

Digitizing Rare Maritime Collections

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Abstract

Maritime College is one of the 64 colleges and universities of the State University of New York. A four-year college is located at the historic Fort Schuyler in New York. The Stephen B. Luce Library of SUNY Maritime College is the oldest academic maritime library in the United States. The Luce Library is a highly specialized library in maritime collections; its holdings represent a well rounded collection with special strength in maritime engineering, naval architecture, marine transportation, oceanography, transportation economics and management. The Stephen B. Luce Library of SUNY Maritime College is nationally and internationally known for its rare collections and archival documents in maritime history dating as early as 1700's. The paper "Digitizing Rare Maritime Collections" demonstrates the work of the Stephen B. Luce Library of SUNY Maritime College in its efforts to digitize and promote rare maritime collections by providing access to researchers throughout the world. The paper describes the uniqueness of the SUNY Maritime College collections, it discusses the methodology for recruiting and acquiring rare maritime related historical resources, and gives reasons to the decision making process for prioritizing certain types of collections for digital archiving. The paper also addresses the technology implemented to digitize and make these historical collections searchable and accessible to researchers throughout the world. The specialized nature of the maritime historical collections housed at the Stephen B. Luce Library serve a variety of purposes: they provide legal, historic and evidentiary value to individuals and society as a whole. The collections document the maritime history of the Port of New York, historical aspects of New York City history, such as trade and transportation during the nineteenth and twentieth century, immigration and water activity in the Eastern Seaboard. The scope of these special maritime collections include journals and proceedings of professional maritime organizations, such as the Marine Society of the City of New York and the Sailor's Snug Harbour, genealogical records, collections of journals reports, daybooks and personal letters, company documents of shipping companies and cruise liners such as the Grace Lines, White Star Lines and the Moore-McCormack Lines. In addition, the collections include artefacts from ships and life at sea, as well as detailing the history of ships and maritime activities during World War II. Most important are the collections pertaining to genealogical records of mariners and passenger manifests of ships arriving at the New York City harbour early 19th century. The paper demonstrates the efforts of the Stephen B. Luce Library, the in-house expertise and the project technology aspects related to digitize and secure long-term access to such rare maritime collections.

Keywords Collections; acquiring historical collections, preservation; content-based access; digitization

1.1 Introduction – New York City Harbour

As early as the 16th century, the New York City Harbour became an important commercial and governmental location in the United States. The Europeans settled in the 1620's and prepared the area as a leading port for the British colonies. During the 19th and 20th centuries, waves of massive immigration came to the shores of New York. The main port of entry at Ellis Island processed 12 million arrivals from 1892 to 1954 (1). Throughout the years, important government organizations, professional societies and philanthropic organizations formed in support of immigrants and to document the history of maritime life and activity at the port of New York. Some of these organizations are still in existence: for example, the *Marine Society of the City of New York* dating back to 1770, is a charitable and educational organization, of seafarers, all of whom must be, or have been Captains or Officers of merchant vessels under the United States flag. It was formed in colonial days, and formally chartered by King George III in 1770 to "...improve maritime knowledge and relieve indigent and distressed shipmasters, their widows and orphans..." Among the early honorary members of the Society was President George Washington (2). Another philanthropic organization is *The Sailors' Snug Harbour*. One of the oldest charitable institutions in the United States, is the first retirement institution for sailors located in the United States. Seamen were admitted to the institution without regards to their nationality, race, religion or rank (3).

The Stephen B. Luce Library of SUNY Maritime College is the oldest maritime Library in the United States. The Library is nationally and internationally known for its rare collections and archival documents in maritime history dating as early as 1700's. Subsequently, because of the Library's specialization in maritime studies and history, and its geographic proximity to New York City, the library became a designated institution for acquiring and preserving rare maritime collections.

1.2 Collections and E-Archives

The mission of the Stephen B. Luce Library is to protect and secure long-term access pertaining to maritime rare collections, by providing access to researchers, faculty, students and the public throughout the world. Working closely with maritime museums and professional associations, the Library has been successful in identifying and acquiring rare historical collections. These rare historical collections reflect the cultural heritage of maritime history in New York City by providing historic and evidentiary value to academic researchers, public officials, individuals and society as a whole.

The scope of these collections include journals and proceedings of professional maritime organizations, genealogical records, collections of journals reports, daybooks and personal letters, company documents of shipping companies and cruise liners, artefacts from ships and life at sea, as well as detailing the

history of ships and maritime activities during World War II. Most important are the collections pertaining to genealogical records of mariners and passenger manifests of ships arriving at the New York City harbour early 19th century. The study “Digitizing Rare Maritime Collections” demonstrates the work of the Stephen B. Luce Library of SUNY Maritime College in its efforts to preserve and promote rare collections by providing access to researchers throughout the world.

Using certain historical and geographic and scholarly criteria, the Library identifies significant maritime collections for preservation and digitization. By inventorying the collections and creating electronic archives, users are able to search the content of the collection through finding aids. Major projects involve the digitization of collections for researchers, which may include audio and video files, photographs, reports, records and manuscripts. Projects such as the “Oral History” strive to preserve maritime history through spoken word. The audio files as well as films are digitized and made available on the internet.

The “Oral History Project” modelled after the Library of Congress “StoryCorps” archives is developing collection that aims to capture and archive the audio stories and experiences of seafarers (4). using high end audio equipment to record the interviews and digitize the audio files thus making them accessible on the web. The recordings are taken with Edirol (R-09) and Marantz PMD portable digital compact voice recorders. Audio files are recorded in either WAV or MP3 formats and then converted to MP3 formats only for online access. Metadata is also applied to the audio files to allow searching capabilities on the web (5).

2. Digital Collections

The study “Digitizing Rare Maritime Collections” focuses on a specific collection of rare documents. The collection is called, *the Sailors’ Snug Harbor* collection. The study demonstrates the technology and methodology used in transforming this rare collection to a digital format and making it accessible to the scholarly community in the United States and beyond.

2.1 Sailors’ Snug Harbor – Background

The *Sailors’ Snug Harbor* community was founded in 1801 upon the death of Captain Robert Richard Randall. Captain Randall created a family fortune as an entrepreneur, privateer, and patriot in the United States. His bequest established an institution “for the purpose of maintaining and supporting aged, decrepit and worn-out sailors.” This institution became firmly established on Staten Island with a site that overlooked Upper New York Bay and the Kill Van Kull on Staten Island. On this site, the architect Minard Lafever designed a complex in the Greek Revival-style that would accommodate 200 seamen. Since that time, the complex expanded until by the early twentieth century there were more than 1,000 residents, or inmates as they were called, living at *Sailors’ Snug Harbor* (photo 1).



Figure 1 Main Building Sailors’ Snug Harbour S.I

Credits: “Stephen B. Luce Library, SUNY Maritime College & The Trustees of the Sailors’ Snug Harbour in the City of New York.”

The men who resided at *Sailors’ Snug Harbor* came from a wide variety of backgrounds both ethnic and racial. During the mid-nineteen century, approximately one-third of the sailor’s were foreign born and throughout its history, *Sailors’ Snug Harbor* had African American residents beginning in 1842. Despite their varied backgrounds, the sailors of *Snug Harbor* retirement community had a common heritage. All had lived hard lives as common seamen which often resulted in permanent physical injury or other health problems. Each one of these men and their records, offer a unique glimpse of the history of maritime sailors and their culture, health care and medical treatment administered on the premises, making these records scholarly important for historians, genealogists sociologist, medical historians and anthropologists (Photo 2).



Figure 2 Sitting in the Main Building Sailors’ Snug Harbour S.I

Credits: “Stephen B. Luce Library, SUNY Maritime College & The Trustees of the Sailors’ Snug Harbour in the City of New York.”

2.2 Sailors’ Snug Harbor – Research Value

The collection consisting of approximately 27,600 pages of documents belonging to these mariners are as diverse as their background. Genealogical materials, such as birth certificates, licenses, and citizenship papers are prevalent, but also extant are medical records, photographs, and scrapbooks. Each one of these items has unique historical significance in detailing the social history of American mariners.

In 1976 the Stephen B. Luce Library of Maritime College, SUNY became the sole owner of the information archives of *Sailors' Snug Harbor*. The collection, covering the period 1797 to 1969 consists of documents and records representing a fairly complete picture during this time period. These materials further document the activities of the *Snug Harbour* and their residents. These materials are wide in scope ranging from the business records of the institution to registries to scrapbooks. Of these records, there is a subset consisting of the official and personal records of the inmates.

3. Digital Project

Recognizing the value of the *Sailors' Snug Harbour* collection, the Stephen B. Luce Library decided to pursue the avenue of digitization to increase access and awareness and also to preserve the documents by minimizing handling of the physical collection.

In 2006, the Library laid the groundwork for the *Sailors' Snug Harbor* Digital Collection by acquiring a grant to digitize a sampling of the *Sailors' Snug Harbour* collection to illustrate the founding of the institution, the daily activities of its residents. The first items to be selected for the digital project included photographs and newspaper clippings on the history of the institution. This grant was funded to purchase equipment, software, and hire staff to digitize 500 pages of documents.

For the project, all documents are uploaded to CONTENTdm management system and became fully searchable with appropriated metadata. CONTENTdm is a digital collection development tool that transforms the content of digital collections to a fully searchable content on the Web. CONTENTdm offers full control over digital text as well as images. The user interface enables the user to insert comments, tags, enhancing capabilities for zooming and sharing digital images. The Library team assigned to the project chose CONTENTdm because of its ability to incorporate the collections to the WoldCat Digital Collections Gateway (5). WoldCat provides the platform where the collections are searchable and viewable at the international arena of libraries and museums research interests. In addition, in an effort to expand access and improve on searching the *Sailors' Snug Harbour* digital collection, the Library collaborates with other New York library organizations to upload metadata and thumbnail images for all digital records into the heavily accessed OCLC Worldcat catalog.

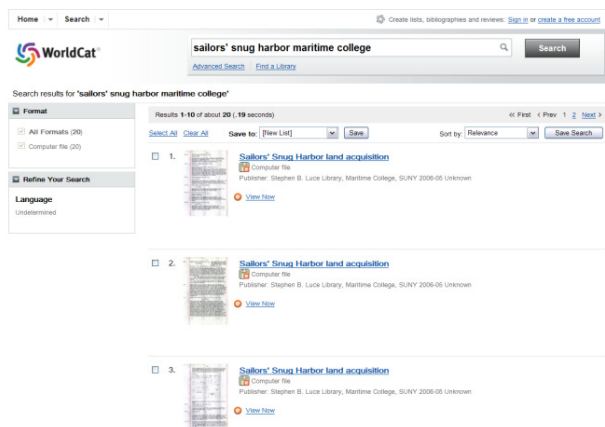


Figure 3 Image from the WoldCat database

3.1 Methodology and Standards

Using the specifications outlined in the BCR's CDP Digital Imaging Best Practices Version 2.0 (7), the Library team either scan in or digitally photograph each document. For the most part, the entire collection could be scanned in safely using the Epson 10000XL flatbed scanner. The Epson 10000XL has been used with great success in many large scale historical digitization projects. Close examination, proved that approximately 15% of the *Sailors' Snug Harbour* documents have been deemed too fragile for scanning. For these type of fragile documents a DSLR (digital single-lens reflex) Canon EOS camera was used for digital imaging. With extreme care, case-by-case decisions were made about the digitization of these fragile documents.

The records were scanned or photographed in colour to show the shade and condition created for each record, a master image, an access image, and a thumbnail image. Master images are in Tagged Image File Format (TIFF) with maximum resolutions of approximately 1200 dpi for typewritten documents and approximately 2000 dpi for handwritten documents. The photo below shows the movable view of a shaded thumbnail with larger image (photo 3).



Figure 4. View of the thumbnail with larger image

Credits: "Stephen B. Luce Library, SUNY Maritime College & The Trustees of the *Sailors' Snug Harbor* in the City of New York."

Handwritten documents such as personal notes, sketches, etc. were scanned or photographed at a higher resolution to allow for easier reading. In addition, two copies of the master images were saved, one copy on a network hard drive and another backup copy on DVD-R. The network drive is specified as two terabyte network access storage (NAS) drive. The drive is easily shared on a network and the original images stored and made accessible on the Library's public computers. This will facilitate the need for anyone requesting higher resolution images. Access images are saved in JPEG format with a resolution ranging between 150 - 300 dpi, depending on text size and matching required image file size for comfortable viewing. Thumbnail images, in JPEG format with an approximate resolution of 72 dpi, are created to use as links to the larger access images. All image editing is done using Adobe Photoshop software.

The metadata and cataloging process was completed almost simultaneously with the digital imaging. The metadata specialist, aided by the digital archivist and two library school interns, oversee this portion of the project. Metadata is created for each

digital file following the latest standards of the Dublin Core Metadata Initiative and using Library of Congress Subject Headings vocabulary. Each typed document is converted to a text file using Optical Character Recognition (OCR) software – ABBYY Finereader. This permits searching the full text of the digital images (photo 4).

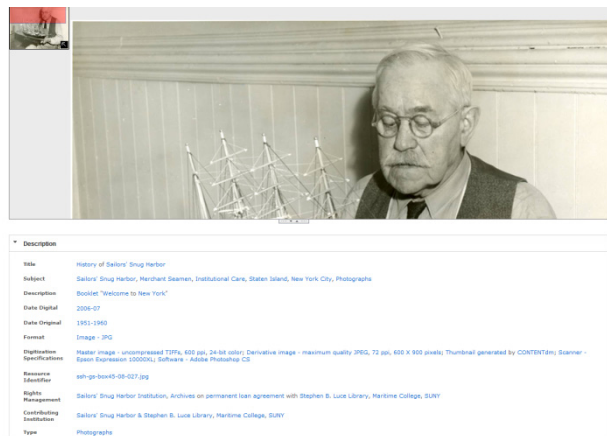


Figure 5 indicates metadata inserted with larger image
Credits: "Stephen B. Luce Library, SUNY Maritime College & The Trustees of the Sailors' Snug Harbor in the City of New York."

4. Storage of and Access to Content

As the project progress and more content is becoming digital, the 30,000 pages of digitized documents will eventually become part of the library's 500 *Snug Harbour* images already housed on the METRO CONTENTdm server as part of the Digital Metro New York initiative (8).

Specific images can easily be searched through the CONTENTdm search interface. Digital Metro New York, a library professional consortium involved in the grant, houses significant digital collections for member libraries from the New York City area.

The Stephen B. Luce Library collections are also accessible through *New York Heritage.org* (9), a research portal for hundreds of digital collections about New York history. *New York Heritage* is described as a research portal for students, educators, historians, genealogists, and others who are interested in learning more about the people, places and institutions of historical New York State. The site provides immediate free access to more than 160 distinct digital collections that reflect New York State's long history. These collections represent a broad range of historical, scholarly, and cultural materials held in libraries, museums, and archives throughout the state.

The Stephen B. Luce Library created a very comprehensive website as a major public entry point for the *Sailors' Snug Harbour* Collection (10). The site includes a detailed description of the history of *Sailors' Snug Harbour*, the *Sailors' Snug Harbour* finding aid, a narrative outlining the documents, as well as, a list of all the documents in the collection. Most importantly, the site is prominently features a searchable database of names of residents. The names of the residents are linked to the image of its respective digitized record stored on the CONTENTdm server.

Persistent links to "search the digital collection" and to "browse all digitized documents" are also available on all pages of the site and these links, when clicked, are redirect users to the CONTENTdm search interface. The web site features historic images of *Snug Harbour* from the *Snug Harbour Cultural Center* and our own collection and a link to the *Snug Harbour Cultural Center*.

The main venue for access to the *Sailors' Snug Harbour* Digital collection is an open access web site available 24/7. Another venue for access is the heavily used worldwide online public access catalog, OCLC Worldcat. All metadata records with thumbnail images are becoming available into the Worldcat catalog. Higher resolution images are also becoming available for download onsite via the NAS network drive that stores all original images.

5. Co-Curation and Future Collaborations

The Sailors' Snug Harbour collections and digital project presents the potential of collaborations with the public, other museums and library organizations to continue to build on the pre-existing history of seamen in New York and in other parts of the United States. As new related collections come to light, or resurface to the attention of scholarly activities, the Stephen B. Luce Library strives to acquire these collections and continue the effort of digitizing their content. Such collections continue to draw attention from a variety of maritime museums from states such as New York, Massachusetts and Connecticut, as well as from across the world. The Stephen B. Luce Library works closely with museum administrators to ensure the long-term preservation of these maritime collections.

In addition, the Library looks to the public to contribute their own untold stories that enhance the history of the maritime cultural heritage. The Library's Oral History Project, titled: "Your Stories, Our History" invites the public to recite their own maritime stories, or their relatives maritime stories which are in turn recorded and digitized, thus made available to the public from the Library's website (4).

The Stephen B. Luce Library strives to continue exploring all possible collaborations with the sea-related and maritime museums as well as with maritime organizations and societies in the United States. It has also become evident that the Library has to reach out to the other part the world, mostly to European countries where maritime history and cultural heritage begun as New York City harbour became the final destination. Such museums and archives, are located in England, (London and Liverpool), in Scandinavian countries, and countries of the Mediterranean Sea region, Greece, Italy, Portugal, Spain.

6. Conclusion

In Latin, the phrase *Cursum Perficio*, means to complete the course, or to bring the course to a perfect "perficio" completion.

The history and the cultural heritage of the new York City maritime life through personal records in many respects documents the history of the county and the birth of immigrant nations in the United States. The Library's inherit responsibility is to bring the course of history into a perfect completion by restoring, preserving and making cultural inheritance teachable and memorable.

In the Library world, digitization is now recognized as the most effective method to preserve and promote access to rare collections. Undertaking a digital project poses several challenges – from seeking funding to having skilled team members to choosing the right equipment to following image and metadata standards to ensuring adequate access. The *Sailors' Snug Harbour* digitization project was a success as it assures these maritime treasures are well preserved, but most importantly, through the use of modern digital technology these treasures are as open and accessible as possible. With the success of the *Sailors' Snug Harbor* digital project, the Stephen B. Luce Library is now venturing into digitizing other rare collections, including the Marine Society of the City of New York records and the Maritime College institutional archives.

The *Sailors' Snug Harbor* collection remains unique because aside from the collections at other maritime institutions there are few fully digitized maritime collections in existence. The collection inspires high interest because of their uniqueness and how they compliment other Maritime collections. The Library continues to receive many requests for access to the collections by researchers in the fields of New York City history, maritime history, genealogy, anthropology and sociology.

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