



The Washington Flag Congress 2011

Tattered Treasures: World War Two U.S. Navy Flags of Mare Island Naval Shipyard

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Abstract

We can learn a lot about flags from the markings that appear on their headers. Diagrams and tables exist that have been created by the military that help to categorize flags by their sizes. Mare Island Naval Shipyard produced thousands of flags over a period of 150 years. Its World War Two flags include distinctive markings that appear on many of the flags in my collection. I have devised a way to calculate a flag's RIF (Remnant Indicator Formula) which will be shared during this presentation. Information will also be shared about the two flags raised over Iwo Jima that were both made at Mare Island.

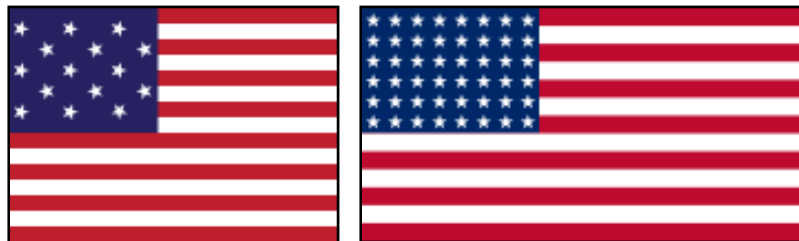


Header of a U.S. flag manufactured at Mare Island Naval Shipyard, 1943

Tattered Treasures

World War Two United States Navy Flags of Mare Island Naval Shipyard

The Star-Spangled Banner and the Iwo Jima Flag



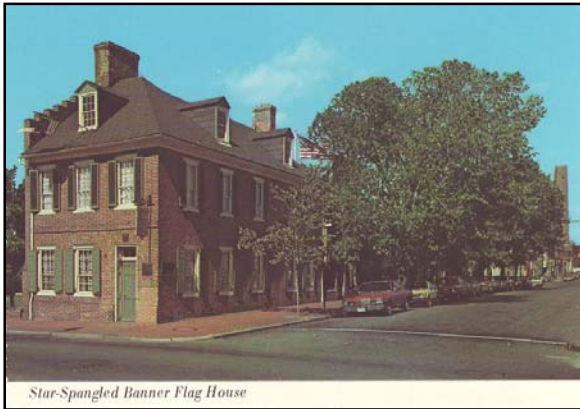
On 14 June 2011, which is Flag Day in the United States, Encyclopedia Britannica Blog asked Dr. Whitney Smith, “In your opinion, what are some of the most important flags in U.S. history?” and his response was: “The single most important flag is the Star-Spangled Banner” and he went on to explain why. I agree with him and I would like to make a case for the second most important American flag.



Here we are at the George Washington Masonic Memorial in Alexandria, near Washington, D.C.



I grew up 60 miles from here in Baltimore County, Maryland, where an important battle took place in a war we Americans refer to as the War of 1812. This land battle took place the day before the bombardment of Fort McHenry in Baltimore, Maryland.



The Star-Spangled Banner was made in Baltimore in 1813 by Mary Pickersgill.



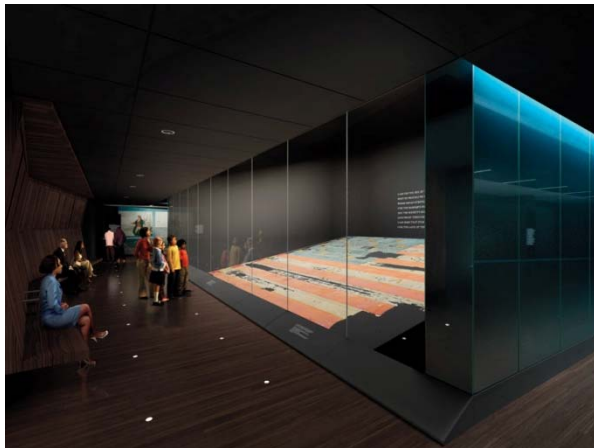
The Flag flew at Fort McHenry, Baltimore, Maryland 13–14 September 1814.



Seeing the American flag still flying after the 25-hour bombardment, Francis Scott Key was inspired to write a poem entitled “The Defense of Fort McHenry” which was set to music and later became the National Anthem of the United States.



This flag, referred to as the Star-Spangled Banner, is today at the National Museum of American History here in Washington, D.C.



This, the most famous American flag, has been conserved –not restored. The Star-Spangled Banner Preservation Project was budgeted for \$18 million. It was started in 1998 and was finished in 2002. Originally the flag was 30’ hoist by 42’ fly. Today it is 8’ shorter and has only 14 stars instead of 15. As a homework assignment, I ask my students to find the fifteenth star and the missing garrison flag that was made at the same time.

Which is the second most famous American flag?



I submit that it is the “Iwo Jima Flag”, raised by U.S. Marines over Mt. Suribachi during the battle for control over that island in the World War II. This image, by photographer Joe Rosenthal, was taken on 23 February 1945.

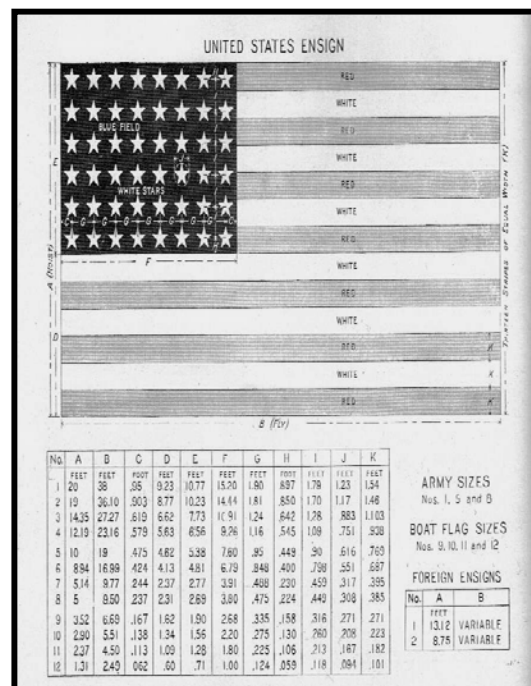
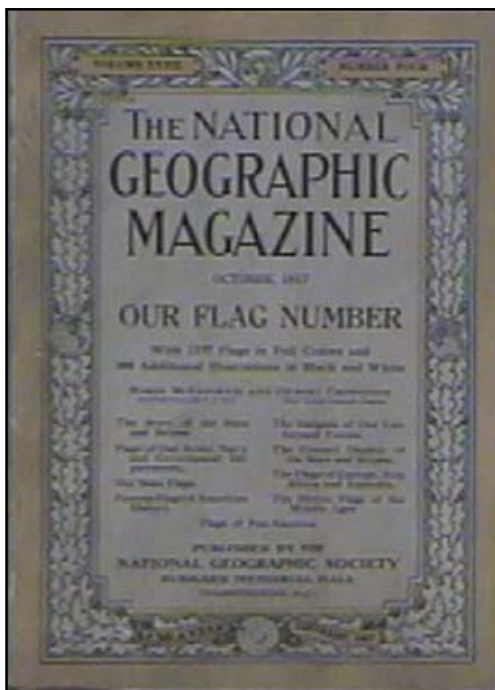
There were two flags raised that day—one at 10:20 AM and the other at noon. Both flags were made at Mare Island.



What do the markings on the header of this flag mean?

“U.S.” United States, some flags are marked “U.S.E.” for United States Ensign. Ensign is what the U.S. Navy calls a flag. “No. 11” is the size of the flag and “MI” stands for Mare Island where the flag was made and “44” is the year 1944 when the flag was made.

But what is “No. 11”? The National Geographic Magazine helped me answer that question with this chart.

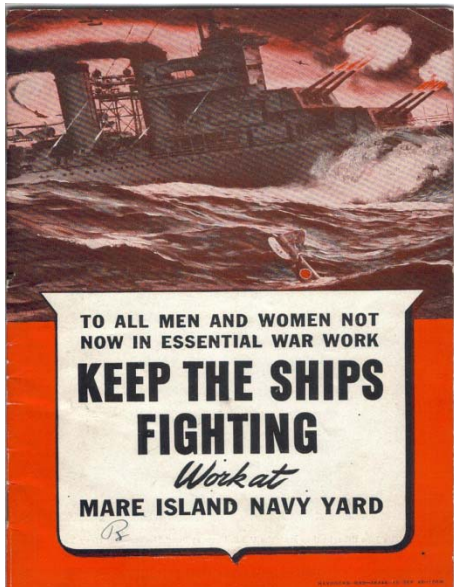


The U.S. Navy numbers its flags 1 through 12, one being the largest and 12 the smallest. Earlier in World War Two, more information was stamped on the flags.




Mare Island Naval Shipyard was the first naval base on the west coast of the United States. It is 25 miles northeast of San Francisco, near Vallejo, California. During WWII the base was used for ship building and repair. There were 46,000 workers employed there during the war. It comprised over 900 buildings, and the base closed in 1996.

The flag loft employed 500 workers, 400 women doing their part by working 8 hours a day 6 days a week. I have an extensive collection of flags made at Mare Island.



LET THESE EMPLOYEES TELL YOU WHY THEY LIKE NAVY YARD WORK

MRS. FRANCES BEHRENS' Navy Yard job is in the Sail and Flag Loft, sewing flags for the Navy. "Where could you find a job you'd be prouder of than this?" she asks. Her job is one of thousands in a Navy Yard for which no industrial training or experience is required.



The bottleneck in flag production was the star cutting machine that ran 24 hours a day but could not keep up with demand. These production facts are from newspaper clippings from a WWII scrapbook compiled by Catherine Hunter, a Flag Loft employee.

Production facts for July 1943:

- 12,000 to 17,000 flags per week
- 800 to 900 National Ensigns
- 400 to 500 Union Jacks
- Signal flags
- Commissioning pennants, etc.

First six months of 1943:

- 2,000,000 yards of bunting
- 3,000 gross of grommets
- 3 tons of machine thread
- 300,000 flags of all types

Efforts to streamline production and save on costs made changes in flag manufacture, as seen by this comparison of size 11 ensigns:

<u>1943 Ensigns</u>	<u>1944 Ensigns</u>
• Sewn stars	Rubber paint stars
• Four grommets	Two grommets
• Brass grommets	Steel grommets
• “U.S. ENSIGN”	“U.S.”
• “MARE ISLAND”	“MI”
• “FEB 1943	“44”



I would like to introduce Grimes’ Remnant Indicator Formula (R.I.F.)—a measure of how much fabric is left after the flag has lost material on the fly end caused by wind.

$$\text{RIF} = \frac{\text{Flag's current dimensions (Hoist multiplied by Fly)}}{\text{Flag's original dimensions (Hoist multiplied by Fly)}}$$

Simplified: (Because the hoist doesn’t change)

$$\text{RIF} = \text{Current fly length divided by original fly length}$$

To be consistent, here is a chart of fly lengths that I use, derived from “the regulations of the Army and Navy” (the hoist measurement doesn’t change with wear):

<u>U.S. Ensign R.I.F. Chart</u>	
Size 12	30” fly
Size 11	54” fly
Size 10	66” fly
Size 9	80” fly
Size 8	114” fly
Size 7	117” fly





Here are examples using the Remnant Indicator Formula for flags sizes 12 through 09.

(No. 12: 86%,
No. 11: 80%,
No. 10: 75%,
No. 09: 62%)



Here are the same flags compared to 100% flags.



Here are four number 11s:

1. Altered, 72%,
2. Remnant, 80%,
3. Tattered, 98%
4. Intact, 100%.



Here are four number 9s:

1. 56%,
2. 67%,
3. 95%,
4. 100%.

I would like to close with some photos of my flags on display. Here is Flag Day, 14 June 2010, Washington, D.C. on the Mall.



These flags were on display in the gallery at the Star-Spangled Banner Flag House in Baltimore for five months in 2005.

Thank you.

About the Author

Dale Grimes grew up in a Maryland neighborhood with a lot of American history. When he was a teenager he bought his first old American flags – a pile of 45/46-star flags. Ten years ago he came across a flag with markings on the header which he later discovered indicated the flag was a World War Two US navy flag made at Mare Island Naval Shipyard in California. His collection now has over 375 flags of all types (ensigns, jacks, secretary of the navy, admirals, commissioning pennants, signal flags, etc.) of which 125 are Mare Island flags. Collecting flags ties in with his sense of history, patriotism, and his family’s naval heritage.

Dale has taught high school math for 24 years, has been married for 31 years, and has two married daughters, a teenage son, and one grandchild. As a result of his community involvement with projects that include flags, he is known as the “Flag Man”.

