NAVAL HISTORY & HERITAGE COMMAND
UNDERWATER ARCHAEOLOGY (UA) BRANCH

Shanna Daniel, NHHC UA Archaeological Conservator

NAVAL HISTORY AND HERITAGE COMMAND

Lest we forget their sacrifice
NAVAL HISTORY & HERITAGE COMMAND
UNDERWATER ARCHAEOLOGY (UA) BRANCH

BRANCH MISSION
To preserve and tell the story of the U.S. Navy through managing, researching, conserving, and protecting the Navy’s collection of more than 17,000 sunken and terrestrial military craft

KEY FUNCTIONS
1) Sunken & Terrestrial Military Craft Management
2) Archaeological Research
3) Conservation & Curation
4) Public Outreach

Introduction section created by: Dr. Alexis Catsambis, NHHC UA Archaeologist
MANAGEMENT OF SUNKEN MILITARY CRAFT

HISTORICAL / CULTURAL VALUE

MARITIME GRAVES

ENVIRONMENTAL CONCERNS

PUBLIC SAFETY HAZARDS

SENSITIVE MATERIALS

SOVEREIGN IMMUNITY & OVERLAPPING JURISDICTIONS
ARCHAEOLOGICAL RESEARCH

**DRIVERS**
- Navy & Partner Field Operations
- Archaeological Research Permits

**TYPES OF PROJECTS**
- Non-Intrusive & Remote Sensing Operations
- Site Excavations & Recoveries
CONSERVATION & COLLECTION MANAGEMENT

Artifacts in Treatment:  
c. 250

Curated Artifacts:  
c. 3,700

Artifacts on Loan:  
c. 14,500

Loan Institutions:  
17
PUBLIC OUTREACH AND EDUCATION

- Enhances appreciation for U.S. Navy sunken and terrestrial military craft
- Serves to support site preservation
- Shares the story of the U.S. Navy with public, as well as present and future sailors
NHHC UA 3D APPLICATIONS

BRINGING NAVY’S HISTORY TO LIFE USING 3D TECHNOLOGY

ROYAL SAVAGE

USS TULIP

Image: Courtesy of Naval History & Heritage Command, ROYAL SAVAGE, NHHC NH 594

Image: “Disaster at Ragged Point” loss of USS Tulip Courtesy of the Historical Marker Database
Lake Champlain Fleet came under the command of Gen. Benedict Arnold later in 1776.

Patrolling the northern lake, *Royal Savage* began the Battle of Valcour Island on 11 OCT 1776.

She ran aground during the battle and was later burned by the British.
In 1934, Mr. Lorenzo Hagglund along with a team of local salvors recovered the Royal Savage.

Approx. 1400 artifacts and 76 structural timbers brought up.

Collection sold to city of Harrisburg, Pennsylvania in 1996.

July 2015, NHHC UA acquired collection from the city of Harrisburg.
ROYAL SAVAGE COLLECTION

STRUCTURAL TIMBERS

14 Frames
37 Hull Planks
1 KEEL
1 KEELSON (3 sections)
1 STERNPOST
ROYAL SAVAGE

Agisoft Photoscan Software
Artec Eva Scanner and Processing Software

FULL 3D SCANNING
ROYAL SAVAGE

Artec 3D Scans into 2D Scaled Drawings

FULL 3D SCANNING
• In 1863, She joined the Potomac River Flotilla whose mission was to protect Union waterways and transport Union troops during the Civil War.

• In 1864, a defective boiler exploded and she sank off of Ragged Point, VA with a loss of 49 of the 57 sailors.

• In 1995, Maryland Maritime Archaeology Program (MMAP) discovered artifacts had been removed from the site. With their assistance, over 1,500 of Tulip’s artifacts were returned to NHHC UA.
Artec Eva allows us to scan artifacts and place finish scans in Sketchfab, which allows us to attach interactive 3D models into our NHHC ESRI ArcGIS Story Maps.
On the Horizon for NHHC UA 3D Capabilities

- Continue to partnership with NAVFAC and NPS in providing 3D Virtual Environment capabilities to NMCI computers allowing the NHHC website (www.history.navy.mil) to support UA’s interactive 3D artifact collection, as well as other Navy collections within our command.

- Begin to explore 3D modeling of Navy’s wreck sites in-situ using photogrammetry and underwater scanning.
THANK YOU FOR LISTENING

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