FINDING AID TO
THE MARK N. BROWN PAPERS,
1963-1991

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Processed by: Mary A. Sego, April 28, 2015
Descriptive Summary

Creator Information  Brown, Mark N., 1951-

Title  Mark N. Brown papers

Collection Identifier  MSA 302

Date Span  1963-1991

Abstract  This collection includes papers and memorabilia of retired astronaut and Purdue Aeronautical and Astronautics Engineering alumnus, Mark N. Brown. Included are Purdue student memorabilia and textbooks, NASA memorabilia such as Brown's personal NASA flight suit, a flown mission shirt with certificate of authenticity, mission patches, space food, G-suit, a shuttle tile with documentation, photographs, slides, DVDs, a presentation on the history of manned flight, along with other papers and memorabilia.

Extent  8.30 cubic feet (4 cubic feet boxes, 3 mss boxes, 1 small flat box, 3 medium flat boxes and 1 large flat box)

Finding Aid Author  Mary A. Sego, 2015

Languages  English

Repository  Virginia Kelly Karnes Archives and Special Collections Research Center, Purdue University Libraries

Administrative Information

Location Information:  ASC

Access Restrictions:  Collection is open for research.

Acquisition Information:  Donated by Mark N. Brown, April 12, 2014

Accession Number:  20140412

Preferred  MSA 302, Mark N. Brown papers, Karnes Archives and Special
Subjects and Genres

Persons
Brown, Mark N., 1951-

Organizations
NASA
Purdue University
Purdue University. AFROTC
Flight Archives at Purdue University

Topics
Astronauts
Astronautics
Aeronautics
Space Shuttle Program (U.S.)
Purdue University--Alumni and alumnae

Form and Genre Types
Artifacts
Certificates
Clothing
DVD
Food (space)
Manual
Memorabilia
Papers
Patches
Photographs
Plaques
Senior projects
Slides
Space shuttles--Thermal tiles
Textbooks

Occupations
Astronaut
Engineer
Biography of Mark N. Brown

Mark N. Brown was born November 18, 1951 to Mr. and Mrs. Richard S. Brown in Valparaiso, Indiana. He graduated from Valparaiso High School in 1969 and received a Bachelor of Science degree in Aeronautical and Astronautical Engineering from Purdue University in 1973.

Brown received his pilot wings at Laughlin Air Force Base, Texas, in 1974. He was then assigned to the 87th Fighter Interceptor Squadron at K.I. Sawyer Air Force Base, Michigan, where he flew both T-33 and F-106 aircraft. In 1979 Brown was transferred to the Air Force Institute of Technology at Wright-Patterson Air Force Base, Ohio, and received his Master of Science degree in Astronautical Engineering in 1980.

In 1980 Brown was employed at the Lyndon B. Johnson Space Center as an engineer in the Flight Activities Section, he participated in the development of contingency procedures for use aboard the Space Shuttle and served as an attitude and pointing officer. Brown supported STS flights 2, 3, 4, 6, 8 and 41-C in the Flight Activity Officer/Staff Support Room of the Mission Control Center.

Selected by NASA in May 1984, Brown became an astronaut in June 1985, and qualified for assignment as a mission specialist on future Space Shuttle flight crews. In December 1985, he was assigned to the crew of a Department of Defense mission which was subsequently canceled due to the Challenger accident. During 1986 and 1987, he served as an astronaut member of the solid rocket booster redesign team.

In February 1988 Brown was assigned to a new flight crew, and on August 8-13, 1989 he flew on STS-28, following which he served as astronaut member on the Space Station Freedom Program. He next flew on STS-48, September 12-18, 1991. With the completion of his second mission, Brown logged over 249 hours in space. Brown left NASA in July 1993 and retired from the United States Air Force to head up the Space Division office of General Research Corporation in Dayton, Ohio. Duties included support to NASA through NASW-4470 to NASA HQ, Code M. This contract provided technical support to the NASA Space Station Program, NASA Hubble Space Telescope Mission, the NASA Space Shuttle Program, the Office of Life and Microgravity Sciences and Applications, and NASA HQ.

In 1995 Brown became Director of Aerospace Programs, Decision Technologies Division, GRC International, Inc. Brown’s assignment to the Aerospace Programs group expanded his management responsibilities to include support to Air Force air and space projects in addition to NASA.

In 1996 Brown was promoted to Acting Director of East Coast Operations, Decision Technologies Division, GRC International, Inc. He assumed responsibility for this $6.5M business involving NASA, the Air Force, commercial, and other government
activities. Duties included full budget accounting and management of computer programmers, engineers, technicians, scientists, and administrative personnel located in three different states.


In 2002 Brown became the Director, Wire Integrity Programs, GRC International, Inc. an AT&T Company (GRC International was purchased by AT&T in 2001 and became AT&T Government Solutions in 2002). Brown assembled a team of six companies in 2000 to provide the technologies needed by the airlines and military services to dramatically improve the testing used to maintain wiring in aircraft, the storage of the testing data, the analyses of the test data, and laboratory studies to understand the aging phenomenology.

Brown became District Manager, Air & Space Programs Development, AT&T Government Solutions, Inc. in 2003. He was a member of the Air Force and NASA Account Teams responsible for the development and execution of a business development plan for the Air Force and NASA. Duties include marketing, business development, budget analysis, capabilities assessments, strategic planning, customer visits, and proposal support.

Later in 2003 he became Vice President and General Manager, Computer Sciences Corporation Federal Sector-Defense Group, Aerospace Division. Brown was the overall manager of the CSC Aerospace Business Unit responsible for operations, business development, and P&L. This business unit includes information technology, logistics support, space systems, program control, finance, and intelligence support. In 2006 Brown became President and Chief Operating Officer, MTC Technologies. As the President and COO of MTC, Brown was responsible for the day to day operations of this 3,000 person, $450M a year company. His duties included the management, supervision, and direction of all operations of the company including all corporate and subsidiary operations. On December 21, 2007, MTC signed an agreement to be purchased by BAE Systems.

In 2008, MTC became part of BAE Systems, and Brown transitioned into a role as Vice President and General Manager within this firm. With BAE, he oversaw continuing operations of the business unit as well as the integration of MTC into BAE Systems. In October 2008 his business unit was reorganized within BAE Systems, and Brown became leader of the BAE Systems Unmanned Aerial Vehicle (UAV) Initiative. He was responsible for the development of BAE’s UAV business in the United States and overseas. He joined MCR Federal in June 2010 as the head of their Dayton, Ohio operations. This business unit supported Air Force program offices.
at Wright-Patterson Air Force Base in Ohio. Beyond his managerial responsibilities, Brown was involved in the migration of unmanned aircraft from Department of Defense use into civil and commercial applications.

In 2012 Brown became an aerospace consultant, providing services to support corporate organization and structure, strategic planning, marketing, and business development.

In November 2014, Brown joined Peerless Technologies Corporation as a senior partner. In this capacity, he advises multiple organizations within Peerless' federal client base in order to help them understand and solve their most challenging problems.


Sources:

NASA Johnson Space Center. Web. 5 May 2015
<http://www.jsc.nasa.gov/Bios/htmlbios/brown-mn.html>

Association of Space Explorers. Web. 5 May 2015
<http://www.space-explorers.org/bios/brown-m.html>

Peerless Technologies Corporation. Web. 5 May 2015
<http://www.epeerless.com/mbrown.html>
Collection Description

Scope

The Mark N. Brown papers (1963-1991; 8.30 cubic feet) include papers and memorabilia of retired astronaut and Purdue Aeronautical and Astronautical Engineering alumnus, Mark N. Brown. Included are Brown's textbooks from his studies at Purdue, AFROTC certificate, Apollo program photographs that were pinned to Brown's Purdue dorm room wall while he was a student in the early 1970s, a Purdue paper airplane contest trophy, along with other Purdue memorabilia. The collection also includes NASA memorabilia such as Brown's personal NASA flight suit, a flown mission shirt with certificate of authenticity, STS-28 and STS-48 mission patches, space food, G-suit, a shuttle tile with documentation, photographs including one of Brown in space holding a "Purdue Engineers - Out of this World" sign, slides, DVDs, a presentation on the history of manned flight, along with other papers and memorabilia.

Types of materials include artifacts, certificates, clothing, DVDs, an aircraft manual, memorabilia, papers, patches, photographs, a plaque, a Purdue senior project, slides and Purdue textbooks.

The papers are organized into 2 series and 8 subseries and are arranged chronologically within each:

Arrangement

1. Purdue University, 1963-1984 (2.8 cubic feet). The Purdue University series contains 25 textbooks used by Brown while he was a student at Purdue University from 1963-1967. Some of the textbooks contain his highlights, notations, a few assignment sheets and notes.

Also found in the series is Brown’s senior group project for Aeronautics, Astronautics, and Engineering Sciences, (A&ES) 451, Apollo 11 photographs that Brown had on his dorm room wall while at Purdue, and a trophy from a paper airplane contest.

While at Purdue, Brown was a member of the Air Force Reserve Officers Training Corps, and he graduated with distinction. His framed certificate is a part of this series, along with a plaque for being the “AFROTC Hand Ball Champ” in 1971. A few other Purdue memorabilia items reside in this series.

Some of the highlights of this series are Shuttle mission STS-28 and STS-48 related photographs, including signed crew photos and photos of Brown in space with Purdue memorabilia, and “STS-28 and STS-48 on Orbit” DVDs. Also included are Certificates/Awards presented to Brown by fellow Hoosiers; a “Hoosier Pride Award,” “Hoosier Heroes,” and a proclamation by the city of Valparaiso, IN designating October 18, 1989 as Mark N. Brown Day.

Textiles found in the series include Brown's NASA STS-28 flight suit bearing both mission patch and Mark Brown’s name, a G-force suit, and a STS-48 polo shirt that flew on Discovery, along with its certificate of authenticity signed by Brown. Some of the unique artifacts include space food, mission patches and pins, a piece of shuttle tile, along with the paperwork for it, and a plaque consisting of 2 halves of hold-down stud frangible nut from STS-28R, presented to Mark N. Brown, “From your friends at the Kennedy Space Center,” 1989

**Descriptive Rules**

Describing Archives: A Content Standard

**Processing Information**

All items have been housed in polyester sleeves, acid-free folders, and acid-free boxes. The oversized plaque has been boxed separately for preservation purposes. The material appears in chronological order within each subseries.
DETAILED DESCRIPTION OF THE COLLECTION

Series 1. Purdue University, 1963-1984
(2.8 cubic feet)

Subseries 1. Textbooks, 1963-1984
(2.4 cubic feet)

Subseries Description: Material within this subseries consists of 25 textbooks used by Brown while he was a student at Purdue University. One book has 1984 written in it and is possibly a textbook used by Brown while he was a master’s student at the Air Force Institute of Technology. Some of the textbooks have Brown’s signature on the inside cover, notations, highlights and markings within. A few had assignment sheets and notes tucked inside, and the listing specifies which ones.

The textbooks are in chronological order and appear in APA format.

Box 1 Purdue University Textbooks, 1963-1967

Folder


book’s pages are all upside down in reference to the cover.)


**Box 2** *Purdue University Textbooks, 1967-1970*

**Folder**


Box 3 Purdue University Textbooks and One, Air Force Institute of Technology Textbook, 1971-1984

Item

Subseries 2. A&ES 451 Senior Project, Artifacts, and Memorabilia, 1971-1973 (0.4 cubic feet)

Subseries Description: This subseries consists of Brown’s Purdue senior project for Aeronautics, Astronautics, and Engineering Sciences, (A&ES) 451. Students worked as a group and were to make a preliminary design of an aircraft. In the case of Brown’s group, it was a “Roach Clipper.” This particular aircraft is a Short Take-off and Landing (STOL) craft. Brown worked on the propulsion and performance part of the project.

Other items are Apollo 11 photographs, which Brown indicated, were on his dorm room wall while a Purdue student, a trophy he won in a paper airplane contest, Air Force ROTC handball champion plaque, along with his framed AFROTC distinguished graduate certificate. A few miscellaneous Purdue memorabilia items also reside in this subseries.

Box 4 Purdue University Senior Project, Artifacts, and Memorabilia, 1971-1973

Item
2. Apollo 11 photographs which Brown marked on folder, “These pictures were on my dorm room wall while a student at Purdue,” circa 1969-1973 (9 NASA photographs)
3. Trophy, Longest distance paper airplane contest, Orville Wright Trophy, Purdue University, 1971
4. Framed certificate, United States Air Force, Reserve Officers Training Corps, Air Force ROTC Detachment 220, Purdue University, given as designation of Distinguished Graduate to Mark Neil Brown, 8 May 1973
5. Plaque, “AFROTC Hand Ball Champ, Mark Brown, 1971”
6. Nametag, “Purdue Homecoming ’85, Mark N. Brown,”
7. Purdue Pete ashtray, undated
8. Little hammer with Purdue on it, undated

(5.50 cubic feet)

(0.4 cubic feet)

**Subseries Description:** Contained in this subseries is an aircraft manual for T-38A and AT-38B aircraft and an abbreviated flight crew checklist. There is a mission chart for shuttle mission STS-48; a binder compiled by Brown, titled, “History of U.S. Manned Spaceflight,” and an “Apollo” book with many photographs featuring the history of the Apollo program.


**Item**

**Subseries 2. Photographs, 1989-1991**
(0.1 cubic feet)

**Subseries Description:** The photograph series contains Mark Brown’s official NASA photograph, along with STS-28 and STS-48 related photographs. Some of the highlights are signed crew photographs and photos of Brown in space with Purdue memorabilia.

**Box 6  Photographs, 1989-1991**

**Folder**
1. Photographs, STS-28, 1989
1. Brown’s official NASA photo, in flight suit, undated
2. Crew of Space Shuttle Mission STS-28, 1989 (3 photographs, one signed by crew)
3. Launch of STS-28, August 8, 1989 (4 different shots of launch)
4. Brown holding Purdue pennant in space, 1989
5. Brown with space food, 1989
6. Casual shots of STS-28 crew in space, 1989 (3 photographs)
7. Photograph of Columbia landing, August 13, 1989

   Item
   1. STS-48 mission patch, enlarged, 1991
   2. STS-48 crew photograph, signed, 1991
   3. Brown in space holding a “Purdue Engineers out of this world” sign, 1991

(0.1 cubic feet)

Subseries Description: Within this subseries are a few slides marked “Purdue;” DVDs marked “STS-28 on Orbit” and “STS-48 on Orbit”, and a DVD-R marked “Digital Images.”

Box 6 continued Audio Visual Material, 1989-1991

Item
4. DVD, “STS-28 on Orbit,” 1989
5. DVD, “STS-48 on Orbit,” 1991

Subseries 4. Certificates/Awards, 1989
(0.75 cubic feet)

Subseries Description: Certificates presented to Brown by fellow Hoosiers to recognize him for his service are represented here; a “Hoosier Pride Award,” “Hoosier Heroes,” and a proclamation by the city of Valparaiso, IN designating October 18, 1989 as Mark N. Brown Day.

Box 7 Certificates/Awards, 1989

Item
2. Framed Certificate, Proclamation issued by City of Valparaiso, IN stating that 18 October 1989 is Mark N. Brown Day

(2.4 cubic feet)

Subseries Description: Located in this subseries are Brown’s NASA flight suit, an anti-G force garment, and a STS-48 polo shirt that flew on Discovery, along with its certificate of authenticity signed by Brown.

Box 8 Anti-G Force Suit, 1989

Item 1. Anti-G Force Garment, circa 1989

Box 9 STS-48 Polo Shirt and Certificate of Authenticity, 1991

Item 1. STS-48 polo shirt that flew on Discovery and certificate of authenticity, December 18, 1991

Box 10 NASA Flight Suit, 1989

Item 1. NASA STS 28 Flight Suit bearing both mission patch and Mark Brown’s name, 1989

(1.75 cubic feet)

Subseries Description: The artifacts consist of sealed packages of labeled space food, marked “Training;” cloth mission patches and pins for STS-28 and STS-48; Brown’s astronaut business cards; and a plaque with 2 halves of hold-down stud frangible nut from STS-28R presented to mission specialist Brown by staff at Kennedy Space Center. Also found in this subseries is a piece of shuttle tile, “flight weight firebrick,” and paperwork for it.

Item
1. Space food, 1 unopened can of Tapioca Pudding, stamped, “Training,” circa 1989
2. Space food, 2 unopened containers; Potatoes Au Gratin, and Noodles and Chicken, both stamped, “Training,” circa 1989
3. Space food, 2 packages; Butter Cookies, stamped, “Training,” and Crackers, circa 1989
4. Cloth and adhesive mission patches for STS-28, 1989 (4 adhesive and 4 cloth)
8. Space shuttle tile; “flight weight firebrick” that protects shuttle from heat buildup during reentry, circa 1991

Box 12  OS Plaque, 1989

Item