

# Stay in touch with SSB radio

Radio communications are vital for for both racers and cruisers sailing offshore

## About SSB radio

Single Side-Band (SSB) radio is the system used by yachts and ships for long distance communication. Originally, it enabled vessels to communicate over long distances between each other and the inland telephone system. In the UK this was via the coast radio station at Portishead – but that facility was abandoned when satellite communication became common. Many older yachts that cruised abroad retained their SSB radios, mainly for reception of news or to join weather nets. SSB is still used in remote regions. Some fishing boats still use SSB to communicate between each other if they are out of range of VHF. These vessels were licensed by the GPO and later by Ofcom. An operator's licence was obtained from the Department for Trade and Industry after training in the operation of the radio and how to deal with telegrams and emergency situations. It permitted someone, usually the skipper, to use the equipment on vessels up to 1,600 tons. Above that a dedicated Wireless Operator was required. Today

The Icom M804 is currently the only SSB system that has CE mark approval – meaning it can be sold to and used by European customers because it conforms to the new Radio Equipment Directive



this is replaced by the VHF licence for yachts – but this only gives a line-of-site communication so the higher the aerial, the greater the range.

- You need a long-range licence to operate marine SSB radio.
- Most racers and those leisure sailors that use MF/HF SSB use a specifically designed radio for that purpose such as Icom's HF SSB Marine Radio IC-M804.



## Long-range radio skills could determine Golden Globe Race winner

High Frequency (HF) SSB radio is a mandatory requirement for the Golden Globe Race (GGR) but most competitors have never used this long range communications equipment before entering.

This year, the second edition of the revived GGR will depart from Les Sables d'Olonne, France on Sunday 4 September. The 'retro, solo, non-stop' circumnavigation challenges sailors to re-enact the 1968 *Sunday Times* Golden Globe Yacht Race, sailing 30,000 miles around the world using yachts and equipment that were available when Sir Robin Knox-Johnston made history as the sole finisher.

Prior to satellite communication developments, HF SSB was essential kit to sailors in places like Australia, who needed to cross the Southern Ocean to reach the rest of the world.

Don McIntyre, GGR founder, explains: "In the 1970s when I started sailing, your only safety link was High Frequency long-range radio. You needed to radio long distances. EPIRBs did not exist. During my 1990 BOC Challenge there were EPIRBs, but no Iridium sat phones. Nearly every day for eight months, I called Sydney Radio direct from anywhere in the world on my trusty High Frequency (HF) single side band long range radio."

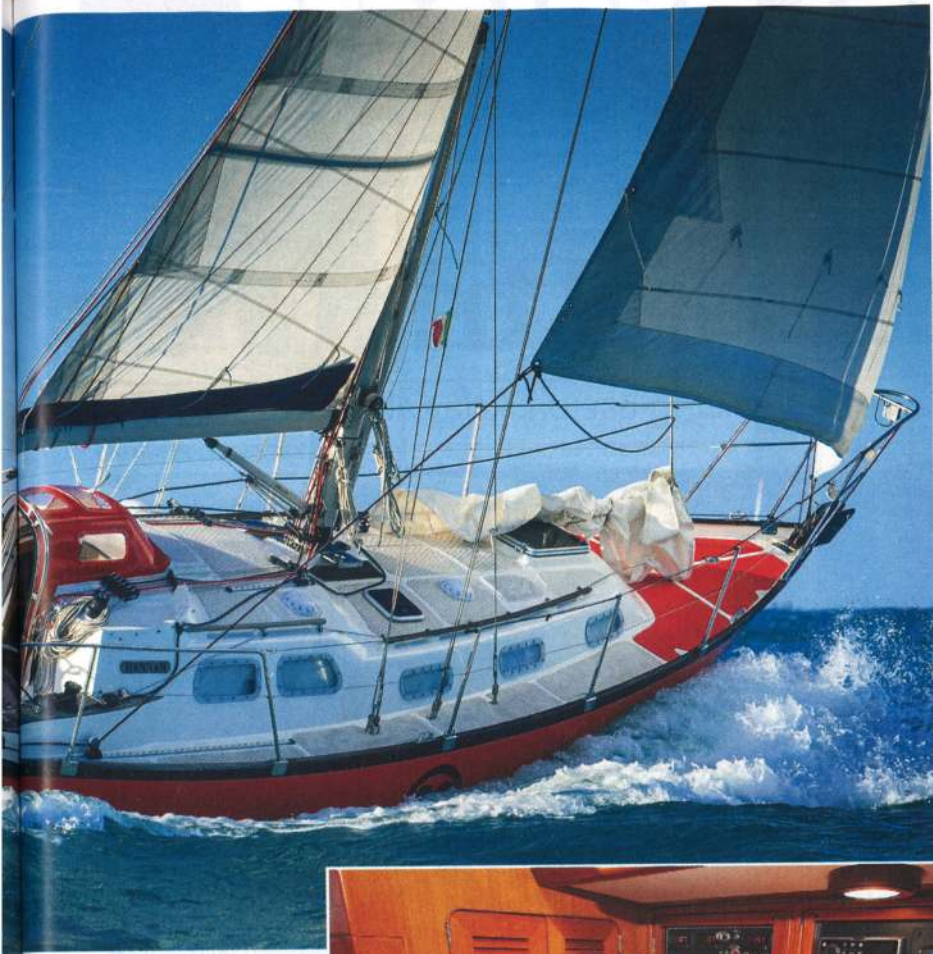


Typical communications set-up on a transatlantic ARC yacht

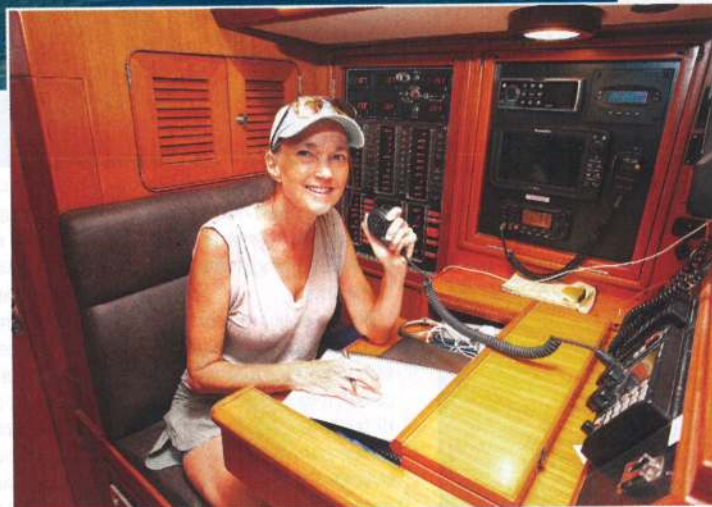
World Cruising Club/James Mitchell

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**ABOVE** Golden Globe Race 2022 entrant Guido Cantini aboard *Hannah of Cowes*, a Vancouver 34  
**RIGHT** Atlantic Rally for Cruisers (ARC) 2019 SSB net controller, Agua Dulch



Don believes that HF SSB skills, while vital for emergency group communications, could also be a deciding factor in who wins the next GGR race.

He said: "The first seven weeks and the last seven weeks of this GGR are tactically very important if you hope to win. Weather planning is vital. Get it wrong and you stop. The rest of the voyage is more hanging on for the ride as you sail in a narrow band through the Southern Ocean.

"Entrants with good HF SSB radios, and who know how to use them, have a huge advantage by receiving accurate weather data and even discussing computer weather information with friends. This kind of information is potentially worth more than the best sails. It could win you the race after rounding Cape Horn. It is allowed under the rules. They cannot

accept weather routing which is someone else telling the entrant where to go to get the best winds.

"As they race south to meet the Southern Ocean for the first time, weather info will be about missing storms rather than sailing fast. Realistically they are so slow they will not miss many, but one thing you can be sure of is that every entrant will be relying on his/her HF SSB radio for more than they ever imagined when they were planning for the race.

"Twice a day they can chat with each other to give encouragement and feel not so alone. I remember in my BOC this was amazing. Many not have spoken to family and friends since they left. Their sense of isolation and being at the end of the world will grow. Their ability to call anyone on the radio is a huge plus."

## SSB radio for offshore sailing rallies

During ocean stages of World Cruising Club (WCC) rallies there are daily SSB (HF) radio nets, which are a mix of safety messages, discussions on weather and routing, and social contact between the boat crews.

There have been fishing and bake-off competitions, an SSB orchestra, quizzes and other fun activities.

The radio net is coordinated within the fleet by volunteer net controllers. It's their job to act as host, switch frequencies, run the roll-call, rebroadcast the daily weather forecast and record any yacht positions.

It can be a tiring task, but all the net controllers agree that it's also fun and they are never short of being brought a drink or two on arrival!

Each year, the great advantage of the radio net is shown when co-ordinating the fleet response to emergencies at sea. HF radio provides the only means of broadcast communication at sea, making it ideal for speaking to a large group simultaneously, using the DSC alert function to bring the fleet on-air. And of course, speaking on air is free, with no per minute charges unlike satellite systems.

SSB radio is not a requirement for the transatlantic ARC rallies, but it is for circumnavigating with World ARC. The distances involved in crossing an ocean on a small boat can make you feel vulnerable and isolated and so it is especially important to maintain wider social contact with other crews while at sea.

World ARC participant Hal from *Cayuse* said: "SSB is the only way to communicate in real time on a daily basis. The radio net breaks the day up, and adds interest to the day. Talking on SSB is much better than communicating by email." It has been used as a social 'glue' for the rally on long passages, but also has a very important role in communicating if there are problems on board."

## Radio net for cruisers

Arriving in different cruising grounds, especially in the Caribbean and for round-the-world cruising, having an SSB radio will provide access to cruisers radio net; informal groups that meet at a regular time and on a published frequency to share information. There is usually a controller who directs the net, but anyone can join in as they're run by cruisers for cruisers. Weather and security messages are shared and often cruisers will use the nets as a way to keep in contact with friends. Radio nets tend to be regional and popular in areas with lots of live-aboard cruisers, such as the Caribbean and the Sea of Cortez.

■ For more information on cruiser radio nets visit [noonsite.com](http://noonsite.com)

Guido Cantini/Hannah Racing

World Cruising Club