San Juan Island National Historical Park



Blockhouse Rehabilitation Underway at English Camp



San Juan National Historical Park's blockhouse restoration project crew chief David Harsh guides maintenance worker Todd Narum in setting a log onto a platform that serves as workplace to shave and prepare logs for fitting the new lower structure.

Visitors and San Juan Islanders will have an opportunity this summer to see how log structures were built on the frontier when San Island National Historical Park maintenance crews replace the lower story of the Royal Marine blockhouse at English Camp.

Historians believe this blockhouse is an exact copy of the fortification brought to San Juan Island from Fort Bellingham by Capt. George Pickett in 1859 when the U.S. Army garrison was shifted en masse during the Pig War crisis. Each has an upper story skewed 45 degrees to repel attacks from all directions.

However, the buildings at both camps were primarily used as guardhouses with the guards occupying the lower floor and the prisoners in narrow cells upstairs. The only difference is that the American Camp blockhouse was fashioned from milled lumber.

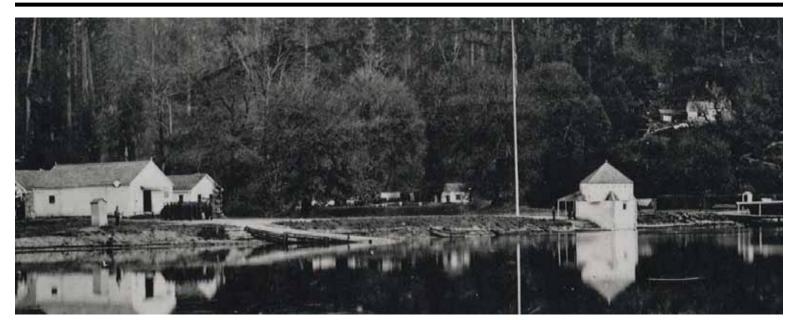
In military science, a blockhouse is a small, iso-

lated fort in the form of a single building. It serves as a defensive strong point against any enemy that does not possess siege equipment or, in modern times, artillery.

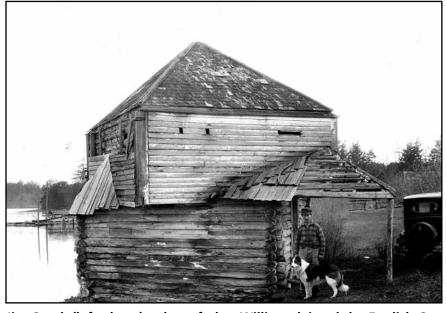
The upper-story logs (hidden by siding) of the English Camp structure are authentic, but because of tidal action, the log base was replaced wholly in 1970 and partially (the bottom 10 logs) in 1995. The lower story has significantly deteriorated since then.

Maintenance crews will use modern tools such as chain saws and vintage hand tools such as broad axes and adze planes to notch and assemble the logs, which were shipped last year from Oregon. The new structure will be assembled at the north end of the English Camp parade ground, said Ken Arzarian, park maintenance foreman.

The logs will then be coded and the structure disassembled. The upper story will be raised and supported by jacks and cribbing while the current lower story is removed log by log.



The blockhouse at far right was primarily used as a guardhouse throughout the joint occupation of San Juan Island.





Jim Crook (left photo), whose father William claimed the English Camp site under the Homestead Act of 1862, made temporary repairs to the blockhouse until his death in 1967. He never had the heart to tear it down. The only original logs left in the structure today compose the entire upper story behind the plank siding. Some can be seen exposed in this photo. National Park Service crews (at right) preserved the original upper story while replacing the lower logs.

The new structure will then be re-erected literally from the ground up, utilizing the same concrete vault installed by the National Park Service in 1970, Arzarian said.

The English Camp blockhouse was standard U.S. Army design at mid-19th century. Fortifications and bridges were required subjects at West Point, taught by the formidable Prof. Denis Hart Mahan, who also wrote *A Complete Treatise on Field Fortification*. The book not only drew upon European principles perfected by Vauban (a 17th century French engineer), but also from a frontier fortification tradition that began with Jamestown in 1607. A typical for-

tification consisted of a stockade about eight feet high, with blockhouses at the corners to accommodate flanking fire over cleared fields of fire.

Pickett probably dug through his trunk and pulled out his copy of Mahan's book before sketching his design when he arrived on Bellingham Bay in August 1856.

He also drew upon the experiences of the settlers on Bellingham Bay who, as with many coastal communities in Washington Territory, had already erected a blockhouse, aptly called "Fort Defiance." This served as protection from raids by First Nations peoples from today's British Columbia, Haida Gwaii and South-

The English Camp blockhouse was likely patterned after a similar structure (upper left) that had been moved to American Camp from Fort Bellingham in 1859. The interior of the blockhouse's upper story remains original after more than 150 years. In 1995 park maintenance crews pre-assembled a portion of a new lower story just as it will done in the summer of 2012.



east Alaska.

Whether or not a frontier fort was totally enclosed depended on the lay of the land, materials at hand and the nature of potential enemies. Save for the basic construction techniques proscribed by Mahan, no two forts were ever alike.

For example, because no massed, surprise attacks were anticipated in Yakama country, Fort Simcoe, also built in 1856, was not enclosed, but possessed freestanding blockhouses for emergencies. The same went for Fort Steilacoom, just south of Tacoma. But taking a note of Fort Defiance, not to mention the hair-raising stories of Indians with firearms in 60-man canoes, Pickett elected to enclose Fort Bellingham.

Pickett found an enthusiastic purveyor of lumber, advice and labor in Whatcom cofounder, Capt. Henry Roeder, who had milled timber for and helped build Fort Defiance. For Pickett's blockhouses, he provided "sawn logs, 8 inches thick, dovetailed...with port holes cut through them."

Each blockhouse was 22 feet square on first floor, with the slightly larger second story set atop the first at a 45 degree angle to allow for flanking fire.

Roeder pointed out that the bastions at Fort Bellingham were placed "...on the opposite corners diagonally... so as to protect the two sides nearest to each. We had steps leading up to them from the inside of the stockade. The bastions were built the same as the blockhouses of square timber."