AN AMERICAN TREASURE IN FAIRBANKS:  
THE REHABILITATION OF THE KOLMAKOVSKY BLOCKHOUSE

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ABSTRACT

In 1841, an eight-sided hand-hewn log blockhouse became the first structure at Kolmakovsky Redoubt, a new Russian outpost along the south bank of the middle Kuskokwim River. That same blockhouse, thanks to a Save America’s Treasures grant from the Institute of Museum and Library Services (IMLS), has been stabilized and re-presented to the public in a way that more accurately reflects the history and context of its original installation. This report documents the process undertaken by University of Alaska Museum of the North (UAMN) staff and contractors to preserve the unique structure.

INTRODUCTION

Resting in a protected area along a walking trail on the campus of the University of Alaska Fairbanks (UAF), to the northeast of the University of Alaska Museum of the North (UAMN), rests a humble octagonal log structure with a sod roof. Often passed without a second thought by thousands of tourists, students, staff, and faculty, the Kolmakovsky Blockhouse (Fig. 1) now holds a position of prominence and is officially recognized for the important role it played in the history of Alaska. With the assistance of a $75,000 grant from the Save America’s Treasures program managed by the Institute of Museum and Library Services (IMLS), the oldest building on the UAF campus has been rehabilitated and stabilized for future generations.

THE HISTORICAL CONTEXT

The Kuskokwim River (Kusquvak in Central Yup’ik) runs 1130 km (724 miles) through southwest Alaska (Fig. 2) and is the setting for dozens of communities and thousands of people. For several millennia, the indigenous people of the middle Kuskokwim1 have fished these waters and hunted, trapped, and gathered plants along its shores, depending on the natural bounty of the land to provide food, shelter, and materials for clothing, tools, and transportation. Despite the cultural richness of this region, very few archaeologists have undertaken work here, and therefore few publications have examined the ethnoarchaeology2 in this area (cf. Oswalt 1980; Oswalt and VanStone 1967; Redding-Gubitosi 1991; Rogers et al. n.d.).

In 1841, the Russian-American Company (RAC), seeking to obtain the rich beaver and river otter furs of the interior of Alaska, set about the construction of the Kolmakovsky Redoubt, having successfully operated a number of smaller trading operations along this section of the river over the preceding years (Oswalt 1980:10–17). Following what was possibly becoming a RAC standard practice and according to local tradition (Oswalt 1980:17–18), the first structure raised at the redoubt was an eight-sided log blockhouse (Fig. 3). Intended as a defensive structure to protect local company employees as they established the new settlement,3 this building was never used as such.4 Local Yup’ik oral history (Oswalt 1980:17) states builders debated on how thick to make the log walls by experimenting with a musket fired point-blank into the side of a log, most likely locally harvested spruce. Gauging the depth of the ball’s penetration, they doubled the measurement and determined it adequate: approximately 18 cm.
The history and significance of Kolmakovsky Redoubt has been documented by a number of authors (Bias 2010; Dilliplane 2007, 2010; Hilsinger 2002; Jackson 1991; Oswalt 1980). In summary, the RAC operated this remote post until approximately 1866, when Kolmakovsky and the other RAC properties were purchased by American companies. The Alaska Commercial Company (ACC) and private individuals exchanged ownership of the fort several times between 1875 and 1917, when the final sale from the ACC to an “unstated purchaser for $250” (Oswalt 1980:29) ended the fort’s operation as a trading post. According to copies of letters on file at the UAMN’s Department of Ethnology and History (Walsh 1929), a miner named Al Walsh of Crooked Creek may have been that 1917 buyer. A letter dated March 18, 1929 to Governor Parks states, “I bought the blockhouse to preserve it as a relic of early Russian occupation and donated it to the Pioneers of the Kuskokwim. October 18, 1928, it was donated to the School of Mines [now the University of Alaska] at Fairbanks by the Pioneers of the Kuskokwim and we hope you will consider us in this matter and we will all see it rebuilt on the College grounds of Alaska’s greatest institution.”

The University of Alaska Museum5 was established in 1926, and by 1928 it held collections primarily relating to the ethnology and archaeology of the Bering Strait region. The collections first went on view in 1929, but the blockhouse was not among those exhibits, having been placed in storage. The Kolmakovsky structure and a similar octagonal blockhouse from Mikhailovsky Redoubt (St. Michael)—donated to the museum in 1937 by the Northern Commercial Company—were held in a warehouse until the early 1980s, when funding from the Alaska State Legislature made it possible to reconstruct the two buildings and exhibit them.

THE SITE

While the blockhouse was resting comfortably in a warehouse in Fairbanks, the site of the redoubt was receiving close examination by Wendell Oswalt of the University of California, Los Angeles (UCLA), who first visited the site on the southern banks of the Kuskokwim River in

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5The University of Alaska Museum (UAMN) is now known as the University of Alaska Museum of the North (UAMN).
1953 (Oswalt 1980:viii). In 1966, Oswalt returned for the summer, in part due to the request of UAM director L. J. Rowinski, who was looking forward to assembling and exhibiting the blockhouse and felt that a full range of artifacts would make a more enticing exhibit. Oswalt returned to Kolmakovsky for another field season in 1967; the resulting artifacts (nearly 5,000 of them) were eventually deposited at UAM's archaeology department (acc. no. UA77-43).

Based on a 1971 nomination by William S. Hanable, historian with the Alaska Division of Parks, the Kolmakov Redoubt Site was listed on the National Register of Historic Places by 1974 (Hanable 1974). However, it appears that no work has physically occurred on the site since Oswalt left in the summer of 1967. Oswalt’s 1980 publication remains the primary work on Kolmakovsky.

THE FIRST MOVE

In 1982, the Kolmakovsky blockhouse (cat. no. UA81-26-2) was reassemble behind the newly constructed Otto Geist Building, the new home of the UAM, while the St. Michael blockhouse (UA81-26-1) was lent to the Anchorage Museum for installation in their Alaska Gallery. The UAM-based project was fully documented by Dinah Larsen (1983), and the accession file in the Ethnology and History department at UAMN holds many photographic negatives and contact sheets by the museum photographer at the time, Barry McWayne. The building enjoyed two decades of exhibition behind the museum, being viewed by thousands of visitors each year. However, in 2001 when museum staff began to prepare for new construction and renovation, Special Projects Manager Gary Selinger (retired 2005) advised that the building needed to be moved in order to protect it. At the time, the gently sloping lawn directly to the east of the museum was covered with spruce and birch trees, and a small cleared area seemed the perfect location for the blockhouse. An assessment of the stability of the building took place and Ethnology and History Curator Molly Lee (retired 2008) approved the move of the building intact.

Figure 3: The blockhouse next to the store, ca. 1900. Unknown source.
A local log cabin moving company spent several days preparing the building, which they lifted off its gravel pad, placed onto a flatbed truck, and then drove to its new “temporary” location, safely out of the way of the planned construction activities.

The expansion and renovation of UAMN was completed in 2005, but in 2006 a 25-year-old roof component of the blockhouse appeared ready to collapse, creating a dangerous situation for visitors. Museum Operations Manager Kevin May and I were enlisted to find a temporary solution to stabilizing the deteriorating sod roof. We opted to remove the failing structural fascia boards, sod, and rotted polyethylene sheeting that formerly served as the moisture barrier between the sod and the spruce-sod, and rotted polyethylene sheeting that formerly served as the moisture barrier between the sod and the sprucepole roof constructed in 1982. In its place went reinforced polyethylene sheeting to protect the roof until funding could be secured to deal with the building appropriately.

**AN AMERICAN TREASURE**

As the years rolled by, the blockhouse weighed heavily on my conscience. I felt that I was not fulfilling my obligation to care for the building and so began to formulate a plan. Over the years, the museum’s former curator, Molly Lee, and I had discussed the possibility of applying for a Save America’s Treasures grant to rehabilitate the structure. Up until this time, we had both been consumed with the museum expansion and all the work required to move and stabilize collections inside the building. With that project completed, I could now turn my attention to the blockhouse. In May of 2009, I submitted a proposal to the Save America’s Treasures program to move the building to a new location slightly north and west of its present site, near the peak of what had recently (February 2008) been designated Troth Yeddha’ Park by the University of Alaska Board of Regents (Office of Public Affairs 2008). Sentiments expressed by the Troth Yeddha’ Park Planning Committee (pers. comm., February 25, 2009) indicated strong feelings against the presence of a Russian structure on a green space intended as a tribute to Alaska Native culture and history on the UAF campus. Thus a new, more protected location was selected that would benefit the blockhouse and the museum’s visitors as well, i.e., along the edge of the museum parking lot in a site visible from both the building’s front doors and the parking lot entrance. The new site was approved by the UAF Master Planning Committee’s Landscape subcommittee. In December of 2009, I received notification that our project had been funded for $75,000 for the rehabilitation and stabilization of both the blockhouse and the archaeological collections deposited by Oswalt. We could start moving forward in the new year.

A number of local log preservation specialists were considered, and eventually Sandy Jamieson was selected based on his experience working on historically significant log structures in the Interior (e.g., Louise Kellogg historic cabin, Palmer; St. James Episcopal Church, Tanana; Rika’s Landing historical structures, Big Delta; Black Rapids Roadhouse; and Morris Thompson Center Dunkel Street Cabin, Fairbanks). The summer and fall of 2010 were spent working out the extent of reconstruction and developing a plan for the removal and reassembly of the blockhouse. The foundation slab and surrounding sidewalk were completed in the fall and in early November, Jamieson’s crew removed the 1982-era roof of the blockhouse (Fig. 4) and disassembled the building by hand, transporting it offsite for winter reconstructive work.

Over the winter and into the spring of 2011, Jamieson worked on hand-cutting replacement logs for those that had rotted beyond the point of stabilization. Claire Alix (2010) had confirmed the logs were spruce, and so locally harvested and cured white spruce (*Picea glauca*) was prepared for use. Jamieson studied the half-lapped, self-locking notched corners of each wall log, carefully hand-cut by RAC craftsmen on site at the redoubt (Oswalt 1980:17). This efficient design allowed a team of two men to assemble a building in a matter of hours, once the logs are cut.

The building was reassembled at Jamieson’s workshop in mid-April to be sure the new logs fit properly. Each new log had to be scribe-fit to perfectly match the logs above and below. By the first week of May 2011, the blockhouse was ready to be returned to the university grounds for its final reassembly. Pressure-treated lumber was placed atop the concrete pad to separate the historic logs from the moisture of the concrete and to act as a sill plate. On a beautiful sunny afternoon, the blockhouse was reassembled and was ready once again to be examined by visitors (Fig. 5).

The project wasn’t even close to being done, however. The roof, which had been built by Gareth Andrews in 1982, required stabilization and rehabilitation as well. One aspect of the Kolmakovsky blockhouse that makes it unique among the known blockhouses of Russian America is the sod roof. While the original roof and floor were left at the site on the Kuskokwim (Fairbairn, North Collegian 1930:1), photographs taken by William Weinland in 1884 (Fig. 6) show a sod roof similar in de-
sign to that replicated by Andrews. Moss had been used to chink the roof, and this had not deteriorated like the polyethylene sheeting that was removed in 2006. In discussions with Jamieson, we agreed on an approach that would combine both traditional and modern materials for protecting the roof structure while keeping the sod healthy. A natural canvas was laid over the moss and over

that, a custom-fit landscaping membrane to protect these natural materials. (Historically builders would have used birch bark.) One of the concerns about the older version of the sod roof was the relative instability of the sod—if a small section started to slump, there would be little to keep it in place and the whole section of heavy sod could be lost. To remedy this, Jamieson suggested the use of peeled
tamarack (*Larix laricina*), which has excellent resistance to rot. Standing dead trees were harvested locally, peeled, and cut to length, then overlapped at the corners and connected with wooden pegs. Once the substrate of the roof was completed, Jamieson and his assistants moved the roof back onto the building and secured it onto the newly carved top round of logs. Over the month of September, several hundred pounds of locally harvested tundra moss was set onto the roof and birch bark was wrapped over the rough edges to complete the job.

Over the winter and spring of 2012, we monitored any possible deflection of the central support structure inside the roof; Jamieson was concerned about the additional weight of the new materials, combined with the weight of the snow. However, the design held and the roof was stable.

The summer and fall of 2012 were spent watching how visitors interacted with the building and how the sod roof reacted to the weather. By fall it was clear that we would need to supplement the sod covering that had been positioned on the roof. The drying of the Fairbanks summer sun caused the rectangular pieces to shrink and a number of gaps opened. We also worked on devising where our interpretive panels would be placed and what information we wanted to communicate through them. I had the honor of traveling to the Kuskokwim River and visiting the site of Kolmakovsky and standing in the depression left by the foundation of the blockhouse (Fig. 7). Guided by Chris Wooley of Chumis Cultural Resource Services and David John, Crooked Creek elder and consultant, we walked through tall grass and birch trees and recorded GPS points of several features.

Back in Fairbanks, two projects initiated by Northern Land Use Research (NLUR) archaeologists combined the blockhouse and technology. First, a 3-D rendering of the building was developed. Using hundreds of photographs and a custom-built stitching program, a digitally manipulable model was produced, which I was able to bring to Crooked Creek on the Kuskokwim and share with community members. Secondly, archaeologists used ground penetrating radar (GPR) to see if the structural stability of historic buildings could be detected in the resulting scans. They produced a series of diagrams that communicate the overall density of the wood, which may be used to assist with the assessment of historical structures *in situ*. 
The final pieces to our project were completed over the summer of 2013 with the installation of four full-color interpretive panels around the blockhouse. Several bags of peat were added to the tundra moss to consolidate the covering and create a more unified appearance. The “jail door,” previously installed by the museum to keep visitors from climbing inside, has also been replaced with a sheet of clear acrylic so that the building is secure, but visitors are able to see the construction details inside.

**SUMMARY**

The rehabilitation of the Kolmakovsky blockhouse has resulted in both the stabilization of an important historic structure and symbol of culture contact and change, as well as an improvement in the overall interpretation of the building and site. The visibility of the blockhouse has been improved for museum visitors as well as those walking along the trails of UAF. Interpretive panels describing the ethnological context of the middle Kuskokwim River area, summarizing the history of the RAC, illustrating a number of the items excavated by Oswalt, and summarizing the rehabilitation project, act as invitations to visitors, dramatically increasing the number of people examining the building. Through web-based advertising as well as social media (e.g., Facebook, Twitter, and YouTube) the story of the Kolmakovsky blockhouse has been shared with a new generation of Alaskans and visitors. An introduction to the people of the middle Kuskokwim River region is now an integral part of the story of the blockhouse and the associated collections held in the archaeology collection.

Anyone interested in examining the blockhouse or the archaeological holdings in more detail should contact the author or the UAMN Archaeology Department.

*Figure 7: Angela Linn standing in the foundation depression for the blockhouse at the Kolmakovsky Redoubt site, September 2012. Photo by Chris Wooley.*
ENDNOTES

1. The middle Kuskokwim River area is defined as the ten communities along the middle stretch of the Kuskokwim River, from Stony River to Lower Kalskag.

2. In keeping with the works of Oswalt and VanStone, ethnoarchaeology is a subfield of archaeology that integrates modern ethnological, historical, and archaeological data to more completely understand a particular site.

3. RAC administrators were likely nervous during the initial phases of construction at Kolmakovsky due to the recent massacre at Russian Mission [Ikogmyut] on the Yukon in 1839 (Zagoskin 1967:252).

4. Oswalt lists a number of sources that describe the blockhouse being used as a fish cache rather than a defensive structure around 1892. One source noted its use as a jail ca. 1902 (Oswalt 1980:18).

5. Coinciding with the opening of the new wing in 2005, the University of Alaska Museum added “of the North” to its official name.

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