

# The Binnacle

A newsletter of the

## Lake Guntersville Sailing Club



[www.lakeguntersvillesailingclub.com](http://www.lakeguntersvillesailingclub.com)

July 2007

### Activities at a Glance and the LGSC Race Schedule

If you need crew or want to crew, contact Keith Kuhlman at [bkkuhlman@hotmail.com](mailto:bkkuhlman@hotmail.com) or call 256-582-1108

DATE	TIME	ACTIVITY
Wed., July 4		Guntersville City fireworks at Kiwanis Pier
Sat., July 7		Pirate's Race & Dinghy Race
	6 p.m.	Hamburger & Hot Dog Social
Sat., July 21	10 a.m.	LGSC Board Meeting in the LGSC clubhouse
	6 p.m.	Social.
Sat., August 18	10 a.m.	LGSC Board Meeting in the LGSC clubhouse
	2 p.m.	Cathedral Caverns Trip – meet at the caverns at 2 p.m.
	6 p.m.	Go Out to Dinner – meet at the clubhouse.
Sat., September 1		Labor Day weekend trip to Goose Pond. Need a head count at least 1 week prior. Come by car or boat – just remember to make reservations. Contact Charlie or Deanna Rains at 256-878-8330 or e-mail <a href="mailto:charlierains@bellsouth.net">charlierains@bellsouth.net</a>
Sat., September 8		LGSC Saturday Pursuit
	10 a.m.	Skipper's Meeting
	11 a.m.	Race Start
Sat., September 15	10 a.m.	LGSC Board Meeting in the LGSC clubhouse
	6 p.m.	Social
Sat., September 22		LGSC Saturday Pursuit
	10 a.m.	Skipper's Meeting
	11 a.m.	Race Start
Sat., October 20		LGSC Autumn Challenge

	<b>10 a.m.</b>	<b>Skipper's Meeting</b>
	<b>11 a.m.</b>	<b>Autumn Challenge Race Start</b>
	<b>6 p.m.</b>	<b>Social</b>
<b>Sat., November 17</b>		<b>LGSC Annual Dinner</b>

### COMMODORE'S COMMENTS

The weather is continuing to have good winds during the week (we saw 20-23 mph three times last Wednesday – with most of the time between 15-18), and little wind on the weekends. Several tried to sail at least part of our poker run last weekend, but to no avail. All ended motoring through the course. Congratulations to Dick Potter for winning with 3 fives and Zack Lawson for having the worst hand (10 high). Afterwards, all enjoyed a great cookout prepared by Charlie with plenty of side dishes brought by the Social Committee members.

July and August tend to be hot and often with little wind. Rather than schedule cookouts where we can all sit around and melt, most have expressed their opinion that they would rather pick a restaurant (air conditioned) and go out to supper. Several of us went to Papa Dubi's a few weeks ago and had a great dinner and good fellowship. If you see us gathering on a Saturday evening (usually around 6 pm), feel free to come and join us or ask during the day to see if plans have been made.

We are trying to put together the fall schedule. If you have any ideas or suggestions, just let one of the Board members know. Sometimes we may not be able to follow through, but we'll try. One member suggested that we should have a bon fire and cookout, which we scheduled several weeks back – but because of the dry weather and burn ban, we were forced to cancel it.

A reminder – it is all of our responsibility to keep the facilities and area clean and trash free. Put trash in the trash cans and don't throw cigarette butts on the grounds or in the restrooms. Thanks for your help.

*What is a knot? What is a nautical mile? By Brian Hagerty*

Submitted by John Frost

Knots and Nautical miles are good old navy terms. The nautical mile was based on the circumference of the earth at the equator. Since the earth is 360 degrees of longitude around, and degrees are broken into 60 so-called

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"minutes", that means there are  $360 * 60 = 21,600$  "minutes" of longitude around the earth. This was taken as the basis for the nautical mile; thus, by definition, 1 minute of longitude at the equator is equal to 1 nautical mile. So the earth is ideally, by definition, 21,600 nautical miles (and 21,600 "minutes" of longitude) in circumference at the equator. If anyone ever asks you how far is it around the earth, you can quickly do the math in your head ( $360 \text{ degrees} * 60 \text{ minutes per degree}$ ) and answer "about 21,600 nautical miles!"

In fact, even modern navigators use the "minute of latitude" on charts to measure distance; this is what you see them doing when they use their compass spreaders while they are hovering over their nautical charts (maps). [For geometrical reasons, we use the minute of latitude on charts to correspond to a nautical mile rather than the minute of longitude. Minutes of longitude shrink as they move away from the equator and towards the poles; minutes of latitude do not shrink. Take a look at a globe with longitude and latitude lines marked on it to understand why.]

Using the definition of a nautical mile for distance at sea, the challenge was to measure speed -- i.e. what is the ship's speed in nautical miles per hour? (By the way, the nautical mile is about 1.15 larger than the "statute" mile used by land lubbers.) Since  $[\text{speed}] = [\text{distance}] \text{ divided by } [\text{time}]$ , if we measure a small distance (or length) in a small time we can do the math and figure our speed.

The device that sailors used to make their speed measurement was called the "chip log." Chip as in chip of wood, and log as in to record in a log. The chip was a wedge of wood about 18" in size; it was tied to one end of a rope on a large spool. The rope had knots tied into it about every 47'3" (more about how that was calibrated below).

The wooden chip was thrown overboard at the ship's stern (back end). Because of its wedge shape, it would "grab" the water and start pulling out rope as the ship moved forward at some yet unknown speed. One man would hold the spool of rope as it played out; another man would start a sandglass filled with 30 seconds of sand; and a third man would count the knots as they passed over the stern board. When the 30 seconds of sand expired, the time keeper would call out and the counting of knots would stop.

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The faster the ship was sailing, more knots and a longer length of rope were played out. The number of knots in the rope that were counted in 30 seconds, then, was equal to the speed of the ship in nautical miles per hour. A "knot", therefore, is not a nautical mile, it is a nautical mile per hour. Thus 1 knot was equivalent to 1 nautical mile per hour; 5 knots were equivalent to 5 nautical miles per hour; etc. The similar sound of "knot" and "naut" is entirely coincidental.

Finally, what about the actual values of 47' 3" between knots on the rope and the 30 seconds that were used with the chip log? The length was based on converting [1 nautical mile per hour] to [feet per second (fps)], and then multiplying [fps] by 30 seconds (which was a practical time to spend counting knots with a sandglass). The result was the calibrated length in feet at which to tie the knots for a 30-second run of the chip log.

... Now that we have much more precise technology to measure things, and because we need to establish international standards and conversion factors, and because the earth is not uniformly flat or round anywhere, and because even the precise definition of the second has changed, the official value for how many international feet in an international nautical mile has changed. Likewise, the measuring time of about "30 seconds" in the sandglass is now calibrated at 28 seconds. Time itself didn't change by 6.7%! But the cumulative effects of new international standard definitions for time, feet, statute miles, and nautical miles and more accurate measurements of the actual size of the earth -- and the fact that we don't use sand to measure time anymore -- have changed the modern calibration of the chip log.

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### **LGSC WEB SITE!**

<http://www.lakegunterstillesailingclub.com>

Need pictures to post on the web site. Please e-mail to [sailor@mindspring.com](mailto:sailor@mindspring.com). Thank you!



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Our web site has a new look, links to other sites, the latest activities, and even a 7 day weather forecast; that is Lake Guntersville Sailing Club weather. So before you pack up the car, check the web site (unless you already live in beautiful Guntersville) to help you plan your sailing adventure.

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All articles are due by the 15<sup>th</sup> of the month to Marsha Babb for the newsletter. E-mail [druids@mindspring.com](mailto:druids@mindspring.com) If you have any story you would like to share about an adventure or an almost adventure, or how you solved a particular problem, or if you need help with a problem; this is the place for information sharing. Just send it to me and I will put you in the line-up. Pictures are nice also. Thank you so much.

