

Using our own proprietary technology, we deliver monitoring systems that stand us apart in the market offering solutions that prioritise efficiency, safety, ease of use with affordability. Our system is insurance approved and we offer bespoke additions for wider applications.

### Why you Need Yacht Trace

Yacht Trace was developed with insurers to monitor tenders and chase boats of superyachts to reduce the risks of loss while on and off tow. Trackers do not reduce the risk of loss, only enable the **possibility** of finding a vessel after loss, after significant damage may have already happened.

The MCA recommends against using **AIS** when towing as it causes confusion to surroundings. It also causes erroneous collision warnings to the mothership

### The Main Causes of Loss

The main cause of loss and damage during towing a tender is a build-up of water in the bilges of the towed vessel. In addition, tow line assemblies can fail randomly due to fatigue etc.

### The Visibility Problem

The amount of water in the tender and the causes of excessive water in the tender can not be seen by visual observation from the superyacht (mothership).

### Uniquely securing your assets

Anti-theft

No reliance on AIS (own RF link)

2-way comms (RF) for crew safety.

Sustainable portable design, Hidden on the tender

Wireless technology

Instant alarms (pre-emptive)

Works anywhere

Bespoke add ons available

Fast Self Install

Contact: [info@yachttrace.com](mailto:info@yachttrace.com)

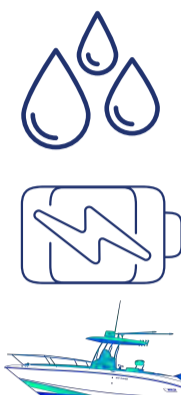
whatsapp: +447974927552

### Common Failure Scenarios

**Tender takes on significant water** → bilges fill → tender sinks/extra strain on tow line and tow line assembly breaks.

**Tender battery runs flat** → pumps stop → tender takes on significant water → bilges fill → tender sinks/extra strain on tow line and tow line assembly breaks.

**Tender pitches and rolls excessively** → tender takes on significant water → bilges fill → tender sinks/extra strain on tow line and tow line assembly breaks.



### Dynamic Geofencing & Tow Protection

Yacht Trace monitors bilge water level, battery, pitch, roll to pre-emptively warn crew of the above scenarios. Yacht Trace also monitors the position of both vessels and calculates the distance between, to warn of tow line break.

### Why Yacht Trace is Different

While other systems rely on third party infrastructure like cell/mobile phone networks (no coverage away from shore), satellite (can be slow response data, use excessive power starving the pumps while on tow, large subscription costs) Yacht Trace uses a dedicated, low power RF link between the mothership and towed vessel, providing fast updates (<10s) and alerts. Yacht Trace is a dedicated system. It does not rely on AIS/VHF (that can be spoofed, requires more power and large antenna on mothership and tender) or any other existing systems on the either vessel. It just requires minimal power at each end.



### Reduced Risk in All Conditions

Due to Yacht Trace's robust dedicated low power communications link and the monitoring of the above parameters (bilge, battery, roll, pitch, and dynamic geofence) the use of a Yacht Trace system significantly reduces the risk of loss.

**Insurers therefore 'allow' towing a tender at night, away from shore, in adverse weather conditions and beyond 50nm when using Yacht Trace, often with lower deductibles.**

### Satellite Backup & Additional Capabilities

In addition, Yacht Trace also incorporates an Iridium Satellite capability, enabling global tracking and monitoring by management and allowing the possibility recovery even in the event of a loss or theft. The Yacht Trace system can also be used to track the tender in use, enabling the crew of the mothership to know where guests are at all times and when they are coming back.

Yacht trace is also being used to monitor tenders in a shipyard, in daily use and when being shipped

Yacht Trace is a plug-and-play system that is usually installed within an hour by crew of the mothership. There is no configuration required to get the system up and running. The system can be purchased with no additional install costs. The tender side can be installed, tested and commissioned without the mothership present.

### Bilge Sensor Transceivers mounted high

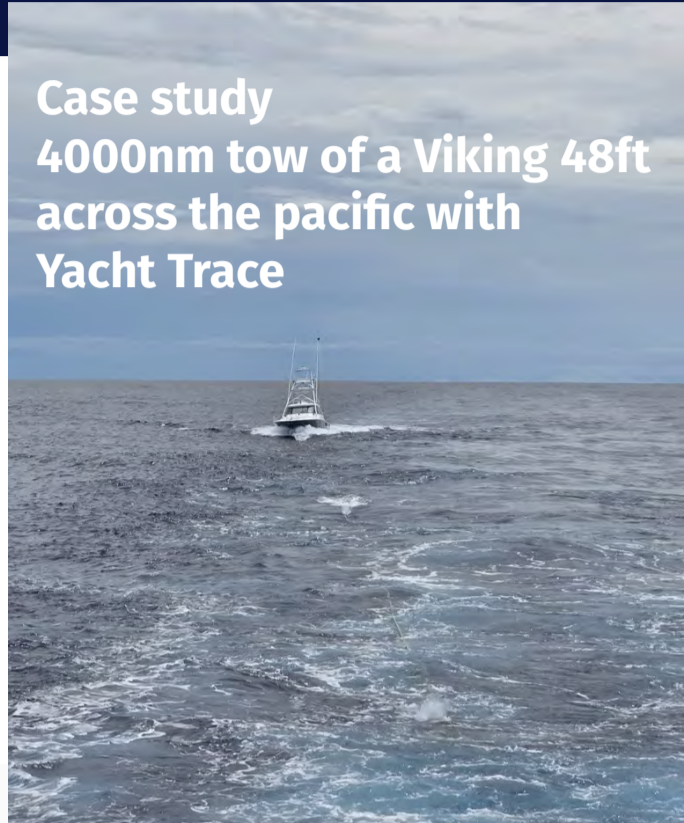


### Tender/Chase Boat

Two wireless bilge sensors (supplied) are installed in the tender bilge area. The transceiver units are mounted as high as possible. The switches are fixed together, in the aft bilge.

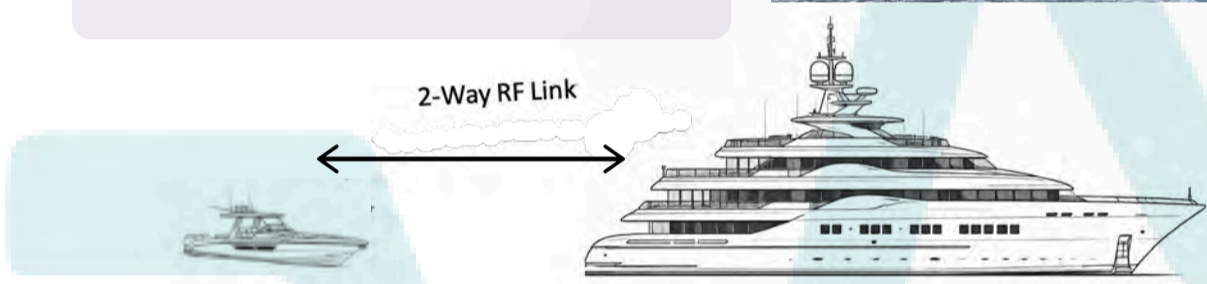
### Measurements

A Peli® measuring 270 mm x 246 mm x 124 mm (colour green) is installed in the tender. It is recommended to be connected to the house battery or which ever battery drives the bilge pumps. It uses approximately 100mA @ 12.5V.



Case study  
4000nm tow of a Viking 48ft across the pacific with Yacht Trace

### Bilge Sensors



### Mothership

A 'Relay' unit is supplied. This device acquires the GPS position of the mothership. It just requires power (230/110V) and put in a position where it can receive GPS signal (by a window, in a cupboard on the sundeck etc.). It links wirelessly to the mothership bridge Peli®. No external antennas are required on the mothership.

The mothership bridge Peli® (colour silver) receives both the RF messages from the tender Peli® and the relay unit. It checks bilge, battery, pitch, roll and dynamic geofence values and will alert if any are exceeded. The RF link is a two way communications link, ensuring once the tender Peli® is powered, no other interaction is required before use. It is all controlled from the mothership. It is recommend the system is left powered at all times, so crew procedures for starting a tow/use of tender can remain the same (reducing crew risk).

### Additional Options for Yacht Trace

Yacht Trace is a flexible platform, and has an allowance for bespoke options as required. Examples of previous integrations are below.

- Position of tender mirrored on chartplotter.
- Jet ski tracking.
- Li-Ion pre-gassing sensing and/or integration to tender's Battery Management System (BMS).
- Propshaft position monitoring.
- Addition NMEA2000® integration to the tender as required.
- Remote control of additional bilge pump on tender.
- Remote control of COLREG lights on tender.

### Tender unit under seat



See references and on the website

