



NEWSLETTER

Friends of Civil War Alcatraz



October 2025

Steve Johnson, Editor

This issue was delayed due to the uncertainty of the continued operation of Alcatraz National Park, which is currently open on a week-to-week basis

In this issue: "Hot Shot" cannon balls

Island News

The National Parks Conservancy and the Hornblower Cruise Line has provided the funding to keep Alcatraz open for visitors, and their numbers continue to be greater than usual. In one day the island staff transferred all the contents of the former cell-house bookstore to the new temporary bookstore, which is located on Eagle Plaza. The dining room is closed while construction proceeds on the north end of the cellhouse. The audio-tour has been updated, and the route for visitors through the cellhouse has been re-configured. "China Alley" is now cleared to the very end, where the "hotshot oven" was located. The new exhibit "Welcome to Indian Land" tells the story of the Indian occupation and is now open in Building 64.

Dates to Remember

Tuesday, November 11
Veterans Day
Presidio
National Cemetery



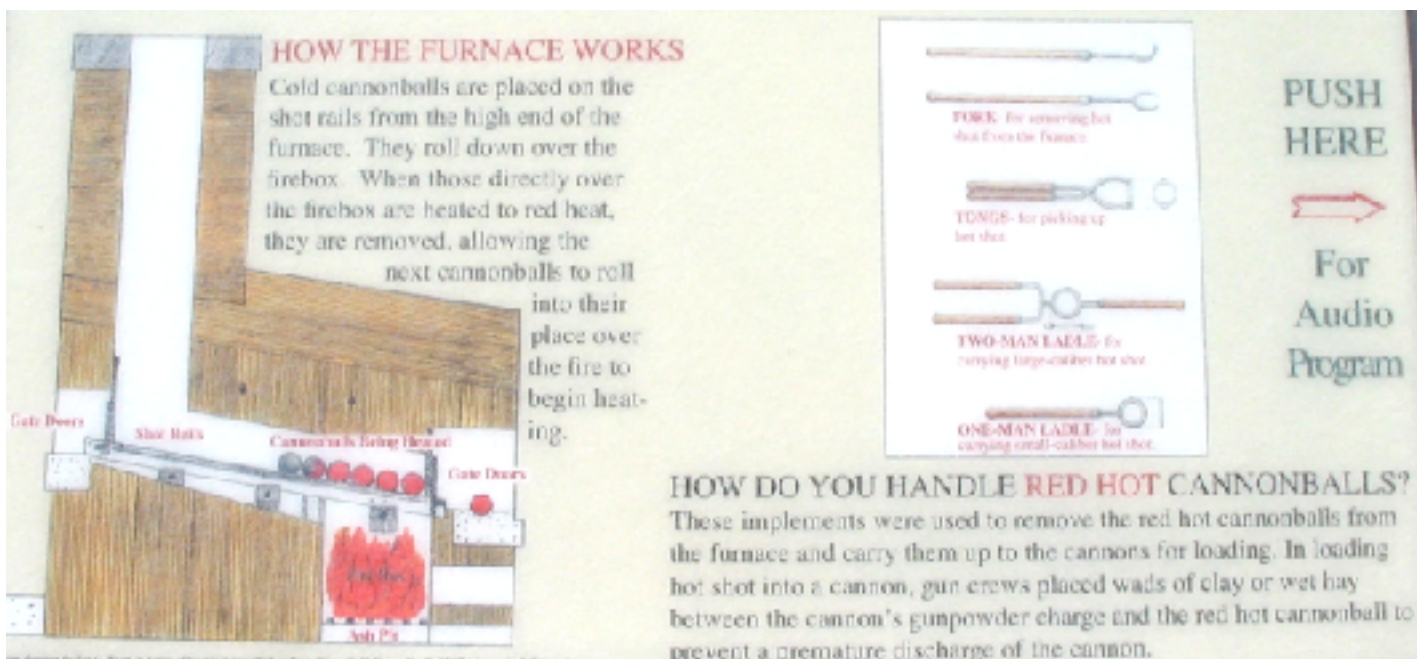
Living History Day on October 4th

Just when it seemed the island would be closed on the planned Living History Day on October 4, we received word that Alcatraz would be staffed and the event could take place. On that day, we had the usual medical display of medical instruments, household remedies and goods, and soldier's equipment. Also on display was money of the Civil War period and tools of the cannoneer. We were very fortunate to have reenactors of the 20th Maine join us for the day, during which they did military marches and drills, accompanied by a fife and drummer. We also for the first time had a representative of the California Cavalry 100, who described the exploits of that small group of Californian horsemen who actually made it back east to fight in various battles. Our thanks to the 32 participants this year who brought to life a time when Alcatraz had soldiers protecting San Francisco Bay during the Civil War.

The Use of “Hot Shot” - Heated Cannonballs

Using fire to destroy ships goes far back in history, when Greeks and Romans hurled blobs of burning materials (composed of asphalt, sulfur, and other ingredients) onto wooden ships which set them afire.¹ Heated shot from a cannon was first used by the Polish in 1579 when fighting the Russians, and in the Battle of Yorktown French artillerymen used a heated cannonball to destroy the British frigate *HMS Charon*.²

The French were the first to design special brick furnaces to heat cannonballs, and General Simon Bernard of the French Army introduced this idea when he became head of the U.S. Board of Fortifications in 1816. He incorporated these furnaces into the design of many forts, including Fort Knox and Fort Pulaski. These furnaces were usually 8 ft. wide and up to 30 ft. long, with a chimney at one end and a firebox at the other. Inside there was a brick slope with iron rails onto which the cannonballs were placed and allowed to roll down to where the firebox heated them to become red hot.³



from a wayside at Fort Macon, a state park in North Carolina

Soldiers would place the cannonballs at one end, allow them to roll down to the firebox, which would heat the ball until it was red hot. It would take about an hour to get the oven hot enough, and when ready could make a 24-pound cannonball red-hot in about 25 minutes.⁴ The hot cannonball was retrieved using a special fork, scraped with a rasp to remove scale, and then carried in a ladle to the cannon.

¹ Wikipedia, “Greek Fire”

² Wikipedia, “Heated Shot”

³ “Heated Shot”, Military History, https://military-history.fandom.com/wiki/Heated_shot

⁴ NPS Regional Review, February 1939, “Hot Shot Furnaces” https://www.nps.gov/parkhistory/online_books/regional_review/vol2-2d.htm

The cannon was loaded with powder packed in a special parchment, pasted well to prevent any powder from leaking out. Then dry hay was rammed in, followed by wet hay or a clay wad. Finally the cannon was raised a bit and the hot cannonball was rolled in, with more clay to keep the ball in place. Once aimed, the cannon was fired; the object was to place the cannonball just inside the ship to set it afire.

Both Fort Point and Fort Alcatraz had furnaces to heat cannonballs; in fact the remnant of the one on Alcatraz can be seen at the end of “China Alley”. However, it’s not likely they were ever used, except for practice drills. There was little cause to use them, and the advent of ironclad ships made them obsolete.

Photos from Alcatraz Living History Day taken by NPS photographer Dave Rauenbuehler



Frank Avila and Jeffrey Nibert display medical tools.



Randall Hawkinson describes equipment of a soldier



Members of the 20th Maine reenactors march in sallyport



Robert Mayer explains how a cannon was loaded and fired



← Keith Rogers shows the equipment of a cavalry soldier

