

# REPORT OF 2012–2015 RESEARCH RELATING TO THE RUSSIAN-AMERICAN COMPANY SHIP *NEVA* AND POTENTIAL SHIPWRECK SURVIVOR CAMP, ALASKA

J. David McMahan

1021B Meadowbrook Road, Ashland City, TN 37015; ugruk@hotmail.com

## ABSTRACT

In 2012, the author led a team of archaeologists from the Alaska Office of History and Archaeology, the U.S. Forest Service, and the Sitka Historical Society to search for evidence of the Russian-American Company ship *Neva*, known to have wrecked near Sitka in January 1813 (McMahan 2012). The project received additional support from the National Oceanic and Atmospheric Administration and the National Marine Sanctuary Foundation. Based on information from survivor accounts, aerial images and overflights, information on historic tides, and interviews with local divers, the team discovered Russian artifacts at a location believed to represent the *Neva* survivors' camp. With funding from the U.S. National Science Foundation (Award PLR-1330939), the author returned to the site in July 2015 with an international team of American, Russian, and Canadian scientists to conduct survey and excavations. The results of the field investigation, along with archival research by Evguenia Anichtchenko and the author in St. Petersburg and London, are adding details to our knowledge of the *Neva*'s history and of survival in a harsh environment.

## HISTORICAL BACKGROUND

The *Neva*, originally named the *Thames*, was a 372-ton frigate constructed in 1800 at the King and Queen Docks, Rotherhithe, London.<sup>1</sup> The builder was Petr Everitt Mestaer, a wealthy and prominent shipbuilder of Dutch descent who constructed a number of well-known vessels for the East India Company. While the *Neva*'s construction plans have not been discovered, and probably are not preserved, construction details are known through the records of surveys by Lloyd's Register.<sup>2</sup> We know that the *Thames* was constructed of first-class materials, was ship-rigged, and was composed of a single deck with beams (one survey recorded two decks; it is possible that she had 1.5 decks).<sup>3</sup> The vessel was initially unsheathed, with three masts and a 16 ft (4.9 m) draft when fully loaded.<sup>4</sup> She had an "extreme length" of 110.5 ft (33.5 m) and an "extreme breadth" of 28 ft (8.5 m), with a height between decks of 5 ft, 8 in (1.7 m). The vessel is further described as a

square-sterned ship with flush deck and quarter badges, no gallery, and carved "knac" (knee?). The survey records indicate that she had a "carved figure" ("kind of head"), although details are not provided. This suggests that the "kind of head" is not that of a person or easily recognized animal, or it would have been specified as was done for other vessels. From August 1800 until late 1802, the *Thames* was in commercial service between London and ports that included Hamburg. We know from Lloyd's records that her first owner was Robert Taylor. Interestingly, a Robert Taylor is listed in records at the Docklands Museum (London) as having been an owner and captain of vessels involved in the London slave trade in the late eighteenth century. To date, this is the only Robert Taylor identified as having been engaged in marine commerce in London during the late eighteenth and early nineteenth centuries.

By the time of publication (June or July) in 1803, Lloyd's Register (1803–1804, entry 289) lists the vessel as the *Neva* and records a trip from London to St. Petersburg

under a master named “S. Bryant.” Even though there were other contemporaneous vessels named *Thames* and *Neva*, the tonnage and other attributes leave no question that this particular *Thames/Neva* was the same vessel. The Lloyd’s entry further indicates that she was sheathed with copper in 1803, apparently in preparation for her round-the-world voyage. Historical sources, while varying in some details, suggest that the *Thames* was purchased by Russia in February 1803, along with the *Leander* (renamed *Nedezhda*), specifically for Russia’s first circumnavigation of the globe (1803–1806). Adam Johann Ritter von Krusenstern, who lobbied for and organized the voyage, sent Yuri Fyodorovich Lisiansky to Hamburg, then London, to purchase the two vessels (Krusenstern 1813:2–3; Moessner 2003:6). Because the *Thames* was engaged in voyages between London and Hamburg, it is possible that Lisiansky became aware of the vessel while in Hamburg in 1802 and ultimately made the purchase in London.

Once in Kronstadt, where the vessels were renamed, Krusenstern assumed command of the *Nedezhda* while Lisiansky was made captain of the *Neva*. The purchase price for the *Neva* was 17,000 pounds sterling (around \$27,000 in modern U.S. dollars), with another 5000 pounds (U.S. \$8,000) having been spent to repair both the *Neva* and *Nedezhda* (Krusenstern 1813:3).<sup>5</sup> Both vessels were similar three-masted sloop-of-war frigates, although the *Nedezhda*, at 450 tons, was slightly larger than the *Neva* (Moessner 1993:xiv). The *Neva* is said to have carried fourteen cannons (Tikhmenev 1978:71) and a crew of fifty professional sailors (Moessner 1993:xiv). Krusenstern, along with Court Chamberlain Nikolai Rezanov, led the overall expedition. The *Neva* and *Nedezhda* left the port of Kronstadt in June 1803, and a year later became the first Russian ships to visit Hawaii (Lisiansky 1814:99–137). There the two vessels separated, with the *Neva* traveling to Kodiak and Sitka, and the *Nedezhda* proceeding to Japan (Pierce 1990:311–313).

The *Neva* is best known in Alaska for her role in the 1804 “Battle of Sitka.” The battle is said to have involved at least 1000 Russians, Aleuts, and Alutiiq peoples, as well as 500 Tlingit men, women, and children (Dauenhauer and Dauenhauer 2008). In late September 1804, Russian-American Company general manager Alexander Baranov joined Yuri Lisiansky on the *Neva* to retake New Archangel (Sitka) from the Tlingit. Along with two smaller vessels, the *Catherine* and *Alexander*, the *Neva* was instrumental in causing withdrawal of the Tlingit from New Archangel to the Peril Straits area of Baranov Island

(Lisiansky 1814:147–168). She then wintered in Kodiak, and by April had joined the *Nedezhda* in China with a cargo of fur seal, beaver, and other pelts destined for Canton (Lisiansky 1814:272–273; Moessner 2003:380). Both vessels returned to Kronstadt in August 1806. Following his return, Lisiansky published his illustrated narrative of the voyage in Russian (St. Petersburg, 1810), German (Berlin, 1811–1812), English (London, 1814), and eventually other languages. The *Neva* was credited as the first Russian vessel to visit Australia, in 1807 (Massov 2006). From 1807 until her demise in early 1813, she was in the service of the Russian-American Company (Frederick 1979:7). From around 1810–1812, there are few records of the vessel, and it is believed that she remained at anchor in Okhotsk to avoid capture while Russia supported France in a war against England (DeArmond 1946:10). The Russian Naval Archives holdings include extensive correspondence between the czarist government and the Russian-American Company regarding whether the *Neva* would go to Japan and Sakhalin Island or to Russian America in August 1812. In the end, she was sent to Russian America in what would be her final voyage.

## HISTORICAL ACCOUNTS OF THE WRECK

Because the vast majority of Russian-American Company documents prior to 1818 were destroyed after liquidation of the company, the final voyage of the *Neva* is captured in only a few accounts transcribed from survivor narratives. These were translated from Russian and published by the Alaska Historical Society and Sitka Historical Society through a grant from the Alaska Historical Commission (Shalkop 1979). Dates and details in the accounts do not always agree but are consistent in relating the basic story. The following outline is derived from the account of mid-shipman Mikhailo Il’ich Terpigorev (Shalkop 1979), unless otherwise noted.

The final voyage of the *Neva* was plagued by problems, even before the ship left Okhotsk. A skiff with officials tasked with inspecting the *Neva* and *Nedezhda* overturned in the harbor, resulting in the deaths of thirteen people. The *Neva* departed the Siberian port of Okhotsk near the end of August 1812, en route to Sitka, but contrary winds soon slowed her voyage. She did not pass Atka Island (in the Aleutian Islands) until the end of September, and strong winds prevented a landing in either Unalaska or Kodiak. The captain, Lt. Podushkin, was so overwhelmed by the journey that he gave up command of the *Neva* to Daniil

Vasil'evich Kalinin, a civilian employee of the Russian-American Company who was a seasoned seafarer. Finally, on November 16 the *Neva* was able to enter "Resurrection Harbor" (in Prince William Sound) for fresh water and repairs. After a heated debate, a decision was made to sail for Sitka on November 27. After more hardships and a water shortage, early January 1813 brought clear weather, and by January 8 the *Neva* was only 140 versts (150 km) from Sitka (Shalkop 1979:33). By that evening, the shoreline and Mount Edgecumbe were within sight, and by one a.m. the ship was around 30–40 versts (32–42 km) offshore with Mount Edgecumbe to the left (Shalkop 1979:34).<sup>6</sup> While clouds and rain later diminished visibility, the ship's master, Mr. Kalinin, had sufficient confidence in the *Neva's* course that he went belowdecks to rest. By Terpigorev's account, at five a.m. the cry went out that "the shore is under the bow" with Mount Edgecumbe to the right (Shalkop 1979:34–35). This caused Terpigorev to conclude that the man at the wheel had steered contrary to orders, and that the change in direction was compounded by the currents. The anchor was thrown out but had not been secured to the windlass. As the ship turned about, the rudder was knocked out by a rock, and the *Neva* went aground on submerged rocks. According to Terpigorev, "if they had delayed turning by one minute then all inevitably would have perished, because the collision would have taken place near a very high and inaccessible cliff" (Shalkop 1979:35). The ship eventually broke in half, with survivors moving to the bow. By noon, the ship had been "swallowed by the waves," and survivors clung to masts and other pieces of the ship (Shalkop 1979:37).

Of the seventy-three men who left Okhotsk, thirteen died at sea (fifteen according to Golovnin [1864]) and thirty-two drowned. Of the twenty-eight who made it to shore, two soon succumbed (Shalkop 1979:38). Fortunately, one of the *promyshlenniki* was able to start a fire with a flintlock pistol, allowing the survivors to make it through the first night. With strength from food items that had washed ashore, they were eventually able to construct a hut (Shalkop 1979:38). On January 24, one of two *promyshlenniki* who had been sent to explore encountered a Native boy in a kayak and was taken to New Archangel. On February 2, the survivors were rescued and taken to the fort (Shalkop 1979:38), having endured January temperatures for twenty-four days with items either salvaged or procured from their surroundings.

In keeping with the lore of the sea, stories have grown up around the *Neva* and the rich cargo some said that

she carried. Newspaper accounts over the last two centuries have perpetuated these stories, melding truth with fantasy and encouraging many to look for the wreckage. For example, an 1894 article in the *Alaska Herald* related the story of two Indians coming into town (Sitka) with an airtight copper tank, utensils, and oak timbers found near Mount Edgecumbe and presumably from the *Neva* shipwreck (Shalkop 1979:14–15). The writer went on to describe stories that had been told in Sitka, including a report that the ship's captain had placed valuables in barrels and buried them beneath a large spruce tree. In 1915, articles published in the *Daily Alaska Dispatch* (Juneau) and elsewhere reported that a commercial diver from Port Townsend, Washington, had received a permit from the "War Department" to salvage "lost gold" from the *Neva* (Shalkop 1979:15–16), which carried a \$200,000 payroll bound for Sitka. Other articles outline their plans to "salvage the boilers" from the wreck.<sup>7</sup> Numerous articles discuss plans leading up to the 1915 salvage effort, but nothing has been found to indicate that any such salvage ever occurred. It could have been that, like modern treasure hunters, the company was simply trying to line its pockets by stimulating interest by investors. The Reverend Andrew Kasheverof, curator of the Alaska Territorial Museum, wrote an article on the *Neva* in 1932 based on Golovnin's narrative (Shalkop 1979:16). Adding his own text, Kasheverof described the recent discovery of a cave in the wreck area where the survivors are believed to have taken shelter. The discoverer is said to have found a portion of a "Russian brass candlestick," and noted a crown and horseshoes chiseled into the cave wall. Interestingly, the Sitka Historical Society Museum has recently acquired a ship's bell said to be the *Neva's*. The bell was said to have been collected sometime in the nineteenth century by a local family, and purchased by fish buyer and historian Archie Shiels in the 1930s with Kasheverof's assistance. The bell has not yet been authenticated, and its condition and style are problematic. Another item collected by Kasheverof and placed in the Territorial Museum in 1939 is a segment from a mast or similar timber said to have been salvaged from the *Neva* and stored in St. Michael's Cathedral in Sitka. The Alaska State Museum has a carved section of yellow cedar that may have been taken from the timber, and another sample that is possibly from the timber is privately held in Juneau.

In recent years, the Sitka Historical Society Museum has also acquired an anchor said to have been from the *Neva*, although the exact find location is unknown. While



the anchor is consistent stylistically with the time frame of the *Neva*, Russian period anchors are relatively common in the Sitka area. As late as 1966, the newsletter of the Alaska State Centennial Commission (Centennial Press 1963) reported that Sitka “skin divers” had decided to find the *Neva* to commemorate the centennial of the Alaska purchase. The last major field effort to find the wreck was by the group “NevaQuest” in 1979. Led by diver Dennis Cowles, the search was guided by a translation of the Berkh and Markov accounts by Kay M. Paddon (Pierce 1983:64). Despite the use of a marine magnetometer, the effort was unsuccessful. Historical accounts indicate that the wreck occurred in the general vicinity of Cape Edgecumbe, although no details on the exact location are provided. One other Russian sailing ship, the *Chilkat*, is known to have wrecked in that area in 1837 (Tornfelt and Burwell 1992:14). It is not known exactly where the *Chilkat* wreck occurred, as there were no survivors, but debris is said to have washed up on Cape Edgecumbe and St. Lazaria Island (Pierce 1983:65).

### ARCHAEOLOGICAL INVESTIGATIONS

Current archaeological investigations related to the *Neva* wreck site were initiated by the author in June 2012 through

a partnership between the Alaska Office of History and Archaeology (OHA), the U.S. Forest Service (USFS), and the Sitka Historical Society (SHS).<sup>8</sup> The National Marine Sanctuary Foundation provided modest funding to support travel. It was the author’s opinion that the best way to search for evidence of the wreck site was through an intertidal archaeological survey at low tide. Prior to fieldwork, the 2012 team reviewed published survivor accounts and other records, interviewed Sitka residents and commercial divers with knowledge of the area, and reviewed existing low-altitude aerial imagery to identify areas matching landforms described by survivors. This was followed up by overflights in a small airplane. The National Oceanic and Atmospheric Administration (NOAA), Office of Coast Surveys (OCS), provided scientific and historical data on past tide cycles, rates of uplift, and vessel history. These multiple data sets converged on an area along the outer coast of Kruzof Island believed to match the wreck site. It was here that a local abalone diver observed an underwater cannon believed to be consistent in size with the *Neva*’s naval guns (Wilber 1993:23; Wilber, pers. comm. 2012).

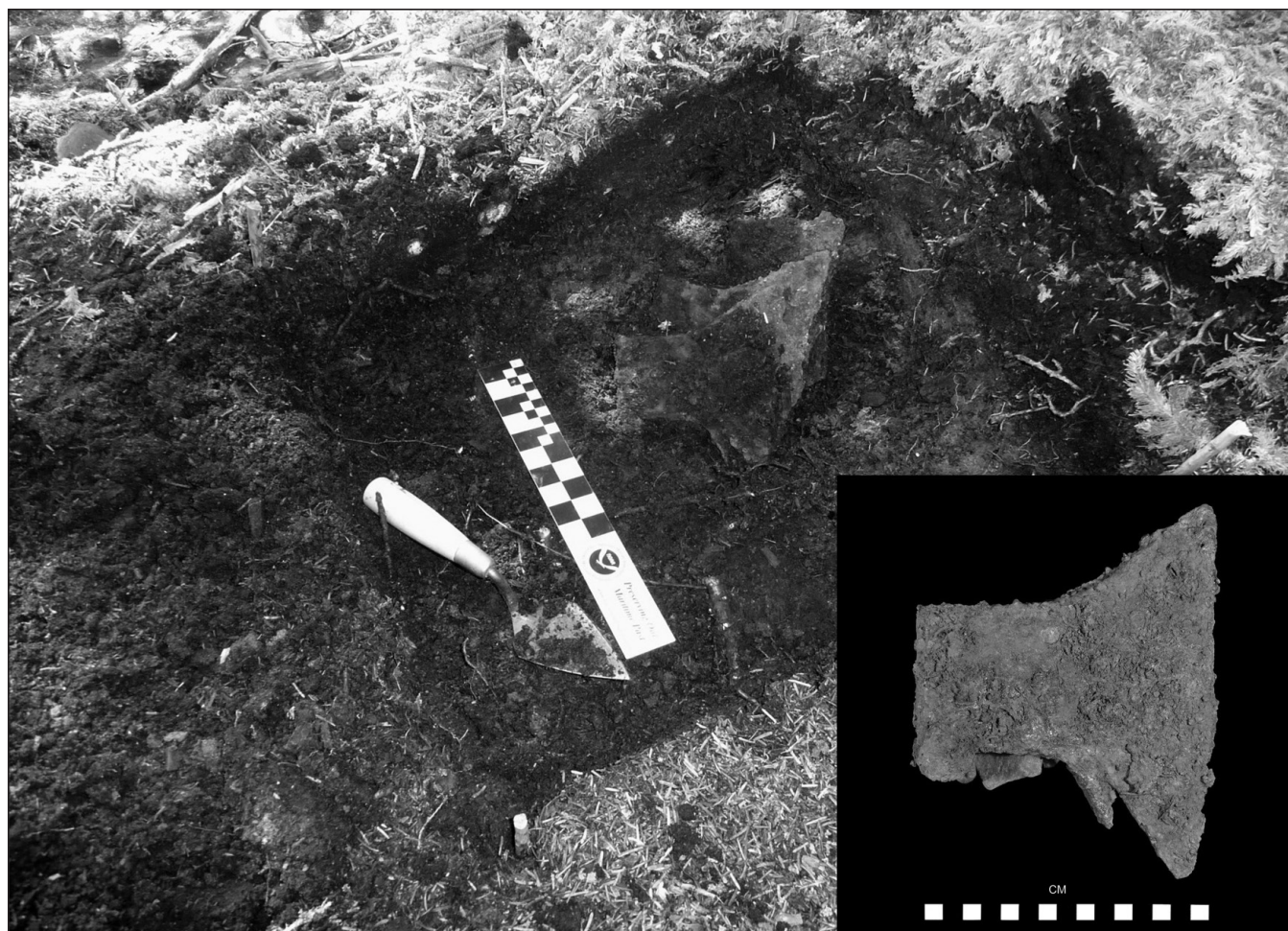
By design, the June 2012 archaeological survey was conducted on the lowest tide of the year. An intertidal survey of the high-energy beach yielded only a few pieces of well-worn “beach glass.” In general, it is unlikely that



*Figure 1: A dramatic photograph of the high-energy coastline in the area where the Neva wrecked in January 1813. Yury Likhin (Taltsy Museum, Irkutsk) is visible in the background.*

artifacts would have survived the combination of crashing waves and rugged volcanic substrate unless buried in fissures (Fig. 1). In the absence of intertidal discoveries, the team turned to the uplands. On a narrow terrace (“South Terrace”) predicted to be the most logical location for a survivor camp, the team conducted a metal detector survey and subsurface testing. This revealed two caches of buried Russian axes stacked as if they had been in crates or containers without handles when deposited (Fig. 2). One of the caches, contained within a large conglomerated mass, was not apparent until the mass was later dissolved via electrolytic reduction in the laboratory. During removal of the conglomerate’s matrix, pockets of darker material emitted an odor characteristic of anaerobic saltwater marsh. Chloride tests confirmed the presence of salts, suggesting that the axes had been exposed to saltwater at one time. A hearth containing a highly degraded iron spike and fragments of calcined fauna was also identified, along with multiple metal detector targets that were not inves-

tigated. While C-14 dates of botanical macrofossils from the hearth are problematic (i.e., modern), the presence of a handwrought spike suggests mid-nineteenth century or earlier. The axes themselves, while in poor condition, are characterized by a spike or “hook” that protrudes downward just anterior to the handle socket. This style evolved in Russia during the seventeenth century and is definitive of Russian axes, particularly during the colonial period (Viires 1969:15–17). Certainly in Alaska, axes of this style are associated exclusively with a Russian (i.e., pre-1867) context. Encouraged by the findings, the team ceased work that would further disturb the site until funding could be secured for a more intensive data recovery effort. In August 2012, a follow-up underwater survey was undertaken to look for evidence of the wreck itself. The author collaborated with the NOAA Office of National Marine Sanctuaries to conduct a marine magnetometer survey.<sup>9</sup> The survey strategy called for boat transects run parallel to the shoreline, but was compromised by dense kelp. Under



*Figure 2: A cache of Russian axes, stacked as having been in a crate. One of two caches (nine axes) discovered in 2012 at a location predicted to be the Neva survivor camp. The inset is a laboratory photo of one of the axes.*



normal conditions (i.e., constant magnetic gradient), the instrument would have recorded anomalies caused by large iron objects such as cannons, anchors, and rigging. However, volcanic activities near Mount Edgecumbe produced pyroclastic flows that caused a very steep magnetic gradient and masked any such anomalies. Essentially, the data gathered from the Neva Bay survey were unusable. This is the same problem experienced by the NevaQuest search team in the 1980s. The crew conducted a brief scuba survey, but found that kelp and seagrass allowed for only about 5–10% visibility of the seafloor. Despite the complications with underwater survey, the team was encouraged by discovery of the possible survivor camp and pursued grant funding for further work.

In April 2013, the Sitka Historical Society (with McMahan as principal investigator and Dilliplane as co-principal investigator) was awarded project funding by the U.S. National Science Foundation (NSF Award No. PLR-1330939). Because the site is in a location of special importance to the Sitka Tlingit, it was necessary to complete tribal consultation and obtain appropriate permits from the land managers (U.S. Forest Service for uplands; State of Alaska for intertidal and submerged lands) before work could begin. After a year of consultation and research, including research by Anichtchenko and McMahan in the

Russian Naval Archives, archaeological work began at the presumed survival camp location in July 2015 (Fig. 3).

The 2015 team initiated work by conducting a systematic metal detector survey of the narrow terrace where Russian axes had been discovered in 2012. Archaeologist Daniel Thompson, who oversaw the metal detector survey, located and logged seventy-six targets. The distribution of these metal targets served as a guide for locating areas to be formally excavated. Sixteen 1 m<sup>2</sup> excavation units, clustered into three blocks, were opened. Total station mapping was conducted by John Pollack and Sean Adams, Canadian team members representing the Institute for Nautical Archaeology. Block 1 (Central Excavation Area), comprised of six contiguous 1 m units, was the first excavated and is in the presumed survivor camp area. Block 2 (Southernmost Excavation Area), comprised of eight contiguous 1 m units, was located approximately 3 m south of Block 1 and is also in the presumed survivor camp area (Fig. 4). Block 3 (“Kitchen Terrace Area”), comprised of two contiguous 1 m units, is north of the stream and is now known to be the location of a mid-to-late-nineteenth-century Tlingit hunting camp.<sup>10</sup> In addition to the block excavations, numerous smaller (50 cm<sup>2</sup> or less) units were opened to remove and record the metal detector targets identified earlier. The work was documented by a professional American-Russian filmmaker, Gleb Mikhalev.

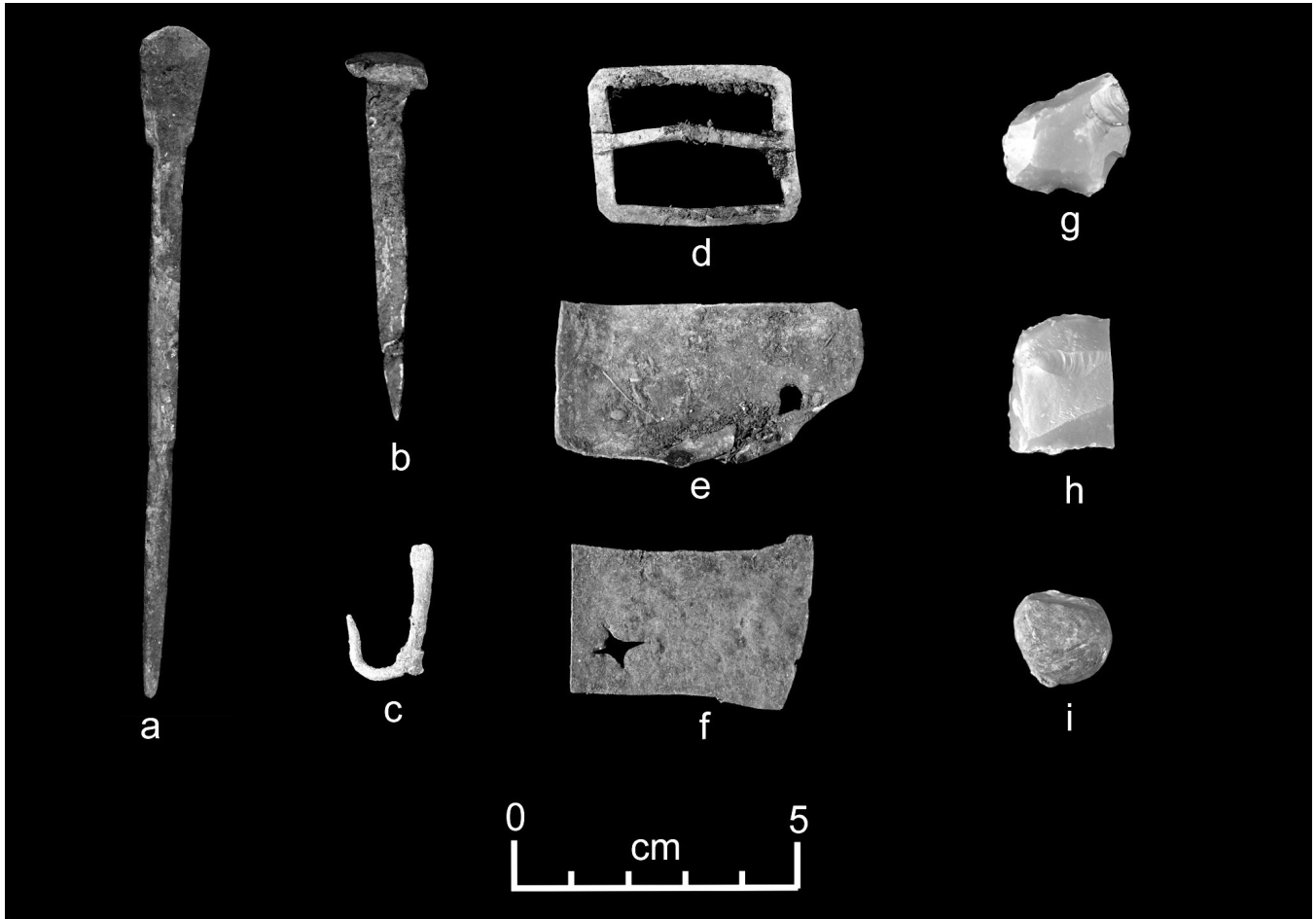
While analysis is in the early stages, findings from the 2015 work do support the hypothesis that the site (SIT-00963) is the location of the *Neva* survivor camp. Recovered artifacts, which are consistent with an early-nineteenth-century time frame, include French gunflints, a brass buckle, reworked copper sheathing, copper and iron nails, musket/pistol balls, a Russian axe, and the leg from a brass nautical (or carpenter’s) divider (Fig. 5). In general, the artifacts are consistent with a “survival” rather than camp situation. For example, both gunflints and associated small flakes of gunflint material were recovered, suggesting that they were used as strike-a-lights for fire starting. One such flake was associated with burned (carbonized) grass, such as might have been used for tinder. Some of the musket balls had been whittled, as if to reduce their size for use in a smaller-caliber weapon such as a pistol. Interestingly, one of the survivor accounts mentions that the unfortunate castaways survived the first night because one of the Russian *promyshlenniki* who made it to shore had a flintlock pistol with which to start a fire. Smaller hand-cast lead shot (with mold lines) were also recovered. They may suggest the use of a fowling gun. At



*Figure 3: The 2015 archaeology field team (left to right): John Pollack, Daniel Thompson, Sean Adams, Dave McMahan, Yury Likhin, Timothy Dilliplane, Gleb Mikhalev, Artur Kharinsky, and Evguenia Anichtchenko. (Not pictured: Brinnen Carter, John Jensen, Travis Shina-barger, and Kevin Murphy.)*



*Figure 4: The Block 2 (southernmost) excavation area showing eight contiguous 1 m units. Yury Likhin (Taltsy Museum, Irkutsk) is excavating a hearth area in the vicinity of a pile of stacked boulders.*



*Figure 5: Examples of artifacts from the presumed Neva “survivor camp”: (a) leg of a copper or brass nautical or carpenter’s divider; (b) a copper “ship’s” nail; (c) a fishhook probably fashioned from a copper nail; (d) a copper or brass strap buckle; (e and f) copper sheathing; (g and h) French gunflints; (i) a lead musket ball that appears to have been whittled to fit into a smaller-diameter weapon.*

least one of the copper nails appears to have been shorn off, as may have occurred as the result of wrecking. A fish-hook recovered from the site may have been fashioned from a nail. Numerous small fragments of copper sheeting, probably ship's sheathing, were recovered. Features identified during excavations in the Block 1 and 2 area include several hearths scattered along the terrace edge, as well as two piles of stacked boulders. The boulder piles could have been used to hold down a sailcloth shelter, or possibly as steam bath stones. Excavations beneath the stones revealed that they had been stacked on the ground surface, with no evidence of a buried feature.

Numerous small fragments of calcined animal bone were handpicked from the hearth deposits, and bulk samples were collected for flotation and/or fine screening. Faunal samples were sent to Megan Partlow, a zooarchaeologist affiliated with Central Washington University, for analysis. Partlow (2016) found that the faunal remains from Blocks 1 and 2 (southern blocks, believed to be in the survivor camp location) included a preponderance of Sitka black-tailed deer (*Odocoileus hemionus sitkensis*) and harbor seal (*Phoca vitulina*), as well as a smaller representation of salmon or trout (*Oncorhynchus* sp.) and Steller sea lion (*Eumetopias jubatus*). She found that "while none of the faunal remains are definitive indicators of a winter occupation of the site, all identified taxa are locally available in winter and could have been hunted or collected by the survivors of the *Neva* shipwreck." A minimum of two deer were represented, which translates loosely into at least 32 kg of meat. Some of the deer long bones exhibited evidence of being broken, perhaps for marrow, as well as evidence of cutting by a metal knife and chopping. At least one harbor seal was represented, and would have yielded around 40 kg of usable meat. In the cold winter temperatures, the high calorie content of the seal blubber would have provided a much-needed energy source to supplement the relatively lean deer and seal meat. Partlow found that the rockfish remains from the site were probably from at least one large (over 60 cm in total length) fish. Despite the mention in one of the survivor accounts that dogs had shown up and died after feeding off corpses, she found only one bone (a phalanx) that was in the general size range for a dog. If dogs were present, they were not eaten by the survivors.

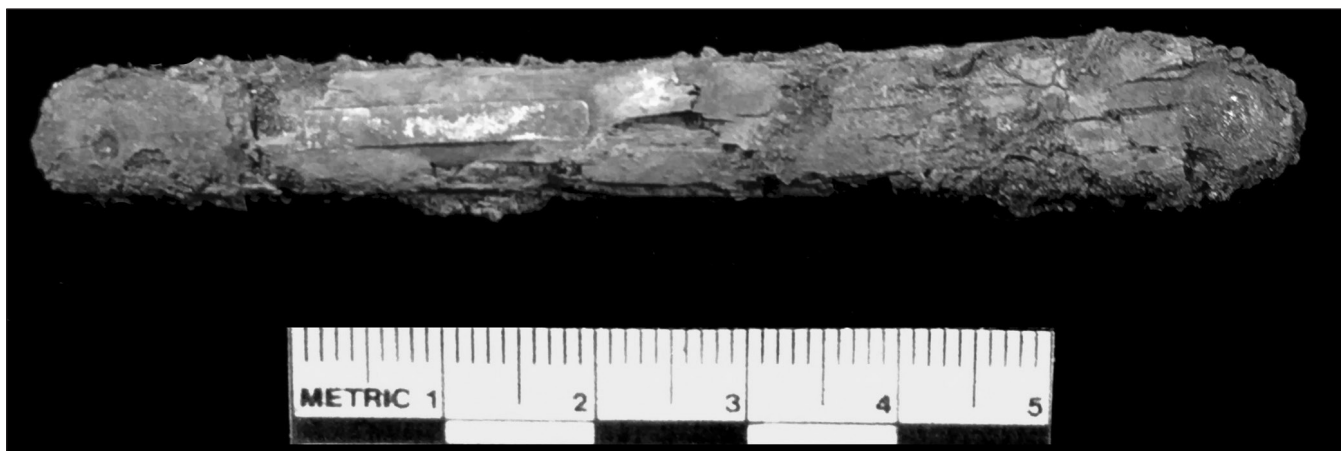
One of the hearths (Block 2) is believed to be intrusive and later than the "survivor camp" deposits. It may relate to a party that visited the site after the rescue to salvage materials, or to the nearby hunting camp.<sup>11</sup> The intrusive nature of this hearth is visible in profile, and it con-

tains materials that may be later. For example, a decorated and marked kaolin pipe stem fragment (Fig. 6) was recovered. While the markings have not yet been identified, the bore diameter ( $\frac{3}{64}$  inch [1.6 mm]) is consistent with a late-eighteenth-century or later time frame. Generally, pipe smoking (as opposed to snuff and chewing) was not popular among Russians until the 1830s (Alexander Petrov, Russian Academy of Sciences, pers. comm.). Still, the crews of round-the-world ships had significant exposure to diverse cultures and often included those of other nationalities. The use of kaolin tobacco pipes was extremely popular in Western Europe by the mid-seventeenth century. The pipe stem fragment will potentially date the intrusive hearth if the manufacturer can be identified. A folding knife from the same vicinity was discovered in the laboratory when an iron concretion was dissolved in electrolysis (Fig. 7). It may be a British jackknife from the early to mid-nineteenth century. Other problematic artifacts from the possible intrusive hearth include a small piece of clear glass from near the surface and a small piece of water-worn transfer-print ceramics. There is also a probability that the Block 1 and 2 ("survivor camp") area was slightly contaminated by materials from the later camp (Block 3) to the north. For example, preliminary metals analysis by Peter Northover (University of Oxford) suggests that a piece of sheet copper may be from the second half of the nineteenth century. These items, along with the rest of the collection, will undergo continued analysis during 2016–2017. Other than these possibly intrusive items, the "primary terrace" deposits were devoid of ceramics, glass, and other items that would be expected on a camp or settlement site. The preponderance of evidence continues to validate the hypothesis that the site represents the *Neva* survivor camp, albeit not without later contamination.<sup>12</sup>



Figure 6: Stem fragment from a J&T FORD kaolin pipe, traded by the Hudson's Bay Company during the 1840s–1860s.





*Figure 7: A folding jackknife or penknife, probably a mid-nineteenth-century intrusion, recovered from an iron concretion. Remnants of the handle appear to be tortoiseshell or horn.*

In addition to the artifact assemblage, geomorphological and dendrochronological data contribute to our understanding of the site. NOAA scientists found that “the land and the sea floor are rising relative to the sea at 17.12 mm/yr (due to isostatic rebound from loss of the weight of the melting glaciers)” (Steven Gill, e-mail dated May 5, 2012). Assuming constant rates over the last century, the land is about 3.4 m higher now than in 1813. The oldest core extracted from a spruce tree during the 2015 archaeological investigation yielded a ring count of minimally 132 years. Allowing for a lag time of at least five years between uplift and germination (Larsen et al. 2004), this suggests the terrace has not been subjected to saltwater since 1878. The interval was probably significantly longer, as older spruce tree stumps were noted but too deteriorated to extract a core. Finally, the artifacts recovered from Blocks 1 and 2 were excavated from a sandy level believed to be a beach deposit. This suggests the occupation level was most likely in the supratidal or beach fringe area at the time of deposition, and is consistent with an estimated 3.4 m of uplift since 1813.

## ONGOING RESEARCH AND FUTURE PLANS

The 2015 collection is presently being cataloged and packaged according to museum standards. Analysis of these items will continue, along with analysis of any items recovered in 2016. Additional metals analysis is planned by both Peter Northover and Kory Cooper (Purdue University). Soil samples from the 2015 work have been dried and screened through 1 mm mesh to remove macroscopic artifacts. Smaller samples have been preserved, and

may be floated along with 2016 samples to extract burned plant materials and fauna. Additional faunal analysis is planned for 2016, particularly if specimens can be attributed to a “survivor camp” occupation level. To this end, attention will be paid to microstratigraphy in 2016 in an effort to separate out early-nineteenth-century deposits of different ages. Most of the recovered artifacts are durable and do not require short-term conservation treatment. At the completion of the 2016 work, however, there are plans to consult with a professional conservator to ensure that collections are stable for long-term curation. The planned 2016 field investigation will include one or more tribal representatives, in addition to an international team of archaeologists, historians, and volunteers. By recounting oral history, tribal members give the scientists an important understanding of the location’s importance to the Sitka Tlingit. It is important to note that the terrace remnant on which the presumed survivor camp is located is being severely undercut by storm waves. It is fortuitous that the site was discovered in 2012, as it will likely be gone in another decade. The 2015 team identified other (unexcavated) hearths on a narrow portion of the terrace that is being undercut by storm waves. The recovery of data from these threatened areas is a high priority for work in 2016.<sup>13</sup>

Additional underwater investigations are planned in 2016 on an opportunistic basis. Any marine work at this location is difficult and dangerous due to its exposed location, significant ocean swell, tidal surge, and dense kelp and seagrass. Sonar survey will be conducted as conditions allow, and any identified targets will be inspected via scuba dives. Additional archival research may be conducted in 2016–2017 if funding is available and poten-

tial unexplored archives are identified. Finally, there are plans to construct a virtual museum exhibit to include 3-D scans of a selection of artifacts. This will allow an inspection of the recovered materials by specialists and the interested public worldwide. There are also plans to develop an educational curriculum that will be available to schoolteachers in Sitka and elsewhere.

## RESEARCH POTENTIAL

Despite more than 100 years of Russian occupation in Alaska prior to 1867 and a large body of archival literature, a relatively small number of Russian-period sites have been studied archaeologically. Moreover, shipwrecks are often described in the literature as “time capsules” because (1) they represent the material culture of a very specific point in time, and (2) their quickly deposited artifact assemblages, including personal belongings, represent “total communities of a special type frozen in time” (Muckelroy 1978:57). To some extent, the same is true of survivor camps because their assemblages are subsets of ships’ assemblages. The *Neva* “survivor camp” site may potentially provide a unique snapshot in time for January 1813. Given the known and specific time frame for the wreck, recovered materials would have immense value for helping us to understand the age and sources of supply for assemblages from other colonial Russian sites. For example, excavations at Castle Hill (Sitka), the colonial capital of Russian America after 1808, produced more than 300,000 artifacts (McMahan 1999, 2001:94, 2002:172–175, 2006, 2007, 2008). The majority of these materials were recovered from a manufacturing and living complex loosely dated to the first quarter of the nineteenth century. A high percentage of imported items from this area can be linked either to China (i.e., Chinese porcelain) or to factories in Russia (McMahan and Thompson 2002:83). Following the initiation of round-the-world voyages by the *Neva* and *Nedezhda*, Russia’s Alaska settlements are believed to have been resupplied primarily through direct voyages from the Baltic port of Kronstadt or through purchase from U.S. trading vessels at New Archangel (Crowell 1997:26; Gibson 1976:73–89). Since we know the *Neva* departed from Okhotsk and was resupplied there, the remnants of her cargo are a proxy for understanding the types of goods being shipped from that port to Russian America at a particular point in time. This information is invaluable for reinterpreting models for supply at Castle Hill and other Russian American sites.

Investigations at the *Neva* “survivor camp” might also advance our understanding of the adaptations that allowed wreck survivors to await rescue in a frigid, unfamiliar, and hostile environment for almost a month. There has been considerable public interest in stories of shipwreck survival, including psychological trauma and the dynamics of group isolation, but relatively few formal archaeological and anthropological investigations of the phenomenon. A notable exception is the comprehensive study by Martin Gibbs of seventeenth-to-nineteenth-century shipwreck survivor camps in Australasia and what they can tell us about human behavior in a crisis situation (Gibbs 2003). Despite differences in specific wreck events, he found many commonalities in survival adaptation processes (Gibbs 2003:129). An interesting comparison with the *Neva* survivor camp may exist in the work done by a joint Russian-Danish team of scientists at the 1741 Bering Expedition survivor camp in the Commodore Islands (Frost 2003). In the Canadian Arctic, studies have focused on materials left behind by the Franklin Expedition (Beattie and Geiger 1992). In Alaska, there have been no such studies, and the exact locations of only a few survivor camps are known.<sup>14</sup> Thus, the *Neva* Bay survivor camp offers important research opportunities. Archaeological materials from the site may also contribute to ongoing research focused on understanding the impacts of isolation on traditional Russian culture in the Russian colonies of North America (Dilliplane 2007a, 2007b, 2009, 2010, 2011a, 2011b, 2012).

## NOTES

1. Krusenstern 1813:3; Shalkop 1979:9; Lloyd’s Register, 1801–1802, entry 51; London Foreign Shipping Registry, entry 61, London Metropolitan Archives.
2. Lloyd’s Register, August 1800; Registry of shipping, London foreign trade, British National Archives BT 107/13, pp. 217–218.
3. “Ship-rigged” or “full-rigged” refers to a sailing vessel that has three or more masts and is square-rigged. This distinguishes them from other vessels such as schooners or barks.
4. By the late eighteenth and early nineteenth centuries, the practice of covering the hulls of sailing vessels with metal sheathing below the waterline was widespread. This protected the vessel from the corrosive effects of saltwater, as well as damage from shipworms and marine vegetation.

5. Von Lowenstern (Moessner 2003:6) said that both vessels were purchased for 230,000 rubles (U.S. \$7500), and 30,000 rubles (U.S. \$976) were spent for repairs. Tikhmenev (1978) reported that the *Neva* (a 373 ton frigate with fourteen cannon) was purchased for 89,914 paper rubles (U.S. \$2,967).
6. Mount Edgecumbe, located near the project area, has a height of 970 m and is a key landmark in Southeast Alaska. It was formed by basaltic eruptions over the past 600,000 years, with the last major explosive eruption having occurred around 12,000 years ago.
7. The *Neva* was a sailing ship, and would not have had boilers as would be found on a steamer. This in itself discredits the article.
8. McMahan was Alaska state archaeologist, employed by OHA, at the time of the 2012 investigation. He retired from OHA in 2013, in part to pursue grant funding for the *Neva* project. Partnership project work was conducted with Jay Kinsman, former Sitka district archaeologist, Tongass National Forest, and Bob Medinger, former executive director of the Sitka Historical Society. The current executive director, Hal Spackman, is now participating in the project.
9. A marine magnetometer was borrowed from the USS Monitor National Marine Sanctuary and operated by marine archaeologist Frank Cantelas. Other crew included Bob Medinger and Sue Thorsen.
10. The mid-to-late-nineteenth-century hunting camp may be the topic of a future paper. This paper focuses only on the early-nineteenth-century components believed to be relevant to the *Neva*.
11. The account transcribed by Berkh (in Shalkop 1979:40) mentions that Baranov sent an armed party to collect goods from the beach immediately after the wreck. We now know (based on the recent identification of a pipe stem fragment) that at least some of the intrusive materials are consistent in age with the nearby Tlingit hunting camp.
12. Multiple lines of evidence (survivor accounts, historical research, aerial imagery, report of a submerged cannon by an abalone diver) established the site of the wreck. At a location predicted to be the most likely for the “survivor camp,” archaeologists found Russian-period materials suggestive of “survival” rather than “settlement.”
13. In July 2016, after submittal of this manuscript for publication, additional fieldwork confirmed the location is that of the *Neva* survival camp and wreck site.

Recovered materials included cached ship’s sheathing, cannon trunnion caps, and Russian axes. Additionally, a coffin burial was discovered but was not excavated.

14. The survivor camp of the 1910 *Farallon* shipwreck was recently identified by a crew that included McMahan. In 2008, McMahan and Patricia Browne excavated a single test pit at the bark *Torrent* (1868) survivor camp at an abandoned Russian mining settlement (Coal Cove) in Kachemak Bay, but were not able to isolate survivor artifacts from earlier and later materials. Maschner et al. (2012:142–144) discuss the early-nineteenth-century survivor camp of Archibald Campbell on Sanak Island, but were not able to confirm the site archaeologically.

## REFERENCES

- Beattie, Owen, and John Geiger  
1992 *Buried in the Ice: The Mystery of a Lost Arctic Expedition*. Scholastic, Inc., New York.
- Centennial Press  
1963 Newsletter of the Alaska State Centennial Commission for October, 1963. From the personal files of George Hall, in possession of his family in Anchorage.
- Crowell, Aron L.  
1997 *Archaeology and the Capitalist World System: A Study from Russian America*. Plenum Press, New York and London.
- Dauenhauer, Richard, and Nora Dauenhauer  
2008 *Russians in Tlingit America: The Battles of Sitka, 1802 and 1804*. University of Washington Press, Seattle.
- DeArmond, Robert N.  
1946 Baranov’s Fleet. In *Alaska Life the Territorial Magazine*. Alaska Life Publishing Company, Seattle.
- Dilliplane, Timothy (Ty) L.  
2007a Investigating Russian Cultural Change and Stability in Russian America: Initial Results. In *Russian America: Materials of the III International Scientific Conference “Russian America”* (Irkutsk, 8–12 August 2007). Russian Federal Agency of Culture and Cinematography, Department of Culture and Archives of the Irkutsk Region, State Culture Institution, and the Taltsi Architectural and Ethnographic Museum. Irkutsk, Russia.



- 2007b *Russian Cultural Change/Stability in Russian America: Examining Kolmakovsky Redoubt*. Two Centuries of U.S.–Russia Diplomatic Relations Conference, Moscow.
- 2009 *The Isolation of Russian America: Searching for Traditional Russian Seagoing Behaviors*. Maritime Conference in the Humanities: Literature, History, and Culture, 2009. Massachusetts Maritime Academy, Buzzards Bay.
- 2010 *Russian Cultural Change/Stability in Russian America: Examining Kolmakovsky Redoubt, Part II*. 2010 International Conference on Russian America, Sitka, Alaska.
- 2011a *Progress Report: Research on Russian Cultural Change/Stability in Russian America*. Given by invitation to special symposium on Russian America, hosted by Ryazan State University Named for S. A. Yesenin, Ryazan, Russia.
- 2011b *Progress Report: Research on Russian Cultural Change/Stability in Russian America*. Given by invitation to special symposium on Russian America, hosted by Vologda Museum, Vologda, Russia.
- 2012 *Russian Cultural Change/Stability in Russian America: Examining Kolmakovsky Redoubt, Part IIIA*. Fort Ross Bicentennial Conference, Santa Rosa, CA.
- Frederick, Robert A.  
1979 Forward. In *The Wreck of the Neva*, translated by Antoinette Shalkop, with an introduction by Antoinette Shalkop and Richard Pierce. Alaska Historical Society, Anchorage.
- Frost, Orcutt William (editor)  
2003 *Bering: The Russian Discovery of America*. Yale University Press, New Haven, CT.
- Gibbs, Martin  
2003 The Archaeology of Crisis: Shipwreck Survivor Camps in Australasia. *Historical Archaeology* 37(1):128–145.
- Gibson, James R.  
1976 *Imperial Russia in Frontier America: The Changing Geography of Supply of Russian America, 1784–1867*. Oxford University Press, New York.
- Krusenstern, Adam Johann von  
1813 *Voyage Round the World, in the Years 1803, 1804, 1805, & 1806, by order of His Imperial Majesty Alexander the First, on board the Ships Nadeshta and Neva*. Printed by Roworth [I] and T. Davison [II] for John Murray and the Board of Longitude, London.
- Larsen, Christopher F., Roman J. Motyka, Jeffrey T. Freymueller, Keith A. Echelmeyer, and Erik R. Ivins  
2004 Rapid uplift of southern Alaska caused by recent ice loss. *Geophysical Journal International* 158(3):1118–1133.
- Lisiansky, Urey  
1814 *A Voyage Round the World: In the Years 1803, 4, 5, & 6; performed, by Order of His Imperial Majesty, Alexander the First, Emperor of Russia, in the Ship Neva, by Urey Lisiansky, Captain in the Russian Navy and Knight of the Orders of St. George and St. Vladimir*. London.
- Maschner, Herbert, Matthew Betts, Buck Benson, Amber Tews, and Sean Mack.  
2012 Archaeology on Sanak. In *Sanak Island, Alaska: A Natural and Cultural History*, edited by Katherine L. Reedy-Maschner and Herbert D. G. Maschner. Idaho Museum of Natural History, Pocatello.
- Massov, Aleksandr  
2006 The Visit of the Russian Sloop *Neva* to Sydney in 1807: 200 Years of Russian-Australian Contacts. *Australian Slavonic and East European Studies* (ASEES) 20(1–2):203–214.
- McMahan, J. David  
1999 Archaeology at Alaska's Castle Hill, the Colonial Capital of Russian America. In *Unseen Treasures: Imperial Russia and the New World*, pp. 17–22. American-Russian Cultural Cooperation Foundation, Washington, DC, and the Russian State Historical Museum, Moscow.
- 2001 Castle Hill Collection (in Japanese). In *The Sea Otter and Glass Beads: Trade of Indigenous Peoples in the North Pacific Rim*, exhibition catalog. Japanese National Museum of Ethnology, Osaka.
- 2002 *Archaeological Data Recovery at Baranof Castle State Historic Site, Sitka, Alaska: Final Report of Investigations (ADOT&PF Project No. 71817/TEA-000-3[43])*, edited by J. David McMahan. Office of History and Archaeology Report No. 84. Division of Parks and Outdoor Recreation, Alaska Department of Natural Resources, Anchorage.
- 2006 The Castle Hill Archaeological Project, Sitka, Alaska: Overview of an Early 19th Century Russian American Artifact Assemblage. *Journal of the Architectural and Ethnographic Museum Talci* 5:7–25.

- 2007 An Overview of the Archaeology of Russian America: The Past, Present, and Future. In *Russian America: Materials of the Third International Scientific Conference 'Russian America,'* edited by G. V. Afanasieva-Medvedeva, T. A. Kriuchkova, Y. P. Lykhin, A. K. Nefedieva, and V. V. Tikhonov, pp. 133–147. Federal Agency of Culture and Cinematography, Department of Culture and Archives of the Irkutsk Region, and Architectural and Ethnographic Museum Taltsi.
- 2008 Southeast Alaska Historical Sites, Featuring Sitka [Castle Hill]. In *Archaeology in America: An Encyclopedia*, vol. 4 *West Coast and Arctic/Subarctic*, edited by Linda S. Cordell, Kent Lightfoot, Francis McManamon, and George Milner. Greenwood Publishing Group, Santa Barbara.
- 2012 Search for the NEVA Wreck Site: 200th Anniversary Expedition: Report of 2012 Investigations. Unpublished [restricted] document on file at the Office of History and Archaeology, Alaska Division of Parks and Outdoor Recreation, Anchorage.
- McMahan, J. David, and Daniel Thompson
- 2002 Chapter 7: An Overview of the Artifact Assemblage. In *Archaeological Data Recovery at Baranof Castle State Historic Site, Sitka, Alaska: Final Report of Investigations (ADOT&PF Project No. 71817/TEA-000-3[43])*, edited by J. David McMahan. Office of History and Archaeology Report No. 84. Division of Parks and Outdoor Recreation, Alaska Department of Natural Resources, Anchorage.
- Moessner, Victoria Joan
- 1993 Translator's Introduction. In *A Voyage Around the World 1803–1807*, by Georg Heinrich von Langsdorff, edited by Richard A. Pierce. Limestone Press, Kingston, ON.
- 2003 *First Russian Voyage around the World: The Journal of Hermann Ludwig von Lowenstern 1803–1806*. University of Alaska Press, Fairbanks.
- Muckelroy, Keith
- 1978 *Maritime Archaeology*. Cambridge University Press, Cambridge.
- Partlow, Megan A.
- 2016 Faunal Report for 49-SIT-963. Prepared January 12, for J. David McMahan in conjunction with the Neva Archaeological Project. Report in McMahan's possession.
- Pierce, Richard A.
- 1983 Record of Maritime Disasters in Russian America: 1800–1867. In *Proceedings of the Alaska Marine Archaeology Workshop*, edited by Steven Langdon, pp. 59–71. Alaska Sea Grant Report 83-9. University of Alaska, Fairbanks.
- 1990 *Russian America: A Biographical Dictionary*. Limestone Press, Kingston, ON, and Fairbanks.
- Shalkop, Antoinette
- 1979 *The Wreck of the Neva*. Annotated and translated by Antoinette Shalkop, with an introduction by Antoinette Shalkop and Richard Pierce. Alaska Historical Society, Anchorage, and Sitka Historical Society, Sitka.
- Tikhmenev, Petr
- 1978 *A History of the Russian-American Company*. Translated and edited by Richard A. Pierce and Alton Donnelly. University of Washington Press, Seattle.
- Tornfelt, Evert E., and Michael Burwell
- 1992 Shipwrecks of the Alaskan Shelf and Shore. Outer Continental Shelf Study MMS 92-0002. U.S. Department of the Interior, Minerals Management Service, Alaska OCS Region, Anchorage.
- Viires, A.
- [1960] 1969 *Woodworking in Estonia: Historical Survey*. Israel Program for Scientific Translations, Jerusalem [translated from Estonian].
- Wilber, Glenn (publisher)
- 1993 NEVA—Russian Man of War. In *Sitka—our 'Land of Destiny.'* Pamphlet published by Alaska Publications, Sitka. Copy on file at the Sitka Historical Society Museum, Sitka.
- 2012 Personal communication to Robert Medinger, followed by a personal communication to Medinger, McMahan, and Kinsman via satellite phone during the June 2012 survey effort.