

Morse Station Profiles

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Message formats. Three different formats were noted so far.
Format 1: VVV markers
MX2N MX2N MX2N VVVVVVVVVVV VVVVVVVVVVV VVVVVVVVVVV +
JPTP JPTP JPTP VVVVVVVVVVV VVVVVVVVVVV VVVVVVVVVVV +
Format 2: 5LGs or 5FGs. Each message consists of 20 or 50
groups.
L8KT L8KT L8KT DE J2V4 J2V4 J2V4 QTC +
L8KT L8KT L8KT DE J2V4 J2V4 J2V4 QTC 12020901 =
LMXPM NAWQT KVUPD HIHQ5 XUBUR MFUFV KDVHY WHNHS YLEZF CHUZS
PMUTG UCWSK TNDZP EJVNO ZBLTY BCUKE UQGFA EVWGA AXDGD SZXLZ +
L8KT L8KT L8KT DE J2V4 J2V4 J2V4 QTC +
L8KT L8KT L8KT DE J2V4 J2V4 J2V4 QTC 22020905
16314 65034 60831 86120 80162 17140 46724 49060 85616 12093
36313 46935 18061 37968 14387 59575 82938 27202 69836 29579 +
Format 3:
KW2P KW2P KW2P DE JPTP JPTP JPTP
284 686 318 386 886 886 340 731 COL
284 686 318 386 886 886 340 731 +
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Updated January 2005

Available from ENIGMA 2000
<http://groups.yahoo.com/group/enigma2000>

List of Morse Station Profiles Updated January 2005

Notes R4= Repeat for 4 minutes 5F= 5 Figure paired groups 5f 5
Figure single groups
197x3= Repeated 3 times // Parallel Frequency

M01 is hand sent, using short zero, and the messages have a usual group count of 40 groups. Although just recently group counts have been varying between 30 and 48. In October 2000 The last group is now always the date the message was compiled and the group count minus one.

For example a message of 40 groups compiled on the 10th of the month, the last group would be 10039. This also applies to the M1 B network. Type of transmission is MCW using low modulation of 2 audio tones. Sent at about 17 WPM although this can vary depending on the operator.

Last group of the messages are now random. Recent group counts have started to be lower than the norm of about 40. At present usually in the 30s, but as low as 24.

Reference	Call	Preamble	Message	Ending
M01	197 R4	381 381 40 40 = =	40x5F = =	381 381 40 40 000

The IDs for this group remain the same for the following months.
197 November December January February
463 March April September October
025 May June July August

Transmission times are, and remain at the same time throughout the year.
Sunday 0700 Tues 1800 2000 Thur 1800 2000 Saturday 1500

Frequencies				
197	5464	5320 4490	5320 4490	5810
463	6508	5474 5017	5474 5017	6261
025	6780	5280 4905	5280 4905	6434

Variants of M01

M01A End of Month transmissions, the last Thursday and Saturday of each Month.

These transmissions are an entirely different format to the normal M1 But they can vary each time. Suggest listening to them to hear the format.

Some of these have been logged at times other than the EOM and at the same time as M01 was transmitting. Sending was not the usual high quality of M01. (possible operator practice sessions?)

These transmissions ceased to be at the end of the month from April 2002.

They have been heard but not at a regular time, day, or frequency. It is a matter of luck to find them.

M01B Hand sent. These are sent to individual IDs and the frequencies are changed at intervals so cannot all be listed. I can supply some current frequencies if required. These messages are repeated and can be the same for four weeks or more. Parallel frequencies are used, group counts vary between the low twenties and as high as seventy-five.

I have listed some of the present skeds. They do change frequency depending on the time of the year, as it gets toward Summer they move higher.

Also transmit 1 hour earlier when the clocks change to summertime.

November 2004

Monday 2110 4615 Tuesday 1820 4848 Thursday 2132
4605 Friday 2202 4505

M01C A common format of these is listed. Several other formats exist. If a message is sent it is nearly always 10 groups.

385 385 385 84297 84297 Repeated 8 times

30 Second pause

385 385 385 86652 86652 Repeated 8 times

Can be any number of these, usually machine sent, ending is hand sent.

385 385 385 000

These can be on at any time and do not use the normal M01 frequencies so are very difficult to find.

Logged on 14 July 1999 on 9143. A long transmission from 1045 to 1133, with 2 messages of 30 and 33 groups.

M01D A new variation heard on 29 September 1999 on 5730 at 0700

Also on 30 September 1999 on 5730 at 0600 0700 and 0800

Similar to M01C but all Auto sent

Call up was 331

Last group of message was random

Here is an example of the end of month transmissions. Between each line of the message there is a pause of anything from 5 to 170 Seconds. It appears that it is waiting for a reply from outstations in these pauses. None of these replies have ever been logged. The message, although there is not always one sent is unusual, in that the groups are only sent once. The call up usually uses the ID in use but has been known to start 333.

463 463 463 50481 50481 (This can be repeated up to 6 times)

111 51962 51962 (This can be repeated up to 6 times)

333 51028 51028

020 18 23

111 999

558 37 = 37x5f = 558 37

111 51179 53065 (Repeat of groups 15 and 25)

111 000

M02 Not heard since 31 October 1997 so presumed ended If it comes on again

will list times and frequencies.

M03. Modes usually ICW a few use MCW

Ref	Call	Preamble	Message	Ending
M03	044/00 (R5)*		No Message	= = 000
M03	044/54 (R5)*	= =	54x5F	= = 000
M03A	552/111/00(R5)*		No Message	= = 000
M03B	XXX/58	Messages repeated from one year to next.		
M03C	XXX/35	Messages 30 to 38 GC First and last 2 groups 77777		
M03D	XXX/58	Longer messages not repeated		

M03G XXX/XXX Messages letter R every 10 groups
(R5)* rarely are (R10) Morse is sent at about 17 WPM except for 503
which is very slow at 5 WPM. That transmission is normally on 10620
Monday at 0800 and 10720 0900 on Tuesday Some transmissions sent in
MCW. Has been since August 2000, sending shorter messages of 30 to 36
groups. These are strange as both the first and last 2 groups are
77777.

There are 3 regular null transmissions. One is daily at 1630 on the
following frequencies.

4180 November to February March to May 6252 September October 7377
May to August Saturday at 0800 7256 8187 9272

M03A is not sent very often and the meaning of it is not known; could
possibly be confirmation of receipt of message.

Only triplets of 111 and 333 have been noted.

When M03 sends a message after the 54x5F groups the ID is sent again
6 times then the message is repeated as 54x5f groups. 54 single
groups.

Is Usually on between 0700 and 1345 on the hour and the half hour.
Messages are usually between 50 and 59 groups, possibly so they fit
in the 30 minutes transmission time. There have recently this year
(2000) been some strange messages sent, with group counts 30 to 35.
These messages always start and end with the groups 77777 77777.

Now not active

M04 U R3 LO LOx3/75977 75977 100x5f Always 100
LO LO/75977 75977 Repeats Message AR SK AR SK

This station uses long zeros. Always MCW with quite low level mod.
Speed 19 WPM

Sent on the second week only of the E23 schedule. Monday Wednesday
and Thursday at the same times.

0957 7250

1157 8188

1257 5748

Last log 14/9/00 There is still a carrier on these frequencies at
the
same

times. Possibly the frequency is being kept open for future use.

These carriers ceased in 2002

Not Active

M07 Mode, Always MCW, constant carrier. Speed 17 WPM.

Strange call, sounds like letters with long dash. "Letters" used A N
U and K, Call is for one minute.

Then

749 749 749 85 85 35 35 = = 35x5F = = 85 85 35 35 000

Then one minute of letters with long dash, sometimes same letter,
Sometimes different letter.

Frequencies used, same as M10, Favourite time is Hour+20 although can
be heard at any 10 minute interval within the hour. Parallel
frequencies never used.

Has not been heard since December 2001

M08A Mode ICW. Uses Cut Numbers

T 0, A 1, N 2, D 3, U 4, W 5, R 6, I 7, G 8, M 9,

UAAMD MDUUA UAIAU R3 UAAMDx5 = = = 150f Cut

After first message sends AR AR AR MDUUAx5 = = = 150f Cut same after

Second message

Ends AR AR AR SK SK SK

This is now the usual format, at least 2 others exist.

In 2004 the AR and SK have been corrupted and sound like 3 dashes and a scratching noise.

M10 Always uses ICW. This station uses a slightly different format of 2 figure decode key. The call up usually starts with 555 but they have been known to use other triplets, 111 222 333 444 777 and 888. These are used on special broadcasts. They have also been known to use up to a 4/5 figure random ID, but only very rarely. Transmission times and frequencies are changed quite often, although they use a set of frequencies to choose from. Sometimes they use 2 frequencies but not always. Regular schedules all use 2 parallel frequencies. The speed the message is sent is variable, usually the later message is sent at a faster speed. Call and first message 17 WPM later messages up to 25 WPM.

Call	Preamble	Message	Ending
555x3 571x3 46 (R5)	571x3 75 75 46 46 = =	46x5F = =	75 75 46 46
000			

They can have up to 4 IDs in the call, in this case the call would be

555x3 571x3 46 275x3 25 049x3 16 435x3 41 (R5)

Then the preamble would be the same, message the same but the ending misses off the 000 and carries on to the next call which would be 275. The message can also sometimes be split into 2 parts with a different decode key for each part, but in this case the call gives the total amount of groups in the message.

Frequencies. A very comprehensive list is available on the ENIGMA 2000 Group.

M10E Four weekly transmissions on 5019 at 0900.

IDs are 5 figures, usually 4 messages

M12 Mode Usually ICW but has been known to use MCW. The call is sent fairly slowly at about 15 WPM but the preamble and messages are usually sent at 30 WPM, single 5 figure groups, although slower and faster speeds have been used. They are constantly changing frequencies and transmission times so it is not worth listing them. Tends to come on in the fixed station part of the band. Has been heard as high as 17242. This is another station that has been noted using the same frequencies and IDs as in 1997. The message is sometimes repeated on a further two frequencies. If the message is sent on the hour then there will be the same message sent at Hour+20 Hour+40, Hour+25 Hour+45, or Hour+30 Hour+50, this depends on length of message and speed sent. Can be found on at any time.

Call	Preamble	Message	Ending
749 749 749 000 R5		No Message	
749 749 749 1 R5	1573 143 1573 143	143x5f	Pause 000 000

The figure 1 after 749 indicates number of messages, 2 messages are very rare.

The ID can be an indicator of the frequency in various ways, either the second figure of 4 or the third figure of 5. The third figure of 3 and the fourth figure of 5. Some of the IDs have no relation to frequency.

Some of the frequencies can have the same last two figures, which makes it easier to find.

The frequencies from 0000 to 1200 always go higher and from 1200 to 2359 lower.

M13 sent in ICW very rarely in MCW Another group constantly changing frequencies and times. Can be found on anywhere between 3.1 and 13 MHz.

Can be recognised as it is sent very slowly, about 9 WPM, and the signal is very strong in the UK. Messages are usually about 23 groups but they have been known to send up to 492 groups The message is sent four times in a period of 4 weeks. Has been logged between 1600 and 1000 the next day, on the hour but transmissions at Hour+30 and Hour+50 have been noted. A popular time seems to be at 2100 and 2200.

Repeat sequences that have been logged:

On the same day 1 Hour later on the same frequency.

On the same day 1 Hour later on a different frequency

On the next day at the same time on the same frequency

On the next day at the same time on a different frequency

On the same day 2 Hours later on the same frequency and also the next Day the same time.

The sequence is then repeated 2 weeks later with the same message.

Next month the transmission is on the same days of the month but on a new frequency. A 12 monthly cycle of frequencies are used. The transmission in October 2003 will be the same as October this year.

It has also been noted that some only transmit once a month.

There are 2 Schedules that come on at the same days each Month, but use a different ID each month. One comes on the second Thursday and Friday each Month at 1600 and 1800 in the winter and 1 hour earlier in the Summer.

Call	Preamble	Message	Repeat	Ending
261 R5 =	189 22 =	22x5f	ID sent x12 =	189 22 = 3 long dashes

M13A Format is the same only the ID is sent as

847 847 847 000 R5 Repeat is 4 times

This format can easily be confused with M12. This is another that is coming on with a different ID each month. Second Monday and Tuesday each Month 2100

Winter 2000 summer.

M13B I have found another group that changes ID each month. It sometimes uses the M13A type ID When GC is 20 to 23. Sends longer messages than usual, and sometimes sends 2 messages in a Month. Is on Second Saturday/Sunday Fourth Saturday/Sunday 2200, each Month. Some of the IDs are 175 831A 764 933 175A 659 323A 473 525 716 438 276.

Frequencies used are between 3168 and 5018.

January	3244	328
February	3215	276
March	3575	510
April	4030	831
May	4732	764
June	5018	933
July	4638	175
August	4051	659
September	3937	323
October	3657	473
November	3246	525
December	3168	716

For the last 2 years has only used the type A call with shorter messages

M13C Another group that changes ID each Month, transmissions are 2100, First Wednesday/Thursday Third Wednesday/Thursday each month.

These might possibly change as I have not heard it every Month. Sent in MCW with a different rhythm to the rest of M13. IDs 419 751 367 522 134 610. Usually a very weak signal

I also think that a lot of M13 transmissions are repeated between 0000 and 0500. Any reports of these from the USA would be very welcome. Some reports of these 0300 transmissions have been received from the USA. The same transmission is repeated at either 2000 or 2100 on a different frequency. All the M13 used to end with 3 long dashes, but now only ends with 3 short dashes.

M14 Modes ICW, MCW, and MCW CC Similar format to M1, except that call is always exactly 4 minutes, machine sent, but ends with 5 zeros. Longer messages than M1. The last group in the message is random and not as M1 Date/Group count. Another group everlasting changing times and frequencies. Variations exist

Regular sked, first and third Friday of each month 2000 and 2100. Repeats on Saturday if message sent. Frequencies change.

M14A Sends 2 Messages, same format, but after first message ID is repeated for 2 minutes. Second message has a different DK but quite often the GC differs by only 1.

There seem to be very few other M14 Skeds. Possibly some on at 0800, between 7200 and 8200.

Inactive

M16 8BY Mode ICW. Uses long zeros.

Call IDS
VVV VVV VVV 8BY 8BY 8BY 605/432/679/236
The IDs can be any number up to 12, they can remain the same for several transmissions, or change by having one ID go and leave the rest, such as 432/679/236. IDs are always in the same sequence. Transmission is at each hour+40 for 20 minutes. Up to 3 frequencies in parallel. My own theory for this group is that it is just a list of IDs that there is a message waiting for and the ID collects the message possibly on another frequency or by other means. Can also use Q and Z codes. If no IDs sends QRU
Example of ZKY= 142 825 047 ZKY/759
Example of ZCC= 142 047 ZCC 11 18/439 ZCC 10 16/306/146
Frequencies in use are,
7668 10248 12075 12170 12283 14433 14925 14931 18415 20946
Last heard August 2004

Not heard since March 2000. So presumed ended

M17 Mode MCW Constant carrier. Each message sent 3 times each on a different frequency. They do use the same triplets of frequencies for each time slot.

Transmissions are Monthly 2 weekly or weekly, on week of each month basis.

Either on the Hour, Hour+20 Hour+40 Or Hour+30 Hour+50 Hour+70. Mainly on during the evening but have been heard at other times of the day.

Call	Preamble	Message	Ending
70832 R4 5 Seconds Dots	29 29 =	29x5f	VA

First 2 figures of header are schedule numbers.

Frequencies used

3410 3910 4270 4460 4740 5235 5695 5865 6290 6675 6935
7425 7790 8070 9050 9245 10470

Only known sked

Wednesday 2000 3410/3910/4740 70nmn
Reports of any other skeds appreciated

M23 Mode ICW. Another strange station always changing times and frequencies. Can use 2 3 or 5 figure identical IDs. Or strings of dots, Vs or Is, and no figures. ID variants, 2 figure even/odd, 3 figure even/odd, 3 zeros, 5 zeros, 5 fives, 5 ones, etc, Vs with gap every half minute, Is with gap every half minute, Continuous Vs, continuous Is. In some cases of 3 figure IDs if all figures are odd there is no message, if even, there will be a message sent. They do have one regular transmission, that has been going now for two and a half years. It is on daily at 0800 and 1400. 2 Frequencies used at same time 8307 and 9285. It just sends the ID 579 for 10 minutes. This ended in April 2002.

When they do send a message they use long zeros and the format is
Call Preamble Message Repeat Ending
00000 R3 To 20 = 33 33 = 33x5f = IMI IMI = 33 33 = =
First and last groups are normally the same. Not all groups are random

One frequency that has seen regular use is 6999 at 1100, although it may not be used for some considerable time. More often on 7800 at 1100.

Another in use at present, February is 7795 at 1030 and 1500. Usually sends long messages. These are repeated many times. Has been known to send the same message for one year.

Many variants on this theme, some EG all 3 fig groups are 2 parallel frequencies, others not.

The transmissions on 7796 which started on 18/2/97 ended on 7/5/01

A few transmissions early 2004, but has not been heard for several months.

It has done this before so may appear again. Heard again in October 2004

M24 Modes ICW, MCW, MCW CC. The same format as M14 except that the 5 zeros at the end are sent spaced out, and the whole transmission is sent at high speed. Usually 40 WPM.

Sometimes sends very long messages. Longest so far is 431 groups which took 45 minutes to send. Has been noted to be back on same frequencies and times as in 1997.

Activity in February at 0800 between 7300 and 8200

M24A same as M14A sends 2 messages.

M26 98 station. Has been heard on 4106 with // 2961. Is a very erratic station, can go for months without being heard, then will be on continuously for a week. Transmissions can last for several hours

Format is similar to following, heard on 22 October 2001

1740 99 10508 Repeated until

1800 99 10672

1830 99 10614 99 40618

1920 99 20512

2000 92 32

2010 99 10514

2012 34 34 34 8x5f Groups

Has not been logged for some considerable time.

Heard again February 27 2004 1900 On 4007

Inactive Last heard May 2003

M29 Mode ICW. VDE Has three formats, the first M29a, is in regular use each day. Another is not heard as often but when it is can send several messages over a period of time, changing frequency each time. The first format transmits on the same frequency for 1 month and transmits the same message for one week. The messages are usually 10 to 14 groups. Although the message is changed each week quite a lot of the same groups appear in many messages. Although the call is VVVx2 the rhythm of sending is unmistakable. Speed 12 WPM

It favours frequencies in the lower part of the band from 3 to 6 Mhz. Winter at the lower end. Is on at 1800 and 2000

Call	Preamble	Message	Ending
VVVx2 De VDEx3 R5	VVVx2 De VDEx3 = =	14x5F	AR

Second Format, M29 Call as above followed by			
18 18 58 58 8 8 1930 1930=		58x5F	AR

Third Format M29B Call as above			
28 28 25 25 11 11 04 04 0800 0800		25x5F	

25 is G Count 11 and 04 Extra figures 0800 Time of first transmission UTC+1

No = = signs. Repeats 30 minutes later 100 Khz HF

Present skeds.

Monday and Tuesday 0600	Monday 0800
Tuesday 0600	Tuesday 0805

These all change frequency each Month.

M34

11 12345 2 Fig IDs, No ending Logged recently on 2 March 1998 at 0820 on 5040

Format is

Call 11 27 R5

11 11 11 13x5f single group message

11 11 11 Same message repeated

27 27 27 13x5f single group message

27 27 27 same message repeated No ending

Machine sent at 15 WPM, using long zeros. Note that the second and last group in the message are the same. Not been heard since then. Seems to have no regular skeds.

M39 Part of the M10 group but does not use M10 frequencies and can be on at any time. The length of the transmission varies and may include more than 1 ID.

458 458 458 76621 76621 Repeated 4 times
Period of dashes
458 458 458 73309 73309 Repeated 4 times

No ending, just stops after the last set of dashes.

M40 747 Was M53 Renumbered by ENIGMA

Format is
VVV CQ 747.135 R5 CQ135 CQ135 CQ135 HR HR 18 18 = = 18x5f AR AR
RPT RPT
VVV CQ135 CQ135 CQ135 HR HR 18 18 = = 18x5f Message repeated Ends AR
AR VA VA
Uses short zeros, sent at about 20 WPM. repeats the same message for 2 days.
Call is always 747 the . is sent as AAA different IDs.
Very rarely, sends 2 messages

This station has been observed for decades.
The signal is very strong in Tokyo.
The station changes its frequencies in March, May, Sept. and Nov.
All in A-2 mode but for CQ515 and CQ747.
Messages are rebroadcast 30 minutes later except for CQ707/CQ909.
The same messages are repeated for two days at the same time on the same frequency.
The speed of CQ747 is slower, compared with that of other CQ3f.
In case of A-2 mode, carrier appears more than 15 minutes before the start of a message.
CQ707 and CQ909 replace each other with frequency changes. CQ 863 and CQ974 do so also.

The station has at least four transmitters.
I believe the station is operated by the Research Department for External Intelligence, one of four intelligence units at the Central Committee of the Workers Party of Korea.
North Korean agent Kim Hyun Hee, who was convicted for blowing up a KAL Boeing in 1987, belonged to the department.
In "Now, As A Woman," the Japanese version of her best selling book, "The Tears of My Soul," she writes she received A-2 Morse coded messages while in Guangzhou, southern China, and Macao in 1985. She received messages at midnight on 10th, 11th, 25th and 26th of every month on 8050, 10300 and 16100kHz. The callsign of her group was CQ616 and her individual callsigns were 083, 914, 493 and 490. The English version does not mention this practice.
Only very occasional transmission heard. No logs for several months

M44 Continuous Roman Letters
M44a Continuous Cyrillic Letters

M45 Similar format to M01 but is sent much slower at 12 WPM. Is part of the S21 family as the same message is sent to a different ID by the S21 Voice station.

It used to start every message with 5 zeros, but has just recently Stopped doing that. Transmits at 1802 each Tuesday and Thursday. Now sends IDs made up of last 3 figures of lowest parallel frequency. It always starts at 2 minutes past the hour.

Possible frequencies and IDs for 1999

January February	3525	//	4025	525
March April	4555	//	4955	555
May to August	5074	//	5474	074 On at 1702
September October	4555	//	4955	555
November December	3525	//	4025	525

M50. Same format as M1, but sending is very poor. Is on daily, Messages are always 50 groups. First logged in 1997 on 5431 at 1800. Call was always 531.

Last log in 1997 was 26 May. Has not been heard for almost 4 years until logged on 13 April 2001 on 4641 at 1920 until 28 April 2001. Then from 15 May 2001 on 5372 at 1930

M50A July 2001. Is now coming on at 1930 sending M1A type transmissions.

Sending is very bad, very difficult to make out what is being sent. Is not on daily.

M51 100 Letter group station. Can be on at any time on any frequency. I have yet to find the start of it so do not know the call. Sends messages of 100 5 letter groups, can be on air for up to 5 hours. A message sent one day for example NR 89 if sent the next day is a different message. Serial numbers run from 1 to 90 and then starts 1 again.

Message header is Serial Number of message, First letter of the Month, Date, Time, which is always 1 hour ahead of UTC
= NR 54 J 9 10:42:37 =

Has been heard to end with 579 sent 60 times

First logged 25/4/97,

M52 2Figure 6 Figure. Another station that may be on at any time. Again when it is on can be on for days continuously. Heard on 5 November 1998 on 4802.

Format is

2000 11 II 253257 253257 253257 AR
2015 12 II 254987 254987 254987 II 99 AR

Latest log Friday 19 February 1999 1900 to 2100 on 4801 sending
24 II 854957 854957 894957 AR

Logged again on 28 July 1999 on 5694
36 II 511919 511919 511919 II 29 II 222 AR

Recent log after 2 years Monday 12 February 2002, 2105 On 5922
30 II 512495 512494 512495 AR

M55 Uses long zeros. So far has only been heard on 12150 on Tuesday and Friday at 1300, and has never sent a message. Call is always 698 for several minutes, ends 000 000.

There are many other stations listed by Enigma between M53 and M75. I have not heard any of these stations to give a description. When I do so I will add them to the FAQ. A lot of them are stations that have only been heard once and possibly will not be heard again. They are described in the Enigma Numbers Stations Booklet Part 1. If you hear any of them, I would always appreciate any information

M76 First heard 11 December 1998. Is on at 0500 and 1750 on 3819. Summer frequency was 3280

Format is Call, 4 Digit callsign De 4 Digit callsign. Uses a different callsign each day, they can be a mixture of letters and figures. It does use accented letters in the callsign.

So far noted U ..-- and A .--

Only sends the callsign 3 times, then

QTC 96 23 = QTC 96 is a serial number, next transmission at 1750 the next day will be QTC 98. 23 is a group count.

First part of message always starts 26310, and quite often has groups of 5 letters, heard so far are D R W and N Last group is always NNNNN. This first part, apart from the first group is always different.

Then follow several messages which can be repeated for days, sent as 335 33 = 33x5f = Last group usually contains some letter X.

The first six groups of the messages have similarities, The first group is always 40545 and the second starts with 79. The last three figures of the message are always 437. where the last group is 7XXXX, then the previous group will end with a 43.

Is sent fairly fast at about 25 WPM. Not a very good signal in Southern England.

Heard until early 2004. Has not appeared in November 2004

M77 P7X As far as I know, can only be heard in the USA

M81 Can only be heard in Russia. Possible Chinese numbers

M82 ?? Possibly a Chinese station, not audible in the UK

M83 Information on M83 thanks to Ary, of Numbers & Oddities
Every 15 minutes (H+15, H+30, H+45, H+00) a messages is being sent.
Normally QRA is sent 3 times and a series of v followed by +.
Series QTCs are sent sporadically in the morning or evening.

Text is 5LG, 5FG or mixed (two 5LG, one 5FG).

Group count is 20 or 50.

Addressees of the 5FGs/5LGs messages are so far always NJ2P and L8KT.

Addressees of the 3FGs can be anyone in the net.

Time is CE(S)T. Central European (Summer) Time (UTC+1 or UTC+2)

The marker changes every hour at H+15.

About every 10 days frequency changes.

QRA's tend to shift every now and then.

Date/time groups.

Example: L8KT L8KT L8KT DE J2V4 J2V4 J2V4 QTC 22020905 =

2 = message number

20 = group count

2 = date

0905 = Central European (Summer) Time (UTC+1 or UTC+2)

Message formats. Three different formats were noted so far:

Format 1: VVV markers
 MX2N MX2N MX2N VVVVVVVVVV VVVVVVVVVV VVVVVVVVVV +
 JPTP JPTP JPTP VVVVVVVVVV VVVVVVVVVV VVVVVVVVVV +
 Format 2: 5LGs or 5FGs. Each message consists of 20 or 50 groups.
 L8KT L8KT L8KT DE J2V4 J2V4 J2V4 QTC +
 L8KT L8KT L8KT DE J2V4 J2V4 J2V4 QTC 12020901 =
 LMXPM NAWQT KVUPD HIHQ5 XUBUR MFUFV KDVHY WHNHS YLEZF CHUZS
 PMUTG UCWSK TNDZP EJVNO ZBLTY BCUKE UQGFA EVWGA AXDGD SZXLZ +
 L8KT L8KT L8KT DE J2V4 J2V4 J2V4 QTC +
 L8KT L8KT L8KT DE J2V4 J2V4 J2V4 QTC 22020905
 16314 65034 60831 86120 80162 17140 46724 49060 85616 12093
 36313 46935 18061 37968 14387 59575 82938 27202 69836 29579 +
 Format 3:
 KW2P KW2P KW2P DE JPTP JPTP JPTP
 284 686 318 386 886 886 340 731 COL
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