The 3-minute radio silence markers on your TWCO®

All TWCO® maritime watches are equipped with this specific design feature and we will gladly explain the function of these markers.

First: where does it come from?
It all started quite some time ago, the early days of radio communication, and it has to do with maritime radiotelephone communication in distress situations on the typical marine MF bands: the 2182 and 500 KHz international bands for emergency and distress. In fact the sinking of the “RMS TITANIC” triggered a lot of safety rules and this is believed to be one of them.

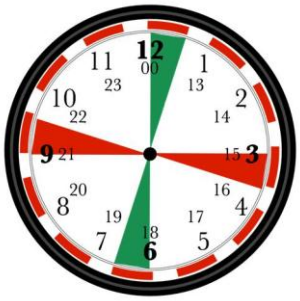
Why a radio silence period?
All stations using 2182 KHz were required to maintain a strictly enforced three-minute silence and listening period twice each hour, starting at h+00, h+30.
This allowed any station with distress, urgent or safety traffic the best chance of being heard at that time, even if they were at some distance from other stations, operating on reduced battery power or perhaps reduced antenna efficiency, as for example from a dismasted vessel.
As a visual aide-memoire, a typical clock in a ship's radio room (see picture) would have these silence periods marked by shading the sectors from h+00 to h+03 and from h+30 to h+33 in green.
Similar sectors were marked in red for what used to be the corresponding silence and listening period on 500 KHz between h+15 and h+18 and from h+45 to h+48.

Now and into the future.
These silence periods are no longer required as the introduction of GMDSS (Global Maritime Distress Safety System) has produced alternative automatic watch keeping systems and the 500 kHz band is no longer in use for maritime traffic.

The 2182 KHz and related distress frequencies.
2182 KHz forms an essential part of the Global Maritime Distress Safety System (GMDSS). It has an associated DSC (Digital Selective Calling) frequency at 2187.5 KHz.

Other international distress frequencies, in use as of 2008, include:

- 121.5 MHz - civil aircraft emergency frequency
- 243 MHz - military aircraft emergency frequency
- 156.8 MHz - Marine VHF radio channel 16, short range maritime use
- 406 MHz / 406.1 MHz - Cospas-Sarsat international satellite-based Search and Rescue (SAR) distress alert detection and information distribution system



Typical, old style, ship’s radio room clock. The 4 second markers on the outside are meant to accurately transmit a 4 second emergency signal (SOLAS).

So now you know where it comes from.

We hope you will never be in a situation where you need it.
But if it ever happens: rely on your TWCO®!