RHKYC MF/HF RADIO CONFIGURATION

Good practice, international radio regulations and the RHKYC SIs require boats to keep a watch at all times on DSC distress frequencies while offshore. This is done automatically by the ICOM M801 and ICOM M802 MF/HF SSB radio transceivers and takes little power and is carried out using the dedicated DSC receive antenna. All that is required is that your radio is left on.

In order to extend this capability for routine communications outside of mandatory radio schedule position reporting periods, we recommend that you put your radio into DSC Watch mode – which means there is no noise which could prevent off-watch crew from sleeping – to scan on the following DSC Routine frequencies in addition to the automatically scanned distress frequencies:

2177.0, 4208.0, 6312.5, 8415.0, 12577.5, and 16805.0 kHz

We recommend that you program into your radio the RHKYC Group MMSI number: 047799902.

This will mean that it is easy for you to get the attention of the entire fleet offshore for routine purposes.

We also recommend (required in RHKYC SIs) that you program into your radio all the MMSI nos of the individual competitors in the race.

We suggest that when adding Individual and Group MMSI nos into the directory that you program the Call Frequency as **4208 kHz** (both RX and TX) and the Traffic frequency as **4060kHz** (both RX and TX)

Please also see in an addendum a novel and newly promoted set of Group MMSI Ids which you may want to consider adding to your radio for the Navarea in which your boat is. For your reference the entire China Sea is within Navarea XI

Instructions:

In order to effectively utilize DSC calls to other boats we must re-program both the channels scanned by the IC M801/2 and the programmed calling frequencies. This process will take about 15 to 20 minutes. We need to do this as apart from 2177kHz, all the other pre-programmed scan frequencies are Duplex and therefore cannot be used effectively Ship-Ship, only Ship-Shore

This approach is being promoted around the world by cruising networks, and is being promoted not just here, but across SE Asia by Brunei Bay Radio - www.bruneibay.net/bbradio, in the UK by Bob Smith – office@yachtcom.co.uk, in the US by Terry Sparks - p-t_on_sunyside@live.com

Action

Delete the old (Duplex) DSC Scan frequencies Add the new Simplex DSC Scan frequencies Delete the old (Duplex) DSC call frequencies Program the new (Simplex) DSC call frequencies

Delete the old Scan Frequencies

The Scan Frequency memory is full as the ICOM 801/2 will only scan six frequencies and has been programmed for six frequencies by ICOM. The first procedure is to delete all the scanned duplex channels to allow re-programming the radio for simplex channels.

- 1. In DSC Watch press [SET/MODE] to display the DSC MENU.
- 2. Rotate the [CH] knob to select Setup and press [ENT].
- 3. Rotate the [CH] knob to select Scan frequency and press [ENT]
- 4. Rotate the [CH] knob to select (each of the duplex frequencies one at a time) and press [ENT].
- 5. Press and hold the [CE] until two beeps are heard and that memory location will be clear.
- 6. Repeat this procedure for all except the 2177.0 frequency.

Program the new simplex Scan frequencies

- 1. Rotate the [CH] knob to select <add> and press [ENT].
- 2. Using the Keypad, enter the desired label for the new frequency, e.g. 4MHz, 6MHz, 8MHz etc.
- 3. Rotate the [CH] Knob to move to the TX:_____. kHz and enter the new frequency.
- {4MHz: 04208.0; 6MHz: 06312.5; 8MHz: 08415.0; 12MHz: 12577.5; 16MHz: 16805.0}
- 4. Rotate the [CH] Knob to move to the RX:____.kHz and enter the same frequency.
- 5. Press [ENT] to save the scanned frequency.
- 6. Repeat this procedure for all five frequencies.
- 7. Note display should indicate <add> Memory full when all five scan frequencies have been added.
- (The six frequencies including the 2177.0 we did not erase.)
- 8. Press [SET/MODE] button to return to DSC Watch.

Delete the Duplex Call frequencies

Now re-program the DSC calling frequencies the same way. While the DSC Call frequency memory is not full, we would fill the memory before all the simplex channels are entered. So we will start by deleting the INTER 4-1, 6-1, 8-1, 12-1 16-1 frequencies. Leaving the other frequencies programmed, e.g INTER 4-2, 6-2, etc.

- 1. In DSC Watch press [SET/MODE] to display the DSC MENU.
- 2. Rotate the [CH] knob to select Setup and press [ENT].
- 3. Rotate the [CH] knob to select Call frequency and press [ENT]

4. Rotate the [CH] knob to select (INTER 4-1, 6-1, 8-1, 12-1 16-1 duplex frequencies one at a time for deletion) and press [ENT].

- 5. Press and hold the [CE] until two beeps are heard and that memory location will be clear.
- 6. Repeat this procedure for each of the INTER frequencies listed above.

Program the new Call frequencies

- 1. Rotate the [CH] knob to select <add> and press [ENT].
- 2. Using the Keypad, enter the desired label for the new frequency, e.g. 4MHz, 6MHz, 8MHz etc.
- 3. Rotate the [CH] Knob to move to the TX:____.kHz and enter the new frequency.
- {4MHz: 04208.0; 6MHz: 06312.5; 8MHz: 08415.0; 12MHz: 12577.5; 16MHz: 16805.0}
- 4. Rotate the [CH] Knob to move to the RX:_____. kHz and enter the same frequency.
- 5. Press [ENT] to save the scanned frequency.

6. Repeat this procedure for all five frequencies.

7. When completed, you may use any of the xxMHz frequencies to call other cruisers and the INTERxx-x are duplex for shore based calls should you need to call shore based stations.8. Press [SET/MODE] button to return to DSC Watch.

When calling other boats now you will be able to try and call on any of these new calling frequencies. However, make sure your friends have re-programmed their radios as well or they will only be able to hear your call at short ranges on 2177.0 kHz. Be sure that if you call on a 6MHz DSC channel, you also choose a 6MHz voice (traffic) frequency as the other boat may hear your call, but not you if you were to select a lower frequency (in the 2MHz or 4MHz band for example) if it is at a greater distance.

Suggested voice frequencies are

2MHz - 2048, 2065, 2079 kHz 4MHz - 4042, 4483, 4060 kHz 6MHz - 6224, 6227, 6516 kHz 8Mhz - 8170, 8294, 8297 kHz 12Mhz - 12353, 12356, 12359, 12362, 12365 kHz 16MHz - 16528, 16531, 16534, 16537, 16540, 16543, 16546 kHz

These are all designated ship - ship routine simplex frequencies.

MF/HF DSC Radio Test

As a result of the Walawala incident during the HK to Vietnam Race 2013 and the subsequent review findings; the RHKYC is now requiring all competing boats conduct an MF/HF DSC test prior to the start of a major Offshore Race. HK MRCC will be supplying a list of all boats whom have done so to the Race Committee.

Yachts with MF/HF DSC radios installed can do a DSC test by prior arrangement with the HKMRCC - HK Marine Rescue Radio. These must be booked two days in advance by sending an email to **hkmrcc@mardep.gov.hk** stating the time that you wish to do the test. You must book in advance in order that if they are busy they can inform you that the test has been cancelled. At the stated time and date you should then perform the DSC transmission test on MF to them on 2187.5kHz. Their MMSI no is 004773500. This is done from the Test menu on the MF/HF DSC radio.

If you have any questions or problems with the above test – please contact the RHKYC Radio Instructor: Simon Boyde: Mobile: + 852 9031 – 2555. email:simon@stormforcemarine.com