

Anchoring Notes

Anchors:

1. Herreshoff, Paul Luke, Maine
2. 1933, CQR, Jeff Taylor, Clyde Quick Release or "Secure"—plow
3. 1940s, Richard Danforth, seaplanes and landing craft—fluke
4. 1971, Peter Bruce, North Sea oil rigs—claw
5. 1986 Fortress, Al alloy, lightweight, large flukes, sharp edges, breaks down, 32/45, use with rope or chain leader—likes a small angle to set.
6. 1996, Alain Poiraud, Spade, concave fluke, weighted tip, hollow and triangular shank.
7. 2004, Rocna, Peter Smith (NZ), concave with roll bar and narrow shank.
8. Sarca Excel, Rex Francis, Anchor Right (AUS), convex with angled heel, weighted tip and narrow shank, sheds mud.
9. Stainless, Al alloy, mild steel: same yield strength. HT 3 times higher.

Crevice corrosion: Chromium added to steel makes it stainless. A barrier that is microns thin of chromium oxide forms on the surface. This protects the steel and is self-healing in the presence of oxygen. When immersed in seawater chlorides react with the steel and create pits that defeat the barrier. Abrasion may also compromise the barrier, which cannot self-heal without oxygen. Seawater then corrodes the metal. Crevice corrosion can go unnoticed and lead to sudden failure. Keep stainless polished, clean and out of salt water. Special SS alloys are available for prop shafts that reduce pitting and crevice corrosion. Monel is better for long life.

Rode:

1. Minimum size for chain leader is weight equal to anchor. 50 to 200 feet also common.
2. Secure bitter end of rode with sacrificial line, lashing or quick release shackle.
3. Secure snubber with chain hook or hitch (prussic, camel, two rolling hitches).
4. 1.3 X LOA minimum for snubber. Can go up to 60'.
5. Chain certified for anchor windlasses:
 - BBB, mild steel, short links, 3B
 - HT, twice as strong, longer links, HT, G4, G43
 - Proof coil (G3) made to inconsistent sizes and may not properly fit between whelps.

Technique:

1. Run engine astern for 30 seconds, start at idle, add in increments of 200 RPM.
2. Maximums for beginners: ½ astern for sailboats and ¼ astern for motorboats.
3. Jumping or a "V" wake signifies dragging. When heaving check for a fouled anchor.
4. Static thrust:
 - 20#/HP for displacement hulls
 - 15#/HP for semi-displacement hulls
 - 10#/HP for planning hulls
 - A power set matches the static thrust of your engine to the predicted wind force on your boat.