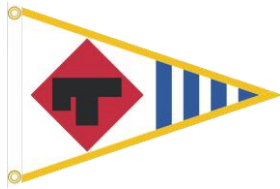




Bremerton, Washington

# The Squawk Box

## February 2023

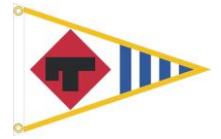


### Squadron News and Tidbits:

1. Who we are: The **United States Power Squadrons** (or USPS) is a non-profit educational organization, founded in 1914, whose *mission is to improve maritime safety and enjoyability* through classes in seamanship, navigation, and other related subjects. It is America's largest non-profit boating organization and has been honored by three US presidents for its civil contributions.
2. **Upcoming Meetings:** Our February 2023 Meeting will be held at the Bremerton Yacht Club, 2700 Yacht Haven Way Bremerton, WA 98312 at 1800.
3. **Upcoming Events:**
  - a. We have set aside 5 slips for an April 7-9 Brownsville rendezvous. Contact Dave McBride (360-228-6003) to reserve your slip. If you plan to come by RV, please make your own reservations.
  - b. Be sure to set aside June 9-11 for the annual District 16 Rendezvous at Poulsbo. More to follow.
  - c. We have set aside 5 slips for the Port Ludlow Rendezvous June 16-18. If you are interested in attending, please contact the Port Ludlow marina at 360-437-0513 to make a reservation. If you plan to come by RV, please make your own reservations
  - d. Dave McBride is going to the Port of Kingston for the 4<sup>th</sup> of July fireworks. He will be in slip 12 from 4/2 – 4/5. Please let him know if you plan to join him (360-228-6003).
4. We still a need a new **Squawk Box Editor** for 2023-2024. You can expect to spend approximately 4 hours per month on publication. Rick Hurst will be happy to provide training and credentials. Contact him at 360-301-2679.
5. If you would like to help by sponsoring a meeting event, a cruise or other event please contact any Bridge Officer.
6. Our speaker for February is Mark Maberry from Kurseman Insurance. If you have questions regarding boat insurance that you would like him to address, send your questions to Ken Nelson ([secretary.bsps@outlook.com](mailto:secretary.bsps@outlook.com)). Mark will also field question from the audience.
7. Susan Hurst will be collecting the \$5.00 per head fee for the spaghetti feed on the 27<sup>th</sup>.

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### From the Bridge

Commander Richard Hurst, P  
[Commander.bsps@outlook.com](mailto:Commander.bsps@outlook.com)  
 360-301-2679

Spring is almost here. Susan and I always take note that the days are starting to get longer, the sun is out more often, the red alders are putting out the red catkins that give them their name and the birds are beginning to sing in earnest.

That also means that boating season is just around the corner. It's time to clean the bilges, check for leaks, top up batteries, check the oil ... you get my drift.

Gary Wade, Dave McBride and Bob Allen have done a wonderful job of putting together an event schedule for the coming year. More to follow in the March newsletter.

Susan and I will be stepping away from boating to do some traveling, birding and pay some much-needed visits to relatives around the country.

Our nominating chair, Bob Allen, has forwarded the following candidates for consideration as Executive Committee members for 2023-2034.

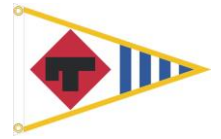


#### Nominations: 2023-2024

<b>Commander</b>	<b>Robert (Bob) Allen</b>
<b>XO</b>	<b>NONE or Appointee later</b>
<b>AO</b>	<b>NONE or Appointee later</b>
<b>SEO</b>	<b>Dave McBride</b>
<b>ASEO</b>	<b>Gary Wade</b>
<b>Secretary</b>	<b>Chris Wright</b>
<b>Treasurer</b>	<b>Dave McBride or Appointee later</b>
<b>Member at Large</b>	<b>Marie McBride</b>

If you are interested in stepping forward for an empty position, contact Bob Allen (360) 731-5312. The annual business meeting will be held on March 27<sup>th</sup>. This is the time we vote on our new bridge. Don't miss it.

Rick



### Executive Officer

Lt/C Bob Allen, AP

[Exec.BSPS@outlook.com](mailto:Exec.BSPS@outlook.com)



It's nice to know that one can depend on late winter and early spring will bring all of us more moderate weather of nice, but cold one day and nasty cold, wet weather the next. Later, it turns to lighter, warmer days with puffy clouds and bright blue skies, invariably followed by wind and rain.

We have quite a few Rendezvous and social events coming your way this spring, including our new member Orientation Training. We will publish a report of spring and summer events soon, but some details are being finalized.

In September, we will resume regular scheduled Potluck Dinners and guest speakers. Also, in September we will be planning for Thanksgiving and Christmas events. So, in conclusion, all of us get to have June through August all to ourselves filling our days of fun at our and D-16 events and Rendezvous' or simply enjoy the summer as you look to the horizon.

See you all at the Annual February Spaghetti Feed and our Annual Business Meeting (Voting on the Bridge positions) in March and our Catered Change of Watch in April.

Bob

[kabob@wavecable.com](mailto:kabob@wavecable.com), (360) 731-5312

### Your Executive Committee and Member Chairs

We are fortunate to have such a committed group of volunteers for our various chairs. Many of these folks have done one, two, three or more stints in various capacities. I personally thank them, and I am sure they would like to have your thanks too. Here is the current list of Officers and chairs.

#### Bremerton Sail & Power Squadron Organization Chart

##### Bridge Officers & Assistants

Commander (2022)	Cdr Richard Hurst, P
Executive Officer (2022)	Lt/C Robert M. Allen, S, P/C
Educational Officer (2022)	Lt/C Gary S. Wade, AP, P/C
Administrative Officer (2022)	Open
Secretary (2022)	Lt/C Ken Nelson, S
Treasurer (2022)	Lt/C Susan Hurst, P

##### General Committees

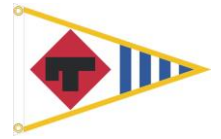
Chairman Merit Marks (2022)	P/C Kevin J. Pisani, JN-ACN
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##### Committees reporting to the Executive Officer

Vessel Safety Check Chairman (2022)	Lt Loyd Albert Walker III, SN
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##### Committees reporting to the Educational Officer

USPS Seminars Chairman (2022)	Lt David J. Miller, AP-CAN
Assistant SEO (2022)	Lt/C, D/Lt/C, P/C Dave McBride AP



## Education's Apple

L/Cdr. Gary Wade, AP

Howdy all,

February is coming to an end, and we completed a couple of events, an ABC class held on February 18<sup>th</sup> and 19<sup>th</sup>. Six students attended. The Seattle Boat Show, February 3<sup>rd</sup> to 11<sup>th</sup> at Lumen Field. Our very own Tuuli Messer-Bookman presented the seminar "Introduction to Radar". We had several people after the seminar approach us with questions about the seminar and what USPS does.



We have not yet determined a schedule for the Boat Handling Class, but we will need help teaching. We are still looking for volunteers to be instructors. The skills needed are simple; comfortable talking to a group of boaters, both experienced and novice; be familiar with the material and skills being taught and have the willingness to pass down your experiences and knowledge.

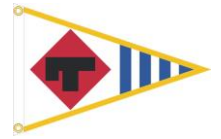
I look forward to seeing you all.

Gary

**"You always have two choices: your commitment versus your fear."  
— Sammy Davis Jr**

**"Commitment is what transforms a promise into a reality."  
— Abraham Lincoln**





## Squadron Contacts

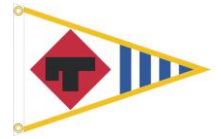
Mailing Address: BSPS, P.O. Box 1512, Port Orchard, WA. 98366

The Squawk Box Editor, <mailto:Editor.BSPS@abcbremerton.org>

Position	Selectee	Email address
Commander	Rick Hurst	<a href="mailto:Commander.BSPS@outlook.com">Commander.BSPS@outlook.com</a>
Executive Officer	Robert Allen	<a href="mailto:Exec.BSPS@outlook.com">Exec.BSPS@outlook.com</a> <a href="mailto:Kabob@comcast.net">Kabob@comcast.net</a>
Education Officer	Gary Wade	<a href="mailto:Education.BSPS@outlook.com">Education.BSPS@outlook.com</a>
Administrative Officer	Open	<a href="mailto:AO.BSPS@outlook.com">AO.BSPS@outlook.com</a>
Secretary	Ken Nelson	<a href="mailto:Secretary.BSPS@outlook.com">Secretary.BSPS@outlook.com</a>
Treasurer	Susan Hurst	<a href="mailto:Treasurer.BSPS@outlook.com">Treasurer.BSPS@outlook.com</a>
Member-at-Large #1	Michele Nelson	<a href="mailto:MMBAL1.BSPS@outlook.com">MMBAL1.BSPS@outlook.com</a> <a href="mailto:shello6@comcast.net">shello6@comcast.net</a>
Public Relations Officer	Open	<a href="mailto:Pro.bsps@outlook.com">Pro.bsps@outlook.com</a>
Vessel Safety Exam Coord.	Loyd Walker	<a href="mailto:lawalker3@comcast.net">lawalker3@comcast.net</a>

## Calendar

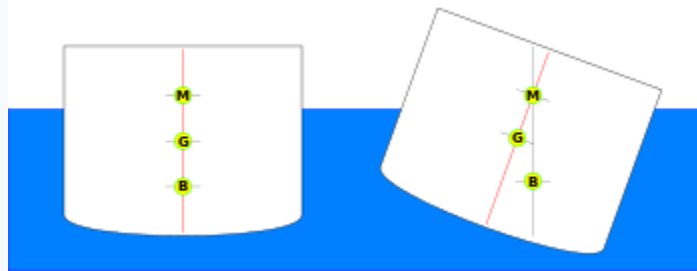
February 2023		
8	Executive Committee Meeting (Zoom) - 1800	Rick Hurst
18-19	ABC3 Location Zoom 0900 - 1500	Dave McBride Gary Wade
27	General Meeting @ BYC – 1800 Annual Spaghetti Feed @ \$5/person. Speaker: Mark Maberry fom Kurseman Insurance, is providing a 15-minute talk about boat insurance.	Rick Hurst
March		
8	Executive Committee Meeting (Zoom) - 1800	Rick Hurst
27	Annual Business Meeting Potluck BYC @1800 – Election of 2023-2024 officers. No speaker this month due to elections.	Rick Hurst
April		
12	Executive Committee Meeting (Zoom) - 1800	Rick Hurst
7-9	Brownsville Marina Rendezvous – 5 slips reserved	Dave McBride
24	BSPS Change of Watch — Catered BYC 1800	Rick Hurst



## Vessel Stability

It keeps your boat afloat.

From Wikipedia, the free encyclopedia. If you want to dig deeper, the links are hot.



Ship stability diagram showing center of gravity (**G**), center of buoyancy (**B**), and metacenter (**M**) with ship upright and heeled over to one side.

As long as the load of a ship remains stable, G is fixed (relative to the ship). For small angles, M can also be fixed, while B moves as the ship heels.

The **metacentric height (GM)** is a measurement of the initial static stability of a floating body. It is calculated as the distance between the **center of gravity (G)** of a ship and its **meta center (M)**. A larger metacentric height implies greater initial stability against overturning. The metacentric height also influences the natural **period** of rolling of a hull, with very large metacentric heights being associated with shorter periods of roll which are uncomfortable for passengers. Hence, a sufficiently, but not excessively, high metacentric height is considered ideal for passenger ships.

## Meta center

When a ship heels (rolls sideways), the center of **buoyancy (B)** of the ship moves laterally. It might also move up or down with respect to the water line. The point at which a vertical line through the heeled center of buoyancy crosses the line through the original, vertical center of buoyancy is the meta center. The meta center remains directly above the center of buoyancy.

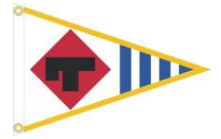
In the diagram above, the two Bs show the centers of buoyancy of a ship in the upright and heeled conditions. The meta center, M, is fixed relative to the ship for small angles of heel; however, at larger angles the meta center can no longer be considered fixed, and its actual location must be found to calculate the ship's stability.

It can be calculated using the formulae:

- $KM = KB + BM$
- $BM = \frac{I}{V}$

Where **KB** is the center of buoyancy (height above the **keel**), **I** is the **second moment of area** of the waterplane around the rotation axis in meters<sup>4</sup>, and **V** is the volume of **displacement** in meters<sup>3</sup>. **KM** is





the distance from the keel to the meta center.<sup>[1]</sup> [Ed. Note. This mean that the wetted area and volume of the hull changes with angle of heel, which in turn, changes the meta center and righting moment. It will tell you at what angle of heel your vessel might succumb to capsizing.]

Stable floating objects have a natural rolling frequency, just like a weight on a spring, where the frequency is increased as the spring gets stiffer. In a boat, the equivalent of the spring stiffness is the distance called "GM" or "metacentric height", being the distance between two points: "G" the center of gravity of the boat and "M", which is a point called the meta center.

Meta center is determined by the ratio between the [inertia resistance](#) of the boat and the volume of the boat. (The inertia resistance is a quantified description of how the waterline width of the boat resists overturning.) Wide and shallow or narrow and deep hulls have high transverse metacenters (relative to the keel), and the opposite have low metacenters; the extreme opposite is shaped like a log or round bottomed boat.

Ignoring the [ballast](#), wide and shallow or narrow and deep means that the ship is very quick to roll and very hard to overturn and is stiff. A log shaped round bottom makes it slow to roll and easy to overturn and tender.

"G", is the center of gravity. "GM", the stiffness parameter of a boat, can be lengthened by lowering the center of gravity or changing the hull form (and thus changing the volume displaced and second moment of area of the waterplane) or both.

An ideal boat strikes a balance. Very tender boats with very slow roll periods are at risk of overturning but are comfortable for passengers. However, vessels with a higher metacentric height are "excessively stable" with a short roll period resulting in high accelerations at the deck level.

Sailing yachts, especially racing yachts, are designed to be stiff, meaning the distance between the [center of mass](#) and the meta center is very large in order to resist the heeling effect of the wind on the sails. In such vessels, the rolling motion is not uncomfortable because of the moment of inertia of the tall mast and the aerodynamic damping of the sails.

## Rummage Sale News

The 2023 Rummage Sale has been scheduled for September 23 with setup on the 22<sup>nd</sup>. Since this is our most important fund raiser for the year, someone needs to step forward to manage the Rummage Sale this year or we won't be able to subsidize many activities the Bremerton Sale & Power Squadron enjoys. Please call Susan Hurst if you are willing to take over the Sale.

Susan Hurst  
360-301-2659  
skhurst@hotmail.com

