

Cultural Resources

▶ Discovering New Jersey's Transportation Past
A Publication of the New Jersey Department of Transportation

Digest

Governor Jon S. Corzine

April 2008

Commissioner Kris Kolluri, Esq.

>location:

galloway township
atlantic county

>resource types:

traditional boatbuilding shop

>action:

evaluation of significance
avoidance



Galloway Township
Atlantic County

The *Cultural Resources Digest*, published by the New Jersey Department of Transportation, summarizes information from professional studies in archaeology, history and historic architecture conducted during the development of transportation projects. Visit us at <http://www.state.nj.us/transportation/works/environment/>

In the South Jersey Tradition: Carl Adams and The Modern Boat Works



At first glance in 1979, this structure looked like little more than a 20th-century utility building, but local informants and boating aficionados knew that it had been the home of the Modern Boat Works for over 30 years. It was spared from demolition once its significance was brought to light.

An abandoned, nondescript two-story metal building on the banks of Nacote Creek, near the U.S. Route 9 bridge in Port Republic, Atlantic County, was scheduled for demolition to make way for a new bridge in the late 1980s.

Long-time residents knew the building as the Modern Boat Works, where a master boatbuilder named Carl Adams built wooden boats to the highest standards of craftsmanship, using traditional skills that had been passed down from master to apprentice for a century or more. Adams had learned his craft as an apprentice to an Atlantic City boatbuilder. He built the shop in 1935 and operated it, with members of his family, until his retirement in 1964. After his death in 1976 the building stood unused, apparently soon to fall victim to progress.

Adams and his contemporaries designed and built skiffs, a traditional type of small boat that was light enough to be launched from the beach and strong enough for ocean use. Skiffs are familiar to anyone who has seen a lifeguard crew at the Jersey shore, but Adams also built larger skiffs powered by engines rather than oars; some were allegedly used to transport illicit liquor during Prohibition. After World War II his clientele was sport fishermen and recreational boaters.

As the significance of Adams and his shop became known through oral history and documentary research, the New Jersey Department of Transportation re-evaluated its bridge project. Ultimately it was redesigned to avoid affecting the boat shop.



When Carl Adams closed his shop for the last time, he left behind not only his tools and raw materials but some unfinished work. Here a typical Jersey skiff sits on the shop floor, awaiting repair; the typical lapstrake planking is evident [Source: New Jersey Department of Transportation].

New Jersey is nationally famous for its shore resorts and miles of sandy beaches that attract millions of visitors every year. But before there was an Atlantic City or a Wildwood, the coast was home to generations of hardy watermen who made their living hunting and fishing in and around the bays and marshes, serving as guides for the occasional visitor, or harvesting clams and oysters. On the open ocean they hunted whales using small rowboats launched from the beach. The same (or similar) boats - surfboats - were called out to rescue survivors of shipwrecks, informally at first, later through the federal Life-Saving Service (predecessor of the U.S. Coast Guard). Larger versions of the same type of boat were used in inshore fisheries, bringing ashore fish that had been caught in nets attached to the ocean floor. In those times, when roads were sparse and not rigorously maintained, survival and transportation demanded boats strong enough to bear up under the ocean's pounding yet light enough to be hauled up on the beach.

The surfboats were *skiffs*, shallow-draft flat-bottomed craft with pointed bows, lapstrake planking

(in which each horizontal plank of the hull slightly overlaps the next, similar to clapboards on a house) and squared-off sterns. Before engines were widely available, oarsmen usually supplied the propulsion. Made of native oak and white cedar, the boats were built in a number of local boatyards up and down the Jersey coast by skilled craftsmen using time-honored (and mostly unwritten) construction techniques passed down from one generation to the next.

The origin of the design is lost. It is similar (but not identical) to a type of workboat common in the harbors of New York and Boston in the 19th century, known as a Whitehall boat; these were being built in Brooklyn before 1820. Other similar boats used along the northeastern coast of North America include the Maine salmon wherry and the Staten Island skiff. All may have descended from the bateaus used to transport cargo in the upper Hudson River region from early in the 18th century onward.

By the second quarter of the 19th century, offshore fishing from the the northern New Jersey coast had grown into an industry, spurred by the demands of



Although this beach scene almost looks like it could have be taken last summer (or a few summers before that), this was Atlantic City in 1884. Compare the skiff with the one in the photograph on page 7 [Source: The Sea Bright Skiff].

New York City's burgeoning population. Because the stretch of New Jersey coast that is closest to New York has no barrier islands or protected back bays, and few rivers, the fishing boats had to be launched and recovered from the beach. A small skiff was a natural choice. The earliest models were about 15 feet long with a *beam* - the width at its widest point - of about five feet. They were being built in Long Branch by 1850, perhaps earlier. A report published in 1860 by the Philadelphia Board of Trade suggested that similar boats had been in use at Cape May in the earliest years of the 19th century in the shore-based whale fishery.

But the boats were used for more than fishing. The coast of New Jersey was notoriously treacherous in the age of sail, when the gales of a nor'easter could (and did) blow ships aground in the shallow waters near the beach. In one nine-year stretch at the middle of the 19th century, 158 ships came to grief on New Jersey beaches, with substantial loss of life and property. The danger took the form of a persistent sandbar several hundred yards off shore. Not only did ships go aground on it, but it prevented larger rescue vessels from reaching the scene. Lifesavers thus needed sturdy shallow-draft boats, and skiffs fit the bill.

Not all skiffs were rowboats. Larger models were built to land larger catches of fish, and the advent of the internal combustion engine allowed for even larger vessels. Engines were widely available before

A Brief History of the U.S. Life-Saving Service

Before there was a U.S. Life-Saving Service, assistance to ships in distress on the coast from Sandy Hook to Little Egg Harbor Inlet (about 70 miles) was provided by a network of volunteer wreckmasters who were authorized to salvage wrecked ships and cargoes.

A disastrous storm in February of 1846, in which 10 vessels came ashore in Monmouth County, led to the establishment of the U.S. Life-Saving Service in 1848. The legislation was introduced by New Jersey Congressman William A. Newell of Manahawkin, himself a member of a volunteer wrecking crew. The new service was allotted \$10,000 for eight stations with "surf boats, rockets, caronades and other necessary apparatus for the better preservation of life and property from shipwrecks on the coasts of New Jersey between Sandy Hook and Little Egg Harbor." The Service was part of the Treasury Department. Life-saving stations - actually little more than equipment sheds - were built and equipped but with no permanent staff, they operated more like volunteer fire companies. The boats were wheeled to the water in wagons and launched into the surf.

Six years later a full-time superintendent was assigned to each station but this proved insufficient. In 1871 new legislation provided for six-man crews at each station and the Service came under the direction of Sumner Kimball. Kimball would reorganize the Life-Saving Service and establish standards of training, fitness and equipment maintenance.

In May of 1872, seeking a suitable boat that would be the standard at all life-saving stations, a special commission met at Sea Bright, New Jersey, and recommended a version of the cedar surfboats then in general use by the civilian wreckers.

In 1915 the U.S. Revenue Cutter System and the U.S. Life-Saving Service were merged and became the U.S. Coast Guard.

World War I, and 30-foot skiffs were common. These could hold 12 to 15 tons of fish.

After World War I, two unrelated factors converged that would profoundly affect the coastal boatbuilding industry. First, when the war ended there were many surplus airplane engines available at low cost from the Federal government. Because they had been

*The U.S. Life-Saving Service, founded in 1848, used small skiffs to rescue survivors of shipwrecks that went aground on a sandbar several hundred yards offshore. Horse-drawn wagons, like this one, brought the surfboats from the life-saving station to the beach. This photograph was taken about 1885 near Navesink [Source: *The Sea Bright Skiff*].*



designed to propel airplanes, these engines were both lightweight and powerful. With only slight adaptations and the addition of a driveshaft and marine propeller, one (or more) of these could turn a plodding fishing boat into a wave-pounding speedster.

The other factor was political. In 1920 the Volstead Act - Prohibition - went into effect, outlawing the "manufacture, sale, or transportation of intoxicating liquors" within the United States. At several places along the coast, so-called "Rum Rows" almost immediately sprang up at sea, just outside the three-mile territorial limit. These were veritable floating bazaars where imported liquor was abundantly (and legally) available by the case from ships that had sailed from places such as Canada, Bermuda, the Caribbean and Europe; reportedly there were 60 ships off New Jersey. This new form of commerce instantly created a ready market for ocean-going boats that could take on a large cargo and still outrun the Coast Guard patrol boats. Thirty-foot skiffs powered by one or two twelve-cylinder Liberty aircraft engines (and fitted with mufflers) were popular.

Likewise, the federal government found itself in need of boats that were faster than a loaded rumrunner, so a kind of nautical arms race ensued, with each side requiring bigger, faster boats. The Coast Guard seized the bootleggers' boats when they caught them, which meant there was a constant need for more boats (although some were sold at auction, possibly to the former owner). There were instances of boatyards

building craft for both civilians and the government, even building both at the same time and in full view of each other.

The Depression and the end of Prohibition in 1933 took their toll on the boat-building industry, but sport fishermen and then private boaters rekindled it. Around the middle of the 20th century, some builders began applying fiberglass to wooden boats, then used it instead of wood, and the traditional methods of construction began to disappear.

The Boats and the Men Who Built Them

Scholars of traditional skiff construction have catalogued a number of types of skiff. Perhaps the best known is the Sea Bright skiff, widely built and used on the northern New Jersey coast where inlets are few and treacherous, and boats had to be capable of launching and landing through the surf. In southern New Jersey, where offshore barrier islands create back bays, the counterpart boat was known as the Atlantic City skiff.

Small rowing skiffs were built using three-dimensional patterns or forms around which the boat was built. These were full-size copies of the hull, strongly built of wood to withstand years of re-use. Construction of an Atlantic City skiff began with the form inverted. The stem, keel plank and transom would be clamped to the form. Oak frames (or ribs), steamed to make

Atlantic City skiffs were built upside down over sturdy re-usable wooden forms. Carl Adams left this one in the Modern Boat Works shop when he retired in 1964. Besides the skiff form, several of his tools can be seen in the background [Source: New Jersey Department of Transportation].



them pliable, were then clamped to the form, from gunwale to gunwale, about eight inches apart, and riveted to the bottom plank. The emerging boat was then lifted off the form and righted. Supported by temporary braces, the hull was planked with cedar strips attached to the frames with copper rivets. Interior items such as seats and rowlocks completed the job.

Beaton, Hankins, Campbell, and VanSant are among the family names that are or were associated with the construction of skiffs along the New Jersey coast. While the products of the various boatyards were basically similar, each used minor variations in design or construction technique. The variations were such that individual boats could be ascribed to specific builders.

Alvin Carl Adams - known by all as Carl - was born into this tradition on January 12, 1886, and 74 of his 90 years would be spent building boats. He learned wood-working skills from his father, a carpenter, and at 16 he apprenticed at the VanSant Boatyard on Gardner's Basin, near Massachusetts Avenue in Atlantic City. In 1905, at the age of 19, he opened his first shop, where he built small craft such as garveys and sneakboxes. Around 1917 he built a larger shop, still in Atlantic City, on Massachusetts Avenue. He subsequently sold this shop but stayed on another year. His third and final Atlantic City shop was on Connecticut Avenue. Here he built both rumrunners and chasers for the Coast Guard. This shop closed during the Depression; the end of Prohibition in 1933 may have been a factor.

In 1935 Carl Adams and his son Alvin D. (known as Alvin) built the Modern Boat Works on Nacote Creek in Port Republic, about 12 miles as the crow flies from Atlantic City, in response to the growing demand for sport-fishing boats. Operating in a fashion similar to today's charter boat industry, these

were skippered by local men (some of whom may have become unemployed by the repeal of Prohibition) and hired by anglers visiting from the nearby urban centers. They were not today's private pleasure craft. Adams turned them out on a custom basis at the rate of about one a year. One of his best-known models was a 40-footer.

When World War II came, Adams father and son were sent to Cambridge, Maryland to oversee and build aircraft rescue boats for the Army.

After the war, boat ownership underwent a significant shift, as did so many other aspects of American life.

Like home ownership, boats were suddenly within the financial reach of the middle class, due in part to cost savings resulting from mass production, itself made feasible by the burgeoning population of the new suburbs. Boats were now purchased by boaters, not watermen who depended on them for their livelihood. There

were more amenities on board, so that the interior began to evoke the owners' suburban homes in areas such as the galley and the sleeping accommodations.

Mass production of boats meant that fiberglass and plywood replaced hand-crafted wood as boat-building materials, and it brought with it a dramatic decrease in the demand for the old-style wooden boats. Carl and Alvin Adams returned to Nacote Creek after the war, now joined by Carl's daughter and Alvin's son, and soon began making Adams' first production boats, 24-foot Jersey skiffs. It was also available in 21, 26 and 30-foot models. During this period the elder Adams famously held out against progress, refusing to give up the old methods of building boats he had learned at VanSant's.

Carl Adams completed his last large commission in 1964 but kept the shop open two more years, doing

“Boat building is Adams’ life, and he does it to a single standard - perfection...Each craft must be a masterpiece of her type before the big doors at the rear of the plant are pushed back and she slides down the ways into the placid Nacote, to add one more member to the charmed circle of skippers who will never be quite happy without an Adams boat.”

--Carl Sheppard, “Better Boating” in the [Philadelphia] *Sunday Bulletin*, April 12, 1959



A few documented boats built by Carl Adams survive, even though all are at least 40 or more years old. This one was undergoing repairs in a New Jersey boatyard in 2005 [Source: private collection].

small jobs and repairs. Even after he finally retired he continued building the same small boats that had launched his career - sneakboxes and garveys - in his basement. He died in 1976.

Typical of traditional craftsmen, Adams' boats were of his own design and made of materials he selected and prepared. Even though cedar was abundant nearby, he used cedar from the Asbury Park-Sea Bright area. Longleaf yellow pine for the keelsons came from a lumberyard in Philadelphia. Frames were fashioned from white oak from Toms River, Sea Girt and Camden. Ribbands and decks were mahogany, a tropical wood.

Large boats were not built over forms. When it was time to start on a new boat, the shop floor would be meticulously cleaned and painted and the design transferred to it as though it were a full-size drawing board, a process known as *lofting*. The boat would then be built right on the "plans."

Adams' stock in trade was his reputation for meticulousness. An account published in 1959 by a Philadelphia newspaper put it this way:

Assisted only by his son, Alvin, Adams proceeds at a speed commensurate with artistry to compose symphonies in cedar, oak, teak and mahogany. His pace leaves customers tearing their hair, but their reward is a creation of graceful strength and matchless performance.

The shop stood on the west side of today's Route 9, on high ground just south of Nacote Creek with its back to a tiny tributary called Ferry Creek. A short marine railway ran from the shop to a basin in Ferry Creek. Nacote Creek led to the Mullica River and Great Bay, and ultimately to the open ocean via Little Egg Inlet. It also provided access to New Jersey's seemingly numberless back bays, coastal creeks and rivers along the way.

Route 9 was Route 4 when it was added to the state highway system in 1916, but there had been a shore-wise route for centuries - perhaps millennia - before that. The section of Route 4 where Adams built the Modern Boat Works was probably built on a new alignment around 1922; in that year a new bridge was built over Nacote Creek here, and it was the replacement of that bridge half a century later that led to the "discovery" of Carl Adams.

When it was time to start on a new boat, the shop floor would be meticulously cleaned and painted and the design transferred to it as though it were a full-size drawing board, a process known as *lofting*.

Bridge Replacement Shines a Light on the Modern Boat Works

Planning to replace the old single-lift steel bascule bridge (also sometimes called a drawbridge) and its approach roadways began in the 1970s. To avoid the tedium of stopping highway traffic to open the bridge for tall boats, engineers designed a high-level fixed (as opposed to movable) bridge. Historians and archaeologists evaluated the old bridge and the land and buildings that would be affected by the project in 1979. They concluded that the bridge itself was not significant (even though it was old) and that the seemingly derelict building was not architecturally significant. Planning for the removal of the building to construct the new bridge proceeded.

The design of the new bridge was well along by the mid-1980s when a public hearing was held to receive comments on the project and its likely environmental impacts. At this hearing, and in a follow-up letter, one member of the public raised the question of the significance of Carl Adams and his place in traditional South Jersey boatbuilding, and whether his shop had to be demolished.

A team of Department of Transportation cultural resources specialists was assigned to re-evaluate the conclusions reached in 1979. In the course of that re-evaluation members of the Adams family were interviewed, the history of traditional boatbuilding in

Other Traditional New Jersey Watercraft

Skiffs are but one of many boats that were historically used along the New Jersey coast, and many are still being built and used today. Here are a few others:

Sneakboxes, also called sneak boats, devil's coffins and melon seeds, were developed in the 1830s in Ocean County, New Jersey. Intended to carry a single hunter, sneakboxes were typically about 12 feet long with a four-foot beam. They were smooth-planked boats that sat very low in the water. The deck was also planked and there was a central cockpit. Because of their shallow draft they were maneuverable in the hunting grounds along Barnegat Bay and other back bays.

Rail gunning skiffs were double-ended, shallow draft boats designed for two people to hunt rail, a shorebird that inhabits the dense reeds along bays and rivers. Because it was used in very shallow waters, the boat was propelled by poling. The gunner stood in the cockpit. Gunning skiffs were being built in New Jersey before 1850.

A *garvey* is a flat-bottomed boat with a blunt bow, used as a work boat. It could also be used as a gunning skiff but hunters complained about the slapping noise caused by the slightest wave striking its sides.

New Jersey was researched more deeply, and other boatbuilders along the Jersey shore were interviewed to help place Adams in the proper historical context.

Ultimately the significance of Carl Adams and his boats were recognized before construction began, and the bridge replacement project was shifted several feet to the east, thus sparing the Modern Boat Works. Although this would not guarantee preservation of the building, its significance will be known to planners of future public projects that may affect it.



The usefulness of the skiff design for beach use is still evident. Here two Ocean City lifeguards are pulling in a modern fiberglass version of the traditional Atlantic City skiff, built in nearby Linwood [Source: The Sea Bright Skiff].

Project: Replacement of U.S. Route 9 Bridge over Nacote Creek
Location: City of Port Republic and Galloway Township, Atlantic County
Date: 1986
Consultant: New Jersey Department of Transportation staff

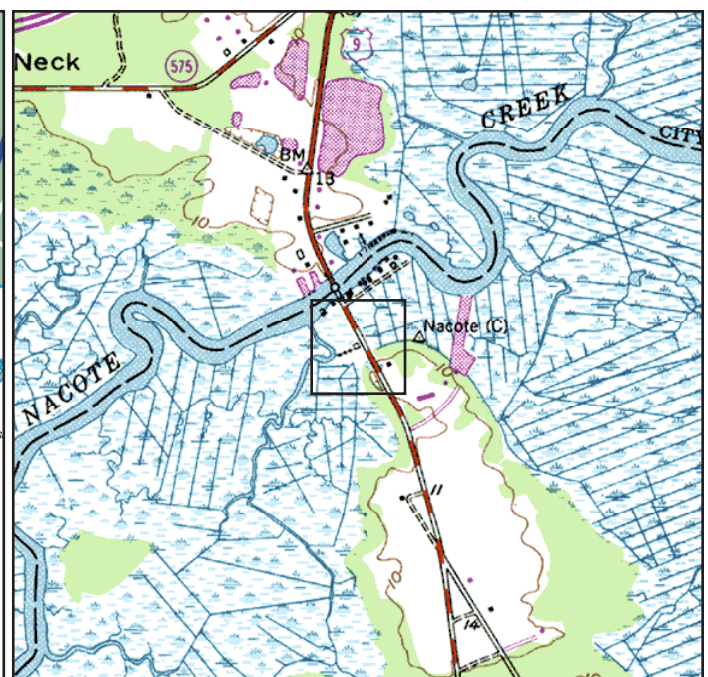
For More Information...

- Gardner, John
 1977 *Building Classic Small Craft.* International Marine, Camden, Maine.
- Guthorn, Peter J.
 1982 *The Sea Bright Skiff and Other Shore Boats.* Schiffer Publishing Ltd., Exton, Pennsylvania.
- Jahn, Robert
 1980 *Down Barnegat Bay: A Nor'easter Midnight Reader.* Beachcomber Press, Mantoloking, New Jersey.
- Moonsammy, Rita and Louis Presti (Producers)
 1991 *The Sea Bright Skiff* [film]. New Jersey Network, Trenton, New Jersey (<http://www.folkstreams.net/filmfacts,41>).
- “Sea Bright Skiff” Library of Congress Local Legacies
 (<http://lcweb2.loc.gov/diglib/legacies/NJ/200003319.html>).
- Sheppard, Carl
 1959 “Better Boating.” In *The [Philadelphia] Sunday Bulletin*, April 12, 1959 (reproduced at <http://tidewaterworkshop.net/history.html>).

Additional information on transportation projects and historic preservation is available from the Division of Environmental Resources, New Jersey Department of Transportation (<http://www.state.nj.us/transportation/works/environment/overview.htm>), the Federal Highway Administration (<http://www.fhwa.dot.gov/environment/archaeology/index.htm>), the New Jersey Historic Preservation Office (<http://www.state.nj.us/dep/hpo/2protection/njreview.htm>), and the Advisory Council on Historic Preservation (<http://www.achp.gov/work106.html>).



Project vicinity map



Area of detail