



Phase II and Phase III Archaeological Database and Inventory

Site Number: 18BC61

Site Name: Bombardment of Baltimore

Prehistoric

Other name(s) I-95 Ft. McHenry Tunnel Vicinity

Historic

Brief Description:

Early 19th century naval battlefield, four late 19th-early 20th century shipwrecks

Unknown

Site Location and Environmental Data:

Maryland Archaeological Research Unit No. 7

SCS soil & sediment code U9

Latitude 39.2554

Longitude -76.5835

Physiographic province Western Shore Coastal

Terrestrial site

Underwater site

Elevation -5 m

Site slope 0-5%

Ethnobotany profile available

Maritime site

Site setting

-Site Setting restricted

-Lat/Long accurate to within 1 sq. mile, user may need to make slight adjustments in mapping to account for sites near state/county lines or streams

Topography

- Floodplain
- Hilltop/bluff
- Interior flat
- Upland flat
- Ridgetop
- Terrace
- Low terrace
- High terrace
- Rockshelter/cave
- Hillslope
- Unknown
- Other
- Made land

Ownership

- Private
- Federal
- State of MD
- Regional/county/city
- Unknown

Nearest Surface Water

Name (if any) Middle Branch of Patapsco

Saltwater

Ocean

Estuary/tidal river

Tidewater/marsh

Freshwater

Stream/river

Swamp

Lake or pond

Spring

Minimum distance to water is 0 m

Temporal & Ethnic Contextual Data:

Paleoindian site

Woodland site

Archaic site

MD Adena

Early archaic

Early woodland

Middle archaic

Mid. woodland

Late archaic

Late woodland

Unknown prehistoric context

Contact period site

ca. 1820 - 1860

Y

ca. 1630 - 1675

ca. 1860 - 1900

Y

ca. 1675 - 1720

ca. 1900 - 1930

Y

ca. 1720 - 1780

Y

Post 1930

Y

ca. 1780 - 1820

Y

Unknown historic context

Unknown context

Ethnic Associations (historic only)

Native American

Asian American

African American

Unknown

Anglo-American

Other

Y

Hispanic

British

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

Multi-component

Misc. ceremonial

Village

Rock art

Hamlet

Shell midden

Base camp

STU/lithic scatter

Rockshelter/cave

Quarry/extraction

Earthen mound

Fish weir

Cairn

Production area

Burial area

Unknown

Other context

Historic

Urban/Rural? Urban

Domestic

Homestead

Farmstead

Mansion

Plantation

Row/townhome

Cellar

Privy

Industrial

Mining-related

Quarry-related

Mill

Black/metalsmith

Furnace/forge

Other

Transportation

Canal-related

Road/railroad

Wharf/landing

Maritime-related

Bridge

Ford

Educational

Commercial

Trading post

Store

Tavern/inn

Military

Battlefield

Fortification

Encampment

Townsite

Religious

Church/mtg house

Ch support bldg

Burial area

Cemetery

Sepulchre

Isolated burial

Bldg or foundation

Possible Structure

Post-in-ground

Frame-built

Masonry

Other structure

Slave related

Non-domestic agri

Recreational

Midden/dump

Artifact scatter

Spring or well

Unknown

Other context

submerged vessels, anchor, armaments

Interpretive Sampling Data:

Prehistoric context samples

Soil samples taken

Flotation samples taken

Other samples taken

Historic context samples

Soil samples taken N

Flotation samples taken N

Other samples taken X-ray of ordnance



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Diagnostic Artifact Data:

Projectile Point Types		Koens-Crispin	
Clovis	<input type="checkbox"/>	Perkiomen	<input type="checkbox"/>
Hardaway-Dalton	<input type="checkbox"/>	Susquehana	<input type="checkbox"/>
Palmer	<input type="checkbox"/>	Vernon	<input type="checkbox"/>
Kirk (notch)	<input type="checkbox"/>	Piscataway	<input type="checkbox"/>
Kirk (stem)	<input type="checkbox"/>	Calvert	<input type="checkbox"/>
Le Croy	<input type="checkbox"/>	Selby Bay	<input type="checkbox"/>
Morrow Mntn	<input type="checkbox"/>	Jacks Rf (notch)	<input type="checkbox"/>
Guilford	<input type="checkbox"/>	Jacks Rf (pent)	<input type="checkbox"/>
Brewerton	<input type="checkbox"/>	Madison/Potomac	<input type="checkbox"/>
Otter Creek	<input type="checkbox"/>	Levanna	<input type="checkbox"/>

Prehistoric Sherd Types

Marcey Creek	<input type="checkbox"/>	Popes Creek	<input type="checkbox"/>	Shepard	<input type="checkbox"/>	Keyser	<input type="checkbox"/>
Dames Qtr	<input type="checkbox"/>	Coulbourn	<input type="checkbox"/>	Townsend	<input type="checkbox"/>	Yeocomico	<input type="checkbox"/>
Selden Island	<input type="checkbox"/>	Watson	<input type="checkbox"/>	Minguannan	<input type="checkbox"/>	Monongahela	<input type="checkbox"/>
Accokeek	<input type="checkbox"/>	Mockley	<input type="checkbox"/>	Sullivan Cove	<input type="checkbox"/>	Susquehannock	<input type="checkbox"/>
Wolfe Neck	<input type="checkbox"/>	Clemson Island	<input type="checkbox"/>	Shenks Ferry	<input type="checkbox"/>		
Vinette	<input type="checkbox"/>	Page	<input type="checkbox"/>	Moyaone	<input type="checkbox"/>		
				Potomac Crk	<input type="checkbox"/>		

Historic Sherd Types

Earthenware		Ironstone	<input type="checkbox"/>	Staffordshire	<input type="checkbox"/>	Stoneware	
Astbury	<input type="checkbox"/>	Jackfield	<input type="checkbox"/>	Tin Glazed	<input type="checkbox"/>	English Brown	<input type="checkbox"/>
Borderware	<input type="checkbox"/>	Mn Mottled	<input type="checkbox"/>	Whiteware	<input type="checkbox"/>	Eng Dry-bodied	<input type="checkbox"/>
Buckley	<input type="checkbox"/>	North Devon	<input type="checkbox"/>	Porcelain	<input type="checkbox"/>	Nottingham	<input type="checkbox"/>
Creamware	<input type="checkbox"/>	Pearlware	<input type="checkbox"/>			Rhenish	<input type="checkbox"/>
						Wt Salt-glazed	<input type="checkbox"/>

All quantities exact or estimated minimal counts

Other Artifact & Feature Types:

Prehistoric Artifacts		Other fired clay	
Flaked stone	<input type="checkbox"/>	Human remain(s)	<input type="checkbox"/>
Ground stone	<input type="checkbox"/>	Modified faunal	<input type="checkbox"/>
Stone bowls	<input type="checkbox"/>	Unmod faunal	<input type="checkbox"/>
Fire-cracked rock	<input type="checkbox"/>	Oyster shell	<input type="checkbox"/>
Other lithics (all)	<input type="checkbox"/>	Floral material	<input type="checkbox"/>
Ceramics (all)	<input type="checkbox"/>	Uncommon Obj.	<input type="checkbox"/>
Rimsherds	<input type="checkbox"/>	Other	<input type="checkbox"/>

Prehistoric Features

Mound(s)	<input type="checkbox"/>	Storage/trash pit	<input type="checkbox"/>
Midden	<input type="checkbox"/>	Burial(s)	<input type="checkbox"/>
Shell midden	<input type="checkbox"/>	Ossuary	<input type="checkbox"/>
Postholes/molds	<input type="checkbox"/>	Unknown	<input type="checkbox"/>
House pattern(s)	<input type="checkbox"/>	Other	<input type="checkbox"/>
Palisade(s)	<input type="checkbox"/>		
Hearth(s)	<input type="checkbox"/>		
Lithic reduc area	<input type="checkbox"/>		

Lithic Material

Fer quartzite	<input type="checkbox"/>	Sil sandstone	<input type="checkbox"/>
Jasper	<input type="checkbox"/>	Chalcedony	<input type="checkbox"/>
Chert	<input type="checkbox"/>	Ironstone	<input type="checkbox"/>
Rhyolite	<input type="checkbox"/>	Argilite	<input type="checkbox"/>
Quartz	<input type="checkbox"/>	Steatite	<input type="checkbox"/>
Quartzite	<input type="checkbox"/>	Sandstone	<input type="checkbox"/>
		European flint	<input type="checkbox"/>
		Basalt	<input type="checkbox"/>
		Unknown	<input type="checkbox"/>
		Other	<input type="checkbox"/>

Dated features present at site

late 19th-early 20th century shipwrecks, ordnance field from an early 20th century battlefield

Historic Artifacts		Tobacco related	
Pottery (all)	<input type="checkbox"/>	Activity item(s)	2
Glass (all)	20	Human remain(s)	<input type="checkbox"/>
Architectural	4	Faunal material	<input type="checkbox"/>
Furniture	<input type="checkbox"/>	Misc. kitchen	<input type="checkbox"/>
Arms	52	Floral material	<input type="checkbox"/>
Clothing	<input type="checkbox"/>	Misc.	10
Personal items	<input type="checkbox"/>	Other	<input type="checkbox"/>

Historic Features

Privy/outhouse	<input type="checkbox"/>	Depression/mound	<input type="checkbox"/>	Unknown	<input type="checkbox"/>
Const feature	<input type="checkbox"/>	Burial(s)	<input type="checkbox"/>	Other	<input checked="" type="checkbox"/>
Foundation	<input type="checkbox"/>	Trash pit/dump	<input type="checkbox"/>	vessels, anchor	
Cellar hole/cellar	<input type="checkbox"/>	Sheet midden	<input type="checkbox"/>		
Hearth/chimney	<input type="checkbox"/>	Planting feature	<input type="checkbox"/>		
Postholes/molds	<input type="checkbox"/>	Road/walkway	<input type="checkbox"/>		
Paling ditch/fence	<input type="checkbox"/>				

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1: +/- years BP Reliability Sample 2: +/- years BP Reliability Sample 3: +/- years BP Reliability

Sample 4: +/- years BP Reliability Sample 5: +/- years BP Reliability Sample 6: +/- years BP Reliability

Sample 7: +/- years BP Reliability Sample 8: +/- years BP Reliability Sample 9: +/- years BP Reliability

Additional radiocarbon results available



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External Samples/Data:

Collection curated at MAC (Accession #2006.018.001)

Additional raw data may be available online

Summary Description:

Site 18BC61 consists of the underwater archeological resources associated with the early 19th Bombardment of Baltimore that occurred during the War of 1812. This Naval battlefield lies off Whetstone Point, the peninsula on which Fort McHenry is situated in the Harbor of Baltimore, Maryland. The site is situated entirely within the waters of the harbor and not on dry land.

In 1729, the Maryland Assembly passed an act to create "Baltimore Town" along the shores of the present-day Inner Harbor of the city. The town's first shipyard was founded in 1730 by William Fell and very quickly, the vicinity of this shipyard (Fells Point) became Baltimore's major shipping center. The tiny port town grew slowly during the first half of the 18th century, but the number of the number of vessels registered in Baltimore increased dramatically in the second half of the century and the town began to surpass Annapolis in importance. The port's trade during this period was mainly with England and the islands of the West Indies.

At the outbreak of the Revolutionary War in 1776, a small shoreline battery was erected at the tip of Whetstone Point to guard the narrows between it and Gorsuch's Point (today's Lazaretto Point) to the east. A few months later, a small star-shaped earthenwork fort was constructed behind the battery. It was named Fort Whetstone. To further protect the entrance to the Inner Harbor, a massive iron chain and a log boom were stretched across the narrows as an obstacle to enemy vessels.

By 1781, the fort had a magazine, military hospital, and barracks. While the fort had been built as a defense against British attack, it never came under enemy fire. During the 1790s, the site of Fort Whetstone, which had fallen into disrepair, was covered over by the construction of Fort McHenry. It was a star-shaped red brick fort that included batteries, magazines, and barracks.

Relations between Great Britain and the new United States government were severely strained during the early years of the 19th century due to trade disagreements and the British impressment of American sailors. On June 18th, 1812, Congress declared war on Great Britain. Privateers sailing out of Baltimore harassed British ships and ultimately drew the attention of their navy.

In February of 1813, the British fleet under Rear Admiral George Cockburn entered the Chesapeake Bay. The British established a blockade at the mouth of the Bay, stalling all maritime traffic. During the summer of 1814, the British fleet in the Bay was enlarged and placed under the command of Vice Admiral Alexander Cochrane. On September 11th, 1814, the British dropped anchor 13 miles south of Baltimore, at the mouth of the Patapsco River. By this time, the British had already entered Washington and burned public buildings to the ground. The capture of Baltimore, both from the land and from the sea, was their next objective.

In order to reach the city via the North West Branch, the British Naval forces would have had to pass by Whetstone Point. Fort McHenry (at that location) was the primary seaward defense of Baltimore. A new water battery had been installed in 1813 to better protect the city. It provided greater protection to the fort from bombardments and eliminated the cover afforded by the terrain between the fort and the water. New platforms and gun carriages were built on the water battery and booms had been constructed in front of the fort. Furnaces for heating up the balls for the guns were also constructed. The guns themselves were borrowed from the French. Parapets were built consisting of sodded earth planted with trees. These were designed to accommodate cannons firing from protected platforms. Twenty-one cannons in all were mounted on the fort. A garrison of 1,000 soldiers under Major George Armistead was quartered at Fort McHenry in anticipation of the British attack.

General Samuel Smith, who had been tasked with the defense of Baltimore, had ordered other defensive measures in the harbor, most notably the sinking and/or mooring of several ships and barges at the mouths of the various rivers and branches that met at the harbor. This was done to prevent British ships from accessing these waterways. Booms and chains, as well as several small artillery fortifications served as further obstacles to the British Navy.

The Patapsco River proved too shallow for British ship of the line. Instead of their large war ships, the British had to send in a fleet of 16 lighter vessels. These ships moved within three miles of Fort McHenry. Included in this attack fleet were frigates, sloops, 5-bomb vessels, and a rocket ship.

At dawn on September 13th, 1814, the British opened fire. The bomb and rocket ships of the British Navy were armed principally with 10-inch and 13-inch mortar guns, firing bombshells weighing over 200 pounds. These shells carried up to 4,200 yards. However, the shells were erratic and frequently burst in mid-air rather than on-target. The garrison at Fort McHenry returned the fire. The guns at the fort did not have the range of the British artillery. The 24-pounders carried 1,800 yards and the big French 36-pounders 2,800 yards, but this was not enough to reach the British ships.

That afternoon, several enemy ships drew as close as two miles from Fort McHenry. They were driven back to the three mile range by American artillery fire. At 1:00 AM on September 14th, British forces, consisting of approximately 1,000 men, rowed up the Ferry Branch of the Patapsco. The plan was to attack Fort McHenry from the rear and approach Baltimore from the southwest. The British forces were repulsed, first by the fire from smaller ancillary fortifications and eventually from Fort McHenry itself as well as the Lazaretto Point battery and armed gunboats. The last rounds from the retiring British forces hit Fort McHenry about 7:00 AM on the 14th.

According to Major Armistead, about 400 shells fell within the fort. Two buildings (unnamed) were severely damaged. American casualties at the fort totaled four dead and 24 wounded. In all, the British expended approximately 1,500 rounds of solid and exploding projectiles weighing between 12 and 180 pounds. Some of the projectiles fired toward Fort McHenry may have fallen into the channel near the fort.

The battle of September 14 inspired Francis Scott Key to write the Star Spangled Banner. He was aboard a British cartel ship some eight miles away from the engagement, and could observe the battle through a spyglass. The sight of the large American flag flying outside Fort McHenry on the morning of the 14th reassured him that the British forces had not won the battle.

The site was first examined archeologically in 1981 during investigations associated with the planned construction of the I-95 Fort McHenry Tunnel. This tunnel and toll road now runs beneath Baltimore Harbor between Whetstone Point and Lazaretto Point. Since the project was a state undertaking using federal highways funds, Section 106 compliance was required for the project.



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Unknown

Historic records searches and literature review suggested that one or more sunken vessels might be located within the area reserved for the tunnel construction, many of which were likely to predate 1930. It also directed attention to the eventful history of Fort McHenry, and the possibility that material relating to the fort may be in the area to be impacted by the tunnel project. For these reasons, a reconnaissance survey was authorized to provide substantive evidence of the presence or absence of cultural resources. Since the area to be investigated was underneath the waters of Baltimore Harbor, a remote sensing survey was necessary.

Proton procession magnetometry was used during the survey portion of the 1981 project. Survey lines were spaced 6.1 m (20 feet apart), and readings were taken at 2.13 m (7 foot) intervals. The sensor was held no more than 3.05 m (10 feet) above the bottom in order to detect iron objects 100-200 lbs. in weight and greater than 30.5 cm (12 inches) in diameter. Following the survey operations, the magnetometer chart record, field notes, and target locational information was analyzed and correlated to enable interpretations to be made of the data obtained. This resulted in the plotting of all targets detected, and preliminary evaluations of their importance to be made.

A total of 46 magnetic targets were identified during the survey stage of the 1981 project. At least three (and possibly 4) of these were determined to be sunken vessels. All four potential vessels and a sample of 22 of the other targets were subsequently investigated by test excavation and mapping. Excavation was performed with a 15.24 cm (6 inch) hydrodredge or a 15.24 cm air lift system. A floating sieve with 1.27 cm (1/2 inch) hardware cloth caught the discharged materials. All of the machinery was operated from a floating steel barge with a specially constructed platform with the assistance of divers. The 22 sampled magnetic "targets" were ultimately recovered or removed from the site.

The conduct of the work underwater was hampered by the lack of visibility. The site's location in Baltimore Harbor and within a nearshore cove meant that the surrounding water constantly contained a large amount of suspended sediments. In some very shallow areas, sunlight could penetrate to permit several centimeters of visibility, however, the remainder of the area was shrouded in total blackness. Even artificial light could not alleviate this situation. As a result, a system was devised using rope and rods in which mapping could be accomplished manually.

Vessels were indeed located at all four "potential" vessel locations. Each was partially excavated and mapped. One of these was a propeller-driven boat dating from the 2nd quarter of the 20th century. Another was a rectangular wooden barge which appeared to be no more than 80 years old. The other two were wooden cargo vessels that dated from between 1880 and 1920. The larger was probably powered by sail, and the smaller was a lighter (small barge-like boat used for transferring cargo between a larger vessel and the shore). None of these sunken vessels could be considered to be historically significant and further investigation of them was not recommended.

The other aspect of the investigation was the identification of the smaller magnetic targets. The most significant target recovered was an iron anchor dating from the 18th century. It formerly had a wooden stock which had long since disintegrated, and was recovered at a depth of 1.83 m (6 ft) into the mud harbor bottom. Other items recovered worthy of mention were pieces of massive iron chain, and a possible portion of a late 19th century cannon mount. None of the targets identified at the site could be definitely associated with the 1814 bombardment of the nearby fort. The remaining objects were mostly modern and included such objects as jettisoned scrap iron and steel cable, lost tools, fishing tackle, pipes, and small boat anchors.

The underwater investigations also resulted in the recovery of an extensive collection of bottles. These mostly date from the World War I period, during which Fort McHenry served as a large military hospital. In addition, a single fragment of one of the War of 1812 British bombshells (found in the water between the fort's seawall and the northern boundary of the site), a 12 lb. cannonball and 9 Civil War Ketchum hand grenades were recovered. All of these materials (with the exception of the British bombshell fragment) had been dumped into the harbor for disposal.

Based on these findings, it was determined that dredging for the construction of the Ft. McHenry Tunnel was unlikely to impact any significant archeological remains within the harbor. The 1981 researchers do note, however, that not all magnetic anomalies could be recovered and some could potentially be unexploded ordnance from the War of 1812.

The Fort McHenry Tunnel for I-95 opened to traffic in 1985.

The most recent archeological project to focus specifically on portions of the site was a magnetometer survey of 84 acres of submerged state land (a significant portion of which constitutes the site) conducted by the Maryland Maritime Archeology program in 2002. The project served the dual purposes of continuing the State's legislatively mandated survey of State waters and assisting the National Park Service with Section 106 compliance in preparation for proposed repairs to portions of the fort's seawall. An additional consideration was the possibility that unexploded ordnance might remain in the area from the bombardment of the fort during the War of 1812 and the hazard that would pose to repair crews and the public if said ordnance was impacted.

The magnetometer survey was pre-plotted using a ruggedized Toshiba Tecra 8200 laptop computer running Coastal Oceanographics' Hypack Max survey software, and Maptech and Chart Navigator mapping software. Eleven lanes, spaced at 15.24 m (50 ft) intervals, were laid out to cover two segments of the seawall. These were then extended to provide coverage of 3 additional segments. A second survey of 11 additional lanes was then carried out to complete coverage of the remaining segments of the seawall within the planned repair area. There was some overlap in the two sets of survey lanes. The surveys employed a Geometrics 881 Cesium magnetometer linked to a Garmin GPS MAP 162 Global Positioning System as well as the aforementioned laptop and software suites. Some lines were run several times while the researchers reconfigured the equipment. In these cases, the data were averaged. The raw data collected during the remote sensing survey were post-processed at the Office of Archeology in Crownsville, MD.

Two anomalies were recorded. Both targets were brief and intense spikes in the background magnetic field. Such spikes tend to indicate small, solid metal objects. Neither was in the area of potential effect for the (then) planned repairs to the sea wall, and so neither was "ground-truthed". One spike was likely a drainpipe known to be situated in that particular area. The other may be a portion of the Fort McHenry Tunnel, but would have been expected to show up in the scans from other survey lanes. The decision was made to simply plot both objects and avoid them in future.

According to the MHT site files, more than 40 pieces of ordnance were recovered during the dredging of channels in the harbor in 2004. Ordnance dating from the 20th century was destroyed by the US Army Corps of Engineers (USACE) as unstable and hazardous, 5 early Schenkel shells (Civil War-era artillery) were also destroyed during attempts to defuse them. Other ordnance, relating to the Civil War and War of 1812, was sent to the Maryland Archeological Conservation (MAC) Lab for conservation treatment. The USACE provided CDs of digital photographs to MHT. In addition, a cannon recovered from Fell's Landing at Fells Point and likely related to the Quasi-War with France (1798-1800) was sent to the MAC Lab. This was recovered by contractors working for



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the City of Baltimore but the USACE was not notified and MHT only learned some time after the recovery thereby precluding an examination of the context in which it was located.

Normally artifacts such as ordnance and cannon are not considered eligible for the National Register. However, the known nature of this area as a battlefield of national significance argues for some means of addressing remains which are related to this event. By delineating the boundaries of the battle, it is easier to afford adequate consideration of such remains during survey or other undertakings affecting this area. It was determined more efficient to utilize an existing site number than to generate another one for consideration of comparable cultural resources and in recent years, MHT has expanded the boundaries of the site to better match the known War of 1812-era naval battlefield.

Site 18BC61 is a significant archeological site associated with a significant event in American history. In 2004, the Maryland Historical Trust redefined this site to reflect the approximate extent of the battle itself. The site is to be treated in the same manner as Monocacy National Battlefield and Antietam National Battlefield. Newly recorded sites within the battlefield which do not relate to the battle should get discrete numbers. However, artifacts related directly to the battle, whether found within such sites or not, should be cataloged as 18BC61.

External Reference Codes (Library ID Numbers):

00005586, 97001557