## EARLY AMERICAN NAVAL FLAGS AND SIGNALS

## by Ray S. Morton

The topic of early American naval flags and signals is a long-time neglected one. The author is presenting some excerpts from his forthcoming book of the same title, which covers the period of 1700 through 1900. The book covers bunting weave 100% worsted wool flag-cloth, natural dyeing, construction, ensigns, pennants, signal flags, vanes; fog signals, pyrotechnics, ship's flags, shipping house flags, as well as fife, drum and bugle calls. This discussion will be limited to but a few ensigns, pennants, and signal flags plus some information regarding bunting weave flag-cloth and dyeing processes.

Ensigns used in the early American navies – the American Continental Navy and the fledgling United States Navy – showed many heritages with their British Royal Navy elder. However, there were many departures from British practice and from European heraldic custom. Chief amongst those departures was the use of the molet, or five-pointed star. Since the crusades, the molet, which was the rowel from the spurs of a knight crusader, was reserved to its use on the crests, shields, and other heraldic devices of those knights. Suddenly, it seemed, a continent of colonists was proclaiming themselves to be knights.

Horizontal stripes, especially thirteen stripes representing the original thirteen colonies, were to be found in all manners of naval ensigns. They were of two-colour and three-colour varieties for the most part and the early American colonial merchant ships flew such flags without a canton or any other device upon them.

Naval ensigns were displayed upon a flagstaff fitted to the taffrail at the stern of the ships of the early 1700s. As naval architecture advanced, the large quadrilateral sail at the after end of the ships, called a spanker, enlarged – so much so that its lower spar, called a boom, would interfere with the flagstaff. Something had to give and the ensign was afterwards hoisted to the outer end of the upper spar holding the spanker, called a gaff. The gaff peak then became the place of honour.

Contrary to popular belief, ensigns and commissioning pennants did not come in standard sizes but were sized proportionally to a major dimension of the ship – the moulded (sic) beam of the ship. The moulded beam is the widest dimension of the ship, 'midships just under the planking. Ensigns came in four sizes – No.1 through No.4.

The No.1 Ensign, or Battle Ensign, was the largest and measured the moulded beam dimension along its fly, with a proportionally measured hoist. The No. 2 Ensign, or Service Ensign, measured the hoist of the No.1 Ensign along its fly. Likewise the No. 3 Ensign, or Storm Ensign, and the No.4 Ensign, or Anchorage Ensign, had their fly measurements the same as the hoist measurement of the next larger ensign. In this manner, ensigns would not over power any given size of ship and one's enemy could readily be recognized in battle.

Likewise, commissioning pennants for the American navies were proportional to the moulded beam of the ship in which they were flown. Commissioning pennants were 1/9th the moulded beam of the ship in the hoist and 2-2/3rds the moulded beam in the fly.

Signal flags were of a standard size but were also of large dimension so they would not be lost against the size for any given ship. American naval signal flags were on the order of 6 feet in the hoist and 15 feet in the fly. They were both rectangular and triangular.

Ensigns, pennants, and signal flags were rarely hoisted hand-over-hand. The normal practice was to place the hoisting side of the flag halyard into a snatch block and one, or more hands, would grab the rope and run along the deck. Hauling the flags down was done in a similar fashion. The

ensign for the United States Frigate Constitution (44) would require 10 or more hands to be hoisted. Through the ages, it was empirically determined that the colors most easily distinguished from each other at sea were bright red, dark blue, bright yellow, and white. These were dyed from madder root, indigo tubers, black oak inner bark (or weld leaves in their second year of growth), and undyed bleached wool.

Generally, wool was dyed as fleece ("dyed in the wool"), prior to being spun into yarn and woven into cloth ("dyed in the piece"). This gave a much more uniform colour to a batch of wool and also allowed the blending of different batches of dyed fleece to achieve a more consistent colour for large runs of fabric. The wool must undergo a mordant process for most dyestuffs that changes its electrical properties and then the dying is done in an alkaline or acid bath, depending on the dyestuff. The mordant acts as a bridge between the fabric fiber molecules and the dyestuff molecules and fixes the dyeing -- instead of the dyestuff merely staining the fabric. The wool from different species of sheep can also shift the resulting dyed colour. Woolen flag-cloth was of bunting-weave that had its warp threads doubled, which provided additional strength along the fly dimension, which provided better flying properties, and which dried much more quickly owing to more thread being exposed to the air. Historic flags and pennants appear to have been fairly tightly woven and then preshrunk before fabrication, which greatly tightened the weave (and, perhaps, before the dyeing processes if dyed in the piece).

Using the same dyestuff, wool fiber dyes much brighter than the cotton and flax fibers, which result in more muted and/or duller colours. Wool was used for American naval flags because it was durable and it dyed to a much brighter colour than the vegetable fibers. There 'are several requirements for naval flag dyes. They must be: light fast, rub fast, sweat fast, alkaline (sea)water fast, and run fast. The above dyes are the only ones available between 1700 and 1900 on the Eastern American Seaboard that meet all these requirements.

The flag-cloth was of a special weave called "bunting". The bunting weave was a loose weave covering between 50% and 70% of the surface with the 100% worsted wool thread. The loose bunting weave made the flag-cloth lighter per square yard so that the flags could fly easier and it exposed more thread to the air so that flags could dry more readily once they became wet.

In her last true battle, on 20 February 1815, US Frigate Constitution (44) overhauled HBM Frigate Cyane (32) and HBM Ship-Sloop Levant (22) about dusk. To start the battle, Constitution fired a shot between the two British ships, enforcing her displayed American colours. The two British ships, British colours flying, immediately responded with their entire facing gun batteries firing into Constitution and the battle was afoot.

"Enforcing the colours", or now popularly called "firing a shot across the bow", meant, "As a matter of honour, these are, indeed, my national colours and I am ready to offer battle. Are you ready to offer battle, or do you strike your colours?" By firing a cannon ball, this enforcement protocol eliminated the ambiguity of the common subterfuge under various other circumstances during the age of sail of a *ruse de guerre* --- of disguising one's vessel as that of another nation's by flying false national colours (enemy or neutral) rather than one's own colours.

Quickly, it seems, "firing a shot across the bow, became a gunners' sport with subsequent bragging rights in seeing just how close to the bow, without hitting it, one could shoot. The enforcement shot would have been unmistakable as a shot's "roar" has a very abrupt but loud, terror-evoking, visceral sound likened to the low screech of tearing canvas with an attendant Doppler effect. The shot'itself would also have left distinct and obvious tall water columns, the first one very close to the bow, as it skipped across the waves beyond the addressed ship.

The above three paragraphs are from the rough first draft of my book *Early American Naval Flags & Signals*, © 1998-1999 by Ray S. Morton. They start the section of the book dealing with national ensigns. HBM abbreviates His Britannic Majesty's -- the number in the parentheses following the vessel's name indicates the vessel's gun-rating.]

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## Ray S. Morton : Early American Signal Flags, Col. Plate Evolution of American Maritime Ensigns (Pre- and Post-Revolutionary War), Vessels of War



## ICV 18 Photos and a Congress "Oldie"



Chantal Webb is the genius and the spark behind the organization of the 18th Congress at Victoria. We thank Chantal, her husband James Webb (The Flag Shop, Victoria ), and Doreen Braverman (The Flag Shop, Vancouver) for being such wonderful and efficient organizers and site hosts. Here Chantal welcomes us at the Opening Ceremony. Right, in 1987, ICV 12, San Francisco, a welcome from Jim Ferrigan, William Crampton, Whitney Smith, and Doreen Braverman, then president of NAVA..



Delegates to ICV 18 : Jim Ferrigan (Nevada, USA) John Moody (New Zealand), Truman Pope (Ind.,USA). Right, David Ott (Texas,USA) shows his personal flag, assisted by Gary Randall (Cal.,USA).



Before the (Naval) Parade Passes By! Foreground and first row: Whitney Smith, Fred Brownell, Graham Bartram, Michael Faul, Mike Clingman; Middle : Vickie Pedersen, Peter Edwards, Tomás Rodríguez Peñas, Amparo Cuadrado, Bernhard Volker (his son, left, is in red), John Lowe, Don Wheeler; Behind them : Michel Lupant. Standing at the back : Kevin Harrington, James Webb, Michael Frijs, Charles Spain, Bruce Berry



A post-prandial moment! Front : Harry Oswald, Alain Raullet, Kevin Harrington, Michel Lupant. Middle : Peter Orenski, Philippe Rault, Ron Strachan, Ralph Kelly, Bruce Berry, Dieter Linder; Back : Ralph Bartlett, Gus Tracchia, Ted Kaye, Andreas Herzfeld

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