# Galley Congress Inspection Report

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On October 22, 2001 a team of archaeologists from the Lake Champlain Maritime Museum inspected the remains of the Galley *Congress* in Arnold's Bay, Panton, Vermont (Figure 1). The remains of this vessel are the only intact structural remains of the five vessels that were burned there in 1776 by Benedict Arnold in order to prevent their capture by the British.

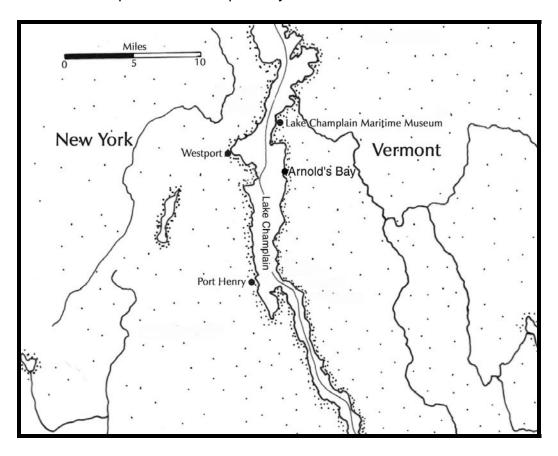


Figure 1. Map of the southern end of Lake Champlain showing Arnold's Bay.

#### PREVIOUS INVESTIGATIONS

Arnold's Bay, where Benedict Arnold was forced to run aground and burn five vessels of his small fleet in 1776, has been the site of numerous salvage operations, and in the 1980s several archaeological surveys.

Faced with overwhelming British naval superiority at the Revolutionary War Battle of Valcour Island on October 11, 1776, Brigadier General Benedict Arnold chose to attempt a retreat southward up Lake Champlain. The escape from the confined water between Valcour Island and the New York shore proved successful, as the 13 surviving American vessels rowed quietly past the negligent British fleet in the early morning hours of the following day. The flight, however, only prolonged the losing struggle.

The American crews, hoping to reach Crown Point, beat into the south wind and rowed to elude their pursuers, but were frustrated by shot damage to their ships and the speed of the enemy's chase. October 12 saw the capture of the gondola *Jersey* and the scuttling of the gunboat *Spitfire*. Arnold's squadron suffered its most crushing blows on the thirteenth, when the galley *Washington* was beaten into striking her colors, the cutter *Lee* was apparently abandoned, and, after a two and a half hour running fight, the galley *Congress* and four gondolas were run ashore in Ferris' Bay in Panton, Vermont. Only four of the vessels which had been with the fleet at Valcour survived the British pursuit. These were the schooner *Revenge*, sloop *Enterprise*, gunboat *New York* and galley *Trumbull*. They reached temporary safety in the lake's southern narrows, only to be lost with the galley *Gates*, and schooner *Liberty* when the British won complete control of Lake Champlain the following year.

The five vessels run ashore in Ferris' Bay (now Arnold's Bay) were set afire to prevent their falling into British hands. Local history has it that the hulls burned with their colors flying, and that Arnold was the last to leave *Congress*, which had served as his flagship since his removal from the schooner *Royal Savage* prior to the Battle of Valcour Island.

The British worked to salvage useable material from the charred hulls in the bay in 1776 and 1777. Such items would probably have included cannon, shot, and possibly other iron objects like tools and hull fittings. Salvage of a different sort, inspired by historical interest rather than military necessity, was conducted on the hulls as early as the mid-nineteenth century. Three of the gunboats were raised by 1859, while the lower stern portion of the wooden hull of *Congress* was dragged out of the bay in 1891. The remains of the fourth and last gunboat were raised by marine salvage engineer Lorenzo Hagglund in 1952. Lacking modern conservation techniques all of these vessels, with the exception of fragmentary pieces, were lost to time and the elements.

Another ambitious effort to recover artifactual material from the site was undertaken by William Leege, Robert Leahy, and Oscar Bredenberg during the summers of 1960 and 1961. These individuals, with the guidance of a local lake captain, located what was almost certainly the bow section of *Congress*. They spent approximately one week each of the two summers dredging a portion of the hull's interior with a water pump, and recovered a large assemblage of artifacts.

In 1984, after consultation with Mr. Leege, archaeologists from the Champlain Maritime Society (precursor of the LCMM) were able to relocate the remains of *Congress* through a combination of remote sensing devices and visual surveys. Upon locating the remains, a 5ft (1.5m) square grid was placed over the exposed frame ends and a water dredge was used to clear mud from the hull. After approximately one hour of dredging the archaeologists were satisfied that they had found the bow section of *Congress*, and the excavation was halted (Figure 2). In 1985, the CMS conducted another survey in the bay. During this field season they conducted a visual diver survey of the bottomlands with the hope of locating previously unknown cultural features. In the course of swimming the equivalent of 17½mi (28.2km) the team made several discoveries. Numerous isolated oak planks were found scattered around the bay; these were likely debris from the American fleet. A deteriorated section of a gun carriage and additional disarticulated wreckage in proximity to *Congress* were also located.

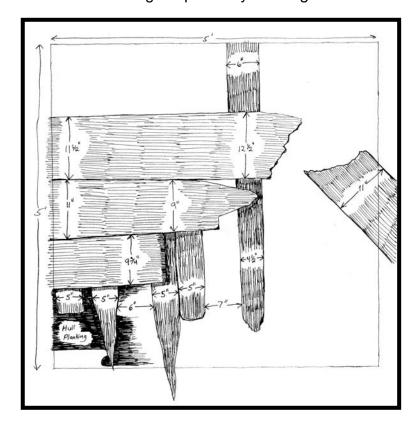


Figure 2. Plan view of Congress remains from 1984 survey (LCMM Collection).

#### 2001 INSPECTION

As per the Lake Champlain Maritime Museum's Department of Defense Legacy Program responsibilities for 2001, the LCMM conducted an inspection of the remains of the Galley *Congress*. The goals of this inspection were to determine the effect of zebra mussels and the extent of anchor damage to the hull. The team consisted of: Arthur Cohn, who assessed and video documented the site;

Pierre LaRocque who photographically documented the remains using a 35mm Nikonos V underwater camera; and Adam Kane, who measured and drew a preliminary site plan of the area.

The remains of *Congress* lie in 5 to 8ft (1.5 to 2.1m) of water, and are largely buried below the bottom sediments. The site was located visually from the surface of the survey vessel. The diving inspection of the area revealed many scattered timbers, presumably most were associated with the 1776 fleet. *Insitu Congress* timbers are visible in six locations (Figure 3). Sections of planking and framing were visible toward the center of the vessel, while five separate futtocks or parts of frames protrude from the lakebed along the length of the hull. The intact section of the hull has a minimum length of 25ft (7.6m), and is likely 30 to 35ft (9.1 to 10.7m) in length.

Contemporary evidence suggests that the portion of the remaining hull is the bow section (Figure 4). This corresponds well to the archaeological evidence. The bottom of the hull protruding from the western side of the site has only a modest curvature. The framing of this bottom section of the hull appears to be nearly flat, which is consistent with the midship section of the Galley *Washington*, the sister ship of *Congress* (Figure 5). In contrast, the portions of the frames protruding from the sediment in the eastern part of the site appear to have significant curvature, as they descend abruptly into the bottom sediments. This positioning suggests that the stem of the vessel lies to the east, just at the toe of a limestone shelf that runs northeast-southwest near the hull.

During the 2001 inspection two primary observations about the stability of the site were made:

- Substantially more of the hull is now exposed than was in 1984; and
- Zebra mussels have colonized approximately 50 percent of the surface area of exposed timbers.

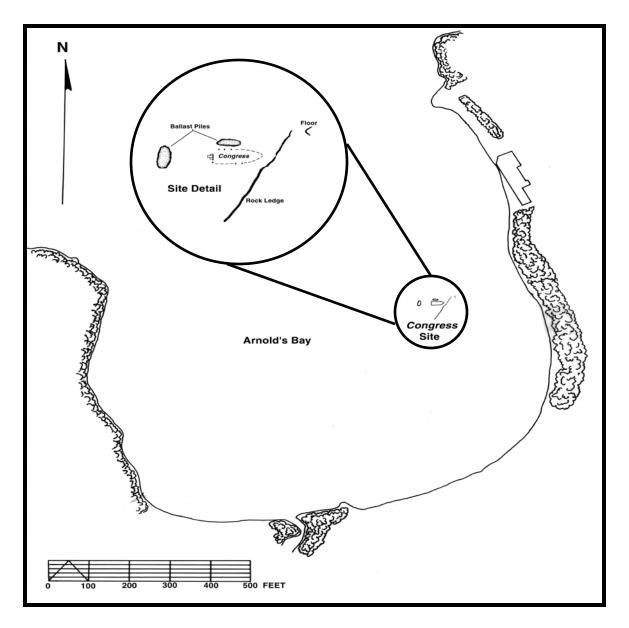


Figure 3. Plan view of Arnold's Bay showing the location of the *Congress* remains, and a detail of the site (base map by Kevin Crisman, *Congress* site information by Adam Kane).



Figure 4. Postcard circa 1905, showing the stern section of the Galley *Congress* (courtesy of Erick Tichonuk).

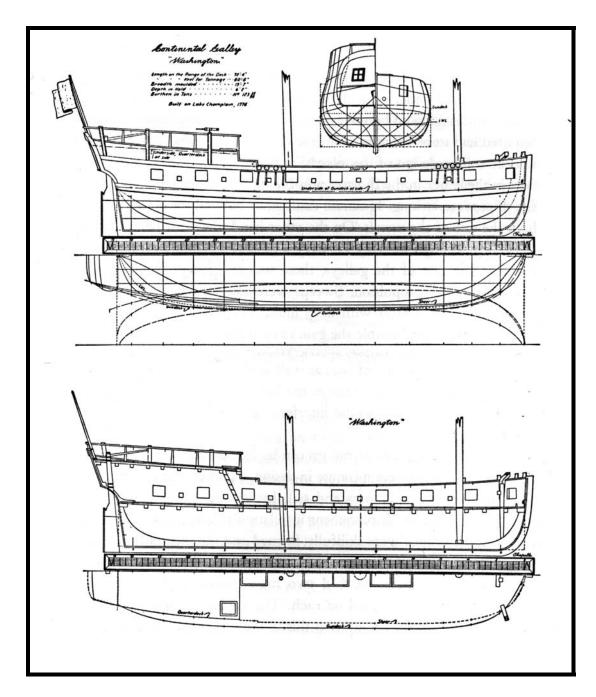


Figure 5. Lines and inboard profile of the Galley *Washington*. Lines taken off by the Royal Navy after her capture (after Chapelle 1935:73)

#### RECOMMENDATIONS

The bow section of *Congress* are the only intact structural remains of the five vessels Benedict Arnold scuttled in Ferris' Bay in 1776. All feasible measures should be taken to ensure the long-term survival of this important Revolutionary War shipwreck. However, numerous other significant disarticulated timbers associated with the 1776 fleet are also located in Arnold's Bay. These may be from *Congress* or from the four gunboats also scuttled there. All of these timbers are rapidly being colonized by zebra mussels and are subject to environmental decay due to the shallow, exposed location.

It is recommended that a significant effort be undertaken to map, document, and preserve these important artifacts. This could be implemented in a one to two week field project in which the scattered timbers are mapped, recovered, documented, and reburied in a central location in the bay. The timbers would be redeposited below the bottom sediments to ensure their preservation in an anaerobic environment. In addition to preserving the disarticulated timbers of the fleet, this study would also add to our understanding of shipbuilding during the Revolutionary War.

It is recommended that *Congress* be stabilized by placing sandbags around the vessel's exposed timbers. This would kill the zebra mussels presently on the timbers and prevent future colonization. The sections of planking in the stern would also benefit from the structural support of sandbags. These timbers protrude up from the sediments and appear to be unstable. Supporting and then covering them with sandbags will insure their long-term survival.

In conclusion, the remains of Benedict Arnold's Flagship, the Galley *Congress*, represent an important and tangible link to a decisive Revolutionary War battle, particularly the activities of the second engagement on October 13, 1776. Although, one half to two thirds of the vessel was removed in 1891, a substantial portion of the bow section is extant. Most of the vessel lies buried under several feet of sediment, and is therefore considered to be in a stable environment. The exposed portions of the hull however, are subject to degradation via colonization by zebra mussels and biological decay.

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