

FRIENDS OF FORT KNOX

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AMERICA'S ORIGINAL FORT KNOX

In Support of SP 321, LD 762

April 9th, 2025

Good afternoon, Senator Grohoski, Representative Milliken and distinguished members of the Committee. Thank you for this opportunity. My name is Dean Martin and yes, my parents WERE fans and no, I don't sing...at least not well. I'm testifying today in strong support of the proposed legislation in LD 762 toward authorizing a General Fund Bond Issue for maintenance, preservation and promotion of State Historic Sites.

I am the Executive Director for Friends of Fort Knox; a Maine 501c3 with a mission to preserve, and enhance the educational, cultural, recreational, and economic value of Fort Knox for the people of Maine. The "*Friends*" has been doing exactly that since the early 90's when its founders and the People of Maine voted by referendum to "Save the Fort" helping to raise more than \$4 million dollars.

The *Friends* have a long-standing partnership with the State of Maine and currently manages Fort Knox Historic Site and the Penobscot Narrows Bridge Observatory in Waldo County under State lease agreements. Since 2012, Fort Knox has been the only historic site that costs the State nothing annually and actually returns \$40K-\$50K to the General Fund.

The *Friends*, however, are limited in what we can do. You know how expensive it is to maintain your own yards and houses, but we spend >\$20K each year on repointing in an endless cycle of upkeep. With BPL and DACF guidance, we spend \$30K-\$100K annually on preservation and capital projects above the normal park operating costs. Repairs and upgrades from the past 7 years are attached below but without proper funding, we are still behind on the more costly, deferred maintenance.

Several projects at Fort Knox include enormous, elevated brickwork that require skilled historic masons to repair the weather damage in the cannon casemates and more on the 160-year-old hot shot furnaces. A similar project persists with the 75' rock retaining wall. It has been 30 years since the roof over Two-Step Alley was repaired and icicles are shifting the granite walls apart again. Ice is stronger than stone. These projects have several hundred thousand to a million dollars in repair estimates.

Other historic sites are in even greater need of increased funding just to remain open to the public. Even with the help from non-profits and volunteers, State parks and historic sites require substantial funding to properly maintain that is representative of Maine and essential to Maine's tourism industry.

Our parks are the face of Maine for guests in addition to potential to be a revenue generator. Maine State Park and Historic Site visitation has been increasing year over year since the pandemic. Local businesses such as hotels and restaurants have seen increased revenues and by direct connection, so has the State of Maine through associated taxes on businesses, gas, groceries, etc.

As an attraction in mid-coast Maine, Fort Knox and the Observatory see over 100K guests each year, almost half of which come in July and August. Anyone who has visited Fort Knox Maine in the past 30 years will notice the continuous improvements and access to areas that have become dilapidated and dangerous. In 1991, the crucial infusion of funding provided at an essential time made Fort Knox Historic Site a centerpiece and destination of mid-coast Maine.

In closing, I recommend you all make time this summer to visit a state park near you to see for yourselves the difference recent funding to the park system has made possible. Then go visit one of the historic sites, perhaps Fort Knox, and see that even with the support of organizations like Friends of Fort Knox, the tangible structures that bring history to life today and have stood for decades and centuries, are in danger of becoming fading memories and forgotten photos. Once our historic sites are gone, they are gone forever.

If you do decide to come to Fort Knox, I'd be honored to give you a personal tour I call the "Dean Martin Show" or address any questions you have. Thank you for your time and consideration.

A handwritten signature in black ink, appearing to read "D. Martin", written in a cursive style.

DEAN L. MARTIN

Executive Director

Friends of Fort Knox

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Fort Knox Capital Improvement & Repair Projects 2018-2024

2017-2020 Two-Step Alley – It was discovered that an outer membrane, installed during the roof repair project in the mid-1990s, had separated from the retaining wall and allowed large amounts of water to infiltrate below to Two-Step alley. In spring of 2018, an initial repair plan was drawn up but put on hold. In 2019, Artifex Engineering firm performed assessments. In 2020, awarded to Knox Masonry in early summer, work began mid-summer but was delayed due to reassessments of optimal water mitigation methods which were finally completed in December. **2020 Cost: \$96,904.72**

2018-2024 - Annual Masonry Repointing – FoFK worked with qualified historic mason from Knox Masonry to complete the repair and repointing of the Officer Quarters brick wall, Southeast and Northeast facing wall of the front of the Fort. Work generally completed in about 3 weeks. **Annual Cost \$20,000 (Annual Recurring)**. 7-year Total \$120,000

2018-2024 Maintenance Efforts – FoFK has a licensed arborist on staff who trimmed unsafe trees and limbs around the grounds. Operations staff completed picnic table repairs, lighting repairs, painting, and staining efforts throughout the season. Paint/staining efforts targeted picnic tables and signage. FoFK staff performs all zero turn, push/riding mowing, weed whacking and roof/hillside mowing/maintenance **Cost ~\$10,000 (Annual Recurring)**. 7-year Total \$70,000

2020 Contracted Services & Landscaping Equipment – FoFK spent approximately \$20K per year on lawn mowing contract services. FoFK obtained DACF approval in April to purchase capital equipment including a riding mowing, push mower, leaf blower, chainsaws and a trailer for transport. The purchase of equipment in 2020 enabled FoFK to assume all lawn care and grounds keeping services and avoid contract expenses for several years. **Cost \$10,451.51.**

2020 Visitor Center Restroom Plumbing Upgrades – FoFK obtained DACF approval in April to upgrade the pressure tank, heater, braided lines, touchless faucet and recalled FlushMate pressure systems in the Visitor Center Restrooms. All work was completed by December except the Ladies Room furnace replacement (~\$5K). Decision was made to defer the furnace replacement and consider heat pumps to replace all three heaters in 2021. **Cost \$12,319.00.**

2021 Visitor Center Restroom Heating Upgrades – FoFK obtained DACF approval in 2020 to upgrade the Visitor Center Restroom plumbing and heating. Twin City Heat Pumps replaced inoperable propane furnaces in Visitor Center restrooms in Nov for \$9,341 with another 10hrs for a licensed master electrician to modify 220W electric service panel. **Cost \$9,802.67. COMPLETE**

2022 Officer Quarters Flooring – In 2019, FoFK staff and volunteers removed existing ¾ inch floor planking of both second floor rooms of the Officer Quarters. Verified structural integrity of original beams and replaced planking with locally milled rough sawn 1-½ inch white pine and hand hammered 16 penny (16d) – 3.5” Hot Dip Galvanized Square-Cut Rosehead nails (RS-010TN-CCR16ZL). By performing work “in-house. **2020 Cost \$0.**

2021-2024 Visitor Center Restroom, Gate Booth, Shed siding walls repaired/restored – Visitor Center Restroom, Gate Booth, Shed and Stairwell Buildings walls repaired/restored. This project began in '21 but staff shortages, weather and challenges obtaining contractors delayed completion, the Gate Booth was completed in 2021. Shed and stairwell buildings replaced/reinforced structural framing, clapboard siding and painting. **Cost: \$10,043.82. COMPLETED**

2022-2024 - Storm Damage Repairs of Ditches/Roads/Paths – Severe wind and rainstorms in Spring '22 – Dec 2024 required immediate repairs to washouts Downstream damage incurred from heavy runoff to the lower batteries, South picnic area restrooms and leach field, and Fort gravel access road required 80 hours of excavator, tractor w/bucket loader, grader, dump truck, and 30 hours of a chipper as well as 120 yards of stone, gravel, and pea gravel. 110 hours of labor billed at \$16/hr. **Cost \$19,710. COMPLETE**

Fort Knox Capital Improvement & Repair Projects 2018-2024

2024 “A” Battery Restoration – This project began in 2023 and completed in 2024. Work included cut/chip/remove trees/brush, reseal cannon emplacements, seeding, improved ability to mow hillside, battery and berm, delineate walking paths, repair powder magazine door. **Cost \$11,435. COMPLETE**

2024 John Deere HPX615E Utility Vehicle – This project was approved by Ron Hunt at DACF in October 2023 but put on hold due to the season ending. FoFK intends to complete this project in 2024 with an estimated cost of \$16K. **Cost \$18,839.96. COMPLETE**

2023-2025 Wood Flooring Installation – Wood was delivered in Dec 2021 but the storeroom’s 24’ x 52’ historic rough-sawn wooden flooring was completed in October with a 2”x 6” subframe and PT 4”x 4” vertical posts. Materials cost was \$3,823.62 and labor was 125 hrs. @ \$16/hr. The 2nd half of this project (OQ Stairwell and Powder Magazines) will be added to the 2023 project’s request. **Cost \$5,823. ONGOING**

2021-2025 Powder Magazine Historic Flooring & OG Stairway – This project was put on hold due to staff shortages, weather and challenges obtaining materials. historic rough-sawn wooden flooring was completed in October with a 2”x 6” subframe and PT 4”x 4” vertical posts. **Cost \$8,273. ONGOING**

10-24 Parking Area & Walkway Asphalt Repairs - Due to more immediate repairs from storms and challenges with RFQ, this project was deferred until the 2025 season. Eaton Paving could not fit the project in and has scheduled to spring 2025 at ~\$7,500. Blacktop Paving quoted over \$10K for same work on sinkhole and broken ADA sidewalks. **2024 Cost - \$0 (FoFK). INCOMPLETE – DEFERRED**

7-24 Fort Façade Lighting - Due to more immediate repairs from storms and staffing shortages, this project was deferred until the 2025 season. Intent is to provide a flush to ground cover over the 28 metal halide lamps for easier grounds keeping while not disturbing the existing electric lines. **Cost - \$45K-\$120K. INCOMPLETE – DEFERRED INDEF**

A+B Battery Hotshot Furnace Restoration – FoFK contacted several experts and sister Forts to obtain Hotshot Furnace building plans to mitigate costs. Historic mason efforts are estimated for disassembly and “as-built” assembly to exceed \$100K. Project placed on hold. **Cost \$? DEFERRED**

2-24 Drainage Ditch Rip Rap - Due to more immediate repairs from storms and staffing shortages, this project was deferred until the 2025 season. Requires heavy equipment for distribution of rock in ditch near VC parking to avoid flash flood erosion. **Cost - \$? DEFERRED**

3-24 Parade Ground Upgrade - Due to more immediate repairs from storms and staffing shortages, this project was deferred until the 2025 season. Requires heavy equipment for distribution of crushed rock at Food Storage Casemates, brickwork repair of casemates, repair of wooden manhole covers, loam & seed to level parade grounds to avoid trip hazards. **Cost - \$? DEFERRED**

4-24 Trail Assessment & Prep - Due to more immediate repairs from storms and challenges with RFQ, this project was deferred until the 2025 season. Intent was for assessment/prep of larger RTF (80/20) or LWCF (50/50) project to create a trail from A Battery to PNO road and north section of B Battery. **Cost - \$? DEFERRED**

5-24 Engineering Assessments - Due to more immediate repairs from storms and challenges with RFQ, this project was deferred until the 2025 season. Intent was for cost estimations of larger projects (Two-Step Alley Roof Repair, A+B Hotshot Furnaces, Cannon Conservation, Enrockment, and B Battery Wharf/Pier. **Cost - \$? DEFERRED**

More about the original Fort Knox...

- The fort was named after Major General Henry Knox, America's first Secretary of War and Commander of Artillery during the American Revolution. General Knox lived in Thomaston, Maine during the final years of his life. America's other Fort Knox, which is in Kentucky, is also named after him.

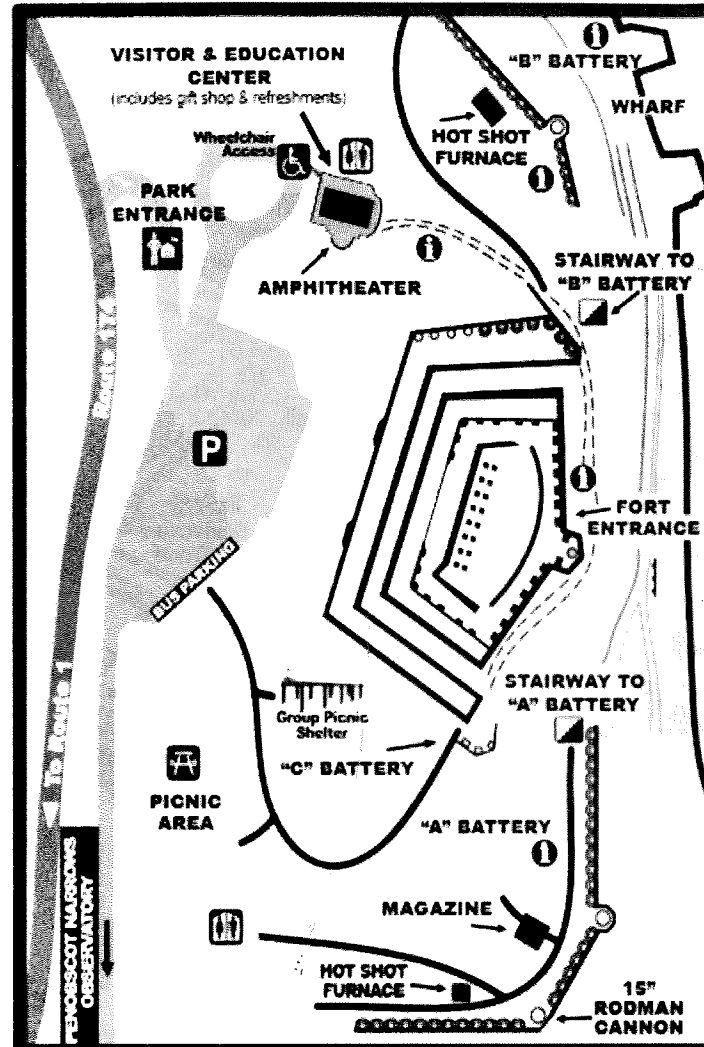
- Fort Knox's granite was quarried on Mt. Waldo, located about five miles upriver from the fort. Once quarried, the granite blocks were transported down the mountain, and then carried by scow to Fort Knox's wharf, near Battery B. Some of the granite was cut and finished to proper sizes on-site at the fort.

- Nearly 1 million dollars was spent to build Fort Knox. Congressional appropriations were sporadic, and construction continued for 25 years. When work finally stopped in 1869, the Fort was still not finished.

- Hot shot furnaces are located on both A & B Batteries. These small brick structures were built for 32-pound cannons that never arrived. Cannonballs were heated in these furnaces until red-hot, then shot into the wooden hulls of enemy ships, with the intent of setting the ships on fire. With the development of iron-clad ships, the firing of red-hot cannonballs became an ineffective means of defense and hot shot furnaces became obsolete.

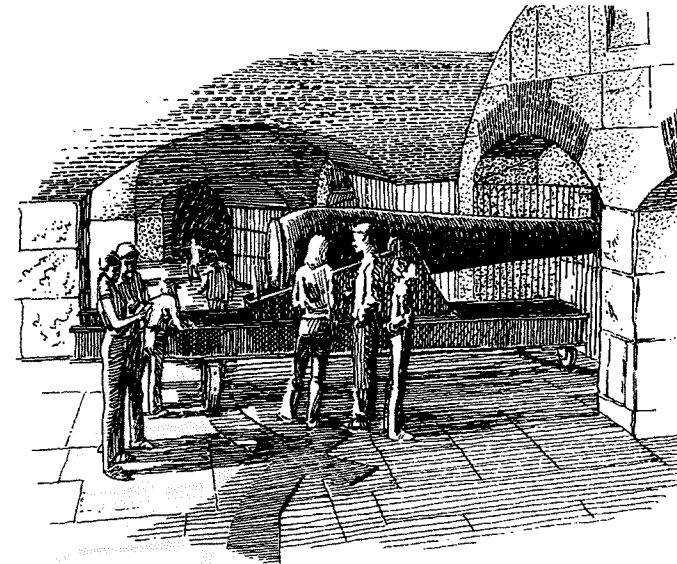
- Some of Fort Knox's most memorable features are the large Rodman cannon in "A" Battery and the slightly smaller Rodman cannon inside the main fort structure. Developed by Thomas Jefferson Rodman who improved the methods of casting metal for the cannon tubes, the Rodman cannons were stronger and safer than previous models.

- The large 15-inch Rodman (15-inch refers to the diameter of the bore) in "A Battery" was extremely powerful, but slow to maneuver. Twelve men were needed to load the cannon. They used a mechanical hoist to lift the 330 pound shell or 450 pound solid cannonball. Often, two men had to manage the rammer. The tube weight of the 15-inch Rodman is 50,000 pounds and the weight of the gunpowder charge was 60 pounds for a shell and 100 pounds for a solid cannonball. At a 20 degree elevation, the cannon could fire a solid cannonball 5,579 yards.

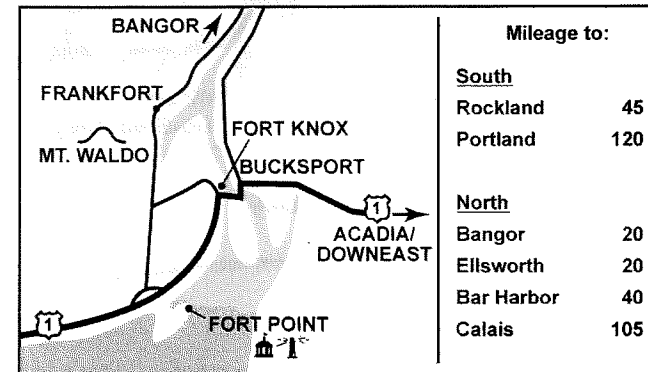


Fort Knox State Historic Site

Information for your visit!



"Protector of the Penobscot"



Self-guided tour information is located throughout the Fort and grounds on interpretative panels. These panels provide information about the fort's construction and the fort's various rooms and passageways.

Begin at the Visitor & Education Center, operated by the Friends of Fort Knox, a 501(c)(3) non-profit whose mission is to preserve Fort Knox for future generations.

The Friends manage the park on behalf of the State of Maine. The Visitor's Center has exhibits and displays about Fort Knox and Maine's history. A gift shop with snacks & souvenirs is in this brick building, the original torpedo shed from the Spanish-American War in 1898. There are restrooms next to this building.

Follow the river-view gravel path to the front of the fort. Continue through the main entrance "sally port" (tunnel) and explore the interior of this great structure (bakery, Powder Magazine, Parade ground, and Soldier's Quarters).

"A" and "B" Batteries along the riverbank were the first line of defense and originally had 10" & 15" Rodman cannons. The granite also arrived by barge at the original wharf, near "B" Battery.

Hours/Season

Fort Knox is open daily, from 9 am to sunset, from May 1st to October 31st unless otherwise posted at the gate.

For more information, please contact, Friends of Fort Knox at (207) 469-6553

www.FortKnoxMaine.com



DEPARTMENT OF AGRICULTURE,
CONSERVATION & FORESTRY
www.ParksAndLands.com

This brochure is available in alternative formats:
Bureau of Parks and Lands, 22 State House
Station, Augusta, ME 04333-0022

(207) 287-3821

FORT KNOX - BUILT TO PROTECT THE PENOBSCOT RIVER VALLEY FROM NAVAL ATTACK

History

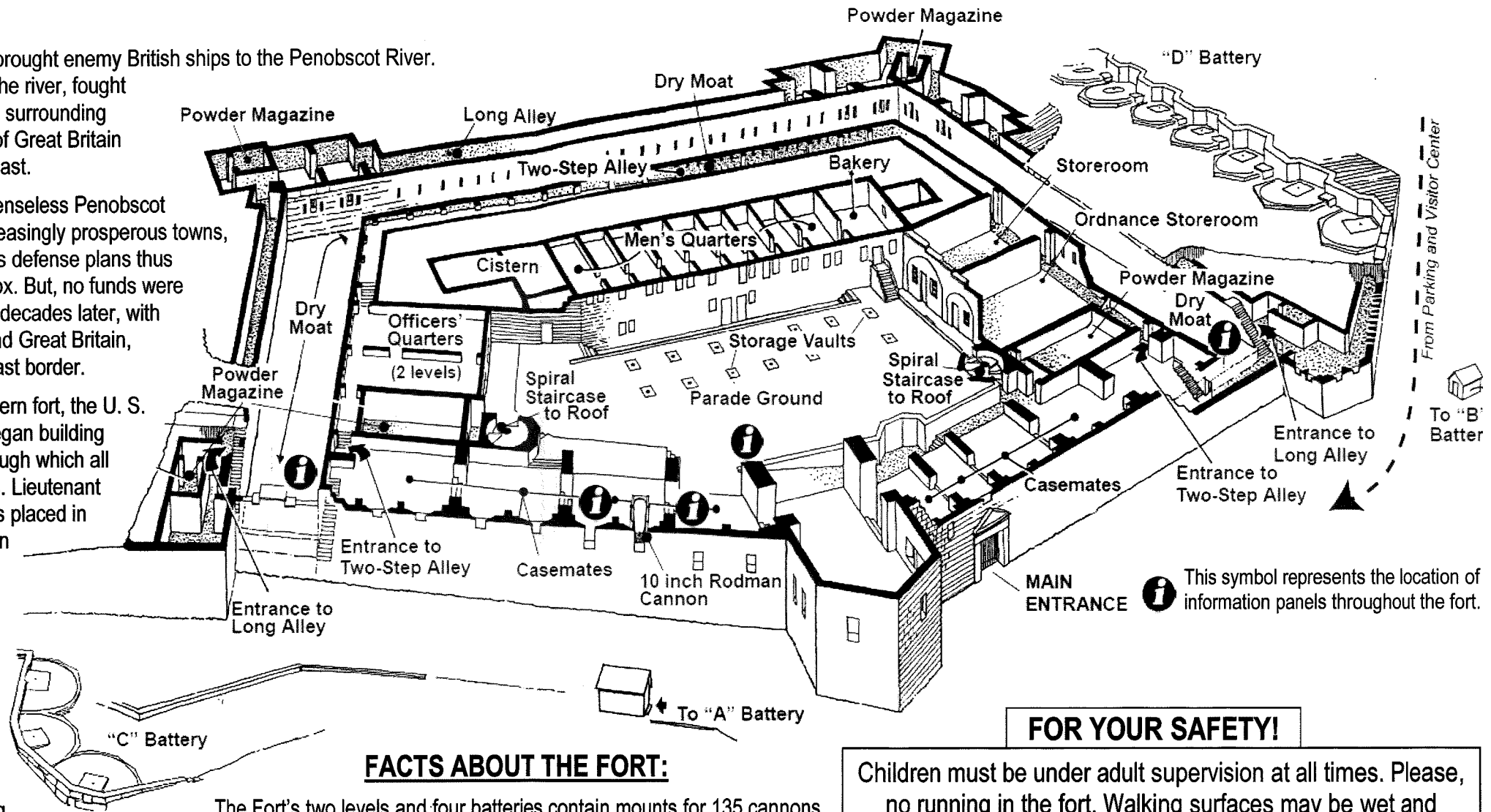
The American Revolution and the War of 1812 brought enemy British ships to the Penobscot River. During both wars, Great Britain seized control of the river, fought battles in the river valley's towns, and claimed the surrounding land for the British crown. With America's defeat of Great Britain in the two wars, British claims to the area did not last.

Still, the U.S. government recognized that a defenseless Penobscot River could be attacked again and the river's increasingly prosperous towns, such as Bangor, threatened. By 1825, the nation's defense plans thus included a Fort at the present-day site of Fort Knox. But, no funds were actually provided for construction until nearly two decades later, with tension still present between the United States and Great Britain, most recently over the location of Maine's northeast border.

After acquiring land and designing a large, modern fort, the U. S. Department of War and its Corps of Engineers began building Fort Knox, sited to guard the narrow channel through which all enemy ships traveling upriver would have to pass. Lieutenant Isaac Stevens, a young West Point graduate, was placed in charge of the massive project. Construction began in May 1844.

Stevens and his crews first built the gun batteries nearest the river and tried to get them ready for cannons. Workers then excavated the main fort site and by about 1853, work began on the granite foundations and walls of the large, central fort building.

The Fort saw two periods of military activity. From 20 to 54 troops were garrisoned here during the Civil War. As the Fort was still under construction at that time, they lived in temporary wooden buildings behind the fort's granite structure. About 575 troops from Connecticut lived at the fort for one month during the Spanish-American War. They lived outside the main Fort structure in large tents. No enemy ships ever appeared on the Penobscot or threatened its towns during these wars.



FACTS ABOUT THE FORT:

The Fort's two levels and four batteries contain mounts for 135 cannons, although no more than about 74 cannons were brought to the site.

Fort Knox was the first and largest granite fort built in Maine. The design of Fort Knox was similar to later Maine forts such as Fort Popham at the mouth of the Kennebec River, and Fort Gorges, Fort Preble, and Fort Scammel in Casco Bay (Portland).

FOR YOUR SAFETY!

Children must be under adult supervision at all times. Please, no running in the fort. Walking surfaces may be wet and uneven. Flashlights are needed in some areas and glass containers are prohibited in the Fort.

Please remember that Fort Knox is a National Historic Landmark. Please do not remove anything from the Fort or grounds. Please report any vandalism to staff.