

Radio Morse code from 3 to 60 MHz (3000 to 60000 kHz).

Morse code in the 21st century.

### [Morse code radio listening in Sydney, Australia from 3 to 60 MHz.](#)

**Learning to receive and send Morse code in the 21st century- 2.**

[3.699 MHz 3699 kHz VK2WI](#), amateur radio station in Dural, Northern Sydney, N.S.W., Australia.

Amateur Radio New South Wales, Australia is a 24 hour automatic Morse code transmitting station for anyone who wants to learn Morse code. The speed of the Morse code transmission changes from slow (5 words per minute) to higher speeds. The call sign VK2WI in CW (Morse code) is transmitted every 2 minutes. Heard on 9 May 2009 at 0100 UTC signal strength 9.

[4.209.5 MHz 4209.5 kHz TAH](#) Istanbul Radio, Turkey (Istanbul Turk Radyo) coastal radio station ship to shore communications.

Heard on 16 May 2009 at 1951 UTC signal strength 8 sending the radio call sign TAH once on Morse code followed by 3 synchronizing signals. This Morse code and digital sequence is repeated continuously. (Not 4209 kHz TAH or 4210 kHz TAH).

[4.210.5 MHz 4210.5 kHz A9M](#) Hamala Radio, Bahrain coastal radio station ship to shore communications. On 20 June 2009 at 1525 UTC signal strength 6 sending "de A9M tlx" on Morse code every 18 seconds followed by synchronizing signals. Tlx means Telex or Telex by HF radio.

[4.210.5 MHz 4210.5 kHz UFL](#) Vladivostok Radio, Russia Pacific Ocean coastal radio station ship to shore communications.

On 18 May 2009 at 1424 UTC sending "de UFL" on Morse code every 18 seconds followed by synchronizing signals at signal strength 7. (Not 4210 kHz UFL or 4211 kHz UFL).

[4.212 MHz 4212 kHz XSQ](#) Guangzhou Radio, China coastal radio station ship to shore communications.

Heard on 16 May 2009 at 1950 UTC signal strength 9 sending the radio call sign XSQ once on Morse code followed by 3 synchronizing signals. This Morse code and digital sequence is repeated continuously.

[4.215 MHz 4215 kHz XSG](#) Shanghai Radio, China coastal radio station ship to shore communications.

Heard on 16 May 2009 at 1945 UTC signal strength 9 sending the radio call sign XSG in Morse code once followed by 3 synchronizing signals. This Morse code and digital sequence is repeated continuously.

[4.212.5 MHz 4212.5 kHz XSV](#) Tianjin Radio, China coastal radio station ship to shore communications.

Heard on 20 June 2009 at 1539 UTC signal strength 7 sending on Morse code "XSV" once followed by four synchronizing signals for digital radio communications. This Morse code and digital transmission format is repeated continuously. (Not 4.212 MHz 4212 kHz XSV or 4.213 MHz 4213 kHz).

[4.218.5 MHz 4218.5 kHz XSG](#) Shanghai Radio, China coastal radio station ship to shore communications.

Heard on 20 June 2009 at 1945 UTC signal strength 9 sending the radio call sign XSG in Morse code once followed by 4 synchronizing signals. This Morse code and digital sequence is repeated continuously. (Not 4.218 MHz 4218 kHz XSG or 4.219 MHz 4219 kHz XSG).

[4219 MHz 4219 kHz TAH](#) Istanbul Radio, Turkey (Istanbul Turk Radyo) coastal radio station ship to shore communications.

Heard on 16 May 2009 at 2004 UTC signal strength 8 sending the radio call sign TAH once on Morse code followed by 3 synchronizing signals. This Morse code and digital sequence is repeated continuously.

[4.225 MHz 4225 kHz 7NPE](#) Chinese military radio communications station, China.

Transmitting V V V test signal and "7NPE" Morse code identification on 22 May 2009 at 1350 UTC signal strength-7. This station was not heard for many days earlier during which time a wideband signal was occupying the frequency.

This station was earlier reported as 7NWI as follows:

[4.225 MHz 4225 kHz 7NWI](#) (4225 kHz 7NPE) unknown station.

Heard on 16 May 2009 at 2042 UTC signal strength-3 sending Morse code "V V V de 7NWI"

three times.

W I and PE can be confused at high Morse code speed.

W is dit-daaa-daaa.

i is dit-dit.

P is dit-daaa-daaa-dit.

E is dit.

[4.325.9 MHz 4325.9 kHz R](#) Russian Federation Army communications station, Izhevsk, Udmurt Republic, Russian Federation. Central European Russian Federation frequency marker R. Non Directional Beacon R.

Frequency marker heard on 17 May 2009 at 2000 UTC signal strength 1 sending the Morse code letter "R" continuously at a speed around 5 words per minute (5wpm). A "beep" was also heard every 6 seconds. This was first reported as 4326 MHz 4326 kHz R.

[4.331 MHz 4331 kHz 4XZ](#) Haifa Radio, Israel navy coastal radio station ship to shore communications.

Heard on 16 May 2009 at 2020 UTC signal strength 6 sending Morse code messages with call sign identification "V V V de 4XZ" repeated before continuing with the message. Morse code speed was around 15 words a minute. I initially thought the call sign was 4X7 (4331 kHz 4X7). On 17 May 2009 between 1430 UTC to 2030 UTC 4XZ was heard several times.

**4.238 MHz 4238 kHz VTP** India Navy Wireless Station, Visakhapatnam, India. Indian Naval coastal radio station ship to shore communications.  
Repeating in Morse code the message V V V (3 times) VTP4/6/7/8 (3 times) on 17 May 2009 at 1350 UTC with signal strength 8. In Morse code slash (/) is daaa dit dit daaa dit.

**4.534 MHz 4534 kHz UWM2** unknown military communications station.  
Heard on 16 May 2009 at 1946 UTC signal strength 9 sending "ZKT5 (3 times) de (means this is) UMW2 (3 times)". This Morse code format is repeated continuously. Station ZKT5 is unknown.

**4.554 MHz 4554 kHz UWM2** unknown military communications station.  
Heard on 15 May 2009 at 2022 UTC signal strength 3 sending "de UMW2" (three times) "K" (over) on Morse code (CW). This Morse code format is repeated continuously.

**4.558.3 MHz 4558.3 kHz K** Russian naval station, Petropavlovsk-Kamchatskiy, Kamchatka, Russia. Far east Asian Russia Bering Sea radio beacon. Non Directional Beacon K.  
The letter K is transmitted every second in Morse code.  
13 Jul 2009 at 1412 UTC signal strength 7. (Not 4.558 MHz 4558 kHz K).

**4.717.4 MHz 4717.4 kHz Morse code letters sent once in groups of 5.**  
22 May 2009 at 2025 UTC signal strength 7 to 8. (Not 4.717 MHz 4717 kHz 5 letter groups or 4.717.5 MHz 4717.5 kHz 5 letter groups or 4.718 MHz 4718 kHz 5 letter groups)

**5.000 MHz 5000 kHz BPM** Shaanxi Astronomical Observatory, China Academy of Sciences, Shaanxi, China. This is the Chinese National Time Service Centre providing accurate time by broadcasting a "beep" every second. Heard on 12 May 2009 at 1059 UTC with fair signal strength using MCW to identify the call sign "BPM" at one minute before and 29 minutes past each hour.

**5154.3 MHz 5154.3 kHz K** Russian naval station, Petropavlovsk-Kamchatskiy, Kamchatka, Russia. Far east Asian Russia Bering Sea radio beacon. Non Directional Beacon K.  
The letter K is transmitted every second in Morse code.  
13 Jul 2009 at 1327 UTC signal strength 3. (Not 5154 MHz 5154 kHz K).

**5.153.7 MHz 5153.7 kHz D** Russian naval station, Sevastopol, Ukraine. Russian Black Sea coastal radio beacon. Non Directional Beacon D.  
The letter D is transmitted every second in Morse code.  
21 Jul 2009 at 1857 UTC signal strength 1.  
(Not 5.153 MHz 5153 kHz D or 5.153.5 MHz 5153.5 kHz D or 5.154 MHz 5154 kHz).

**5.153.8 MHz 5153.8 kHz M** Russian naval station, Magadan, Russia. Far east Asian Russia Sea of Okhotsk Non Directional radio beacon. Non Directional Beacon M.  
The letter M is transmitted every 2 seconds in Morse code.  
13 Jul 2009 at 1342 UTC signal strength 7. (Not 8.495.5 MHz 8495.5 kHz M or 8.495 MHz 8495 kHz M or 5.154.3 MHz 5154.3 kHz M).

**6.317 MHz 6317 kHz WLO** Mobile Radio, city of Mobile, Alabama, USA coastal radio station ship to shore communications. 18 July 2009 at 0530 UTC signal strength 3 sending the radio call sign WLO on Morse code followed by 4 synchronizing signals for SITOR, AMTOR, PACTOR and PACTOR II digital radio communications.

**6318 MHz 6318 kHz KLB** Seattle Marine Radio, Seattle, Washington State, USA coastal radio station ship to shore communications.  
Heard on 18 May 2009 at 1415 UTC signal strength 7 sending in Morse code the call sign "KLB" (once) followed by 3 synchronizing signals. This Morse code and digital sequence is repeated continuously.  
18 July 2009 at 0715 UTC signal strength 6.

**6.325.5 MHz 6325.5 kHz VZG420** Townsville Radio, Queensland, Australia coastal radio station ship to shore communications.  
Heard on 17 May 2009 at 1952 UTC signal strength 2 sending the Morse code message "CQ de VZG420" every 3 minutes followed by synchronous signals for digital communications.  
This Morse code and digital sequence is repeated continuously. Heard on 18 May 2009 at 2109 UTC signal strength 9. (Not 6325 kHz VZG420 or 6326 kHz VZG420).

**7.038.7 MHz 7038.7 kHz D** Sevastopol Russian naval station, Sevastopol, Ukraine. Russian Black Sea coastal radio beacon. Non Directional Beacon D.  
The letter D is transmitted every second in Morse code.  
12 Jul 2009 at 1538 UTC signal strength 5. (Not 7.039 MHz 7039 kHz D).

**7.038.9 MHz 7038.9 kHz S** Russian naval station, Russian northern fleet base, Severomorsk, Murmansk district, Russia. Kola Bay, Arctic and Northern Russia coastal radio beacon. Non Directional Beacon S.  
The letter S is transmitted every second in Morse code.  
12 Jul 2009 at 1538 UTC signal strength 3. (Not 7.039 MHz 7039 kHz S).

**7.039 MHz 7039 kHz C** Russian naval Headquarter, Moscow, Russia. Central European Russia Moscow River coastal radio beacon. Non Directional Beacon C.  
The letter C is transmitted every second in Morse code.  
23 Jul 2009 at 1629 UTC. with signal strength 1.

**7.0393 MHz 7039.3 kHz K** Russian naval station, Petropavlovsk-Kamchatskiy, Kamchatka, Russia. Far east Asian Russia Bering Sea radio beacon. Non Directional Beacon K.  
The letter K is transmitted every second in Morse code.  
12 Jul 2009 at 1113 UTC signal strength 2. This is a continuous 24 hour transmission. Sometimes K faded in while station M faded out briefly. Signal strength 7 at 1210 UTC. (Not 7.039 MHz 7039 kHz K).

**7.0394 MHz 7039.4 kHz M** Russian naval station, Magadan, Sea of Okhotsk, Russia. Far east Asian Russia Sea of Okhotsk radio beacon. Non Directional Beacon M.

The letter M is transmitted every 2 seconds in Morse code.

12 Jul 2009 at 1113 UTC signal strength 1. This is a continuous transmission. Sometimes M faded in while station K faded out briefly. Signal strength 6 at 1210 UTC. (Not 7.039 MHz 7039 kHz M).

**8.417.5 MHz 8417.5 kHz XSV** Tianjin Radio, China coastal radio station ship to shore communications.

Heard on 17 May 2009 at 2024 UTC signal strength 8 sending the radio call sign XSV once on Morse code followed by 4 synchronizing signals. This Morse code and digital sequence is repeated continuously.  
(Not 8417 kHz XSV or 8418 kHz XSV).

**8.418 MHz 8418 kHz IAR** Roma Radio (Rome Radio), Italy coastal radio station ship to shore communications.

Heard on 15 May 2009 at 1754 UTC signal strength 6 sending the radio call sign IAR once on Morse code (CW) followed by synchronizing signals for digital radio communications. This Morse code and digital transmission format is repeated continuously.  
18 July 2009 signal strength 5 at 0545 UTC repeating in Morse code IAR once followed by 4 synchronizing signals.

**8.421 MHz 8421 kHz WLO** Mobile Radio, city of Mobile, Alabama, USA coastal radio station ship to shore communications.

Heard on 8 May 2009 at 1026 UTC signal strength 5 regularly sending the radio call sign WLO on Morse code followed by synchronizing signals for SITOR, AMTOR, PACTOR and PACTOR II digital radio communications.

**8.422 MHz 8422 kHz NRV** Guam Island, central Pacific Ocean, United States Coast Guard USCG coastal radio station ship to shore communications.

Heard on 8 May 2009 at 1022 UTC signal strength 9 sending the radio call sign NRV on Morse code once followed by three synchronizing signals. This Morse code identification and digital sequence is repeated.  
18 July 2009 at 0530 UTC signal strength 5.

**8.423 MHz 8423 kHz UFL** Vladivostok Radio, Russia Pacific Ocean coastal radio station ship to shore communications.

On 17 May 2009 at 2026 UTC sending "de UFL" on Morse code every 18 seconds with signal strength 4.

**8.424 MHz 8424 kHz SVO** Olympia Radio, Greece coastal radio station ship to shore communications remotely controlled from Athens, Greece.

Heard on 15 May 2009 at 1745 UTC signal strength 5 sending on Morse code "de SVO" followed by a 2-second long carrier. This Morse code and carrier format is repeated continuously.  
18 July 2009 at 0540 UTC signal strength 6.

**8.425.5 MHz 8425.5 kHz XSG** Shanghai Radio, China coastal radio station ship to shore communications.

Heard on 8 May 2009 at 1038 UTC signal strength 7 regularly sending the radio call sign XSG on Morse code followed by synchronizing signals. (Not 8425 kHz XSG or 8426 kHz XSG).

**8.427.5 MHz 8427.5 kHz A9M** Hamala Radio, Bahrain coastal radio station ship to shore communications.

Heard on 15 May 2009 at 1748 UTC signal strength 3 sending on Morse code "de A9M tlx" (tlx means Telex, Telex by HF radio) followed by synchronizing signals for digital radio communications. This Morse code and digital transmission format is repeated continuously.

(Not 8427 kHz A9M or 8428 kHz A9M).

**8.431 MHz 8431 kHz TAH** Istanbul Radio, Turkey coastal radio station ship to shore communications.

Heard on 9 May 2009 at 2152 UTC signal strength 3 regularly sending the radio call sign TAS on Morse code followed by synchronizing signals.

**8431.5 MHz 8431.5 kHz UAT** Moscow Radio, Russia coastal radio station ship to shore communications.

Heard on 20 June 2009 at 1617 UTC signal strength 7 sending the radio call sign "de UAT" in Morse code every 18 seconds once followed by synchronizing signals. This Morse code and digital sequence is repeated continuously. (Not 8431 kHz UAT or 8432 kHz UAT).

**8.433 MHz 8.433 kHz XSG** Shanghai Radio, China coastal radio station ship to shore communications.

Heard on 9 May 2009 at 0907 UTC signal strength 7 regularly sending the radio call sign XSG on Morse code followed by synchronizing signals.

**8.434 MHz 8434 kHz TAH** Istanbul Radio, Turkey coastal radio station ship to shore communications.

Heard on 9 May 2009 at 2154 UTC signal strength 3 regularly sending the radio call sign TAH on Morse code followed by synchronizing signals.

**8.435 MHz 8435 kHz XSQ** Guangzhou Radio, China coastal radio station ship to shore communications.

Heard on 8 May 2009 at 1032 UTC signal strength 5 sending the radio call sign XSQ once on Morse code followed by synchronizing signals. This Morse code and digital sequence is repeated continuously.

**8.436 MHz 8436 kHz VZG420** Townsville Radio, Queensland, Australia coastal radio station

ship to shore communications.

Heard on 8 May 2009 at 1032 UTC signal strength 5 sending the Morse code message "CQ de VZG420" every 5 minutes followed by synchronous signals for digital communications. This Morse code and digital sequence is repeated continuously.

**8.484 MHz 8484 kHz HLG** Seoul Radio, South Korea coastal radio station ship to shore communications.

Repeating the Morse code message: CQ (meaning "general call to any station" sent 3 times) de (meaning "this is" sent one time) HLG (call sign HLG sent 3 times) QSX (means

listening on) 8 MHz K (means go ahead or over). Heard on 8 May 2009 at 1017 UTC signal strength 5 to 7.

**8.491 MHz 8491 kHz AQP, 8491 kHz AQP4/5** Pakistan navy communications station, Karachi, Pakistan.

Transmitting in Morse code V V V (3 times) followed by the call sign AQP4/5 (once). Repeated continuously.

14 July 2009 at 1240 UTC with signal strength 5. (Not 8490 kHz AQP or 8490 kHz AQP4/5).

**8.494.7 MHz 8494.7 kHz D** Sevastopol Russian naval station, Sevastopol, Ukraine. Russian Black Sea coastal radio beacon. Non Directional Beacon D.

The letter D is transmitted every second in Morse code.

14 Jul 2009 at 1436 UTC signal strength under 1. (Not 8.495 MHz 8495 kHz D or 8.494.5 MHz 8494.5 kHz D or 8.493 MHz 8493 kHz D).

**8.494.9 MHz 8494.9 kHz S** Russian naval station, Russian northern fleet base, Severomorsk, Murmansk district, Russia. Kola Bay, Arctic and Northern Russia coastal radio beacon. Non Directional Beacon S.

The letter S is transmitted every second in Morse code.

15 July 2009 at 1230 UTC with signal strength under 1 fading in and out.

**8.495 MHz 8495 kHz C** Russian naval Headquarter, Moscow, Russia. Central European Russia Moscow River coastal radio beacon. Non Directional Beacon C.

The letter C is transmitted every second in Morse code.

23 Jul 2009 at 1632 UTC with signal strength 2.

**8.495.2 MHz 8495.2 kHz F** Russian naval station, Vladivostok, Russia. Far east Asian Russia Sea of Japan coastal radio beacon. Non Directional Beacon F.

The letter F is transmitted every second in Morse code.

17 July 2009 at 1110 UTC with signal strength 2.

**8.495.3 MHz 8495.3 kHz K** Russian naval station, Petropavlovsk-Kamchatskiy, Kamchatka, Russia. Far east Asian Russia Bering Sea radio beacon. Non Directional Beacon K.

The letter K is transmitted every second in Morse code.

13 Jul 2009 at 1309 UTC signal strength 5. (Not 8.495.5 MHz 8495.5 kHz K or 8.495 MHz 8495 kHz K)

**8.495.4 MHz 8495.4 kHz M** Russian naval station, Magadan, Russia. Far east Asian Russia Sea of Okhotsk radio beacon. Non Directional Beacon M.

The letter M is transmitted every 2 seconds in Morse code. Signal strength 6 at 1210 UTC.

13 Jul 2009 at 1310 UTC signal strength 1. (Not 8.495.5 MHz 8495.5 kHz M or 8.495 MHz 8495 kHz M)

**8.636 MHz 8636 kHz HLW**, Seoul Radio, South Korea coastal radio station ship to shore communications.

Repeating the Morse code message: CQ (meaning "general call to any station" sent 3 times) de (meaning "this is" sent one time) HLW (call sign HLW sent 3 times) QSX (means listening on) 8 MHz K (means go ahead or over). Heard on 8 May 2009 at 1010 UTC signal strength 7.

### 13 July 2009 News flash!

**USA returns to Morse code 10 years after it was last commercially used by USA ships.**

**8.642 MHz 8642 kHz KPH** Point Reyes coastal radio station, Bolinas, north of San Francisco, California, USA.

This radio station was closed 10 years ago.

13 July 2009 I heard a computer quality Morse code message followed by V V V de KPH at 0700 UTC and then I heard a hand sent Morse code message starting with CQ CQ CQ de KPH. Signal strength 7.

10 years ago radio station KPH sent its last commercial Morse code message in the USA. During a special event beginning 12 July 2009 at 1701 UTC (13 July 2009 at 0001 UTC) marine radio station KPH has returned to the air on Morse code to commemorate the men and women who used Morse code on ships and in coast radio stations in the USA and around the world.

KPH is transmitting on Morse code using 426 kHz, 500 kHz, 4247.0 kHz, 6477.5 kHz, 8642.0 kHz, 12808.5 kHz, 17016.8 kHz and 22477.5 kHz.

KPH is listening for Morse code replies from ships on 500 kHz, 4184.0 kHz, 6276.0 kHz, 8368.0 kHz, 12552.0 kHz, 16736.0 kHz and 22280.5 kHz.

Many other USA coastal radio stations have also joined this special event on Morse code.

**8.646 MHz 8646 kHz VTP** India Navy Wireless Station, Visakhapatnam, India. Indian Naval coastal radio station ship to shore communications.

Repeating in Morse code the message V V V (3 times) VTP4/6/7/8 (3 times) on 13 July 2009 at 1212 UTC with signal strength 8. In Morse code slash (/) is daaa dit dit daaa dit.

### **9.112 MHz 9112 kHz Morse code letters sent once in groups of 5.**

Heard on MCW on 8 May 2009 at 1015 UTC signal strength 9. This is the same transmitter (reported to be from Cuba) that was earlier on 9.153 MHz 9153 kHz.

### **9.153 MHz 9153 kHz Morse code letters sent once in groups of 5.**

Heard on MCW on 8 May 2009 at 0715 UTC with signal strength 9 plus 10db.

These broadcasts have previously been reported as originating from transmitters in Cuba.

**10.000 MHz 10.000 MHz BPM** Shaanxi Astronomical Observatory, China Academy of Sciences, Shaanxi, China. This is the Chinese National Time Service Centre providing accurate time by broadcasting a "beep" every second. Heard on 12 May 2009 at 1059 UTC with fair signal strength using MCW to identify the call sign "BPM" at one minute before and 29 minutes past each hour.

### **10.433 MHz 10433 kHz Morse code letters sent once in groups of 5.**

Heard on MCW on 11 May 2009 at 0933 UTC signal strength 9.

**10.871.7 MHz 10871.7 kHz D** Sevastopol joint Russian naval station, Sevastopol, Ukraine. Russian Black Sea coastal radio beacon. Non Directional Beacon D.



The letter D is transmitted every second in Morse code.

14 Jul 2009 at 1401 UTC signal strength under 1. (Not 10.872 MHz 10872 kHz D or 10.871.5 MHz 10871.5 kHz D).

[10871.9 MHz 10871.9 kHz S](#) Russian naval station, Russian northern fleet base, Severomorsk, Murmansk district, Russia. Kola Bay, Arctic and Northern Russia coastal radio beacon. Non Directional Beacon S.

The letter S is transmitted every second in Morse code.

21 July 2009 at 2150 UTC with signal strength 1.

[10.872 MHz 10872 kHz C](#) Russian naval Headquarters, Moscow, Russia. Central European Russia Moscow River coastal radio beacon. Non Directional Beacon C.

The letter C is transmitted every second in Morse code.

14 Jul 2009 at 1513 UTC.with signal strength 1.

[10.872.1 MHz 10872.1 kHz A](#) Russian naval station, Astrakhan, Russia. Southern European Russia Caspian Sea coastal radio beacon. Non Directional Beacon A.

The letter A is transmitted every second in Morse code.

13 Jul 2009 at 1356 UTC signal strength 1. (Not 10.872 MHz 10872 kHz A).

[10.872.3 MHz 10872.3 kHz T](#) Russian naval station, Russia. Faulty Non Directional Beacon T.

The letter T is transmitted every 3 seconds in Morse code with occasional spaces in the transmission.

21 July 2009 at 2030 UTC.with signal strength 1. Still heard at 2100 UTC. Some clicks noted at the start of keying at 2102 UTC. By 2003 UTC T had disappeared and replaced by two clicking sounds repeated, one T heard at 2005 UTC followed by 2 clicks without sound repeated then again one last T heard, 2 clicks without sound repeated. This could be a faulty Morse code beacon. The first identified Russian Navy beacon to appear was the A beacon at 2101 UTC under signal strength 1. Two clicking sounds continued with no further tones by 2112 UTC and faded out by 2120 UTC. (At 2100 UTC the D beacon heard on 7038.7 kHz and 8494.7 kHz).

(Not 10.872 MHz 10872 kHz T or 10.872.5 MHz 10873.5 kHz T).

[11.000 MHz 11000 kHz RIW](#) Russian Navy Headquarters, Moscow, Russia.

Radio Operators based in the Kremlin in Moscow sending Morse code remotely through transmitter sites in Russia. Very active using CW Morse code to call stations followed by call sign "RIW" then "K" (K means "go ahead"). Heard on 13 May 2009 at 0630 UTC signal strength 1.

[12.581.5 MHz 12581.5 kHz XSV](#) Tianjin Radio, China coastal radio station ship to shore communications.

Heard on 15 May 2009 at 2125 UTC signal strength 5 sending on Morse code "XSV" once followed by four synchronizing signals for digital radio communications. This Morse code and digital transmission format is repeated continuously. (Not 12581 kHz XSV or 12582 kHz XSV).

[12.585 MHz 12585 kHz NRV](#) Guam Island, central Pacific Ocean, United States Coast Guard USCG coastal radio station ship to shore communications.

Heard on 16 May 2009 at 2026 UTC signal strength 9 sending the radio call sign NRV on Morse code once followed by four synchronizing signals. This Morse code identification and digital sequence is repeated.

**12.590.5 MHz 12590.5 kHz KLB** Seattle Marine Radio, Seattle, Washington State, USA coastal radio station ship to shore communications.

18 July 2009 at 0533 UTC signal strength 7 sending in Morse code the call sign "KLB" (once) followed by 4 synchronizing signals. This Morse code and digital sequence is repeated continuously.

**12.591.5 MHz 12591.5 kHz UFL** Vladivostok Radio, Russia Pacific Ocean coastal radio station ship to shore communications. 18 July 2009 at 0812 UTC signal strength 5 sending "de UFL" on Morse code every 13 seconds followed by synchronizing signals. (Not 12.591 MHz 12591 kHz UFL or 12.592 MHz 12592 kHz UFL).

**12.613 MHz 12613 kHz XSQ** Guangzhou Radio, China coastal radio station ship to shore communications.

18 July 2009 at 0250 UTC signal strength 5 sending the radio call sign XSQ once on Morse code followed by 3 synchronizing signals. This Morse code and digital sequence is repeated continuously.

**12.637.5 MHz 12637.5 kHz XSG** Shanghai Radio, China coastal radio station ship to shore communications.

Heard on 15 May 2009 at 2122 UTC signal strength 8 regularly sending the radio call sign XSG once on Morse code followed by synchronizing signals. Morse code and digital transmission format is repeated continuously. (Not 12637 kHz XSG or 12638 kHz XSG).

**12.843 MHz 12843 kHz HLO** Seoul Radio, South Korea coastal radio station ship to shore communications. Repeating the Morse code message: CQ (meaning "general call to any station" sent 3 times) de (meaning "this is" sent one time) HLO (call sign HLO sent 3 times) QSX (Q code meaning "I am listening on") 12 MHz K (K means "go ahead anyone wishing to contact me"). Heard on 12 May 2009 at 1154 UTC signal strength 8.

**12.916.5 MHz 12916.5 kHz HLF** Seoul Radio, South Korea coastal radio station ship to shore communications. Repeating the Morse code message: CQ (meaning "general call to any station" sent 3 times) de (meaning "this is" sent one time) HLF (call sign HLF sent 3 times) QSX (Q code meaning "I am listening on") 12 MHz K (K means "go ahead anyone wishing to contact me"). Heard on 12 May 2009 at 1150 UTC signal strength 8. (Not 12916 kHz HLF or 12917 kHz HLF).

**12.923 MHz 12923 kHz HLW2** Seoul Radio, South Korea coastal radio station ship to shore communications.

Repeating the Morse code message: CQ (meaning "general call to any station" sent 3 times) de (meaning "this is" sent one time) HLW2 (call sign HLW2 sent 3 times) QSX (meaning "listening on") 12 MHz K (meaning "over"). Heard on 15 May 2009 at 2117 UTC signal strength 8.

**12.935 MHz 12935 kHz HLG** Seoul Radio, South Korea coastal radio station ship to shore communications.

Repeating the Morse code message: CQ (meaning "general call to any station" sent 3

times) de (meaning "this is" sent one time) HLG (call sign HLG sent 3 times) QSX (meaning "listening on ") 12 MHz K (meaning "over"). Heard on 15 May 2009 at 2116 UTC signal strength 8.

**13.527.7 MHz 13527.7 kHz D** Sevastopol joint Russian naval station, Sevastopol, Ukraine. Russian Black Sea coastal radio beacon. Non Directional Beacon D. The letter D is transmitted every second in Morse code. 14 Jul 2009 at 0355 UTC signal strength under 1 and some fade out. (Not 13.528 MHz 13528 kHz D or 13.527.5 MHz 13527.5 kHz D).

**13.527.8 MHz 13527.8 kHz M** Russian naval station, Magadan, Russia. Far east Asian Russia Sea of Okhotsk radio beacon. Non Directional Beacon M. The letter M is transmitted every 2 seconds in Morse code. 21 Jul 2009 at 2205 UTC signal strength 1. (Not 13.527.5 MHz 13.527.5 kHz M or 13.527 MHz 13.527 kHz M or 13.528 MHz 13.528 kHz M)

**13.527.9 MHz 13527.9 kHz S** Russian naval station, Russian northern fleet base, Severomorsk, Murmansk district, Russia. Kola Bay, Arctic and Northern Russia coastal radio beacon. Non Directional Beacon S. Non Directional Beacon S. The letter S is transmitted every second in Morse code. 14 July 2009 at 1250 UTC with signal strength 1.

**13.528 MHz 13.528 kHz A** Russian naval station, Astrakhan, Russia. Southern European Russia Caspian Sea coastal radio beacon. Non Directional Beacon A. The letter A is transmitted every second in Morse code. 14 Jul 2009 at 0116 UTC signal strength 1.

**13.528 MHz 13528 kHz C** Russian naval Headquarters, Moscow, Russia. Central European Russia Moscow River coastal radio beacon. Non Directional Beacon C. The letter C is transmitted every second in Morse code. 14 Jul 2009 at 1255 UTC with signal strength 1.

**14.047.5 MHz 14047.5 kHz W1AW** American Radio Relay League (ARRL), Newington, Connecticut, USA. The USA amateur radio headquarter station Morse code practice broadcast heard on 12 June 2009 at 0212 UTC signal strength 5 to 6.

**14.100 MHz 14100 kHz W6WX** San Jose, California, USA. Amateur Radio International radio beacon project to monitor Solar and other factors that affect radio communications. The Northern California DX Foundation Inc (NCDXF) propagation research radio beacon uses a vertical antenna to transmit the call sign W6WX in Morse code once every 3 minutes followed by 4 carriers of decreasing power levels. 20 June 2009 at 0609 UTC 4 carriers were heard, 100 Watts, 10 Watt, 1 Watt and 0.1 Watt (100 mw) signal strength 9 to signal strength 1.

[14.100 MHz 14100 kHz KH6WO](#) Laie, Oahu, Hawaii, USA. Amateur Radio International radio beacon project to monitor Solar and other factors that affect radio communications. The Honolulu Amateur Radio Club propagation research radio beacon uses a vertical antenna to transmit the call sign KH6WO in Morse code once every 3 minutes followed by 4 carriers of decreasing power levels. 20 June 2009 at 0627 UTC 4 carriers were heard, 100 Watts, 10 Watt, 1 Watt and 0.1 Watt (100 mw) signal strength 7 to signal strength 1.

[14.100 MHz 14100 kHz ZL6B](#) Masterton, New Zealand. Amateur Radio International radio beacon project to monitor Solar and other factors that affect radio communications. The New Zealand Association of Radio Transmitters (NZART) propagation research radio beacon uses a vertical antenna to transmit the call sign ZL6B in Morse code once every 3 minutes followed by 4 carriers of decreasing power levels. 19 June 2009 at 2348 UTC 4 carriers were heard, 100 Watts was signal strength 9, then 10 Watt and 1 Watt. 0.1 Watt (100 mw) was signal strength 5.

[14.100 MHz 14100 kHz VK6RBP](#) Perth, Western Australia. Amateur Radio International radio beacon project to monitor Solar and other factors that affect radio communications. The Wireless Institute Of Australia (WIA) Western Australian Division propagation research radio beacon uses a vertical antenna to transmit the call sign VK6RBP in Morse code once every 3 minutes followed by 4 carriers of decreasing power levels. 19 June 2009 at 0116 UTC 4 carriers were heard, 100 Watts was signal strength 8, then 10 Watt and 1 Watt. 0.1 Watt (100 mw) was signal strength 1.

[14.100 MHz 14100 kHz JA2IGY](#) Mount Asama, Ise city, Mie, Japan. Amateur Radio International radio beacon project to monitor Solar and other factors that affect radio communications. The Japan Amateur Radio League (JARL) propagation research radio beacon uses a vertical antenna to transmit the call sign JA2IGY in Morse code once every 3 minutes followed by 4 carriers of decreasing power levels. 20 June 2009 at 0628 UTC heard 1 carrier at 100 Watts signal strength less than 1.

[15.000 MHz 15.000 kHz BPM](#) Shaanxi Astronomical Observatory, China Academy of Sciences, Shaanxi, China. This is the Chinese National Time Service Centre providing accurate time by broadcasting a “beep” every second. Heard on 13 May 2009 at 0759 UTC with fair signal strength using Modulated Morse code (MCW). The call sign “BPM” is sent 8 or 9 times at one minute before and 29 minutes past each hour.

[16.332 MHz 16332 kHz A](#) Russian naval station, Astrakhan, Russia. Southern European Russia Caspian Sea coastal radio beacon. Non Directional Beacon A. The letter A transmitted every second in Morse code. 14 Jul 2009 at 0655 UTC signal strength 1.

[16.812.5 MHz 16812.5 kHz NRV](#) Guam Island Radio, central Pacific Ocean, United States Coast Guard USCG coastal radio station ship to shore communications. Heard on 9 May 2009 at 0212 UTC signal strength 1 to 2 sending the radio call sign NRV on Morse code every 15 seconds followed by synchronizing signals.

(Not 16812 kHz NRV or 16813 kHz NRV).

**16.876.7 MHz 16876.7 kHz XSQ** Guangzhou Radio, China coastal radio station ship to shore communications.

Heard on 14 July 2009 at 2330 UTC signal strength 5 sending the radio call sign XSQ once on Morse code followed by 3 synchronizing signals. This Morse code and digital sequence is repeated continuously. (Not 16.876.5 MHz 16876.5 kHz XSQ or 16.876 MHz 16876 kHz XSQ or 16.877 MHz 16877 kHz XSQ)

**16.880 MHz 16880 kHz XSQ** Guangzhou Radio, China coastal radio station ship to shore communications.

Heard on 14 July 2009 at 2330 UTC signal strength 5 sending the radio call sign XSQ once on Morse code followed by 3 synchronizing signals. This Morse code and digital sequence is repeated continuously.

**16.892 MHz 16892 kHz XSG** Shanghai Radio, China coastal radio station ship to shore communications. Heard on 14 July 2009 at 2332 UTC signal strength 5 sending the radio call sign XSG once on Morse code followed by 3 synchronizing signals. This transmission format is repeated continuously.

**16.898.5 MHz 16898.5 kHz XSG** Shanghai Radio, China coastal radio station ship to shore communications. Heard on 12 May 2009 at 1038 UTC signal strength 1 sending the radio call sign XSG once on Morse code followed by 3 synchronizing signals. This transmission format is repeated continuously.  
(Not 16898 kHz XSG or 16899 kHz XSG).

**16.910 MHz 16.910 kHz HLJ**, Seoul Radio, South Korea coastal radio station ship to shore communications. Repeating the Morse code message: CQ (meaning "general call to any station" sent 3 times) de (meaning "this is" sent one time) HLJ (call sign HLJ sent 3 times). Heard on 11 May 2009 at 0218 UTC signal strength 1.

**17.130 MHz 17130 kHz HLW**, Seoul Radio, South Korea coastal radio station ship to shore communications.

Repeating the Morse code message: CQ (meaning "general call to any station" sent 3 times) de (meaning "this is" sent one time) HLW (call sign HLW sent 3 times) QSX (meaning "listening on ") 12 MHz K (K means "over"). Heard on 11 May 2009 at 0214 UTC signal strength 7.

**18.097.5 MHz 18097.5 kHz W1AW** American Radio Relay League (ARRL), Newington, Connecticut, USA.

The USA amateur radio headquarter station Morse code practice broadcast heard on 12 June 2009 at 2303 UTC signal strength 1. This is often heard in Sydney.

**18.110 MHz 18110 kHz W6WX** San Jose, California, USA. Amateur Radio International radio beacon project to monitor Solar and other factors that affect radio communications. The Northern California DX Foundation Inc (NCDXF) propagation research radio beacon uses a vertical antenna to transmit the call sign W6WX in Morse code once every 3 minutes followed by 4 carriers of decreasing power levels. 21 June 2009 at 0615 UTC 3

carriers were heard, 100 Watts, 10 Watt and 1 Watt all signal strength 1.

[18.110 MHz 18110 kHz KH6WO](#) Laie, Oahu, Hawaii, USA. Amateur Radio International radio beacon project to monitor Solar and other factors that affect radio communications. The Honolulu Amateur Radio Club propagation research radio beacon uses a vertical antenna to transmit the call sign KH6WO in Morse code once every 3 minutes followed by 4 carriers of decreasing power levels.

21 June 2009 at 0621 UTC 1 carrier was heard at 100 Watts signal strength 1.

[18.110 MHz 18110 kHz ZL6B](#) Masterton, New Zealand. Amateur Radio International radio beacon project to monitor Solar and other factors that affect radio communications.

The New Zealand Association of Radio Transmitters (NZART) propagation research radio beacon uses a vertical antenna to transmit the call sign ZL6B in Morse code once every 3 minutes followed by 4 carriers of decreasing power levels. 20 June 2009 at 0225 UTC 4 carriers were heard 100 Watts, 10 Watt, 1 Watt and 0.1 Watt (100 milliwatts) all at and under signal strength 1.

[18.110 MHz 18110 kHz VK6RBP](#) Perth, Western Australia. Amateur Radio International radio beacon project to monitor Solar and other factors that affect radio communications.

The Wireless Institute Of Australia (WIA) Western Australian Division propagation research radio beacon uses a vertical antenna to transmit the call sign VK6RBP in Morse code once every 3 minutes followed by 4 carriers of decreasing power levels. 20 June 2009 at 0228 UTC 3 carriers were heard 100 Watts, 10 Watts and 1 Watt all under signal strength 1. 21 June 2009 at 0622 UTC 2 carriers were heard at 100 Watts and 10 Watts signal strength 1.

[18.110 MHz 18110 kHz JA2IGY](#) Mount Asama, Ise city, Mie, Japan. Amateur Radio International radio beacon project to monitor Solar and other factors that affect radio communications.

The Japan Amateur Radio League (JARL) propagation research radio beacon uses a vertical antenna to transmit the call sign JA2IGY in Morse code once every 3 minutes followed by 4 carriers of decreasing power levels. 21 June 2009 at 0622 UTC 2 carriers were heard at 100 Watts and 10 Watts signal strength 1.

[21.067.5 MHz 21067.5 kHz W1AW](#) American Radio Relay League (ARRL), Newington, Connecticut, USA.

The USA amateur radio headquarter station Morse code practice broadcast heard on 12 June 2009 at 0208 UTC signal strength 5.

[21.150 MHz 21150 kHz W6WX](#) San Jose, California, USA. Amateur Radio International radio beacon project to monitor Solar and other factors that affect radio communications.

The Northern California DX Foundation Inc (NCDXF) propagation research radio beacon uses a vertical antenna to transmit the call sign W6WX in Morse code once every 3 minutes followed by 4 carriers of decreasing power levels. 21 June 2009 at 0506 UTC 3 carriers were heard, 100 Watts, 10 Watt and 1 Watt all signal strength 1.

[21.150 MHz 21150 kHz JA2IGY](#) Mount Asama, Ise city, Mie, Japan. Amateur Radio International radio beacon project to monitor Solar and other factors that affect radio communications.

The Japan Amateur Radio League (JARL) propagation research radio beacon uses a vertical antenna to transmit the call sign JA2IGY in Morse code once every 3 minutes followed by 4 carriers of decreasing power levels. 19 June 2009 at 0223 UTC 2 carriers were heard, 100 Watts and 10 Watt signal strength 1.

[22.382 MHz 22.382 kHz NRV](#) Guam Island, central Pacific Ocean, United States Coast Guard USCG coastal radio station ship to shore communications.

Heard on 16 May 2009 at 0248 UTC signal strength 9 sending the radio call sign NRV on Morse code once followed by four synchronizing signals. This Morse code identification and digital sequence is repeated.

21 July 2009 at 0139 UTC signal strength 1 (signal strength 5 at 0343 UTC).

[22.383.5 MHz 22383.5 kHz WLO](#) Mobile Radio, city of Mobile, Alabama, USA coastal radio station ship to shore communications.

21 July 2009 at 0138 UTC signal strength 1 sending the radio call sign WLO on Morse code once followed by 4 synchronizing signals for SITOR, AMTOR, PACTOR and PACTOR II digital radio communications. This Morse code and digital transmission format is repeated continuously.

[28.262 MHz 28262 kHz VK2RSY](#) amateur radio station in Dural, Northern Sydney, N.S.W., Australia.

Amateur Radio New South Wales, Australia is a 24 hour automatic radio beacon providing a signal for propagation "radio weather" research.

Heard on 9 May 2009 at 0430 UTC signal strength 9 plus 10db sending the radio call sign VK2RSY on Morse code every 40 seconds followed by a continuous unmodulated (no audio) radio frequency carrier wave.

#### Morse code on VHF (Very High Frequency) Radio.

[50.288 MHz 50288 kHz VK2RHV](#) amateur radio beacon station in Newcastle, N.S.W., Australia.

This is a 24 hour automatic radio beacon providing a signal for propagation "radio weather" research. Heard on 12 May 2009 at 2345 UTC signal strength 1 sending this message on Morse code "Beacon de VK2RHV Newcastle ..." 10 second carrier, 4 "dits" followed again with the Morse code identification message. This transmission format is repeated continuously.

[50.289 MHz 50289 kHz VK2RSY](#) amateur radio station in Dural, Northern Sydney, N.S.W., Australia.

Amateur Radio New South Wales, Australia is a 24 hour automatic radio beacon providing a signal for propagation "radio weather" research. Heard on 9 May 2009 at 0423 UTC signal strength 3 sending the radio call sign VK2RSY on Morse code every 40 seconds followed by a continuous unmodulated (no audio) radio frequency carrier wave.

[53.850 MHz 53850 kHz VK2RWI](#) amateur radio repeater station in Dural, Northern Sydney, N.S.W., Australia.

Amateur Radio New South Wales, Australia maintains this 24 hour automatic radio repeater station to provide a free automatic relay station that retransmits the FM voice conversations of amateur radio mobile, handheld or home stations over a long distance in the 6 metre amateur radio band. The Morse code identification transmits the repeater call sign "VK2RWI" in Frequency Modulated Morse code (MCW).