



RADIO FREQUENCY SAFETY ASSESSMENT

Prepared by: The Cruising Association Regulations and Technical Services (RATS) group

Date: 20 October 2021

General Information

Vessel Name:		Assessment by:	
Vessel Type:		Assessment date:	
Vessel MMSI		Signature:	

RF Compliance Assessment

This assessment template has been produced by the Cruising Association Regulations and Technical Services (RATS) group to help CA members and other boat owners assess the radio equipment on the boat to ensure they are conforming to Ofcom's policy for limiting exposure of the public to electro-magnetic emissions. This policy is effective from 18 November 2021 (except for HF/SSB radios for which the effective date is 18 May 2022 for 10-110MHz transmissions and 18 November 2022 for transmissions below 10MHz). This assessment is based on the EMF calculator provided by Ofcom www.ofcom.org.uk/manage-your-licence/emf/calculator.

To complete the assessment, fill in the *equipment model* field below with the RF equipment installed on your boat and follow the action required if any. Note that:

1. No assessment is needed when equipment is used in an emergency situation. Therefore, safety equipment such as EPIRBs, PLBs, etc that are used only in emergencies do not need assessment. In addition using your VHF radio for an extended time during an emergency would not invalidate your compliance.
2. Compliance is only required whilst in UK waters.
3. For other RF equipment, please refer to www.ofcom.org.uk/manage-your-licence/emf/compliance-and-enforcement-guidance to make your assessment.

An overview for marine users can be found at:

www.ofcom.org.uk/_data/assets/pdf_file/0026/220796/emf-licence-condition-what-you-need-to-know-ship-radio.pdf

Ofcom advises that you should turn off your VHF radio (or at least not transmit on your VHF radio) and radar once docked in a harbour to avoid any risks of non-compliance due to proximity to the public.

Complete the table below with your equipment type and mark the assessment completed as appropriate. Print out a copy to keep with ship's papers.

Equipment Type	Equipment Model	Assessment	Installation location	Action required	Assessment completed
Handheld VHF radio		Transmit power is 6W so RF transmissions below 6.1W ERP threshold	N/A	No action required	
Maritime fixed VHF radio (no more than 25W transmit power) with standard 3db antenna		<p>Transmission time is less than 12% during any 6-minute period (e.g. no more than 40 seconds in any 6-minute period)*</p> <p>If transmission time is 50% of any 6-minute period, using the Ofcom Calculator, the minimum separation required is 2m.*</p> <p>If transmission time is 25% of any 6-minute period, using the Ofcom calculator, the minimum separation required is 1.4m.*</p> <p><i>*Delete as appropriate</i></p>	<p>N/A</p> <p>At cross-trees, mast-head or more than 1.6m/1.1m* away from crew's heads</p> <p>Less than 1.6m/1.1m* from crew's heads</p>	<p>No action required</p> <p><i>Do not transmit when crew is climbing mast.</i></p> <p><i>Instruct crew to be at least 1.6m/1.1m* away from VHF antenna when transmitting. Install warning notice near VHF antenna. If possible, raise VHF antenna to be beyond 1.6m/1.1m*.</i></p>	
AIS Transponder		Transmit power is 2-5W so RF transmissions below 6.1W ERP threshold	N/A	No action required	
Radar		For normal motor/sailing yacht radars, the compliance distance is within the product casing of radome products and within the rotating diameter for non-radome products.	N/A	No action required	
Active Radar Reflector		Transmit power is about 1W EIRP.	N/A	No action required	

HF/SSB 150W Radio		For a 150W HF/SSB radio, transmitting at 10Mhz, using the Ofcom calculator, the minimum separation distance is 4.77m regardless of transmission time (because of the relatively long wavelength). <i>Note that Ofcom has not yet provided an assessment for transmissions below 10MHz.</i>	Backstay	Instruct crew to be at least 4.77m away from any point of antenna when transmitting. <i>Note compliance is required by 18 May 2022 for transmissions in the range 10-110MHz and by 18 November 2022 for transmissions below 10Mhz.</i>	
<i>Other:</i>					

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