

# Murphy's Guide To The Slow Tow

By Tim Murphy

Published: February/March 2014

*What could possibly go wrong? If you're towing a dinghy, the answer is, plenty. Here are some tips for managing the risks.*

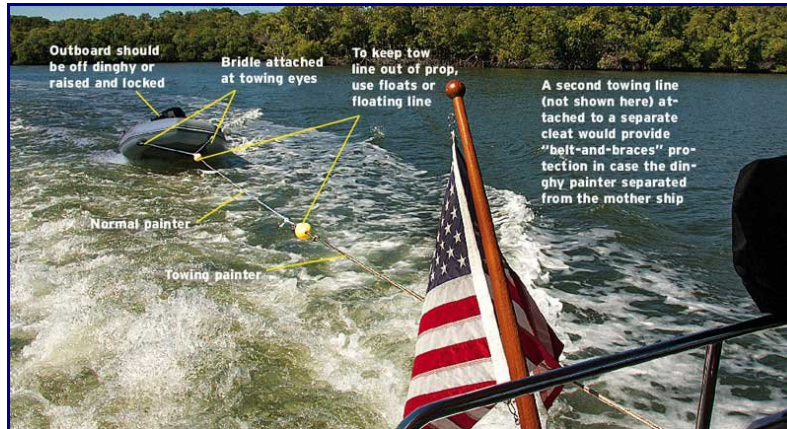


Photo: Jim and Lisa Favors

In an astronaut's guide to life on earth, Commander Chris Hadfield, chief of the international space station and veteran of three space missions, tells of repeatedly posing one question to himself as he goes about his work: What's the next thing that will kill me? Bracing question, indeed, but entirely useful. It focuses Hadfield and his crew on identifying worst-case scenarios, then mitigating each one. For those aboard cruisers, trawlers, and sailboats towing dinghies at low speeds in waves less than two feet, the stakes are rarely so high; our likeliest worst case, thank heavens, is loss of property. Still, a paraphrased version of Hadfield's question can be just as useful for us: What's the next thing that could possibly go wrong?

## We Could Lose The Dinghy

Retail price on a new 12-foot rigid-inflatable boat (RIB) and motor and all its kit might be \$5,000 or more. Depending on where we're cruising, there's probably no chandlery around the next corner to take our money on short notice, anyway. Losing the dink would surely ruin the day. The simplest way to mitigate that risk is to get the dinghy onto the big boat and not tow it at all. For ocean passages and all but the shortest and calmest coastal hops, this is the only prudent option. But for relatively protected day runs, the inconvenience of stowing aboard very often outweighs the risk of towing. In that case, the three most likely faults are:

- The knot or hitch in the painter (the line between the boat and dinghy) fails.
- The painter's attachment at the boat fails.
- The painter isn't strong enough for the tow and it breaks.

**TIP** Never tow kayaks; bring them aboard to transport. The bow handles are meant only for lifting and can pull out, and then your kayak would be lost.

The first of these is entirely on you. Treat every bowline and cleat hitch with healthy skepticism. For belt-and-braces safety, tie off the bitter end (down the line from the cleat hitch) with a bowline to the pulpit or other strongpoint.

Attachment points on the dinghy are far more likely to fail than cleats on the big boat. Hard dinghies should have a thru-bolted eye or similar attachment point, preferably down the stem toward the waterline so the bow rides high under tow. Inflatables typically have a pair of structural D-rings installed port and starboard, aft of the bow, and near the waterline. The best technique is to affix a bridle to these two points, then join the painter to that bridle with a bowline or carabiner; this way, as the dinghy yaws, the strain remains fairly even on both attachment points. Discount chandleries stock premade bridles that float.

Check your painter for UV degradation and chafe, especially at the knots and termination points. Keep the motor and other items out of the dinghy when towing; together with preventing swamping, this will mitigate excessive loads. A secondary painter is cheap insurance.

## **We Could Swamp The Dinghy**

The best way to keep water out of the dinghy is to prevent it from yawing from side to side excessively, and to manage its pitch orientation underway. The bridle described above is a good start. Beware of attachment points that are too high on the hull (near the gunwales), which can cause the boat to tow bow-down. In open water and at cruising speed, experiment to find the ideal towing distance. Most folks like to put the dinghy two wave crests back, with the dinghy on the downhill side of the second wave for minimal strain. For more on towing distance, see sidebar.

Inflatable dinghies with a single towing eye at the bow can be towed using the much stronger attachment points in the transom. Domenico Fossati, whose company distributes Caribe and Highfield inflatable boats in the U.S., explains how to do this using two separate painters to maximize stability. "Most dinghies have two towing rings in the transom," he said. "Beginning at these rings, pass two towing lines over the top of the transom and then under the dinghy, let them cross in the bow eye, then attach them to the cleats on the yacht, port, and starboard."

## **We Could Lose Items From The Dinghy**

It's always preferred to remove the motor and any other items from the dinghy before towing. The last thing you need to deal with is a projectile behind you if weather conditions deteriorate. If you choose not to remove the motor, be sure to attach it with a cable in case its mounts back out. Absolutely tilt it up, secure it in position, and lash down any items.

## **We Could Wrap The Dinghy Painter Around The Big Boat's Prop**

Many boaters use polyester line or nylon line for dinghy painters; nylon stretches, putting less strain on attachment points than polyester, especially in a seaway. But it doesn't float. For close quarters or backing down, one crewmember is typically tasked with guiding the painter to keep it clear of the prop. To be safest, shorten up the painter so the dinghy rests alongside the bigger boat during maneuvers. Be sure to use a fender to keep the dinghy from rubbing against your topsides. Joe Saindon, president of

North Atlantic Inflatables in Portland, Maine, recommends using a painter made from polypropylene line — the kind waterskiers use — because it floats. Beware of UV degradation, though, especially in more tropical latitudes. Also, it's almost impossible to make knots in polypropylene that will hold fast; the knots loosen up, as does this line when it's cleated. If you're using polypropylene, splicing is preferred.

## Beating Murphy's Rap

The conditions through the day are never the conditions you started in. After you've started your tow, keep an eye on the dinghy behind you to make sure it's riding steady and not taking on water.

The conditions through the day are never the conditions you started in. After you've started your tow, keep an eye on the dinghy behind you to make sure it's riding steady and not taking on water. 🚤

## Long Tow Or Short?



A float on the bridle helps keep the painter out of the prop when towing the dinghy close to the stern.

Search the internet on dinghy towing and you'll find endless debate about the correct length for the towline because there's no single answer. The right length depends on conditions, boat speed, and whether you're sailing or motoring. When towing behind a sailboat or trawler at speeds of 8 knots or less in calm conditions with waves of less than two feet, **keeping the dinghy two waves back is a good rule of thumb.** That should put it in the smooth part of the wake behind the turbulence from the prop for a trawler, and keep it centered behind the sailboat even if it is heeling. Start with the dinghy there and watch its performance. If waves are slewing it from one side to the other, you may need to shorten the painter to pull it into the flat part of the wake. If it is in the turbulence of the prop, you may need to lengthen it. At the right length, the dinghy will not yaw from side to side but will track straight behind the boat.

**Faster powerboats tow at much higher speeds, which requires much longer tow lines** to dampen down the changes in acceleration and to keep the dinghy from colliding with the boat when you stop. But towing at 20 knots with the dinghy 100 to 150 feet behind the boat means that it will be exposed to

the full force of the waves instead of riding nicely in the wake, and the strain on fittings, lines, and attachment points will be much higher. The risk of swamping or capsizing also increases greatly. Based on the claims we see in our insurance files, we do not recommend towing at high speed.