

# Finding Aid to The HistoryMakers® Video Oral History with Clayton W. Bates, Jr.

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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>	Bates, Clayton W., Jr., 1932-
<b>Title:</b>	The HistoryMakers® Video Oral History Interview with Clayton W. Bates, Jr.,
<b>Dates:</b>	March 5, 2004
<b>Bulk Dates:</b>	2004
<b>Physical Description:</b>	4 Betacame SP videocassettes (1:45:08).
<b>Abstract:</b>	Electrical engineer and physicist Clayton W. Bates, Jr. (1932 - ) served on the engineering faculty at Stanford University and Howard University. He has dedicated his career to improving STEM education for African Americans. Bates was interviewed by The HistoryMakers® on March 5, 2004, in Washington, District of Columbia. This collection is comprised of the original video footage of the interview.
<b>Identification:</b>	A2004_016
<b>Language:</b>	The interview and records are in English.

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## Biographical Note by The HistoryMakers®

Electrical engineer and physicist Clayton W. Bates, Jr. was born on September 5, 1932 in New York City, where he attended elementary school at New York Public School 119 and middle school at New York Junior High School 43. Bates earned his high school diploma from the all-boys Brooklyn Technical High School in 1950 where he was a member of the baseball, basketball, and track teams. As a young boy, he also enjoyed playing baseball and basketball in his Harlem neighborhood where he lived with his mother and older sister, Barbara. Bates' parents, Arline and Clayton Bates, Sr., divorced when he was a young teenager. Bates' love affair with science and engineering began early; as a youngster he enjoyed building model planes and dreamed of becoming a pilot.

From 1950 to 1954, Bates attended Manhattan College on a full academic scholarship where he received his B.S. degree in electrical engineering. Bates went on to earn his M.S. degree in electrical engineering from the Polytechnic Institute of Brooklyn. He then received a fellowship from Harvard University where he earned his second M.S. degree in electrical engineering in 1960. Bates went on to study at Washington University in St. Louis, Missouri where he received his Ph.D. degree in physics in 1966.

Following graduation, Bates worked for several engineering and scientific companies including Varian Associates, AVCO, Sylvania Electric Products, the Ford Instrument Company, and RCA. His projects ranged from low-level light detection and x-ray image intensification to the design of the nuclear reactor controls of the first SEA WOLF, the second atomic powered submarine. In 1972, Bates left Varian and accepted a position in Stanford University's Department of Materials Science and Engineering. Bates continued to work at Stanford for the next twenty-two years where he helped to organize the Society of Black Scientists and Engineers. In 1984, Bates accepted the position of associate dean for graduate education and research in Howard University's College of Engineering, Architecture, and Computer Sciences. Throughout his career, Bates authored numerous publications. He has been committed to increasing the number of African Americans in STEM fields and improving scientific research at Historically Black Colleges and Universities.

Bates and his wife, Priscilla, raised three children: Katherine, Christopher and Naomi.

Clayton W. Bates, Jr. was interviewed by *The HistoryMakers* on March 5, 2005.

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## Scope and Content

This life oral history interview with Clayton W. Bates, Jr. was conducted by Racine Tucker Hamilton on March 5, 2004, in Washington, District of Columbia, and was recorded on 4 Betacame SP videocassettes. Electrical engineer and physicist Clayton W. Bates, Jr. (1932 - ) served on the engineering faculty at Stanford University and Howard University. He has dedicated his career to improving STEM education for African Americans.

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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:

Bates, Clayton W., Jr., 1932-

Hamilton, Racine Tucker (Interviewer)

Lane, Edgar Carey (Videographer)

### Subjects:

African Americans--Interviews

Bates, Clayton W., Jr., 1932---Interviews

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African American engineers--Interviews.

African American physicists--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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## **Occupations:**

Electrical Engineer

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Physicist

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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 Clayton W. Bates, Jr., March 5, 2004. 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 Clayton W. Bates, Jr., Section A2004\_016\_001\_001, TRT: 0:30:09 ?

Clayton Bates talks about his parents. His mother, Arline Walker was born in Virginia, but never learned who her parents were. She was raised by a woman in Pamplin, Virginia, and later moved to New York where she met Clayton Wilson Bates, Bates' father. Clayton, Sr. was born in Petersburg, Virginia to Rosa Jones Bates. Bates talks about growing up in Harlem. His parents separated when he was twelve because of domestic abuse. Although they were very poor, Bates felt that his mother's job as a domestic worker provided the family with the essentials. Bates describes his childhood community and shares early memories. A very good student, Bates attended Manhattanville Junior High School and Brooklyn Technical High School, maintaining an interest in engineering throughout.

African American families--Virginia.

African American families--New York (State)--New York.

Family violence--New York (State)--New York.

African Americans--Education (Secondary).

African American single mothers.

Divorce--United States.

African Americans--New York (State)--New York--Social life and customs.

African American household employees.

Video Oral History Interview with Clayton W. Bates, Jr., Section A2004\_016\_001\_002, TRT: 0:30:25 ?

Clayton Bates talks about Brooklyn Technical High School and his aspiration to become an engineer. After graduating in 1950, he attended Manhattan College because they offered him a generous financial package. He earned his bachelor's degree in electrical engineering in 1954 and then worked for Radio Corporation of America (RCA). Bates went on to earn his master's degree from the Polytechnic Institute of New York University in Brooklyn and his second master's degree from Harvard University in 1960. He finished with his Ph.D. degree in physics from Washington University in St. Louis in 1966. Following his education, Bates worked at Sylvania Electric Products in California and Varian Associates where he was involved in amorphous materials development. Bates talks about accepting a job offer at Stanford University in 1972 and his involvement with their Society of Black Scientists and Engineers.

African Americans--Education (Secondary).

Brooklyn Technical High School (Brooklyn, New York, N.Y.).

African Americans--Education (Higher).

Electrical engineering--Study and teaching.

RCA Corporation.

Polytechnic University (Brooklyn, New York, N.Y.).

Harvard University.

Washington University (Saint Louis, Mo.).

Sylvania Electric Products, Inc.

Stanford University--Faculty.

Physics--Study and teaching.

Video Oral History Interview with Clayton W. Bates, Jr., Section A2004\_016\_001\_003, TRT:  
0:29:57 ?

Clayton Bates talks about the Society of Black Scientists and Engineers, which he helped found at Stanford University in 1973. He discusses minority science education and the need for African Americans to be more involved in science policy. In 1984, Bates accepted the position of associate dean for graduate education and research in the College of Engineering, Architecture, and Computer Sciences at Howard University. He talks about his transition from a predominantly white campus to a predominantly black campus noting the cultural differences. Bates talks about his research in infrared radiation detection devices as well as his career as a professional model. He describes his three children and notes that fatherhood is one of his greatest accomplishments. Bates finishes by reflecting on his career.

African American engineers--California.

Engineering--Societies, etc.

African American scientists--California.

Minorities in science.

Howard University--Administration.

African American universities and colleges--Social life and customs.

African American fathers--Washington (D.C.).

African American families--Washington (D.C.).

Infrared radiation.

Infrared detectors.

African American fathers--California--Palo Alto.

African American families--California--Palo Alto.

Video Oral History Interview with Clayton W. Bates, Jr., Section A2004\_016\_001\_004, TRT:  
0:14:37 ?

Clayton Bates reflects on his life, saying that he has been fortunate. He responds to a question about the importance of history in the African American community. Bates believes that history can be used to inform the African American community specifically about scientific career opportunities.

African American scientists.

African Americans--History.