

Index

• A •

abandoning ship, 225–226
accessories
 boat hook, 67
 fenders, 67–68
 marine electronics, 68–70
 mooring lines, 65–66
 safety, 61–65
 tubes, 70–74
accidents. *See* emergencies
advisories, small craft, 198–199
aft, 20, 21
Alaska small craft advisories, 199
alcohol, 318
aligning (vehicle and trailer), 80–81
alongside docking. *See also* docking
 between boats, 144–145
 currents and, 145
 illustrated, 141
 selecting, 144
 tying up with, 148
aluminum paddles, 65
aluminum propellers. *See also* propellers
 benefits/drawbacks, 273–274
 repairing, 277–278
American Boat and Yacht Council (ABYC)
 wiring standard, 279, 280–281
anchor launch strategy, 107
anchor lock, 20, 21
anchored boats
 approaching for rafting up, 149–150
 drift, 155
 GPS position, 155
 swing, 153
anchors
 chain, 152
 checking, 212
 defined, 152
 depth, 154–155
 flake, 154
 grapnel, 154

 lowering, 155
 parts of, 152–153
 plough, 153
 pulling before starting engine, 126
 rode, 152
 rode-to-depth ratio, 155
 scope, 152
 setting, 154–155
 spare, 64, 228
 stowing, 156
 stuck, 156
 styles, 153–154
 weighing, 156
antennas
 cost, 185
 external, 184
 fixed VHF radios, 184–185
 GPS, 191
 handheld VHF radio, 183
 height, 184
 mounting bracket, 185
 mounting location, 184
anti-fouling paint, 294
anti-slip transmission, 117

• B •

backing up (trailers), 83–84
bad weather. *See* weather
ball (hitch), 78, 81, 89
ball mount, 78
Bass Anglers Sportsman Society (BASS), 321
bass boats, 13, 23–24
Bass Club Digest, 321
bass clubs, 320–321
batteries
 charge level, checking, 97–98
 charging, 248–252
 connections, 281–282
 deep-cycle, 248
 jumping, 130–131
 in long-term storage, 261

- batteries (*continued*)
 - maintaining, 248–252
 - positive terminal, 282
 - replacing, 252
 - setups, 281
 - switch, 97
 - 12-volt systems, 281–282
- battery chargers
 - built-in, 250
 - dockside connection, 293
 - requirements, 249
 - solar, 249–250
 - types, 249
 - using, 251–252
 - Xtreme Charge, 261
- battery isolator switch, 251
- battery jumper, 130–131
- battery packs, 250
- bay boats, 13
- beam-to docking. *See* alongside docking
- Beaufort scale, 203
- belts
 - change indications, 272
 - functions, 271
 - pre-purchase inspection, 347
 - tension, testing, 271–272
- berths, 13
- bilge
 - defined, 266
 - fan, 149
 - in long-term storage, 263
 - pump, 266
- bilge plug
 - launching and, 267
 - putting in, 96
 - removing, 118, 308
- bill of sale, 53
- black streak remover, 255
- blades, propeller, 273
- boarding ladder, 20, 21
- boat brush, 253
- boat covers. *See* mooring covers
- boat handler. *See also* launching
 - boat-driving capability, 101–102
 - defined, 101
- boat hooks, 67, 340–341
- boat shows, 59
- boat wax, 254
- boat-brand clubs, 322–323
- boater characteristics, 9–10
- boating
 - activities, matching to boat type, 41–42
 - commitment, 9
 - costs, weighing, 10–11
 - licenses, 13, 14
 - training, 13–14
- boats
 - buying, 14–15
 - cruising, 13, 31–32
 - deck, 12
 - fishing, 13, 22–27
 - hitching together, 150
 - parts of, 20–22
 - pontoon, 12, 30
 - runabouts, 27–30
 - specifications, 2
 - types of, 12–13
 - watersports, 12, 29
- boat-washing soap, 255
- bolts, tightening, 267–268
- bow
 - defined, 20
 - illustrated, 21
 - navigation light, 20, 21
 - in strong seas, 208
 - winch, 96, 116
- bow strap
 - at solo launch, 106
 - checking, 89
 - at crew launch, 102
 - defined, 78
- bow-in docking. *See also* docking
 - illustrated, 141
 - process, 143–144
 - selecting, 143
- bowline knots, tying, 335–336
- bowriders
 - benefits/drawbacks, 28
 - characteristics, 27–28
 - defined, 12
 - popularity, 27
- brackets/braces, tightening/repairing, 270
- brake cable, 79, 81
- brakes
 - tow vehicle, 88
 - trailer, 89, 350

- breakfast, 316
 - bridge lights, 172
 - bronze propellers, 274, 279
 - buckets, 253
 - budgets
 - boat storage costs, 44–45
 - financing, 48–49
 - fuel, 46
 - insurance, 47–48
 - maintenance, 46–47
 - trailer purchase, 45–46
 - buoys. *See also* navigation markers
 - green “can,” 171, 172
 - nautical charts, 176
 - red and green, 170
 - red “nun” buoys, 170–171, 172
 - white and red/orange, 171
 - buying
 - basics, 50–53
 - at boat shows, 59
 - boating activities and, 41–42
 - budgets, 44–50
 - with cash, 48
 - choices, narrowing, 38–44
 - at dealers, 53, 58–59
 - financing and, 48–49
 - horsepower selection, 43–44
 - from individuals, 57–58
 - new boats, 14–15
 - paperwork, 52–53
 - pre-owned boats, 15
 - pre-owned versus new boat decision, 50–56
 - price determination, 51–52
 - quality construction, 50–51
 - sea trials, 15
 - water type/location and, 38–41
 - Web site, 56–57
- C ●
- captain’s license, 60
 - cardinal directions, 179
 - cellphones, 207, 215
 - center console offshore boats, 26
 - center rollers (trailer), 90, 91
 - Central region small craft advisories, 199
 - chain, anchor, 152
 - charts
 - contents, 176
 - as emergency gear, 216
 - fishing, 174, 177–178
 - GPS, 191
 - nautical, 174, 175–177
 - obsolescence, 175
 - smaller lake, 174
 - sources, 178
 - chilling items, 313–314
 - chines, 20, 21
 - chop, at trailer approach, 111
 - circuit breakers, 282–283
 - cleaning. *See also* maintenance
 - green products, 255
 - onboard equipment, 340
 - soaps, 254–256
 - tools, 253–254
 - waxes, 254–256
 - cleats, lashing lines to, 146–147
 - clubs
 - boat-brand, 322–323
 - fishing, 319–322
 - fractional ownership, 325–328
 - U.S. Coast Guard Auxiliary, 324–325
 - watersports, 323–324
 - Coastal Conservation Association (CCA), 322
 - cockpit, 20, 21
 - coffee makers, 311
 - collision, vessel, 220
 - combo skis, 72–73
 - communication
 - between boats, 185–186
 - emergency message, 186
 - compass
 - accuracy, checking, 180
 - card, 179
 - cardinal directions, 179
 - choosing, 182
 - degrees, 179
 - as emergency gear, 216
 - functioning of, 179
 - illustrated, 180
 - navigation, 178–182
 - need for, 179
 - using, 181

- conventions, this book, 2–3
 - coolers, 310–311
 - costs
 - antennas, 185
 - boat storage, 44–45
 - boating, 11–12
 - depth finder, 69
 - dry storage, 302
 - financing, 48–49
 - fuel, 46
 - GPS, 69
 - insurance, 47
 - landlubber family activities, 11
 - maintenance, 46–47
 - skis, 73
 - slalom ski, 73
 - trailer purchase, 45–46
 - tube, 70
 - VHF radio, 70, 183
 - wakeboard, 71
 - wet slip storage, 297–298
 - course
 - changing, 34
 - changing, in stormy seas, 209–210
 - maintaining, 133–134
 - reciprocal, 181
 - courtesy dock
 - for crew, 104
 - dry stack storage, 301
 - at solo launch, 106
 - at loading time, 109
 - offloading passengers at, 109–110
 - releasing boat from, 110
 - CPR training, 60
 - crack the whip tube maneuver, 72
 - crew
 - at boat loading, 116
 - dock fueling and, 124, 125
 - at launch, 104–105
 - limits, knowing, 331–332
 - loading, time for, 98, 104
 - offloading, 109–110
 - preparation for docking/disembarking, 332–333
 - securing, 110
 - storm preparation, 206
 - crew boat launch. *See also* launching
 - boat handler, 101–102
 - guests/kids, 204–205
 - with no courtesy dock, 105
 - vehicle driver, 103–104
 - crosscurrents, on ramp, 100–101
 - crossing paths rule, 161–162
 - cruisers
 - defined, 13
 - express, 31
 - horsepower guidelines, 44
 - houseboat, 32
 - pocket, 31
 - sedan, 31
 - cuddy cabins, 28
 - currents
 - alongside docking and, 145
 - stern-in docking and, 142
 - at trailer approach, 111, 113
- D •
- damage assessment, 227
 - day markers, 169
 - deadrise angle, 20, 21
 - dealers
 - buying from, 58–59
 - new boat pricing, 55–56
 - NMMA seal, 58, 59
 - deck
 - defined, 20
 - illustrated, 21
 - pre-purchase inspection, 349
 - deck boats
 - characteristics, 28–29
 - defined, 12
 - performance, 28
 - deep ramps, 100
 - deep-cycle batteries, 248
 - depth finders. *See also* electronics
 - choosing, 187–188
 - costs, 69, 186
 - defined, 68
 - digital transmitters, 188
 - functioning, 187
 - screens, 188
 - shallow water alarm, 188
 - sonar unit, 187
 - spotting fish with, 189
 - time lag, 189
 - transducers, 187, 188
 - using, 188–189

- diameter, propeller, 272, 273
 - dinner, 317
 - displacement hoists, 296–297
 - displacement hulls, 132
 - distress signals, 224–225
 - docking
 - alongside (parallel), 144–145
 - approach to, 17, 140
 - bow-in (forward), 143–144
 - choices, 140
 - crew preparation for, 332–333
 - fear of, 140
 - speed, 140
 - stern-in (backward), 140–143
 - undocking and, 148–149
 - docklines. *See* lines
 - dockminiums, 304–305
 - docks
 - floating, 293
 - fueling at, 124–125
 - tying to, 145–148
 - documenting boats, 53
 - draft, 20, 21, 36
 - drift, while anchored, 155
 - drinks. *See also* food
 - alcoholic, 318
 - chilling, 313
 - coffee/tea, 315
 - single-serving mixes, 314
 - sodas, 314
 - sports drinks, 314
 - water, 313, 314
 - drive system alignment, checking, 349
 - drive trim, 346
 - driving
 - acceleration, 133
 - changing course, 134
 - cruise speed, 133
 - docking, 17, 140–149
 - engine shutdown and, 137
 - fueling and, 121–125
 - high speeds, 134
 - maintaining course, 133–134
 - pitch, 135
 - propeller, trimming, 135–136
 - response, 134
 - ride, adjusting, 134–137
 - roll, 135
 - slow speeds, 134
 - speed, 17
 - starting engine and, 126–131
 - taking off, 131–133
 - trim tabs, 136–137
 - yaw, 135
 - dry stack storage. *See also* storage
 - advantages/disadvantages, 302–304
 - boat preparation for, 301–302
 - characteristics, 300–301
 - costs, 302
 - courtesy docks, 301
 - covered/uncovered, 300
 - defined, 45, 299
 - illustrated, 299
 - launch limits, 300, 302
- *E* ●
- ear muffs, 259
 - Eastern region small craft advisories, 199
 - electric hoists, 297
 - electrical problems
 - circuit breakers, 282–283
 - fuses, 282–283
 - 110-volt power, 283
 - repairing, 279–285
 - stereo example, 284–285
 - tracking down, 283–285
 - 12-volt battery system, 281–282
 - wire color code and, 280–281
 - wiring tools, 285
 - electronic control module (ECM), 247
 - electronics
 - depth finder, 68–69, 186–189
 - GPS, 69, 189–192
 - radar, 192–193
 - security, 307
 - VHF radio, 70, 183–186
 - emergencies
 - abandoning ship, 225–226
 - collision, 220
 - communication gear for, 214–215
 - equipment failure, 217
 - equipment for, 211–217
 - fire, 218–219
 - flares, 224
 - float plans, 216–217

emergencies (*continued*)

- grounding, 219–220
- help, calling for, 186, 221–225
- knowing, 207
- mayday call, 222–223
- navigation tools for, 215–216
- pan-pan call, 223–224
- personal accident/injury, 221
- task assignment during, 217
- temporary repairs, 226–227
- types of, 217–221
- wait or go to shore decision, 225
- waving for attention, 224
- weather, 221
- engine compartments
 - latches, 234
 - see-through fire ports, 218
- engine management module (EMM), 247
- engines
 - checking before purchase, 15
 - choking, 128–129
 - cylinders, fogging, 259
 - ethanol and, 245–246
 - flushing with fresh water, 118–119
 - four-stroke, 123
 - freezing up prevention, 260
 - gauges, 247–248, 347–348
 - horsepower selection, 43–44
 - inboard, 32–33
 - jet propulsion, 35–36
 - jump-starting, 130–131
 - manifolds, 260
 - oil, 122–123
 - outboard, 33–34
 - pod drive, 35
 - shutting down, 137
 - starting, 126–131
 - sterndrive, 34–35
 - two-stroke, 123
 - types of, 32–36
 - winterizing, 18
- equipment failure
 - emergencies, 217
 - minor, consequences, 228
- ethanol, 245–246
- express cruisers, 31
- eye bolts, 79, 89

● **F** ●

- fenders
 - attaching, 96–97
 - defined, 67
 - hanging, 148
 - lines, adjusting, 148
 - materials, 67
 - in rafting up, 150, 151
 - specs, 68
- financing, 49
- fire emergencies, 218–219
- fire extinguishers
 - checking, 212
 - classes, 64
 - maintenance, 64
 - standards, 64
- first-aid kit, 213–214
- first-aid training, 60
- fish and ski boats, 13, 24
- fishing boats
 - bass, 13, 23–24
 - bay, 23, 25–26
 - center console offshore, 26
 - choosing, 22–27
 - fish and ski, 23, 24
 - flats, 13, 25
 - freshwater, 23–24
 - horsepower guidelines, 43–44
 - saltwater, 25–27
 - types of, 13
 - walkaround, 26–27
 - walleye, 13, 24
- fishing charts. *See also* charts
 - defined, 174
 - USGS maps, 177–178
 - using, 177–178
- fishing clubs. *See also* clubs
 - bass, 320–321
 - benefits, 319
 - Coastal Conservation Association (CCA), 322
 - muskie, 322
 - offerings, 320
 - walleye, 321
- fit and finish, 50–51
- flares, 224

- flats boats, 13, 25
 - float plans, 216
 - floating docks, 293
 - floating hoists, 296
 - fluids
 - checking, 18
 - hydraulic engine trim, 245, 345
 - power steering, 346
 - transmission, 243–244
 - trim tab, 346
 - fluke anchor, 153, 154
 - FLW Outdoors, 321
 - fog
 - generation conditions, 204
 - lights and, 205
 - navigating through, 203–205
 - radar and, 205
 - rules for boaters, 204–205
 - sound signals, 205
 - speed rules, 204–205
 - fogging cylinders, 259
 - following seas, 209
 - food. *See also* drinks
 - breakfast, 316
 - dinner, 317
 - lunch, 316–317
 - meal planning, 317–318
 - snacks, 315
 - forward, 21, 22
 - four-point connection, 145, 146–147
 - four-stroke engines, 123
 - four-wheel drive, 117
 - fractional ownership clubs
 - advantages/disadvantages, 327–328
 - boating expenses, 327
 - defined, 325
 - finding, 326
 - initiation fees, 326
 - ownership fees, 326
 - recurring fees, 326–327
 - freeboard
 - defined, 22
 - illustrated, 21
 - in strong seas, 208
 - freezer packs, 314
 - freshwater
 - access, 293
 - systems, 262
 - tanks, 293
 - freshwater fishing boats, 23–24
 - freshwater usage, in boat selection, 41
 - fuel
 - burn rate, 46
 - costs, 46
 - gauge, 347
 - stabilizing, 258–259
 - fueling
 - considerations, 122
 - courtesy, 124
 - at dock, 124–125
 - on land, 123–124
 - oil needs and, 122–123
 - patience, 125
 - safety equipment, 125
 - fuses, 282–283, 341
- G ●
- galley. *See also* drinks; food
 - defined, 13, 309
 - fridges, 310
 - heating appliances, 311–312
 - tools and utensils, 312
 - galvanic corrosion, 295
 - gauges, engine, 247–248, 347–348
 - gear-case lubricant
 - changing, 241–243
 - draining, 242
 - pre-purchase inspection, 345
 - replacement process, 242
 - in sterndrives, 243
 - tools and supplies, 241
 - give-way vessels
 - in crossing paths rule, 162
 - defined, 160
 - in head-on meeting rule, 165
 - in overtaking vessel rule, 164
 - Global Positioning Systems (GPS)
 - anchor drift, 155
 - antennas, 191
 - chart plotters, 190
 - charts, 191
 - choosing, 190–191
 - combination units, 191
 - cost, 69
 - defined, 69

Global Positioning Systems (GPS) (*continued*)
 as emergency gear, 215–216
 fixed mount units, 191
 functioning of, 189–190
 GOTO function, 191
 Man Over Board (MOB) function, 192
 position calculation, 190
 receivers, 190
 satellites, 190
 screens, 190–191
 speed display, 192
 trails, 190, 192
 using, 189–192
 waypoints, 192
 weather information, 197–198
 GOTO function, GPS, 191
 GPS. *See* Global Positioning Systems
 GPS Snitch, 307
 grapnel anchor, 153, 154
 Great Lakes, 39
 green boat-care products, 255
 green “can” buoys, 171, 172
 green lights
 boat, 166, 168
 dry land, 172
 green, odd-numbered squares, 169, 170
 grills, 311–312
 grounding, 219–220
 Guam and Northern Mariana Islands small
 craft advisories, 199
 guests/kids at launch, 104–105
 guide-ons (trailer), 90, 91
 gunwale, 21, 22, 311

• H •

hail, 203
 half-hitch knots, 336–338
 handheld VHF radios, 183, 214–215
 harbormaster, 207, 293
 hardware, tightening/replacing, 270–271
 Hawaii and Samoa small craft advisories, 199
 hazards. *See* emergencies
 head, 13
 head seas, 208
 head-on meeting rule, 165
 heating appliances, 311–312

helm, 21, 22, 334
 helm station, 21, 22, 271
 hinges, tightening/repairing, 270
 hitch locking lever, 79, 81
 hitching
 alignment, 80–81
 defined, 78
 parts, 78
 process, 81
 hoists
 displacement, 296–297
 electric, 297
 floating, 296
 salty bunks on, 297
 wet slip, 296–297
 hooks. *See* anchors
 horn, backup, 341
 horsepower. *See also* engines
 choosing in boat purchase, 43–44
 cruisers, 44
 fishing boats, 43–44
 fuel economy and, 43
 pontoons, 44
 runabouts, 44
 hose fittings, checking, 18, 268–269
 hot-dogging, resisting temptation, 333–334
 houseboats, 32
 hulls
 displacement, 132
 planing, 132
 pre-purchase inspection, 349
 problems, 349
 hurricanes, 201
 hydraulic engine trim fluid, 245, 345

• I •

ice, 313–314
 icons, this book, 6
 ignition switch, tightening, 271
 inboard engines. *See also* engines
 boats using, 33
 defined, 32
 kill switch connector, 127
 oil, changing, 237–239
 placement illustration, 33
 props, removing, 277

- transmission fluid, checking/changing, 243–244
 - individuals, buying from, 57–58
 - In-Fisherman Professional Walleye Trail, 321
 - inflatable boats, 29–30
 - inshore coastal waters, 39
 - inspections
 - with marine surveyors, 53, 54–55
 - pre-owned boats, 54, 344–350
 - insurance
 - checking, 217
 - costs, 47
 - guidelines, 47–48
 - lining up, 15
 - online, 48
 - Intracoastal Waterway (ICW)
 - defined, 175
 - markers, 169
 - nautical charts, 176
- **J** •
- jet boats, 36
 - jet propulsion power
 - defined, 35
 - functioning, 36
 - illustrated, 36
 - oil, changing, 240
- **K** •
- keel, 21, 22
 - kill switch lanyard, 127–128
 - knives, 342
 - knots
 - bowline, 335–336
 - half-hitch, 336–338
- **L** •
- lakes, 39
 - latches, tightening/repairing, 270
 - launching
 - alone, 105–107
 - anchor strategy, 107
 - boat handler, 101–102
 - with crew, 101–105
 - crew loading at, 98
 - crosscurrent on ramp, 100–101
 - deep ramp, 100
 - etiquette, 95
 - guests/kids at, 104–105
 - juggling act strategy, 108
 - lining up for, 98
 - potential mistakes, 16
 - process, 17
 - shallow ramp, 99
 - staging for, 95–98
 - vehicle driver, 103–104
 - wheel chocks during, 98
 - leaks
 - fixing, 266–267
 - plug materials, 342
 - plugging, 227
 - licenses, boating, 13, 14
 - life jackets. *See also* safety gear
 - defined, 62
 - in emergencies, 225
 - importance, 339
 - state laws and, 62
 - types, 62
 - watersports, 74
 - life preservers, 63, 212
 - lighted markers, 169
 - lightning, 200–221, 202–203
 - lights (boat)
 - fog and, 205
 - green, 166, 168
 - interpreting, 168
 - pre-purchase inspection, 348
 - reading, 166–168
 - red, 166, 168
 - repairing, 271
 - turning on, 167
 - visibility, 166
 - white, 166–167, 168
 - yellow, 167
 - lights (trailer)
 - failure, all, 85
 - failure, single, 85–86
 - pre-purchase inspection, 350
 - testing, 81, 86
 - wire color coding, 85
 - wiring, 84–85

- lights, bridge, 172
 - lights, navigation, 172
 - lines. *See also* mooring lines
 - defined, 145
 - down-current, 149
 - downwind, 149
 - fender, adjusting, 148
 - lashing to cleats, 146–147
 - proper, using, 334
 - tangled, avoiding, 335
 - tying, 147, 148
 - up-current, 149
 - upwind, 149
 - livewells, 23
 - loading
 - crew, 98
 - gear, 94
 - last-minute gear, 97
 - loading boats
 - bow winch alone, 116
 - challenge, 16
 - courtesy dock and, 109
 - deep ramp, 100
 - final approach, 114
 - idling boaters and, 108
 - offloading crew and, 109–110
 - power, 115
 - at ramp, 109
 - road-ready boat/trailer, 117–119
 - shallow ramp, 99
 - situating on trailer, 114
 - staging area and, 109, 118
 - traffic, 107
 - trailer approach, 111–113
 - trailer contact, 113–116
 - winch with partner, 116
 - loading line, 108–109
 - local channel markers, 169–170, 176
 - locker drains, 262
 - locking pin, 79, 81
 - long-term storage. *See* storage (long-term)
 - lookout rule, 161
 - loss of horizon, 132
 - lubber line, 179
 - lubricating
 - gear case, 241–243
 - wheel bearings, 87–88
 - wiring connections, 85
 - lunch, 316–317
- M •
- magnetic north, 182
 - maintenance
 - battery, 248–252
 - cleaning, 253–256
 - costs, budgeting, 46–47
 - ethanol effects, 245–246
 - fire extinguisher, 64
 - fittings, checking, 18
 - fluids, 18, 243–246
 - gauges and, 247–248
 - gear-case lubricant, 241–243
 - hydraulic engine trim fluid, 245
 - oil, 232–240
 - power-steering fluid, 244
 - tasks, 18
 - transmission fluid, 243–244
 - winterization, 18
 - wiring tools, 285
 - Man Over Board (MOB) function, GPS, 192
 - maneuvers
 - crack the whip, 72
 - warning before, 332
 - yelling and, 333
 - marina operators, 207, 293
 - marinas
 - amenities, 303
 - mechanics, 304
 - premium amenities, 305
 - marine forecasts
 - bad, 200–201
 - getting, 195–198
 - GPS, 197–198
 - radio, 197
 - Web, 196
 - marine surveyors, 53, 54–55
 - markers. *See* navigation markers
 - mayday calls, 222–223
 - meal planning, 317–318
 - mechanical checks (pre-owned boat purchase)
 - deck and hull, 349
 - drive system alignment, 349
 - electrical devices, 348
 - engine belt, 347
 - engine devices, 346
 - engine fluids, 344–346
 - trailer, 350

microfiber towels, 254
midships, 21, 22
mooring covers
 characteristics, 263
 covering, 264
 fit, 290
 importance, 263
 installation, 291
 removing in hurricanes, 201
 UV protection, 290
 waterproofing, 290
mooring lines
 attaching, 96–97
 choosing, 65–66
 diameter, 66
 length, 66
 materials, 65–66
 in rafting up, 150
 specs, 66
muskie clubs, 322

• N •

National Association of State Boating Laws
 Administrators (NASBLA), 60
National Marine Manufacturers Association
 (NMMA)
 boat certification, 219
 fire extinguishers, 64
 wiring, 279
National Oceanic and Atmospheric
 Administration (NOAA), 174
National Weather Service site, 196
nautical charts. *See also* charts
 bridge/power line heights, 177
 buoys, 176
 cardinal directions, 176
 contents, 176–177
 defined, 174
 depth soundings, 176
 ICW, 176
 local channel markers, 176
 obstructions, 177
 using, 175–177
navigation
 bad weather, 195–210
 charts, 174–178
 compass, 178–182
 electronics, 173

 fog, 203–205
 GPS, 189–192
 lights, 172
 tools, 215–216
navigation markers
 buoys, 170–172
 day, 169
 intersecting channel, 170
 Intracoastal Waterway (ICW), 169
 lighted, 169
 local channels, 169–170, 176
 understanding, 168–172
negative wires, 284
new boats (buying). *See also* buying
 buying basics, 50–53
 highlights, 14–15
 lemons, 55
 looking at, 55–56
 pricing policies, 55–56
nighttime boating, 165
non-skid deck cleaner, 255
north
 compass and, 179
 magnetic, 182
 true, 182

• O •

offshore coastal waters, 39
offshore fishing boats, 13, 26
oil
 brand, 233
 checking, 234, 238
 dipstick, 234, 235
 FC-W, 233
 four-stroke engine, 123, 237–239
 jet-drive engines, 240
 premium versus bargain, 240
 pre-purchase inspection, 344
 two-stroke engine, 122, 236
 weight, 233
oil changes
 inboard/sterndrive engines, 237–239
 jet-drive engine, 240
 for long-term storage, 259
 money savings, 232
 process, 234–235
 tools and supplies, 233–234
 two-stroke engines, 236

- oil filters
 - automobile engine, 234
 - marine engine, 234
 - unscrewing, 235, 239
 - wrench, 233
 - oil-pressure gauge, 247, 347–348
 - 110-volt power, 283
 - organization, this book, 4–5
 - outboard power. *See also* engines
 - automatic draining, 260
 - boats using, 34
 - defined, 33
 - oil, changing, 236
 - placement illustration, 33
 - priming, 128
 - props, removing, 275–277
 - overtaking vessel rule. *See also* rules
 - application, 163
 - exceptions, 163
 - give-way vessel, 164
 - horn and whistle signals, 163
 - illustrated, 164
 - international waters, 163
 - special requirements, 163
 - stand-on vessel, 164
 - owner's manuals, 47
- p •**
- paddles, 64–65
 - paint, anti-fouling, 294
 - painting boat bottom, 294–295
 - pan-pan calls, 223–224
 - paperwork, 52–53
 - personal accidents/injuries, 221
 - pitch, 135
 - pitch, propeller, 272, 273
 - planing hulls, 132
 - planning
 - meal, 317–318
 - ramp, 94
 - pliers, 341
 - plough anchor, 153
 - plumbing
 - bilge, 263
 - draining before storage, 261
 - freeze-proofing, 261–263
 - freshwater systems, 262
 - locker drains, 262
 - pocket cruisers, 31
 - pod drives, 35
 - pontoon boats
 - characteristics, 30
 - defined, 12
 - horsepower guidelines, 44
 - popularity, 30
 - port, 21, 22
 - power loading, 115
 - power-steering fluid, 244, 246
 - pre-owned boats (buying). *See also* buying
 - buying basics, 50–53
 - considering, 54–55
 - highlights, 15
 - inspecting, 54
 - marine surveyor inspection, 53, 54–55
 - mechanical checks, 343–350
 - new boat versus, 50–56
 - prequalification, financing, 48
 - prices
 - asking, 52
 - fair, determining, 51–52
 - guidelines, 52
 - new boat, 55–56
 - propellers
 - aluminum, 273–274, 277–278
 - blades, 273
 - broken, 227
 - bronze, 274, 279
 - clearance, 156
 - damage determination, 274–275
 - diameter, 272, 273
 - dimensions, 272–273
 - inboard, removing, 277
 - materials, 273–274
 - outboard/sterndrive, removing, 275–277
 - pitch, 272, 273
 - removing, 275–277
 - repairing, 277–279
 - spins a hub, 275
 - stainless-steel, 274, 278
 - trimmed up, 132
 - trimming, 135–136
 - in water at engine start, 126
 - pulling boat-loaded trailers, 82

• Q •

quartering seas, 209

• R •

rackominiums, 304, 305

radar

benefits, 193

fog and, 205

functioning of, 192–193

helm display, 193

mounting, 193

power, 193

radios. *See* VHF radios

rafting up

approach, 149–150

break-up, 151

defined, 149

fenders, 151

hitching boats, 150

mooring lines, 150

ramps

boats loading up at, 109

crosscurrents on, 100–101

deep, 100

downward slope, 98

hogs at, 95

lining up for loading, 110

preparation for, 94

roughing up, 117

shallow, 99

sizing up, 98–101

slippery, 116–117

staging area, 95

reader assumptions, this book, 3–4

reciprocal course, 181

recommissioning

defined, 258

preparation, 264

red and green buoys, 170, 171

red, even-numbered triangles, 169, 170

red lights

boat, 166, 168

safe passage boundaries, 172

red “nun” buoys, 170–171, 172

refrigerators, 310

regional advisories, 199

registration, 53

rendezvous, 323

repairs. *See also* maintenance

belts, 271–272

bolts/screws, 267–268

downtime, 265

electrical, 279–285

hardware, 269–271

hose clamps, 268–269

leaks, 266–267

major, need for, 265

minor, 265–285

propeller, 272–279

temporary, 226–227

through-hull fittings, 267, 269

retractable transom straps (trailer), 90, 91

right of way, 160–161

rigid inflatable boats (RIBs), 30

rivers, 39

rode. *See also* anchors

checking, 212

defined, 152

in setting anchor, 155

rode-to-depth ratio, 155

roll, 135

rope, extra, 340

rules, boating

crossing paths, 161–162

enforcement, 159

in fault/liability determination, 160

foggy, 204–205

golden rule, 160–161

light turn-on, 167

lookout, 161

meeting head-on rule, 165

navigation markers, 168–172

no right of way, 160–161

overtaking vessel, 162–164

sharing the water, 159–165

speed, 165

states, 2, 160

runabouts

bowriders, 27–28

cuddy cabins, 28

deck boats, 28–29

defined, 27

horsepower guidelines, 44

inflatable, 29–30

● S ●

- safety
 - courses, 60
 - fueling, 125
 - starting engine, 126–127
 - stops, 119
 - undocking, 149
- safety chains, 79, 81, 118
- safety gear
 - checking, 17, 212–213
 - fire extinguishers, 64, 212
 - first-aid kit, 213–214
 - life jackets, 62, 74, 225, 339
 - life preservers, 63, 212
 - orientation, 61–62
 - paddles, 64–65
 - spare anchor, 64
- saltwater boating, 118–119
- saltwater fishing boats, 25–27
- saltwater usage, in boat selection, 40
- scope, 153
- screwdriver, 341
- screws, tightening/replacing, 267–268
- sea trials, 15
- seas
 - adjusting speed to, 207
 - following, 209
 - gauging, 202
 - head, 208
 - quartering, 209
 - stormy, 209–210
 - strong, affecting parts of boat, 208
- security
 - marina, 303
 - trailer, 307–308
- sedan cruisers, 31
- setting anchor, 154–155
- shallow ramps, 99
- shallow waters, 39
- shoaling, 175
- shorepower, 293
- shoving off, 148–149
- shutting down engines, 137
- silicone squeegee, 254
- SIRIUS Satellite Radio, 197
- six-pack license, 60
- skis
 - combo set, 72–73
 - slalom, 73
- slippery ramps, 116–117
- slips. *See* wet slips
- small craft advisories
 - defined, 198
 - heeding, 198
 - regional, 199
- smart instruments, 247
- snacks, 315
- solar chargers, 249
- sole, 21, 22
- solo launches. *See also* launching
 - anchor strategy, 107
 - juggling act strategy, 108
 - with no courtesy dock, 106–107
 - steps, 106
 - swimmer's, 105
- solo loading, 116
- sonar units. *See* depth finders
- Southern region small craft advisories, 199
- spare anchors, 64, 228
- specifications, boat, 2
- speed
 - cruise, 133
 - docking approach, 140
 - GPS display, 192
 - high, 134
 - nighttime boating, 165
 - rule, 165
 - slow, 134
 - at trailer approach, 112
- speedometer, 247, 347
- spotters, 80, 81
- spray grease, 342
- spray wash-and-wax, 255
- staging area
 - after loading, 118
 - before loading, 109
 - defined, 95
- staging for launch. *See also* launching
 - battery charge check, 97–98
 - battery switch, 97
 - bilge plug, 96
 - bow winch, 96

- fenders and docklines, 96–97
 - last-minute gear loading, 97
 - transom straps, 96
 - stainless-steel propellers. *See also* propellers
 - characteristics, 274
 - performance, 274
 - repairing, 278
 - stand-on vessels
 - in crossing paths rule, 162
 - defined, 160
 - in head-on meeting rule, 165
 - in overtaking vessel rule, 164
 - starboard, 21, 22
 - starting engines
 - anchor and, 126
 - choking and pumping, 128
 - jumping and, 130–131
 - kill switch, 127–128
 - priming fuel lines, 128
 - propeller in water, 126
 - safety, 126–127
 - troubleshooting, 129–131
 - state boating exam, 60
 - stem, 21, 22
 - stern
 - defined, 22
 - illustrated, 21
 - in strong seas, 208
 - sterndrive power
 - boats using, 35
 - defined, 34
 - hydraulic engine trim fluid, 245
 - kill switch connector, 127
 - oil, changing, 237–239
 - placement illustration, 34
 - power-steering fluid, 244
 - props, removing, 275–277
 - upper gear cases in, 243
 - stern-in docking. *See also* docking
 - illustrated, 141
 - process, 142–143
 - reasons for, 140–141
 - selecting, 142–143
 - storage
 - costs, 44–45
 - dry stack, 299–304
 - mooring covers and, 290–291
 - options, 45
 - purchase, 304–305
 - setting up, 289–308
 - trailing, 305–308
 - storage (long-term)
 - battery, 261
 - defined, 258
 - engine freeze-up prevention, 260
 - fogging cylinders, 259
 - freeze-proofing plumbing, 261–263
 - mooring covers, 263–264
 - oil changing for, 259
 - preparing for, 257–264
 - stabilizing fuel, 258–259
 - storms. *See also* weather
 - boat security/relocation, 201
 - bow in, 208
 - crew preparation, 206
 - freeboard in, 208
 - handling boats in, 205–210
 - riding out, 206–207
 - stern in, 208
 - stormy seas
 - affects on boat parts, 208
 - changing course in, 209–210
 - following, 209
 - head, 208
 - quartering, 209
 - stoves, 311
 - stowable paddles, 65
 - sun protection, 342
 - swim platform, 21, 22
 - swing, 153
 - synthetic chamois, 254
- T ●
- tachometer, 247, 347
 - temperature gauge, 248
 - temporary repairs, 226–227
 - throttle
 - engaging, 133
 - lever functions, 131
 - pumping, 128–129
 - through-hull fittings, 18, 267, 269
 - throwable life preservers, 63

- thunderstorms. *See also* weather
 - formation, 203
 - power of, 202–203
 - speed, 206
- tires (trailer), 88, 350
- title, 53
- tongue jack, 79, 81
- tools
 - cleaning, 253–254
 - galley, 312
- tools
 - gear-case lubricant, 241
 - key, 341–342
 - navigation, 215–216
 - oil changing, 233–234
 - wiring, 285
- tow ropes
 - ransom, 73
 - tow point, 73
 - tubing, 74
 - wakeboarding, 74
 - water-skiing, 74
- tow vehicles
 - acceleration, 82
 - at solo launch, 106
 - anti-slip transmission, 117
 - backing up, 16
 - brakes, 88
 - financing, 49
 - four-wheel drive, 117
 - fuel consumption, minimizing, 82–83
 - mirrors, 81
 - parking/emergency brakes, 17, 99, 106
 - stopping distance, 82
 - turning with, 82
 - wheel chocks, 104
- towing
 - backing up and, 83–84
 - capacity, 16
 - difficulties, 77
 - on dual-lane roads, 82
 - frequent stops while, 83
 - hitching, 78–79
 - pulling and, 82
 - safety, 16
 - tips, 82–83
- trailer approach. *See also* loading boats
 - contact, 113–116
 - current, 111, 113
 - final, 114
 - speed, 112
 - steering challenges, 112–113
 - water conditions, 111
 - wind conditions, 111, 113
- trailer storage. *See also* storage
 - advantages/disadvantages, 308
 - boat preparation for, 306–308
 - boat protection, 308
 - convenience, 305
 - home, 306
 - marina, 306
 - security, 307–308
 - self-storage lots, 306
 - using, 305–308
- trailers
 - backing up with, 16, 83–84
 - brakes, 89, 350
 - center rollers, 90, 91
 - contact, at loading, 113–116
 - coupler, 79
 - finding, 16
 - gadgets, 90–91
 - guide-ons, 90, 91
 - hardware, checking, 89
 - light plug, 81
 - lighting wires, 84–85
 - lights, failure, 85–86
 - lights, testing, 81, 350
 - pre-purchase inspection, 350
 - pulling, 82–83
 - purchase costs, 45–46
 - retractable transom straps, 90, 91
 - retrieving for loading, 110
 - road-readying, 117–119
 - roadworthiness, 84–89
 - as storage, 45
 - tires, 350
 - tongue jack, 79
 - wheels, 87–88, 350
- training, 13–14
- transducers, sonar, 187, 188
- transmission fluid, 243–244

transom straps. *See also* trailers
 checking, 89
 connecting, 118
 defined, 79
 disconnecting/removing, 96
 retractable, 90–91

transoms
 defined, 22
 illustrated, 21
 walk-through, 141

trim tabs
 defined, 136
 at engine shutdown, 137
 fluid, 346
 illustrated, 136
 markings, 137
 pre-purchase operation, 346–347

trimming propeller
 defined, 135
 process, 135–136
 in quartering seas, 209

trolling, 24

true north, 182

tubes
 cost, 70
 crack the whip maneuver, 72
 defined, 70
 illustrated, 71
 tow ropes, 74

12-volt battery system, 281–282

two-stroke engines, 122

tying
 bowline knots, 335–336
 to dock, 145–148
 half-hitch knots, 336–338
 lines, 147, 148
 to other boats, 149–151

types, life jacket, 62

• U •

undocking, 148–149

U.S. Coast Guard
 radioing position to, 207
 rule enforcement, 159

U.S. Coast Guard Auxiliary, 14, 324–325

U.S. Coast Guard Navigation Rules, 159, 205

U.S. Geological Survey (USGS) maps, 177

upholstery cleaners, 256

UV inhibitor, 256

• V •

vehicle driver
 at crew launch, 103–104
 at solo launch, 105–117
 trailer retrieval, 110

ventilating, 135

vessels
 collision with, 220
 crossing paths with, 161–162
 defined, 160
 give-way, 160, 162, 164
 overtaking, 162–164
 stand-on, 160, 162, 164

VHF radios
 antennas, 183, 184–185
 backup, 184
 calling with, 186
 channels, 185
 checking, 212
 communicating with, 185–186
 cost, 70, 184
 defined, 183
 DSC-equipped, 184
 emergency transmission, 186, 222–224
 fixed, 183–184
 handheld, 183, 214–215
 need for, 70
 transmit range, 183, 184
 weather, 197

voltage meter, 248, 347

• W •

wakeboard riders, 29

wakeboards
 cost, 71
 defined, 71
 illustrated, 72
 tow rope, 74

walkaround boats, 26–27

- walleye boats, 13, 24
 - walleye clubs, 321
 - water, drinking, 313, 314
 - waterline, 21, 22
 - water-pump hoses, draining, 260
 - waters
 - boat selection and, 40–41
 - fresh water, 41
 - location, 38
 - salt water, 40–41
 - sharing, 159–165
 - types, 38–39
 - water-skiing, tow rope, 74
 - watersports
 - boats, 12, 29
 - clubs, 323–324
 - jackets, 74
 - watersports accessories. *See also* accessories
 - life jackets, 74
 - skis, 72–73
 - slalom ski, 73
 - tow rope, 73–74
 - tubes, 70–71
 - wakeboards, 71–72
 - waves, gauging, 202
 - waving, in emergencies, 224
 - waypoints, GPS, 192
 - weather
 - dealing with, 201–205
 - departure/destination plans and, 200
 - emergencies, 221
 - fog, 203–205
 - GPS, 197–198
 - hail, 203
 - hurricanes, 201
 - lightning, 200–201, 202–203
 - marine forecasts, 195–198
 - navigating, 195–210
 - precautions, 200–201
 - radios, 197
 - small crafts warnings/advisories, 198–199
 - storms, 205–210
 - sudden changes, 201
 - thunderstorms, 202–203
 - Web sites, 196
 - Web site shopping, 56–57
 - weighing (raising) anchor, 156
 - Western region small craft advisories, 199
 - wet slips. *See also* storage
 - advantages/disadvantages, 45, 298
 - anti-fouling paint and, 294
 - approach, 292
 - boarding access, 292–293
 - boat preparation for, 294–295
 - costs, 297–298
 - docking access, 291–293
 - dockside amenities, 293
 - galvanic corrosion and, 295
 - hoists, 296–297
 - location in marina, 292
 - shorepower, 293
 - stern-in docking, 140–143
 - storage, 291–298
 - wheel chocks, 98, 99, 104
 - wheels (trailer)
 - bearings, monitoring, 87–88
 - bearings, pre-purchase inspection, 350
 - tires, checking, 88
 - white and red/orange buoys, 171
 - white lights, 166–167, 168
 - wind
 - gauging, 202
 - stern-in docking and, 142
 - at trailer approach, 111, 113
 - wire crimping tool, 285
 - wiring. *See also* electrical problems
 - ABYC standards, 279
 - color code, 280–281
 - connections, lubricating, 85
 - tools, 285
 - trailer lights, 84–85
 - wooden paddles, 65
 - wrench, adjustable, 341
-
- X •
 - XM Radio, 198
 - Y •
 - yaw, 135
 - yelling, 333
 - yellow lights, 167
 - Z •
 - zincs, 295