The Cruising Club of America

CHANGES TO

THE

USCG'S WATCHKEEPING FREQUENCIES

FOR MARINE SSB

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Forward

Effective January 1, 2005, the USCG stopped using duplex frequencies for watchkeeping and began using the international safety and hailing frequencies used by most countries.

The change was not broadly announced prior to or even after the change, catching many of us by surprise.

This paper is being posted as a temporary measure until the affected papers in this series can be updated. Readers requiring more or detailed information should consult these papers, substituting the new frequencies for the old duplex frequencies as appropriate until the changes can be made.

In particular, the "Emergency Cards" in circulation and hopefully posted near a yacht's SSB radio should be corrected immediately.

Updated versions of these "cards" will be posted to the CCA website at www.cruisingclub.org as soon as possible.

The replacement pages have a version and date on the bottom. As with all these papers, the latest version should always be consulted before casting off.

We regret any inconvenience this may have caused.

This revision includes a 24 hour watch on 8291 kHz which was not an assigned frequency initially.

Comments and suggestions as well as corrections are always welcomed. I answer all such emails although sometimes a little delayed when we are off cruising.

Best wishes for fair winds and good sailing.

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THE USCG'S NEW WATCHKEEPING FREQUENCIES

The new frequencies now being watched by the Coast Guard are all simplex. This means that others can hear the hail or safety concern. In so doing, they now comply with GMDSS (Global Marine Distress and Safety System) requirements.

The new watchkeeping frequencies in kHz and effective ranges are:

ITU	Yacht TX	Yacht RX	Effective Day	Range Night
	2182	2182	100	300
450	4125	4125	300	800
650	6215	6215	400	1000
850	8291	8291	500	1200
1250	12290	12290	2000	800
1650 *	16420	16420	4000	Unreliable

* ITU 1650 (16420 kHz) is available on request only

Notes:

1. Effective Ranges for 4, 6, 8, 12 and 16 MHz frequencies are approximate in nautical miles.

Low frequency transmissions are particularly affected by the installation of the SSB. This includes but is not limited to:

a. The power available to the radio.

b. The amount or adequacy of the ground plane (counterpoise).

c. Proper and good connections of the antenna feed wire to the antenna and automatic tuner.

d. The height and length of the antenna.

These are the most common problems although there can be others. These directly relate to range limitations when transmitting (not receiving), particularly on low frequencies such as 2182 kHz.

The bottom line is, a yacht more than about 100 to 300 miles offshore may be able to hear the Coast Guard on 2182 or 2670 kHz (their working channel) but not reach them when transmitting. On the other hand, weather abnormalities will sometimes greatly extend the effective range for a short time.

USCG Distress and Safety Watch Keeping Schedule

The Coast Guard maintains a SSB radio watch at specific times and frequencies at their various stations. The frequencies and times for all stations are determined by the expected propagation which varies during the day. Depending upon where the Coast Guard's station is located, their respective area of coverage determines the time and frequencies watched.

USCG SSB Stations

There are two master stations, one for the Atlantic Ocean and the other for the Pacific Ocean. These stations are NMN and NMC. All radio traffic with other stations in continental US remotes into these two stations. If you call NMF at Boston, you will be talking to a Coast Guard operator in Norfolk, VA. It is seamless and they take their business very seriously.

Station		Location	
NMN		Chesapeake, VA (Norfolk)	Master
NMF		Boston, MA (Marshfield)	Remote
NMA		Miami, FL	Remote
NMG		New Orleans, LA (Belle Chase)	Remote
NMC		Pt. Reyes, CA (San Francisco)	Master
NMO		Honolulu, HI	Remote
NRV		Guam	Partial Remote
NOJ		Kodiak, AK	Independent

USCG Watchkeeping Schedule

The watchkeeping schedule using the new frequencies is:

ITU	Yacht	Yacht	NMN	NMF	NMG	NMA	NMC	NMO	NOJ	NRV
	TX	RX	Chesapeake	Boston	New Orleans	Miami	Pt. Reyes	Honolulu	Kodiak	Guam
	2182	2182								
	2670	2670								
450	4125	4125	2300 -1100	2300 -1100	2300 -1100	2300 -1100	24 Hrs	0600 -1800	24 Hrs	---
650	6215	6215	24 Hrs	24 Hrs	24 Hrs	24 Hrs	24 Hrs	24 Hrs	24 Hrs	0900 -2100
850	8291	8291	24 Hrs	24 Hrs	24 Hrs	24 Hrs	24 Hrs	24 Hrs	UR	---
1250	12290	12290	1100 – 2300	1100 - 2300	1100 - 2300	1100 - 2300	24 Hrs	1800 -0600	UR	2100 -0900
1650	16420	16420	UR	UR	UR	UR	UR	UR	UR	UR

Notes:

1. UR = Upon Request

2. All times are GMT (Z).

3. With the short range inherent with 2 MHz frequencies, the USCG monitors 2182 kHz at local stations rather than remotely at Master Stations Chesapeake and Pt. Reyes.

4. Although 2182 will work in AM mode, USB is recommended, preferred and also stipulated by the US FCC. It also works better – much better. If you want to be heard in an emergency, make sure the mode is USB.

5. Some SSB radios were programmed at the factory to automatically default to AM mode when using the automatic alarm. This is not user programmable and requires a technician to correct. As a temporary measure, program 2182 kHz USB into channel 1 on your radio.

USCG Working Channels

The Coast Guard designated their old duplex frequencies as their Working Channels. That is, after contact is made on one of the new Safety and Hailing frequencies, the caller will be asked to switch to a "Working Channel" to clear the hailing channel.

These channels will also be used for search, navigational and weather warnings and, weather broadcasts. It is not clear if they will continue to use 2670 kHz, their former simplex working channel which was ideal for short range communications; ITU 424 a duplex channel is a higher frequency and has a definite skip zone at short range.

The USCG Working Channels in kHz are:

ITU	Yacht Transmit Frequency	Yacht Receive Frequency
424	4134	4426
601	6200	6501
816	8240	8764
1205	12242	13089
1625	16432	17314

On many radios, the ITU number can be dialed directly at the keypad to get the proper frequency.