.

African Americans--Sports.

Video Oral History Interview with Joseph Monroe, Section A2013\_075\_001\_003, TRT: 3:31:32 ?

While stationed in Turkey with the U.S. Air Force in the 1950s, Joseph Monroe enrolled in correspondence courses in mathematics and science at the University of Maryland. In 1959, he enrolled at North Carolina A&T State University, where he earned his bachelor's degrees in mathematics, English and French. He was then appointed to the Intelligence Data Handling Systems (IDHS) program at Lowry Air Force Base in Denver, where he began working towards a master's degree in computer science at the University of Colorado. In 1965, Monroe

enrolled in a master's degree program in computer science at Texas A&M University, and returned there in 1969 to pursue his Ph.D. degree in computer science. Monroe also talks about his mentors at A&M, his experience on the computer science faculty at the U.S. Air Force Academy, the early days of computers and computer programming, and how he met his wife, Sallie Monroe. United States--Air Force--Participation, African American.

Correspondence schools and courses--United States.

Texas A & M University--Faculty.

IBM computers--History.

Computer science--Study and teaching.

Video Oral History Interview with Joseph Monroe, Section A2013\_075\_001\_004, TRT: 4:29:07 ?

In 1969, Joseph Monroe returned to Texas A&M University to pursue his Ph.D. degree in computer science. He describes the politics that were involved at the U.S. Air Force Academy during this selection process, and his experience at College Station. Monroe studied complexity theory, and earned his Ph.D. degree in 1974. He returned to the computer science faculty at the Air Force Academy, where he became the first African American permanent professor in the service academies, as appointed by President Jimmy Carter. Monroe discusses the expansion of computers and computer science degrees across the nation, and talks about his work with helping other universities establish accredited computer science programs. He returned to North Carolina in 1988, where he served at the University of North Carolina, Fayetteville State University, before becoming the Ronald E. McNair Endowed Chair Professor of Computer Science at North Carolina A&T State University in 1991.

Computer science--Study and teaching (Higher)--United States.

Texas A & M University--Students.

United States Air Force Academy--African Americans.

North Carolina Agricultural and Technical State University--College department heads.

Video Oral History Interview with Joseph Monroe, Section A2013\_075\_001\_005, TRT: 5:27:59 ?

Joseph Monroe became the Ronald E. McNair Endowed Chair Professor of Computer Science at North Carolina A&T State University in 1991. He describes his research in geomatics, as well as his work on transportation security for the Department of Homeland Security, reusing the ATA language in the navigation systems for ships, and the adaptation and scalability of computers. Monroe became the dean of the College of Engineering at North Carolina A&T in 2000. He shares his most significant contributions there, including his mentoring initiatives, and his role in the establishment of an Engineering Research Center, with funding from the National Science Foundation (NSF). Monroe has served on the Board of Directors for Computing at NASA and on the board that governs the practice of engineering and land survey in North Carolina. He also reflects upon his hopes and concerns for the African American community and talks about his family.

Geomatics.

Navigation--Technological innovations.

North Carolina Agricultural and Technical State University--Deans (Education).

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

Work and family.

Video Oral History Interview with Joseph Monroe, Section A2013\_075\_001\_006, TRT: 6:14:50 ?

Joseph Monroe talks about his sons, Joseph Monroe, Jr. and Robert Bruce Monroe. He then reflects upon his legacy, shares his involvement in the Bible training center at his church, and talks about how he would like to be remembered. Monroe also describes his photographs.

African American families--Sons.

African Americans--Religious life--North Carolina.

Photographs.