Welcome

Dear Students, Alumni, and Friends,

Welcome to issue 3 of The Masthead. For those who have missed the first two issues, you can download them from the Archive on page 12. In the short time since we started publishing the newsletter, our subscriber list has grown to over 1000 names and it continues to grow at a rate of about 100 a month. We would like to thank our readers who sent us e-mails telling us how much they enjoy receiving the publication.

Norm
Norman Nudelman, Editor

The Results

The Westlawn/Cruising World Design Competition
With Sponsorship from Island Packet Yachts, Westlawn, and Cruising World Magazine

A commercial-boat designer from Tasmania took top honors in a design competition held for Cruising World magazine readers, in affiliation with Westlawn Institute of Marine Technology and Island Packet Yachts. The contest, which drew entries from all over the world, was won by Richard Boult, whose Quick Clinker 31 achieved, “a well-reasoned and interesting design with clean hull lines and appearance,” the judges said. Boult, who designs commercial ferries, received a $1,000 check in addition to recognition in the August issue of Cruising World.

Boult, who worked briefly for Hall-of-Fame yacht designer Ben Lexcen in the late ‘80s, has been interested in boat design from an early age, but has spent most of his career working on commercial vessels. “I hope to use the cash award,” he said, “to develop a Web site, upgrade some computer software, and try to develop a yacht-design business.”

A total of 53 submissions came in from aspirants all over the globe in response to the search for an inventive boat design of between 30 and 60 feet LOA and capable of serious cruising with two or more people for a minimum of three weeks. Of the 53 entrants, half of the ten finalists were Westlawn alumni or students, and the first runner-up is a
Two larger designs also received recognition:

First runner-up was Keimpe Reitsma of the Netherlands, whose cruising yacht of 57 Feet LOA (see left), was praised by the judges as “a beautiful, attractive, practical boat.”

Second runner-up was Paulo Bisol of France, whose Deep Blue 48 is, “a nicely proportioned design with pleasant relationships between the visual masses,” the judges said.

The panel of judges represented top professionals from every sector of the marine industry: Dave Gerr, director, Westlawn Institute of Marine Technology; Norm Nudelman, provost, Westlawn Institute of Marine Technology; Chris Wentz, president, Z-Sails; Bob Johnson, founder and president, Island Packet Yachts; Rod Johnstone, co-founder, J/Boats; Bruce King, yacht designer; and Jeremy McGeary, CW contributing editor. Gerr, Nudelman, and Wentz whittled the group of submissions down to 10 finalists and then turned them over for grading and comment to Johnson, Johnstone, King and McGeary.

To read more about Boult’s Quick Clinker 31 and the nine other finalist designs, log on to the Cruising World Web site. Website readers are also invited to participate in a poll” and rank the designs as they would judge them, at www.cruisingworld.com/designfinalists.

Click here to read the Cruising World article about the design contest results and see the winning design and runners-up in more detail.

Details of the 2008 contest will be announced in an upcoming issue and on the Cruising World Web site.

**Have you registered for IBEX yet?**

October 10-12, 2007 — Miami Beach Convention Center, Miami Beach Florida

Free Pre-Conference—October 9th

- Westlawn students receive a 50% discount on seminars if they pre-register
- Admission is FREE with valid student ID card or trade business card
- Be sure to stop by the Westlawn/ABYC booths to meet with our faculty and staff

Click here to go to the IBEX 2007 website for complete information on this great show.
The second annual Westlawn “Mystic Meet” took place July 28-29, 2007 at Mystic Seaport, in historic Mystic, Connecticut. Fifty-eight students, faculty, and guests from the U.S. and abroad gathered at Westlawn’s Mystic Seaport campus for a weekend of learning and fun.

After a get-acquainted coffee get-together, students headed across the street for the Mystic Collections Research Center for a guided tour of the G. W. Blunt White Library and the Daniel S. Gregory Ships Plans Library. The G.W. Blunt White Library is a specialized library with a collection of 70,000 volumes, and periodicals, 1,000,000 manuscript pieces, and other holdings, dedicated to maritime history.

The Ships Plans Library houses approximately 100,000 naval-architectural drawings of boats and yachts and other watercraft.

Next, we had a behind-the-scenes tour of Boat Hall and Engine Collection — parts of the Seaport collection in storage and not on public display.

After such a busy morning, students joined their instructors for leisurely lunch, compliments of Westlawn, at the Seaport’s Seaman’s Inne.

Back at the Westlawn office for the afternoon, Westlawn graduate Jack Horner—a long-time marine surveyor and boat designer—presented a PowerPoint show on some of the amazing disasters that he has seen over the years in his Annapolis-based marine-surveying business. Jack’s talk was followed by a faculty one-on-one critique and review of student drawings by Westlawn faculty members, and a question-and-answer period in which students were invited to try to stump the faculty.

On Sunday, students explored Mystic Seaport, and the wonderful boats at the Antique and Classic Boat Rendezvous, learning even more about America’s rich maritime history.

Click here for more photos.

**News and Views**

For 34 years the federal Environmental Protection Agency, under the Clean Water Act permit system, has exempted discharges from recreational boats. However, a recent court ruling intended to address the ballast water permitting issue canceled this exemption. The National Marine Manufacturers Association (NMMA) is urging its members and the boating public to support the Recreational Boating Act of 2007 (H.R. 2550) to reinstate the exemption.

Click here to learn more about this issue.
After deciding on a career in boat and yacht design, Massimo Gregori enrolled in the Westlawn Institute of Marine Technology. In 1976, he founded the Yankee Delta design studio. He hasn't stopped drawing superb power boats and sailing yachts since.

In the early stages of his career, he traveled widely and worked in many parts of the world. Eventually, he settled in Crespina in the hills near Pisa, Italy. From his studio in the Tuscan hills, he is able to telecommute via his high speed ADSL internet setup with his many associates, collaborators, and builders near and far.

Gregori's designs demonstrate that he excels in a wide variety of styles spanning the whole range from classical to contemporary to modern. But his overriding philosophy is that boats must be designed for the rigors of the sea. Yacht design is a complex subject involving a blending of art and science to produce a vessel that is safe, seaworthy, comfortable, and a joy to behold.

In addition to his busy yacht-design practice, Massimo lectures at the Instituto Superiore de Architettura e Design, in Milan, and at the Politecnico di Milano. To learn more about Massimo Gregori and his designs, click here to visit his website. While at his Website make sure to read the interesting reprint about Massimo from the Italian magazine YD Yacht Design. The article is both in Italian and English.

**ABYC Courses and Schedule**

The ABYC Education Department has been providing Industry Certifications, Factory Training, High School and College Curriculum and Industry Seminars for over 15 years. We are providing the marine industry with the skilled workers required to build and maintain modern recreational water craft.

ABYC is currently scheduling On-Site factory training for the fall of 2007 and the spring of 2008. Please call ABYC for custom tailored, flat rate, instruction by top industry trainers at your facility (410-990-4460, Ext. 31).

The Marine Certification Program developed by ABYC with “NOCTI Certification” has proven to be the industry standard. We continue to provide the “Standard” of marine education and training throughout the country and throughout the year.

### 2007 Class Calendar

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<tr>
<th>Month</th>
<th>Date</th>
<th>Course</th>
<th>Description</th>
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<td>23 - 25</td>
<td>BEL200</td>
<td>Basic Marine Electric</td>
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<td>MSC400</td>
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<td>ELC400</td>
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For course descriptions [Click Here](#)
### Continuing Ed.
**New TechTran Course for Marine Industry Pros**

**FUEL SYSTEMS FOR BOATS** *(Course No.: TT 501)*

This comprehensive distance-learning course provides instruction in safe, reliable, and practical fuel systems for both diesel- and gasoline-engine boats.

Topics include: Applicable standards; fuel-system piping and filter requirements; fuel-piping manifolds; anti-siphoning protection; access and fastening requirements; diesel-specific fuel piping considerations and day-tank piping; fuel-transfer pumps; return-oil coolers; fuel-line valves; calculating fuel consumption; calculating tank capacity and weight; specifying fuel hoses, hose clamps, and piping; tank fastening; considerations in tank location; protection against corrosion; restrictions and recommendations for location of openings in fuel tanks; tank vent requirements and installation; fuel fills; fuel take-offs; common problems related to spills at vents and fills; tank construction; choice and selection of tank materials; requirements and recommendations for baffles and baffle openings; fuel-tank labels; tank pressure tests; flexible bladder tanks.

**Click Here** for more details and enrollment information on Westlawn’s many continuing-education courses.

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### Alumni Gallery

62-foot Steel Longliner, commercial fishing boat, designed by Westlawn graduate Richard McBride.

Thousands of boats and yachts have been designed by Westlawn alumni. To see a selection of these by Richard McBride and many other Westlawn Alumni, go to the Design Gallery at [www.westlawn.edu](http://www.westlawn.edu)

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### Hargrave Custom Yachts Celebrates Another Westlawn Grad.

The Westlawn Institute of Marine Technology is pleased to announce that, for the first time, it has granted a diploma to a former Yacht Design Institute (YDI) student. Greg Boyko, of Hargrave Custom Yachts, earned his Westlawn diploma as a result an evaluation which consisted of a review of equivalent courses completed at YDI and newly submitted advanced design work. This evaluation procedure was created as part of Westlawn’s acquisition of YDI in 2006. Greg is the second Westlawn graduate currently working in Hargrave Custom Yachts’ design department.

Mike Joyce, CEO of Hargrave Custom yachts, arranged for a graduation celebration at Hargrave to present Greg with his Westlawn diploma. Joyce said:

“It was a wonderful day for me personally to be able to present second diploma to a Westlawn graduate since taking over the Hargrave company. I want to thank Westlawn for making all this possible not only for Greg Boyko, but for the entire Hargrave family. We take great pride in our company’s long history with Westlawn, and the list of honored recipients to receive a Westlawn diploma who not only played an important role in our company, but in the yachting industry overall is impressive indeed. Keep up the great work!”

In addition, Hargrave carries on the distinguished tradition of the famous naval architect Jack Hargrave, who himself was a Westlawn graduate. Westlawn director, Dave Gerr stated, “We’re pleased as punch, to be able to help further the careers of Greg Boyko and Ben Dodarell [the other Westlawn graduate at Hargrave], and it’s every bit as important, that we’re able to help companies like Hargrave Custom Yachts get the qualified employees they require. It’s doubly rewarding to not only be able to help Hargrave Custom Yachts, as they been long-time supporters of Westlawn, but to also be able to assist a former YDI student at the same time.”

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### $60.00 (15%) Scholarship Rebate Offer

**For Marine industry Professionals**

To receive your Scholarship Rebate, enroll in TT501- Fuel Systems for Boats and complete the course in 6 months or less from your enrollment date, with a grade average of 80% or better. Staple this coupon to your enrollment agreement. This coupon *is transferable* to any marine industry professional.

Code TT501-907

Offer expires 12/14/2007

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Mike Joyce (left), Greg Boyko (right)
In the previous issue, we discussed initial stability or sail-carrying power—the stability that directly affects performance. Reserve stability is every bit as critical, but for safety. Reserve stability is measured in the number of degrees a boat can heel and still right itself. Any further heel, and the boat will—of its own weight—continue on to capsize. The angle at which stability goes to zero is termed the angle of vanishing stability, AVS. It is also referred to as the “range of positive stability.” If a boat maintains positive stability through up to 126 degrees, its AVS is 126 degrees.

As a general rule, serious seaboats under 75 feet LOA should have a range of positive stability of 120 degrees or greater. Craft over 75 feet are acceptable with a range of 110 degrees. An analysis of boats in the 1979 Fastnet race—a race that had multiple vessels lost or damaged in a severe storm—produced an instructive curve. You can see that the greater the AVS the less time a boat will spend upside down before it self rights. With an AVS of 120 degrees or more, the inverted time will usually be 2 minutes or less. This is one of the drawbacks to wide, shallow-bodied hulls. Such hulls tend to have low AVSs, and worse still tend to be quite stable upside down. Indeed, one of the other aspects of reserve stability is the resistance of a boat to self-right once it has capsized. A moderate-beam hull, with a range of positive stability over 120 degrees, will only be slightly stable in the inverted condition. This means that virtually any sizable wave will roll the capsized hull over far enough for it to self right soon after. A wide hull, will be much more stable when inverted, and even a large wave may not roll it far enough to generate self righting.

**Curve of Righting Arms**

Reserve stability can be evaluated through a curve of righting arms (also called the stability curve), which plots the righting arm (GZ) against heel angle—see next page. As long as the GZ is positive, the boat will self right. At the angle the GZ turns negative, the boat will capsize. This shows immediately as the range of stability (AVS). The curve also shows other important things. The area under the positive portion of the righting arm curve represent the energy required to capsize the boat. The more energy required, the stronger the wind gust and the more sustained it must be to create a capsize. Alternately, the bigger and faster moving the wave must be to capsize the boat. Similarly, the area under the negative side of the curve represents the energy required to right a boat once it’s been capsized. Incidentally, the energy on these curves is measured in the rather odd unit of “degree feet.”

The same curve can be constructed using the righting moment (RM)—see next page. Remember, RM is just GZ times displacement. The curve will look the same whether it’s plotted as RM or GZ, but—you should use RM when plotting different boats on the same scale for comparison. This will immediately show the difference between boats with the same GZ but differing displacement. You can see, on the Righting-Moment Curves Compared graph, that the area under the stability curve is much larger for the heavier 26,866-pound boat that for the 19,190-pound boat, even though both have the same GZs at all angles of heel. This means that it requires more energy to capsize the larger, heavier boat. This is the reason
that bigger boats are inherently safer (broadly speaking) offshore. The energy on righting-moment stability curves is measured in “degree foot-pounds.”

**Estimating AVS**

The exact way to determine AVS is by doing a detailed weight study to find VCG and then a computer analysis to determine GZ at every angle of heel based on the precise hull form. You can also manually analyze each angle of heel, at 10-degree intervals (the old way) using Skene’s method. This works well too, but is quite labor intensive. Whichever method employed, it not only requires a lot of time and work, but a full set of drawings for the boat.

The Wolfson Unit of Southampton University developed a formula for estimating AVS for contemporary keel sailboats of ordinary form and proportions. Centerboarders, and keel centerboarders are not accurately handled by this formula which can’t give an AVS less than 110 degrees. For standard keel boats; however, the Wolfson formula will allow you to estimate the AVS of a boat. Keep in mind, however, that this is just an estimate, though a fairly reasonable one. It is excellent for preliminary design or investigating an existing boat you have limited data on.

You need to know the following:

Hull draft (also called “draft canoe-body,” or DCB), feet
Ballast, pounds
Displacement, pounds
Beam overall, feet
Density of seawater = 64 lb./cu.ft.
Density of freshwater = 62.4 lb./cu.ft.

Hull draft or canoe-body draft (DCB) is the draft without the keel. For this formula, it’s taken at the midships section of the boat by drawing a vertical line one-eighth of total beam out from the centerline, and measuring down from the waterline to where this line intersects with the hull bottom. If you don’t have a midships section, measure the DCB on the profile view of the boat at the centerline, and subtract 10%.

Say our boat had the following:

DCB = 1.89 ft.
Ballast = 7,484 lb.
Displacement = 19,190 lb.
Beam overall = 11.66 ft.
First, find the ballast ratio:
\[ BR = \frac{7,484 \text{ lb.}}{19,190 \text{ lb.}} = 0.39 \]

Next find the displacement in cubic feet (for seawater in this case):
\[ 19,190 \text{ lb.} \div 64 \text{ lb./cu.ft.} = 299.8 \text{ cu.ft.} \]

Now, find SV:
\[ SV = \frac{\text{Beam}^2}{BR \times DCB \times \frac{3}{2} \text{Disp., cu.ft.}} \]
\[ SV = \frac{(11.66 \text{ ft. Beam})^2}{0.39 \times 1.89 \text{ ft. DCB} \times \frac{3}{2} \times 299.8 \text{ cu.ft. Disp.}} = 27.5 \]

Next, find the estimated AVS
\[ AVS = 100 + \frac{400}{SV - 10} \]
\[ AVS = 100 + \frac{400}{27.5 \times 10} = 123 \text{ degrees} \]

Finally, I make an adjustment to reduce the standard Wolfson-method AVS, as I’ve found it seems to slightly overestimate AVS. So multiply the AVS by 0.97.

\[ 123^\circ \times 0.97 = 119.3^\circ \text{ AVS estimated} \]

This is very close to 120 degrees, so this boat would just barely meet the criteria for offshore cruising. The curve of righting arms, or stability curve for our 44-foot cutter shows this clearly. (This is the boat pictured and discussed in the first part of this article, in the previous issue.)

**Increased Freeboard: Increased AVS**

One of the things that the Wolfson estimate does not take into account is that increased freeboard increases AVS. At large angles of heel, higher freeboard shifts the heeled center of buoyancy further away from the center of gravity than lower freeboard. Not only does this increase AVS, but it also increases the downflood angle.

On shoal-draft boats—even boats so shallow they have no external keel—AVSs of 120 degrees can be achieved by: keeping the hull structure light; ensuring the ballast ratio is above 35 percent (sometimes with all inside ballast); and increasing freeboard. Properly proportioned and designed, such shoal centerboarders and keel-centerboarders have proven themselves as excellent seaboats.

**Added Weights Reduce AVS**

It is easy to add weights and weights are almost always added above the waterline. Accordingly, these weights raise the VCG (vertical center of gravity) and reduce both initial and reserve stability. If our example boat above were overloaded, its displacement would increase and its ballast-ratio decrease, and AVS would then be lower than 120 degrees.

Adding weights up high on the mast is even more critical. Adding a radar unit, and masthead light and instrument package, could reduce AVS by a full degree or more.

Even more critical are heavy masts. There is a tendency for offshore voyagers to simply beef up the mast and rigging. Increasing the weight of the mast and rigging may make them more rugged, but this also reduces the AVS. It’s a delicate balance and needs careful thought. In-the-boom, roller-furling masts must be significantly heavier than standard masts, because the top-to-bottom slot in the mast weakens the section. The mast accordingly must be beefier to compensate. In addition, there’s the added weight of the roller gear. Switching from a well-proportioned, tapered standard mast to a common, untapered, in-boom-furler mast can reduce the AVS by 15 degrees, sometimes more! This too needs careful consideration.
The Safe Energy Ratio
For offshore work, the area under the negative side of the stability curve must be less than one-third the area under the positive side. This makes it very likely that any sea conditions that were severe enough to capsize a boat in the first place, will also be severe enough to right that boat quickly.

The area under the curves can be estimated by the following:

Positive energy (area) = AVS x Max. GZ x 0.63
Negative energy (area) = (180 - AVS) x Min. GZ x 0.66

Looking at the curve of righting arms you can see that the maximum positive GZ is 2.45 feet, and the maximum negative GZ is -0.74 feet.

Positive energy = 119.8 x 2.45 ft. Max. GZ x 0.63 = 184.9 degree feet
Negative energy = (180 - 119.8) x 0.74 ft. Min. GZ x 0.66 = 29.4 degree feet

29.4 degree feet ÷ 184.9 degree feet = 16%

This is well under the minimum one-third area and so quite suitable for offshore work.

Downflood Angle
Naturally, things aren’t quite as simple as all this and the standard stability curves assume that the boat is all sealed up like a submarine. The reality is that, once most boats are heeled over more than 110 degrees, water will start to enter the boat through ventilators and small leaks at hatches and windows. Any such leaks reduce stability by flooding the boat with water on the down side (shifting ballast on the wrong side). Worse still, such water sloshes about, and the sloshing action (known as “free-surface effect”) further reduces righting moment. Still—if all the hatches and windows are buttoned up tight and ventilators are off the side decks and well protected with water-trap boxes—this effect is minimal.

Full stability analysis, however, assumes that any principle hatch—usually the companion hatch or hatches—might be left open. Every so often, freak wind gusts or freak waves have rolled boats over very quickly without warning in otherwise moderate weather. A boat could have an AVS of 130 degrees, but a downflood angle of 112 degrees. If the hatch were open water could flood the boat long before the theoretical 130-degree AVS and the boat might capsize and sink.

Generally, the downflood angle should be over 110 degrees for offshore boats. As a rule—with the companion hatch on the centerline—this is almost automatic. You’d be surprised; however, how much reduction in the downflood angle can result from companion hatches off centerline. A hatch all the way to the side of a standard trunk cabin could reduce the downflood angle by 20 degrees or so! Two nearly identical models of the same boat—one with a centerline hatch and the other with hatch off to the side—could have downflood angles of, say, 122 degrees and 104 degrees respectively.

Capsize Screening Number
Both wind or wave action can capsize a boat and—as we’ve seen—the energy required increases with larger heavier boats. In fact, a boat that is relatively heavier for a given beam has a greater resistance to capsize than a boat with wider shallower hull at the same displacement. (Remember, the wide shallow hulls which increase sail-carrying power reduce reserve stability characteristics.)

The capsize screening number evaluates this aspect of reserve stability. It is simply:

\[
\text{Capsize Number} = \frac{\text{BOA}}{\sqrt[3]{\text{Disp.}}}
\]

Where:
BOA = beam overall, feet
Disp. = displacement in cubic feet

The lower the capsize number the more resistant the boat is to sudden-energy capsize events. Any capsize number under 2.0 is acceptable for offshore work. If you’re planing to round the Horn or cruise Antarctica, a capsize number of 1.7 or less is indicated; but for ordinary voyaging cruisers such a low capsize number is more than required.

Our example 44-foot cutter has a displacement of 19,190 pounds (299.8 cu.ft. saltwater) and a beam overall of 12.25 feet, so:
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Capsize Number = \( \frac{11.66 \text{ ft. BOA}}{\sqrt[3]{299.8 \text{ cu.ft. Disp.}}} = 1.74 \)

This is well under 2, and so indicates good resistance to capsize.

Another use for this number is to modify the required minimum AVS. For ordinary ocean cruising, a capsize number of 1.7 or less, will give acceptable safety with an AVS of 115 degrees, rather than 120 for boats under 75 feet LOA. For boats over 75 feet, it allows an AVS of 105 degrees.

Keep in mind; however, that the capsize screening number doesn’t mean much by itself. It must be used in conjunction with other characteristics discussed above when evaluating reserve stability.

Evaluating Reserve Stability

Reserve stability is frequently talked about in terms of AVS and nothing else. This is too simple an approach. Vessels that are doing serious offshore work need to meet several criteria to ensure the best resistance to capsize:

1) For boats under 75 feet LOA, AVS to be 120 degrees or higher, unless the capsize number is 1.7 or less, in which case 115 degrees or higher. For boats over 75 feet, AVS of 110 degrees or higher, unless the capsize number is 1.7 or less, in which case 105 degrees or higher.

2) The area under the negative side of the stability curve should be less than one-third of the area under the positive side.

3) The downflood angle should be 110 degrees or greater.

4) The capsize number should be less than 2.0 for serious ocean cruising, and 1.7 or less for extreme ocean voyaging (or for reduced AVS, as above).

5) The Dellenbaugh angle should be within the range shown on the chart (see previous issue) for the length of the boat. This ensures that the initial stability is properly matched to the rig.

A boat that meets all these criteria has stability characteristics that indicate it is suitable for serious offshore voyaging with regard to stability.

STIX — The Capsize-Screening Number

A somewhat recent development in evaluating stability is that boats built for sale in Europe or an EU country must be built to ISO standards to obtain their CE mark. Without this mark, indicating compliance with the applicable ISO standards, no boat can legally be sold or operated in EU waters if they have an EU-country flag. (U.S. boats can sail EU waters, under the U.S. flag, without the CE mark.)

One of the very many individual ISO standards governs sailboat stability. Like most ISO documents, this standard quite convoluted. Rather than simply applying the fundamentals described above, the ISO stability standard calculates numerous separate values and adds them together in prescribed ways to get a stability index number known as the “ISO stability index number” or STIX (STability IndeX).

Because complying with STIX under ISO is now the law in Europe, there is a tendency to interpret STIX as a good indicator of seaworthy stability in the U.S. I personally don’t believe that STIX is all that reliable an indicator. Nevertheless, the STIX number is a reasonable marker, but is not as reliable—in my opinion—as simply applying the basic concepts above (along with one or two others involving dynamic stability—too complex to go into here—for really accurate results by designers).

Another peculiarity of ISO CE is that—rather than using the perfectly good Beaufort sea-state scale—it developed it’s own set of sea-state categories. (Why reinvent the wheel?) In any case, ISO sea-state categories range from A through D, with A being extreme ocean storms and D being pretty close to calm. A boat intended for offshore work should have a category A or B STIX number. The current regulation-required STIX numbers for each category are as follows:

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Category A is truly extreme weather. It is defined as significant wave heights of 23 feet and maximum wave heights of 46 feet. Most sailors—even ocean-crossing ones—will go their entire lives without seeing such conditions. Category B is more than adequate for most average cruisers, with significant wave heights at 13 feet, and maximum heights at 26 feet.

Regardless, category A is the holy grail of ISO CE for ocean-going sailboats. If you are looking at a European-built boat with CE category A, you’re more than likely looking at a safe seaboat. I’m not convinced that a STIX of 32 (and the many other requirements for category A) actually ensure that the boat is any safer than a well-built U.S. sailboat intended for ocean cruising and without a CE mark. In fact—having run through ISO CE and STIX for a design recently—I’m not convinced that any of this is the best approach for evaluating or making safe boats. That; however, would be the subject for another article.

If you want to learn more about the STIX number refer to an article by Rolf Eliasson, in issue 81 (Feb/Mar. 2003) of Professional Boatbuilder magazine, starting on page 128. [Click here to order this back issue.]

(The thoughts and opinions on STIX above, are solely those of the author and not those of Westlawn or ABYC.)

Westlawn graduate Bruce King’s beautiful 124-foot sloop, Antonisa, shows off her magnificent sail-carrying power.

“If one is always to be overawed by the circumstances which may arise against one—no full-rigged ships would never have been built."

... Allan Villiers
Editorial

We keep Anhinga, our 25-foot sportfishing boat, in a marina on the Hudson River located conveniently a few blocks from our home. During the boating season, which lasts from May 15th to October 15th, we spend an average two days a week on the water. Although I have a great fish finder on board, we don’t catch much fish. My wife says that is why they call it fishing not catching.

We have been ardent boaters, both power and sail, for more years than I care to mention. So, I have seen a lot of goofy things on the water. One thing that amazes me is the lack of knowledge of the rules of the road experience from some other boaters. For example, if you are overtaking a boat from astern, and you want to pass, the Inland Rules state that the overtaking vessel should signal the stand-on vessel (the boat being overtaken) by 2 short blasts on the horn to indicate that you are going to pass the overtaken boat on its port side (1 short blast if you will be passing to starboard). So how come, on more that one occasion, I have been greeted with the all too common obscene gesture as I pass. Obviously, the skipper on the other boat thinks my horn signal means, “Why don’t you get the h... out of my way.”

There are many other rules that, if ignored or not known, can lead to serious accidents on the water. Also, designers and builders need to know the rules, particularly as they need to specify correct running lights, horns, and bells. For the complete Rules of the Road, known as the COLREGS, Click Here.

Norm Nudelman

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The Masthead

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Who Are We

Westlawn is a not-for-profit educational affiliate of the American Boat and Yacht Council (ABYC). Our School is nationally accredited by the Distance Education and Training Council (DETC), and approved by the Connecticut Department of Higher Education.

Our Mission

Founded in 1930, the mission of the Westlawn Institute of Marine Technology is threefold:
- To provide our students with the skills and knowledge required to build a rewarding career in the profession of yacht and small-craft naval architecture.
- To support continued growth of the recreational and small-craft marine community through the development of well-trained, safety-oriented, boat designers developing better products for the benefit of the boating public.
- To provide continuing education to marine-industry professionals.

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