Two Ships / Two Centuries
Archaeological Research at Yorktown and Cape Hatteras

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The Battle of Yorktown, 1781
Destruction of British Ships, Yorktown

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The Aftermath at Yorktown, 1781
Archaeological Surveys
(1975 – 1978)
Survey Results
Environmental Conditions

- Strong currents
- Stinging jellyfish
- Dangerous boat traffic
- Shallow – 25 feet max.
- No visibility

View from diver’s mask
The Answer: A Cofferdam
Cofferdam Excavation
1980s

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Structural Features

Unique bow structure

Pump box and mainmast
Interior Furnishings

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Military Items
Nautical and Rigging Items

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Cooperage

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Personal Items
Faunal and Botanical Items
Lines: plumb bob → computer → splines & ink
Lines →
Model
Model & Artifacts → Museum
Reenactors help identify the wreck …

… the *Betsy* of Whitehaven
Discovering the Betsy’s master
The (not quite) final results
-- the ship
At the climax of the American Revolution, Lord Charles Cornwallis—facing combined United States and French forces—scuttled ships in the York River to prevent a naval assault on Yorktown, Virginia. Now archaeologists unlock the secrets of a Yorktown Shipwreck.

By JOHN D. BROADWATER
Photographs by BATES LITTLEHALES
A 5-volume report was completed in 1996 . . .
New Wrecks

- GL 136 (HMS Charon)
- GL 106 (Shipwright?)
- YO 86
- YO 85
- YO 12 (HMS Fowey?)
- YO 94
- YO 88 (Betsy)
- YO 89

York River

Yorktown

Gloucester Point

# 10

# 11

Yorktown Wreck Proposal -- 31Mar2010
USS Monitor
1862
The Race to Save the Monitor
John Ericsson
and the
USS Monitor
Clash of the Titans

Hampton Roads, Virginia
March 9, 1862
“What the fire of the enemy failed to do, the elements have accomplished.”

-- Paymaster William Keeler
Search for the Monitor

August 1973
Discovery
August 1973
Off Cape Hatteras, NC
235 feet deep
R/V Alcoa Seaprobe Expedition

April 1974
Protecting the *Monitor* Through Sanctuary Designation

January 30, 1975
The *Monitor* lies at a depth of 235 feet.
Deterioration of the USS Monitor
The Race to Save the *Monitor*

Defining the Problem, Proposing a Solution
Monitor Comprehensive, Long-Range Preservation Plan

Conclusions:

• If left on the seabed, the Monitor will disintegrate rapidly

• Complete recovery of hull/contents is not viable

• Hull stabilization and selective recovery must begin soon if anything is to be saved
NOAA’s *Monitor* Preservation Plan

Preservation Strategy:

Six Phases of On-Site Archaeology and Engineering
1- Recover skeg and propeller

2- Recover steam engine

3- Lift turret to the surface
The Race to Save the *Monitor*

Propeller Recovery

June 1998
June 1998: the propeller and eleven feet of propeller shaft were recovered by Navy divers
The Race to Save the *Monitor*

Engine Recovery

July 2001
Wreck of the USS Monitor
Site Orientation

Fire Room

- Reversing Wheel and Guard Rail
- Engine Bed
- Engine Frame No. 1
- Pumps
- Reversing Gear
- Engine Room Ladder
- Valve Levers and Links
- Rock Shaft
- Gauges
- Throttle and Starting Gear
- Main Steam Pipe
- Valve Chest
- Cylinder
The Engine Recovery Structure

Installed in summer 2000

The three main components of the engine recovery structure (ERS).

ERS in Place over the Wreck

Monitor Collection, NOAA
Navy divers logged 666 hours bottom time, 70% of which was by saturation divers.

First use of commercial saturation system by U.S. Navy.

Navy divers worked day and night, 7 days per week.
Self-Contained, Mixed-Gas “Technical” Diving by A NOAA-sponsored Team
Recovery of the *Monitor’s* Engine

July 16, 2001
Deck and Armor Belt
Area Removal Sequence
Navy and NOAA/NURC Divers
Spider and the Platform
USS Monitor Center at The Mariners’ Museum
USS Monitor Center at The Mariners’ Museum
Facial Reconstructions
“Their names are for history; and so long as we remain a people, so long will the work of the Monitor be remembered, and her story told to our children’s children… the ‘little cheesebox on a raft’ has made herself a name which will not soon be forgotten by the American people.”

Grenville Weeks, Surgeon, USS Monitor