

Sailor's Knives: 14 High-End Blades Tested

The Boye Dendritic Cobalt 'Prophet' tops the scoring, followed by three excellent models from Benchmade

We last tested knives for the sailor in the August 15, 1993 issue. Most of the knives tested then are still on the market—not surprising in view of their largely traditional nature. What has changed, however, is a broadening of the scope of what's considered appropriate to the mariner's use. In addition, some newer materials promise to resist, and in one case to provide, absolute immunity from corrosion.

In his 1953 book, *The Arts of the Sailor*, Hervey Garrett Smith describes an incident on a 33-foot ketch which shaped his thoughts about nautical knives:

"After a long beat to windward in a light northeasterly I came about and headed for home, the booms broad off and running dead before it. Suddenly, with hardly five seconds' warning, we were struck by the most vicious line squall—caught in the worst possible position—dead before the wind and in total darkness. In an instant the boat rounded to and broached—with the boom ends in the water, the sails flogging wildly and every sheet, halyard and line hopelessly fouled or washed overboard. I knew that the canvas had to come off in a hurry. I clawed my way forward, yanked out my sheath knife and cut the main and jib halyards just above the belaying pins. After what seemed like an hour I got the sails nearly all the way down, and slowly the boat righted to a less critical angle of heel. I gave silent thanks for the friend who but recently had given me that sheath knife, for without it I doubt if I could have got the sails off in time to prevent capsizing. I learned many things that night,

not the least of which was the importance of a proper knife."

Were he to prepare for that squall today, Smith would no doubt delight in the current market's rich offerings. He would be impressed with how well some folding knives can do what he did with his sheath knife, and how current blades can outperform his plain-edge sheepfoot blade. Yes, you can afford to be choosy in selecting the tool on which your life may well depend.

The Ideal Mariner's Knife

Based on criteria explained below, an ideal knife will cut keenly "out of the box" (and keep on cutting), and its edge will be restorable without great effort. It will be light, easy to get to, and quick to bring to a task. It will either be reasonably priced, or so delightful and durable that you'll consider its high cost worthwhile. You won't have to worry how close it comes to your compass. It will resist rust and pitting despite exposure to salt and humidity. Some of the knives are available with an optional coating, but they are dark and make the blade harder to see at night.

Evaluation Criteria

Cutting ability, portability and deployability are strongly interrelated



Above: A sharp knife is essential in an emergency.

and were all assigned the highest value in our weighted rating system (see chart on page 26).

Cutting. The purpose of a knife is to cut, or as David Boye, maker of one of the knives tested, puts it, "Cutting occurs because the point-of-contact pressure breaks the bonds of cohesion, and parts the heretofore unitary element in the workpiece."

For our cutting tests we started with 3/8" braided Sta-Set X Lite Spectra line (4,400-lb. test). We then cut braided cotton line. We concentrated on rope not just for tradition's sake but because you may have to cut someone out of a tangle in an emergency.

If properly executed, serrated edges clearly outperform plain edges; the point-of-contact pressure is constantly changing, as is the angle of cut. Even the exotic ceramic blade

Specs: High-end Knives

Make/Model	Price (retail)	Blade Material	Opening Device	Type of Lock	Attachment to Clothing	Weight	LOA
Benchmade Nimravus	\$135	ATS-34	—	—	Kydex sheath	4.0 oz.	9.4"
Benchmade Axis	\$160	ATS-34 SS	Stud	Axis	Steel clip	4.5 oz.	8.8"
Benchmade AFCK	\$145	ATS-34 SS	Round Hole	Liner	Steel clip	4.1 oz.	9.0"
Benchmade Stryker	\$155	ATS-34 SS	Thumb disk	Liner	Steel clip	3.8 oz.	8.25"
Boker Infinity	\$142	Ceramic	Stud	Liner	Steel clip	2.8 oz.	8.2"
Boye Dendritic	\$135	Cobalt	Elliptical Hole	Lockback	Aluminum clip	2.1 oz.	6.8"
Buck River Rafter	\$57.50	SS	Stud	Liner	Steel clip	3.5 oz.	8.5"
Buck Yachtsman	\$68	2 x SS	Stud	Liner	—	5.0 oz.	8.5"
Cold Steel	\$90	AUS-8A SS	Stud	Lockback	FRN clip	3.4 oz.	9.0"
Myerchin Navigator	\$68	440C SS	Keyhole-shaped hole	Lockback	FRN clip	5.2 oz.	8.0"
Spyderco Rescue	\$69	ATS-55 SS	Round Hole	Lockback	Steel clip	2.4 oz.	8.2"
Spyderco Snap-It	\$57	AUS-8A SS	Round Hole	Lockback	Steel snap shackle	2.4 oz.	6.9"
Spyderco Remote Release	\$65	AUS-8A SS	Round Hole	Lockback	Steel snap shackle	2.5 oz.	7.9"
West Marine/Wichard	\$20	Unknown	Nail nick	No lock	None	3.5 oz.	7.2"

Notes: All models have lanyard holes and locking blades. The Benchmade Nimravus is a fixed-blade model; all others are folders. SS = stainless steel, FRN = fiberglass-reinforced nylon. Substantial discounts are available from Internet sellers.

with its plain edge was no match for most of the serrated blades. The best-executed serrations for cutting the test rope material were those on the Benchmade models. Spyderco serrations, with their long points, tended to snag in this material. (An older Spyderco knife (not reviewed) that had more rounded points, would

have earned a 4 or 5 in cutting because it did not snag.)

Among the top cutters, the ones with the narrowest edge bevels (the final angle right behind the cutting edge) cut best. Beware too wide an edge bevel; either the manufacturer doesn't trust his steel to stand up at a more useful (i.e., narrower) angle, or a poor design escaped from engineering into manufacturing. If possible, avoid those. To some extent you can reshape the bevel, but it's a lot of work.

Comfort. The most comfortable knife to use was the Benchmade Nimravus Cub, probably because it had no

opening in the handle to dig into the hand when gripping hard.

Portability and Deployability. Portability is vital because the knife one uses when the need arises is typically the one he's carrying: The term "just in time" comes to mind. Portability includes not only weight but size. The knife you leave home or belowdecks is of little use in an emergency.

Deployability includes the rela-

Below: The Benchmade knives have handles made of G-10, a material that is finding its way into boatbuilding. From left to right: the Nimravus Cub, Stryker, Axis and AFCK.

Below: The Buck River Rafter (left) and Yachtsman, which comes with a sheath and combo blade tool.



Ratings: High-end Knives

Test Criteria	Cutting	Portability	Deployability	Magnetic Interference	Affordability	Corrosion Resistance	Total Score
Score weight	6	6	6	3	3	1	
Boye Dendritic Cobalt	4	5	5	4	2	5	107
Benchmade Nimravus Cub	5	4	5	2	2	4	100
Benchmade Stryker	5	5	5	1	1	4	100
Benchmade Axis	5	5	5	1	1	3	99
Spyderco Rescue	3	5	5	3	3	3	99
Benchmade AFCK	5	5	5	1*	1	4	97
Cold Steel Land & Sea Rescue	4	4	4	3	3	3	93
Spyderco Snap-It	3	4	4	3	5	3	93
Spyderco Remote Release	3	4	4	3	4	3	90
Boker Infinity	4	4	2	4	2	5	83
Buck River Rafter	2	4	4	1*	5	3	78
Buck Yachtsman	3	3	3	1	4	3	72
West Marine/Wichard	5	2	1	1	5	3	69
Myerchin Navigator	3	3	1	2	4	3	63

Each knife earned between 1 (poor) and 5 (excellent) points in each category. That value was then multiplied by the weight for that attribute, e.g., an Excellent rating for Deployability earns 5 x 4, or 20 points for that attribute. The total score for each knife is shown in the rightmost column. An * indicates enough blade magnetism to lift a paper clip.

tive degree of effort required to get the knife out and ready to cut, and the relative comfort of carrying it until it's needed. Knives that require both hands to deploy, or must be carried in pockets, scored lower.

Folding knives with opening holes in the blade and pocket clips on the handle provide the best results in both categories, allowing comfortable full-time carry as well as deployment and use by one hand—an obvious plus for the sailor. Most of these knives will require some practice in opening one-handed. A well-executed fixed-blade knife/sheath combo can do almost as well.

Clothing clips should be adjustable for tension, and replaceable if broken off. Benchmade and Spyderco amply fill these needs. Two of the Spyderco models have snap fasteners instead of clothing clips designed specifically for attachment to a life vest or harness or belt loop. But precisely because they are optimized for these special uses they are less handy

for everyday off-boat wear. Non-adjustable and non-replaceable clips will eventually disappoint.

Magnetic Interference. In the previous test we cautioned, “Don’t, with any of these knives in your pocket or in a sheath, hang around the steering compass on your boat. The magnetic card will follow it around like a puppy dog named Martensitic.” Despite the rise of electronic navigation, including fluxgate compasses, most boats are still steered by referring to a magnetic compass. Magnetic signature thus remains a significant criterion: One would rather not have to divest himself of his knife every time he passes close to the binnacle, nor be distracted by the need to do so.

The iron content of a steel blade has much to do with hardness and edge retention. Knives with high iron content, however, tend also to have a strong magnetic signature, a significant annoyance to the sailor. We therefore included blades of exotic materials that should combine low magnet-

ic signature with high corrosion resistance. For extra sensitivity we used a handheld compass and tested needle deflection with the knife very close to it. There were surprises here, but bear in mind that these were not laboratory conditions. Blades marked in the chart with an * were magnetized enough to pick up a paper clip.

Affordability. Affordability. Any product bought on price tag alone is more likely to be a mistake. At the same time, we all look for good value.

Retail prices of the tested knives span an eight-to-one range. In order to map to the 1-5 rating scale, we ranked their retail prices and assigned points to each knife according to quintile, without reference to performance. Substantial discounts are available on most models.

Corrosion Resistance. It would indeed be a blessing to have one fewer item on a boat that must be watched and maintained lest it show signs of corrosion. Since regular maintenance (rinsing in clear water and wiping



Above: From left to right, the Myerchin, Cold Steel Land & Sea Rescue, and the West Marine/Wichard.



Above: The Spyderco knives, from left to right: the Snap-It Clipit, Remote Release and Rescue.

dry) will obviate most corrosion, however, we assigned corrosion resistance a relatively low weight.

Exotic blade materials such as cobalt, titanium and ceramic offer high-end corrosion protection. The term “stainless,” however, should not be taken literally, as it really means only stain-resistant. Any blade with enough carbon to provide serious cutting ability will corrode under the right conditions.

Always flush a knife in freshwater after exposure to saltwater, as chlorine in its dry state—which forms if you let saltwater dry on a knife—can be more corrosive than chlorine in solution as sea water. Follow the rinse by drying the knife. If a folding knife has been immersed in saltwater, oil the blade pivot as well.

Two protective products, Marine Tuf-Cloth (\$8.95) and Militec-1 Metal Conditioner, are endorsed by at least one of the makers whose knives received high evaluations. Each has a different action. Tuf-Cloth is a dry film corrosion inhibitor and lubricant that is rubbed on, leaving a “fast-drying, water-displacing micro-bonding crystal barrier against rust, friction and wear [that] ... will not wash off.” Militec is a liquid which is briskly rubbed on, creating “a chemical bond within the micropores of metal surfaces. Militec-1 actually becomes part of the metal, not merely a film on

the surface. Militec-1’s chemical action seals the metal, reduces friction, and creates a self-lubricating effect.” We hope to test these and similar products in the near future.

Individual Evaluations

Apart from the tests, here are our evaluations of the design and manufacturing qualities of 14 knives based on close inspection and cutting tests. The order is alphabetical by maker.

Benchmade 145SBT Nimravus Cub. The only fixed-blade knife in this review, the Nimravus handles as though it were a locked-open folder. With its versatile Kydex sheath (may be worn in several positions) it’s an appealing package even to a sailor who’ll be spending much of his time sitting. Its partially serrated blade has a drop-point shape, coated with BT2, a “proprietary Teflon-based polymer that provides corrosion protection and lubricity.” Handles are of G-10 glass-filled epoxy and provide excellent grip.

Benchmade 710S Axis. A full-size folder with a useful, partially serrated, recurved blade, the Axis’ S-shaped edge tends to prevent items being cut from moving away from the blade, and draws them instead toward the user. The new Axis locking mechanism is notable for smoothness of operation—and, most importantly, its design should automatically compensate for the inevitable wear that loosens most locks. Scales (the outer handle material that you grip when using the knife) are of G-10; liners (inner pieces that strengthen the handle and are attached to the scales; they are

typically metal) are titanium.

Benchmade 800SBT AFCK. A capable working folder that’s available in several choices of size, serrations, steel and blade coating. Ours is the larger size with an uncoated blade. It has G-10 scales and titanium liners. Its drop-point blade is partially serrated and has a round opening hole in the style of the Spyderco models. The AFCK affords a natural feel in the hand that many knives of its size lack.

Benchmade 910SBT Stryker. With the following exceptions, the Stryker can be considered a folding version of the Nimravus. Its blade is straight and tanto-shaped, giving it extra slicing performance and a stronger point, at the cost of extra effort to resharpen. A knurled disk fixed perpendicular to the blade allows either thumb to open it easily. G-10 scales and titanium liners. An effective clothing clip, also coated, completes this lightweight package.

Boker 89 Infinity Ceramic. Handle is lightweight molded plastic, of substantial thickness. Linerlock locks opened blade. Although the drop-point blade is ceramic, the other fittings (e.g., pivot pin, liner lock, pocket clip) contain ferrous metal. The opening stud on the blade is too small and too smooth, and it’s mounted on the blade too close to the pivot pin. The ceramic blade must be sent to the factory for sharpening, since the blade is as hard as any sharpener material



Above: Because the Boker Infinity (left) has a blade as hard as any sharpener, it must be sent to the factory for sharpening. The lightweight Boye Dendritic Cobalt 'Prophet' rated tops overall.

short of diamond.

Boye Dendritic Cobalt 'Prophet.' Very lightweight. Handle is blue fiberglass-reinforced nylon. Lockback locking mechanism. The aluminum pocket clip is said to be the only non-cobalt fitting on this knife. Single-stage serrations on the sheepfoot-style blade result in a scalloped edge similar to that of many bread knives, a less aggressive cutting pattern than on others tested.

Buck #2644 River Rafter. Stainless sheepfoot blade with full serrations and opening stud. Black polymer handle with yellow insert and liner lock mechanism. Stainless clothing clip. Lanyard hole has short lanyard and plastic snap.

Buck #2729 Yachtsman. Similar to above model but blade has combination edge, and knife has a second "blade" made up of tools, including a useful shackle key.

Cold Steel 34RLSB Land & Sea Rescue. Serrated sheepfoot blade of AUS-8A stainless steel. Lockback locking mechanism; open blade by pushing with thumb on stud. Blue FRN handle with clothing clip.

Myerchin L300P Lightknife Navigator Pro. A largish folder in a traditional rigging knife with locking spike. Lockback drop-point blade of 440C stainless has a 60/40 serration. Blade is difficult to open with one hand and,

when locked open, can only be unlocked by partially deploying the spike, also a two-hand operation. The FRN handle has a removable plastic clothing clip, which also contains a tiny but effective red LED lamp for chart reading at night.

Spyderco C14SOR Rescue. Lightweight orange handle of FRN. Sheepfoot blade has full serrations,

and was supplied extremely sharp. Trademarked round opening hole conveniently located in a hump in the blade which also serves as a thumb rest.

Spyderco C26SBK Snap-It. Substantially the same as the Rescue above, but instead of a pocket clip provides a carabiner-style snap at the blade-pivot end of the (black) handle. Ideal for securing knife to a vest, harness or similar clothing worn above the waist. Use your thumb to operate the snap, then to open the blade without changing your grip. Fully serrated blade.

Spyderco C30SBK Remote Release. Similar blade shape to Snap-It above, but with a different handle, which also has a snap for attachment. No pocket clip. Designed to hang at or below the waist, where it is easily detached, then opened using the round hole in the blade, without changing one's grip.

West Marine Sailing Knife #319517. Made by Wichard in France. Fairly crude in operation but its slim combination edge cut rope well. Second blade is a shackle key and bottle opener. Strictly a pocket knife, with a non-locking blade. Plastic scales glow in dark. Its low price makes it a good value, but it's not really in the same league with the other high-end knives.

Conclusion

The four Benchmades and the West Marine showed the best cutting performance on the test ropes. Tops in portability/deployability were the Boye; Benchmade Stryker, Axis Lock and AFCK; and the Spyderco Rescue.

Tops in affordability were the Spy-

derco Snap-It, Buck River Rafter; the West Marine was also very affordable but its low overall score and non-locking blade separate it from the others. The Boye and the Boker led in corrosion resistance. Now try putting all the criteria together. Not easy, is it? The scores in the right-hand column of the chart on page 27 should help.

Our advice: concentrate on the models that did well on the three highest-weighted criteria, unless you have some special need involving the three lesser criteria.

Buy a knife you can live with. Try it out as extensively as you can before buying. Put some pressure on it to test comfort in the hand. Insist on a model that can be deployed, used and put away with one hand. Look for a narrow edge-bevel (compare it with other similar knives) and at least a combination (plain/serrated) edge. If cutting rope is an important application, avoid serrations with long deep points.

Once you've bought the knife, wear it whenever possible so you'll have it when you need it. On board a boat a good metal clothing clip and a lanyard (that's what the hole is for) could make the difference between surviving and not surviving. ■

Contacts- Benchmade, 800/800-7427, www.benchmade.com. Boye Knives, PO Box 1238, Dolan Springs, AZ 86441; 800/853-1617; www.boyeknives.com.

Buck Knives. www.buckknives.com. Boker Knives, 303/462-0662. Knife Center of the Internet, www.knifecenter.com; 800/338-6799. Cold Steel Knives, 800/255-4716; www.coldsteel.com. Kyocera Ceramics, www.kyocera.com.

Militec-1 Metal Conditioner. 877/222-5512; www.militec-1.com.

Myerchin Knives. 800/531-4890; www.myerchin.com. Spyderco Knives, 800/525-7770; www.spyderco.com. Tuf-Cloth, Marine Tuf-Cloth, 800/546-8049; www.sentrysolutions.com.

Wichard Knives, West Marine, 800/262-8464; www.westmarine.com.