

EXPERT ON BOARD

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Teamwork and timing are crucial when towing your yacht onto a berth



How to tow a 10-tonne yacht with a 2.5hp tender

Tom Cunliffe on techniques that work, and some that don't, when towing with an inflatable dinghy

In a recent *Expert on Board* article I looked at sailing a yacht into a marina. It's not something you'd do every day for fun, but it's a valuable skill when the engine has failed. A second option, especially if there's no wind, is to tow the yacht using the dinghy and her outboard.

It's years since I did this for real. The last serious tow I accepted was from an 80-footer in South America. Her Mediterranean skipper was out of sorts because

his cook was refusing 'to do it the Greek way', whatever that meant, but the result was that he took a drink, engaged the autopilot, fell asleep and proceeded to drag my 32-footer at nine knots through 60 miles of open water. Somehow my boat and I survived this trauma, but when we finally arrived I swore never to be towed again.

Time moves on, however, and when *Yachting Monthly* suggested a study of towing a yacht with an inflatable tender I rose to the bait.

I have to say that I never expected much in the way of results on the windy day that the weatherman served up for us. Especially with *Chiscos*, John Simpson's 10-tonne Warrior 40 and a modest Avon.

Inflatable dinghy

John and his crew Mikaela are serious ocean sailors who are now running the exciting Christmas Caribbean Rally. When we arrived, they were moored in Ocean Village Marina in Southampton with the



We joined John Simpson of Sailing Rallies on his Warrior 40, *Chiscos*



ALL PHOTOS: BOB AYLCOTT

'I skippered the punt and John steered the yacht – communication was continuous and vital'

busy River Itchen flowing past outside. Mikaela volunteered to drive John's Zodiac with a hefty outboard for our photographer. This is their tender of choice at anchor in the strong trade winds of the West Indies, but *Chiscos* also ships an Avon, powered by a two-stroke with no gearbox. As this is a more typical dinghy for many of us, we went for the Avon as tug. When the motor ran, it drove bravely, but its 2.5hp didn't sound like much grunt to control so hefty a yacht.

I'm not an experienced tugboat skipper but I have knocked around a bit. I had a word with a pal of mine who drives a yard launch to make sure I wasn't in the wrong playing field, and then John and I applied the time-honoured principles of basic seamanship. I 'skippered' the punt and John steered the yacht. Communication was continuous and vital.

I'm delighted, and not a little surprised, to report that it all worked out a treat.

Little and large: Could our 2.5hp outboard really tow such a big yacht?

Towing ahead or alongside?

For a longish tow in anything other than flat water, it is far more effective to run the tow with the dinghy strung out ahead of the yacht. In confined water, and particularly when

way must be taken off the yacht for berthing, towing alongside is really the only option. That way, the outboard's power can be used to stop the tow by way of springlines. This method also allows some degree of steering before the yacht has reached the critical speed at which her rudder begins to work.

How to tow your yacht from ahead, on p28 ➔

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After trying various points, the most successful bridle was from two strop patches towards the transom

Towing from ahead

You'd think this would be easy, wouldn't you? Well, it's not. Here's the problem: the obvious place to attach a towline to the Avon is at the stern where it's out of the driver's way and has a reasonable chance of not swiping the motor off the transom. The trouble is, the drag of the towline so close to the fore-and-aft position of the outboard propeller impedes any attempt to steer the dinghy. We tried therefore to rig the tow using a bridle from the rowlocks. This would have been grand from the steering viewpoint, but it failed for practical reasons. Clearly, a bridle of some sort was required to keep the tow clear of the engine, so we secured it instead to a couple of likely-looking strop patches further aft. So far, so good.

Initially the dinghy scooted back and forth across the water in front of the yacht without inducing any forward momentum



'Soon we were proceeding up-river against a good stream and a Force 5'

Rob Peake from YM tried driving the dinghy first. We motored the Warrior out into mid-Itchen, killed the engine and drifted away on the tide. We ran a towline out over the bow roller to Rob, who buzzed off optimistically upstream in the dinghy. A sort of mad ballet dance then commenced with the punt skidding across the water from one side of the boat to the other, with a real danger of flipping at the end of each gyration as the tow wrenched it back into line. Varying the warp length made little difference, so I asked Rob to come alongside and

RIGHT: Rob tried several different lengths of line with very little success





On the yacht, our tow line was simply secured to one bow cleat

let me have a go, to see what his problems were at first-hand.

I mean no disrespect to Rob, who is younger, fitter and better-looking than me. However, the one thing you can say in favour of age is that because you aren't as strong as you were, you develop cunning instead. Rob had been blasting off at full power trying to drag the yacht round to face the tide. It hadn't worked at all. The answer proved quite simple. I lined the dinghy up fore-and-aft with *Chiscos*, which was lying at right-angles to the flow of the river. The wind wasn't helping as it was blowing along the tide. Our only chance with so little power was to use the yacht's own rudder to steer. I looked at the yacht and started the motor. My job was to apply as much power as I dared and keep the punt dead in line with the yacht as she gathered way.

Moving ahead sweetly

The bank of the river began to loom, but this was one of those situations where faint heart never wins fair lady, so we pressed on. Just as things were getting tight, I saw the *Warrior's* bows start to swing downwind and John giving me a clear 'thumbs-up'. He hadn't even tried to go upwind without much way on. Instead, he used the ambient conditions to advantage. Now that we were moving ahead sweetly, my job was just to watch what he was doing, keep power on and stay in line. John was in charge. I was just his engine. Soon we were proceeding upriver against a good stream and a Force 5 wind, making sound steerage way and working up towards the marina. The next question we faced was, what happens when we actually get there? The answer was bringing the tender alongside to tow from there.

Towing alongside,
turn to p30 ➔

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Instead of trying to charge off at full power, the trick is to apply just enough throttle to get the yacht moving

'The next question we faced was, what happens when we actually get there?'



Keeping the dinghy in line with the yacht's bow and stern as much as possible, and using the yacht's rudder to steer, was successful

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At slow speeds the towed craft has no rudder response, but the dinghy can steer her by pushing her stern around



Towing alongside

THE THEORY

The great advantage of towing alongside is that the towboat has some degree of control over the proceedings. At very slow speeds when the towed craft has no rudder response, the dinghy can still steer her charge by throwing the yacht's stern around using the propwash aimed in a suitable direction. The further her propeller can be abaft the pivot point of the yacht, therefore, the greater its leverage and the more effective will it be. In practice, this means the dinghy's stern should be in line with (abaft) the stern of the towed yacht. If it isn't, low-speed steering will be severely compromised.

'The further her prop is abaft the yacht's pivot point, the more effective it will be'



When roping the tender to the yacht, keep the bow spring (tied to a point within the dinghy) as tight as possible

Roping up

This is simple on paper but not always so easy in practice. The punt is secured to the yacht by breast-lines at bow and stern, with the stern breast at a bit of an angle to accommodate its position abaft the transom. Then comes a stern spring and, most important of all, a bow spring. The short breast lines run as square as practicable

from the dinghy to the yacht. They serve to keep the two vessels parallel and should be set up to be taut against one another.

The bow spring will take most of the load when towing ahead. It should be as tight as possible because, whatever you do with it, it will always end up grabbing any slack that it can weasel out of the whole system.

The stern spring serves two functions: first, it provides the opposite reaction to the critical bow spring, giving you something to set that line up against; second, it holds the dinghy in place fore-and-aft when you go astern with the outboard to take off way.

Towing alongside in practice, turn to p32 ➔

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Lying athwart the breeze in a tidal river, with just 2.5hp to turn us round and get us into a marina

Towing alongside

IN PRACTICE

Despite our success in towing ahead, neither John nor I expected great things from the alongside situation. The breeze was stiff and we only had the width of the river to gain control. Once we were moving and steering, we would have to enter the marina and work our way around a right-angled port-hand turn among the berths, and swing through two 90-degree horrors to starboard before arriving at a short finger with the wind blowing off it, starboard side to. It was a tall order, but we roped up and gave it our best shot.

The first priority was to get way on as soon as possible, so that

John could take command from the helm of the yacht. I put the outboard ahead and the boat, predictably I suppose, began to swing her bow away from the dinghy. By steering about halfway in towards the hull I was able to shove her stern across and check that tendency to some extent.

We allowed the bow some room to swing, but by not overdoing the in-draught from the propeller, we were able to maximise forward thrust. In other words, a compromise was reached. We didn't try to steer up into the wind straight away. Instead, we let her blow away downhill so that she could get some way on. Soon we were making two to three knots

and John had full control. He then steered up into the tide and wind and, to our joy, the power of the baby black motor kept her going under reasonable control.

At one point during the initial manoeuvre, John had asked me to shove his stern directly away from the dinghy. Rather than saying to me, 'Turn to port', he just said, 'Shove the stern over my way.'

I understood completely and the yacht's stern was literally pushed sideways to counteract any tendency for her head to turn away from the dinghy. This level of communication and teamwork would be critical in the next part of the operation, which was to slip into the marina then wiggle through into our berth.

Keep her moving

By now, we had enough way on for John to steer with confidence. My job in the small boat was to just keep her moving – without dragging her stern halfway around

Hampshire and back again. This held good until the very last turn, which was 'away from the dinghy', or to starboard.

By now we were making a good three knots, but we soon had to stop, so I killed the outboard and let John steer her in. Rob stood by with a midships spring to stop her if need be and I, who could now see nothing across the boat which towered above me, waited for orders. When he had about five yards to go, John asked me to take off what way I could. I started the engine again and flipped it round through 180 degrees so that the prop was pointing forwards, not aft – then I gave it the gun. This turned out to be so effective that the stern spring wasn't needed. We were drifting in nicely.

'How are we doing?' I called after a few seconds.

'We're there, mate!' announced John from somewhere over on the other side. Good result! ▲



Starting in mid-river, we had enough way on for John, at the helm, to steer the yacht with some confidence towards the marina

No tricks, just sound boat handling

This whole operation was a pleasant revelation to all concerned. It worked by the application of sound, basic boat handling. There were no tricks, other than to ensure the dinghy was as far aft as possible when towing alongside and to make all efforts to get way on regardless of whether it was in the direction required or not. That could follow later.

Success on this occasion was down to crisp seamanship and clear communication. When your turn comes (as it surely will, unexpectedly, one fine day), you just need to apply the same principles. Get way on, then keep it on and you can be confident of a safe arrival without resorting to the mobile phone, the yard launch or troubling the rescue services.



1 As we entered Ocean Village, my job was to keep her moving without dragging the stern the wrong way



2 The last turn was away from the dinghy and we needed to lose way, so I killed the outboard power and let John steer us round



3 Rob needed to be alert and ready with the lines on the foredeck as a spring could be crucial in stopping us



4 Near the pontoon, John asked me to take way off so I swivelled the outboard and gunned the engine away from the yacht



5 Rob jumped onto the pontoon with the bow line while John readied the stern spring. Then it was just a case of pulling her in



6 Home and dry! The real key to the success of the operation was in maintaining good communication at all times