Pickled Fish and Salted Provisions
*Historical Musings from Salem Maritime NHS*

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*The Arms Chest*
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On the Cover:
Left to right: a British flintlock musket, known as a “Brown Bess,” a boarding axe, and a Navy cutlass of the style used by British and American sailors during the Revolutionary War and the War of 1812. These arms are on a Hudson’s Bay wool blanket, a type of blanket used by sailors in the 18th century.

Musket, axe, and cutlass courtesy of the National Park Service. Blanket courtesy of John Frayler. NPS Photo.
**Danger on the High Seas**

Installation of an arms chest in the great cabin of the replica Salem East Indiaman *Friendship* adds another dimension to the interpretation of the risks involved in the opening of American world trade during the last quarter of the eighteenth century. Her arms locker reflects the potential for interference by foreign powers unwilling to accept United States vessels as neutral traders and the ever-present threat of pirates. Launched in 1797, the original *Friendship* was issued a commission as a private armed ship in August 1799 to defend herself against attack and engage any hostile French vessel with the blessing of the government during the undeclared Quasi-War (1797-1801).

The transportation of valuable cargo has always been subject to risk, on land or by sea, and the danger involved increases with the distance traveled. The technology of transportation has made the process generally safer, yet human error and natural catastrophe still take their toll. Trucks have traffic accidents, planes crash, trains derail, and ships sink. It is expected to happen and the insurance industry thrives on beating the odds. But man's dark side is always lurking nearby, waiting for the opportunity to steal, and wreak mayhem on the unware. War on terror is nothing new. For centuries North African corsairs terrorized the shipping interests of European, and later, American, traders in the Mediterranean. In the early nineteenth century aggressive United States naval intervention during the Barbary Wars helped to reduce threat, but old habits died hard. Following subsequent actions by the British and Dutch navies in 1816 and the British again in 1824, the end was finally in sight for the Barbary pirates when the French conquered Algiers in 1830. But piracy has not disappeared entirely. Often instigated by drug trafficking, it plagues some of the less secure sea-lanes to this day.

The weapon, in whatever form, is the instrument of both predator and defender; and history is the story of a never-ending arms race.

**Arming a Vessel**

By the mid-seventeenth century the age of gunpowder was well established and basic flintlock firearms were used in conjunction with the more ancient cutting weapons and spears. Arrows were obsolete in western European arsenals although they persisted among less technologically advanced peoples into the twentieth century.

This was the state of the art in arms development in the years of the American colonial wars, the American and French revolutions, the Napoleonic period and the War of 1812. Quantities of these arms were found aboard the East Indiaman *Friendship* of Salem and her contemporaries while establishing the United States as a great commercial power.

Ships were traditionally armed for self-defense unless their routes and destina-
tions were within the protection of friendly naval forces. Even under the best of circumstances, piracy was rampant in the West Indies, the Mediterranean, the Indian Ocean, and the seas from Sumatra to Canton. In time of war, privateers legally roamed the seas enriching their owners while crippling their enemies economically. Although not up to the standards of naval vessels, both privateers and pirates operated with ruthless energy and efficiency. Still, they sometimes got more than they bargained for when a spirited defense and quick thinking merchant captain turned the tables on their designs.

**Arming for Hand-to-Hand Combat**

In addition to artillery, or “guns,” as they are documented in the official records, there were lesser categories of weapons commonly found aboard ships of the period. These included muskets, pistols, blunderbusses, swords and cutlasses, boarding axes, and pikes (a kind of spear). Hand grenades were sometimes among the inventory. A combination of small, portable cannons called swivel guns and full-size dummy cannons called Quaker guns could sometimes discourage attacks by less determined adversaries.

Probably the most universal tool of the sea-going warrior was the cutlass, a short, handy chopping sword for close encounters. These were wielded with the greatest urgency in boarding another vessel, particularly after firing a single-shot pistol at your opponent and missing him. This scenario would have been very common; the pistol’s range and accuracy left much to be desired, unlike dramatic movie encounters in which a man on deck easily brings down the would-be assassin from his perch high in the rigging. Pistols tended to be heavy and accurate only at very close range, but they did make excellent clubs.

Muskets had a better record for accuracy. They were designed to hit a man-size target regularly out to about seventy-five yards with a lead ball sometimes weighing more than an ounce, although the ball could travel much further with lethal results. A simple wood-stocked iron tube fitted with a flintlock to ignite a charge of black powder, it was loaded from the muzzle with a ramrod. The rate of fire was typically three shots per minute. A musket could also be loaded with buckshot or a ball plus buckshot. With a bayonet added, it made an effective spear. Marines stationed in the mast tops used muskets to great advantage in clearing personnel from the enemy’s decks, the most famous example being Admiral Horatio Nelson, shot down on the quarterdeck of HMS *Victory* from above during the battle of Trafalgar in 1805.

Blunderbusses were intended for use at short distances with heavy charges of buckshot. Their characteristic flared barrels expedited loading. These pieces were handy for use aboard ships’ boats since they could be easily carried and handled in confined spaces.

Boarding axes and hatchets or tomahawks were used as weapons and also as
Above: examples of the small arms used by sailors. Clockwise from top left: a British flintlock pistol, c. 1730, bullets and tools (see detail at the right and caption below), a tomahawk, a military cartridge box and sling for use with muskets, and a typical powder horn of the eighteenth and early nineteenth centuries.

Right: detail of the arms and accoutrements. Clockwise from top: gunflints, a “worm” used to clean pistol and muskets, and a combination screwdriver and cleaning tool of the type designed by Timothy Pickering of Salem, 72 caliber musket balls, buckshot, and a shot bag.

All items are courtesy of John Frayler. NPS photo.
tools for cutting away damaged or burning rigging and woodwork. Modern fire axes are very similar to the old boarding axes.

Particularly useful in defense, the boarding pike filled the need for something giving a longer reach than a sword or cutlass. These spears were cheap to make and just as effective as a bayoneted musket once the ammunition supply ran out or there was no time to reload.

Cast iron hand grenades were part of the outfit of naval vessels and privateers. Once the external fuse was lit, they would be dropped from the yards extending over the decks of the opponent. Since the greatest threats aboard ship were fire or the explosion of open gunpowder containers, bursting hand grenades could have devastating results.

In addition to weapons, tools and any available items that could inflict damage were called into action as the need arose.

Guns and Gunpowder
Gunpowder in bulk was stored in magazines, made as secure and fire-resistant as possible within a wooden environment. Powder was shipped in wooden kegs, and prepared cannon cartridges (bags with a pre-measured quantity of powder for faster loading and reduced chance of accident) were kept in special spark-resistant containers. Copper measures and tools of wood were used to prevent sparking when working with gunpowder. Horns were ideal for storing small quantities of cannon priming and small arms powder. Muskets and pistols were supplied with paper wrapped cartridges containing both powder and projectile. These were usually carried in a leather and wood cartridge pouch, designed to be spark and rain resistant and worn on the belt or a sling over the shoulder.

The ship’s “guns,” rated by the size of the shot fired, were loaded in the same manner as muskets and pistols, but were commonly ignited by filling the vent between the bore and the exterior of the barrel with loose powder from a horn and touching a slow match to it. A slow match was a smoldering piece of treated cord fastened to a stick called a linstock. Another option was a specially designed cannon gunlock using a flint that came into use during the latter part of the eighteenth century.

On the modern Friendship, two “Quaker guns” equal in dimension to four-pounders represent the heavy armament. A “Quaker gun” was a non-firing representation of a real cannon used to give the impression that a vessel was more heavily armed than it actually was.

The muskets, cutlasses, and boarding axes in the arms chest, the last resort of resistance, were most effective when you could, following the advice of General Israel Putnam at the battle of Bunker Hill, “see the whites of their eyes.”
The officers and crew aboard *Friendship* lacked formal military training, but could be expected to defend their vessel in times of danger. Defeat meant losing their cargo, their ship, and perhaps their lives. Warding off pirates or privateers meant a triumphant return to Salem.

The risks of their journeys were known by few, but the rewards appreciated by many.

**Notes**

1 C. Keith Wilbur, *Picture Book of the Revolution's Privateers* (Harrisburg, PA, 1973), p.46 “The privateer captain rated bluff heavily in his bag of tricks. A prospective prize would have second thoughts of resistance if a vessel bore down with her deck bristling with cannon and a boarding party howling like banshees. Too late, their captain would find much of the armament wooden! These were popularly known as Quakers and these peaceful replicas were turned out of logs and blackened to look like the real thing.”

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