

Setting the record Straight

Because all Products are Not Created Equal A Photographic Side by Side Para-Anchor Comparison

Dear Boater,

All of us at Fiorentino want sailors to have the best and most complete information possible when they are planning to buy or use parachute sea anchors and drogues. While we admit that we think we have the best products available; we are also committed to providing straightforward comparisons.

Recently, we discovered an article written in Pacific Yachting magazine that in our opinion implied that Fiorentino's Offshore Para-Anchor was essentially the same as the Para-Tech brand. We know there are many differences between the two products so we decided to try something new. In this article we will review manufacturing differences between the Para-Tech parachute sea anchor and Fiorentino parachute sea anchor with side by side photographs. We asked Para-Tech to review our information, but haven't heard from them. Let us know what you think and we may turn this into a new series. info@para-anchor.com

The Fiorentino Team --

Article in Question:

Publication: Pacific Yachting Magazine

Article Name: "Hitting the Brakes" Comparison

Reporter: Garrett Lambert

Editor's response: "...this was meant to be a short 1.66 page overview of sea anchors and drogues, not a comprehensive guide to all of the various options and manufacturing processes."

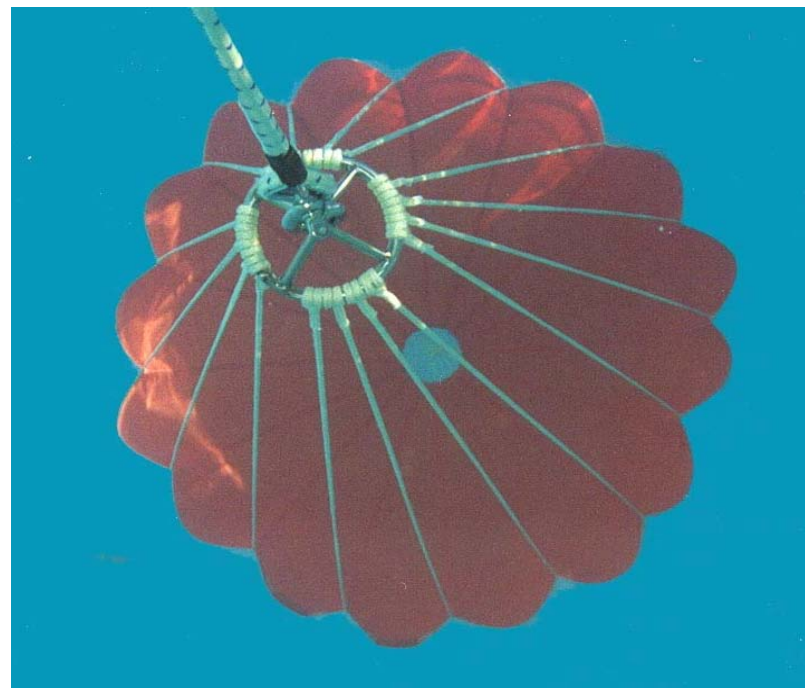
PARACHUTE SEA ANCHORS

The First Side by Side Photographic Comparison

Photographs & Technical Information
Provided by Zack Smith -- head of Fiorentino's Research Team



Para-Tech Offshore Anchor (9-footer pictured)



Fiorentino Offshore Anchor (9-footer pictured)



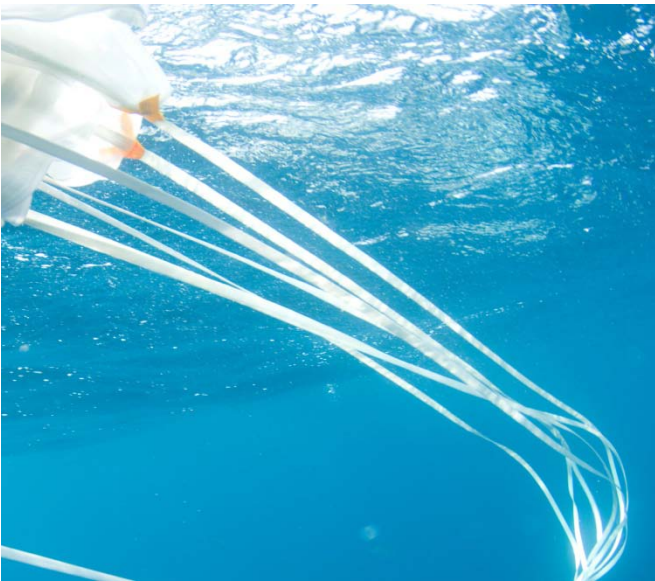
Para-Tech's Shackle

Para-Tech uses galvanized hardware which is a cheaper alternative to stainless and is commonly used for shroud line attachment. Galvanized hardware is strong, but can rust rather quickly. The anchor sold by Para-Tech may require an additional swivel purchase. It's always best practice to ask about extra charges and the size hardware you are receiving.



Fiorentino's Patented Para-Ring®

Fiorentino includes a 316 stainless swivel that is fabricated into the patented stainless Para-Ring hardware for shroud attachment. The anti-tangle device is considered the first to permit swivels to spin when placed under force, while spreading open the shrouds to virtually eliminate line twisting and tangling. The Para-Ring technology has consequently been awarded more patents than any other drag device in history.



Para-Tech's Webbed Shrouds:

A popular method for cutting manufacturing costs is to reduce the number of lines sewn to the canopy. The pictured 9-foot offshore anchor (produced by Para-Tech) uses 8 shroud lines compared to Fiorentino's 9-foot offshore anchor that utilizes 16 shroud lines. The anchor sold by Para-Tech also uses labor friendly, flat webbing shrouds with a reported 1,500 lbs. break strength.



Fiorentino's Braided Shrouds:

Fiorentino sews extra shroud lines to its offshore canopy to increase overall performance and strength. Mechanical engineering studies confirm that more shroud lines attached to the canopy improves force distribution throughout the parachute making it stronger to avoid breakage. Test studies also demonstrate that extra shroud lines can act like a barrier to reduce canopy inversion and they create a better canopy shape that holds more water. Fiorentino's 5/16-inch shroud lines are braided with 2,500 lbs. break strength. Fiorentino uses twice as many shroud lines compared to Para-Tech.



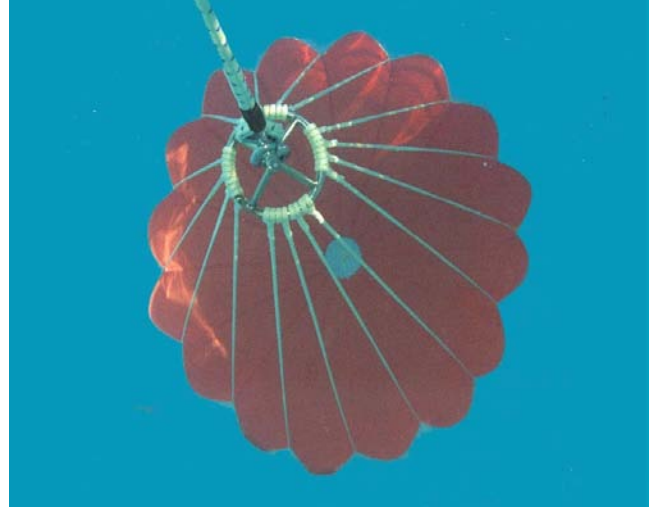
Para-Tech's 9' Offshore Anchor:

Up to 4 oz. Canopy with Wide Panels:

Para-Tech may use seconds quality fabrics when it is available to build canopies up to 4 oz. Seconds fabrics are more cost effective since they are discounted due to flaws within them. The manufacturer claims its parachute anchors are "failure tolerant. If the full system is overstressed the Sea Anchor is designed to blow a panel before anything else fails. The Sea Anchor will still hold the boat, but with increased drift. It will function properly even with some broken or damaged lines."

Towing parachutes behind 100-foot tugboats indicate that this "failure tolerant" concept might be questionable since these anchors can break apart rather quickly. This is especially true with the use of seconds fabrics that can have reduced amounts of fibers making the fabric too thin. Tow tests by Fiorentino and Dan Shewmon, author of *the Sea Anchor & Drogue Handbook*, indicate that canopy fabric should be at least 7 oz. in weight if the para-anchor is to be designed for heavy-duty use.

Note: Para-Tech maybe sold in a variety of colors including yellow, white or red since seconds materials come in many colors. Currently, the Para-Tech brand is advertised in a yellow and sometimes a red color which is similar to Fiorentino's Coastal and Offshore models, although white is the color most commonly supplied to the end user.



Fiorentino's 9' Offshore Anchor:

8 oz. Canopy with Small Panels:

Fiorentino uses a minimum of 8 oz. fabric for building heavy-duty canopies with first quality fabric. Fiorentino takes the manufacturing process one step further by incorporating smaller panels into its offshore anchor. Smaller canopy panels help in spreading workloads more evenly throughout the parachute because the extra seams act like a highway for shock loads to travel upward, permitting force to dissipate over more contact points. Fiorentino tow tests demonstrate that first quality fabrics are more consistent in strength than seconds grade fabrics used by other manufacturers. For this reason, Fiorentino will only use first quality fabrics.



Fiorentino's Canopy Weight:

Fiorentino installs custom size canopy weights to aide with faster deployment. The weight can also reduce canopy rotation. The sinking weights are included in Fiorentino's Coastal & Offshore models. The Para-Tech brand does not include weight placement.



Para-Tech's 1/4-inch Trip Line:

The anchor sold by Para-Tech uses a 1/4-inch trip line for recovering their parachute. The trip line is attached to a float line (a flat piece of webbing permanently attached to the parachute's container) with a very small link. No other parts were included with Para-Tech's parachute when Fiorentino's team purchased six of these parachutes for testing. An additional purchase is necessary when obtaining the parts necessary to attach the trip line to the floats. Trip line sizes may vary, so be sure to ask what the diameter and length of trip line you are purchasing. The trip line may or may not include a deployment bag for an extra fee.



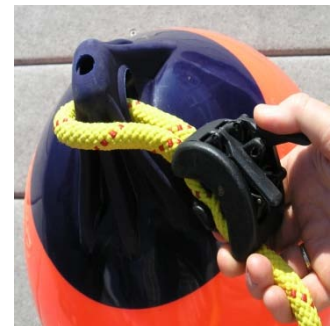
Parts cost extra:

We had to magnify this picture in order to show you the 1/4-inch galvanized steel, quick link used to attach the trip line to the float line on the anchor sold by Para-Tech. Parts for connecting the trip line to floats are currently available at an additional cost.



Fiorentino's 1/2-inch Trip Line:

Fiorentino's trip line is 1/2-inch in diameter because it is easier to pull the wet equipment in by hand. The trip line includes a float, removable nylon splices, and one chafe guard. The nylon clamp makes it easy to attach the trip line to any boat fender. Lengths are typically 50- to 100-feet, with custom sizes available for larger vessels. Fiorentino's trip lines do not require a deployment bag and come as a complete kit.



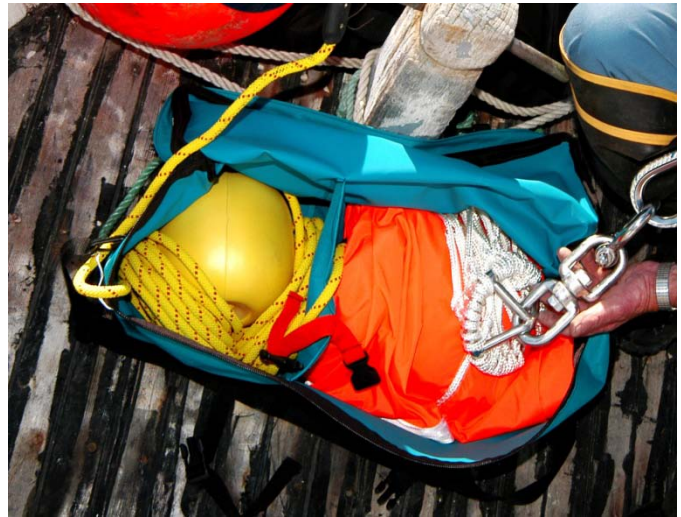
Fiorentino's Nylon Hand Clamp:

Fiorentino's unique design utilizes a patented clamp that requires no tools for connecting a retrieval float at the tail end of the trip line. Any fender aboard your boat will function perfectly as a retrieval float.



Para-Tech's Deployment Bag:

The parachute sold by Para-Tech comes with a deployment bag to prevent the lightweight canopy from inflating on deck (Fiorentino's heavier parachute doesn't have this inflation on deck issue). The idea is to toss the bag overboard and let it deploy from its container. A second deployment bag is required for the trip line. Like aerial parachutes, you must carefully pack the bag to avoid tangles with future deployments. *The Drag Device Database*, written by Victor Shane, claims there have been problems associated with deployment bags tangling with the parachutes. Para-Tech claims this problem has been resolved.



Fiorentino's Fast-Pak®

Fiorentino pioneered the Fast-Pak storage bag that carries both the para-anchor and trip line. The purpose is to make the deployment and packing process faster and more user-friendly. Deployment is faster because there is no bag to constrain and slow the opening of the parachute canopy. Instead, Fiorentino's Para-Ring and canopy weights sink the parachute very fast, causing immediate inflation of the parachute. Packing is just as fast. Fold the shroud lines in half, lay them in the middle of the canopy, fold the canopy over the shroud lines once, and roll the parachute up like a sleeping bag. To watch just how fast Fiorentino's deployment and packing methods are check out our Fox sports video at: www.Para-Anchor.com.



Fiorentino's "All-in-One" Deployment Bag:

Fiorentino does offer an optional deployment bag as indicated on Fiorentino's website. Fiorentino's deployment bag is different in that it carries both the parachute anchor and trip line in one bag for ease of use. Deployment bags, unlike the Fast-Pak®, require careful packing to ensure proper parachute inflation.

Emergency Use: Sea Trials conducted by Fiorentino demonstrate how all deployment bags have a tendency to float too long and require chain to sink them. Tangles may occur. For this reason deployment may not be reliable for storm use.

Conclusion:

We hope the information in this article has helped educate and inform you. The use of parachute sea anchors and storm drogues should never be taken lightly. Complete and Factual information is necessary to keep you and your crew as safe as possible. We invite you to contact the Fiorentino team with any questions and/or thoughts at info@para-anchor.com.

Sources:

Fiorentino: Para-Anchor.com

Para-Tech: seaanchor.com