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# **Standardization in Historical Information and Interpretation System Demonstration Project**

## Ohio Historical Society and North American Maritime Consortium, Inc.

### Grant Agreement No. MT-2255-6-NC-034

## **Final Report**

Submitted by Jay C Martin, Ph.D. Project Principal Investigator

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Funding for this report was provided by the National Park Service's National Center for Preservation Technology and Training, Natchitoches, Louisiana. NCPTT promotes and enhances the preservation of prehistoric and historic resources in the United States for present and future generations through the advancement and dissemination of preservation technology and training

NCPTT's Preservation Technology and Training Grants program develops partners in non-profit organizations, universities and government agencies throughout the United States to complete critical preservation work and lends significant support to developments in the conservation and preservation community.

### Introduction

In 1996, the Ohio Historic Preservation Office and the North American Maritime Consortium, Inc, received grant funding from the National Center for Preservation Training and Technology, an office of the National Park Service, for a prototype information management system known as the Standardization in Historical Information and interpretation System (SHIIPS). SHIIPS was designed as an expandable, relational, and searchable database of Ohio's Lake Erie maritime cultural resources that would be accessible on the World Wide Web from either Macintosh or IBM Platforms.

### Implementation

Early in the implementation process, representatives of the Ohio Historic Preservation Office, the North American Maritime Consortium, and Great Lakes Visual/Research, discussed fundamental parameters of hardware, software, and personnel acquisition and allocation. Hardware and software selection was problematic given the rapidly changing nature of computer technology. The decision was made to first bring aboard a computer specialist who could examine all existing hardware and software and reaccess project needs. After interviewing several prospective contractors and asking for competitive bids, John Williamson, Training Program Developer of Michigan State University's College of Osteopathic Medicine, was awarded the contract for specialized programming. Mr. Williamson was our leading candidate because of his internationally acknowledged expertise in database design and construction and Internet integration.

Mr. Williamson recommended continued use of the Macintosh platform because of its excellent graphic capabilities and its ease of development of web sites and databases. One PowerMacintosh 9500 with expanded memory was leased to act as the Internet and database server. An Ethernet speed (10 MegaBits per second or 300 times faster than a 33.6K bits per second modem) cable modem Internet connection was leased through Great Lakes Visual/Research, Inc., and their service provider, TCI-Met of East Lansing, Michigan, a company which provides this low Cost, high-speed emerging Internet technology.

Mr. Williamson also recommended use of FileMaker Pro for database construction. This software facilitated the construction of an expandable relational database that was easy to understand and use by people of varying computer experience. FileMaker Pro was also selected because it could be operated on either a Macintosh or a Windows platform.

After hardware and software selection, the core team composed of Jay Martin, Harley Seeley, and John Williamson designed a database architecture that was comprehensive enough to fit the needs of cultural resource managers (including State Historic Preservation Officers), yet combined the flexibility to be of use to the broadest spectrum of professionals and non-professionals who shared a common interest in North American maritime history As a result, the SHIIPS database framework went beyond the initial emphasis upon shipwrecks. The SHIIPS database was subdivided into the following major interrelated databases: vessels, ports, people, images, artifacts. The vessels subdatabase was further subdivided into the following lesser databases names of vessels, enrollments, engines, boilers, repairs, casualties. The people subdatabase was further subdivided into the following lesser databases: affiliation and child. For a complete explanation of these databases and subdatabases see the "Standardization in Historical Information and Interpretation System Users Manual" Database design was created in consultation with Franco Ruffini of the Ohio Historic Preservation Office.

Database construction and testing was conducted by the Core team through 1997. The data incorporated into the SHIIPS prototype came from two existing databases donated by Jay Martin, supplemented with improvements and additions from regional archives researched by Jay Martin

and input under Martin's direction by volunteers Information from regional archives was loaded directly into the database using a Mac PowerBook 180 lent to the project by Great Lakes Visual/Research

Outside analysis of the database online was conducted by David Cooper, Wisconsin State Underwater Archaeologist, and his assistant Jeff Gray, after the SHIIPS prototype was completed SHIIPS was demonstrated at the Annual Meeting of the Society for Historical Archaeology, January 8-10, 1998. The forum chosen was an ongoing series of demonstrations in the Book Room, where for three days conference participants could access the SHIIPS prototype with a simulated Internet connection via two Macintosh and one IBM platforms. Approximately seventy-five conference participants tried the SHIIPS prototype at the Conference and were informed that the prototype would be available for online testing free of charge through March 31, 1998, via the NAMC gateway located at: http://www.zone-2.com/namc/index.html.

Participants in the Conference demonstration suggested the following criticisms and comments

### Criticisms:

1) The number of fields searchable online via the Internet needs to be expanded to take advantage of the full potential for reference and research.

2) Timely quality control of the information flowing into SHIIPS will eventually require that one or more professionals be hired.

### Comments:

1) Though the SHIIPS databases have a limited amount of information in them at this time, they have great potential for growth and to provide an online reference tool.

2) SHIIPS should be expanded to add the sale of publications online.

3) SHIIPS should be expanded to cover land-based maritime sites and structures.

4) Use of SHIIPS on either a Windows or Mac platform will be convenient for the entry of additional data at widely dispersed locations using a variety of hardware.

David Cooper and his assistant Jeff Gray had the following additional criticisms and comments:

### Criticisms:

1) SHIIPS as it currently exists is good at tracing specific information, but is not good at tracing ranges of information because search string capability is unwieldy online. (ie. it can pull up vessels built in a specific year like 1840, but has difficulty pulling up information on vessels built over a series of years, say the decade of 1840s without searching each year individually)

2) Use of coded rather than textual information would speed search time, although using coded information would require more skill and knowledge on the part of users.

3) There are several useful fields that could be added to the Vessel database:

- a) depth of water vessel was lost in;
- b) known location of loss that have not be confirmed;
- c) name of land owner in location of vessel remains;
- d) archaeological survey data;
- e) a separate references field might be more effective.

### Comments:

 SHIIPS would be most useful to the offices of the Wisconsin Historical Society if it could be made available on CD-ROM, especially if complete with driving software. This bundle could be handled as part of the NAMC membership or separate subscription with periodic updates, therefore avoiding the need to access the information on the World Wide Web at inconvenient times or when in the field.
SHIIPS has potential for further development. Comments from participants in the SHIIPS demonstration at the Annual Meeting of the Society for Historical Archaeology and those received from the analysis of Underwater Archaeologist David Cooper were used to redesign the prototype to meet a variety of needs. These changes and further SHIIPS expansion, including the input of additional databases, will be implemented in April 1998.

### Finances Through the Grant Period

The following budge compares projected Demonstration Project expenses with those actually incurred:

Project Expenditures Category		Initial Budget	Actual Expenditure
Salaries		<b>\$</b> U	\$0
Fringe Benefits		\$0	\$0
Travel		\$0	\$0
Equipment Purchase Internet software Server/Internet connection Modem & dedicated line Lease computer equipment Hard drive lease		\$9,500.00	\$10,391.64
Supplies		\$500.00	\$498.62
<b>Contractual</b> Principal Investigator Chief Programmer Asst. Programmer Database Consultant		\$26,000.00	\$26,360.00
Other Group Demonstration Printing Prospectus Postage Telephone		\$4000.00	\$2,765.12
ŗ	Fotals	\$40,000.00	\$40,015.38*

The \$15.38 over in total project expenditures has been assumed by the North American Maritime Consortium as part of the project match as detailed below:

Project Match		
-	Cash	In Kind
North American Maritime Consortium		
Budget Overage	\$15.38	
Research (427.5 hours		\$6,412.50
@ \$15.00 per)		
Data Entry (2792 hours		\$27,920.00
@ \$10.00 per)		
Great Lakes Visual/Research, Inc.		
Use of Mac PowerBook 180 for research at		
regional archives (34 days @ \$100 per)		\$3,400.00
Travel to regional archives	\$3,557.99	
Totals		
	\$3,573.37	\$37,732.50

The total match for this project was \$41,305.87 Please note that the matching time listed above does not take into account the monetary value (research time, data entry, travel, expenses) related to contribution of preexisting data, databases, and copyrighted images by Jay Martin, Harley Seeley, the North American Maritime Consortium, and the Wisconsin Maritime Museum.

### **Conclusion**

The Standardization in Historical Information and Interpretation System Demonstration Project resulted in the production and demonstration of a prototype online maritime database. The SHIIPS database is currently being used successfully, and has accumulated 315 online reference requests between January 1, 1998, and February 26, 1998.

As of this date, the SHIIPS database is not self-supporting, but NAMC has committed to keeping the system operational with confidence that it will eventually become self-supporting. Several individuals and organizations have expressed serious interest in adding unique materials to the database and this will make SHIIPS an important resource in the future. These organizations include the South Street Seaport Museum and the Wisconsin Maritime Museum. The most serious interest was expressed by the Wisconsin Maritime Museum which is currently preparing an application for a National Maritime Heritage Grant in order to bring selected portions of its archival and material culture collections and publications online The Wisconsin Maritime Museum eventually expects to have its collections available for online use.

This document was developed under a grant from the National Park Service and the National Center for Preservation Technology and Training The contents of this document are solely the responsibility of the author and do not necessarily represent the official position or policies of the National Park Service or the National Center for Preservation Technology and Training.

### APPENDIX A

## SHIIPS System Design Specifications

Computer Server:	Macintosh 9500 with expanded memory
Internet Connection:	One TCI Met cable modem (10 MegaBits per second)
Software:	FileMaker Pro 3.0 with custom Internet interface

SHIIPS Records Statistics (1/1998) (Expandability unlimited assuming sufficient memory can be added):

Vessels	1702
People	82
Ports	7
Artifacts	2

# Standardization in Historical Information and Interpretation System

# **User Manual**

## Ohio Historical Society and North American Maritime Consortium, Inc.

Grant Agreement No. MT-2255-6-NC-034

Jay C. Martin, Ph.D. Project Principal Investigator

North American Maritime Consortium, Inc. 2031 North Rapids Road Manitowoc, WI 54220

March 9, 1998

#### Introduction

Archival and material culture research has always required more time, expertise, and resources than are readily available. Caches of archival and material culture source materials are frequently widely scattered, poorly organized, and difficult to access efficiently. As a result, researchers have developed their own databases or compiled data in a format that lacks the continuity of an established research methodology. The Standardization in Historical Information and Interpretation System (SHIIPS) databases of maritime information was created to encourage more disciplined data acquisition and provide a framework for cooperative international access via the World Wide Web, so that less time may be expended in data acquisition and more in data analysis.

The SHIIPS concept was developed by Great Lakes Visual/Research, Inc. (GLV/R) of Lansing, Michigan, a consulting firm specializing in maritime history and archaeology, in 1991. In 1995, a refined version of the SHIIPS concept was transferred from GLV/R to the North American Maritime Consortium, Inc. (NAMC), a not for profit corporation developed to administer SHIIPS and other emerging technological applications. In 1996, the Ohio Historic Preservation Office and the NAMC, received grant funding from the National Center for Preservation Training and Technology, an office of the National Park Service, for a prototype SHIIPS information management system. The SHIIPS prototype was developed using commercially available computer hardware and software customized and interfaced with the World Wide Web for ease of access. SHIIPS is an expandable, relational, and searchable database of Ohio's Lake Erie maritime cultural resources that are accessible on the World Wide Web from either Macintosh or IBM Platforms.

The SHIIPS database prototype went beyond the initial emphasis upon shipwrecks. The SHIIPS database was subdivided into the following major interrelated databases: vessels, ports, people, images, artifacts. The vessels database was further subdivided into the following lesser databases: names of vessels, enrollments, engines, boilers, repairs, and casualties. The people database was further subdivided into the following lesser databases: affiliation and child. These databases and the data fields that they contain are described below.

SHIIPS is intended to be a dynamic reference tool that welcomes and encourages input from a variety of sources. The common characteristic of members of the North American Maritime Consortium is a sincere desire to cooperate in the compilation and use of quality data. To keep the data and the online reference framework of the highest quality, members are empowered to Contact the Project Director with comments and data additions or corrections at jmartin@zone-2.com. No information is entered into any database directly from the World Wide Web For methodological issues associated with data acquisition and use, please see Jay C. Martin, From Shipways to Shipwrecks: A Guide to Research in Great Lakes History (Lansing, Michigan. Great Lakes Visual/Research, Inc., 1991).

This manual was developed for the SHIIPS prototype only. The manual will be updated periodically as SHIIPS is upgraded with refinement of data fields, data entry, search parameters, software and hardware are changes.

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#### Searching Databases

SHIIPS database access is achieved online through the North American Maritime Consortium web site and SHIIPS gateway. The address for this gateway is **http://www.zone-2.com/namc/index.html**. Entry is free of charge through March 31, 1998, but will be require an entry code alter that date when the system is closed for members-only access. Members-only access is necessary in order to secure adequate financial support for SHIIPS.

The SHIIPS main page currently provides three possible search pages which correspond with three of the four main databases vessels, people, and ports. The artifacts database will be searchable in the near future. Any future databases will also be accessible from the main page.

The vessel database currently offers the following fields for online searching: SHIIPS Vessel Identification Number; Vessel Name; Official Number; National Identification Number; State Identification Number; HAER Number; Construction Year; Launch Date; Builder Name; Builder City; Builder State; Builder Country; Builder Hull/Yard Number; Names of Owners. For a complete list of vessel database fields and a description of the type and format of information contained in each, see page four. Many more of these fields will be available for online searching in the coming months.

The people database currently offers the following fields for online searching: Person's Last Name; Persons First Name; Operations Theater. For a complete list of people database fields and a description of the type and format of information contained in each, see page eleven. Many more of these fields will be available for online searching in the coming months.

The port database currently offers the following fields for online searching: Place Name, Official; State; Country; Body of Water. For a complete list of port database fields and a description of the type and format of information contained in each, see page fourteen. Many more of these fields will be available for online searching in the coming months.

Copies of the current gateway, search, and information pages are attached as Appendix A.

#### Vessel Database

The vessel database is intended to encapsulate information on individual vessels that have seen service within the waters of North America. SHIIPS was designed by a former reference archivist for the use of cultural resource managers, but with the potential use of a multitude of groups also in mind.

The SHIIPS prototype includes many more data fields than are currently searchable over the World Wide Web. The topics that are searchable are indicated throughout this manual in **bold face**. All fields are presented in order of appearance on the full database.

*SHIIPS Vessel identification Number*--This identification number is unique to each vessel included in the SHIIPS vessel database. This number is used by SHIIPS staffers to connect related data to a single vessel or for ease of referring to other vessels. This number is preceded by the designation "VE-".

*Name*--Names of vessels are entered in their entirety as registered, enrolled, or designated by their owners. Names of individuals are entered last name first. Following the name are the year and official number of the vessel while it had that name. A transfer of ownership to a different governmental jurisdiction (ex. United States to Canada) requires reentry of the vessel name even if the name does not change.

Date--The year that the vessel entered service is entered

*Number*--The official number of a vessel while under the indicated name is entered with an abbreviated code for nation of registry preceding it. These codes are as follows:

Canada	С
France	F
Mexico	М
United Kingdom	UK
United States	US

For vessels that do not have official numbers because they belong to governmental agencies, the following abbreviated entries should be used:

Canadian Army	CA
Canadian Navy	CN
Canadian Coast Guard	CCG
Mexican Army	MA
Mexican Navy	MN
Mexican Coast Guard	MCG
United States Army	USA
United States CoastGuard	USCG
United States ArmyCorps of Engineers	USA CE
United States Navy (including naval reserve	e) USN

For agencies that are not listed, the name of the agency is simply typed in.

*Original Name*--This "Yes" or "No" field is used to limit searches. Yes indicates that the name given is the first that that vessel had No indicates that it is not the first name that the vessel had.

*Official Number*--The official number is the same as the one given above, except that entries are made with no national designation. Since official numbers are the closest that vessels come to fingerprints, this redundant field is used to make sure that a clerical error does not keep a vessel hidden within the database.

*Number State*--This field is meant for state or provincial numerical designations like site numbers.

*Number National*--This field is meant for numerical designations given to a site by a federal agency.

*Number HAER--This* field is meant for numerical designations given by the Historic American Engineering Register

*Construction Year*--The year of construction is provided as a means of searching for vessels built in a particular year. In many cases the exact date of launch is unknown, making this the most important field next to "Name" and "Official Number" for searching for specific vessels.

*Launch Date--The* date of launch is entered the following order. month-day-year.

Name Builder--The name of the person or company that built the vessel is entered in total.

Number Yard/Hull--The shipbuilder's hull or yard number.

*Construction City*--City where the vessel was built. If the name of the city changed or disappeared, or if a more prominent city is close by, other names may be entered also.

*Construction State*--The name of the state or province where the vessel was constructed is entered.

*Construction Country*--The name of the country in today's boundaries is entered.

Tons Gross--Original gross tonnage of the vessel, regardless of the nation where it was registered.

Tons Net--Original net tonnage of the vessel, regardless of the nation where it was registered.

Tons Registered--Original registered tonnage, regardless of the nation where it was registered.

*Tons Adjusted*--The adjusted version of the original gross tonnage will eventually be calculated by the system using a formula to be developed later based on date of construction and nation of registry/enrollment. This field will be used for comparison of tonnage across international boundaries.

Dimension Length Overall--Overall length of the vessel given in feet.

Dimension Length Between Particulars--Length between particulars given in feet.

Dimension Beam Overall--Overall beam of the vessel given in feet.

Dimension Beam Between Particulars--Beam between particulars given in feet.

Dimension Hold Depth--Depth of hold given in feet

Dimension Draft--Draft of vessel given in feet

*Names of Owners*--The names of vessel owners and managers are listed in order, if known, with the city and dates of ownership

*Rig*--This field is used to list both method of locomotion and use of the vessel. Locomotion is described by the types of devices or arrangement of sail that drive a vessel through the water as per the following examples:

Sail	Steam/Motor
Schooner	Sidewheeler
Ship	Propeller
Bark	Sternwheeler
Sloop	Internalwheeler
Schooner Barge	
Scow	

<u>Other</u> Chain Ferry Horse Ferry Barge Canal Boat

The following are examples of uses of a vessel:

Examples of Uses Bulk Cargo Carferrv Commercial Fishing Container Ship Dredge Package Freight Passenger Roll on Roll Off Tanker Tow-Barge Towing

These terms should also be modified with more specifics as necessary. For instance, using the following terms help describe the vessel whaleback, self-unloader, etc.

Construction Material--Construction material, for instance:

Aluminum Composite (iron and wood) Concrete Ferro-Cement Fiberglass Iron Steel Wood

Disposition Lake/River--The major body of water that the vessel was lost in should be listed.

Disposition Port--The name of the nearest port.

*Disposition Political Jurisdiction-*-Enter the name of the contemporary name of the political jurisdiction that the vessel was lost in.

Disposition Latitude--Latitude where lost.

Disposition Longitude--Longitude where lost.

Disposition Loran--Loran coordinates of vessel remains, if known.

Disposition Global Positioning System--GPS coordinates of vessel remains, if known.

*Notes*--Textual notes may be searched by any word or series of words or word fragments that are necessary. This is the area where references are added.

*Casualties*--The Casualties sub-database is intended to keep track of the many mishaps that occur in each vessel's career. This is also the series of fields where information on vessel final disposition is entered.

Date--Month-day-year of casualty. If only partial date is known, enter this information under Description.

*Type--*Type of casualty is categorized as follows, except as the type of casualty does not fit the following broad categories:

Abandoned--Vessel intentionally removed from service, but not scrapped. Burned--Vessel damaged through fire. Collision-- Vessel damaged through collision with another vessel. Grounded--Vessel damaged lightly by beaching or stranding. Foundered-- Vessel sunk in deep water. Scrapped-- Vessel intentionally dismantled. Scuttled-- Vessel intentionally sunk. Struck Obstruction-- Vessel damaged through collision with something other than another vessel (ie. a pier, a wreck, a lighthouse, etc.) War Casualty-- Vessel lost as the result of enemy action or friendly fire. Wrecked-- Vessel damaged extensively by beaching or stranding.

Combinations of these casualty types may also have contributed to the vessels loss, and may be listed together.

Location--The city, state/province, and body of water on which the vessel met with its casualty.

*Description*--A brief narrative description of the casualty, including the type of cargo on board, number of lives lost, etc. A reference to the source of this information should be included at the end.

*Builder*--If the vessel casualty was repaired, the name of the person or firm that repaired the damage is entered.

*Builder Location*--If the vessel casualty was repaired, the city and state/province where the repairing builder was located is entered.

*Repairs*--The Repairs sub-database is intended to keep track of the many alterations or repairs that occur in each vessel's career. Each repair gets an "RP-" identification number that is unique to each repair included in the SHIIPS vessel database. This number is used by SHIIPS staffers to connect related repair or alteration data to a single vessel or for ease of refering to other vessels.

Date--Month-day-year that repairs or alterations were started on the vessel.

*Location*--The city/province and state where repairs were made.

*Repaired By*--The name of the individual(s) or firm(s) that made the repairs. In the event of multiple contractors, the most prominent ones will be listed first.

*Rig Change--*If alteration or repair required a change in rig, the new configuration is listed.

Tons Gross--If a change of tonnage resulted, the new gross tonnage is listed.

Tons Net--If a change of tonnage resulted, the new net tonnage is listed.

Dimensions New--If a change of measured dimensions resulted, the new dimensions are entered.

Extent--A narrative description of repairs or alterations to the vessel is entered.

Source--List references from which the above information was extracted.

*Enrollments*--The entry of registry and enrollment data is intended to be systematic and to mirror the enrollment forms standard in the United States merchant marine. Most fields are directly comparable to fields in the enrollments and certificates of registry of other nations.

SHIIPS Enrollment Identification Number--This identification number is unique to each enrollment included in the SHIIPS vessel database This number is used by SHIIPS staffers to connect related enrollment data to a single vessel or for ease of referring to other vessels This number is preceded by the designation "EN-".

SHIIPS Vessel Identification Number--Same as above.

*Enrollment Number*--In American enrollments and certificates of registry, a number is assigned to each document dependent upon its chronological sequence of issuance. In other words, the first enrollment issued at Buffalo in the year 1890 is enrollment number one for that year.

Master Last Name--Enter the last name of the master.

Master First Name--Enter the first name and middle initial of the master.

*Owners Last Name*--Enter the last name of the sole or managing owner, unless owned by a company. If owned by a company, enter the company name instead.

*Owners First Name*--Enter the first name of the sole or managing owner. If the owner is a company, leave this area blank or list the names of company officials, if given on the document.

Masts--Enter the number of masts.

*Bow*--Enter the type of bow plain, figurehead, scroll head, scow, square, etc.

Stern--Enter the type of stern: plain, square, gallery, no gallery, etc.

Decks--Enter the number of decks.

*Home Port*--Enter the name of the city and state/province that was listed as home port.

*Reason*--Enter the reason that the vessel was enrolled: new vessel, district change, tonnage change, readmeasured, change of owners, etc.

Engines--A small database of engineering information on individual vessels.

SHIIPS Vessel Identification Number--Same as above.

*SHIIPS Engine Identification* Number--SHIIPS number used to track individual engines even as they are transfered among different vessels.

*Type--Engine* type.

Engine Number--Builders engine identification number.

Engine Builder Location--City and state/province where engine was built.

*Engine Builder*--Name of person or firm that manufactured engine.

Date--Year of engine construction.

Horsepower--Horsepower of engine followed by means of measurement.

*Fuel*--Type of fuel burned by the engine.

Propeller--Number of propellers.

Bow Thruster--Number of thrusters.

*Comments*--Miscellaneous information about the engine, propellers, and thrusters, such as supporting construction specifications, installation dates, etc.

Cylinder and Stroke--For steam engines, the number and size of cylinders and stroke.

Source--References from which engine information was gleaned.

Quantity--Number of engines.

Boilers--A small database of boiler information on individual vessels

SHIIPS Vessel Identification Number--Same as above.

SHIIPS Boiler Identification Number--SHIIPS number used to track individual boilers even as they are transferred among different vessels.

*Type--*Type of boiler fire box, scotch, water tube, etc.

Quantity--Number of boilers.

*Size*--Dimensions of boilers.

Build Location--City and state/province where boilers were constructed.

Build Company--Name of the individual or firm that manufactured boilers.

Build Date--Year boilers were built in.

*Comment*--Miscellaneous information about the boilers, such as supporting construction specifications, installation dates, etc.

Source--References from which information on boilers was gleaned.

#### People Database

The people database is intended to encapsulate information on people who were involved in some aspect of maritime endeavor, or who participated in closely allied industries. SHIIPS was designed by a former reference archivist for the use of cultural resource managers, but with the potential use of a multitude of groups also in mind.

The SHIIPS prototype includes many more data fields than are currently searchable over the World Wide Web. The topics that are searchable are indicated throughout this manual in **bold face**. All fields are presented in order of appearance on the full database.

SHIIPS People Identification Number--This identification number is unique to each person included in the SHIIPS people database. This number is used by SHIIPS staffers to connect related data to a single person or for ease of refering to other people or the ports, artifacts, or vessels that they were associated with. This number is preceded by the designation "PR-".

Last Name- -Individual's last name.

*First Name*--Individuals first name.

*Middle Name--*Individuals middle name(s).

*Name Full*--The SHIIPS people database will calculate this information from the three fields above when completed

SHIIPS Vessel Identification Number--Same as above.

SHIIPS Port Identification Number--Same as below under "Port Database."

SHIIPS Image identification Number--Same as below under "Image Database."

*Identifier, Social Security Number*--Individual's social security number. This information will not be readily searchable.

*Identifier*, Z *Number--If* a American merchant mariner of the 20th Century, enter the individual's Z-number. This information will not be readily searchable.

Birth Year--Year of birth. Birth Month--Month of birth Birth Day--Day of birth Birth City--Location or city of birth Birth State--State or province of birth Birth Country--Country of birth Death Year--Year of death. Death Month--Month of death Death Day--Day of death

Death City--Location or city where death occurred

Death State--State or province where death occurred

Death Country--Country where death occurred

Death Maritime-- yes or no

*Operations Theater*--Primary theater(s) of the individual's maritime activities. For example: Great Lakes, Lake Champlain, Atlantic Coast, Gulf Coast, Pacific Coast, Inland Rivers.

Biography--Short narrative biography with references to sources from which this information was obtained

*Notes*--Miscellanous notes about individuals and their activities with references to sources from which this information was obtained

Spouse--Information about the individual's spouse(s) Wedding Year--Year wedding occurred.

Wedding Month--Month wedding occurred.

Wedding Day--Day wedding occurred.

Spouse Last Name--Maiden name of spouse.

Spouse First Name--First name of spouse with middle initial.

Birth Year--Year of birth.

Birth Month--Month of birth.

Birth Day--Day of birth.

Spouse Birth City--Location or city in which spouse was born.

Spouse Birth State--State or province where the spouse was born.

Spouse Birth Country-Spouse Death Year--Year of spouse's death.

Spouse Death Month--Month of spouses death.

Spouse Death Day--Day of spouses death.

Spouse Death City--Location or city where spouse died.

Spouse Death State--State or province where spouse died.

Spouse Death Country--County where spouse died.

Affiliations--Personal and professional affiliations of the individual connected to maritime operations. These affiliations may be fraternal, religious, or professional.

*Type--*Type of affiliation: Religious, Professional, Fraternal, etc.

Date--Year of first known affiliation.

*Description*--Name and description of affiliation: Lake Carriers Association, International Ship Masters Association, National Maritime Union, Odd Fellows, etc.

*Children*--The children of mariners and their spouse(s) are entered in this sub-database in order to track family traditions of participation in maritime activities.

Last Name--Last name of child.

First Name--First name and middle name of child.

Birth Year--Year of birth.

Birth Month--Month of birth

Birth Day--Day of birth.

Occupation--List of occupations, with span dates of each occupation, if known.

### Port Database

The port database is intended to encapsulate information on individual vessels that have seen service within the waters of North America. SHIIPS was designed by a former reference archivist for the use of cultural resource managers, but with the potential use of a multitude of groups also in mind.

The SHIIPS prototype includes many more data fields than are currently searchable over the World Wide Web. The topics that are searchable are indicated throughout this manual in **bold face**. All fields are presented in order of appearance on the full database.

SHIIPS Port Identification Number--This identification number is unique to each port included in the SHIIPS port database. This number is used by SHIIPS staffers to connect related data to a single port or for ease of refering to other ports or the people, artifacts, or vessels that they were associated with. This number is preceded by the designation "PO-".

*Theme Historic*--This field is used illustrate the major themes of American History that a particular port has ties to. For instance, New York, New York, would have immigration as a major theme.

*Sub-Theme Historic*--This field is used illustrate the many minor themes of American History that a particular port has ties to.

*Place Name, Official*--The official contemporary name of a port is entered in this field.

*Place Name, Unofficial*--Any unofficial or former names of a place are entered in this field. For example, present-day Toledo, Ohio, was originally made up of smaller communities named Manhattan, Vistula, Port Lawrence, all of which names were abandoned when they combined under the name Toledo. These former names would be entered in this field.

*State--*The name of the present state or province controlling the majority of the city.

*Country*--The name of the nation controlling the city.

*Body of Water*- -Enter the name of the body(ies) of water that this port is associated with, starting with the one that is most prominent. For instance, Toledo, Ohio's entry reads: Great Lakes, Lake Erie, Maumee River, Maumee Bay, Swan Creek, Miami and Erie Canal, Wabash and Erie Canal.

*Location Narrative--*Enter a brief descriptive narrative of the port that will help users find it on an ordinary road map.

*Latitude*--Enter latitude.

*Longitude*--Enter longitude.

Loran--Enter Loran coordinates.

Global Positioning System--Enter GPS location.

*Year Founded*--Year the community was founded. If there is doubt, use the earliest date of European settlement Explain pre-European settlement and any controversy over date of settlement under "Notes" or 'History Narrative."

History Narrative--Give a brief history of the port, concentrating on major civic and port developments.

*Local Lighthouse--*Name local lighthouses. Place in parenthesis after each the date of erection.

Local Life Saving Station--Name local Life Saving Station, or later Coast Guard stations.

Local Shipbuilders--Name local shipbuilders. Place in parenthesis the dates that these firms were in operation.

Local Shipping Companies-Name local shipping companies. Place in parenthesis the dates that these firms were in operation.

Local Commercial Fishing Finns--Name local commercial fishing companies. Place in parenthesis the dates that these firms were in operation.

*Local Maritime Businesses--*Name local maritime businesses (chandleries, rope walks, sailmakers, boiler makers, etc.) that are not otherwise listed above. Place in parenthesis the dates that these firms were in operation.

Historic Sites--Name any historic sites that are connected to the local maritime history and culture.

*Local Museums*--Provide the name, address, and telephone number of any local museums and historical Societies that have collections relative to area maritime history and culture.

*Sources*--List the sources of information provided on this form. This may also be used as an area to enter a bibliography of potential sources on local maritime history and culture.

Structures Historic--List local historic structures not otherwise mentioned above.

Political Jurisdiction--Enter the current political jurisdiction(s) that the city and its environs fall in.

*Notes*--Enter textual notes about the maritime history and culture of the city or its environs.

#### Artifact Database

The artifact database is intended to encapsulate information on individual vessels that have seen service within the waters of North America. SHIIPS was designed by a former reference archivist for the use of cultural resource managers, but with the potential use of a multitude of groups also in mind.

The SHIIPS prototype includes many more data fields than are currently searchable over the World Wide Web. The topics that are searchable are indicated throughout this manual in **bold face**. All fields are presented in order of appearance on the full database.

SHIIPS Artifact Identification Number--This identification number is unique to each artifact included in the SHIIPS port database. This number is used by SHIIPS staffers to connect related data to a single artifact or for ease of refering to other artifacts or the people, ports, or vessels that they were associated with. This number is preceded by the designation 'AR-".

Chennal Nomenclature--Enter the Chennal nomenclature for the artifact.

*Type*--Enter the type of artifact as classified by Chennal.

*Nautical Name*--Enter the nautical name of the artifact.

SHIIPS Vessel Identification Number--Same as above.

SHIIPS Port identification Number--Same as above.

SHIIPS People Identification Number--Same as above.

SHIIPS Imaged Identification Number--See below under "Images Database."

*Theme Historic*--This field is used illustrate the major themes of American History that a particular artifact has ties to.

Sub-Theme Historic--This field is used illustrate the many minor themes of American History that a particular artifact has ties to.

*History*--Provide a detailed provenance of the artifact, including ties to specific ports, vessels, and people.

*Operations Theater--*Primary theater(s) of the individuals maritime activities For example Great Lakes, Lake Champlain, Atlantic Coast, Gulf Coast, Pacific Coast, Inland Rivers.

*Description*--Enter a physical description of the artifact.

Function--Basic description of the function of the artifact.

Made By--Name of the manufacturer.

*Made At*--City or town where the artifact was manufactured.

Made Year--Year of manufacture.

Color--Description of the colors and decorations of the artifact.

Notes--Textual notes on the artifact history, including any sources used in the research of its history.

### Images Database

The image database is different from the other databases in that it was intended to service all of the other databases with appropriate images The SHIPS prototype does not allow images to be searched over the World Wide Web, because images automatically come up with the other databases and are therefore already searchable All images are provided online as thumbnails of larger image files

SHIPS Image Identification Number--This identification number is unique to each image included in the SHIPS port database. This number is used by SHIPS staffers to connect related data to a single image or for ease of refering to other images or the artifacts, people, ports, or vessels that they were associated with. This number is preceded by the designation "IM-".

*Category*--Enter category of image.

*Type--*Enter the type of image. Most images will be photographic, and can be described as Black and White (B&W), Color, or Hand Tinted. However, other sources of images will eventually be included. Art, Architectural Plan, Chart, etc.

*Picture*--This space is where the individual image appears. Images are added by SHIIPS technicians.

*Description*--The descriptive section is used to enter a textual description of the image, its subject, and an indication of the copyright holder.

SHIIPS Vessel Identification Number--Same as above.

SHIIPS Port identification Number--Same as above.

SHIIPS People Identification Number--Same as above.

SHIIPS Artifact Identification Number--Same as above.

*Source*--Enter the source of the image.

Source Identification Number--Enter a short code unique to the source of the image.

### Appendix A

Attached are the following SHIIPS sample pages:

- 1) SHIIPS Online Gateway
- 2) SHIIPS Vessel Database Online Search Page
- 3) SHIIPS Vessel Data Online Page from search
- 4) SHIIPS Vessel Data Entry Page
- 5) SHIIPS People Database Online Search Page
- 6) SHIIPS People Data Online Page from search
- 7) SHIIPS People Data Entry Page
- 8) SHIIPS Port Database Online Search Page
- 9) SHIIPS Port Data Online Page from search
- 10) SHIIPS Port Data Entry Page
- 11) SHIIPS Image Entry Page