CONTENTS
SEPTEMBER/OCTOBER 2011

For the love of sailboats

Review boat
8 Aloha 8.5
A popular and hospitable cruiser from Canada
by Gregg Nestor

24 Ranger 26
A swift, sweet, and well-mannered all-rounder
by Richard Smith

Feature boat
14 A Mistral 33 rejuvenated
A Swedish classic is the retirement plan
he can live on
by Karen Larson

Boat comparison
18 The Mistral 33 shares numbers
… with two contemporary classic cruisers
by Ted Brewer

Speaking seriously

Sailboats 101
12 Measuring Boat Speed 101
Steps in the process of measuring progress
by Don Launer

Useful modifications
19 Zero-discharge solution
A cruising family installs the Air Head
by Connie McBride

Hulls and holes
28 How to refloat a boat
It takes fortune, fortitude, and a well-stocked pickup truck
by Jim Hildinger

Clever cleaning
29 Lessons in onboard laundering
A long-term cruising sailor comes clean
by Connie McBride

Rigging matters
44 Where there is no rigger
Replacing standing rigging, step by step
by Leslie Linckila and Philip DiNuovo

Ground tackle
50 Anchor kellet: take 1
Taking comfort in a little added weight
by David VanDenburgh

52 Anchor kellet: take 2
A homemade sentinel is cheap reassurance
by Fred Bagley
Contents

5 Things that go bump in the basement
Mystic’s mad scientist is at work again
by Karen Larson

6 Mail buoy
Hooligan Navy, still smiling, and overboard recovery

22 Sailing life
Mexico-bound in company
Rallying to the call of the Baja Ha-Ha
by Lewis Keizer

56 Cruising memories
A pocket cruiser full of dreams
A captain of fantasy puts to sea at last
by Roy Vestrich

60 Simple solutions
Banish holding-tank odor
A homemade filter keeps the cabin sweet
by Bob Tigar

62 Quick and easy
How to fold a nautical chart
A system that simplifies storage and use
by Steve Christensen

64 Instrument covers
Fabric scraps protect delicate displays
by Karen Larson

65 Replacing a lost halyard
A not-so-nutty way to send a messenger
by Carl Hunt

68 Good old classifieds

75 Product launchings
Odor-eating enzymes and a versatile pump

77 Reflections
Are you OK?
A sailboat sailing? . . . What’s the problem?
by Connie McBride

About the cover...
The North Channel’s popular Benjamin Islands attracted Karma, a Nor’Sea 27, and her skipper, Tom Scott. Bill Jacobs, who caught this photo, says, “Small boat cruising doesn’t get any better than this.”
Sometimes, being realistic about your boat’s limitations and embracing them with whole-hearted and simple adjustments can reap a host of benefits. We have a short list of modifications that have worked for us.

**Better dishpan plan**
The galley sink on our boat, a 30-foot Albin Ballad built in 1973, is an optimistic notion at best. Like the sink on many smallish production boats, its diminutive size limits its usefulness to dispensing drinking water, hand washing, brushing teeth, and serving as a general catch-all for loose items while under way.

Full-scale dishwashing for our family of four is out of the question given the limitations of the sink and the surrounding area. We’ve found that a plastic dishpan, half again as big as our sink, carried into the cockpit works much better. Dirty dishes accumulate there and eventually get washed right out in the open.

If we are tied up at a marina, we use water from a dockside faucet to conserve our limited supply. With luck, it has already been preheated by the sun, something that our onboard water supply never is.

When we are at anchor in relatively pristine surroundings, we wash with salt water and rinse sparingly with fresh water from a 5-gallon Coleman jug stored in our lazarette. Dirty water is discretely drained into the cockpit scuppers and chased with a couple of extra buckets to sluice things down, thus cleaning the boat and the dishes in the same operation.

Doing dishes in the cockpit may raise a few eyebrows on neighboring boats, but it gives us the elbow room and surface area to set up an efficient production line that is a stunning achievement in family cooperation in this day and age.

**Icebox drain diversion**
The dollhouse-sized sink in the galley, now relieved of any serious scullery duty, was nonetheless originally fitted with a saltwater spigot activated by a foot pump in addition to a similar freshwater spigot. We don’t have any need now for saltwater in the galley, so I reassigned the plumbing to make improvements on two other fronts.

Any day I can eliminate a hole in the bottom of my boat is a good day. I have removed the saltwater intake seacock and capped the through-hull fitting, reducing our operational through-hull fittings to two, a raw-water intake for the engine and a drain for the galley sink. That’s one less thing to worry about.

I connected our icebox drain, that originally ran into the bilge, to the old saltwater foot pump. We can now pump melted ice water into the sink from where it drains overboard. If I am feeling unusually frugal and conscientious, I rinse my hands with it in the process.

No longer is there anything normal about having water in my bilge. And no longer are there slimy gelatinous globules of liquid lettuce lurking beneath my floorboards. As one of my mentors in the field of marine survey is fond of saying, “Nothing good ever came from having water inside your boat.”

**Ice enhancement**
With our icebox runoff beneficially redirected, I turned my attention to making the most of the ice. We are always amazed at the variability of the price of a block...
of ice in the Salish Sea of Puget Sound. It can range from $2 to $5 a block from one port to the next. Our opinion of each port is tempered by this cold hard fact.

One solution that gives us a leg up at the beginning of each cruise has been to make customized ice blocks molded to perfectly fill the bottom of our icebox. I fashioned a rough plywood box that replicates the bottom 6 inches of our icebox, lined it with plastic, and placed it, filled to within an inch of the rim with water, in our chest freezer at home. The resulting block of ice is like permafrost. It routinely lasts five or six days, whereas the blocks from the store typically last two to three days at best. Extra insulation is also on my to-do list, but this article is about simple changes that spring from reorienting and adapting to existing features of the boat.

**Additional counter space**

We have about three square feet of countertop in the galley... as long as we’re not cooking. The stove resides under this precious surface, and when we want to use it, the countertop must be removed.

To preserve this work surface, I rigged up a way to hang it from the overhead grabrail with one end secured to the pilot berth bulkhead next to the galley. I cut three inconspicuous slots in the removable countertop and fastened a short rabbeted batten above the back of the starboard settee. With the addition of a nylon cord looped over the overhead grabrail and knotted at each end, the transition is complete.

While this is not quite as good as the original standard-height solid work surface, it restores most of what was otherwise lost. This modification took less than an hour to accomplish. There was minimal impact to the boat and practically no investment.

**Trash can storage mod**

Trash management is another area where the token galley often falls short. Everyone needs a trash can. It should be large, easy to access, and out of the way.

We have a sliding access panel in the aft galley bulkhead that communicates with the starboard cockpit locker. When we bought the boat, there was no evidence that this had been used as a trash

*continued on page 74*
My 37-year-old Cape Dory 28, *Nikki*, has been my home for five years. We swing on a mooring in Boca Ciega Bay near Gulfport on the midwestern coast of Florida. In 24 years (not consecutive) of living aboard boats, I’ve learned that I always have too much stuff and too little storage space, but I’ve always dealt with it with discipline and ingenuity.

The Cape Dory 28 was not intended to be a liveaboard nor ocean passagemaker; there was (and still is) very little market for such boats. *Nikki* was designed as a weekender for a couple with two kids . . . and that she did superbly. She also turned out to be an outstanding performer, winning West Florida’s Cruising Boat of the Year for 2010 in a 16-race series, including first overall in the prestigious Michelob Cup in the Tampa Bay area. But as a floating home, she was severely lacking in storage space and other amenities.

My work to improve *Nikki*’s galley began immediately after I acquired her. As a retired yacht designer, I was aware that a major failing in stock boats is the poor use, or no use, of upper portions of potential storage spaces. That’s much like having a home clothes closet without a top shelf. This was an obvious starting point. Another shortfall is the lack of use of oddly shaped spaces. As these would be extremely costly to improve on the production line, their use would result in pricing increases. *Nikki* suffered from both maladies.

**The port cavern**

Beneath the countertop stove, her port galley counter enclosed a huge storage space 20 inches wide by 32 inches long by 30 inches high. A very small door facing inboard made it impossible to reach fully into the compartment. By some careful surgery with a right-angle cutoff tool, I was able to almost double the size of the door. I had some matching material to fabricate a new door, and in less than a day I had full access to an otherwise largely useless cavern. I was actually able to crawl fully inside the space to sand and paint. The next job was to design and construct shelving that virtually doubled the utility of this precious asset.

**New stove, counters, and bins**

*Nikki*’s ancient, inefficient, and rusty original stove was an alcohol two-burner, countertop style. I replaced it with a new stainless-steel...
LPG double-burner stove purchased from an online RV accessories dealer for less than $200. This required reshaping the countertop cutout to receive the stove and installing the LPG tank and its plumbing.

While I was at it, I realized there was a lot of unused upper interior counter space. I designed and installed several countertop bins with finger-lift covers for cooking utensils and silverware. Since the builder had made no provision for galley drawers, the new bins more than made up for this lack of space. I based the new bins on boxes made of thin, but very strong, polycarbonate plastic (Lexan is the best-known brand) suspended from beneath the countertop, each with covers to match the Formica counter surface. To avoid complicated, space-sacrificing construction, I made the boxes by bending the polycarbonate with a special heat strip. These bins have vastly changed my life aboard.

I enjoy working with sheet plastics, so I also made several small shelves and brackets to occupy oddly shaped spaces that were left totally unused. One bracket accommodates the signal horn that is now conveniently accessible from the helm. Another bracket holds plastic and paper cups just over the galley sink. Above that is a small polycarbonate shelf to hold an alarm clock, racing timer, and another small timer that awakens me when I have fallen asleep while watching television. Another little shelf is home to my collection of sun and reading glasses. I replaced a gaudy and space-gobbling teak paper-towel holder with a compact and nicer-looking clear-acrylic one.

A major improvement came from an unexpected place: the interior molded-fiberglass enclosure for the backs of no-longer-used electronic sailing instruments. I patched the holes in the aft side of the cabin...
trunk, lined the interior of the space with mahogany, and installed a louvered teak door. The space is now a large and attractive food and condiment cabinet.

**Icebox**

*Nikki*’s original icebox was pathetically inefficient with a melt rate of almost one pound of cube ice per hour. In a grueling month of messy and complicated work, I added a lot of closed-cell polyurethane insulation (plank and two-part poured) and a new Formica-lined interior. This increased the box’s efficiency by a factor of five. In some places, the insulation thickness now measures 9 inches and the average thickness overall is 5 inches. I gained the first 2 inches by reducing the box interior by installing plank “space foam” that’s available at large home-improvement chain stores. It’s the same stuff used to insulate the International Space Station. Even though adding insulation resulted in a loss of icebox volume, it more than makes up for it with the need for less ice. I replaced the original solid-teak box lid (teak is not an insulator) with a highly efficient closed-cell space-foam lid, covered it with fiberglass, and finished the countertop to match. In addition, I installed a drain loop to prevent cold air from escaping through the icebox water drain.

*Nikki* now has a 12-volt condenser/evaporator-type refrigeration system capable of making ice and freezing food, something I only rarely do. I would not have considered installing a refrigerator without first improving the efficiency of the box. I also fitted the new icebox with polycarbonate divisions and a removable food tray.

During the icebox rebuilding project, I was able to fashion a very handy, shelved counter cabinet to store pans, coffee makers, and a Thermos jug. The cabinet is also home to the depth-sounder transducer.

**Retention fiddles**

Two relatively unused countertop spaces on each side of the galley became valuable and accessible simply by installing ¼-inch clear-polycarbonate fiddles to prevent dish detergent, hand soap, small storage containers, and my instant coffee from moving around when the boat is under way. I then added another longitudinal polycarb fiddle extension to a fixed teak fiddle to prevent my dishes from “jumping the fence” when we’re sailing to windward in heavy weather. This extension can be put in place and removed when not needed in only a second.

When *Nikki* is sailing to weather or dealing with big seas, I keep pots and pans in place on the stove by using small C-clamps as adjustable fiddles.

**Companionway steps**

The companionway steps provided more unused spaces. I hate hanging garbage bags in my boat, so I fabricated a teak-faced plywood trash can that fits perfectly under the lower step without interfering with foot room. Under the upper step, I installed a retractable teak bin as the storage space for the
plastic shopping bags I use for transporting garbage. Small strips of stick-on Velcro keep the bin and trash cans securely in place.

**Further storage**

When I bought *Nikki* she was like an uncut gem. Her previous owners had made little attempt to improve anything. There was no means for storing cups and mugs. I solved that by installing brass hooks over the port galley counter at a cost of about $2. I have added custom-made clear-acrylic glass holders to the cabin overhead for storing the French ruby glass tumblers and wine glasses I’ve been sailing with for more than three decades.

On the starboard side, over the icebox, I made and installed a clear polycarbonate drop shelf, where I keep breakfast cereal, cookies and munchies, rolls, and other bread products. It contains food that I access every day in more than 1½ cubic feet of otherwise unusable space.

I bought a bamboo cutting board. It doesn’t warp like the more common edge-glued hardwood boards. This cutting board adds work surface by fitting securely over the galley sink. It also serves as a cockpit jump seat that allows me to turn my legs and torso forward when I’m at the tiller, rather than twisting my body for long periods.

I fastened to the starboard inboard face of the galley a very small but tidy dishtowel rack, homemade of ¼-inch polycarbonate scrap. Any purchased towel rack would have been more than twice as large.

**Sink and cooking improvements**

Finally, I tapped into the freshwater piping and installed a countertop dish sprayer in addition to the galley water faucet. Then I installed a small tap for dispensing ice water produced in the refrigerated icebox. This eliminated the need to buy and store bottled water that took up valuable space in the icebox. It also ended the practice of keeping and refilling empty water bottles.

When laying down the new Formica on the galley countertops, I had to remove the original teak fiddles. Their replacements will be removable so I’ll gain some working surface when not under way.

*Nikki* has a small 1,000-watt microwave oven suspended under the port sidedeck in the saloon.

My 12 VDC to 120 VAC inverter is able to run the microwave and my large hand tools, but I nevertheless run the engine for the short periods when the microwave is in use to support the battery load. I also have a small crockpot that plugs into *Nikki’s* AC system and is powered by the inverter or dockside connection.

**A dollhouse**

When planning your own galley improvements, imagine that your boat is a child’s miniature house like those you’ve seen in backyards. You don’t necessarily have to eliminate interior features, but scaling down the size of furnishings is very practical.

Production-boat manufacturers were usually forced by the marketplace to deliver the bare necessities in order to keep their prices competitive. But you don’t have to leave it at that. Your own time and ingenuity will be well spent when improving your galley’s utility. Each improvement will add to the convenience and enjoyment of your days aboard.

Bruce Bingham began sailing before he could walk. As well as being a prolific sailing writer, illustrator, and photographer, he has designed more than 40 boats, the *Flicka* and the *Fantasia* among them. Although no longer in print, his book, *Sailor’s Sketchbook*, has been selling for 30 years. Bruce lives aboard his Cape Dory 28, *Nikki*, moored near Gulfport, Florida.