

LCM

LIBRARY OF CONGRESS MAGAZINE
JULY/AUGUST 2024

SAVING SOUNDS

HOW THE LIBRARY PRESERVES
OUR AUDIO HERITAGE

Inside

The Bible That Helped Revive
An Extinct Native Language

Our All-Star Selections:
Favorite Baseball Items

Plus

Einstein's Love Letters

A Compass Points to Mecca

The Gerry Behind
'Gerrymander'



FEATURES

08

The Way to Mecca

Unusual device points the faithful to Islam's holiest site for their daily prayers.

14

Saving Sounds

Library specialists work to preserve the audio heritage of America.

20

Capturing Airwaves

Collections chronicle the history of radio broadcasting.

■ The Library's audio collection extends from late 19th-century recordings etched into wax to albums like those shown above to the most recent achievements in digital sound recording.
Shawn Miller

LCM

LIBRARY OF CONGRESS MAGAZINE

JULY / AUGUST 2024

VOL. 13 NO. 4

Mission of the Library of Congress

The Library's mission is to engage, inspire and inform Congress and the American people with a universal and enduring source of knowledge and creativity.

Library of Congress Magazine is issued bimonthly by the Office of Communications of the Library of Congress and distributed free of charge to publicly supported libraries and research institutions, donors, academic libraries, learned societies and allied organizations in the United States. Research institutions and educational organizations in other countries may arrange to receive Library of Congress Magazine on an exchange basis by applying in writing to the Library's Director for Acquisitions and Bibliographic Access, 101 Independence Ave. S.E., Washington DC 20540-4100. LCM is also available on the web at loc.gov/lcm/. All other correspondence should be addressed to the Office of Communications, Library of Congress, 101 Independence Ave. S.E., Washington DC 20540-1610.

news@loc.gov

loc.gov/lcm

ISSN 2169-0855 (print)

ISSN 2169-0863 (online)

Carla Hayden
Librarian of Congress

April Slayton
Executive Editor

Mark Hartsell
Editor

Ashley Jones
Designer

Shawn Miller
Photo Editor

Contributors

Matt Barton

Chuck D

Mark Dimunation

Rob Friedrich

Jennifer Harbster

Sahar Kazmi

Josh Levy

Wendi A. Maloney

Rachel McNellis

María Peña

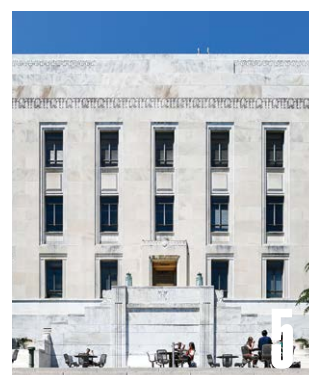
Cynthia Smith

Helena Zinkham

■ **On the cover:** Audio preservation specialist Melissa Widzinski cleans a historical recording at the Library's National Audio-Visual Conservation Center in Culpeper, Virginia. *Shawn Miller*

DEPARTMENTS

- 2 **Online Offerings**
- 3 **Off the Shelf**
- 4 **Extremes**
- 5 **Favorite Place**
- 6 **Page From the Past**
- 10 **Curator's Picks**
- 12 **Technology**
- 13 **My Job**
- 24 **Around the Library**
- 25 **News Briefs**
- 26 **Shop the Library**
- 27 **Support the Library**
- 28 **Last Word**

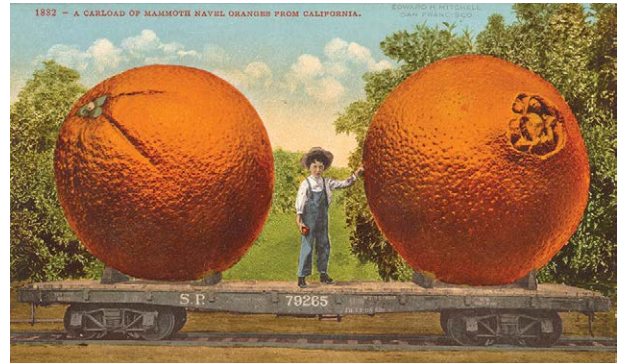
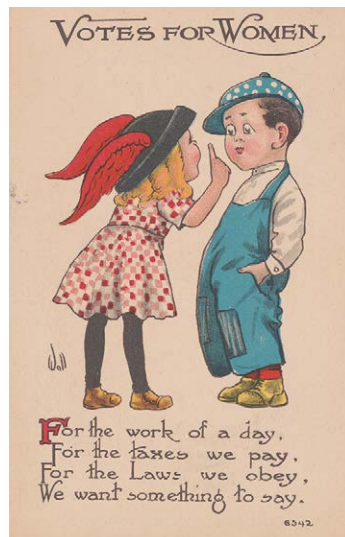


CONNECT ON

loc.gov/connect



ONLINE OFFERINGS



■ The Library recently placed thousands of early 1900s postcards such as these online. *Prints and Photographs Division*

POSTCARDS FROM AMERICA

'Real photo' cards reveal turn-of-the-century U.S.

Greetings from Washington, D.C.!

And from Gordon, Nebraska; Black River Falls, Wisconsin; San Francisco, California; and countless other big cities and tiny hamlets spread across the vastness of the United States.

The Library's Prints and Photographs Division recently placed online more than 8,000 "real photo" postcards from the early 1900s – cards that preserve images of life as it existed in turn-of-the-century America.

The production and use of postcards exploded in the United States after a federal law, passed in 1907, allowed for messages to be written on the backs of the cards along with the addresses. Previously, postcards were widely used, but messages could only be added to the fronts of cards, which detracted from the images.

At a time when relatively few households had a telephone, postcards provided quick and convenient communication. Many people also collected cards as souvenirs in albums.

Large commercial companies fed this new market with millions of cards featuring popular landmarks and tourist sites,

humorous pictures, holiday greetings and advertisements. Local photographers participated in the craze by printing their negatives on a photographic card stock, typically 3½ by 5½ inches in size.

Their images show an America hard at work and play, and the country's innate sense of humor. In South Dakota, men top off a giant haystack. A boy rides an enormous prize rooster at the Minnesota State Fair. In Olustee, Oklahoma, a couple poses in the back seat of their Overland automobile, their dog in the driver's seat, paws on wheel.

And they show an America moving ahead into a new, modern era: A biplane flies down Main Street in Mayville, Wisconsin; an illustrated card from 1913 calls for votes for women.

When photographers expected large sales for a card, they could deposit a copy of the card for copyright protection. The Prints and Photographs Division now preserves thousands of those copyright deposit postcards.

The Collections Digitization Division scanned all the cards in 2023, fronts and backs – now all waiting online to be explored.

–Helena Zinkham is chief of the Prints and Photographs Division.

MORE INFORMATION

Postcards research guide
guides.loc.gov/postcards

NORTH AMERICA'S FIRST BIBLE

Today, Eliot's translation helps resurrect an extinct Native language.

After arriving in the Massachusetts Bay Colony in 1631, English Puritan minister John Eliot made history not only with his steadfast mission to convert Native Americans to Christianity but also for his evangelical method: translating the Bible into the Wampanoag language of the region's Algonquin tribes.

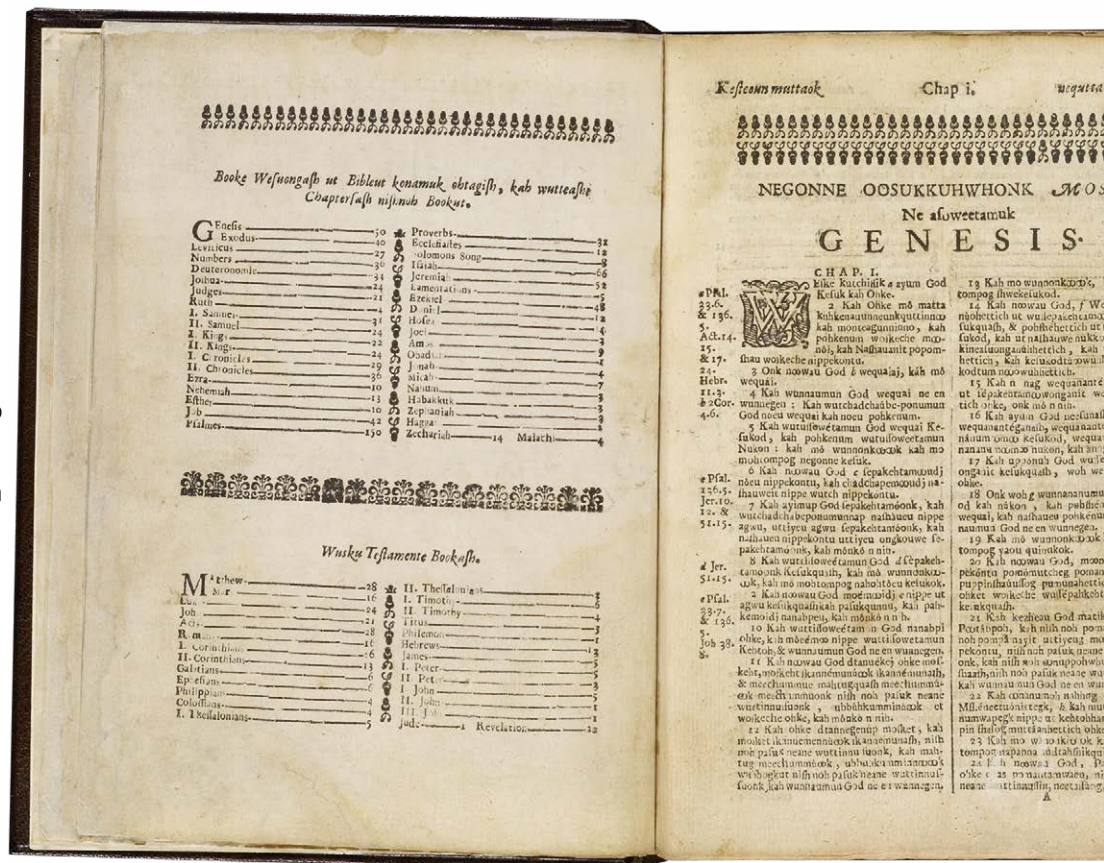
Eliot believed Indigenous communities would be more receptive to the message of Christianity if the holy scriptures were written in their language, also known as Natick. He learned the previously unwritten language and spent years translating the Geneva Bible into it, getting significant help from Native Americans such as James Printer and John Nesutan, according to the Massachusetts Historical Society.

Printed in Cambridge between 1660 and 1663, the Eliot Indian Bible today represents a landmark in printing history: It was the first Bible printed in North America in any language.

Eliot was a pivotal figure among the Puritans. He helped settle the intertribal communities of Christian converts, called "praying towns," that dotted the New England landscape between 1646 and 1675. The establishment of these communities – 14 in total – was part of an attempt to impose Puritan rules, mores and lifestyles on recent Indigenous converts.

Eliot's efforts to convert more Natives ultimately failed, in part because of bubbling animosity between white Colonists and the Wampanoags. And most copies of his Bible were destroyed during King Philip's War (1675–1676), a conflict that took a toll on the region's Indigenous population. A second edition of the Eliot Bible was published in 1685 – the edition held by the Library today.

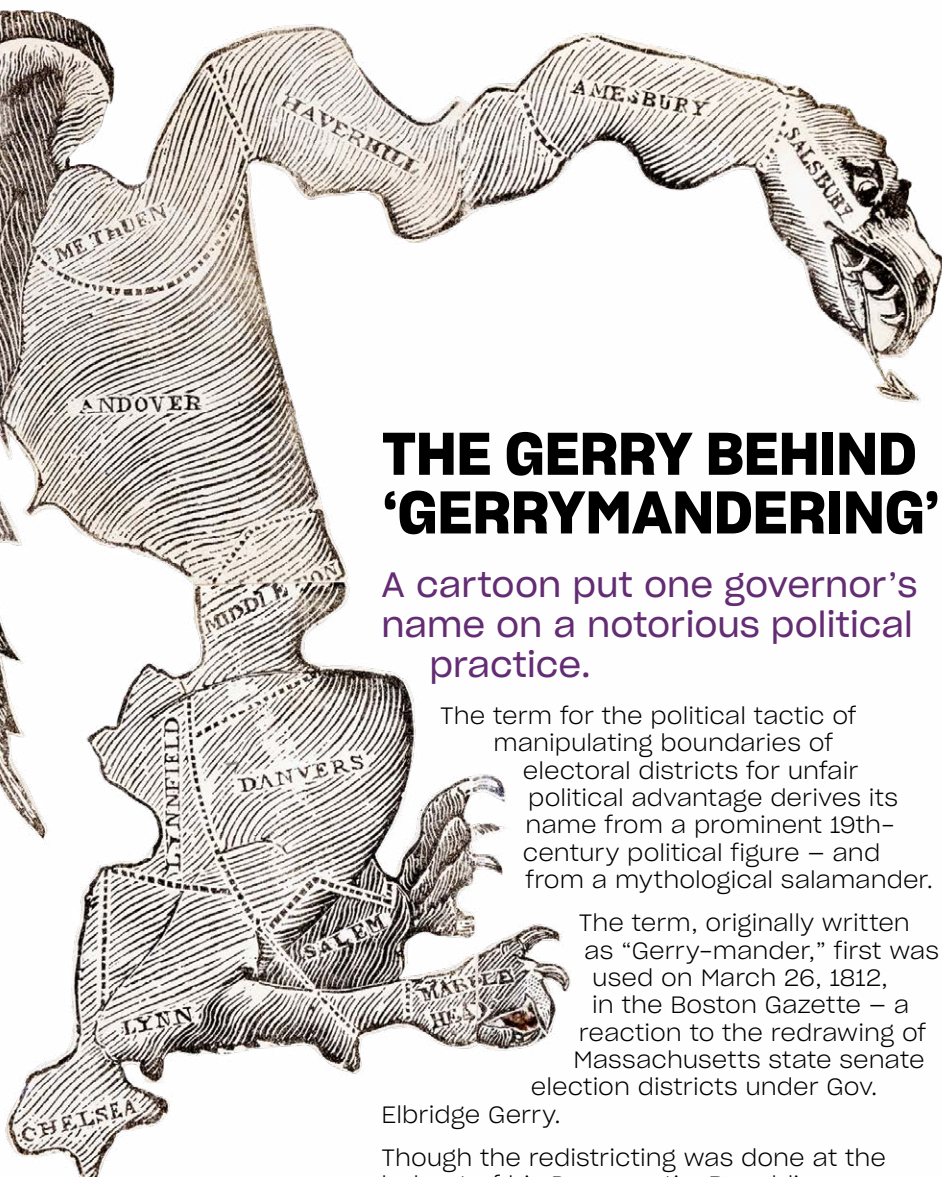
■ Puritan minister John Eliot translated the Bible into the Wampanoag language in the mid-17th century. This copy held by the Library is the second edition, published in 1685. Rare Book and Special Collections Division



In recent decades, the Wampanoag nation has used the Eliot Bible as a tool to help resurrect its ancestral language, which declined soon after the Mayflower Pilgrims arrived and went extinct in the 19th century.

Founded by MIT-trained linguist Jessie Little Doe Baird in 1993, the Wôpanâak Language Reclamation Project uses the Eliot Bible and archival records to bring the language back to Wampanoag households, one student at a time.

—María Peña is a public affairs specialist in the Office of Communications.



THE GERRY BEHIND 'GERRYMANDERING'

A cartoon put one governor's name on a notorious political practice.

The term for the political tactic of manipulating boundaries of electoral districts for unfair political advantage derives its name from a prominent 19th-century political figure – and from a mythological salamander.

The term, originally written as “Gerry-mander,” first was used on March 26, 1812, in the *Boston Gazette* – a reaction to the redrawing of Massachusetts state senate election districts under Gov. Elbridge Gerry.

Though the redistricting was done at the behest of his Democratic-Republican Party, it was Gerry who signed the bill in 1812. As a result, he received the dubious honor of attribution, along with its negative connotations.

Gerry, in fact, found the proposal “highly disagreeable.” He lost the next election, but the redistricting was a success: His party retained control of the legislature.

One of the remapped, contorted districts in the Boston area was said to resemble the shape of a mythological salamander. The newly drawn state senate district in Essex County was lampooned in cartoons as a strange winged dragon, clutching at the region.



■ Elkanah Tisdale used these wooden blocks to print the original image of the “gerrymander” shown at left. *Geography and Map Division (blocks); Rare Book and Special Collections Division (print)*

The person who coined the term gerrymander never has been identified. The artist who drew the political cartoon, however, was Elkanah Tisdale, a Boston-based artist and engraver who had the skills to cut the blocks for the original cartoon.

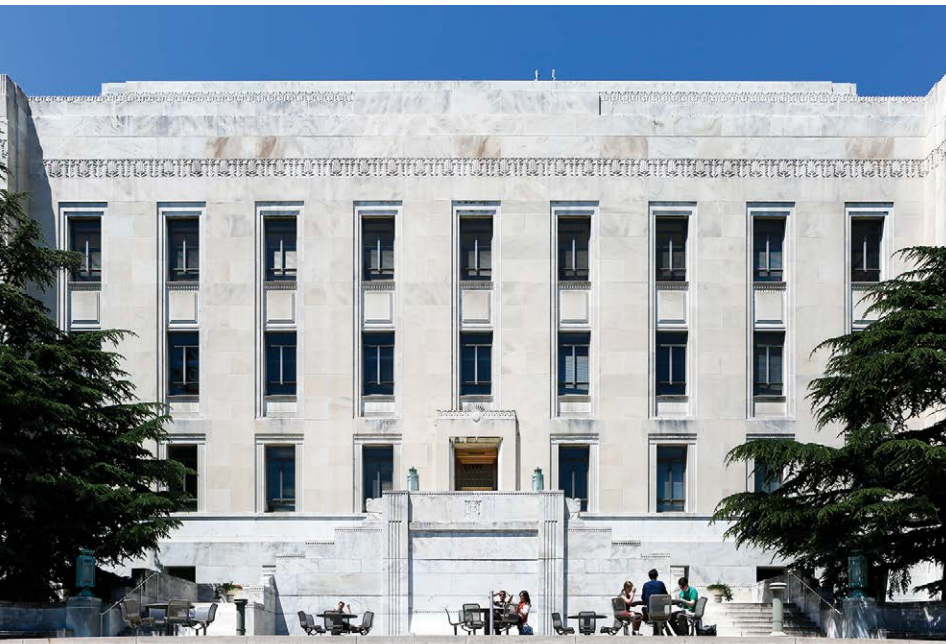
Gerry was a signer of the Declaration of Independence, a two-term member of the House of Representatives, governor of Massachusetts and U.S. vice president under James Madison. His name, however, was forever negatively linked to this form of political powerbroking by the cartoon shown here, which often appeared with the term gerrymander.

The Library's Rare Book and Special Collections Division holds the original print of the image, and the Geography and Map Division holds Tisdale's original woodblocks – preserving the origins of the name for a political practice that continues over two centuries later.

–Mark Dimunation is the former chief of the Rare Book and Special Collections Division.

FAVORITE PLACE

85 YEARS OF THE ADAMS BUILDING



The year was 1939. Packard became the first automobile company to offer air conditioning. Pan American Airways' Yankee Clipper made its first trans-Atlantic passenger flight. Scientists at Iowa State College developed the prototype for the first digital computer.

For the Library, the year was notable for another event: the opening of the John Adams Building, 85 years ago.

The Adams – originally called the Annex, as in the annex to what is now known as the Thomas Jefferson Building – incorporates traditional beaux arts architectural styles, including Italian Renaissance and classical Greco-Roman details, along with fashionable art deco designs.

At its core, the Adams contains 12 tiers of bookstacks extending from the basement to the fourth floor. Each tier covers 13 acres of space; together, the tiers can hold up to 10 million books. Staff offices and workspaces encircle the bookstacks.

Topping everything off, on the fifth floor, are two high-ceilinged reading rooms adorned with murals by artist Ezra Winters, one paying tribute to Jefferson and the other featuring a procession of colorful characters from Chaucer's "Canterbury Tales" marching across the walls – including a cameo by Chaucer himself.

Architectural sculptor Lee Lawrie adorned the Adams with an array of modernist details and deco designs: Sculptural reliefs adorn bronze doors; plant motifs in metal and stone grow in elevator lobbies and on water fountains, walls and other unexpected surfaces; owls dressed in nickel, aluminum or stone nest about the reading room and on the building's exterior.

The highly symbolic designs and wealth of detail that Winter and Lawrie incorporated into the Adams Building – along with the artistry of many others – make the Adams much more than an annex. It is truly a worthy companion to its older sibling, the historic, magnificent Jefferson Building.

–Jennifer Harbster is head of the Science Reference Section.



SHAWN MILLER; CAROL M. HIGHSMITH ARCHIVE/PRINTS AND PHOTOGRAPHS DIVISION

■ Albert Einstein, shown at right with Margarita Konenkova, wrote these letters to her during their affair in the mid-1940s. *Manuscript Division (letters); Getty Images (photo)*

LOVE AND INTRIGUE AT PRINCETON

Small set of letters reveals Einstein's brief affair with Margarita Konenkova.

In 1945, Margarita Konenkova was returning to Russia with her homesick husband, sculptor Sergey Konenkov. Before she left, she entrusted her New York neighbor with six letters received from Albert Einstein during their passionate affair. The neighbor left instructions that, in case of her death, the letters be “burned without further ado.”

The letters were never burned. Instead, they ended up in the Library of Congress, closed to researchers until 2019.

Einstein, clearly infatuated, penned the letters between 1944 and 1945. One includes a sketch of a “Half-Nest,” a cozy room that resembles his home study. Though the sketch is simple, Einstein clarifies, he was not drunk when drawing it. He simply wished to capture the space he most associated with Konenkova.

The letters mix Einstein's humanity with his genius. We see him incapacitated by illness, grounding his sailboat in stormy weather, railing against birthday parties as “stupid bourgeois affairs” but attending them anyway and smoking pipes that Konenkova sent him.

Then he becomes the renowned physicist again, debating Robert Oppenheimer, Bertrand Russell, Wolfgang Pauli and Kurt Gödel in his home. Occasionally, politics emerge. “I admire Stalin's sagacity,” Einstein declares, without context. “He does it significantly better than the others, not only militarily but also politically.” He worries over nuclear secrecy and calls the growing

alienation between Russians and Russian Americans “a kind of personal expatriation.”

The affair was, of course, a secret. While Einstein was a widower, Konenkova remained married. Still, their friends were discreet. When asked later whether an affair had occurred, one only offered, “I certainly hope so! They were two lonely people.”

THE LETTERS MIX EINSTEIN'S HUMANITY WITH HIS GENIUS. WE SEE HIM INCAPACITATED BY ILLNESS AND THEN DEBATING ROBERT OPPENHEIMER.

In 1994, a Russian newspaper finally revealed the affair. Later, Sotheby's, having read the discredited memoir of an ex-Soviet spymaster, announced that Konenkova had been a spy, pressing Einstein for intelligence about the bomb. Several historians have since declared the claim implausible.

Of course, these letters contain no evidence that Konenkova really was a spy. But they do shed a little light on a clandestine encounter between two lonely people.

—Rachel McNellis is an archivist in the Manuscript Division, and Josh Levy is a historian in the same division.

Sunday.

mal Du hast
wirst an solch
das Dezimalday
solong nicht mit
Gestern fehr

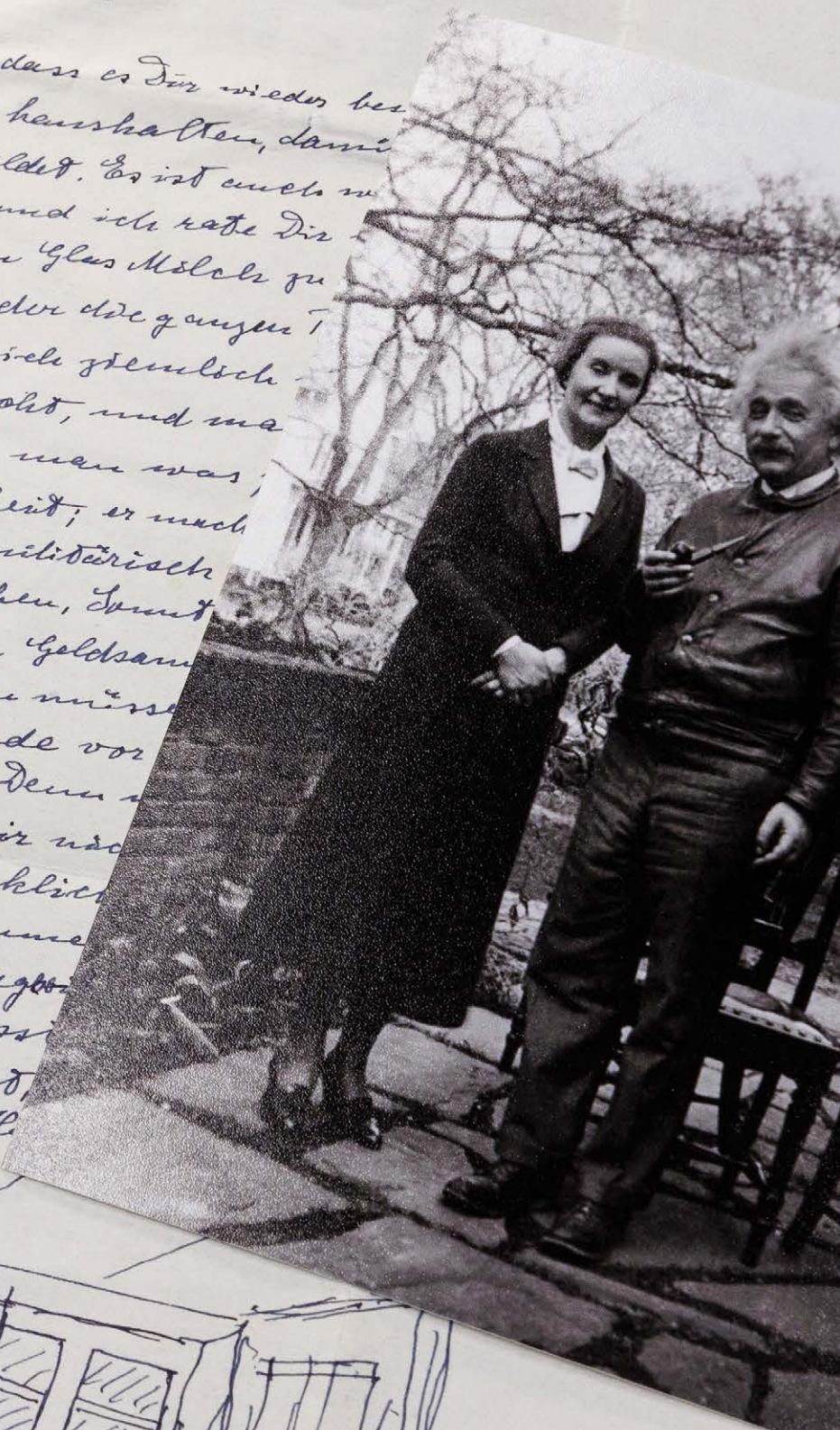
Donnerstag.



Liebe Margarita!

Ich freue mich sehr, dass es Dir wieder bes
Du aber mit Deiner Kraft haushalten, damit
wirklich dauernd zurückbildet. Es ist auch w
das Essen einzunehmen, und ich rate Dir
mässig einmal im Tag ein Glas Milch zu
es verträgt. Ich habe wieder die ganzen
Nächte gearbeitet, sodass ich ziemlich
von selbst geht es eben nicht, und ma
nicht rot.

... wenn man was,
Stalins Klugheit; er macht
, nicht nur militärisch
nicht versprechen, damit
der jüdischen Goldsam
lung werde gehen müsste
Der Wochenende vor
Geburtstag. Dem
han, sodass wir näch
Dich glücklich
ich dich keine
e blöde Bourgeois
st hinauspass
mies kamst,
Es in mehreren Fl
wie es aussieht



An artistic illustration of the Kaaba and the surrounding mosque architecture in Mecca. The Kaaba is a large black cube with gold bands, situated in a courtyard. The mosque features multiple domes, minarets, and arched walkways. The scene is set in a desert environment with palm trees and a patterned rug in the foreground. A large blue circular graphic is overlaid on the left side of the image, containing the title text.

THE WAY TO MECCA

Rare compass points faithful
to Islam's holiest site.

BY CYNTHIA SMITH

Five times each day, millions of Muslims the world over turn toward Mecca in prayer, facing in the direction of the Ka'bah, the black stone considered holy in Islam.

Knowing the correct direction to face – referred to as the “qiblah” – is crucial to all Muslims. And for those hundreds or even thousands of miles over the horizon from Mecca, the qiblah might be difficult to determine.

For centuries, qiblah compasses have helped show the faithful the way by indicating the proper direction.

The Library’s Geography and Map Division recently acquired a remarkable, vibrantly decorated qiblah compass, made in Turkey during the period of the Ottoman Empire. The precise year of the instrument’s creation is not known; however, it is believed to date to the 18th or early 19th century.

Located in western Saudi Arabia about 50 miles from the Red Sea, Mecca is the birthplace of the prophet Muhammad and one of the holiest cities in Islam. Within the city lies the Great Mosque, or Masjid al-Sharif. Situated in the mosque’s center is the Ka’bah – the focus of daily prayers by the faithful.

Muslims, no matter where in the world they may be, pray five times a day facing the Ka’bah. The prayers are based on the phases of the sun: the Fajr (dawn or sunrise), Dhuhr (high noon), ‘Asr (afternoon), Maghrib (sunset) and Isha (evening).

Qiblah compasses help the devout in their worship.

They are simple to use. The outer ring of the base on the Library’s qiblah compass is inscribed in black with the names of scores of cities and regions throughout the Islamic world. One, located at about 5 o’clock on the dial, is written in red: Qustantiniyah, or Constantinople (today’s Istanbul), the capital of the Ottoman Empire.

The compass allows users to locate the correct direction by adjusting the bottom end of the needle to the place or city where they are located and determine the direction of the Ka’bah using the outer point of needle.

Many of these instruments were elaborately decorated. The inside lid of the Library’s is brilliantly illustrated with an image of the Great Mosque and the Ka’bah, encircled by



■ A brilliantly colored image of the Great Mosque (left and opposite) decorates the underside of the lid of this qiblah compass. Geography and Map Division

a ring of pink flowers and green leaves.

The base features a more rudimentary image of the mosque and Ka’bah as well as four images of mihrabs – sacred alcoves in a mosque that indicate the direction of the qiblah. The mihrabs on the base depict the four Sunni schools of Islamic thought: the Shafi’i, Maliki, Hanbali and Hanafi.

The outer lid is decorated with a delicate, circular floral motif encircled by gold-hued bands, all on a green background. Those designs – floral patterns and green and yellow hues – are a hallmark of the Edirnekari style rooted in Edirne, Turkey. Artisans learned those techniques in workshops located in Edirne and Constantinople.

The Geography and Map Division holds many historical scientific instruments. This brilliantly decorated, meticulously crafted instrument, however, represents the first qiblah compass acquired for the collections – a fascinating and practical device that helps the faithful find their way to worship.

–Cynthia Smith is a reference specialist in the Geography and Map Division.

CURATOR'S PICKS

ALL-STAR SELECTIONS

To mark the Midsummer Classic, we chose favorite baseball items from the Library's collections.



PRINTS AND PHOTOGRAPHS DIVISION

THE EARLIEST KNOWN BASEBALL CARD

The Brooklyn Atlantics dominated New York baseball in the early 1860s, winning championships in 1861, 1864 and 1865. Photographer Charles Williamson made this team portrait in 1865. The Atlantics mounted the image on cards and handed them out to fans and to opposing teams – an act of swagger that let opposing teams know who was king of the diamond. The card today is considered the earliest known baseball card in existence.

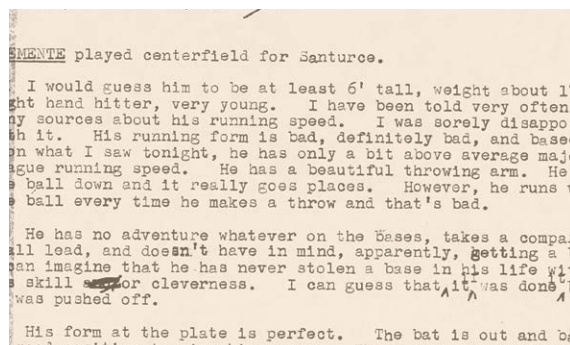
SENATORS WIN WORLD SERIES

WASHINGTON – 40,000 frantic fans see American Leaguers take 12-inning deciding game, 4 to 3
KINOGRAMS

NATIONAL AUDIO-VISUAL CONSERVATION CENTER

RARE WORLD SERIES FOOTAGE

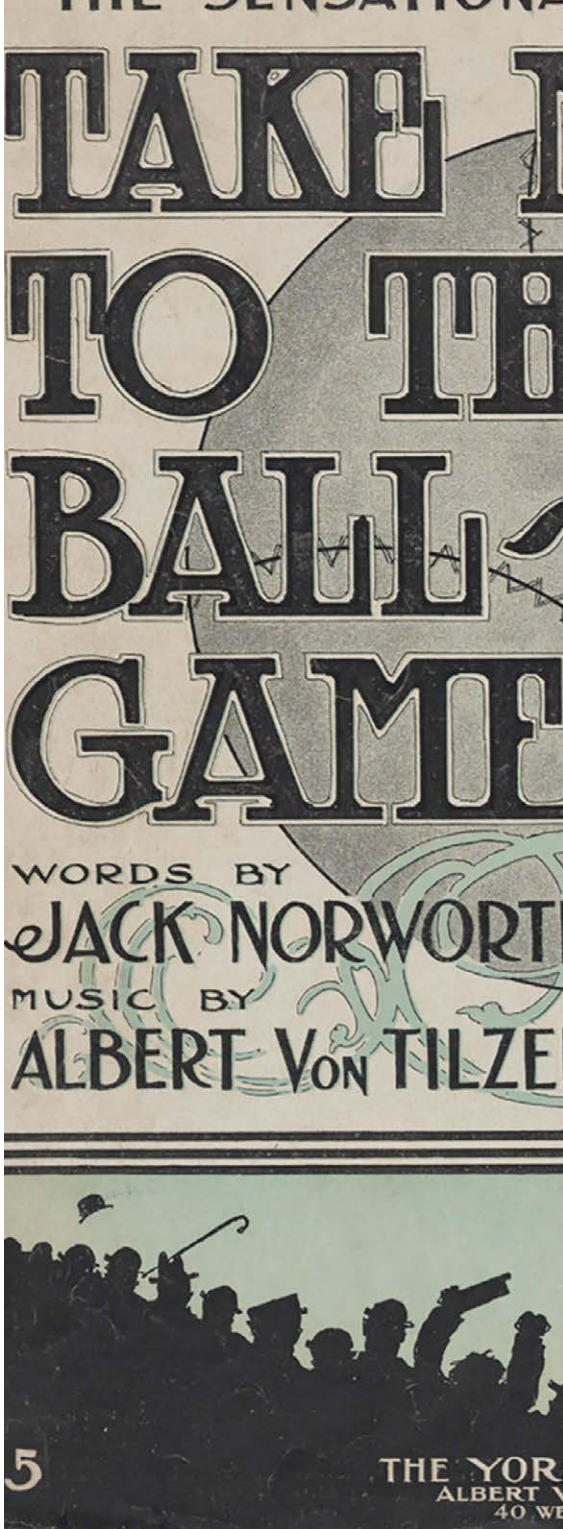
This was a home run of a discovery. A relative of a Library employee found eight cans of film in the rafters of a neighbor's garage. Further exploration revealed that one can held a Kinogram newsreel featuring a prominent story on Game 7 of the Washington Senators' victory over the New York Giants in the 1924 World Series – the only footage of the game known to exist.



MANUSCRIPT DIVISION

BRANCH RICKEY'S SCOUTING REPORTS

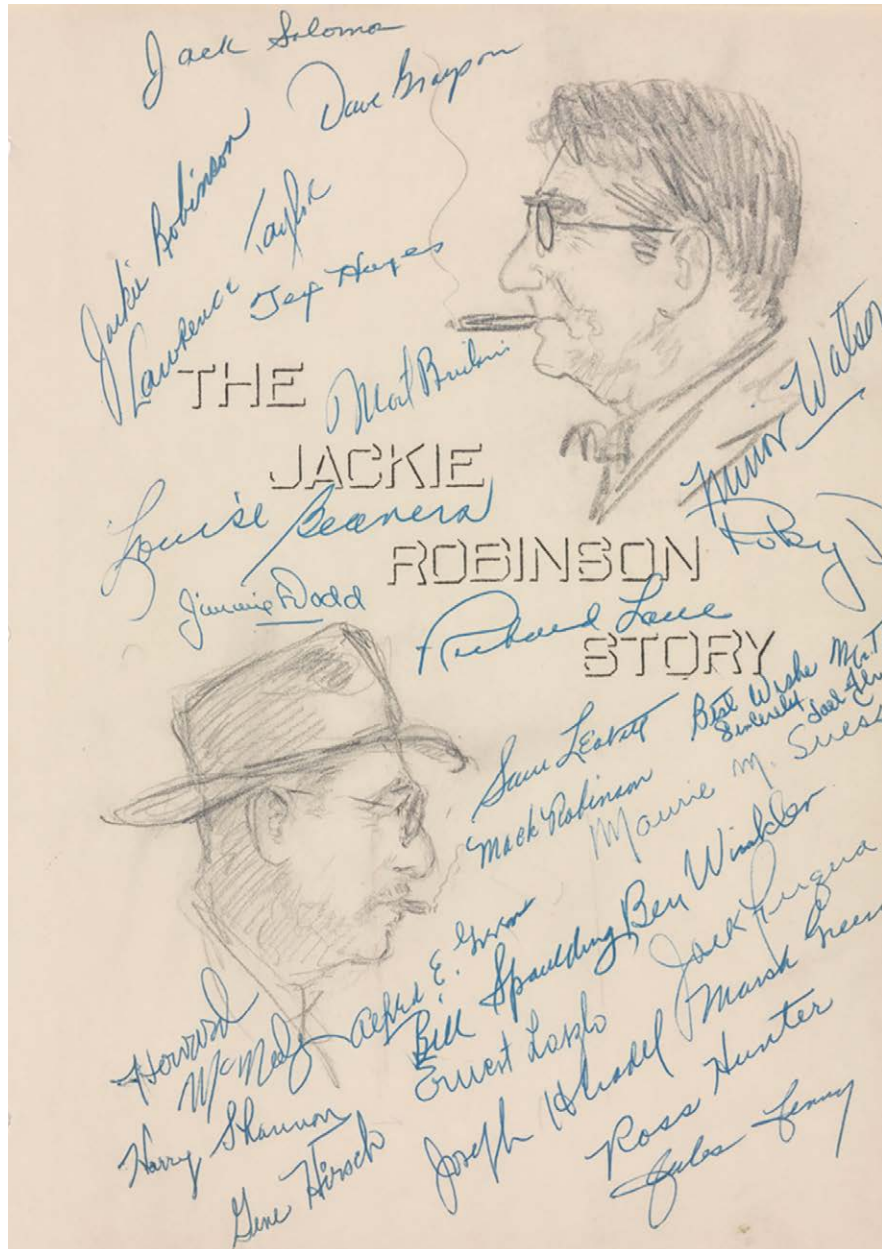
The papers of longtime baseball executive Branch Rickey include some 1,750 scouting reports from the 1950s and '60s. In the reports, Rickey analyzed the skills of both current and up-and-coming players, including future Hall of Famers such as Hank Aaron, Don Drysdale and Sandy Koufax. In a middling review of Roberto Clemente, Rickey praised Clemente's "perfect" form at the plate but bemoaned a lack of speed and instincts. Clemente went on to become one of the great players in baseball history.



MUSIC DIVISION

'TAKE ME OUT TO THE BALL GAME'

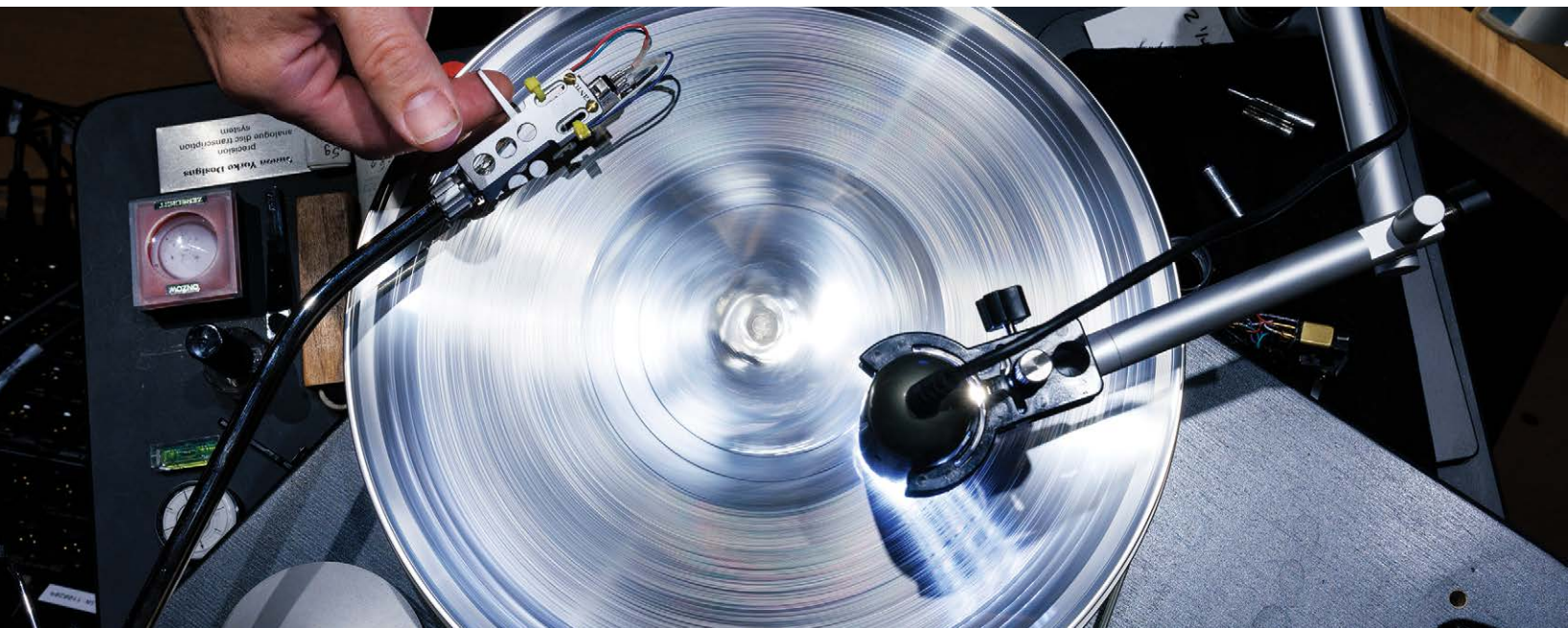
The best-known of all sports songs got its start on the New York subway, where Jack Norworth jotted down the lyrics in 1908. Albert Von Tilzer set the words to music, launching a century of "root, root, root for the home team" singalongs at ballparks across America. Norworth and Von Tilzer submitted this sheet music of the song to the U.S. Copyright Office at the Library for copyright on May 2, 1908.



ARTHUR MANN PAPERS/MANUSCRIPT DIVISION

THE JACKIE ROBINSON STORY

Jackie Robinson broke baseball's color line in 1947, a historic moment in the history of the game and the nation. Three years later, he starred in his own biopic, "The Jackie Robinson Story." This copy of the script, part of the papers of sportswriter Arthur Mann, bears the signature of Robinson and co-star Ruby Dee and Mann's sketches of Dodgers general manager Branch Rickey and Clyde Sukeforth, who played a key role in bringing Robinson to the team.



■ Audio preservation specialist Bryan Hoffa digitizes a recording made on a metal master disc in one of the Library's audio preservation labs. *Shawn Miller*

METAL MUSIC

Library preserves historical sounds on over 200,000 of these rare master discs.

Today, we can swoon to the rich tones of Ella Fitzgerald's voice or Louis Armstrong's blazing trumpet at the press of a button on our phones. While it's easy to take for granted, the sounds of decades past reach us today as the result of ever-evolving recording science and innovation.

Thanks to a generous donation from the Universal Music Group (UMG) in 2011, the Library holds more than 200,000 historical master recordings of songs from iconic artists like Fitzgerald and Armstrong, as well as the Andrews Sisters, Bing Crosby, Guy Lombardo, Sister Rosetta Tharpe and many more.

The collection contains both released and unreleased music of the 1930s and 1940s from the Decca Records label, etched on metal discs used in the record manufacturing process. These nickel-plated metal discs contain the negative and positive images of an audio recording, which were once used to press shellac-based 78 rpm records for public sale.

In that era, recording artists played live in

the studio, and the sounds they made were captured by cutting grooves into a blank wax disc from which master (negative) and mother (positive) metal discs were then derived. The mother was a nickel-coated copper disc that could be played like a conventional commercial record. The mother's negative impression, called the stamper, was used to press the records sold in stores.

The masters from this particular period are unique, not only because the process of metal mastering evolved before midcentury, but also because the discs themselves are playable – if you have the right equipment.

These masters can now be played on modern equipment with two pointed styli, allowing us to hear decades-old live-in-studio performances with exceptional detail and clarity.

As Librarian of Congress James H. Billington noted when the masters were first donated to the Library, too much from this era of American music has been “lost due to neglect and deterioration.”

In the safety of the National Audio-Visual Conservation Center in Culpeper, Virginia, the Library's experts now preserve both these rare metal masters and the exceptional musical heritage they hold.

—Sahar Kazmi is a writer-editor in the Office of the Chief Information Officer.

Rob Friedrich leads a team of world-class audio engineers.

Describe your work at the Library.

I work at the National Audio-Visual Conservation Center (NAVCC) in Culpeper, Virginia. I head the Audio Preservation Lab, where I am responsible for leading the technology and establishing workflows to preserve the nearly 4 million items in the Library's Recorded Sound Collection.

My daily duties are managing a great team of audio engineers who preserve unique audio recordings that range from the late 1880s to the cutting-edge technologies of today. I also work closely with industry experts to keep up with technologies and techniques to ensure our practices meet the highest standards.

How did you prepare for your position?

I was preparing for a career in recording from early childhood and didn't even know it. I was a violinist from age 6 through college and beyond. From my earliest age, I always was drawn to the higher fidelity of brilliant recordings, which led me to where I am today.

After my university studies in performance and music history, I got an internship in a commercial recording studio in New York City while also performing professionally. I was very fortunate to learn from the finest producers and engineers in the studio.

After years as a commercial recording engineer and performing musician, I was offered a position as a recording engineer for the world-renowned Telarc record label based in Cleveland. There, I further developed my skills, producing world-class recordings of globally known artists ranging from Dave Brubeck to the Philharmonia to Philip Bailey. Working for a record label that demanded production excellence taught me the value of preserving recordings.

I am honored to have won two Grammy Awards and a Latin Grammy for my engineering work, with four other Grammy nominations.

What have been your standout projects here at the Library?

Leading the upgrades to and buildout of the audio preservation studios at the NAVCC has been inspiring. Knowing we are preserving the Library's great collection at the highest



SHAWN MILLER

standards and creating new capabilities has been tremendous. There have been quite a few "firsts" during these projects that now put us in a position to preserve collection items we could not before.


I am currently leading the buildout of our listening theater, which will allow the public to experience extraordinary immersive sound. Immersive audio is a 3D experience that is created with multiple speakers above and around the listening position. It's going to be amazing!

What are your favorite collections items at the Library?

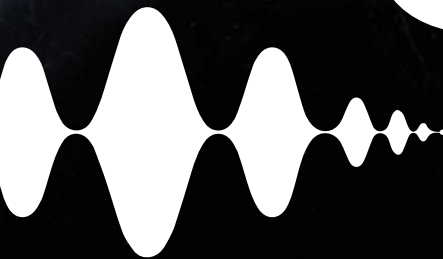
My favorite collections are the ones we are working on currently. There is much format and content variety to learn from preserving each collection. Each collection needs to be planned for and can create technical challenges that are welcomed – it's what we do!


Among the firsts was the preservation of professional analog multitrack items in the Les Paul collection. Paul was not only a great musician but also a pioneer in the development of multitrack recording.

We now are working on the Universal Music Group lacquer and metal master discs collection, which features great recordings ranging from classical to pop with artists such as Jascha Heifetz and Bing Crosby.

SAVING 

SO UN





OS OF HISTORY

■ An original recording of
"Someday You'll Know"
from the collection of
sound recording pioneer
Les Paul. *Shawn Miller*

Les Paul Coll.

*"Someday You'll
Know"*

Library
specialists work
to preserve our
audio heritage.

BY WENDI A. MALONEY

In the dimly lit studio, just after the backing band starts, Mary Ford's smooth voice cuts in: "Put your sweet lips a little closer to the phone, Let's pretend that we're together, all alone."

The sound is so vibrant it's easy to imagine yourself in the Quonset Hut Studio in Nashville, Tennessee, where Ford recorded "She'll Have to Go" in 1962.

The sense of immediacy deepens as record producer Jim Foglesong interrupts: "Once again, please," he says, ending



■ **Audio preservation specialist Melissa Widzinski cleans a damaged lacquer disc using a turntable equipped with a specialized arm. Shawn Miller**

Take 1. On Take 3: “Hold it a second. Joe, the bass is just a little bit too hard.”
Take 8: “Mary ... move in just a touch.”

In 2024, Ford’s voice emanates not from Nashville, however, but from a speaker in Culpeper, Virginia – one of six in a custom-designed multitracking studio at the Library of Congress’ National Audio-Visual Conservation Center (NAVCC).

Audio design engineers fabricated the studio to preserve the vast collection of guitar virtuoso and sound recording innovator Les Paul, a pioneer of multitracking.

In 1962, Paul and Ford were spouses, musical collaborators and major mid-20th-century hitmakers. Paul listened in the control room as Foglesong guided Mary and the band through takes.

The new multitrack studio is NAVCC’s most technically complex audio studio to date. Its infrastructure enables engineers to capture and package multiple elements of a multitrack work for access in a library cataloging system – a new capability at the Library.

But the studio is not alone in number or sophistication.

“We have some of the best specifications you’re going to find,” Rob Friedrich, head of the Audio Preservation Lab, says of the 20 support rooms and audio

preservation studios engineers operate on NAVCC’s sprawling campus in the foothills of the Blue Ridge Mountains.

He should know. He joined NAVCC in 2011 having won three Grammy Awards, including a Latin Grammy, as an audio engineer for the Telarc label. He now supervises a staff of specialists who transfer audio from fragile or obsolete formats to preservation-quality digital files.

Along with studios, Friedrich and his staff have developed an array of cutting-edge sound preservation labs at NAVCC, where they work hand-in-hand with curators, archivists and librarians to acquire, preserve and share America’s sound heritage.

Preserving the Library’s audio collection is no small feat: At nearly 4 million and growing, it is the nation’s largest. It spans experimental recordings etched into wax cylinders in the 1890s to the most recent achievements in digital sound recording.

A trip to NAVCC’s subterranean storage vaults – once used by the Federal Reserve to safeguard billions in cash – brings home the almost mind-boggling range of formats and genres.

“We have commercial albums and singles in every format – 78s, 45s, cassettes, reels, CDs,” recorded sound curator Matt Barton says. “We have hundreds of thousands of radio



broadcasts. Recordings of sound effects. Environmental recordings, you name it.”

On ceiling-high shelves in one vault, CD box sets of the Beatles sit next to the Chicago Symphony Orchestra. There’s a music-box recording of “Amazing Grace.” Commercial LPs feature Billy Taylor, the Beach Boys and, for fans of drag-car racing, “The Big Sounds of Drag.”

In another vault, master recordings of Andrés Segovia, Lawrence Welk and Bing Crosby are etched into 16-inch lacquer discs. Even after all of this time, they give off a scent, despite the chill. The vaults are kept at low temperature and humidity to slow down degradation of materials.

In other vaults, the NBC Collection contains upward of 40,000 hours of radio broadcasts

■ Sound lab supervisor Rob Friedrich removes a disc from the Library’s Lomax Collection. *Shawn Miller*





■ NAVCC's multitrack studio is its most technically advanced to date. *Shawn Miller*

from 1935 to 1971. Master recordings in the Universal Music Group collection showcase Ella Fitzgerald, Bill Monroe and Jascha Heifetz, to name a few.

Often, before a collection proceeds to a studio for digitization, items have to be stabilized. In one lab, specialists wash lacquer discs, the most vulnerable of formats.

"They constantly undergo a chemical degradation process called exudation," explains audio engineer Melissa Widzinski. It leaves a white haze that, over time, can cause irreparable damage.

To clean a disc, she places it on a turntable. Its arm has a small brush and cleaning fluid, applied as the disc revolves. A water rinse follows. Then, a tiny vacuum threads through each groove picking up moisture.

Next, the disc goes into a cabinet with

shelves of perforated racks and a fan. The door closes, and the lacquer dries completely within minutes.

In another lab, preservationists use special ovens to bake tapes that have absorbed too much moisture from the air, causing their layers to separate. Once heated overnight, "It's essentially like dehydrating them, pulling the moisture out," Widzinski says.

In one unusual instance earlier this year, a tape had too little moisture, not too much.

A French radio performance of composer Gunther Schuller's music arrived in the Audio Preservation Lab looking like ... not audiotape. A hockey puck? A blob? No one could say for sure.

To rehydrate the solidified brown mass, audio engineer Bryan Hoffa placed just enough water in a round plastic bucket – the kind home-improvement stores sell – to cover the bottom. He wedged an empty reel inside the bucket above the water, topped the reel with a flange, then set the tape on the flange and closed the lid.

Within 24 hours, the water vapor had rehydrated the tape. When Hoffa plays the digitized file now, the sound resonates.

"This is the creative process," Friedrich says of Hoffa's seemingly simple yet carefully considered approach – he spent months doing research before treating the tape.

In other labs, optical-assisted technology extracts sound from wax cylinder recordings. In one space, a system dubbed IRENE uses a tiny ultra-high-resolution camera to image grooved discs that are too fragile or damaged to play with a stylus. Afterward, software translates the images to sound.

"There were some hundred Les Paul discs that we could not have transferred without IRENE," Friedrich says.

Given the size of the Library's sound recording collections, sound preservationists have to balance time-intensive methods with expanded research access.

Engineer Ryan Chroninger transfers audio cassettes – the variety popular in the 1980s – at high speed.

To qualify, the tapes must be in good condition. "They don't have to be baked or spliced or have any other kinds of repairs done to them," Chroninger says.

In two studios, he operates up to eight decks simultaneously at two- to four-times normal cassette playback speed and can transfer the A and the B sides of tapes at the same time.

In another studio, 16 vintage reel-to-reel tape machines transfer 32 hours of recorded sound in a single hour. Friedrich jokes the room is his “magnum opus” for production speed.

As in Chroninger’s studios, tapes have to be good quality. Engineers just finished digitizing the enormous NBC Collection. Years earlier, it was transferred from disc to tape at the Library, making it a known quantity.

The studio’s decades-old reel-to-reel machines operate as if they were new thanks to NAVCC’s “amazingly knowledgeable” maintenance specialist,

Travis Thatcher, Friedrich says.

Maintenance engineers have expertly restored all kinds of legacy playback equipment, including a 16-track player that captured some of Paul’s hits.

Now, his artistry lives on in high fidelity at the Library of Congress. And in the studio built to preserve it, other unique multitracks – music of Liza Minnelli, Max Roach, the Gershwins – can be preserved for future generations.

“It’s because of the Les Paul collection,” Friedrich says. “We’re in a position to do it now. We’ve never been able to do that before.”

–Wendi A. Maloney is a writer–editor in the Office of Communications.

■ Ryan Chroninger digitizes multiple recordings simultaneously using vintage reel-to-reel tape machines restored at NAVCC. Shawn Miller



■ A historical
microphone in the
Library of Congress
collections. *Shawn Miller*

CAPTURING THE AIRWAVES

Collections preserve the history of
radio broadcasting.

BY MATT BARTON



The date was Nov. 2, 1920, and Americans – a small number of them, at least – gathered to listen to a broadcast of the returns in the race for the White House between Warren G. Harding and James M. Cox.

Harding won quite easily, and the more historic event, it turned out, was the broadcast itself by KDKA in Pittsburgh. Though individuals and businesses had experimented with occasional scheduled broadcasts in the 1910s, the KDKA broadcast of the 1920 election results today is considered the first commercial radio broadcast in history.

Few recordings from that first generation of radio survive. Indeed, because of technical problems such as amplification and recording length, few such recordings were even made. But much of what did survive lives on in the vast collections of the Library of Congress.

The Library holds nearly 4 million sound recordings, ranging in date from the 1880s to the present and in every description and format. That number includes radio recordings dating from the 1920s to modern days – a vast and unique repository of history and culture that still delights and informs.

By 1935, a reliable system for archiving and prerecording radio programs was available. The Presto Corporation developed cutting lathes that could record live programs on 16-inch lacquer-coated aluminum discs, capturing 15 minutes of audio per side. Using a bank of lathes, an operator could record continuous programming by moving from one lathe to the next.

Performers could appraise their own work, and should a sponsor, the government, audience members or others object, the recordings provided evidence of what actually had been said and done.

Not all programming was recorded, and not all of what was recorded survived. Still, an amazing number of recordings made from 1935 on still exist. The largest single component of the Library's radio holdings, the NBC collection, contains some 170,000 discs, holding over 40,000 hours of NBC broadcasting from 1935 through the 1960s.

In the pretelevision era, radio offered every kind of programming eventually available on TV. And radio pioneered many forms and genres we now take



■ From top: a radio station's extensive record library; the "tomato can" mic used in the first radio broadcast, by KDKA in 1920; KDKA's chief announcer, H.W. Arlin. *Prints and Photographs Division; The Lantern*



Expert on Happiness

■ She's Irna Phillips, who brings you every day the laughter and tears of all humanity

By NORTON RUSSELL

QUICKLY, now—who is Irna Phillips?

Probably you had to stop and think before you could answer. Possibly you can't answer at all. And yet, with the exceptions of Mrs. Franklin D. Roosevelt and Dorothy Thompson, she influences more members of her sex than any other woman in America. She has an added distinction, too, over Mrs. Roosevelt and Miss Thompson—the women she influences are unaware that anyone is influencing them at all.

You, very likely, owe some of your beliefs or ideals to Irna Phillips—even if you aren't familiar with her name.

She is the author of three of radio's most popular daily serials: *The Woman in White*, *The Guiding Light*, and *Road of Life*. You are her daily audience—at least two million of you, probably many more. To every one of you two million, the characters Irna has created are real, living, breathing, moving human beings. Dr. John Ruthledge and Rose Kransky of *The Guiding Light*, Dr. Jim Brent of *Road of Life*, Karen Adams, the *Woman in White*—all these, and dozens more, are the intimate friends of a great slice of our country.

It's time you met this woman who brings you so many hours of laughter, of tears, of heartbreak, and of joy each week; and who knows the



■ To Irna Phillips, the characters of *Woman in White*, *The Guiding Light*, *Road of Life*, are as real as her own family.

physical, mental and emotional characteristics of the many people she creates as intimately as she knows those of her own family; and who, most important of all, is so wise and human that every one of her programs contains inspiration and help for those who will listen.

In radio, a business which seems to create remarkable people, she is one of the most remarkable of all.

Irna could have been an actress as easily as a writer. In fact, though few people outside the casts of her plays know it, she is an actress.

When *Today's Children*, her first network serial, was on the air, Irna played two roles in it—*Mother Moran* and *Kay*.

Drop into Irna's office on Ontario Street in Chicago, any day between 8:30 and 1:00, and you'll see her doing an informal, but thorough, job of acting. Facing rapidly back and forth across the room, she dictates the dialogue of a script to her secretary, Gertrude Prys. As she talks, she changes the inflections of her voice to suit the different characters.

so that Gertrude knows without being told who is supposed to be speaking. Her different voices are excellent imitations of those you hear on the air—even the men's voices aren't bad!

In a way, all this is a sort of shorthand communication between the two women, designed to save time and get a story down on paper with the minimum of effort. Irna admits that Gertrude, with her quick perception and intimate knowledge of her boss's method of working, is responsible for cutting the work of writing three daily scripts just about in half. In other words, down to a point where it requires only the energy of a stevedore, the resourcefulness of an international spy, and the inventiveness of an Edgar Rice Burroughs.

For a girl who didn't think she could write, Irna Phillips is doing very well for herself. Her salary just now is \$3,000 a week—the highest of any writer for radio; and, when you consider that it goes on for 52 (Continued on page 68)



for granted: news, sports, music, comedy, soap operas, game shows, talk shows, variety programs and more.

In the NBC collection, listeners can relive the drama of the days leading to World War II – the first announcements of the Pearl Harbor attack and live coverage from every theater of the war through V-E and V-J Days.

There are historic sports broadcasts: Joe Louis defeats Max Schmeling in the Fight of the Century; Yankees great Joe DiMaggio makes his World Series debut in 1936; the great racehorse Seabiscuit charges to victory.

There's the hilarious "feud" between comedians Jack Benny and Fred Allen and the original version of the long-running "Guiding Light" daytime drama series. There are the passionate debates on "America's Town Meeting of the Air," in which leading journalists, government figures and ordinary people debated the issues of the times.

And there are other collections. The holdings of CBS and ABC programming, while not as large, contain many significant broadcasts. In two days of CBS coverage from May 1945, at the end of World War II in Europe, conflicting reports reveal people dancing in the streets in celebration even as bitter fighting continued in the absence of official confirmation of the German surrender. ABC broadcast a four-part, four-night dramatic reading of John Hersey's account of the Hiroshima bombing and its aftermath, aired less than two

weeks after it first appeared in print.

In the 1950s, television took over many of radio's specialties. Still, radio remained a vital source of news, often providing the first broadcast coverage of major events as well as long-form coverage of them. Coverage of the 1962 March on Washington, for example, is particularly deep, with interviews by Studs Terkel of marchers for WFMT radio and hours of coverage from NBC and the Educational Radio Network, or ERN, the forerunner of today's NPR.

The collections of many of radio's key innovators and most exceptional talents are another strongpoint. These include Mary Margaret McBride's interviews with great authors such as Zora Neale Hurston, Graham Greene, Erskine Caldwell, S.J. Perelman and P.L. Travers, creator of "Mary Poppins"; the sports interviews and play-by-play of Bob Wolff and Al Wester; the socially aware supernatural programs of Arch Oboler; the unique youth reporting of the Children's Express news agency from 1975 to 2001; and the Latin American News Service of the 1980s, to name just a few.

Radio's obituary has been written many times in the 100-plus years it has been on the air and in our ears. Yet, these recordings remain part of a living broadcast tradition, a heritage that is here for all to enjoy.

—Matt Barton is a recorded sound curator at the National Audio-Visual Conservation Center.

■ **Above:** Historical broadcasting equipment from the Library's collections. *Shawn Miller*

Opposite, clockwise from top left: Radio drama innovator Arch Oboler; the "first lady of radio," interviewer Mary Margaret McBride; Irna Phillips, creator of "Guiding Light"; and a broadcast of "America's Town Meeting of the Air." *Prints and Photographs Division; The Lantern*

AROUND THE LIBRARY



1.



2.



3.



4.



5.



6.

1. Actor and author George Takei speaks to local school groups at the Library on May 10.
2. Somapa Thai Dance Company performs in the Coolidge Auditorium on May 23 to mark Asian American Pacific Islander Heritage Month.
3. Visitors mingle with costumed Library staff members during Fantasy Book Night on May 16.
4. Geri Halliwell-Horner, aka Ginger Spice of the Spice Girls, tours the Main Reading Room on May 8.
5. Elli Kim of the Asian Division shows Library collections items to Hyundong Cho, the Republic of Korea's ambassador to the United States, on May 20.
6. Librarian of Congress Carla Hayden interviews actress and author Whoopi Goldberg in the Coolidge Auditorium on May 10.

ALL PHOTOS BY SHAWN MILLER

Library Reveals Lineup For National Book Festival

The Library announced the lineup of authors for the 2024 Library of Congress National Book Festival, set for Aug. 24. The festival's theme, "Books Build Us Up," explores how reading connects us and informs our lives. It's through books that readers can develop strong bonds with writers and their ideas – relationships that open the entire world, real or imagined, to all.

The lineup features, among many others, authors such as James Patterson, historian Doris Kearns Goodwin, Sandra Cisneros, Casey McQuiston, Abby Jimenez, Erik Larson, Rebecca Yarros, Grammy-winning vocalist Renée Fleming and children's author Meg Medina, the national ambassador for young people's literature.

The festival takes place from 9 a.m. to 8 p.m. at the Walter E. Washington Convention Center in Washington, D.C. Doors will open at 8:30 a.m. The festival is free and open to everyone.

MORE: loc.gov/item/prn-24-048

Reading Ambassador Launches Video Series

National Ambassador for Young People's Literature Meg Medina launched a new video series – "Let's Talk Books!" – that features beloved children's and young adult authors, illustrators and graphic novelists.

Primarily meant for families and children aged 9–12 and for librarians and educators, this dynamic 18-segment series is part of Medina's "Cuéntame!: Let's Talk Books!" platform, which encourages children and their families to engage in conversations about books.

The series features notable literary figures such as Rita Williams-García, Gene Luen Yang, Cece Bell, Jarrett J. Krosoczka, Sabaa Tahir and many others. In each video, the guests discuss a book of their choice and their path to a writing career and offer advice for young learners. The video series and its corresponding promotional clips will drop two at a time monthly on the Library's YouTube channel through Dec. 10.

MORE: loc.gov/item/prn-24-041

Office of Communications Wins Silver Anvil Award

The Library of Congress communications team has won one of the highest awards in its field – the Public Relations Society of America Silver Anvil Award – for organizational excellence in its communications and outreach on behalf of the national library.

The Anvil Awards honor the best strategic public relations campaigns and organizational excellence that set the highest standards of the industry. The Library's Office of Communications won for excellence, best in-house team in government.

Case studies from the award nomination focused on the Library's communications campaigns for the National Recording Registry, collaborations with artists and celebrities such as Lizzo and the office's success in raising awareness of the nation's library and its flagship programs to new audiences nationally. The title of the entry was "Success Off the Shelf: The Library of Congress Office of Communications."

Centers for the Book Choose 'Great Reads'

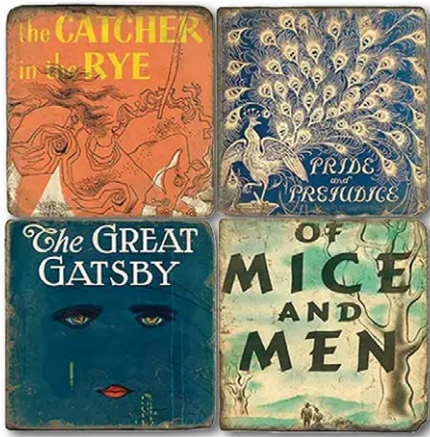
The 56 affiliated Centers for the Book of the Library of Congress have chosen books, called "Great Reads," that will be recognized at the Library of Congress National Book Festival on Aug. 24.

Every year since 2002, these Library affiliates have chosen a book to celebrate at the festival in the Library's Roadmap to Reading program – a vast space at the festival where every center has a table to promote its book choices as well as its state or territory.

The Center for the Book has affiliates in each of the 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, American Samoa, Guam and Northern Marianas. These affiliates carry out the center's mission of promoting books, reading, libraries and literacy, as well as their local literary heritage.

MORE: loc.gov/item/prn-24-042

SHOP



Book cover coasters
 Product #21508614
 Price: \$45

Toast your favorite classic books with these handcrafted marble coasters printed with iconic covers.



Mosaic earrings
 Product #21509971
 Price: \$29

The intricate filigree, faux pearls and navy enameling evoke the ceiling patterns of Mahogany Row in the Library's Jefferson Building.



'Book Nerd' pillow
 Product #21309603
 Price: \$42

Proudly proclaim your love of reading with this "book nerd" pillow, designed to hold your book or tablet at the perfect angle.



Cinderella bookend
 Product #21501814
 Price: \$16.95

Give a magical touch to your kids' rooms with this bookend shaped like a princess and her fairy-tale castle.



Athletic T-shirt
 Product #
 Price: \$25

Show your devotion to libraries and reading with this collegiate heavyweight cotton T-shirt. Sizes S-XXL.



Pride and Peppermints
 Product #21505961
 Price: \$17.99

Refresh your spirits the literary way, with Jane Austen's Pride and Peppermints.

■ Order online: loc.gov/shop ■ Order by phone: 888.682.3557

■ President Joe Biden greets Steven Portnoy at the White House Correspondents Association dinner. *White House Correspondents Association*



TREASURES OF SIGHT AND SOUND

ABC radio correspondent recognizes importance of saving audiovisual heritage.

ABC News Radio national correspondent Steven Portnoy has dedicated over two decades to network news, including seven years covering the White House.

His passion for preserving cultural heritage led him to become a Friend of the Library and support the National Audio-Visual Conservation Center (NAVCC), recognizing the profound impact of audiovisual content on shaping the American experience.

“From the earliest films and wax recordings to today’s TikTok videos and podcasts, audiovisual content stands as a signature emblem of our culture,” Portnoy says. “What we have collectively heard and seen has shaped our shared experience as Americans and informed how we have governed ourselves for over a century.”

During a visit to the NAVCC campus last year, Portnoy was thrilled to witness technicians working to digitize the NBC Radio archive, facilitating efficient

access to the audio for researchers and producers alike. Another highlight of the visit: viewing the oldest color videotape in existence, a May 1958 Ampex recording of President Eisenhower dedicating NBC’s then-new Washington facility.

Prior to his current work at ABC, Portnoy reported for CBS News Radio. For his final project with CBS, he wrote and produced a three-hour radio documentary on the 1948 murder of CBS News correspondent George Polk, which recently won the National Headliner Award for best radio network documentary.

Portnoy emphasizes the significance of using archival audio to bring forgotten stories to new audiences. “The process opened my ears to the idea that there are countless, long-forgotten stories of the 20th century that we can bring to new light for listeners today by leveraging archival audio,” he says.

When asked what he’d tell someone who doesn’t know about the Library, Portnoy says, “It’s more than just books. It’s everything. And it’s a genuine national treasure.”

MORE INFORMATION

Support the Library
[loc.gov/support](https://www.loc.gov/support)

LAST WORD

CHUCK D

Being on WBAU with Hank Shocklee and Flava Flav played a pivotal role in your early career. Can you say more about those early days?

All those hours Hank and Flav and I spent in the WBAU studio were just a part of Public Enemy's origin. It was also the wherewithal of Bill Stephney that made it all work, along with what we were doing with Spectrum City and, later, Andre Brown (aka Doctor Dre, who went on to host "Yo! MTV Raps"). It was like the meeting of the hip-hop minds, laying a foundation that will never leave us.

You've said you originally put together 1984's "Public Enemy #1" on two tape decks and a Roland 8000 drum machine. How has hip-hop or your approach to it changed as technology changed?

Right now, AI is mind-blowing. Hip-hop has always made music out of technology, out of recordings and turntables manipulated to make new sounds no one ever heard before. So, AI puts us right back at square zero, where we're creating through technology again. It's something I believe we have to learn to dance with instead of trying to negate or eliminate.

"Fear of a Black Planet" was the second hip-hop record added to the National Recording Registry. What did that mean for you and Public Enemy?

I was humbled by its achievement. "Fear of a Black Planet" was our statement about the hip-hop we saw and heard around the world when we toured. It's our dissertation of rap words and beats.

You recently became a member of the National Recording Preservation Board. Why is the board's work important to you?

It's important for people who love the music and the art to be a part of recognizing the work of artists who may not be known to someone outside of that industry or genre. As part of an art form that is historically misunderstood, I'm honored to be able to be a voice for it on the board.



COURTESY OF CHUCK D

You're an author, film producer, radio host, recording artist, visual artist and activist. You've been called an icon and a revolutionary. What would you like your legacy to be?

I'm just a service person to the arts. And I would like to be a part of making sure all the people around me get their due.

—Chuck D is a founding member of the seminal hip-hop group Public Enemy. Through his work with Public Enemy, he is a member of the Rock & Roll Hall of Fame and a recipient of the Grammy Lifetime Achievement Award. He also is a member of the Library of Congress National Recording Preservation Board.



■ A display of vintage audio equipment at the Library's National Audio-Visual Conservation Center in Culpeper, Virginia. *Shawn Miller*

**CURRENT
EXHIBITIONS**



**COLLECTING
MEMORIES:
TREASURES FROM
THE LIBRARY OF
CONGRESS**
Just opened

NOT AN OSTRICH
Ongoing

**THOMAS
JEFFERSON'S
LIBRARY**
Ongoing

More information
loc.gov/exhibits