The first two decades of the 19th century saw tremendous innovation and experimentation in North American shipbuilding. Expanding maritime trade was threatened by piracy and prolonged wars in Europe, and shipwrights responded by creating swift-sailing designs such as the celebrated “Baltimore Clipper.” While much has been written about the developments in naval architecture during this period, few of the actual vessels have undergone archaeological study.

Crisman, Kevin J., “Mr.Eckfords´Brig Jefferson”
INA Newsletter, 16.3: 10-14

Lake Champlain
Saratoga, Ticonderoga, Eagle, Allen, Confiance,Linnet.

26-gun frigate Saratoga - Comm. T. Macdonough; 28k/29w;
17-gun schooner Ticonderoga - Lt. Stephan Cassin; 6k/6w;
20-gun brig Eagle - Lt. Robert Henley; 13k/20w;
7-gun sloop Preble - Lt. Charles Budd; 2k/0w
10 row galleys.

39-gun frigate Confiance - Capt. G. Downey; 41k/40w;
16-gun brig Linnet - Capt. Daniel Pring; 10k/14w;
11-gun sloop Chubb - Capt. James McHie; 6k/16w;
11-gun sloop Finch - Capt. William Hicks; 0k/2w;
12 row galleys.

K - killed; W - wounded
The 26-gun ship *Saratoga*

The *Saratoga* was built in February and March 1814 in Vergennes, VT, by Noah Brown for Macdonough, to serve as his flagship. Macdonough had planned to build only gunboats, but as he was informed that the English were building a large ship on the Richelieu River, he ordered the *Saratoga*.

Its construction took 40 days. At the same time, Noah Brown built 6 gunboats 22.9 m long, designed to carry 2 guns each.

During the 2 hour 20 minute engagement of September 11, 1814, the *Saratoga* took 55 round shots on its hull, and twice was set on fire by hot shot fired from the *Confiance*.

After the battle, the *Saratoga* was taken to Whitehall and its rigging, guns and stores were removed. It was then left in ordinary with a small crew of sailors charged with working the pumps every day, so that the ship would not sink in the channel. Then, by 1820, the *Saratoga* was moved to a narrower river north of Whitehall, to make sure that it would not block the main channel of the lake. Later, the remains of the *Saratoga* were destroyed when this section of the river was enlarged.

The 17-gun schooner *Ticonderoga*

In 1811, Elihu Bunker, a businessman from New York, won the right to operate a steamboat line on Lake Champlain. He formed the Lake Champlain Steamboat Company, and started the construction of its first ship on the shores of the lake.

When war erupted the next year, Macdonough commandeered the ship under construction, and since there was no time to wait for the machinery to arrive and be installed, he had Brown transform it into the schooner *Ticonderoga*.

The *Ticonderoga* was armed with 17 guns of several sizes.

After the battle of Plattsburg Bay, the *Ticonderoga* was sailed to a small bay near Whitehall on the southern end of Lake Champlain, where it was stripped of its armament and stores, and then left to rot.

In 1825, the hulls of Macdonough’s vessels were sold to scrap merchants.

The *Ticonderoga* was raised from the bottom of Lake Champlain in 1958, and put on display behind the Skenesborough Museum in Whitehall, New York.

In 1981, the vessel was surveyed by Dr. Kevin Crisman.

Its hull was very sturdy, as would be expected from a hull designed to withstand the vibrations of a steam engine.

Hull remains included the keel (34.7 m), sternposts and deadwood, frames (to the turn of the bilge), portions of the keelson, and hull planking.
The 20-gun brig *Eagle*

The *Eagle* was built in 19 days by Adam Brown in the summer of 1814. It was armed with eight long 18-pounder guns, and twelve 32-pounder carronades. Its 150-man crew was completed with musicians from a military band and 40 convicts from a chain gang.

After the battle of Plattsburg Bay on September 11, 1814, the *Eagle* was sailed to Whitehall, NY, at the lower end of the lake.

When news of the end of war arrived in February 1815, the *Eagle* and the other ships of the Lake Champlain squadron were stripped of rigging, armament and stores.

By 1825, the green wood of which they had been built rotted and the hulls sunk. They were sold for scrap.

In 1981, the remains of the *Eagle* were found by Dr. Kevin Crisman, and recorded during the next two years.

The hull was very well preserved. The keel of the Eagle measured 32.4 m (106 ft.). The ship had an overall length of 35.74 m (117´3´´) and a moded beam of 10.59 m (34´9´´).

Its hull was very shallow and extremely stable, designed for the conditions of the lake. Its beams were not reinforced with deck knees.

A full reconstruction has been proposed by Dr. Crisman.

The story of the Eagle has been published in the book: *The Eagle: An American Brig on Lake Champlain during the War of 1812* by Kevin J. Crisman.

The row galley *Allen*

The *Allen* was built by Noah Brown at Vergennes in the spring of 1814 as part of Thomas Macdonough’s galley squadron.

These row galleys were built from plans by the Chief Naval Constructor at the Washington, D.C. shipyard, William Doughty. They were 22.9 m (75 ft.) long and 4.57 m (15 ft.) in beam.

Carrying a long 24-pounder and a 42 pound carronade, the *Allen* was propelled by 40 oars. It could also be sailed, but its very shallow draft of around 56 cm (22 in.) only allowed it to sail before the wind.

After the battle of Plattsburg Bay, the *Allen* was stationed at Whitehall with the rest of the lake squadron. In 1818, the *Allen* was recommissioned for patrol duty on the lake, working until 1825, after which it was sold for scrap.

The upper part of the hull was salvaged, and the lower was left underwater near Whitehall.

The *Allen* was found by Dr. Kevin Crisman and Arthur Cohn during a survey on Lake Champlain in 1981, downstream of the *Eagle* and the *Linnet*’s remains.
An archaeological survey of the hull was carried out in the summer of 1982. Approximately 50% of Allen’s hull was intact.

In 1995, threatened by the zebra mussel infestation of the lake, the Allen was excavated and recorded. Based on the data gathered in 1982 and 1995, and on the historical documents available, TAMU Ph.D. Eric Emery proposed a reconstruction of the hull and prepared a complete set of drawings.

The only artifact found in the row galley Allen was a uniform button from the 13th Infantry Regiment.

The 39-gun frigate Confiance

Like the other vessels, after the battle the Confiance was taken to Whitehall.

In spite of its bad condition – having taken 105 hits in the hull alone – the Confiance served as Macdonough’s headquarters.

Once the war was over it was left to rot on the Poultney River.

In 1873, however, after dredging works on the river, the hull of the Confiance slid into the deepened channel and blocked it.

In view of this problem, Mr. J.J.Holden, a local contractor better known as “Nitroglycerine Jack” was called to remove the obstacle. After a huge explosion, the only remains of the former pride of Lake Champlain were turned into a limited supply of walking canes, which were sold for a dollar apiece.

In 1996, sport divers located an anchor of the Confiance. Weighing almost 1 ton, the anchor underwent conservation work in the Lake Champlain Maritime Museum. After cleaning, the anchor revealed a large dent in one of its flukes made by a cannonball hit. A maker’s mark can also be clearly seen, from Hawks, Crawshay, & Co. in Gateshead, England.

16-gun brig Linnet

The Linnet was built by British shipwrights during the winter of 1813-14 as part of the Captain George Downey’s squadron, which was to invade the US late in the summer that year.

It fought in the battle of Plattsburg Bay on September 11, 1814. Badly battered by enemy fire, the Linnet surrendered to the Saratoga soon after the Confiance struck its colors. The Linnet had taken between 30 to 50 hits in the hull.

After the battle, the Linnet was towed to Whitehall and put in ordinary with the rest of the squadron.

In 1949, a small group of farmers passed two steel cables around the timbers and pulled the Linnet’s remains out of the water. Over 300 people came to see it.
As reported by the local press, one broken mortar, two 9-pounder cannon – which had been used as ballast – and some 350 cannon balls were taken from the wrecksite, as well as 38 barshot and 6 “exploding bombs.”

The hull of the *Linnet* broke in the process of being raised, and a large portion slid back into the river. Part of the raised timbers were taken to Mount Hope and put on display as remains of a “colonial gunboat.”

The *Linnet* was found by Dr. Kevin Crisman and Arthur Cohn in 1981, together with the remains of the *Eagle* and the row galley *Allen*. It was excavated in 1995.

The *Linnet*’s hull remains were recorded and a reconstruction proposed. Its hull was 25.15 m (82´6´´) long, had a beam of 8.23 m (27´), and a length between perpendiculars of 25.91 m (85´).
Lake Erie

Noah Brown’s vessels:

   Lawrence
   Niagara
   a small schooner
   two gunboats
   14 small boats

Battle of Lake Erie, 1813

Statement of force of the British squadron:

   Ship Detroit - 19 guns-1 on pivot and 2 howitzers
   Ship Queen Charlotte - 17 guns, 1 howitzer.
   Schooner Lady Prevost - 13 guns, 1 howitzer.
   Brig Hunter - 10 guns.
   Sloop Little Belt - 3 guns.
   Schooner Chippeway - 1 guns and 2 swivels

Total: 63 guns

Statement of force of the American squadron:

   Brig Lawrence - 20 guns.
   Brig Niagara - 20 guns.
   Caledonia - 3 guns.
   Schooner Ariel - 4 guns. (1 burst early in action)
   Scorpion - 2 guns.
   Somers - 2 guns and 2 swivels
   Sloop Trippe - 1 gun.
   Schooner Tygress - 1 gun.
   Porcupine - 1 gun.

Total: 54 guns
The 20-gun grig *Lawrence*

Built by Noah Brown for Oliver Perry in the spring of 1813, under the most difficult circumstances. It was Oliver Perry’s flagship. On September 10, 1813, it took so much enemy fire during the first two hours of the engagement that most of its crew was killed, its rigging was disabled, and its guns broken.

Perry moved to the *Niagara*, which had not take any action for unknown reasons.

After the battle, the *Lawrence* was laid up in Misery Bay and later intentionally sunk to preserve its hull.

Raised in the 1870s, the *Lawrence* was cut down into pieces which were sold as souvenirs.

The 20-gun brig *Niagara*

Built in 1813 by Noah Brown for Oliver Perry together with the *Lawrence*.

When Commodore Oliver H. Perry took its command and sailed it into the middle of the enemy line it was quite fresh, and able to strike a major blow in the much battered English ships. The battle was over in 15 minutes.

After the battle, the *Niagara* sailed to Erie, where it served as a station ship until 1820. Then, in 1820, it was scuttled nearby at Misery Bay.

In 1913, to celebrate the centennial of the battle, Erie citizens raised the hulk and rebuilt her, using many of the old timbers. The *Niagara* was towed around the Great Lakes by the USS *Wolverine*, and participated in the commemoration ceremonies at Put-in-Bay on September 10, 1913.

After the commemoration, the *Niagara* went back to Erie, and was handed over to the State of Pennsylvania for restorations in 1931. These were delayed by the Great Depression, and the ship’s hull was not ready before 1943. The masts and the rigging were installed in 1963.

Then, in the 1980s, the *Niagara* was so badly decayed that it was decided to build a replica. The International Historic Watercraft Society was contracted to design and build a reconstruction of the *Niagara*.

This replica was ready by September 1988 and the new *Niagara* was launched on the 10\textsuperscript{th}, marking the commemorations of the 175\textsuperscript{th} anniversary of the Battle of Lake Erie.

The *Niagara* is now on display in Erie, Pennsylvania.
Lake Ontario

United States
  Oneida
  Madisson
  Hamilton*
  Scourge*
  Jones
  Jefferson*

Great Britain
  Royal George
  another 5 vessels

Hamilton

The Diana was a merchant schooner that had been built in Oswego, NY, in 1809. Purchased by the U.S. Navy when the war begun, its name was changed to Hamilton.

The Hamilton was rigged as a topsail schooner and could be rowed by means of long sweeps if becalmed. It had a length on deck of 22 m and a beam of 6.7 m.

The Hamilton mounted 9 guns, four 18-pounder carronades on each side, and one long pivot gun, probably a 12-pounder, mounted on a platform abaft the mainmast.

It was sunk by a sudden squall on August 8, 1813.

It was found in 1973 and filmed in 1980, under the auspices of the Royal Ontario Museum. Rigging material such as deadeyes and blocks are spread over a large area around the wrecksite. Powder ladles, grapeshot pedestals, and canisters can also be seen around the wreck. A number of cutlasses can be seen as well.

The Hamilton carried two anchors with wooden stocks at the bow. At the stern rests the ship’s boat.
**Scourge**

The *Scourge* was also a merchant schooner, named *Lord Nelson*, that had been built in Niagara and was seized by the U.S. Navy brig *Oneida* two weeks before the war began.

Smaller than the *Hamilton*, the *Scourge* was 18 m long on deck, and had a beam of 6 m. It was rigged as a topsail schooner.

The *Scourge* was equipped with 10 light guns, possibly 4- and 6-pounders, which nevertheless made it top-heavy and unstable.

It was sunk by a squall on August 8, 1813.

It was discovered in 1973, lying undisturbed on the bottom of Lake Ontario at a depth of 91 m.

The title of these two vessels was offered to the city of Hamilton by the U.S. Navy through the U.S. Congress, via the Royal Ontario Museum, in 1980.

In 1982 the Hamilton-Scourge Foundation (helped by a number of sponsors) promoted a full-scale photographic survey of these wrecks. Preliminary plans were developed from this survey by Dr. Kevin Crisman from INA/TAMU.

**The 20-gun brig Jefferson**

The *Jefferson* was built in early 1814 by Henry Eckford for service in the squadron of Commodore Isaac Chauncey, on the shores of Lake Ontario.

Eckford was a well known New York shipwright who designed fast-sailing merchant and naval vessels.

The *Jefferson* was surely a fast vessel, with a sharp hull and shallow draft. But these characteristics probably made it very unstable, for it almost capsized in September 1814, when caught by a sudden gale. It was knocked on its beam ends twice, and had to throw into the sea half of its guns. Moreover, there is evidence that it was in fact top heavy. Shortly after its launch, its captain had a pivot gun removed from its forecastle and the mainmast resteped three feet aft.

When the war was over the *Jefferson* was laid up and left to rot at Sackets Harbor, New York.

It was found by Dr. Kevin Crisman and Arthur Cohn in 1984, under one of the piers of the marina built at Sackets Harbor in the 1960s. Its hull was very well preserved, and it was excavated and recorded in 1986 and 1987.

A set of lines and construction drawings were produced. Its comparison with the 20-gun brig *Eagle*, built almost at the same time on Lake Champlain – a rather different environment – helped historians to get a better understanding of the naval shipbuilding techniques in America, during the early 19th century.
Baltimore Clippers were fast schooners developed in the 1790's in Maryland. Baltimore was the undisputed leader of the shipbuilding industry on the Chesapeake Bay. Baltimore Clippers were built for speed to survive on the high seas, where there was no American Navy to protect the American merchant fleet. The Baltimore Clippers emerged from the Baltimore shipyards as an answer to the powerful but slow British naval vessels that preyed on the American merchant fleet on a regular basis after the War of Independence.

With an extremely sharp “V-shaped” midship section, they were two-masted, gaff-rigged vessels, generally with a topsail on the foremost.

Baltimore Clippers were very fast and highly maneuverable vessels. They employed the best technology and design available in the world at the time. The Baltimore Clippers’ era lasted between 1795 and 1815.

After the War of 1812 speed was no longer a crucial feature, and it was therefore sacrificed for capacity.

During the War of 1812, many Baltimore Clippers engaged in privateering activities. President Madison issued many letters of marque, and American privateers may have captured as many as 1,700 British vessels during the three-year period of the war.

One of the most famous Baltimore Clippers was the *Chasseur*, launched at Baltimore in 1812. In 1814, the *Chasseur* sailed to the British Islands and declared (alone) a full embargo on the Islands. The *Chasseur* caught 17 merchant vessels before returning home, in early 1815. Once arrived, a sister ship was designed and named the *Pride of Baltimore*.

Today’s *Pride of Baltimore* was commissioned in 1988, and is a second, less dangerous replica, because the first one, built in 1977, sunk tragically off Puerto Rico in 1986, with the loss of its captain and three of its crew.

After 1815, Baltimore Clippers sadly became known as slave smugglers.

*General Armstrong*

Another very famous privateer is the *General Armstrong*. Alone at the Island of Faial in the Azores, the *General Armstrong* crew, under the command of Captain Samuel Reid, managed to repel the repeated attacks of the British fleet commanded by Captain Robert Lloyd. The outcome of this engagement would delay the British perhaps long enough to prevent them from conquering New Orleans, and securing a strong position in the peace negotiations going on in France at that time.

The English suffered almost 200 deaths and 100 wounded, while the Americans only encountered 2 deaths and 7 wounded.

The hull of the *General Armstrong* lies near the fortress of Santa Cruz, near the modern marina.