

National Archives Assembly Legacy Project

Oral History Interview Package
Including transcript of interview
Conducted December 14, 2006
of

Patrick Alexander

Project Manager

National Archives Building Renovation (1999–2005)

Introduction

Pat Alexander retired in October 2006 having served his country in the United States Navy from 1971–1978 and in the civilian federal workforce from 1983 to 2006 with a five-year stint at Proctor and Gamble in between. He joined the National Archives and Records Administration (NARA) in 1992 eventually becoming project manager of the National Archives Building renovation (1999–2005) and ultimately the Deputy Assistant Archivist for Administration. Pat served with distinction at every point in his career mentoring many of his subordinates along the way. This interview was primarily conducted to capture some of NARA’s institutional memory regarding the renovation of the National Archives Building. This introduction concludes with a summary statement regarding the project background and scope plus a statement pertaining to the marble used in the Rotunda.

The Main Renovation contract was awarded to Grunley Construction, Inc.

The National Archives Building Renovation Team was comprised of the following individuals:

Pat Alexander, Project Manager, NARA
Marv Shenkler, Renovation Consultant
Rick Blondo, Archives Specialist / liaison to staff and contractors, NARA
John Bartell, Engineer and Project Manager in the end months of the renovation, NARA
Scott Teixeira, Hartman-Cox Architects, Project Architect
Gary Simmons, Engineer, NARA
Timothy Edwards, Archives I Facility Manager, NARA
Richard “Chip” Sandage, Facilities Specialist, NARA
John Weiler, Heery International, Construction Quality Manager
Karen Harrelson, Heery International, Project Document Manager
Bronson Alcott, Heery International, Electrical Inspector
Doug Dorner, Heery International, Electrical Inspector
Richard Dominguez, Engineer, NARA
George Harrelson, Heery International, Administrative Assistant
Stanley Whatley, Heery International, Mechanical Inspector

NATIONAL ARCHIVES BUILDING RENOVATION PROJECT OVERVIEW

Project Background By Rick Blondo

Planning for the National Archives Building (Archives I) renovation started in 1985 with a study conducted by the Boston architectural firm, Shepley, Bulfinch, Richardson, and Abbott. The Shepley renovation plan was placed on hold because of the greater need for a new facility to house archival holdings then stored at the Washington National Records Center (Suitland, MD) and in rented space in Alexandria, Virginia. Consequently, the design and construction of the National Archives at College Park, MD (Archives II) took precedence over an Archives I renovation. Once Archives II was completed, Heery International was commissioned in 1994 to revisit and update the Shepley study, documenting the renovation needs of Archives I.

Both the Shepley study in 1985 and the 1994 Heery study proposed gutting the stack areas of the building. And, both studies proposed removing all staff and records to leased space while the renovation took place. All steel decks in the building would have been removed under these plans and one concrete slab would have been constructed in place of every two steel decks. This would have created concrete floors with almost 12' of space between floors. With this additional space, new air ducts could have been installed that would have optimized environmental storage conditions for the records, closely approximating storage conditions at Archives II. These proposals would have removed 16 tiers from the building and then restored 8, reducing the gross square footage in the building from the pre-renovation 957,000 sf to approximately 660,000 sf. Although the new concrete floors would have allowed the use of mobile shelving, stack storage would still have been reduced from the pre-renovation 960,000 cf to less than 400,000 cf. Eventually this plan, which was coupled with an expansion to Archives II to compensate for the lost storage in Archives I, was rejected by both the Office of Management and Budget (OMB) and NARA's congressional appropriation committees as being too costly.

In 1997 NARA revisited the renovation plan and commissioned a new renovation study by Heery to address the most significant issues identified in the previous studies while significantly reducing the cost of the renovation to a level that could be supported by OMB and the Congress. The new study's goals for Archives I included meeting ADA accessibility requirements, renovating deteriorated building systems, redisplaying the Charters of Freedom in new encasements, resolving long-standing fire safety deficiencies, improving stack environmental conditions, and addressing public program deficiencies. The 1997 Heery study recommended three potential approaches to renovating the building which would address some limited improvements (the low option) to all major issues (the high option). All approaches involved renovating the building while it remained occupied. The selected approach combined elements of two of the three options.

The decision on what should be done was made after balancing budget limitations with renovation requirements. Trade offs included replacing fewer stack doors, not using proximity card readers on stack doors (like those used at Archives II), reducing the renovation scope of several mechanical system upgrades, reducing the renovation scope of staff office space, and

upgrading other building systems as separate stand alone projects to spread funding requirements over several years (e.g., elevators and roof replacement).

After lengthy negotiations with OMB over the scope of the renovation, funding to begin the renovation design was appropriated and design began in FY 1999. The 1997 Heery study was used as a guide for the project. While it detailed the issues the renovation addressed, it was not a rigid “blueprint.” NARA selected the architectural firm of Hartman-Cox Architects to design the renovation of Archives I. Staff from Peck Peck Associates, the firm selected to do the initial space layouts for Archives I, met with Archives staff members to plan the new spaces. Hartman-Cox representatives refined the space layouts and began the process of taking the layouts to the next level of design. The new design for the Archives I renovation reduces the building gross square footage from the original 957,000 sf to approximately 849,000 sf, and stack storage capacity from the original 960,000 cf to approximately 650,000 cf through the removal of steel decks on tiers 2 and 6 and the concrete slab on tier 4.

Archives I Renovation Project Elements

The Renovation Project included the following items:

1. Replace/upgrade deteriorated building systems (e.g., plumbing, electrical, ventilation and air conditioning), bringing these systems into compliance with applicable building codes.
2. Bring the public areas of the building into compliance with the Americans with Disabilities Act (ADA).
3. Improve security for both documents and people (visitors, researchers, and staff).
4. Eliminate fire safety issues and code deficiencies.
5. Improve environmental storage conditions in stack areas.
6. Consolidate public areas onto lower tiers easily accessible from the new ADA entrances on Constitution Avenue and from the Pennsylvania Avenue entrance, respectively.
7. Replace and improve exhibit space surrounding the Rotunda.
8. Provide improved public outreach space.
9. Provide the redisplay of the re-encased Charters of Freedom.

Replace/Upgrade Deteriorated Building Systems.

The building systems (i.e., Heating, Ventilation and Air Conditioning (HVAC); electrical supply; plumbing) ranged in age from original equipment that was over 60 years old to partial system components that were only fifteen years old. Most of these systems either did not comply with current code or had deteriorated to the point that they must be replaced or upgraded.

- A. HVAC: The HVAC system consisted of water chillers (used for air conditioning), air handlers, steam heating piping, ducts, and a hook-up to the General Services Administration's (GSA's) Tidal Basin condenser water system. The pre-renovation system included air handlers more than 30 years old located in the basement that supplied conditioned air to the offices and some stacks and ten-year-old penthouse air handlers that supplied the majority of the stacks. At that time only 60% of the stacks were served by air handlers that had chemical filtration to eliminate

gaseous pollutants in the stacks. The steam piping was over 30 years old and the low-pressure air ducts installed between the shaft walls in the stacks, which run from the basement to the roof, were over 60 years old. There were four chillers; two new 650 ton units, one fifteen year old 650 ton unit, and one ten year old 300 ton unit. The whole Archives I system tied into GSA's Tidal Basin condenser water system that had barely adequate capacity to meet the current building requirements and would not meet post-renovation needs.

Chillers: The renovation refurbished the 650-ton chiller and replaced the 300-ton chiller with two new low temperature glycol chillers. These changes create a system designed and sized to provide sufficient chilled water capacity year round to meet the increased demand caused by tighter control of the stack temperatures and humidity levels.

Air Handlers: The basement and penthouse air handlers were replaced. Additional air handlers to serve the office and public areas were provided, permitting air handlers to be dedicated to the stacks. All stack air handlers were outfitted with chemical filtration for preservation purposes.

Steam Piping: The steam supply station was replaced and a new steam to hot water heat exchanger was installed. The steam radiator system supplying the office areas was replaced with a four-pipe fan coil system permitting individual office control of temperatures and eliminating hot and cold offices.

Duct: Existing duct was removed and replaced with new, high-pressure duct.

Condenser Water System: Condenser water is required for chillers to operate. The renovation installed a cooling tower in a new mechanical room on tiers 19 -21 West, permitting NARA to eliminate its dependence on the GSA Tidal Basin system for condenser water. The cooling tower was fit in portions of what were stack areas and give NARA the capacity to meet building needs.

- B. **Electrical:** The project replaced deteriorated and non-code compliant 60 year old internal distribution wiring, added safety disconnects to all mechanical equipment in accordance with code, replaced transformers and switchgear, provided additional transformer capacity to meet projected demand, replaced the undersized and non-code compliant emergency generator, replaced the inefficient lighting in the public and office space with new energy saving lighting, and recabled the offices and public space to provide additional electrical capacity in each area.

- C. Plumbing: The project replaced the deteriorated 60 year old water distribution system, abated the deteriorated asbestos insulation on the water piping, and replaced the deteriorated storm water removal piping throughout the building.

As a result of the building system changes, new mechanical rooms were installed on tiers one and 19 - 21 West. These changes added approximately 17,542 sf of new mechanical room space in the building.

UFAS / ADA Compliance

The National Archives Building renovation was in compliance with the Uniform Federal Accessibility Standards (UFAS) which apply to all Federal facilities. Although the Americans with Disabilities Act (ADA) applies only to commercial facilities, NARA attempted to integrate both UFAS and ADA requirements into the renovation design. Archives I was brought into partial compliance with UFAS in the 1970s when temporary ramps were added in the Rotunda, and the restrooms on the North side and the Rotunda were modified to add a handicapped accessible stall. However, these changes were only interim measures.

The ADA requires that public and staff space, entrances, restrooms, and access routes be made fully accessible whenever substantial renovations occur in a building. Consequently, the main entrance to the building was made accessible, all restrooms were brought into full compliance (the previous modifications which added one accessible stall in the restrooms did not address the entrances and other fixtures), and public and staff spaces were made accessible. The Archives I project renovated all existing public and staff restrooms to bring them into compliance with accessibility guidelines, as well as adjusted the fixture count to comply with current guidelines.

The Pennsylvania Avenue entrance continues to be the entrance for staff and researchers. All others use new entrances built into the sides of the Constitution Avenue steps. Elevators and stairs adjacent to each other permit the same dignified entrance for people with disabilities as for those without disabilities, complying with ADA equal access requirements. In the Rotunda, the Charters of Freedom cases and the perimeter display cases were replaced with fully accessible cases, permitting these documents to be experienced by all in the same manner. The marble steps leading to the Charters display area were removed. The Sales Shop was moved from its inadequate location in the East Gallery of the Rotunda and redesigned in its own separate area with adequately sized aisles and display cases that meet ADA requirements. New exhibit galleries replaced the original Circular Gallery and meet ADA requirements.

New ADA accessible entrances are built featuring gently sloping sidewalks at both sides of the Constitution Avenue stairs leading to new doors cut into both sides of the stairs.

New public restrooms, properly sized for the visitors to the Rotunda and exhibit space, are installed. There is also an appropriate increase in fixtures for women in accordance with current design philosophy.

The NARA Sales Shop, once located in the East Foyer on tier 5, was not ADA accessible. A replacement shop, fully ADA accessible, is located near the new building entrances on tier 3, permitting the East Foyer to become Rotunda circulation space.

The locker rooms for the contract personnel and staff, once located on the mezzanine level between the subbasement and the basement, are not accessible to the disabled. New ADA compliant locker rooms will be provided on tier 1, one set for staff adjacent to the new fitness center and one set for contract personnel adjacent to their work spaces. The original mezzanine space was converted to storage space for light building supplies that can be easily moved up and down the stairs.

Restrooms serving the staff in the stacks and on the North side of the building were renovated to correct piping and ventilation problems. They are also fully compliant with ADA requirements. Both restrooms on the Ground Floor were rebuilt and altered in size and shape to eliminate the long non-ADA compliant corridor serving the Men's room, and to adjust the fixture count between the two rooms. A new replacement Women's room was built on the 4th floor. The stack restrooms were rebuilt in the old stack stairwells and brought into ADA compliance.

The changes result in the removal and permanent loss of tiers 2, 4, and 6. That space is now occupied by new entrances on the Constitution Avenue side of the building, the Charters redisplay, access to the new theater, researcher lockers, new microfilm and pension records research rooms and library, expanded exhibit galleries, a conference center, volunteers education center, and a larger snack bar for the public and staff.

Improve Security for Documents and People.

Pre-renovation there were no effective means to separate staff from the public or to prevent the public from going anywhere in Archives I once they passed through the Pennsylvania Avenue lobby. Stack corridor doors leading from the North side of the building to the stack lobbies cannot be locked because they are life safety egress routes in case of fire. Both of these conditions are cited in the Heery study as security problems that should be addressed as part of the renovation.

Post-renovation, staff and researchers use the Pennsylvania Avenue entrance. A new microfilm research room, researcher registration, library, cashiers' office, and researcher lockers are built on tier 3 through an entrance built between the two main elevators serving the north side of the building. Researchers come through the Pennsylvania Avenue lobby and after a security check proceed straight ahead to the new researcher registration/orientation area. After registration/orientation researchers using textual records are directed to the Textual Research Room (Central Research Room) which remains in its current location on the second floor. Researchers using microfilm or textual pension records will remain on tier 3 to use the new microfilm research room or pension records research room. [Note: Insufficient staffing has made it so the Pension Records Room has been used for only a few days since the renovation was completed]

Other guests use the new Constitution Avenue entrances. The renovation separates staff from the other guests visiting Archives I by locating most public space (exhibit space, theater, conference facilities, volunteers' tour orientation/classroom space, public side of the snack bar, and Archives sales shop) on the south side of the building on tiers 1, 3, and 5.

Security checkpoints [x-ray machines and magnetometers] are located in both the new Constitution Avenue lobby and the Pennsylvania Avenue lobby. Doors separating staff areas on the north side of the building from the exhibit space, theater, conference facilities, volunteers' tour orientation/classroom space, and the Archives sales shop are controlled by card readers that limit passage to staff only. Visitors require escorts to staff areas for prearranged business appointments, etc.

Eliminate Fire Safety Problems and Code Deficiencies

The building was constructed during a time when fire safety and exiting standards were considerably less stringent than current code requirements. When the building first opened, the number of staff and visitors was much lower than the current staff and visitor population. On a yearly basis, Archives I received more than 1,000,000 visitors in the Rotunda and Circular gallery and over 80,000 researchers used the research rooms. Should emergency evacuation been necessary, there were insufficient exit doors for this number of people to exit the building safely. In addition, the stack exit stairs for staff did not comply with codes regarding the direction of the door swings, stair width, or fire resistant construction. Finally, there was no separation between floors to prevent fire from spreading to upper or lower floors through the vertical duct risers (a riser shaft is a vertical areaway, usually built between walls, that provides space for things such as pipes, conduit, phone lines, data lines, air ducts, wires, etc.).

To address those exiting problems the renovation replaced the original stack stairs with properly sized and constructed stairs and add additional protected exit stairs from the public areas on the south side of the building. Those protected exit stairs lead to the south moat enabling the public to exit safely. The duct risers were replaced with new fire-rated risers containing fire dampers to prevent smoke and flame from moving through the duct. The concrete floors were extended within the shaft openings to prevent the vertical spread of fire. A new fire alarm system was installed throughout the building. Finally, the renovation replaced the existing electric fire pump with a new larger electric pump with a diesel backup, similar to what is installed at Archives II. These changes considerably upgrade the safety features in the building and bring the building into code compliance.

Improve Environmental Storage Conditions in the Stacks

Pre-renovation only 60% of the stacks had chemical filtration to remove gaseous pollutants from incoming air and half were on joint systems in which the air handler serves both offices and stack space. It was not possible to maintain the stacks at the desired temperature [65 degrees] because the ducts and chillers were not capable of achieving required airflow and temperatures as they were configured. The zones and space sizes that the air handlers served were excessively large resulting in uneven cooling. The renovation reconfigured the air handlers so that all public and office space are separated from the stacks and the stack zones are reduced to a

more manageable size. Chemical filtration was added to all stack air handlers. These changes enable the Archives I stacks to meet environmental storage criteria for textual archival records.

Consolidate Public Areas Onto Lower Tiers Easily Accessible From the New ADA Entrances on Constitution Avenue and From the Pennsylvania Avenue Entrance

Researcher registration and consultation are located on tier 3 immediately behind the existing elevators that serve the north side (Pennsylvania Avenue side) of the building. All researchers come first to this area for researcher cards or help with their research projects. If they are using microfilm, they will stay in this area to use the new microfilm research room. If they are using textual records, they will go to the existing Central Research Room on floor 2 (tier 7), which remains in use as a textual records research room. The Central Research Room was enhanced as much as possible to allow for new technology while maintaining its historical integrity. It is a designated historic space within the National Archives Building; a building entered into the National Register of Historic Places. The Central Research Room was rehabilitated to the extent of having new furniture, power at each researcher desk, computer hook-ups, and improved lighting. Other elements such as the cork flooring cannot be altered because of the room's designation as an historic space. New cork flooring was installed as part of the renovation as well as replica chandeliers in rooms 202 and 204 to make the lighting fixtures in those adjacent rooms on par with the original chandeliers in room 203.

The pre-renovation microfilm research room was too small to meet existing researcher demand resulting in the imposition of 2-hour time limits on researchers during peak periods creating long lines and customer dissatisfaction. It was not possible to expand the existing research room in place, and the finding aids area is not fully ADA accessible as required. The pre-renovation microfilm research room space on floor 4 (tier 10) has become office space and the adjacent stack, which was used for microfilm storage, was reclaimed for archival record storage.

The new microfilm research room, located on tier 3 (the ground floor), provides the space needed to meet researcher demand and the capability necessary to upgrade equipment. While there were 100 microfilm readers, the new room was to have 150. Reader printers were to increase from 7 to 15. The new research room has online finding aids for the microfilm holdings and the ability to incorporate other improvements as technology advances. It will be large enough to hold within the room all the microfilm publications appropriate for use at Archives I with room remaining for new microfilm publications. [Note: After the renovation design was made final it became clear that microfilm use was declining as more and more records became available online in digital form. Consequently, Archivist of the United States John Carlin directed that only the East half and a portion of the connecting corridor would be outfitted as a microfilm research room of what was to be a dumbbell shaped microfilm room that spanned from 7th Street to 9th Street. Consequently, the room opened in 2003 with about the same number of microfilm readers and printers as existed pre-renovation.]

Consolidating the microfilm research room and the library on tier 3, and creating a new textual research room for pension records [eventually called the Military Service Research Room] adjacent to the new microfilm research room, enhances the research experience for genealogists

and make it possible to resolve researcher questions expeditiously. Researcher lockers, restrooms, a publications sales area, genealogical orientation, a consolidated finding aids room, the researcher registration and consultation area, an electrostatic copier area, the Trust Fund cashier, and an archival holding area complete the new research center which was named after former Archivist of the United States Robert Warner in 2004.

The Center for Legislative Archives continues to use the east search room and their staff has consolidated in areas adjacent to or close to the Central Research Room.

Replace and Improve Exhibit Space Surrounding the Rotunda

The original changing exhibit space included the Circular Gallery, the entrance to the Circular Gallery, and the West Foyer to the Rotunda totaling 3,451 sf. This space was inadequate and did not meet ADA requirements. The renovation design included approximately 13,400 sf of exhibit space. Approximately 9,800 sf was designated for a permanent exhibit eventually titled The Public Vaults (a component of the National Archives Experience) and 3,600 sf for changing exhibits.

Provide Improved Public Outreach Space

The original building had limited public outreach space. The G-13 area once used for tour assembly and classroom-style training conducted by the Volunteers was located in former stack space on tier 3. Post-renovation, those functions are relocated to tier 5 adjacent to the new exhibit areas and the Rotunda and in close proximity to new conference rooms.

Archives I had very limited conference room space. The renovation corrected that deficiency by creating a new conference center on tier 5, east of the new permanent exhibit. Because of existing structural columns, each of the five conference rooms are stand-alone. The rooms cannot be interconnected like those at Archives II. The smallest room seats 10 and the largest room seats 50. These changes enable NARA to regularly schedule conferences and training at Archives I.

A new theater under the Constitution Avenue stairs at the tier 1 level was built with 5 million dollars of private funding raised. The theater was not part of the renovation scope agreed to by OMB. Theater guests enter through the new Constitution Avenue entrances on tier 3 and take stairs or elevators down to tier 1. The seating area slopes downward toward Constitution Avenue. It includes a 10 foot high screen, raised stage, dressing rooms, rehearsal area, and seating for 290.

The new snack bar is also located on tier 1 and is accessible to both the public and staff.

Provide the Redisplay of the Re-encased Charters of Freedom

The Rotunda display cases (including those along the wall on both sides of the Charters) were too high for those in a wheelchair or of small stature to see the documents easily or at all. New display cases, designed to better view the Charters of Freedom and other documents, were installed. The Rotunda closed for renovation on July 5, 2001, and reopened on September 17,

2003. The front edge of the new display cases are approximately 30 inches high and the display angle is 25 degrees from the horizontal.



St. Genevieve Gold Marble
used in the Rotunda of the
National Archives Building
Washington DC

Architect John Russell Pope, who designed the National Archives Building in the 1930s and many other renowned buildings, specified St. Genevieve Gold marble for use in the area of the National Archives Building Rotunda where the Declaration of Independence and the Constitution of the United States were to be displayed. Although the building opened in 1935, those documents were not placed on display there until 1952 when they transferred to the National Archives from the Library of Congress.

When the renovation design for that area was conceptualized by Hartman-Cox Architects in 1999, the design specified the use of St. Genevieve Gold for the new display cases that would house the Declaration of Independence, the Constitution of the United States, and the Bill of Rights. The new display cases make it possible for those in wheelchairs to easily view the documents. That marble was also specified to recreate the original mantle that spanned the two columns in the center of the Rotunda wall that had been notched in 1952 to accommodate the display of the Declaration of Independence.

John Russell Pope specified many types of marble for use in the Rotunda, most of which came from Tennessee. The 1999 renovation design sought to match the Tennessee and Maryland marble used in the original floor for a new section of floor where there had once been steps that led to the display area. The Tennessee supplier of that marble (Tennessee Valley Marble) knew of several blocks of St. Genevieve Gold marble saved at a Tennessee quarry for many years. It was produced in Missouri for a Florida courthouse project that was canceled and wound up at a Tennessee quarry. To the knowledge of the Hartman-Cox architects, those blocks of St. Genevieve Gold marble were the last available blocks and the original quarry in Missouri has been closed for more than 30 years.

The Rotunda is a historic space and any proposed changes to such space must be reviewed and approved by preservation officials. Accordingly, the State Historic Preservation Officer for the District of Columbia and the Historic Preservation Review Board [both entities of the District of Columbia government] reviewed and approved the Rotunda renovation plans. The Advisory Council on Historic Preservation, a federal entity, also reviewed and approved the plan. The renovation design goal to match the original marble with marble of the same type, ideally from the same quarry as the original, was met resulting in a beautiful renovated space that maintains the historic character of the original Rotunda.

Marble statement written by
Rick Blondo
Archives Specialist
National Archives Building Renovation Team
September 17, 2003

Preface

The following interview was conducted in December 2006 shortly after Pat Alexander retired as Deputy Assistant Archivist for Administration. Following the interview I prepared this transcription, which Pat has reviewed. He made very few corrections and no substantial edits, so this transcript closely reflects the recording.

The original recording was made on $\frac{3}{4}$ inch U-matic Beta tape and Digital Video Disc (DVD) both of which have become part of the National Archives Motion Picture, Sound, and Video Branch holdings along with an audiocassette tape made from one of the above to ease the transcribing activity. Also part of those holding is a copy of this transcript and the administrative documentation related to this interview.

The National Archives Library [ALIC—Archives Library Information Center] maintains a reference copy of this interview comprised of a DVD and copy of this transcript.

Rick Blondo
Archives Specialist
Real Property Branch
Space and Security Management Division
Office of Administration

February 2007



Photograph of Pat Alexander (right) and Rick Blondo taken in October 2006



Marv Shenkler (left), John Weiler (Construction Quality Manager, Heery, International), and Pat Alexander in the office shared by Pat and Marv. It is now the conference room in the B1 conservation lab. Photo taken in 2005.



Pat Alexander

Legal instrument documenting that title to this Oral History Interview belongs to the National Archives and Records Administration.

Transcript of the Patrick Alexander interview conducted
December 14, 2006, in Lecture Room D of the
National Archives at College Park, MD (Archives II)
Interview was recorded on DVD and ¾ inch Beta videotape
Motion Image run time is 1:20:56

Interviewee: Patrick Alexander (PA)

Interviewer: Rick Blondo (RB) [who had a cold and subsequent strained voice]

Editorial comments for clarity in [brackets] provided by Rick Blondo

Chapter 1 0:00:30–0:04:29

RB: It's December 14, 2006. We're doing an oral history interview with Patrick Alexander who was the project manager of the National Archives Building renovation. We're doing this at the National Archives at College Park as part of the NARA Legacy Project. I'm Rick Blondo. I am an archivist on staff with Space and Security Management and was part of the team of the National Archives Building renovation. So with that I will introduce Pat Alexander to our group and we're ready to begin.

Pat, I wonder if you can tell us something about your background and what brought you to be the project manager of the National Archives Building renovation.

PA: What brought me to be the project manager of the National Archives renovation? Well, a lot of luck first of all. It was a very circuitous route. I attended the Naval Academy and graduated in 1971 and really thought my career would be in the Navy but that ended after seven years when I decided that I wanted to spend more time with my family than I wanted to spend at sea. After the Navy I went to Proctor and Gamble and I was a maintenance manager and an industrial engineer there. I worked there for five years and left Proctor and Gamble in 1983 right after I got a masters degree in management from Marywood [University].

I went to work for GSA [General Services Administration] as an industrial engineer in 1983 and remained with GSA for the next nine years; two years as industrial engineer, two years as a program specialist and then five years as the Chief of their Project Development Branch. And that's where I really started getting into renovation related work. That Branch was responsible for all of the [federal] government buildings in the Washington area for all of their repairs and alterations. And so that gave me a very good background on managing a budget. I had a budget there of about 50 million dollars a year for recurring projects and about anywhere from 20 to 150 million dollars for large scale renovation projects. And I supervised a staff of architects and engineers who surveyed government buildings in order to find out what repairs were needed.

RB: For most people that would sound like a career path right there that would take you through to retirement. Somehow your attention turned to the National Archives.

PA: Well, it did, primarily because I wanted to do different things within GSA and I was sort of blocked on that. I had decided earlier that I was interested in working at three different agencies, Library of Congress, the Smithsonian, and the National Archives because of their association with history and America. One of my first loves as a child had always been history. I looked on those three agencies as an avenue where I could work some of that as well as my professional work as an engineer.

RB: It's unusual to have an engineering bent and yet have a history interest as well.

PA: Well, the engineering bent came about strictly because of the Naval Academy. Most people go to college to get a specific degree. I went to the Naval Academy in order to become a Naval officer. The degree I got did not matter to me. When I went there everybody majored in engineering so that wasn't a choice.

Chapter 2 *0:04:30 – 0:09:30*

My minor at that time had been history and I had joined a Military History Club at age ten. So history really was where I liked best. But I do have an engineering bent and a technical bent. The government calls me an engineer but I really look at myself as a manager in a technical environment.

RB: But when you came to the National Archives was it with the idea of getting the renovation of the Archives I building [the National Archives Building in Washington, DC] done?

PA: No, I came to the Archives as the Chief of Facilities for at that time [it was in 1992] the Archives I building downtown and the Archives II [the National Archives at College Park, MD] building was still under construction. I was not involved in the construction of that. However, Facilities were the first people to occupy the building and I was involved with getting the building set up. So starting in 1993 I moved to Archives II and in discussions with my superiors it was evident that the Archives I building needed a renovation and at that point in time I started working on a scope of work to have the building renovated. That took us about seven years to get done. So during that entire time I was Chief of Facilities for both buildings and an increasing amount of time was spent on seeking to get funding for the renovation.

RB: This interview will become part of the historical record of that renovation project. I wonder if you can give a brief overview as to the path that was taken that led to the renovation. For instance, I know back in the 1970s there was a plan to add on to the building.

PA: There were and they were handled by GSA and actually they were handled by the branch that I worked in, the Project Development Branch. When I left GSA I brought a full copy of the file with me for everything they had on Archives. And in reviewing the file before I came to Archives it was evident that the building had had specific upgrades. Elevators, for instance, were upgraded. The mechanical systems shifted from a very early air conditioning system to a more modern air conditioning system, but never had a comprehensive upgrade of the entire building. NARA [National Archives and Records Administration] started looking at upgrading and expanding the Archives I building in the 70s but the most comprehensive overview of that was the Shepley Bulfinch study that was done in the mid-1980s. That study recommended initially

trying to construct a building across the street from Pennsylvania Avenue from the Archives and making that an Archives II complex. But the Navy Memorial was going there and we could not get support for that from OMB.

The crowding in the building by that time had become so great that they pursued the construction of the Archives II building out in College Park so all thoughts of renovations for the Archives I stopped at that point in time. That's why I picked it up in 1993 once the Archives II building was completed. Our initial thrust on that was to look at the building and do a renovation similar to what had occurred at Archives II to incorporate best practices of everything (the most modern technology) into a renovated Archives I building. The initial plan on that was not approved so it was rejected. We went back to work again on that and came up with an alternative on that which was also rejected. That was about 1995 or 96. Once that was rejected it sort of took the wind out of our sails and we didn't really have much to go on at that time.

I started looking at it and I said all of our thrusts up to that point had been to make Archives I similar to Archives II. I worked with the numbers and looked at the plans and said what if we only renovated the lower six floors to be like Archives II and left the upper fifteen floors to be like they were. That cut the costs considerably. I reviewed that with Adrienne Thomas [then Assistant Archivist for Administrative Services now retitled as Assistant Archivist for Administration] and then she gave approval to proceed with a plan like that and we then commissioned another study and that was the one that actually resulted in our funding.

Chapter 3 0:09:30-0:##:##

The initial concept had been to essentially gut the building and rebuild it and the final concept was we're going to leave the upper areas, the stack areas, pretty much alone other than the work we had to do in them and concentrate on the lower areas of the building.

RB: When you say "to be like Archives II" I wonder if you could elaborate on what you mean by that because it could leave the impression that you're taking a building that has a neoclassical look and changing it into a 21st-century, streamlined, modern thing.

PA: Well, actually, it would have left the outside like it is but it would have removed all the inner floors. The Archives I building was initially constructed with four large courtyards which were then in-filled. So, basically, on the North side of the building, which is the Pennsylvania Avenue side of the building, there are seven floors. On the South side of the building, which is where the Rotunda is, with the exception of the Rotunda, there were 21 floors. And those floors were achieved by having concrete floors every 21 feet and then subdividing those floors with two interstitial metal deckings at 7 feet. That's where all the stacks were. So we had 21 levels of stacks on the South side of the building and 7 levels of offices on the North side of the building.

The plan was to remove all the metal decking and to replace them with floors at about 10 feet each and then have mobile shelving on those floors similar to the shelving here at Archives II. But because of the column situation in there plus the fact that we'd have to remove all the records in order to do that, it was a very expensive project. So the alternative was to just leave the upper stack floors as they were and then just concentrating on replacing all the decrepit

mechanical and electrical equipment as well as opening up the building to a better use to visitors and staff.

RB: I wonder if you could comment along two lines as far as how the renovation took place. One (I'll call it the technical side) the mechanical, the plumbing, etc. as far as what was done. The other, the artistic side. John Russell Pope has a brilliant design and that was honored and respected by the renovation project that was done.

PA: You're asking how we incorporated two almost opposing aspects. How we could maintain historical appearances of the building as well as how we could retrofit it into modern mechanical systems. First of all our studies on the systems showed that we needed a new air conditioning system. The electrical system dated from the 1930s and had to be totally replaced. The plumbing was all 1930s. So, what you're talking about is systems that were 75 years old and while they might have been state of the art when they were installed were no longer state of the art and over the years had deteriorated. For instance, all the plumbing system was insulated with asbestos. We had about 3 million dollars worth of asbestos and lead abatement in the project. So, there were significant environmental issues as well as fire safety issues.

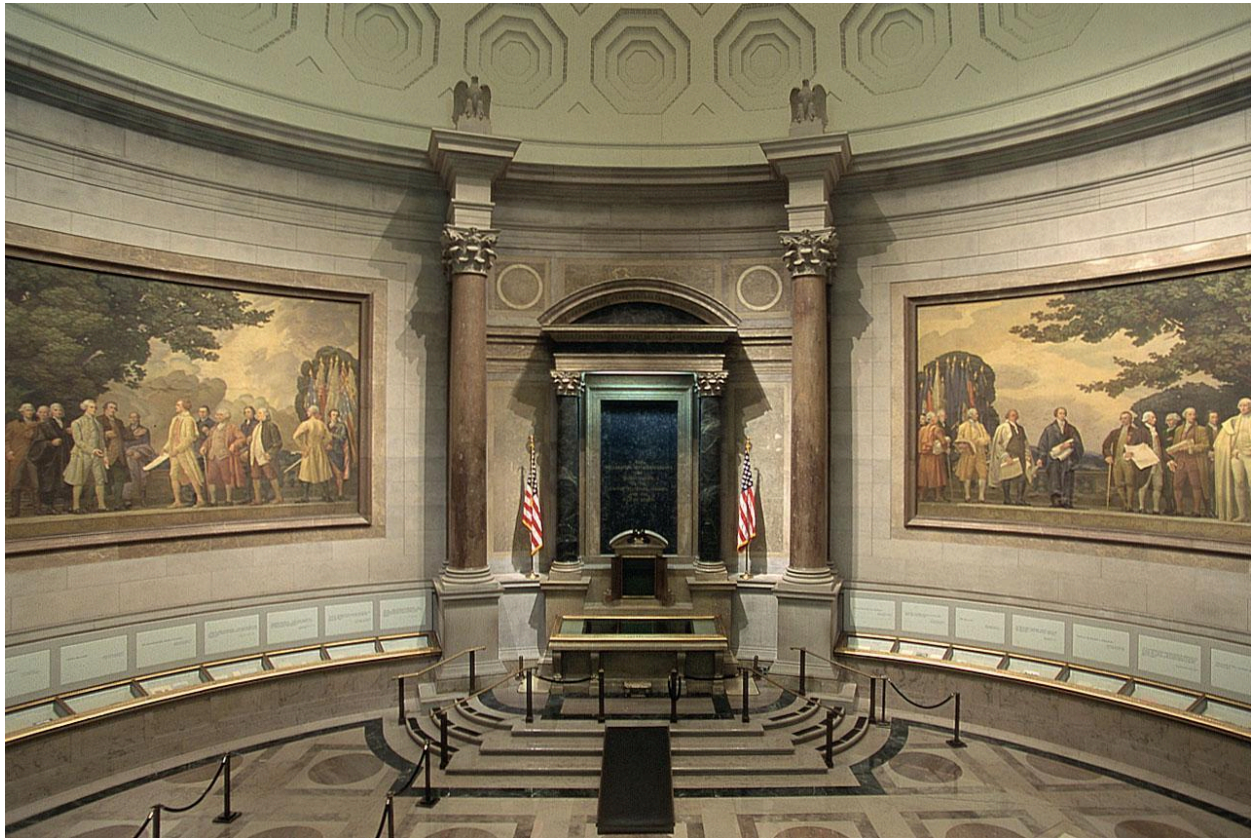
The building itself was built as a bank vault. If you look at Pope's original design it had an entrance for the staff on Pennsylvania Avenue, it had an entrance at the loading dock on 7th street, and it had an entrance for visitors to the Rotunda on Constitution Avenue. Three entrances and exits from the building and the building could hold 1,500 people in the Rotunda area and had a staff of over a thousand all had to exit through these three small entrances. So, it did not comply with fire safety exiting requirements.

You could stand in the subbasement of the building and look all the way up to the roof where the duct risers went up. There was no fire separation between floors so if a fire had started anywhere in there it would have been like a chimney effect and could have consumed the building. So, in looking at the building we identified significant safety issues for staff and for the records themselves in the event of a fire which had to be addressed which would have required major modifications on the interior. So, our thrust first of all was to identify all the mechanical, electrical, fire safety, and security work that had to be done then try to incorporate them in the historical building. The building is on the Register of National Historic Places and rightfully so. It is a beautiful building and the interior was beautifully done.

One of the first problems that we had once we had agreed on what we wanted to do for the renovation was to convince the historical people that what we had was a viable option. Over the years times changed. In our Rotunda area . . . and if I can find the picture here . . .

RB: We should also comment on the fact that Hartman Cox Architects were responsible for the Renovation design.

PA: Right. (Pointing to picture) In the Rotunda area here you can see that there is an altar effect where the Constitution and the Declaration of Independence were displayed.



What we had done typically was display the Declaration of Independence, the first and last page of the Constitution, and the Bill of Rights but the Constitution has four pages. The Americans with Disabilities Act requires us to change how the documents were displayed so that people could access them. That was a major issue with the historic people [the State Historic Preservation Officer for the District of Columbia which presents its report to another District of Columbia entity, the Historic Preservation Review Board]. Because their initial thinking was just to display the documents elsewhere because it's a historic building that was designed by John Russell Pope. We countered that with the argument that the building was designed to display these documents. So displaying these documents takes precedence over how they are displayed. We wanted to comply with current laws and current standards and to not address that and to maybe just move the documents to the middle of the Rotunda would have harmed the floor much more than what we ended up doing but also would have deprived us of the use of the Rotunda. So that was a major discussion with the historic people. That was eventually resolved by us just saying we had to address that issue. They asked us to do additional testing on that.

One of the concepts we came up with was we reviewed all of the standards we could find; Americans with Disabilities Act requirements; Uniform Federal Accessibility Standards for federal buildings; the Smithsonian had standards for exhibits and none of them addressed how high exhibits should be, what [display] angle they should be, so we created a prototype case. And that prototype case we could vary the height and we could vary the angle. And we brought in groups of people. Small children, large children, tall adults, short adults, people in wheelchairs

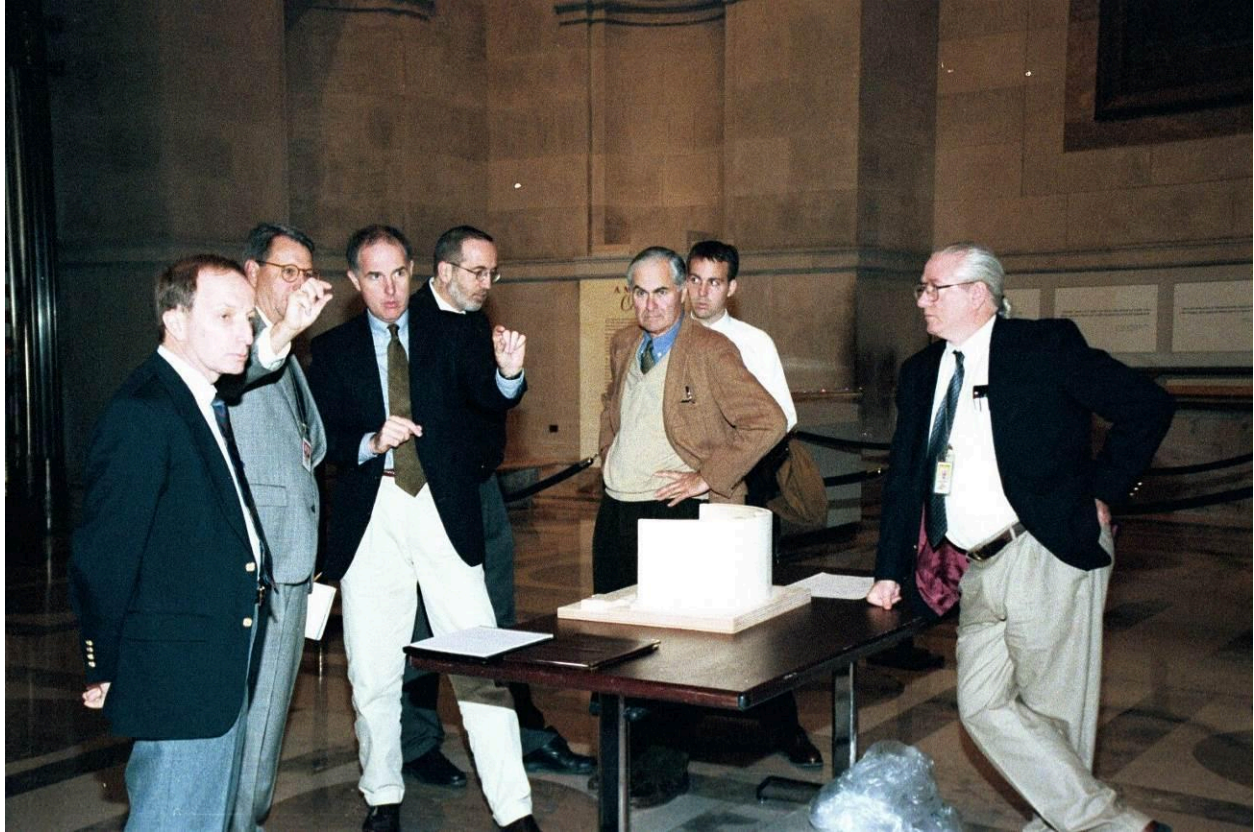
and we asked their opinion on different heights and different display techniques. So we sort of invented our own wheel on that in coming up with how we were going to display it.



Tests to determine optimum exhibit case height.

So we settled on a display height of 29 inches at the front face of the cases (they had been 44 inches). Americans with Disabilities Act which said they had to be 39 inches or less. And the rear of the display case was about 44 inches because its sloping. We then presented that to the historic people and showed them how we would change the Rotunda. Hartman Cox Architects did a model in wood of the Rotunda and that was used in the presentation with the various approval bodies. They finally did approve it and we proceeded with the renovation.





Left to Right: Marvin Shenkler (Renovation Consultant), Mario Boiardi (Architect, Hartman Cox Architects), David Maloney (State Historic Preservation Officer for the District of Columbia), unknown, Warren Cox (Principal, Hartman Cox Architects), Rob Petrie (Modelmaker, Hartman Cox Architects), Pat Alexander (Project Manager).

RB: One of the things I think naturally happens as part of a renovation effort is to expect the unexpected. Were there any times during the renovation where you were genuinely surprised about something that was found or something that had to be surmounted.

PA: It would probably be easier to say were there any days when I was not surprised rather than what were the surprises. We did a design, started the design of the building in January of 1999 and finished the design in March of 2001. Initially we had thought we would have one project to do everything but it rapidly came about that we could not do that. We ended up with six separate construction projects.

The first project was started in February of 2000 and that was just to do demolition and to construct swing space [John C. Grimberg, Inc.]. We converted exterior, exposed moats on the Pennsylvania Avenue side of the building to about 10,000 square feet of office space so that we could move staff from areas that were going to be renovated. That was started before we finished the design work so that entire process involved a lot of changes as we refined the design.

The second project we did was we pulled out the lighting for the new cases and did that as a specialty project so that was a fiber optic lighting project [BAND, Inc.]. A third project we did was to pull out the new mechanisms to display the documents and to secure the documents as a

separate project. And that was awarded to people who specialized in security of documents and bank vaults. Diebold won that contract. A third [fourth] item we did is in the Rotunda itself there were large murals on either side of the display case [cough interruption] and these Barry Faulkner murals were put on the walls of the Rotunda in the early 1930s [1936] and they had deteriorated. When they were initially put on the walls of the Rotunda they were put on with an adhesive that was a mixture of plaster, asbestos and lead and they were just glued onto the walls. And then over the years because of air conditioning and because of people being in the Rotunda they had eventually—some of the plaster had started buckling and we had large buckles. So that was done as a specialty project. [Olin Conservation, Inc. The NARA Conservation Staff was given the Olin submission documenting the entire project including a sample section of the aluminum backing plate onto which the restored murals are affixed.]

Then we had the full scale renovation of the building with everything after the demolition was done as another project. [Grunley Construction, Inc.] So we had all of these sequential projects that had to all be finished at certain times in a certain area really impacted the renovation. Initially when we went to Congress and OMB for funding we were limited in funding for construction to about 80 million dollars which we believed was insufficient to address all our needs. One thing we did after we received approval for an 80 million dollar construction project with the design money and oversight money on top of that we started doing selective demolition of walls in order to find out what was behind the walls. In doing that we got enough evidence to show that we had to address the fire safety issues of not having fire stopping in the ductwork and it also demonstrated that the ductwork was insufficient to meet our environmental standards. We went back to Congress and asked for additional money for that and they did approve that which brought the funding up to about 90 million dollars for construction. And with some very innovative rounding methods that eventually ended up at 95 million dollars.

We also received approval from Congress to use annual repair and restoration money to accomplish projects related to the renovation. The roof replacement was a project that we had identified that we needed. There was some electrical work, some cooling tower work. These were all identified and Congress said we could use—supplement the renovation money with that. So the construction, the design, and the oversight of the renovation was finally projected at a cost of about 115 million dollars. And that excluded 5 million dollars for a theater construction, 3 million dollars for the mural replacement [restoration] and then all the furniture and move costs which would be on top of that. The total project ended up costing about 130 to 135 million dollars.

RB: I wonder if you could comment on the impact of deadlines being imposed on the project. I'm thinking specifically of the Rotunda reopening by date certain and then the complicating fact of Hollywood coming knocking right at that time as well.

PA: That was—you're right—having imposed deadlines was a very difficult process. In discussions with Congress there was some concern about leaving the Charters of Freedom documents off display for extended periods of time while we renovated the building. So it was agreed by the Archivist [John Carlin] and our Congressional committees that the documents would be off display for 2 years. So that gave us a date that we had to at least complete the Rotunda from. So we always worked from that date. We met that date. The documents came off

display on July 5, 2001, and they were scheduled initially to go back on July 4, 2003, which was rapidly changed to Constitution Day 2003, September 17. So our whole construction schedule was impacted by this artificially set date. While we managed to make it, it really required monumental efforts on everybody's part because we had to pull together the fiber optic lighting, the new vault and security mechanisms, which were separate contracts, as well as the main renovation all had to meet on those same dates.

We were behind schedule and had major problems with the display top cases, bronze cases. In August, if you looked at the Rotunda, you would have said we will never be able to open it up. It looked like a bomb had gone off in there. We had 24-hours a day work going on. Artisans with the marble.



August 8, 2003 photograph



August 29, 2003 photograph

And at that point in time Walt Disney Company wanted to film their movie, National Treasure, in the Rotunda. The Archivist came in and was very supportive of this, Disney has a lot of political influence of course. And we finally told him that if they were going to film it inside the building then we were not going to be able to reopen on September 17. We would not be able to meet the date because of the disruptions. That was a major problem within the Archives but the Archivist finally agreed to that. So they did their filming on the outside. I think we made it available one day for the inside, interior filming. [NARA allowed them to film inside the vestibule leading to the South Portico].

We finished installing the final casetop on September 14 with the President coming for the reopening on September 17. And the documents were installed in their display cases on the 15th so it was very close to doing that. And to be quite frank we didn't have everything finished that we wanted to have finished. The Rotunda level was finished, the new entrances were finished, but right behind the entrances in other areas we had not finished those areas.

RB: Well speaking of finishes, I wonder if you could speak to some of the efforts that took place to do the best possible effort possible, ugh, that's redundant, to do the best work possible to

honor John Russell Pope's look for the building. I'm thinking particularly the bronze, the marble, that type of thing.

PA: What you're asking is how do we mimic Pope's design and what did we do specifically on that. Within the historic community there is a great discussion on how you address historic issues. Mostly what they say is if you're modifying or extending historic space you should make it look different so you could tell where the new space was added. Hartman Cox [Architects] and us a lot of discussions on that and we finally came to the conclusion that what we wanted to do was, for the most part, use the same design elements that John Russell Pope had done. And that gained agreement with the DC State Historic Preservation Officer as well as the Advisory Council on Historic Preservation. So the direction that we gave to Hartman Cox was to mimic the marble, mimic the terrazzo, mimic the finishes and if you walk through the space it is a seamless flow from one space to the other.

The marble was a particular problem. Marble was used in construction in America for several hundred years but starting in the 1940s it started falling out of favor and most of the marble quarries had closed down. So during the design process we were struggling with where are we going to get the marble to finish the building to mimic the Pope thing. I had remembered reading an article about the Smithsonian's new statue garden [the National Gallery of Art Sculpture Garden, which is not part of the Smithsonian] that they constructed across the street from Archives and they had said they had found the original marble manufacturer. The NARA librarian was kind enough to find that article for me and we went to Hartman Cox. The article listed who the original marble person was.

That company had gone bankrupt and gone out of business for about 30 years. They were just starting to try to reopen. We contacted them. They sent one of their marble people up and we walked around the building because we wanted to make sure that they actually knew what they were doing. We had the original construction documents and the original specifications and we didn't share them with him. And we walked the building with this individual and every time we had a piece of marble we would say what is this and he would say oh that's a Tellico gray, that's a St. Genevieve gold, whatever and he was right. He knew exactly where it had been quarried, he knew the types of stone it was, the type of finish on it and we could verify that from the specs. And it was just amazing walking around with this artisan, really, who knew marble so well. He was an expert on it and with no notes could tell exactly what we had and where we had it in the building.

He had told us that they could replicate all of the marble that we had with the exception of the marble that was used around in the Rotunda for the display cases for the Charters of Freedom which was St. Genevieve gold [St. Genevieve is a suburb of St. Louis, Missouri]. And he said that quarry had gone out of business and there was a K-Mart or a Wal-Mart built over where that quarry was. He said that they had six of the original blocks of marble left over from the construction. Originally it had been nine, three had been used for a courthouse that was built in the 1940s and the other six were sitting on their property. So we did a sole source purchase order for that marble and that's what we used then for the St. Genevieve gold around the Charters of Freedom. All the rest of the marble in the building they could replicate from the existing quarry with the exception with the green marble around the floor of the Rotunda which did not come

from their quarry. It's a highly-veined marble, very porous, beautiful but difficult to get. That marble came from a Maryland quarry [Maryland Cardiff Green from Cardiff, Harford County, Maryland]. That quarry also had gone out of business. Somebody had tried to restart it in the early 1990s, had done some quarrying, and then stopped. We contacted them and they said they had four blocks but were only willing to sell us one. We needed six. They eventually sold us three. But in discussing it with them they had mentioned that they had sold some blocks to the White House about 20 years earlier for a renovation at the White House. Marv Shenkler, who was our Project Consultant and really an excellent person to work with and a great resource on the project, he contacted the Chief Usher in the White House who said yes, they had a block and half of this left over and they didn't want it. We went and looked at it.

Now a block of marble, for instance, people— say a block of marble—and people don't know how big a block of marble is. It's about the size of a minivan. So one block of marble is about the size of a minivan. We drove over to the [National] Park Service storage facility for the White House and there was a block and a half there and they gave it to us because they no longer needed it. So that got us up to four and a half blocks. Our quarry people down in Tennessee said that still was not enough because of the veining on the marble and the high loss rate. He went up and paid a visit to the old quarry in Maryland and there were no large blocks of marble there but walking through the woods adjacent to the quarry he found some smaller pieces and blocks which they scavenged up. Eventually they had five and a half blocks. When they started cutting the marble it was just too veiny and it kept crumbling so they used more on that than they did but to actually get it we needed marble that was about 2 inches thick. So what they did was they took shale and cut it to 1 inch thick and then laminated on one inch thick marble on top of that in order to give us enough. And that allowed us to finish the marble in the Rotunda.

Also in the Rotunda, we had the limestone in the Rotunda. These walls are all limestone walls. The original quarry was Georgia limestone and it's a very white limestone, it's very beautiful. But ours is more grayish. And we initially thought well we didn't really get white limestone. So we took a sandpaper and we started sandpapering the limestone from some samples that we had cut out where we were putting in new entrance doors—on the east and west walls to provide ADA access to the Rotunda, and we discovered that if you buffed up the exterior of the limestone it was white. So the gray color that we had in the limestone really was due to the pollution in the air from people exhaling and the fact that it was exposed for 70 years on the walls. We didn't know how to address this because the Georgia limestone when you held it up to it really was a totally different color. It was white. So the original—we went to the original quarry and they gave us some samples and it just did not match. One of the architects said you know there's other colors of limestone and we eventually ended up getting limestone from Indiana which is a darker limestone and it matched exactly the color that we had. So what we have in the Rotunda right now is from a height of 10 feet down we have new Indiana limestone that is slightly grayish and from 10 feet up we have the original white Georgia limestone which, because of 75 years of age, is now slightly grayish and the look is perfectly matched.

[Break point in the interview]

[Interview resumes]

RB: We've been talking about the effort to get the Rotunda reopened within the preset time of September 17, 2003. Were there any compromises that had to have been made in order to meet that deadline.

PA: You're asking us really what kind of compromises did we have to make in order to meet that deadline of that artificially constrained reopening date. Yes there were. First of all, there were no compromises in safety or installation of the equipment or an environmental standard. But the compromises we had to make had to do with aesthetics. We had significant problems with the bronze tops. The original display cases were beautiful bronze. We had a very difficult time with that. It's probably one of the—the one area where I think we did not—we had to compromise from the start and in hindsight I would not have done it the same way. The display cases within the Rotunda should have been treated as a separate project and they weren't. They were incorporated in the main construction job. But they really were specialty work. We had pulled the other specialty work out – the fiber optics, the vaults and security systems, and the murals.

We did not pull out the display cases. As a result the contractor [Grunley Construction, Inc.] contracted with a miscellaneous metal works subcontractor [James River Iron] who did a very good job on hand railings and everything else but did not come up with what we thought was a quality top. They were late on the delivery of the bronze and we were struggling on that. So, one of the first compromises we made was to say the seven adjacent cases on either side of the Charters of Freedom (14 cases in total) we ended up putting a wood top on as a temporary measure because the bronze was not going to be ready. So that was the first compromise we made. And actually, that worked out very well. It was painted to resemble the limestone and it really fits in well in the Rotunda. And two years later we're still using them because we're still struggling with the bronze tops. The other compromise we made is that the lifting mechanism on the three bronze tops that we put in isn't complete. So they have to be manually lifted rather than mechanically lifted.

And then, over the Charters of Freedom cases themselves are three plaques with the names. Declaration of Independence is inscribed here, Constitution of the United States here, and Bill of Rights over here. People look at them and they say wow, that's magnificent. The limestone over the Declaration of Independence and the Bill of Rights just perfectly matches the walls and the marble over the Constitution matches the marble. But those three name plaques are not real plaques. They are artificial constructs made out of a foam and painted to look like the stone that they're adjacent to. So we had a separate small contract came in and did that. Now the reason for that—in hindsight we didn't have to take that—we thought that there was going to be historic objections. But since we had removed all of the limestone from a height of 10 feet down, that really was not a valid argument. So we had put these up because we didn't think we wanted to inscribe the original limestone. We wanted to see what it would actually look like. So we have these three beautiful looking name tags hanging above these documents that right now everybody thinks is original stone and is not, they are foam products painted to look like the stone. So, 70 years from now if they're still there, whoever renovates it at that point in time will have to make a decision on whether they want to leave them or replace them.

RB: Knowing from your past experience that renovation projects are filled with the unexpected, why was it decided from the outset to settle for this—or accept—this two year duration for the

time that the documents would be off display. I would imagine in your heart you thought that that might be a tough deadline to meet.

PA: You're really getting into a very political area and asking why we had to accept a two year deadline. Our original project, we actually had to accept much less funding in the original project than what we wanted to. And people have asked why we accepted it and why we proceeded with it. And our stock answer has always been we did it because it was time to renovate it.

There was a subplot going on at that time. The Smithsonian Institution had been making overtures and had—which had reached OMB [Office of Management and Budget] and White House level—saying that they could construct an appropriate exhibit for the Charters of Freedom and put them on display in two years and since the Archives would need three to five years for their renovation they thought it would be appropriate to transfer those documents to the Smithsonian and have them displayed as artifacts. We don't believe that the Charters of Freedom are artifacts. We believe that they are living documents that we use constantly and they are not—should not be treated as artifacts. We give them great reverence in the Rotunda. We settled for the lower monetary amount and we settled for the two year off display time period in order to make sure that the documents remained with NARA rather than be transferred to the Smithsonian. That's the bottom line.

RB: Was the Smithsonian offering this from the standpoint that it's a service to America to have them on display and then gladly would return them when the Archives reopened?

PA: I can't answer that, I wasn't involved in those discussions. But based on the past, I would probably say no.

RB: Moving on . . . [laughter]. Are there any other highlights that you can recall or would like to share from the renovation of that building?

PA: Well, the renovation was a very difficult project first of all and it entailed a lot of compromises on many different areas. One of the first compromises we had to contend with was the old building—the National Archives was I believe the first [federal] government constructed with the mind of having air conditioning in it. The original air conditioning system was a system where you had a mist of water and you blew air through it and that conditioned the stacks. So when it was built it was built to condition the stacks. It was modified over the years, particularly after we added additional stacks. But essentially it could keep the conditions for the records at about somewhere between 72 and 75 degrees and a relative humidity of between 50 and 55 percent.

For conservation measures we wanted to get the temperature conditions in the stacks as low as possible. And working with conservation they had set 68 as a target. We could not attain that with the ductwork that was in place. Nor could we attain that with the amount of condenser water that the chillers needed to do that. So our initial proposal was to put cooling towers around the building in the moats. And that was rejected by historic preservation because the water plumes from the cooling towers would have damaged the exterior limestone of the building. We looked into putting a cooling plant underneath the lawn but we would have had the same problems. And

we also looked into working with the Smithsonian to try to install the cooling towers across the street where the current sculpture garden is. But the Smithsonian had a plan for the sculpture garden and would not give us the space.

So we were left either remaining on the old GSA tidal basin system which was obsolete and had inadequate water flow or installing cooling towers on the roof. Our roofline is part of the historic vista of Washington and we were not permitted by either NCPC [National Capital Planning Commission] or the historic people to have cooling towers that projected above the roof. Our solution was to take a quadrant of the building and install the cooling towers inside the building. This was very controversial with the staff because we were introducing a large amount of water into space that had previously been stack space and the potential of a catastrophic failure flooding stacks below it. We sought out low flow cooling towers and we also then when we constructed them we removed three tiers of stacks (tier 19, 20, and 21 in the Northwest quadrant). We constructed a new roof at tier 20 and the cooling towers sit in a well on tier 20 within the building but not projecting above the building. So we have an interior roof at a lower level than our main roof.

And as an additional precaution we installed a bathtub underneath on tier 19 below the new tier 20 area where the cooling towers are which can hold all of the water from the cooling towers. So this bathtub has curbing on all four sides that goes up and has another roofing material on it. So essentially we have two roofs underneath the cooling towers as well as alarms for water intrusion and water flow. So, while the staff was not happy about this they did accept this as a working alternative to address that issue. That permits us to get the temperatures in the building down to 68 degrees which is much closer to where conservation would like to see the building.

RB: Any other highlights or lessons learned or special components that you'd like to comment on?

PA: Well, we wanted to have a new theater in the building. We had exterior parking underneath the Constitution Avenue steps. We decided to put a theater underneath the steps in an area where the parking was. That required us to relocate a GSA steam tunnel. So, this area down here was surface parking and we moved the steam tunnel to this area in the street. So we had to open up the steps, we dug an area underneath the sidewalk, and we put the steam tunnel in the sidewalk. Now, this GSA steam tunnel serves all of the government buildings within the Washington, DC area. We moved it essentially about 25 feet south. Because in the new theater—this used to be surface parking from here on up and this is below ground—the steam tunnel would have run right underneath our stage. So we moved the steam tunnel 25 feet south. It entailed two shutdowns. We had to do them during the summer period when the use of steam is very low. That project alone—or that part of the project alone— was about 2 and a half million dollars to move the steam tunnels.

RB: Now why did it have to move? Is it a safety issue or what?

PA: Well, what we were afraid of [unintelligible] and then you have a leak in the steam tunnel or, ahhh, everything else. We did not want to have a leak right underneath our stage. So, if we were—in our new theater if we had had a leak anywhere in the steam tunnel right in here there

was always a danger that the temperature in the theater would have risen too high or that we would have had steam actually escaping into the building. So that's why we had to relocate that.

RB: Speaking about a leak, it reminds me that the theater after it was opened in its renovated state flooded in late June 2006 because of torrential rains in Washington. Any comments on that whole experience and how it impacted the work that was done in the theater.

PA: You're asking how a flood that occurred after the completion of the renovation impacted, impacted the work. The theater was completed and open to the public in September of 2004. And it actually is a very magnificent theater. It cost about 7 and a half million dollars substantially funded by a donation. The work within the theater was done by the same craftsmen who worked throughout the rest of the building and the features in the theater match the features next to the Rotunda and the other public space. The flood in June of 2006 was caused by a torrential downpour which flooded the streets and what happened is the water backed up in the streets because the storm drains and storm sewers around Washington are not adequate. And there was about 5 feet of water in the street that came down an exterior entrance and flowed in. Flooded our newly installed transformer vaults [Constitution Avenue flooded on Sunday night, June 25. Water poured down the driveways on both the 7th and 9th Street sides of the National Archives Building and flooded the main electrical vaults, the McGowan Theater and the subbasement chiller plant and mechanical areas.] and then flooded the theater to a depth of about 4 feet. We had not closed out the contract with Grunley Construction for the main renovation. And Grunley Construction I'd have to say and their subcontractors did a superb job throughout the renovation.

We brought Grunley back in—they brought the same people back in that did the theater in the first place. And so in a period of three months they replaced the lower stage, seating, carpet, removed the drywall and walls that had been damaged by water to a height of 4 feet and replaced all of them and repainted the whole thing so that it looks like it had never been damaged at all. They did a superb job of getting us back up and running. It was pricey, but superb.

RB: If the project manager who will be doing the next renovation of the National Archives Building, say 70 years from this year, 2006, were sitting here next to me, is there anything that you would like to share with him or her that only a project manager would appreciate?

PA: What would I tell the next project manager? I'd probably say good luck. However, I think this project was—this was a very large project, ah—and I think quite often they look too much at the project manager on a project like this. This project actually involved hundreds of people within NARA and outside of NARA but even within NARA there were many people that were involved in the project who had to work as a team. And communications within the team of the people working on it as well as with the contractor are key. This project was done with the research rooms remaining open throughout it. Even though we closed the Rotunda area, the research rooms stayed open. And we had 550,000 cubic feet of documents in the building which over the course of the 5 years of the renovation we probably moved about half of them from one place to another and some of them in multiple moves in order to free up space for the renovation. It really was a team effort. It's no one individual did it. It involved literally working with hundreds of people and the job of the project manager is to as much as possible facilitate that

communication. And that's where you have to start I believe is working on the communications. And we did several things.

I had mentioned Marv Shenkler as the project consultant. Marv Shenkler actually was a NARA employee who retired in 1994 and he was the project manager on the construction of the Archives II building. Now the Archives II building was empty, it was a new construction. It involved many technical details but it's much easier constructing a new building than it is renovating an old building, particularly renovating an old building that's occupied. Marv and I worked very closely on the design. And then when the construction started I think one of the crucial decisions that we made on the first day that we moved down [to set up a renovation office at Archives I from their renovation planning office at Archives II] was that we were going to share an office. A lot of people would look at the fact—they'd say well based on your position, or your grade or whatever you should have a private office and we decided that we didn't want to do that. So we got an office that was a little bit larger, you know it could barely hold two desks but it could hold two desks and we moved in to that office and we shared that office for the next 5 years.

I heard every conversation that Marv had and he heard every conversation that I had. We attended meetings together. We discussed things in private. We started thinking together and so when Marv wasn't available I knew what his thought processes were on the engineering aspects. When I wasn't available he knew what my thought processes were on the areas that I was handling and we could answer the questions. And it came out later on that many of the staff on the renovation would laugh because they would ask me a question and they would get the exact same answer that Marv had given them or they would ask Marv a question and they would get the exact same answer that I gave them.

And we both during the hectic days of the renovation, probably from January 2003 through September 2004 was really the most intense period of time, we both had trouble sleeping at night and we both kept a pen and paper next to our desk [our bed] and we'd wake up in the middle of the night and write things down. There's emails that we exchanged sometimes at 3, 4 in the morning. Letters that we wrote at—early in the morning that we sent in. We started thinking alike and we could communicate that to the staff so that really what we presented was a uniform thought process on the project.

So for the project manager they have to remember that they're not just dealing with an engineering technical situation. They're dealing with personalities, they're dealing with people, they're dealing with records and that the first goal within the National Archives is the preservation of the records. I can't say that we didn't cause dust and disruption and maybe hazard the records. But we tried to minimize that and we tried to minimize that for the staff, too. It wasn't our choice to renovate the building occupied. That was a choice that was forced on us. But we tried to set it up such that we had open lines of communication. We hired a person whose specific task was to coordinate the move from the renovation perspective with the archival staff who were responsible for the records and that person communicated daily on a daily basis. We recommended that the archival operations have people that were just devoted to the move and they did that creating positions that just did that. We had a safety coordinator who just

coordinated that. And that was to make sure that we got the input from the staff about problems and that we tried to address them.

And within our staff itself was composed of NARA personnel myself, you [Rick Blondo] were on it critical thing we had two engineers that were NARA staff on it, too, and contract personnel. And making sure that everybody was working from the same book which said we're going to preserve the records, we're going to do the project right and then coordinating that with the staff and making sure that we address staff issues as we went along I think was a key towards the project being completed.

RB: But there were some technical decisions that had to be made. For instance, working on the building in quadrants and the sequencing, et cetera. I wonder if you could comment on how those choices eventually were made and then if a future project manager is going to learn from that, the new systems we put in, would it be handled differently.

PA: Well, you're asking how we sequenced the building and the work and why we sequenced it in that way. I previously mentioned that the building was originally constructed in the 30s with four courtyards – had very little stack space. Even while they were still finishing the construction on the building they had made a decision to infill the courtyards with the stack space. The Archives building is different from almost any other government building downtown. All the other government buildings are constructed with wings with the mechanical systems above the wing. So when they renovate them what they do is they shut down a wing, renovate the floors and the systems in place that are fed from the mechanical rooms either in the basement and mostly up in the attic and connections between two of them. Archives also has mechanical rooms in the attic but between the attic and the basement were 21 floors of records and they were infilled. We had to do that. What we couldn't do was turn the contractor loose to work anywhere they wanted to in the building. We spent six months working on a sequence system to do the mechanical and electrical work because all the electrical work was replaced and all the mechanical systems were replaced but at the same time we had to provide service to the building. The engineers came up with a plan which they submitted to us and we rejected it. It was almost laughable when they came up and they didn't understand why we rejected it. So we brought them down. And the first thing I asked them was have you even walked the space to know what they're doing. And they said Oh yeah we sent somebody over to walk the space. So we walked into the subbasement and from the floor to the ceiling the subbasement is about 22 feet. But the upper 12 feet was filled with piping, ahh, conduit, you know, systems, steam valves. And I walked down with the electrical engineers. I said what you're saying is you're going to remove this duct bank that's been in there since 1932 but what about all of the piping and conduits that was hung underneath it during the 75 years between when it was originally installed and now. And just looking at their faces it was clear that they hadn't contemplated how to do that. Their approach was more ahh we're going to do this like it was a new building—we're just going to install everything new—without addressing how are you going to do that. So, we took a long time coming up with the sequence. Really, what the sequence for the records was dictated by how much space we had to move records around. We only had a limited amount of swing space for the records so we divided the building up into 8 quadrants. We had to finish 4 of those quadrants in order to get the Rotunda open. And then we had the other 4 quadrants that could be done after the Rotunda opened. So taking the requirements for the Rotunda and the amount of

swing space that we had we came up with this sequence which was a proposal which we then sat down with the archival staff and said this is what we want to do. They looked at their numbers and we eventually worked it out that in the upper areas of occupied areas of the building we could do that. We had adequate swing space for the staff, we had adequate swing space for the records, and then on the mechanical side we could feed enough of the staff space, the public space, and the stack space such that we could maintain minimal conditions there. And that's really how we came up with the sequence. It was a very elaborate dance. We couldn't shut down this air handler until another air handler was up and running. We couldn't shut down this riser for electrical work until the replacement riser had been in place.

RB: All right, I want to shift gears now to some general NARA things unless there is anything more . . .

PA: No

RB: . . . renovation. And then we'll close with a general Tell us what your impressions were when you joined the National Archives—1993 I think is what you said. What your impressions were of the agency at that time and now these dozen years later what your impressions are today.

PA: [Laughter] What are my impressions of the agency then and now? I actually came to NARA in February of '92 and I'd have to say that probably one of the most memorable days in my life had to do with the second day I worked for NARA. I was doing a tour of the building and we walked into the vault where the Charters of Freedom were lowered into every night. And this was before the Rotunda opened [to the public]. And the Declaration of Independence had been taken off display for conservation work where they were actually photographing the dots to make sure that the ink dots hadn't moved from the parchment. And they were putting it back on display. And the technicians were up in this gridwork—very awkward working space and the Declaration was in its case on a cart. And they asked me to hand them the Declaration up. So the second day I'm working here I actually handled the case that contained the Declaration of Independence which really was a very memorable moment for me. To pass that up into—so that it could be put back on display. And that sort of sets the tone for what I think the agency is.

The agency has changed over the years. Since I started working here we've had staff freezes, we've had staff reductions. It's smaller now than it was when I came. We have more buildings. More records. They probably need many more people in order to do the job and other ways of doing the work. I'm not an archivist. I'm appreciative of the people who work on historical issues and appreciative of the fact that we need an archives. My concern has been to provide the best space management that we can for the records and the people that work here. And I appreciate the job that people do. I don't think that the ethic has changed at all. That people really are concentrating on the records. They do need to look at different ways of processing the vast amount of records that we're getting in.

RB: What about changes in NARA administration during the years you were here? When a changeover would take place, when a new Archivist would come for instance, did that have any impact on the nature of your work.

PA: You're asking how a new Archivist has an impact on the nature of the work. The Archivist sets the tone for the direction of the agency. I came in 1992 and in 1993 the Archivist left and we had a series of Acting Archivists until John Carlin came in 1995 and he remained here for 10 years to be replaced in 1995 [2005] by Allen Weinstein. They both had different emphasis, they both have been very supportive and were very supportive of it. NARA itself has to be able to contend with a change in records from paper based records to electronic records while maintaining our paper based records. John Carlin set goals for how to improve management and how to fund stuff which we are still living with and were very good goals. Allen Weinstein has the same direction. The direction on more public outreach to people certainly impacted facilities. A lot of what we did downtown was to bring more people into the building. Prior to the renovation there was 2,400 square feet of exhibit space in the National Archives Building. And it was in a cramped area that was not handicap accessible that circled the Rotunda. We now have 12,000 square feet of exhibit space which is – open space is more conducive to exhibits. We constructed a very brand new totally modern research room to handle microfilm researchers and additional textual researchers. We constructed a conference center downtown. All of that was constructed and carved out of stack space that had to be converted because of accessibility issues with bringing people into the building. That really permits the Archives to change how their program message is. We should not be looked on as an agency that's handling old, dusty records. We're not a museum. I think one of the things I don't like is how we have adopted the term museum operations. I don't think our records should be treated as a museum. A museum has a connotation in my mind of old, not used. These are living documents that people can use for their private lives. But we document the history of the United States and that is a very worthwhile and needed avenue for our government.

RB: Apart from the renovation, were there any other challenges or issues that you faced in your other Archives positions or jobs that you did that are worth sharing for posterity here.

PA: No, not really.

RB: Okay.

PA: It's the same everyday stuff that you have in any job.

RB: How about turning points in your NARA career? Any significant turning points—maybe you found yourself in a different place than you thought you'd be when you first came to NARA.

PA: Well when I first came to NARA I didn't expect to be the renovation project manager. I expected to be in charge of Facilities and working with that but I fully thought other people would be involved with that. On completion of the renovation I moved to—a short time as Director of Space and Security and then finally to Adrienne Thomas' Deputy position. They were all great positions. One of the continuities that we have is the fact that throughout the entire time I've been at NARA Adrienne Thomas either was the Deputy Assistant Archivist or the Assistant Archivist [for Administration]. And it was just a great pleasure working for her and how she set an agenda and allowed me to work within that agenda to achieve whatever I have achieved.

RB: Pat, you have a deep career background from the Navy, through Proctor and Gamble, et cetera. You've been exposed to different management philosophies or styles. Is there anything that NARA can learn that it isn't doing at current from those exposures that you've had.

PA: Well, you're asking if there is anything NARA can learn from different management techniques that I might have seen. I don't think it is a NARA problem, but it's more a federal government problem—ahh, from the time I attended the Naval Academy entering as an 18 year old the emphasis was on making decisions and managing people. And when I graduated and went out as an officer in the Navy at the age of 22 I was expected to manage people and make decisions. And you made wrong decisions. The way you get to make right decisions is by making an awful lot of wrong decisions and learning from them. You don't learn very much from making the right decision. You learn an awful lot from making the wrong decision. And within the federal government I believe that there's too little decision making and that people wait too long to start making decisions. By the time you become a supervisor and actually can make decisions within the federal government you're a GS-13, GS-14, you're in your mid-30s or maybe even your 40s and by then the system has beaten you down to only making the correct decision—that there is no room to make incorrect decisions. Now, you don't want people making disastrous major decisions. But the way you learn how to make decisions is to start young and start making them and learn from your mistakes.

So I think that there should be an emphasis on training people on how to make decisions and then to give them the authority to make decisions and to learn from their mistakes. If you cut off their heads every time they make the wrong decision, they're not going to make the decisions. And I think that is part of the problem with management within the government is that people are afraid to make decisions and that decisions keep getting bumped up to higher and higher levels so that the very top levels of management and the executives are the ones who are making all the substantial decisions. I believe that they should be setting direction and that the decision making should be much lower down in the organization so that people are trained for that.

The second thing I would say is that there should be a lot more movement of people. This probably does apply to NARA. People fall in love with their work. You get a lot of emphasis on personal identification with your work. But what is your work? Is your work that one record or is your work all the records. And I think by moving people around to different organizations within the organization exposing them to other avenues broadens the individual. Within the Administration I've been a personnel officer, I've been a security officer, I've been a budget analyst, I've been a – managed budgets, I've managed facilities, I've managed people. I had a lot of different assignments over the last 35 years. I didn't just do one thing. And I think when people only do one thing within an organization they tend to micromanage that aspect of it and they just focus on that aspect and they lose sight of the big picture. So, within the organization, I think they need to have a training program to broaden the experience of people and to broaden how we make decisions.

RB: You've told us a memorable experience you had on your second day on the job of handling the Declaration. Final question for this interview. Are there any other memorable experiences or fond memories that you have that you'd like to share?

PA: I think ahh—as far as fond memories go, I really enjoyed working in NARA. The renovation was very difficult, it had a lot of staff resistance until we started turning over finished space. And then I have to say that one of the best memories was taking around staff to show them the space that they were moving in to and what we had done in the renovation and hearing many of the staff say WOW, it really was worth it and we're sorry we gave you so much grief during it and I guess that would—that would have to classify as my really fond memory.

RB: Anything else you'd like to share?

PA: No.

RB: All right. We're done.