News

NORTHEAST DOCUMENT CONSERVATION CENTER
100 BRICKSTONE SQUARE
ANDOVER, MA 01810
978 470-1010
WINTER 2003
Vol 12 Number 1

Mostly Moscow

by Jamie Doyle, News Editor

Exchanges with Russian colleagues continue to evolve with support from the Trust for Mutual Understanding, the Samuel H. Kress Foundation, and the Getty Conservation Institute. In October, NEDCC's Senior Paper Conservator, Walter Newman, traveled to Moscow and St. Petersburg, leading seminars for conservators, providing follow-up training to former interns, and surveying collections. In Moscow, he worked with Olga Perminova, Head of Conservation at the Research Center for Conservation and Restoration at the Russian State Library, to teach a master class for experienced conservators. The 24 participants came from Yaroslavl, Kazahstan, Chelyabinsk, and Ukraine, as well as from Russia.

In January 2003, NEDCC will welcome two conservators from the State Hermitage Museum in St. Petersburg for training. Under the supervision of NEDCC's Photographs Conservator, Monique Fischer, Andrey Chulin and Marina Gambalevskaya will study conservation techniques for preserving daguerreotypes. The Hermitage recently discovered an astonishing collection of oversized daguerreotypes, made by a member of the Czar's family and documenting St. Petersburg street scenes in the 1850's. Mr. Chulin and Ms. Gambalevskaya will apply the skills and techniques they acquire at NEDCC to treating images from this collection. The daguerreotypes will be displayed in the Hermitage's exhibition entitled, "St. Petersburg and the History of Photography." The exhibition is part of the jubilee celebration of the city's 300th anniversary.

Associate Paper Conservator, Suzanne Gramly, discusses her work with Russian, Olga Perminova, who visited NEDCC during the International Federation of Library Associations'(IFLA's) 67th general conference that was held in Boston.

NEDCC treats George Washington Documents

By Mary Todd Glaser and Suzanne Martin Gramly

The NEDCC papershop has recently completed treatment of 770 manuscript leaves from the Custis Family Papers, a group of approximately 900 items belonging to the Virginia Historical Society. The manuscripts give revealing information about the personal lives of George Washington and his wife, Martha Dandridge Custis Washington. Some of the documents were written by George Washington or bear annotations in his hand.

The project was funded in part by a Save America's Treasures grant, administered by the Institute of Museum and Library Services, which the Historical Society received in early 2000. The collection has been described as "immensely significant".

The condition of the collection, however, was exceedingly poor. The papers were weak and badly stained from mold and decades of poor storage prior to their arrival at the Society. In addition, the individual documents had been laminated with various materials, most frequently plastic.

Lamination in plastic, usually cellulose acetate applied by the Barrow process, was distressingly common during the middle years of the 20th century. Although intended to preserve, acetate films actually damage paper. They deteriorate in time, giving off acidic compounds. Over the years NEDCC has rescued many artifacts from unsightly and harmful plastic enclosures. The Emancipation Proclamation, which NEDCC delaminated and treated for the National Archives in the late 1980s, was one of these. The Custis Papers project was unique in our experience, however, because of the large number of laminated objects.

Removing laminates from the Custis Papers was especially difficult because of the deplorably weak condition of the documents. In addition, these films did not dissolve in acetone, the solvent often used to remove cellulose acetate. After much experimentation, Associate Conservator Suzanne Martin Gramly developed a successful procedure. Working in a fume-hood, Suzanne immersed the manuscripts, a few leaves at a time, in a bath consisting of 4 parts acetone, 2 parts water, and 1 part ethanol. This mixture successfully dissolved the laminate. The papers were then carefully moved through additional baths to clear the dissolved plastic. Pure acetone was used for the final solvent bath. The papers were air dried, then washed in two successive baths of filtered water, followed by two more, which had been had been slightly alkalized with calcium hydroxide. The washing process helped clean and reduce acidity in the papers, raising the pH from an average of pH 3 to pH 7. As they were still very weak, most of the sheets were reinforced with a backing of tengujo, a hand-made Japanese tissue. Although strong, tengujo is very fine and almost invisible when in place. It does not obscure handwriting. Finally, the papers were sized with 1% methyl cellulose and flattened under moderate pressure.

When they arrived at NEDCC, the Custis Papers were encased in plastic laminations that were more harmful than helpful. NEDCC conservators removed the cellulose acetate lamination as it had become acidic and was shrinking, causing the document to pucker and split. The lamination was also obscuring some of the documents' text.

The most difficult documents to treat were a small group that had been split and adhered to a core of stronger paper before lamination. During the delamination process, the layers separated and the two halves became shredded. With difficulty, they were assembled and readhered to the core paper with a gelatin adhesive.

Manuscripts not encased in plastic (about 25% of the collection) had been laminated with Japanese paper or silk. NEDCC did not treat all of these. The Japanese paper proved to be so difficult to remove that it was left in place; this material is, in any event, stable and comparatively safe. The conservation department at the Virginia Historical Society will treat the "silked" documents, which are relatively easy to delaminate in a water bath.

After the period of experimentation, treatment of the Custis Papers at NEDCC took 17 months. Assistant Conservators Heather Hamilton and Carolyn Frisa assisted Suzanne Gramly with the treatment.

It is believed that William Clark carried this elkskin journal on the historic transcontinental expedition.

The Conservation of Exploration
NEDCC Treats Lewis and Clark's Journals

Nearly two hundred years after Meriwether Lewis and William Clark set out on their transcontinental journey of exploration, their journals arrived at the NEDCC lab for conservation. In 2002, the Missouri Historical Society sent the explorers'journals to NEDCC for treatment in preparation for a bicentennial exhibition commemorating the historic expedition.

In 1804, Captains Meriwether Lewis and William Clark led a U. S. Army "Corps of Discovery" from St. Louis up the Missouri River into the vast, newly acquired Louisiana Territory. Following instructions from President Thomas Jefferson, their aim was to become the first Americans to traverse North America to the Pacific via an imagined water route.

Along the way, they were to map the continent's interior, collect plant, mineral, and animal specimens for science, and, most significantly, develop relationships with diverse tribes of American Indians. The seven journals treated at NEDCC document the discoveries, descriptions, and reflections of these great adventurers. The handwritten accounts of Lewis and Clark provide a priceless glimpse into a world few of us can imagine. For theirs was a journey into new cultural landscapes as well as new lands.

In the spring and summer of 2002, NEDCC book conservators worked to stabilize the four journals, an Orderly Book, and a later memorandum book so that they could be part of the traveling exhibition. The journals included three volumes known as the "red books" and one known as the "elkskin journal." In all volumes, the text leaves were discolored and slightly brittle along the edges.

Director of Book Conservation, Deb Wender, said of the volumes, "The condition of the books reflects the high level of demand for examination of the original Lewis and Clark material over the years. The volumes have survived two centuries of use, and consequently structures are now weakened and materials deteriorated to some degree."

Upon initial examination, it was clear that the books had been treated by many hands over their lifetimes. Tears and losses had been mended using a variety of materials and techniques. NEDCC conservators reversed these earlier repairs in order to treat each page in a uniform manner.

Deb Wender, and Associate Book Conservator, Mary Bogan, were thrilled when they examined the elkskin journal. From all appearances, this journal was carried by Clark as he made his way across the country; he apparently sewed additional pages into the elkskin wrapper as needed.

Ultimately, Lewis and Clark both succeeded and failed. Simply reaching the Pacific and returning to St. Louis in 1806 with only one life lost was an astounding accomplishment, and the storehouse of knowledge they acquired on their journey transformed their countrymen's image of the West. But there was no feasible water route to the Pacific, and the important aim of bringing western tribes into commercial and political alignment with the United States had been impossible to achieve.

The Missouri Historical Society's Lewis & Clark: The National Bicentennial Exhibition follows the Corps of Discovery from the banks of the Mississippi and Missouri Rivers through the human geography of western North America.

This exciting exhibition will compare the assumptions of Lewis and Clark and the Indian peoples they were among on such topics as politics and diplomacy, women, geography, animals, military heroism, language, trade and property, curing and health, and plants.

A Short Guide to Film-base Photographic Matterials Identification

by Monique Fischer, Photograph Conservator
Northeast Document Conservation Center

INTRODUCTION

There are three broad types of film-base photographic materials: cellulose nitrate, the cellulose acetates, and polyester. These materials have been used as a support for negatives, positive transparencies, motion pictures, microfilm, and other photographic products. Unfortunately, cellulose nitrate and the cellulose acetates are unstable. Their degradation products can severely harm and even destroy photographic collections, in addition to posing serious health and safety hazards.

IDENTIFICATION

NITRATE FILM-BASE

In August 1889 Eastman Kodak began selling the first photographic negatives on cellulose nitrate flexible film support. This innovation was the beginning of a revolution in photography. The increased convenience of flexible films allowed professional photographers to shoot more pictures under a greater variety of conditions; it also created a new amateur market which quickly became the economic foundation of the photo industry. Nitrate film remained in production in various formats, until the early 1950's.

As a photographic support it had some serious disadvantages. Nitrate film was, and is, highly flammable, it releases hazardous gases when it deteriorates. Large quantities of nitrate film has caused several disastrous fires. Due to the instability of cellulose nitrate, much of our photographic legacy from this period is disappearing.

Aphotographic collection that contains any flexible, transparent film negatives from the time period of 1890-1950 has nitrate film in it. These negatives need **special attention** and should immediately be separated from other negatives. Deteriorated nitrate negatives are easy to identify, but nitrate negatives in good condition are almost indistinguishable from other types of transparent films. There are four ways to identify nitrate negatives.

1. Edge printing. Many manufacturers stamped professional sheet films with an identification along one border. The words generally identified the manufacturer and the type of film: nitrate or safety. Unfortunately edge printing was not done by all manufacturers; nor was it done on early nitrate negatives, nor on some roll film formats. Amateur roll films were not marked but can be identified by their tendency to curl into very tight scrolls. Later roll films were coated on both sides to prevent such curling. A "V" notch code (1st from the edge) can also identify Kodak sheet film (prior to 1949) as nitrate. *(See Figure 1. below)*

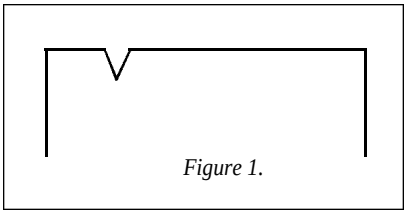

Figure 1.

2. Dating Information. The dates Eastman Kodak stopped the manufacture of nitrate film follow. If a negative can be accurately dated, either by subject or by the photographer's notes, it is possible to determine if it is nitrate film.

Type of Film	Last Yearof Nitrate Manufacture
X-ray films	1933
Roll films in size 135	1938 (A)
Portrait and Commercial sheet films (B)	1939
Aerial films 1942 Film Packs (C)	1949
Roll films in sizes 616, 620, etc. (D)	1950
Professional 35mm Motion Picture films (E)	1951

Notes:

(A) It has always been a common practice for photographers to purchase bulk rolls of 35mm motion picture film and respool it into cassettes for still camera use. So it is possible to find still camera negatives on nitrate film for an additional 13 year period after this date.

(B) Nitrate sheet film tends to have a very thick and rigid base. Professional sheet film negatives will also have notches on one corner. These notches are used by photographers to determine the emulsion side in the dark.

(C) Film pack negatives were produced in the same sizes as sheet film. Film packs used a much thinner and a very flexible based film. These negatives will feel like roll film. They lack a notch code, but may have a negative number, generally 1 through 12.

(D) These sizes were called amateur roll film formats. Most families probably have a small number of these negatives stored in their home with no idea of the hazard they present.

(E) Professional 35mm motion picture film represents the greatest hazard. All nitrate 35mm motion picture film should be duplicated by an authorized laboratory. Then the nitrate motion picture film should be disposed of through the local fire marshall or a hazardous materials disposal service. NOTE: 16mm, regular 8, and super 8 movie formats were considered amateur formats and were always made on a safety film base.

Unfortunately Eastman Kodak is the only manufacturer that has supplied any dates on nitrate film production. These dates do not apply to other manufacturers'films. Nor do they give an indication of when Kodak started selling safety films. For example, nitrate sheet film production ended in 1939, but Kodak began test marketing safety based sheet film sometime in the mid 1920's. For most formats there was a carry over period when both types of film were made.

3. Nitrate film-base deterioration. A third means of film-base identification is based on the observations of deterioration characteristics. Nitric oxide, nitrous oxide, and nitrous dioxide are all released as gases from the decomposition of cellulose nitrate. In the presence of atmospheric moisture, these gases combine with the water to form nitric acid. The formation of nitric acid acts to further degrade the cellulose nitrate film, it can destroy enclosures in which the negatives are stored, and it can also damage materials in close proximity to the collection.

Institutions should isolate and properly store cellulose nitrate materials because of their extreme flammability, especially when in a deteriorated condition. They should be stored in a controlled environment of relatively low humidity or, ideally in cold storage.

Cellulose nitrate decomposition can be very rapid. Deterioration is generally categorized in six progressive stages:

Level 1 No deterioration.

Level 2 The negatives begin to yellow and mirror.

Level 3 The film becomes sticky and emits a strong noxious odor (nitric acid).

Level 4 The film can become an amber color and the image begins to fade.

Level 5 The film is soft and can weld to adjacent negatives, enclosures and photographs.

Level 6 The film can degenerate into a brownish acid powder.

Most negatives will retain legible photographic detail into the third stage of decomposition. These negatives may become brittle, but with careful handling can be duplicated. Negatives in the fourth, fifth, and sixth stages of decomposition generally have no legible image and should be either placed in cold storage or duplicated.

4. Testing. Tests provide a more exact, but not completely definitive, way of identification. There are four tests, three of which are destructive; they require that a sample be taken from the film-base material in question. Any destructive tests should be performed only after all other identification procedures have been conducted and identification remains uncertain.

a) Polarization:When viewed between cross-polarized filters, polyester and other highly birefringent materials exhibit red and green interference colors like those seen on soap bubbles. Cellulose nitrates and the cellulose acetates do not show these interference colors. The Polarization Test can be performed with the simple viewer described below.

To use the viewer unfold the viewer and place a corner of the material in question over one polarizing filter. Close the viewer and hold the viewer up to a light source. Tilt viewer back-and-forth and side-to-side, red and green

interference colors will be most apparent in clear areas. If a material is badly deteriorated, examine it on a light table with one polarizing filter underneath it and one on top of it.

Instructions for Making a Viewer

1. Tape together two pieces of mat board along their long edge.

2. At the left corner of each mat board split an area slightly larger than the polarizing filter.

3. Cut a hole in each split area smaller than the polarizing filter.

4. Slip polarizing filters into each split board. Be sure to place the filters so that they are almost at cross polars to one another. This will be at the point at which they block the most light passing through them.

5. Apply double-sided tape to reattach the split boards and to hold the filters in place. (Polarizing filters are available at toy stores in many children's science kits.)

b) **Diphenylamine Test:** *Handle this solution with caution. It contains 90% sulfuric acid!* A solution of diphenylamine and sulfuric acid can be used to identify cellulose nitrate. In this solution cellulose nitrate turns a deep blue color. Cellulose acetate and polyester do not produce this color. However, cellulose nitrate is used in very small amounts in the manufacture of cellulose acetate and polyester products. This "subbing layer" does not appear to effect either the longevity or the safety of these materials, but may cause a very faint blue tinge to be seen in the support of the cellulose acetates and polyester.

Place sample on a microscope slide and apply a drop of the prepared solution. After one minute, a cellulose nitrate sample will turn completely blue while the cellulose acetates and polyester will not. In some cases, a large cellulose nitrate sample may exhaust the solution and no blue color will form. Therefore, to confirm a negative test, apply two more drops and wait another minute to confirm that the sample is not cellulose nitrate.

The solution is somewhat sensitive to light. Before testing unknowns, test the efficacy of the solution with a known sample of cellulose nitrate such as DUCO Cement or UHU All-Purpose Clear Adhesive.

Instructions for the preparation of this solution can be found in: Canadian Conservation Institute. (1989). "The diphenylamine spot test for cellulose nitrate in museum objects." CCI Notes (17/2).

c) **Burn Test:** *Do not perform in your collection! Cellulose nitrate is extremely difficult to extinguish.* The burn test uses the flammable nature of cellulose nitrate for identification since both the cellulose acetates and polyester are much less flammable. Cellulose nitrate burns quickly and has a characteristic yellow flame. Having known materials for comparison is particularly important for this test.

Hold sample vertically with metal tongs. Be sure to ignite the strip from the top, only cellulose nitrate will burn downwards. For safety, have a large container of water nearby.

d) **Float Test:** *Trichloroethylene is toxic and a carcinogen! Conduct this test in a well-ventilated area, wear rubber gloves, and use with extreme caution.* The float test may be used to identify film base types due to their differing densities. Cellulose nitrate being the most dense will sink, while cellulose acetate will rise to the top. Polyester should remain in the center of the solution.

Results from this test may be difficult to interpret because deteriorated acetate film may sink to the bottom like nitrate film. Another complicating factor is that the specific gravities for cellulose nitrate and the cellulose acetates fall within a fairly broad range which may cause materials to behave differently. As with the other tests, having a known sample for comparison can be extremely helpful.

Place sample in a test tube of trichloroethylene. Shake test tube so sample is completely immersed. Observe location of sample in the liquid.[1]

ACETATE FILM-BASE

Nitrate film was, and is, ***highly flammable***. It releases hazardous gases, when it decomposes naturally. Beginning in the mid 1920's, it was slowly replaced with cellulose acetate film-base (cellulose diacetate, cellulose acetate propiarate, cellulose acetate butyrate and cellulose triacetate.) It became known as "Safety" film. However, the cellulose acetates do have stability problems. The deterioration of cellulose acetate is autocatalytic, like that of cellulose nitrate; once deterioration has begun the degradation products induce further deterioration. It affects the plastic support of acetate film, causing it to become acidic, to shrink, and to give off an odor of acetic acid (vinegar).

A useful tool in helping determine the amount of acid vapor present, and gain an overview of the condition of acid-vapors in an entire collection are "A-D Strips" (acid-detecting strips) from the Image Permanence Institute at the Rochester Institute of Technology in Rochester, NY. They are acid-base indicator papers which turn from blue to green to yellow in the presence of acid, and measure the extent of the acetate base support deterioration.

As with nitrate negatives, deteriorated acetate negatives are easy to identify, but in good condition are almost undistinguishable from other types of plastic films. There are also four ways to identify acetate film-base negatives.

1. Edge printing. Some cellulose acetate film-base materials have the word "Safety" contained in the border. Those manufactured prior to 1955 are definitely acetate. Edge printing may also include the name of the manufacturer, manufacturing code data, and notch codes. "The Acetate Negative Survey Final Report" by Horvath is an invaluable resource for identifying cellulose acetates using this information.[2]

2. Dating information:

	Sheet Film	Roll Film
Cellulose diacetate	1925 - 1950	1920's - 1935
Cellulose acetate propionate	1930 - 1945	1920 - 1945
Cellulose acetate butynate	1935 - present	
Cellulose triacetate	1945 - present	1945 - present

3. Acetate film-base deterioration: When acetate-base film is stored in a poor environment at high heat and humidity, or exposed to acidic vapors from nearby degrading film, cellulose acetate undergoes chemical reactions within the plastic support to form acetic acid. It causes the support to become acidic, brittle, and shrink. This in turn spreads into the gelatin emulsion or into the air creating a harsh, acidic odor. It is a slow form of chemical deterioration known as "Vinegar Syndrome". It places acetate film at risk, and then deterioration may place otherwise stable photographic materials at risk as well.

Deterioration is generally catalogued in six progressive stages:

Level 1	No deterioration
Level 2	The negatives begin to curl and they can turn red or blue.
Level 3	The oneset of acetic acid (vinegar smell); also shrinkage and brittleness.
Level 4	The warping can begin.
Level 5	The formation of bubbles and crystals in the film.
Level 6	The formation of channeling in the film.

SELECTED BIBLIOGRAPHY

Adelstein, P.Z. and J. L. McCrea. (1981). "Stability of processed polyester base photographic films." Journal of Applied Photographic Engineering. 7 (6, August): 160-167.

Calhoun, J. M. (1953). "Storage of nitrate amateur still-camera negatives." Journal of the Biological Photographic Association 21 (3, Aug.): 1-13.

Carroll, J. F. and J. M. Calhoun. (1955). "Effect of nitrogen oxide gases on processed acetate film." Journal of the SMPTE 64 (Sep.): 501-507.

Cummings, J. W., A. C. Hutton, and H. Silfin. (1950). "Spontaneous ignition of decomposing cellulose nitrate film." Journal of the SMPTE 54 (March): 268-274.

Eastman Kodak. (1984). Copying and Duplicating in Black-and-White and Color. Kodak Publication M-1. Rochester, NY.

Fischer, M. and A. Robb (1993). "Guidelines for care and identification of film-base photographic materials." Topics in Photographic Conservation 5: Washington, DC: AIC.

Horvath. D. G. (1987). The Acetate Negative Survey Final Report. Louisville, KY: Ekstrom Library Photographic Archives, University of Louisville.

Image Permanence Institute. The IPI Storage Guide for Acetate Film. Rochester, NY: Image Permanence Institute, 1993.

Puglia, S. T. (1989). "Negative duplication: evaluating the reproduction and preservation needs of collections." Topics in Photographic Conservation 3: 123-134. Washington, DC: AIC.

Reilly, J. M., P.Z. Adelstein, and D. Nishimura. (1991). Preservation of Safety Film. Rochester, NY: Image Permanence Institute, Rochester Institute of Technology.

Sturge, J. M. , ed. (1977). Neblette's Handbook of Photography and Reprography — Materials, Processes and Systems, Seventh Edition. New York: Van Nostrand Reinhold Co.

Wilhelm, H. and Carol Bower (1993). Permanence and Care of Color Photographs. Grinnell, Iowa: Preservation Publishing Co.

Young, C. (1989). "Nitrate film in public institutions." History News 44 (4 July/August 1989).

LISTOFSUPPLIERS

Conservation Resources International, L.L.C., 8000-H Forbes Place, Springfield, VA 22151, (800) 634-6932

Image Permanence Institute, Rochester Institute of Technology, 70 Lomb Memorial Drive, Rochester, NY14623-5604, (716) 475-5199

Light Impressions, P.O. Box 22708, Rochester, NY14692-2708, (800) 828-6216

Metal Edge, Inc. Archival Storage Materials, 6340 Bandini Boulevard, Commerce, CA90040, (800) 862-2228

ENDNOTES

[1]Testing section from Fischer & Robb. (1993). "Care and Identification of Film-Base Photographic Materials." Topics in Photographic Preservation. Volume 5. American Institute for Conservation - Photographic Materials Group, Washington, DC

[2]Horvath, D.G. (1987). The Acetate Negative Survey Final Report. Louisville, KY: Ekstrom Library Photographic Archives, University of Louisville.

BOSNIAN TRIAGE: A Report on Efforts to Preserve Cultural Collections in the Wake of War

In May 2002, NEDCC's Senior Paper Conservator, Walter Newman traveled to Sarajevo to meet with colleagues, visit cultural institutions, and the conservation facilities at the National Library and University of Bosnia and Herzegovina. The fact-finding trip was made possible by a grant from the Trust for Mutual Understanding.

Mr. Newman's itinerary began at the National Library where he met with administrators, viewed special collections, and toured the new conservation facility, built with European funding. The staff of the National Library was inspired by NEDCC's model of organization as a regional center and would like the institution to become a regional conservation center. Although they have excellent equipment, their lack of conservation training has limited the work that can be performed. They are eager to obtain further training through internships.

Mr. Newman visited the former National Library's building called "Vijecnica". A prime target during the war in the early 1990's, this building's shell still stands while its interior and the majority of its contents have been ruined. He went on to visit the Gazy Husrev Begova Library, Sarajevo's oldest library. Their important collections include early Islamic and Oriental manuscripts, which fortunately survived the war.

A visit was next made to the Bosnian Foundation, which operates a museum of Bosnian history and culture as well as a research library. With a single full-time conservator on staff, this was the only other institution where Mr. Newman observed conservation treatments being carried out. The next day, Mr. Newman traveled to Mostar, about a two-hour drive from Sarajevo. Formerly the site of a lengthy and brutal inter-ethnic war, Mostar is now divided into Muslim and Croat sectors. Consequently, its cultural institutions are divided along ethnic lines, with each group having its own library and archives. Mr. Newman was able to visit the Muslim municipal institutions and found

The poor storage conditions at the City Archives in Mostar illustrate the damage the war and ensuing social disruption have inflicted on cultural collections.

Eman Bilcevic, paper conservator at the National Library and University of Bosnia and Herzegovina, examines some of the manuscripts he is conserving in the new lab.

overcrowded storage conditions, collections stored in damp basements, and whole buildings without electricity because the institutions could not afford to pay for utilities.

On the last day of his visit, Mr. Newman visited the National Archives in Sarajevo. Here he found conditions similar to those in Mostar, but on a larger scale. The building and its contents bear the scars of gunfire. Mr. Newman saw many books and documents with bullet holes and other war damage. Operating without microfilming or conservation services of their own for several years now, the staff at the National Archives expressed an interest in working out an arrangement with the National Library to address their large-scale conservation needs. At the Zemaljski Museum, located on the former front line of the war, Mr. Newman saw more damaged and burnt materials.

The last institution Mr. Newman visited was the Institute for Oriental Studies. Once the home of many important and prestigious collections, the entire Institute, its collections and catalogs, were burned in the war. All that remains of the Institute, some 20 bound manuscripts with heavy fire damage, fits into two cardboard boxes.

In summing up his observations about Bosnia, Mr. Newman was struck not only by the great losses endured by libraries and archives, but also by the staff members' spirit of survival and their work toward renewal. The war literally wounded and destroyed much of a rich culture's heritage. The National Library's efforts to rebuild and provide leadership in the face of massive financial and physical obstacles, has indeed been admirable.

NEDCC Presents: School for Scanning: Creating, Managing, & Preserving Digital Assets

April 23-25, 2003
The Getty Center, Los Angeles, California

What is the *School for Scanning*? This conference, taught by some of our nation's leading experts in digital library development, provides current, essential information for managers of paper-based collections (including photographs) who are seeking to create, manage, and preserve digital assets. Although significant technical content will be presented, this is not a technician-training program.

For more information on registration for School for Scanning, and a detailed agenda, please see the NEDCC Website at <www.nedcc.org>

This conference is funded in part by the National Endowment for the Humanities. It is co-sponsored by Amigos Library Services, Inc., the Balboa Art Conservation Center, and the J.Paul Getty Trust.

Grant Information

A number of public funding agencies make grant funds available for preservation surveys, conservation treatment, microfilming, and duplication of photographic materials. As a service to its clients, NEDCC has compiled information about some upcoming grant opportunities. Many of the grant programs are being reorganized. Call the granting agency for eligibility requirements, new guidelines, and deadline dates.

Institute of Museum and Library Services
1100 Pennsylvania Avenue NW
Washington, DC 20506
(202) 606-5227
<www.imls.gov>
Conservation Project Support Program:
annual deadline is Fall 2003.
Funding to museums for conservation activities including treatment, surveys, and implementation.

National Endowment for the Humanities
Division of Preservation and Access
1100 Pennsylvania Avenue NW, Rm. 802
Washington, DC 20506
(202) 606-8570
<www.neh.gov>
NEH's Division of Preservation and Access funds projects that will create, preserve, and make available cultural resources of importance for research, education, and lifelong learning in the humanities. Categories of support include:
Stabilizing Humanities Collections:
deadline October 1, 2003
Preservation Assistance Grants:
deadline May 15, 2003
Preservation Education and Training:
deadline July 1, 2003
Preserving and Creating Access to Humanities Collections: *deadline July 15, 2003*

National Endowment for the Arts
1100 Pennsylvania Avenue NW
Washington, DC 20506
682-5400
<www.nea.gov>
Funding is divided into four themes including ***Creation and Presentation, Heritage and Preservation, Education and Access, and Planning and Stabilization.***
Check website for deadline dates and guidelines.

National Historical Publications and Records Commission
National Archives Building (Archives I) Rm. 607
Washington, DC 20408
(202) 501-5610
<nhprc@arch1.nara.gov>

Lower Hudson Conference
Conservation Treatment Support Grant
<www.lowerhudsonconference.org>
The Conservation Treatment Grant Program, administered by Lower Hudson Conference (LHC) in association with the Museum Program of the New York State Council on the Arts (NYSCA), provides support for treatment procedures to aid in stabilizing and preserving objects in collections of museums and historical organizations in New York State.
Check website for deadlines and guidelines.

Maine State Museum, Archives & Historical Board
84 State House Station
Augusta, ME 04333-0084
(207)287-5795
<www.state.me.us>
<maine.cric@state.me.us>
Archive Projects
Deadlines: February 1, 2003 and June 1, 2003
Grants for archive projects in nonprofit historical records repositories in the state of Maine.
New Century Preservation Grants Program
Matching grants program designed to help meet the collection preservation needs of Maine's historical societies, museums, and archives.
Check website for deadlines

Massachusetts Board of Library Commissioners
648 Beacon Street
Boston, MA02215
(800) 952-7403
Contact: Gregor Trinkaus-Randall
<gtrinkaus-randall@state.ma.us>
LSTA Grants
Funding for preservation including surveys, microfilming, and conservation treatment. Eligibility has been extended to include all types of libraries that belong to regional networks.

Massachusetts Historical Records Advisory Board
Documentary Heritage Grants - three cycles
<www.state.ma.us>
Any nonprofit in Mass. is eligible. Funding for documentation planning of community history, which can include microfilming and preservation surveys.
Contact: Field Archivist or Historical Records Coordinator (617) 727-2816
Check website for deadlines and guidelines.

New York State Library
Division of Library Development
New York State Library
10-C-47 Cultural Education Center
Albany, NY12230
(518) 474-6971
<www.nysl.nysed.gov>
Conservation/Preservation Discretionary Grant Program:
Annual deadline December 2003
Funding to preserve unique library materials in all types of nonprofit institutions within New York State.

Save America's Treasures
<www.saveamericastreasures.org>
<www.nthp.org>
Preservation organization formed by public-private partnership between the National Park Service and The National Trust for Historic Preservation awards grants for conservation and preservation projects on collections of national significance.
Check websites for deadlines and guidelines.

Vermont Museum and Gallery Alliance
c/o Billings Farm Museum
P.O. Box 489
Woodstock, VT 05091
1-800-639-2330
<www.vmga.org><vccp@kingcon.com>
Vermont Collections Care Grants
Deadline: March 31, 2003

NEDCC is grateful for the support of:

NORTHEAST DOCUMENT CONSERVATION CENTER
100 BRICKSTONE SQUARE
ANDOVER, MA 01810

NEDCC's Services Include:

- ***paper conservation***
- ***book conservation***
- ***photograph conservation***
- ***preservation microfilming***
- ***photographic copying***
- ***surveys and consultation***
- ***workshops and seminars***
- ***disaster assistance***

NON-PROFIT
ORGANIZATION
U. S. POSTAGE
PAID
PERMIT NO.259
ANDOVER, MA

Hemingway's Legacy: A U.S./Cuban Effort

In November 2002, Cuban and American officials formally signed an accord to preserve and provide access to the Hemingway papers housed at the Hemingway Museum near Havana. The goals are to preserve original documents, reformat the collection, and deposit a microfilm copy at the John F. Kennedy Library in Boston so that it will be accessible to American scholars.

NEDCC's Executive Director, Ann Russell, along with Hemingway family members and scholars, looked on as President Fidel Castro and Representative James McGovern, Democrat of Massachusetts, witnessed the signing of the historic agreement outside Hemingway's home known as *Finca Vigia* or Lookout Farm. Since the 1960's, the home has been maintained as a museum, carefully tended by the Cuban Ministry of Culture.

A grant from the Rockefeller Foundation to the Social Science Research Council (SSRC) supports the first phase of this groundbreaking international initiative to preserve and provide access to the personal papers of the Nobel Prize winning author. The archival collection includes about 3,000 photographs, 9,000 books with margin notes by the author, and 3,000 manuscripts, letters between Hemingway and a host of 20th-century celebrities, and love letters. The collection is also very telling of the author's daily routine as he regularly recorded his weight, blood pressure, and pulse on an inside cover of *Wuthering Heights*.

NEDCC consultants Mildred O'Connell and Susan Wrynn, Director of Reprographic Services, performed a survey of preservation needs of the collection in March 2002. Their recommendations are helping to shape the plan of work for the project. The report, which praises the Museum staff for protecting and preserving the collection, was termed "thoughtful and sensitive" by NEDCC's Cuban counterparts. SSRC, a long-time supporter of NEDCC's training and outreach efforts in Cuba, is coordinating the project and spearheading the fundraising efforts.

Hemingway's desk at Finca Vigia *in Havana.*