## ENIGMA 2000 NEWSLETTER <br> http：／／www．enigma2000．org．uk <br> 路点罗 <br> 



Telephone Interception Office［Exhibit Lithuanian Museum of Genocide］
During the Soviet occupation of Lithuania certain＇crimes against the State＇were perpetrated． Interception of suspects＇telephone useage was routinely carried out，from an office just like this．

Thanks to the member who anonymously sent this in

## ISSUE 68

## January 2012

http：／／www．enigma2000．org．uk

## ISSUE 68 January 2012.

## A Happy New Year to our members

Once again we are hit with gremlins, again with MikeL who emailed me to state he was unable to meet our deadline as he was cut off due to his phone lines being down. I too lost a serious amount of data with the failure of my external HDD, but nonetheless I keep a copy of the draft newsletter elsewhere.

## Station activity

## Morse

Morse activity continues, however BR notes that s ince the start of the new year M12 has severely reduced its transmissions. Looking at the pattern it seems that the Ids that BR calls the "core Ids" are all missing - that is $124,257 \& 463$ which is a huge chunk of the output. This coupled with the cessation of the MCW sched suggets the future of M12 may not be too rosy.
M23, M51, M89 and M97 all being adequately reported. Reports have also been received for M03 [used to be the reserve of JoA who sadly passed away recently] and the occasional M08a report.

## Voice

E06 continues its sendings unabated; the weekend early morning slots being exceedingly strong with the occasional unexplained hard to hear events.
E07 has continued with its mix of transmiaaion quality across the last year; sometimes strong and sometimes absolutely diabolically weak audio on strong carriers. E07a continues as a strong signal but the sending of null messages or the strange repeats of previously sent content occur with increased frequency.
An eye on E07a may show some changes in the New Year.
E17z the usual style of message with difficult pronunciation was seen across the year with the then change to null message for the latter part.
E25 continues on 6140 and 9450 kHz . Better heard in Europe proper its interception in the UK is difficult, if not impossible, for most of us. E2k relies on those in Europe and the Mediterranean areas for their reports; many thanks for those.

Family 3 stations: These still continue to send daily with no apparent slowing down of content.
G06 has continued throughout the last year with its usual signal strengths; a short discussion some years back suggested that G06 is the nearest we now get to the Cold War style German language station and its good to hear it continuing, apparently unabated.

S06 and its variants continue with their usually strong signals and logs are always forthcoming for this station.
V02a Cuban station seems to be less reported than usual and its sad to see the majority of reports coming from Europe and the Argentine when the transmissions are widely heard throughout the US, where we have a member base.

V07 and upwards seem to be the realm of T and it is here that we share information ith N\&O and whilst E2k likes to have a different content for obvious reasons we are happy to use the reports from T .

## Polytones and Digital Incursions

The interest in polytones has risen since the provision of Ian Wraith's excellent Rivit decoder. However, the XPA b schedule at 0440/0540z is almost certainly that used by the two German spies arrested on $18{ }^{\text {th }}$ October, 2011. Read later.
The number of XPA2 transmissions has diminished since the summer. That of course doesn't mean there's less sendings, rather they are not being found.
Ian Wraith's new column Digital, Incursions and Unexplained Signals is very popular and well received by our readership. Please feel free to offer intercepts of this material via our Group site.

## Use of ENIGMA 2000 material

With the sheer amount of stuff that has been taken from our Group as well as our webpages there have been complaints from members whose work has appeared elsewhere with the permission of the originator being sought. WE do view this practice dimly and request that if anyone wishes to use E2k stuff they ask first. We have rarely said no to a direct response but just to take and use is more than just bad manners.

## Membership

We receive many applications to join us; most are unsuccessful. The email which instructs on how to make a successful application is either ignored or because it says we look for contributing members suggests those applying are actually non-contributing types who like to take everything for nothing.
Those who have successfully joined have, in the main, contributed well although some have been removed through inactivity. It is at this point that I must state that those members, old and new, who have not contributed [but have selected individual mails] will be removed in due course.

I'd like to thank all those who have supported ENIGMA 2000 over the past year in many ways. We have non-members who more than support us too, so a special thanks there as well.

BR's logs November and December

| 5320 | 1800z | 01 Nov | '197' $43730=$ = 64071, Strong, Med-fast, |
| :---: | :---: | :---: | :---: |
| 4490 | 2000z | 01 Nov | '197' $78830=$ = 98565, Strong, Med-fast |
| 4490 | 2000z | 03 Nov | '197' $81330=$ 28019, Good, Fast |
| 5465 | 0700z | 06 Nov | '197' $21730=$ 69076, Weak, Fast |
| 4490 | 1800z | 08 Nov | '197' $76230==72231$, Strong, Fast, many errors, used 2000z freq. |
| 4490 | 2000z | 08 Nov | '197' $13630=$ = 43329, Good, Med-fast |
| 5320 | 1800z | 10 Nov | '197' $31930==66984$, Strong, Fast increasing speed during msg. |
| 4490 | 2000z | 10 Nov | '197' $93930=$ = 84042, Good, fast but disjointed |
| 5810 | 1500z | 12 Nov | '197' $03730=$ 68527, Good, Fast |
| 5465 | 0700z | 13 Nov | '197' $51930=$ = 40217, Fair, Fast |
| 5320 | 1800z | 15 Nov | '197' $27930=$ 20356, Strong, Slow, ending 00000000 |
| 4490 | 2000z | 15 Nov | '197' $39030=$ = 87901, Strong, Corrected error |
| 5320 | 1800z | 17 Nov | '197' $11130=$ = 27525, Strong, Fast, Severe QRM XJT |
| 4490 | 2000z | 17 Nov | '197' $81430==67492$, Strong, Fast |
| 5810 | 1500z | 19 Nov | '197' $97046=$ = 97046, Fair, Fast |
| 5465 | 0700z | 20 Nov | '197' $43830=$ = 47295, Good / Strong, Fast |
| 5320 | 1800z | 22 Nov | '197' $70730=$ = 37158, Good, Med-fast, Corrected \& uncorrected errors |
| 4490 | 2000z | 22 Nov | '197' $07730=$ = 85759, Good, Med-fast |
| 5320 | 1800z | 24 Nov | '197' $72830=$ = 86688, Poor |
| 4490 | 2000z | 24 Nov | '197' $60930==76219$, Strong, Fast, Numerous errors |
| 5810 | 1500z | 26 Nov | '197' $50330=$ = 66700, Good, Fast |
| 5465 | 0700z | 27 Nov | '197' $81030=$ = 61419, Strong, Med-fast, Corrected error on DK |
| 5320 | 1800z | 29 Nov | '197' $09130=$ = 55455, Strong, Slow, Multiple errors |
| 4490 | 2000z | 29 Nov | '197' $52030=$ = 90251, Strong, Slow |
| 5320 | 1800z | 01 Dec | '197' $43830=$ = 20442, Weak, Fast |
| 4490 | 2000z | 01 Dec | '197' $61030==23229$, Good, Fast |
| 5810 | 1500z | 03 Dec | '197' $24630=$ = 78158, Good, Fast |
| 5465 | 0700z | 04 Dec | '197' $32130=$ = 64640, Good, Fast |
| 5320 | 1800z | 06 Dec | '197' $30130=$ = 07391, Good, Fast |
| 4490 | 2000z | 06 Dec | '197' $13830==37842$, Strong, Fast |
| 5320 | 1800z | 08 Dec | '197' $61230=$ = 67169, Good, Fast |
| 4490 | 2000z | 08 Dec | '197' $44330=$ = 36039, Strong, Fast |
| 5810 | 1500z | 10 Dec | '197' $21430=$ = 62146, Strong, Fast - wound down to slow near end - bizarre! |
| 5465 | 0700z | 11 Dec | '197' $45730=$ = 42081, Fair, Fast, DK at end sent as 4578457 |
| 5320 | 1800z | 13 Dec | '197' $93130=$ = 13108, Good, Fast |
| 4490 | 2000z | 13 Dec | '197' $12830==12644$, Strong, Fast |
| 5320 | 1800z | 15 Dec | '197' $53730=$ = 18733, Good, Fast |
| 4490 | 2000z | 15 Dec | '197' $39130=$ 18460, Fair, Med-fast |
| 5810 | 1500z | 17 Dec | '197' $21030==72721$, Strong, Fast |
| 5465 | 0700z | 18 Dec | '197' $86230==35990$, Strong, fast, with errors |
| 4490 | 2000z | 20 Dec | '197' $81330==10692$, Good Fast |
| 5320 | 1800z | 22 Dec | '197' $01130=$ = 12345, Weak, Fast, note first grp 12345 |
| 4490 | 2000z | 22 Dec | '197' $34230=$ = 24189, Strong, Fast, note last grp 09876 |
| 5810 | 1500z | 24 Dec | '197' $55330=$ = 02487, Strong, Fast |
| 5465 | 0700z | 25 Dec | '197' $44830==73328$, Fair, Fast |
| 5320 | 1800z | 27 Dec | '197' 17130 78041, Good, fast, note" = = ' missing from start of msg |
| 4490 | 2000z | 27 Dec | '197' $80430=$ = 23419, Strong, Slow |
| 5320 | 1800z | 29 Dec | '197' $31430=$ = 11866, Strong, Severe QRM from modulated tones |
| 4490 | 2000z | 29 Dec | '197' $92630==48862$, Strong, Fast |
| 5810 | 1500z | 31 Dec | '197' $04830=$ 65043, Good, Fast |

M23
This station carries on being inconsistent, procedural transmissions only with time, frequency and triplet changes.
In order to overcome these changes 4951,4980 and 5345 kHz have been guarded from 0700 to 2200 z for the whole month of November 2011 using three receivers coupled to independent antennae.

The same patterns have continued in December 2011
Others' logs
November 2011:

4951kHz1758z
4951kHz1658z 4951kHz1758z 4951kHz1658z 4951kHz1758z

4980kHz 1328z
5345kHz1758z

02/11[579(R)] 1810z Very strong ended '5’ //5345kHz
05/11[246(R)] 1721z Both strong //5345kHz
05/11[246(R)] 1813z Both strong //5345kHz
06/11[246(R)] 1721z Both strong //5345kHz
06/11[246(R)] 1813z Both strong //5345kHz
25/11[111(R)] 1348z Fair //5345kHz
01/11[579(R)] 1810z Very strong ended ‘57’ 4951 kHz

| PLdn,DoK,GD | WED |
| :--- | :--- |
| PLdn,Dok,JPL | SAT |
| PLdn,Dok,JPL | SAT |
| PLdn,Dok,JPL | SUN |
| PLdn,Dok,JPL | SUN |
| DoK, PLdn | FRI |
| DoK, GD | TUE |

5345kHz1328z
5345kHz1328z $5345 \mathrm{kHz} 1328 z$ 5345 kHz 1328 z 5345kHz1327z 5345 kHz 1327 z 5345 kHz 1327 z $5345 k H z 1328 z$

18/11[111(R )] 1348z
Strong
/
20/11[111(R)] $1348 \mathrm{z} / / 4980 \mathrm{kHz}$ strong //NRH 21/11[111(R)] 1348z

Strong 22/11[111(R)] 1348z Strong //4980kHz NRH 23/11[111(R )]1348z Strong //4980kHz NRH 24/11[111(R )]1348z Strong //4980kHz NRH 25/11[111(R)] 1348z Strong //4980kHz

DoK
FRI
DoK,PLdn
SAT
DoK,PLdn SUN
DoK
DoKPLdn
DoK, PLdn
DoK, PLdn
DoK, PLdn MON TUE WED THU FRI

December 2011:

4951 kHz 0855
05/12[579 (R )]Strong; started 0845z tone at 0843z //5345z
5345kHz 0957z 5345 kHz 0845 z 5345kHz1000z 5345 kHz 0957 z $5345 k H z 1001 z$

02/12 [579(R)] 1009z Fair, QSB3
05/12[579 (R)]Strong; tone at 0843z //4951
06/12[579 (R)]Strong; tone at 0957z 4951kHz [not used as // this tx] 1014z 10/12 Single bleep only 11/12[579(R )]1013z Fair, Tone 0958z

|  | PLdn | MON |
| :--- | :--- | :--- |
| (9m07s) | PLdn | FRI |
|  | DoK,PLdn | MON |
|  | DoK,PLdn | TUE |
|  | DoK,PLdn | SAT |
| (11m59s) | DoK,PLdn | SUN |

M23 Known Frequencies
Recently Active

| 4030 | 6806 | 9069 | 11000 | 13400 |
| :---: | :---: | :---: | :---: | :---: |
| 4980 | 6937 | 9120 | 11170 | 13417 |
| 4951 | 6961 | 9125/8 | 11422 | 13454 |
|  | 6961 | 9143 | 11429/30 |  |
|  |  | 9218 | 11442 |  |
|  |  | 9245 |  |  |
|  |  | 9750 |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| 5182 | 7542 |  |  |  |
| 5345 | 7785 |  |  |  |
| 5450 | 7920 |  |  |  |
| 5665 |  |  |  |  |
| 5670 |  |  | 12170 | 14450 |
| 5760 |  |  | 12200 | 14600 |
| 5914 |  | 10000 | 12220 | 14710 |
|  |  | 10551 | 12279 |  |
|  |  | 10650 | 12700 |  |
|  |  | 10708 |  |  |
|  |  | 10780 |  |  |
|  |  | 10916 |  |  |
|  | 8030 |  |  |  |
|  | 8150 |  |  |  |
|  | 8810 |  |  |  |

M23 November 2011 activity

| Freq | // | Tue 01 | Wed 02 | Thu 03 | Fri 04 | Sat 05 | Sun 06 | Mon 07 | Tue 08 | Wed 09 | Thu 10 | Fri 11 | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5345 | 4951 |  |  | NRH |  |  |  | NRH | NRH | NRH | NRH |  |  |
|  | 4980 |  |  |  |  |  |  |  |  |  |  |  |  |
| 5345 | 4951 |  |  |  |  | 1654 |  |  |  |  |  |  | Blip/Tone |
| 5345 | 4951 |  |  |  | 1658 | 1658 | 1658 |  |  |  |  |  | 246 |
| 5345 | 4951 |  |  |  | 1754 | 1754 | 1754 |  |  |  |  |  | Blip/Tone |
| 5345 | 4951 | 1758 | 1758 |  |  |  |  |  |  |  |  |  | 579 |
|  |  |  |  |  | 1758 | 1758 | 1758 |  |  |  |  |  | 246 |
| Freq | // | Thu 17 | Fri 18 | Sat 19 | Sun 20 | Mon 21 | Tue 22 | Wed 23 | Thu 24 | Fri 25 | Sat 26 | Sun 27 | Notes |
| 5345 | 4951 |  |  | 0800 |  |  |  |  |  |  | NRH |  |  |
| 5345 |  |  |  |  |  |  |  |  |  |  |  | 1016 |  |
| 5345 |  |  |  | $\begin{aligned} & \text { 프주N } \\ & 3 \\ & \text { B } \end{aligned}$ |  |  |  |  |  |  |  | 1054 |  |
| 5345 |  |  |  |  |  |  |  |  |  |  |  | 1133 |  |
| 5345 |  |  |  |  |  |  |  |  |  |  |  | 1245 |  |
| 5345 |  |  |  |  |  |  |  |  |  |  |  | 1256 |  |
| 5345 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5345 |  |  |  |  |  |  |  |  |  |  |  | 1309 |  |
| 5345 |  |  |  | 1323 | 1323 | 1323 |  |  | 1323 | 1323 |  |  | Blip/Tone |
| 5345 |  |  |  |  |  |  | 1325 |  |  |  |  |  | Blip/Tone |
| 5345 | 4980 |  |  | 1327 |  |  |  |  |  | 1327 |  |  | 111 |
| 5345 | 4980 |  | 1328 |  | 1328 | 1328 | 1328 |  | 1328 |  |  |  | 111 |
| 5345 |  |  |  |  |  |  |  | 1335 |  |  |  |  | Blip/Tone |
| 5345 | 4980 |  |  |  |  |  |  | 1338 |  |  |  |  | 111 |
| 5345 |  |  |  |  |  |  |  |  |  |  |  | 1344 | Blip/Tone |
| 5345 |  |  |  |  |  |  |  |  |  |  |  | 1351 | Blip/Tone |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| M23 November 2011 activity |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Day/Date | Freq // | Content | Start | Finish |
| Tues 01 | 5345//4951kHz | 579 | 1758 | 1810 |
| Wed02 | 5345//4951kHz | 579 | 1758 | 1810 |
| Thu 03 | 5345//4951kHz | NRH |  |  |
| Fri 04 | 5345//4951kHz | 246 | 1658 | 1720 |
| Fri 04 | 5345//4951kHz | Blip/Tone | 1754 |  |
| Fri 04 | 5345//4951kHz | 246 | 1758 | 1812 |
| Sat 05 | 5345//4951kHz | Blip/Tone | 1654 |  |
| Sat 05 | 5345//4951kHz | 246 | 1658 | 1720 |
| Sat 05 | 5345//4951kHz | Blip/Tone | 1754 |  |
| Sat 05 | 5345//4951kHz | 246 | 1758 | 1813 |
| Sun 06 | 5345//4951kHz | 246 | 1658 | 1720 |
| Sun 06 | 5345//4951kHz | Blip/Tone | 1754 |  |
| Sun 06 | 5345//4951kHz | 246 | 1758 | 1813 |
| Mon 07 | 5345//4951kHz | NRH |  |  |
| Tue 08 | 5345//4951kHz | NRH |  |  |
| Wed 09 | 5345//4951kHz | NRH |  |  |
| Thu 10 | 5345//4951kHz | NRH |  |  |
| Fri 11 to Thu 17 | 5345//4951kHz | NRH |  |  |
| Fri 18 | 5345//4980kHz | 111 | 1328 | 1348 |
| Sat 19 |  | atch | 0800 | 1300 |
| Sat 19 | 5345 kHz | Blip/Tone | 1323 |  |
| Sat 19 | 5345//4980kHz | 111 | 1327 | 1348 |
| Sun 20 | 5345 kHz | Blip/Tone | 1323 |  |
| Sun 20 | 5345//4980kHz | 111 | 1328 | 1348 |
| Mon 21 | 5345 kHz | Blip/Tone | 1323 |  |
| Mon 21 | 5345//4980kHz | 111 | 1328 | 1348 |
| Tue 22 | 5345 kHz | Blip/Tone | 1325 |  |
| Tue 22 | 5345//4980kHz | 111 | 1328 | 1348 |
| Wed 23 | 5345 kHz | Blip/Tone | 1335 |  |
| Wed 23 | 5345//4980kHz | 111 | 1338 | 1348 |
| Thu 24 | 5345 kHz | Blip/Tone | 1323 |  |

M23 November 2011 activity continued:

| Day/Date | Freq // | Content | Start | Finish |
| :---: | :---: | :---: | :---: | :---: |
| Thu 24 | 5345 kHz | 111 | 1328 | 1347 |
| Fri 25 | 5345 kHz | Blip/Tone | 1323 |  |
| Fri 25 | 5345 kHz | 111 | 1328 | 1347 |
| Sat 26 | 5345//4980kHz | NRH |  |  |
| Sun 27 | 5345 kHz | Blip/Tone | 1030 |  |
| Sun 27 | 5345 kHz | Blip/Tone | 1054 |  |
| Sun 27 | 5345 kHz | Blip/Tone | 1133 |  |
| Sun 27 | 5345 kHz | Blip/Tone | 1245 |  |
| Sun 27 | 5345 kHz | Blip/Tone | 1256 |  |
| Sun 27 | 5345 kHz | Blip/Tone | 1309 |  |
| Sun 27 | 5345 kHz | Blip/Tone | 1344 |  |
| Sun 27 | 5345 kHz | Blip/Tone | 1351 |  |
| Mon 28 | 5345//4980kHz | NRH |  |  |
| Tue 29 | 5345//4980kHz | NRH |  |  |
| Wed 30 | 5345//4980kHz | NRH |  |  |

This station carries on being inconsistent, procedural transmissions only with time, frequency and triplet changes.
In order to overcome these changes 4951, 4980 and 5345 kHz have been guarded from 0700 to 2200 z for the whole month of November 2011 using three receivers coupled to independent antennae.

The same patterns have continued in December 2011
Many thanks DoK

M51
[Many excellent logs submitted, these here a representation].

4477kHz0003z
0227z
2239z
0218z
0047z

03/11[NR 48 N 03 01:03:40 1983 BT VPTMN ... XFLDN BT] 0008z Fair QRN3 QSB3 03/11[NR 71 N 03 03:27:27 1983 BT GQGCY ... UVBIL BT] 0233z Fair QRN3 QSB3 05/11[NR 64 N 03 23:39:57 1983 BT MLDQF ... TVOJU BT] 2245z Weak QRN3 QSB3 06/11[NR 09 N 04 03:18:12 1983 BT PTBUQ ... SEHEN BT] 0224z Weak QRN3 QSB3 03/11[NR 55 N 03 01:47:23 1983 BT JHWYP ... ICFSP BT] 0053z Fair QRN3 QSB3

## M51 4477kHz 0047z 03/11 Transcript:

BT NR 55 N Ø3 Ø1:47:23 1983 BT
JHWYP JGWQI KPFBX BFGWC ERZPC NYKYI ELGOC XHETD TSGFP ZWMUL
SDWHZ IBTCV EIJME FFUCK QOGZP IKDTG LBOYU WOMXF SVPLF VNXPQ
WTWXE JJHOP KGQMO UPTIS FMBLJ XTRTY GYCBS SPRCT MQACW YQINH
EOPTD BGZJF KHZOS HQOQJ HUETC LPDNQ HCGOS TTMLG ROYNM UGRNV NQAXD KJUKN TFEYZ ZFBLW TJMPZ YBFSN KVKHJ AKLWO WGOXY RDDVS QVLCB GBLZA EERGT NHLOR XDPAC ZYKSG HPKLK KVIWQ DRGOY WBFLW SEDRE GDFAH AJJDS BYLML ATHAA FFBKK BLMEI JIAJP QTPMV KFNZN DGESZ KFDQJ VTYRZ ZTGTB ESPGI NPEMC ZAZGB ZNOLM TQRJY OADUG ETSLL NIGLX RJXOR VMWYN YLHPI ARITH DHICA DDJAK HPXLE WBIDE DWNMJ YFBQV XIWCA UWMEU CQCBZ SXXGY XKTOJ DHFTO BEWEF ICFSP BT

Spectre Spectre Spectre
Spectre Spectre

| Spectre | SUN |
| :--- | :--- |
| Spectre | SUN |
| Spectre | SUN |
| Spectre | SUN |

SUN
SUN
SUN

NR 3 Ø N 21 21:23:41 1983 BT
GMFBA RWDNH OSEAW TNVKQ GXMXR ZXHXV ISHFY ZJESH WGSQO JNXWJ LQEGO XPCFT VKACS CYCQA VDZZJ JIFKZ NGIIE GLLFS DWQIS EULVX DQBXM NYYBR RPEDC WYNEH RRZUR GEGVF ZKTSR VAPQT XBSGS GOXPR ECDOX EUAOC CARVW AGYTR OOMVI LWESM TQBJU QUALT EBXCW ZLLNI YTLPA OLNNR SBQKU QWSKS PNRJR IIYXD OVUNX LFAIS NUXKA DPEQI DCTSZ HTJOI HIUHQ JIFJD PFVWW VCEYH KTHJW VGYPK YACKV KSIVG EZBBJ KGYRZ RDMTX ENMZI QIPKJ YOVKC IKZTW HCQQW CGVVG WUOUN YJJRI GRRGC CXOXR VISBM GZESS IAGOY HWEYI RWSFL JQEWZ LPUFE GKDGI JANHS OFEQA UBDRJ OHQUB NXBQH MJTPF WMHPG MTZPC DBNEP ZFXLE UGGJE HEIWK YAPBU SFLTT GUETF FTQZF GVFYE FRLNH FBWAM BT Courtesy Spectre

0510kHz1544z 10510kHz1551z

25/11 [NR 26 N 22 16:44:57 1983 BT LQIDH ... GTEVT BT] 1551z Fair QRN2 QSB3 25/11 [NR 27 N 22 16:51:12 1983 BT OTSPA ... RLQKA BT] 1557z Fair QRN2 QSB3

Spectre Spectre

10510kHz 1551z 25/11 Transcript:
NR 27 N 22 16:51:12 1983 BT
OTSPA VBCUN NWHGJ HNELB UNUZX FVOZJ GJVIZ XKSLF UDLFV FZBHN HEHWK PFPUR GUNDO JQZDH WBXXD XRRAP KFNYS RPRMT JRSNS UFOKL WLBGF TYRWG VBCGW BHZZQ XLOAM QLWRB DAIEN BZDJO MOJJY AHMCT WRBWL ILIBR GSVXB OJSAB BWJFJ FZQVM DBEXW UGONT OFPRP LNQJZ NCXDJ ZBANN SOKZN ZTNKY MCNKX WUICM XQBHU HGOLB MWKOR PDPNV KZYPH XPNWN BFDCQ EXMPR EKZEJ OSBZA HEALP PVBQP MGPAT PPZNC YDLUS QIYDN OLSJC MWIRD JKJBV BEEUG CXUTG WRWEK MGCSU WQJED DCMYM RTNKQ KHFWL KEZHD XVGJN OYQVU VJDSD RXGHS ENCSQ GFYLH LCRLU FILZD AQAMF NXOYD EWWHV WHRFH ZTJBV UIBSQ CKSCX VQWRC XYFHM ABLGW NIIAR UWQBG NEYZN RMYHV WKLQA JSQQU SBEDS RLQKA BT

Courtesy Spectre

10510kHz1557z 10510kHz1603z 10510kHz1622z 10510kHz1628z

25/11[NR 28 N 22 16:57:30 1983 BT CDHWP ... ARTSJ BT] 1603z Fair QRN2 QSB3 25/11[NR 29 N 22 17:03:42 1983 BT FZVRX ... WRIHS BT] 1609z Fair QRN2 QSB3 25/11[NR 32 N 22 17:22:24 1983 BT UGVQP ... BHEHY BT] 1628z Fair QRN2 QSB3 25/11[NR 33 N 22 17:28:35 1983 BT NOPYK ... DHJYL BT] 1634z Fair QRN2 QSB3

| 3880 kHz 0001 z | 11/12 [NR 73 D 09 00:59:23 1983 BT ZDTHY ... TOXVV BT] 0007z Fair QRN3 QSB3 |
| :---: | :---: |
| 0007z | 11/12 [NR 74 D 09 01:07:03 1983 BT BKXQY ... XTHTP BT] 0013z Fair QRN3 QSB3 |
| 0013z | 11/12 [NR 75 D 09 01:13:20 1983 BT IJMOR ... XJHBE BT] 0019z Fair QRN3 QSB3 |
| 0019z | 11/12 [NR 76 D 09 01:19:30 1983 BT HWTMG ... JOQQM BT] 0025z Fair QRN3 QSB3 |
| 0025z | 1/12 [NR 77 D 09 01:25:50 1983 BT JUGJA ... KYQFN BT] 0032z Fair QRN3 QSB3 |
| 0031z | 11/12 [NR 78 D 09 01:31:02 1983 BT CVMEX ... TBKQW BT] 0037z Fair QRN3 QSB3 |
| 0037z | 11/12 [NR 79 D 09 01:37:25 1983 BT MYGMS ... MRCHT BT] 0044z Fair QRN3 QSB3 |
| 0044z | 11/12 [NR 80 D 09 01:44:26 1983 BT SOZEU ... FGGTO BT] 0050z Fair QRN3 QSB3 |
| 0050z | 11/12 [NR 81 D 09 01:50:49 1983 BT LQDZI ... EDSTT BT] 0057z Fair QRN3 QSB3 |
| 0057z | 11/12 [NR 82 D 09 01:57:13 1983 BT EHRCO ... CKPUG BT] 0103z Fair QRN3 QSB3 |
| 0103z | 11/12 [NR 83 D 09 02:03:43 1983 BT TZBGF ... CNMML BT] 0109z Fair QRN3 QSB3 |
| 0109z | 11/12 [NR 84 D 09 02:09:32 1983 BT ASXPX ... WEMXT BT] 0115z Fair QRN3 QSB3 |
| 0115z | 11/12 [NR 85 D 09 02:15:50 1983 BT QFQXW ... COOXH BT] 0122z Fair QRN3 QSB3 |
| 0122z | 11/12 [NR 86 D 09 02:22:08 1983 BT NMROF ... RFREP BT] 0128z Fair QRN3 QSB3 |
| 0147z | 11/12 [NR 90 D 09 02:47:10 1983 BT KDNZH ... UVQUC BT] 0153z Fair QRN3 QSB3 |
| 0153z | 11/12 [NR 01 D 09 02:53:24 1983 BT BLXMI ... NTOEH BT] 0159z Fair QRN3 QSB3 |
| 0159z | 11/12 [NR 02 D 09 02:59:36 1983 BT FLUJP ... JBUKH BT] 0205z Fair QRN3 QSB3 |
| 0205z | 11/12 [NR 03 D 09 03:05:53 1983 BT RXJEN ... BBGIM BT] 0212z Fair QRN3 QSB3 |
| 0212z | 11/12 [NR 04 D 09 03:12:08 1983 BT IWGXW ... YWZVA BT] 0218z Fair QRN3 QSB3 |
| 0218z | 11/12 [NR 05 D 09 03:18:23 1983 BT ZHICF ... PDDRM BT] 0224z Fair QRN3 QSB3 |
| 0224z | 11/12 [NR 06 D 09 03:24:43 1983 BT HTPXJ ... XTLUK BT] 0230z Fair QRN3 QSB3 |
| 0230z | 11/12 [NR 07 D 09 03:30:58 1983 BT PBNAK ... QJBMZ BT] 0236z Fair QRN3 QSB3 |
| 0236z | 11/12 [NR 08 D 09 03:36:03 1983 BT QEMWV ... QPJRM BT] 0243z Fair QRN3 QSB3 |
| 0243z | 11/12 [NR 09 D 09 03:43:24 1983 BT LHETX ... WSUUQ BT] 0249z Fair QRN3 QSB3 |
| 0249z | 11/12 [NR 10 D 09 03:49:49 1983 BT LAEDX ... XHYKT BT] 0256z Fair QRN3 QSB3 |
| 0256z | 11/12 [NR 11 D 09 03:56:01 1983 BT RUVBW ... LQXAW BT] 0302z Fair QRN3 QSB3 |
| 0302z | 11/12 [NR 12 D 09 04:02:16 1983 BT QCNKM ... NKURR BT] 0308z Fair QRN3 QSB3 |
| 0308z | 11/12 [NR 13 D 09 04:08:29 1983 BT GCQTR ... QDLAQ BT] 0314z Fair QRN3 QSB3 |
| 0314z | 11/12 [NR 14 D 09 04:14:43 1983 BT SWODH ... TYIAI BT] 0321z Fair QRN3 QSB3 |
| 0321z | 11/12 [NR 15 D 09 04:21:02 1983 BT VWMFW ... PSEZP BT] 0327z Fair QRN3 QSB3 |
| 0327z | 11/12 [NR 16 D 09 04:27:09 1983 BT FGUST ... IKIMU BT] 0333z Fair QRN3 QSB3 |
| 0333z | 11/12 [NR 17 D 09 04:33:15 1983 BT XDROH ... CYLVE BT] 0339z Fair QRN3 QSB3 |
| 0339z | 11/12 [NR 18 D 09 04:39:04 1983 BT UPNAI ... USRRY BT] 0346z Fair QRN3 QSB3 |
| 0346z | 11/12 [NR 19 D 09 04:46:44 1983 BT XVDGD ... QNPDX BT] 0351z Fair QRN3 QSB3 |
| 0351z | 11/12 [NR 20 D 09 04:51:59 1983 BT YNZQQ ... SODEW BT] 0358z Fair QRN3 QSB3 |
| 0358z | 11/12 [NR 21 D 09 04:58:14 1983 BT GLLTA ... KAIAS BT] 0404z Fair QRN3 QSB3 |
| 0404z | 11/12 [NR 22 D 09 05:04:29 1983 BT JYTMO ... MQESE BT] 0410z Fair QRN3 QSB3 |
| 0410z | 11/12 [NR 23 D 09 05:10:41 1983 BT CTIJL ... NKCGQ BT] 0416z Fair QRN3 QSB3 |
| 0416z | 11/12 [NR 24 D 09 05:16:59 1983 BT USSPO ... BUGXR BT] 0423z Fair QRN3 QSB3 |
| 0423z | 11/12 [NR 25 D 09 05:23:08 1983 BT MPUZE ... LXUGI BT] 0429z Fair QRN3 QSB3 |
| 0429z | 11/12 [NR 26 D 09 05:29:27 1983 BT QUNTW ... AMJNI BT] 0435z Fair QRN3 QSB3 |
| 0435z | 11/12 [NR 27 D 09 05:35:39 1983 BT JCYGD ... JSOOV BT] 0441z Fair QRN3 QSB3 |
| 0441z | 11/12 [NR 28 D 09 05:41:57 1983 BT FUVJT ... OLNGX BT] 0448z Fair QRN3 QSB3 |
| 0448z | 11/12 [NR 29 D 09 05:48:11 1983 BT YNMRZ ... UFODP BT] 0454z Fair QRN3 QSB3 |
| 0454z | 11/12 [NR 30 D 09 05:54:24 1983 BT LCOQR ... HSCAG BT] 0500z Fair QRN3 QSB3 |
| 0500z | 11/12 [NR 31 D 09 06:00:51 1983 BT WRMWA ... IYZAI BT] 0506z Fair QRN3 QSB3 |
| 0506z | 11/12 [NR 32 D 09 06:06:48 1983 BT OLUZQ ... VKKUD BT] 0512z Fair QRN3 QSB3 |
| 0512z | 11/12 [NR 33 D 09 06:12:58 1983 BT BJQZP ... MZEVJ BT] 0519z Fair QRN3 QSB3 |
| 0519z | 11/12 [NR 34 D 09 06:19:12 1983 BT WXENU ... RLHPY BT] 0525z Fair QRN3 QSB3 |
| 0525z | 11/12 [NR 35 D 09 06:25:28 1983 BT DOSIR ... PFATU BT] 0531z Fair QRN3 QSB3 |


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11/12 [NR 36 D 09 06:31:49 1983 BT RBIRE ... ZQZTV BT] 0538z Fair QRN3 QSB3 11/12 [NR 37 D 09 06:38:01 1983 BT DLEUB ... ZBAIW BT] 0544z Fair QRN3 QSB3 11/12 [NR 38 D 09 06:44:00 1983 BT YQYHI ... BKWHC BT] 0550z Fair QRN3 QSB3 11/12 [NR 39 D 09 06:50:37 1983 BT PULVW ... CSBNO BT] 0556z Fair QRN3 QSB3 11/12 [NR 40 D 09 06:56:46 1983 BT ZVPQI ... WRRCY BT] 0602z Fair QRN3 QSB3 11/12 [NR 41 D 09 07:02:07 1983 BT LBAIE ... ZLZWH BT] 0609z Fair QRN3 QSB3 11/12 [NR 42 D 09 07:09:27 1983 BT SYDMG ... BVQCC BT] 0615z Fair QRN3 QSB3 11/12 [NR 43 D 09 07:15:44 1983 BT AWIIM ... OYEXO BT] 0622z Fair QRN3 QSB3 11/12 [NR 44 D 09 07:22:06 1983 BT CQSYF ... PDETC BT] 0628z Fair QRN3 QSB3 11/12 [NR 45 D 09 07:28:19 1983 BT QLOGX ... JTOIY BT] 0634z Fair QRN3 QSB3 11/12 [NR 46 D 09 07:34:34 1983 BT KVYWJ ... NKVAP BT] 0640z Fair QRN3 QSB3 11/12 [NR 47 D 09 07:40:46 1983 BT RCUGS ... GCRVC BT] 0647z Fair QRN3 QSB3 11/12 [NR 48 D 09 07:47:00 1983 BT BVAMU ... FGJAE BT] 0653z Fair QRN3 QSB3 11/12 [NR 49 D 09 07:53:15 1983 BT HMILT ... (M51 QRT)] 0653z Fair QRN3 QSB3

25/12 [NR 81 D 26 21:35:34 1983 BT BBPEN ... IJNPC BT] 2041z Fair QRN3 QSB3 25/12 [NR 82 D 26 21:41:48 1983 BT INQEG ... SRTFR BT] 2047z Fair QRN3 QSB3 25/12 [NR 83 D 26 21:48:03 1983 BT VRIBE ... GJTQC BT] 2054z Fair QRN3 QSB3 25/12 [NR 84 D 26 21:54:12 1983 BT XEKDE ... AXTRE BT] 2100z Fair QRN3 QSB3 25/12 [NR 85 D 26 22:00:24 1983 BT KKURV ... QEHSB BT] 2106z Fair QRN3 QSB3 25/12 [NR 86 D 26 22:06:30 1983 BT MRRMP ... BZWFJ BT] 2112z Fair QRN3 QSB3 25/12 [NR 87 D 26 22:12:42 1983 BT XGKMC ... PFKSV BT] 2118z Fair QRN3 QSB3 25/12 [NR 88 D 26 22:18:58 1983 BT JRIUU ... IWSLX BT] 2125z Fair QRN3 QSB3 25/12 [NR 89 D 26 22:25:14 1983 BT TFYIT ... TGQLB BT] 2131z Fair QRN3 QSB3 25/12 [NR 90 D 26 22:31:33 1983 BT UKSQQ ... TETNL BT] 2137z Fair QRN3 QSB3 25/12 [NR 03 D 26 22:50:02 1983 BT NDSNL ... RXXSQ BT] 2156z Fair QRN3 QSB3 25/12 [NR 04 D 26 22:56:32 1983 BT FTDKD ... SPSXP BT] 2202z Fair QRN3 QSB3 25/12 [NR 05 D 26 23:02:45 1983 BT GJNWK ... DGSEM BT] 2208z Fair QRN3 QSB3 25/12 [NR 06 D 26 23:08:57 1983 BT BTZRA ... EPCPC BT] 2215z Fair QRN3 QSB3 25/12 [NR 07 D 26 23:15:08 1983 BT CNGYY ... AMYWJ BT] 2221z Fair QRN3 QSB3 25/12 [NR 08 D 26 23:21:13 1983 BT UBHPY ... ZAGTC BT] 2227z Fair QRN3 QSB3 25/12 [NR 09 D 26 23:27:42 1983 BT YBTXD ... GGNIA BT] 2233z Fair QRN3 QSB3 25/12 [NR 10 D 26 23:33:58 1983 BT EBKQR ... XSFXH BT] 2240z Fair QRN3 QSB3 25/12 [NR 11 D 26 23:40:14 1983 BT XVJMN ... AOTGT BT] 2246z Fair QRN3 QSB3 25/12 [NR 12 D 26 23:46:36 1983 BT AEODJ ... RJIND BT] 2252z Fair QRN3 QSB3 25/12 [NR 13 D 26 23:52:43 1983 BT ODWGV ... FLKNW BT] 2258z Fair QRN3 QSB3 25/12 [NR 14 D 26 23:58:46 1983 BT QHQLZ ... PTIRR BT] 2305z Fair QRN3 QSB3 25/12 [NR 15 D 27 00:05:03 1983 BT VENHO ... TGNEY BT] 2311z Fair QRN3 QSB3 25/12 [NR 16 D 27 00:11:19 1983 BT HBXRO ... XFUMH BT] 2317z Fair QRN3 QSB3 25/12 [NR 17 D 27 00:17:35 1983 BT MNVXV ... TMGIH BT] 2323z Fair QRN3 QSB3 25/12 [NR 18 D 27 00:23:44 1983 BT BWLWV ... MPZWN BT] 2329z Fair QRN3 QSB3 25/12 [NR 19 D 27 00:29:53 1983 BT ENMTT ... NPIWT BT] 2336z Fair QRN3 QSB3 25/12 [NR 20 D 27 00:36:12 1983 BT FXFQS ... YWRDT BT] 2342z Fair QRN3 QSB3 25/12 [NR 21 D 27 00:42:29 1983 BT GHISJ ... AIETE BT] 2348z Fair QRN3 QSB3 25/12 [NR 22 D 27 00:48:44 1983 BT XTAZI ... EPZVU BT] 2354z Fair QRN3 QSB3 25/12 [NR 23 D 27 00:54:56 1983 BT DGUFV ... INCMO BT] 0000z Fair QRN3 QSB3 26/12 [NR 24 D 27 01:00:51 1983 BT ZVOAE ... JHNQB BT] 0007z Fair QRN3 QSB3 26/12 [NR 25 D 27 01:07:07 1983 BT GKBJS ... OWRXV BT] 0013z Fair QRN3 QSB3 26/12 [NR 26 D 27 01:13:24 1983 BT XQZWP ... TDHLV BT] 0019z Fair QRN3 QSB3 26/12 [NR 27 D 27 01:19:34 1983 BT NFXGO ... BOFVC BT] 0025z Fair QRN3 QSB3 26/12 [NR 28 D 27 01:25:49 1983 BT VUSIJ ... PNKED BT] 0031z Fair QRN3 QSB3 26/12 [NR 29 D 27 01:32:01 1983 BT WUTHU ... NZREA BT] 0038z Fair QRN3 QSB3 26/12 [NR 30 D 27 01:38:20 1983 BT AAYGA ... YIGEI BT] 0044z Fair QRN3 QSB3 26/12 [NR 31 D 27 01:44:34 1983 BT TLSZN ... MSDBG BT] 0050z Fair QRN3 QSB3 26/12 [NR 32 D 27 01:50:47 1983 BT HOOKP ... ZEVVA BT] 0056z Fair QRN3 QSB3 26/12 [NR 33 D 27 01:56:59 1983 BT XXJLH ... DUTWE BT] 0102z Fair QRN3 QSB3 26/12 [NR 34 D 27 02:02:59 1983 BT HYGAX ... ESJFC BT] 0109z Fair QRN3 QSB3 26/12 [NR 35 D 27 02:09:02 1983 BT JEWLE ... XATID BT] 0114z Fair QRN3 QSB3 26/12 [NR 36 D 27 02:15:25 1983 BT PKFFS ... RPLKW BT] 0121z Fair QRN3 QSB3 26/12 [NR 37 D 27 02:21:35 1983 BT DYUFJ ... SJHSY BT] 0127z Fair QRN3 QSB3 26/12 [NR 38 D 27 02:27:49 1983 BT BSZJB ... ENFYN BT] 0134z Fair QRN3 QSB3 26/12 [NR 39 D 27 02:34:06 1983 BT NRWWZ ... AQSNM BT] 0140z Fair QRN3 QSB3 26/12 [NR 40 D 27 02:40:27 1983 BT DFRZS ... JMBNK BT] 0146z Fair QRN3 QSB3 26/12 [NR 41 D 27 02:46:40 1983 BT HLXHT ... MRQQU BT] 0152z Fair QRN3 QSB3 26/12 [NR 42 D 27 02:52:56 1983 BT OACKX ... FCIET BT] 0158z Fair QRN3 QSB3 26/12 [NR 43 D 27 02:58:02 1983 BT HIWQA ... WCAVJ BT] 0204z Fair QRN3 QSB3

07/12 [NR 15 D 07 23:53:00 1983 BT ZOINR ... SYBEI BT] 2259z Fair QRN3 QSB3 07/12 [NR 16 D 07 23:59:21 1983 BT AHHGG ... ZEJEB BT] 2305z Fair QRN3 QSB3 07/12 [NR 17 D 08 00:05:35 1983 BT LSPZC ... NCLEC BT] 2311z Fair QRN3 QSB3 07/12 [NR 18 D 08 00:11:26 1983 BT CVEAI ... FYDHN BT] 2318z Fair QRN3 QSB3 07/12 [NR 19 D 08 00:18:12 1983 BT CMCPF ... RQXJA BT] 2324z Fair QRN3 QSB3 07/12 [NR 20 D 08 00:24:31 1983 BT QLURU ... XFGNF BT] 2330z Fair QRN3 QSB3 07/12 [NR 21 D 08 00:30:45 1983 BT PRJTW ... SDSGS BT] 2337z Fair QRN3 QSB3 07/12 [NR 22 D 08 00:37:20 1983 BT CHNXK ... RFRZZ BT] 2343z Fair QRN3 QSB3 07/12 [NR 23 D 08 00:43:12 1983 BT JSQCF ... AXDEW BT] 2349z Fair QRN3 QSB3

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01 Dec 111452 -1530 10375 CW M97 (Traffic sent - See below) (Thurs) (GlobalTuners Hong Kong) (JPL)

AAAAAAAAAAAAAAA (Did not count) (1452z)
SD 65 KKK SD 65 KKK SD 65 KKK

## BT BT BT

SN 80 SN 80 SN 80

47118524894310094916779964084944635596649185662647 48955779586268198142631464103615091646683529348222 69605754785990594347084022990320106635399085895800 14788508004964649558310934247793028269953049923129 56233911170660365105628226735143230070041471323019 85105123463935084708307547572240201653933585454337 79271908266343789154254809559078518819205627284005 16039644301959901237755252776591206055627905505059

## KKKKKK

## AAAAAA

SD 66 KKK SD 66 KKK SD 66
KKK
BT BT BT (1504z)
SN 15 SN 15 SN 15
52705522852126168820345002826559574715229454110521
6333513641354007289987185
KKKKKKKKKKKKKKKKKKKKKKKK (Did not count) (1506z)
(Silent for 1 minute)
(Repeats entire sked at 1507 z - Finished at 1517 z - Silent for 1 minute)
(Repeats entire sked again at 1518 z - Finished at 1530z)
(Uses long zeros - Short pause after every 5 groups)
(Super strong signal on GlobalTuners Hong Kong)
JPL

## Interesting UNID CW

It has been a while since I have reported anything, have been rather busy. But I did put together something this past weekend on a CW station I have been watching. This will be rather a lengthy post, sorry in advance for the size.

In late August Ary Boender emailed me about a CW station on 10375 kHz at about 1500 UTC daily that had been reported to him by a listener out of Russia. The station was first reported on July 1, 2011. Interestingly enough the last V30 transmission (for quite a while) was on June 30, 2011, the day before the first reported reception of the unknown CW station. Naturally I have no idea if this was coincidence or not, and the Morse station could have been around for a while but unnoticed before that time. Ary has assigned it the N\&O ID of MV30.
I carry it in my log as UnkCW/MV30. It is sending $5 f$ format and its actions are similar to Vietnamese V30.
From August 26, 2011, on I started to record this station. Things have been hectic and busy, so I really did not have time to look at the recordings until just this last week. That means I reviewed over 3 months of activity in a few days. The trends showed up nicely, but it took a bit of time ;)

The habits of this station are indeed very similar to V30. Like V30 it transmits 3 identical messages a day, one right after the other with a short pause between each. Like V30 it sends the same message for weeks on end. Like V30 it occasionally skips days, in no particular cycle that I can determine. Several other factors tie it in to V30 even more closely than the format/habits.

The message is sent three times total with pauses between each set. Generally any errors in the first transmission are also in the subsequent, they are probably all from the same recording/script. There is a noticeable pause each 5 groups, with longer pauses each 10 groups, the first long pause is after the first 5 groups. Most messages begin with 29 "A"s being sent and end with 29"K"s.

- The format for each transmission is pretty stable with a few minor variations,this is the SD 61 message sent from August 26, 27, and 28 of 2011, I have no recording for the 29 , so I do not know if it was sent that day (my comments in parenthesis):

Sound example here :
http://www.token.hpathome.net/SharedFiles/AudTfer/MV30_10375 SD61 Aug28 2011 145\9 56 start.mp3

AAAAAAAAAAAAAAAAAAAAAAAAAAAAA
SD 61 SD 61 SD 61 (sequential message ID, new message gets next number)
TK TK TK (some messages use HT instead of TK)
SN 68 SN 68 SN 68 (number of groups in the message)
0134988612830235459356388
7062801540010098655063662
0430666852730549230497918
3210170134 240GG0 0684119598
2391824299677922244932321
7344296924583113278915911
7558737122116501764208853
0353628475878715981861337 0787848607377920667204710 1293226694590104310013383 3084503991672617233207610 7571899979007378725153819 4944167009335074651777738 474787797834501
KKKKKKKKKKKKKKKKKKKKKKKKKKKKK

- SD 62 was sent from August 30 to September 20, 2011.

Sound example here :
http://www.token.hpathome.net/SharedFiles/AudTfer/MV30_10375_SD62_Sep17_2011_145\9_48_start.mp3
AAAAAAAAAAAAAAAAAAAAAAAAAAAAA
SD 62 SD 62 SD 62
TK TK TK
SN 37 SN 37 SN 37
6310536602843579752625845
6578748454590834924929744
4041625323557818707525418
0712980922215619752142194 2051816561332983821537968 8449764675745220366851540 1099885261230078902654534 2662745386

## KKKKKKKKKKKKKKKKKKKKKKKKKKKKK

- SD 63 was sent from September 23 to October 24, 2011.

Sound example here :
http://www.token.hpathome.net/SharedFiles/AudTfer/MV30_10375_SD63_Oct17_2011_145\9_24_start.mp3
The "A" string started with two close spaced "dahs", this was probably an error and should have been an A because only 28 "A" were sent instead of the normal 29.

Note the use of "HT" instead of the "TK" previously used.
AAAAAAAAAAAAAAAAAAAAAAAAAAAA
SD 63 SD 63 SD 63

## HT HT HT

SN 40 SN 40 SN 40
0240838628119054421630065
4202344982790132831090621
5520593780950779115617955
7489743552476803879611317
6383663552638498449656253 7305967562160752884550578 6091739506110375056466467 0071427862835291290344430 ККККККККККККККККККККККККККККК

- SD 64 was sent from October 28 to November 23, 2011

Sound example here :
http://www.token.hpathome.net/SharedFiles/AudTfer/MV30_10375_SD64_Nov21_2011_145\5_20_start.mp3
Note the inclusion of "KVD" in the message ID string.
Note the return to "TK"

AAAAAAAAAAAAAAAAAAAAAAAAAAAAA
SD 64 KVD SD 64 KVD SD 64 KVD
TK TK TK
SN 95 SN 95 SN 95
5814935329080814030887100
3206143616335387478915161
1636267723366988541235119 0790036922398980913693108 9723933001262913795375372 0088516931659374395449516

9896210054593742257852971 7384611534981266079100082 6637432282326170573729717 9305044885074613616352385 2437480358108858979739014 6554521601364388606809202 3297485304441565822928558 8874310093152982614409636 3791859887202734548984828 7272185159402623475261929 1002599246845618659287715 4596490459322886035936932 6539983176655658910222816 ККККККККККККККККККККККККККККК

- Starting November 24, 2011, and continuing to date (November 30, 2011) the station changed its format slightly. A single transmission contained two message IDs (SD 65 and SD 66) and two messages run together in one transmission
This was repeated three times as any normal single message would be. The message and format is shown below:
Sound example here :
http://www.token.hpathome.net/SharedFiles/AudTfer/MV30_10375_SD65_and_SD66_Nov24\2011_1455_15_start.mp3
Note the inclusion of "KKK" in the message ID string for both message segments.
Note the return to HT from TK for both message segments.
TAAAAAAAAAAAAAAAAAAAAAAAAAAAA (only 28 As following the T)
SD 65 KKK SD 65 KKK SD 65 KKK


## HT HT HT

SN 80 SN 80 SN 80
4711852489431009391677996
4084944635596649185662647 4895577958626819814263146 4103615091646683529348222 6960575478599059434708402 2990320106635399085895800 1478850800496464955831093 4247794028269953049923129 5623391117066036510562822 6735143230070041471323019 8510512346393508470830754 7572240201653933585454337 7927190826634378915425480 9559078518819205627284005 1603964430195990123775525 2776591206055627905505059
KKKKKKK (only 7 "K"s)
AAAAAAA (only 7 "A"s)
SD 66 KKK SD 66 KKK SD 66 KKK
HT HT HT
SN 15 SN 15 SN 15
5270552285212616882034500
2826559574715229454110521
6333513641354007289987185
KKKKKKKKKKKKKKKKKKKKKKKK (only 24 Ks)

- The station has transmitted one message that did not fit the above formats.

For one day, on September 22, 2011, after the last transmission of SD 62 on September 20 and one day before the first transmission of SD 63 on September 23, the station sent a message that was not in 5 figure groups, but rather seems to be clear text. A translation of the text looks like an advertisement for deodorant. Was this filler gone bad? Was it an accidental transmission?
I have no good explanation for it, but similar messages have been noted on other frequencies at other times, I suppose I will have to add those frequencies to the watch list and see if there is ever coded traffic on them.

September 22, 2011, message, my comments are in parenthesis and these were not part of the message:
Sound example here :
http://www.token.hpathome.net/SharedFiles/AudTfer/MV30_10375 no num Sep22 2011 sltart1459 41.mp3

```
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA (30 "A"s)
TREN THI TRUONG HIEN SSY CO
MOT SO SAN PHAM CO TAC DUNG
LAM GIAM TIET (longer pause)
MO HOI NHIEU. NOI 5AT TRONG
SO DO CO SAN PHAM VOI
NGUON GOC CHIET (longer pause)
SUAT TU THIEN NHIEN NHU
CAC CO, CAC LOAI LI VI
?(dah di di dah dit)AC CHIT
HOAN TOAN AN TOAN VA
KHONG ANH HUONG CUNG NHU
CO TAC DUNG PHU VOI CO
THE (longer pause)
CON NGUOI, SAN PHAM DUOC
BAO CHE DUOI DANC VIEN
```

NEN AN TOAN VA DE SU
DUNG (longer pause)
CAC THUC PHAM CHUC NANG
CO NHIEM VU GIU NUO?(di di di dah dit)
TRONG TE BSO, LAM GIAM (longer pause)
HOAT DONG QUA MUC CUA
THAN KINH GIAO CAM,
DO VAY LIM GIAM SU TIET (longer pause)
MO HOI TRONG LOSG BAN
TAY, BAN CHAN VA CO THE
TOAN THAN
KKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKK (33 "K"s)

- Indicators that this signal is (or at least might be) somehow related to V30:

1. Actions are the same, one message, repeated three times each day, short pause between each one.
2. Start time is "about" 1500, much like V30 starts "about" 1600. Start time actually moves forward slightly each day, again as V30 does.
3. The same message can be sent for weeks on end.
4. The station periodically skips one or more days, with no readily discernable cycle/pattern.
5. SD probably stands for So Dien, the same term used in V30 for message ID.
6. SN probably stands for So Nhom, the same term used in V30 for group count.
7. The station was first noticed the day after the last V30 transmission for an extended period of time. V30 was off the air (as far as I know) from July 1 to November 4, 2011.
8. Since November 4 any day this station is not on the air neither is V30.MV30 has been on the air 3 days when V30 was not.
9. On November 9 both stations had identical but very minor audio issues, a very little bit of crackling in the audio that was not related to atmospherics.
10. Since November 5 (first noted V30 and MV30 on the same day) the start times for the first transmission of the day for the two stations have been essentially identical, often to the second, except V30 starts one hour later (the largest variation I have seen is 3 seconds). My guess is they are being started from the same clock.

I will mention there is no correlation between message lengths or change dates with V30 and MV30 that I can tell. So, while they are almost definitely related in some way they do carry different messages and traffic.

Dates in November, with start times of first message of the day in UTC, all times $+/-1 \mathrm{sec}$ as I round to the closest second in my log.
Chart of Times for both V30 and UnkCW/MV30 for month of November:
http://www.token.hpathome.net/SharedFiles/ImageTfer/Start_times_Nov2011_V30_and_lMV30.jpg

I would suggest that ENIGMA 2000 consider assigning this station the next sequential M number. Now M97 T!

Chart of first message start times daily, comparing V30 and MV30 for month of November, 2011.

| Date (in <br> November) | V30 Start time | UnkCW/MV30 <br> Start time |
| :---: | :---: | :---: |
| 05 | $1555: 41$ | $1455: 41$ |
| 06 | $1555: 39$ | $1455: 40$ |
| 07 | No TX | No TX |
| 08 | $1555: 36$ | $1455: 37$ |
| 09 | $1555: 36$ | $1455: 36$ |
| 10 | No TX | $1455: 34$ |
| 11 | No TX | No TX |
| 12 | No TX | No TX |
| 13 | No TX | No TX |
| 14 | 1555:29 | $1455: 28$ |
| 15 | $1555: 27$ | $1455: 26$ |
| 16 | $1555: 28$ | $1455: 25$ |
| 17 | $1555: 24$ | $1455: 24$ |
| 18 | $1555: 23$ | $1455: 23$ |
| 19 | No TX | No TX |
| 20 | No TX | No TX |
| 21 | $1555: 20$ | $1455: 20$ |
| 22 | No TX | $1455: 20$ |
| 23 | $1555: 18$ | $1455: 18$ |
| 24 | $1555: 18$ | $1455: 16$ |
| 25 | $1555: 13$ | $1455: 14$ |
| 26 | $1555: 14$ | $1455: 14$ |
| 27 | $1555: 14$ | $1455: 13$ |
| 28 | $1555: 13$ | $1455: 12$ |
| 29 | $1555: 09$ | $1455: 10$ |
| 30 | $1555: 08$ | $1455: 09$ |

Logs as group message 35627 or as posted in N\&O 170
Ary [N\&O] replied to this brilliant posting stating:
VERY impressive, T! Thanks for the report. With regards to the message below, I think that these are test messages. They pop up regularly and also have been noted on other freqs. I mentioned them in N\&O a while back.

They always seem to cover food or articles, more like advertisements.
> AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA (30 "A"s)
> TREN THI TRUONG HIEN SSY CO
> MOT SO SAN PHAM CO TAC DUNG
> LAM GIAM TIET (longer pause)
> MO HOI NHIEU. NOI 5AT TRONG
> SO DO CO SAN PHAM VOI
> NGUON GOC CHIET (longer pause)
> SUAT TU THIEN NHIEN NHU
$>$ CAC CO, CAC LOAI LI VI
$>$ ?(dah di di dah dit)AC CHIT
> HOAN TOAN AN TOAN VA
$>$ KHONG ANH HUONG CUNG NHU
> CO TAC DUNG PHU VOI CO
> THE (longer pause)
> CON NGUOI, SAN PHAM DUOC
> BAO CHE DUOI DANC VIEN
> NEN AN TOAN VA DE SU
> DUNG (longer pause)
> CAC THUC PHAM CHUC NANG
> CO NHIEM VU GIU NUO? (di di di dah dit)
> TRONG TE BSO, LAM GIAM (longer pause)
> HOAT DONG QUA MUC CUA
> THAN KINH GIAO CAM,
> DO VAY LIM GIAM SU TIET (longer pause)
> MO HOI TRONG LOSG BAN
> TAY, BAN CHAN VA CO THE
$>$ TOAN THAN.
> KKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKK (33 "K"s)
Although the translation is poor it says something like. That was also the contents of the other messages. .
On the market ...
A NUMBER OF PRODUCTS ....
Effect REDUCE periods ..
too much. THE ...
Origin EXTRACT
Capacity of natural .... types VI LI
.... is perfectly safe
NO impact and .....
.... the product is Prepared in DANC VIEN
Safer and .....etc

This is the translation of two older messages:
"Prominent among the available products with extracts derived natural capacity of plants, mammals and the chat is completely safe and khong impact and side effects have the elephant the people, products Formulated tablet form safe and easy to use functional foods task of keeping water in the cell, reducing overactive sympathetic nervous crab, by borrowing reduces the secretion sweating in the palms, feet and have the whole body."
"Not so long ago! gmail chen hinh da add functionality expression on the email compose window! help you to send email with many different feelings, now! Gmail adding hybrid Smilies de you the option, not long ago!
gmail chen hinh da add functionality expression on the email compose window! help you to send email with many different feelings, now! gmail"

Thanks Ary

## GERMAN BRANCH REPORT

At the end of 2011 - the report from ENIGMA2000's German Branch (E2Kde) and X06 team
Hallo liebe Freunde und Kollegen der deutschen Branche und des X06 Teams (Hello dear friends and colleagues of the German Branch and X06 team)
The old year is at its end, and we have again some interesting things from E2Kde and X06:
S28 article in German newspaper
The S28 article from WIRED, which appeared in September, was translated into German for a December edition of the popular German newspaper "Sueddeutsche Zeitung". It's online available:
http://szmstat.sueddeutsche.de/texte/anzeigen/36763/1/1 [till /36763/3/1 - so there are 3 pages]. In it, "Jochen Schäfer, president of the German section of an online community named ENIGMA 2000" is mentioned.

Numbers station in the forest of Boeblingen - who breaks the code?

A German "numbers activist" in Boeblingen/Southwestern Germany created a (pseudo) numbers station in the forest of his home town. You can find it via http://www.geocaching.com/ with a German "instruction manual". If you press "Play" via the menu, you'll hear a mix of E03 and G08 ("Lincolnshire Poacher" callsign and then German numbers). Other menu options: "Hide and seek", "Cache", "by Cache-Name". The name is simply called "Zahlensender" (the German word for numbers stations), the number is: GC39Z62. In the region of Boeblingen, you can also listen to the station via radio - like a real numbers station - on 102.6 mHz FM. - Who breaks the code and finds the "key"? - For our German friends, this information will also be posted by me in the numbers forum of the "Geheime Welten" (a.k.a. SIS Germany), the German communication platform of E2Kde, but nowhere else in the numbers scene.

X06 team
It got a new member from Israel: Douglas, a.k.a. 4z5. With him, we have an interesting member from the Middle East, a territory, where we didn't have people from so far. So our "intercontinental work" is increasing! Our next project will be to try to DF signals, where they are coming from. We could already make some interesting discoveries. Eddy from Australia found out, that one signal he caught was coming from near Vladivostok. To find out more about the origin of the signals we want to DF signals, hopefully we can report more in the next edition.

X06 Mazielka (1C) logs section

| Date | Day UTC | Freq | Scale | Monitor | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 20111101 | Tue 0954-1005 | 11462 | 165423 | Peter/UK | Good, M273 |
| 20111102 | Wed 0835-0841 | 14377 | 432516 | Alexinroma | Good in AM with some QRM, M274 |
| 20111102 | Wed 1012-1015 | 18346 | 214356 | Alex | Strong, M275 |
| 20111109 | Wed 0917-0921 | 16116 | 134265 | Alex | Strong, M276 |
| 20111109 | Wed 1919 | 6917 |  | [Spooks] | New freq, R |
| 20111109 | Wed 1937 | 6782 |  | [Spooks] | New freq, R |
| 20111110 | Thu 0845-0846 | 9388 | 561243 | WebWeasel | Monitored in progress, M277 |
| 20111110 | Thu 0932 | 18575 | 352416 | RNGB | Alert type 7 (all parts R) (1) |
| 20111110 | Thu 0935-0937 | 14950 | 352416 | RNGB | 7(2) |
| 20111110 | Thu 0939-0948 | 14950 | 352416 | RNGB | 7(3) Restart |
| 20111110 | Thu 0943-0946 | 13506 | 164532 | RNGB | M277a |
| 20111110 | Thu 1010-1014 | 16132 | 352416 | WebWeasel | R |
| 20111110 | Thu 1524-1532 | 14871 | 156234 | Peter | Fair, M278 |
| 20111110 | Thu 1621-1624 | 9106 | 564213 | Peter | Good, M279 |
| 20111111 | Fri 0834-0836 | 14863 | 615243 | Peter | M280 |
| 20111111 | Fri 0848-0901 | 10653 | 356412 | Peter | Good and clear, M281 |
| 20111111 | Fri 1011-1017 | 17463 | 256134 | Peter | Fair, M282 |
| 20111114 | Mon 0905 | 11424 | 421635 | Alex | S9, M283 |
| 20111114 | Mon 0938-0944 | 13517 | 463125 | Alex | Monitored in progress, fair, M284 |
| 20111114 | Mon 0940-0947 | 14950 | 352416 | Fritz/CH | R |
| 20111114 | Mon 1245 | 15656 | 364152 | Peter | Short (only 1 sequence), M285 |
| 20111115 | Tue 0946-0952 | 16276 | 314265 | Ian Wraith | R |
| 20111121 | Mon 1500-1507 | 12055 | 256134 | WebWeasel, Danix/PL | R |
| 20111121 | Mon 1621-1632 | 12055 | 256134 | Spectre/UK | Fair, BC QRM3, QSB2, R |
| 20111122 | Tue 1512 | 17463 | 256134 | Fritz | R |
| 20111123 | Wed 0851-0900 | 11483 | 412356 | Alex | S9+, carrier till 0902, M286 |
| 20111125 | Fri 1123-1144 | 13506 | 164532 | Peter | Strong and clear, M287 |
| 20111125 | Fri 1502-1510 | 14871 | 156234 | Peter | Good, M288 |
| 20111130 | Wed 0718 | 14970 | 216354 | Bruno/IT |  |
| 20111130 | Wed 1131-1135 | 14944 | 621543 | Alex, Peter | Good, M289 |
| 20111201 | Thu 0930-0936 | 17468 | 436512 | RNGB | I. p., heavy PLT QRM, R |
| 20111202 | Fri 0924-0926 | 16219 | 324615 | Eddy/AU | New freq, CROWD36 just before TX, R |
| 20111202 | Fri 0929 | 14547 | 645321 | Peter | R |
| 20111202 | Fri 1002 | 12215 | 361245 | Peter | M290 |
| 20111202 | Fri 1325-1327 | 14644 | 215346 | Eddy | Alert 3(1) New freq, R |
| 20111202 | Fri 1327 | 14650 | 215346 | Peter | 3(2) M291 |
| 20111202 | Fri 1338-1339 | 1220 | 2153 | 346 Peter | 3(3) M292 |
| 20111206 | Tue 0730-0738 | 16317 | 612534 | LU5EMM | R |
| 20111206 | Tue 0848-0851 | 12157 | 165423 | Peter | M293 |
| 20111206 | Tue 1436-1448 | 14650 | 215346 | Peter | M294 |
| 20111207 | Wed 0852-0857 | 14377 | 432516 | Peter, Spectre | M295 |
| 20111207 | Wed 1312 | 14970 | 216354 | Peter | R |
| 20111207 | Wed 1323 | 12207 | 215346 | Peter | R |
| 20111209 | Fri 0901-0905 | 14863 | 615243 | Eddy | New style, S4, M296 |
| 20111212 | Mon 0932-0933 | 11537 | 421635 | RNGB | I. p., M297 |
| 20111212 | Mon 1045 | 16117 | 463125 | Bruno | M298 |
| 20111215 | Thu 0907-0911 | 14970 | 216354 | RNGB | I. P., R |
| 20111215 | Thu 0908-0912 | 14650 | 215346 | RNGB | I. P., R |
| 20111216 | Fri 0958-1002 | 12215 | 361245 | Peter | M299 |
| 20111216 | Fri 1020-1027 | 12194 | 625413 | Peter | M300 |
| 20111216 | Fri 1417-1426 | 12207 | 215346 | Peter | R |
| 20111219 | Mon 1644 | 6884 | 612534 | FrankE2Kde | R |
| 20111220 | Tue 0852-0859 | 9450 | 165423 | Alex | Good, M301 |
| 20111220 | Tue 0917-0920 | 17421 | 246531 | Peter | M302 |
| 20111221 | Wed 0935-0937 | 14631 | 362154 | RNGB | I. P., R |
| 20111223 | Fri 0906-0910 | 10653 | 356412 | Peter | M303 |
| 20111223 | Fri 1000-1008 | 17463 | 256134 | Peter | M304 |
| 20111224 | Sat 1041-1042 | 16115 | 215346 | Eddy | Fair, R |
| 20111224 | Sat 1106-1109 | 13961 | 216354 | Eddy | R |
| 20111224 | Sat 1423 | 14970 | 216354 | Linkz/FR | R |
| 20111227 | Tue 0905-0907 | 13420 | 534216 | Alex | Weak, M305 |
| 20111227 | Tue 0930-0939 | 12157 | 165423 | Peter | Good, R |
| 20111227 | Tue 1004-1008 | 16320 | 612534 | Peter, <br> LU5EMM | Good in UK, R |
| 20111228 | Wed 0859 | 13419 | 465132 | Peter | M306 |

Again as usual very nice and interesting stuff! Many thanks for all the contributors of the section in 2011, and I wish all of you a happy new year and further good cooperation in 2012, which will bring some more interesting events and logs.

Till the next report I say "Auf Wiedersehen" and "Good-bye"
Jochen Schäfer, KopfE2Kde and X06 Teamkopf

VOICE STATIONS

E06 [1A]
E06 November log [RNGB]:

| Thursday | 3rd | 07.00 | 18212 | '507’ 2749562772919637192995453 13904.... 83735 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 20.30 | 4836 | '321’ $268156543756843658976548945621 . . . .53867$ |
| Friday | 4th | 06.00 | 16200 | '507' 2749562772919637192995453 13904..... 83735 |
|  |  | 07.00 | 18200 | ‘507’ 2749562772919637192995453 13904..... 83735 |
|  |  | 21.30 | 4760 | '472' 3531554678453675632068453 96754..... 67453 |
| Saturday | 5th | 01.30 | 5837 | '759'102 3465378677518353455464 49811..... 87709 |
| Weds | 9th | 19.20 | 4036 | '829' 00000 |
|  |  | 20.20 | 3842 | '829' 00000 |
| Thursday | 10th | 07.00 | 18200 | '507’ 62314157621898084666303303 45915..... 31985 |
| Saturday | 12th | 01.30 | 5837 | '759' $428316970542560864905755360694 . \ldots . .09243$ |
| Thursday | 17th | 07.00 | 18210 | '507' 62314157621898084666303303 45915..... 31985 |
| Saturday | 19th | 01.30 | 5837 | ‘759’ 21833318051809043961923345 88407..... 18301 |
| Weds | 23rd | 08.46 | 9946 | '343' 20137 (in progress) groups not copied |
|  |  | 09.38 | 8095 | '343' 20137 (in progress) groups not copied |
| Friday | 25th | 07.00 | 18200 | '507’ 42915540510167808166792290 25681..... 04247 |

Other's

November 2011:

| 4583kHz0230z | 05/11[759 1023465378 ... 8770910234 00000(f)] Strong, TTYQRM2 |
| :---: | :---: |
| 0230z | 06/11[759 1023465378 ... 8770910234 00000(f)] Strong, TTYQRM2 |
| 0230z | 12/11[759 $4283169705 \ldots 092434283100000$ (f)] Very strong, TTYQRM2 |
| 0230z | 13/11[759 $4283169705 \ldots 0924342831$ 00000(f)] Very strong, TTYQRM2 |
| 0230z | 19/11[759 2183331805 ... 1830121833 00000(f)] Very strong, TTYQRM2 |
| 0230z | 20/11[759 2183331805 .. 1830121833 00000(f)] Very strong, TTYsplatterQRM2 |
| 0230z | 26/11[759 6423173659 ... 6853664231 00000(f)] Strong, QRM3 |
| 0230z | 27/11[759 6423173659 ... 6853664231 00000(f)] Very strong |
| 4760kHz 2053z | 04/11[123456789] 2054z Fair QRN2 QSB2 |
| 2130z | 04/11[472 3531554678 ... 6745335315 00000(s)] 2137z Fair QRN2 QSB2 |
| 2129z | 18/11[472 3531554678 ... 6745335315 00000(s)] 2136z Weak QRN4 QSB3 |
|  | 4760kHz 2130z 04/11 Transcript: |
|  | 47235315 |
|  | 54678453675632068453967548758364890542196574343768 |
|  | 4523487906562896789567453 courtes Spectre |
|  | 3531500000 Courtesy Spectre |

4836kHz2029z 03/11[321 $2681565437 \ldots 5386726815$ 00000(s)] 2036z Weak XJTQRM4 QSB3

2030z 17/11[321 2681565437 ... 5386726815 00000(s)] 2037z Weak QRM3 QSB3
4836kHz 2029z 03/11 Transcript:

65437568436589765481456214693554879342685494624678 4538624967456204720653867
2681500000

06/11[759 $1023465378 \ldots 8770910234$ 00000(f)] Strong
E06 5837/4583kHz 05/6/11 Transcript:

## 75910234

65378677518353455464498112984888383589190117253120 37132656201928461209274067442843497705676644993497 03389181852091776746094242482324825099158012898915 46465578061061987709
1023400000
Courtesy Spectre

| $(10 \mathrm{~m} 02 \mathrm{~s})$ | Spectre ,PLdn | SAT |
| :--- | :--- | ---: |
| $(10 \mathrm{~m} 02 \mathrm{~s})$ | Spectre, PLdn | SUN |
| $(9 \mathrm{~m} 37 \mathrm{~s})$ | Spectre, PLdn | SAT |
| $(9 \mathrm{~m} 37 \mathrm{~s})$ | Spectre, PLdn | SUN |
| $(9 \mathrm{~m} 55 \mathrm{~s})$ | Spectre, PLdn | SAT |
| $(9 \mathrm{~m} 55 \mathrm{~s})$ | Spectre, PLdn | SUN |
| $(9 \mathrm{~m} 31 \mathrm{~s})$ | Spectre, PLdn | SAT |
| $(9 \mathrm{~m} 31 \mathrm{~s})$ | Spectre, PLdn | SUN |
|  |  |  |
|  | Spectre, PLdn | FRI |
|  | Spectre | FRI |
|  | Spectre | FRI |


| Spectre | THU |
| :--- | :--- |
| Spectre, Fanis | THU |


| $(10 \mathrm{~m} 02 \mathrm{~s})$ | PLdn, Spectre | SAT |
| :--- | :--- | :--- |
| $(10 \mathrm{~m} 02 \mathrm{~s})$ | PLdn, Spectre | SUN |

E06 5837/4583kHz 0130/0230z 12/13 Transcript:
75942831
69705425608649057553606949425470006069079904307481 61412796618820414121682322903347265496334283567235 64120626444912992690002978283620759747708338126829 09243 4283100000 Courtesy Spectre

0130z 19/11[7592183331805 ... 1830121833 00000(f)] 0140z Weak QRN3 QSB3
0130z 20/11[7592183331805 ... $183012183300000(f)] 0140 z$ Weak QRN3 QSB3
E06 5837/4583kHz 0130/0230z 19/20/11 Transcript:
75921833
31805180904396192345884075947193770112820939580215
97915410643826497686176093470649821096283509346065
01620200812699515389554071540588176072906079351333
107552461218301
2183300000
Courtesy Spectre
0130z 26/11[759 6423173659 ... 6853664231 00000(f)] 0139z Fair QRN3 QSB2
0130z 27/11[7596423173659 ... 6853664231 00000(f)] 0139z Fair QRN3 QSB2
E06 5837/4583kHz 0130/0230z 26/27/11 Transcript:
75964231
73659496244742536108518588705844048527023338843248
46512666588155327076360294298991220368759925664962
03609781203552163952242959723844605521255539286214
68536
$6423100000 \quad$ Courtesy Spectre

| $8167 \mathrm{kHz1217z}$ | 26/11[....... 12935 00000] | Danix | SAT |
| :---: | :---: | :---: | :---: |
| 10423kHz1114z | 26/11[i/p, ended $1293500000(\mathrm{f})$ ] 1118z Strong | Danix | SAT |
| $18200 \mathrm{kHz} \mathrm{0700z}$ | 25/11[507 42915540510 ... 0424742915500000 ] 0730z Strong | FR, Spectre | FRI |
|  | E06 18200kHz 0700z 24/11 Transcript: |  |  |
|  | 507429155 |  |  |
|  | 40510167808166792290256811811061870355480618398753 |  |  |
|  | 83294992025012095837952478125576605736402934402028 |  |  |
|  | 02812130612224203914 626*5 6914758962762785877667172 |  |  |
|  | 06609292823160578005411455460506442790628111229528 |  |  |
|  | 78105348819153921180516083767844131039601947562320 |  |  |
|  | 79885022553979839922645992798754148009697288419208 |  |  |
|  | 20693077986333519978231638870230945672218839520212 |  |  |
|  | 66776019947045971700429304925683374698475673617280 |  |  |
|  | 77590547164854304381748120139681975409529554527878 |  |  |
|  | 9659776088551792563703515397139605921633 4**03 66203 |  |  |
|  | 74964721198723432715345353175358737995514383872087 |  |  |
|  | 04618829393323795084975757326147344156332445441389 |  |  |
|  | 10300306819577283442948827358767420707385201166647 |  |  |
|  | 55226623007167942528295012006172409378648340058199 |  |  |
|  | 18925472508225701942784788752132793686780061933443 |  |  |
|  | 8289606263976651005604247 |  |  |
|  | 42915500000 Courtesy FR, Spectre |  |  |
| 18210kHz 0700z | 17/11[507 623141 57621] | FN | THU |
| 0700z | 18/11[ ....... 871973198562362314114100000$]$ | MSA | FRI |

December 2011:

## E06 log December [RNGB]

| Thursday | 1st | 07.00 | 15933 | '923' 00000 |
| :---: | :---: | :---: | :---: | :---: |
| Saturday | 3rd | 01.30 | 5796 | ‘759’ $401329722615794939399200547967 \ldots . .38202$ |
| Thursday | 8th | 07.00 | 15940 | '923' 570133258708145137217 9548-44400..... 92937 |
| Friday | 9th | 06.00 | 13910 | '923' 570133258708145137217 9548-44400.... 92937 |
| Saturday | 10th | 01.30 | 5796 | '759' 8623111159587353749816320 63408.... 60267 |
| Weds | 14th | 19.20 | 4036 | '829' 000000 |
|  |  | 20.20 | 3842 | '829' 000000 |
| Thursday | 15th | 07.00 | 15940 | '923' 570133258708145137217 9548-44400.... 92937 |
|  |  | 20.30 | 4836 | '321' 4861563527384658905674352 12389.... 53421 |
| Friday | 16th | 21.30 | 4760 | '472' 5531567489643764352637890 04735....78654 |
| Sunday | 18th | 01.30 | 5796 | ‘759’ 1263483255952045741591827 61000.... 39469 |
| Saturday | 24th | 01.30 | 5796 | '759' 3084233816220686291804804 25771.... 98563 |
| Thursday | 29th | 07.00 | 15940 | '923' 00000 |
| Saturday | 31st | 01.30 | 5796 | ‘759’180 3297712875650854758239 10478.... 90455 |

## Others' Deecember Logs

| 4036 kHz 1920 z | $14 / 12[82982982900000]$ |
| ---: | :--- |
| 4516 kHz 0230 z | $03 / 12[7594013297226 \ldots 382024013200000(\mathrm{f})]$ Very strong, XWPQRM2 |
| 0230 z | $04 / 12[7594013297226 \ldots 382024013200000(\mathrm{f})]$ Very strong, XWPQRM2 |
| 0230 z | $10 / 12[7598623111159 \ldots 602678623100000(\mathrm{f})] 0240 \mathrm{z}$ Very Strong, XWPQRM2 |


| 0230z | 11/12[759 8623111159 ... 6026786231 00000(f)] 0240z Very Strong, XWPQRM2 | (9m38s) | PLdn, Spectre | SUN |
| :---: | :---: | :---: | :---: | :---: |
| 0230z | 17/12[759 1263483255 ... 394691263400000 (f)] 0240z Weak, XWPQRM3 | (10m04s) | PLdn, Spectre | SAT |
| 0230z | 18/12[759 1263483255 ... 3946912634 00000(f)] 0240z Very strong | (10m04s) | PLdn, Spectre | SUN |
| 0230z | 25/12[759 $3084233816 \ldots 9856330842$ 00000(f)] 0240z Very strong XWPQRM2 | (11m30s) | PLdn, Spectre | SUN |
| 4518kHz0230z | 24/12[759 $3084233816 \ldots 9856330842$ 00000(f)] 0140z Very strong +2kHz reduces XWPQRM | (11m30s) |  | SAT |
| 0230z | 31/12[759 $1803297712 \ldots 9045510832$ 00000(f)] 0240z Fair and noisy | (9m50s) | PLdn | SAT |
| $4760 \mathrm{kHz2130z}$ | 02/12[472 5521567489 ... 7865455215 00000(s)] 2136z Weak QRN4 QSB3 |  | Spectre | FRI |
| 2130z | 16/12[472 5521567489 ... 7865455215 00000(s)] 2136z Weak QRN4 QSB3 |  | Spectre | FRI |
|  | 47255315 <br> 6748964376435263789004735 <br> 2143235643321455674334237 <br> 6754343589987654234578654 <br> 55315 00000(s) Courtesy Fanis/FR |  |  |  |
| 4836kHz2030z | 01/12[3214861563527 ... 5342148615 00000(s)] Strong signal QRM, QSB |  | FR , Spectre | THU |
|  | $\begin{aligned} & 32148615 \\ & 6352738465890567435212389 \\ & 0546327894362513649064578 \\ & 5325743689543255467853421 \\ & 4861500000 \quad \text { Courtesy Fox } \end{aligned}$ |  |  |  |
| 2030z | 15/12 [3214861563527 ... 5642148615 00000] Strong signal, moderate/strong noise, audio distorted |  | FR, Spectre | THU |
| 5796kHz0130z | 03/12[759 $4013297226 \ldots 3820240132$ 00000(f)] Very strong | (9m43s) | PLdn, Spectre | SAT |
| 0130z | 04/12[759 $4013297226 \ldots 3820240132$ 00000(f)] Very strong | (9m43s) | PLdn, Spectre | SUN |
|  | 75940132 <br> 97226157949393992005479672557075816295729261512497 <br> 26829562553286791568295329779237217793641230698506 <br> 14373298367203353434676107487720701600724729055617 <br> 85608382024013200000 <br> Courtesy Spectre |  |  |  |
| 0130z | 10/12[759 8623111159 ... 6026786231 00000(f)] 0140z Very Strong, QSB2 | (9m38s) | PLdn, Spectre | SAT |
| 0130z | 11/12[759 8623111159 ... 6026786231 00000(f)] 0140z Very Strong, QSB2 | (9m38s) | PLdn | SUN |
|  | 75986231 <br> 11159587353749816320634082854151481218492332860503 <br> 28120640640403884761157344772620129032394384394921 <br> 29471174735604878212427089481734802132603011221469 <br> 602678623100000 <br> Courtesy Spectre |  |  |  |
| 0130z | 17/12[759 $1263483255 \ldots 3946912634$ 00000(f)] 0140z Weak | (10m04s) | PLdn, Spectre | SAT |
| 0130z | 18/12[759 1263483255 ... 3946912634 00000(f)] 0140z Very strong | (10m04s) | PLdn | SUN |
|  | 75912634 <br> 83255952045741591827610001890826105626203400090691 77057680826745251854683023105914044330966464507096 84089239477855357620552133994699810669790127686017 061336426045224394691263400000 <br> Courtesy Spectre |  |  |  |
| 0130z | 24/12[759 $3084233816 \ldots 9856330842$ 00000(f)] 0140z Very strong | (11m04s) | RNGB, Spectre | SAT |
| 0130z | 25/12[759 3084233816 ... 9856330842 00000(f)] 0141z Very strong | Spectre, D | Danix, RNGB,PLdn | SUN |
|  | 75930842 <br> 33816220686291804804257713012583586048798392280359 85178300782180057587525928397027640299123599040593 62715341444664667416949253748934133550546607267689 05799583891627428821744677882113934449064529742314 64720985633084200000 <br> Courtesy Danix\& Spectre |  |  |  |
| 0130z | 31/12[759 1803297712 ... 9045510832 00000(f)] 0140z Weak and noisy | (9m50s) | PLdn, Spectre | SAT |

## PoSW's logs:

First + Third Thursdays in the Month 2030 UTC Schedule:-
3-Nov-11:- $4,836 \mathrm{kHz}$, calling " 321 ", weak signal and noisy frequency, largely unreadable.
Started well before the half-hour.
17-Nov-11:- $4,836 \mathrm{kHz}$, started approx. 50 seconds early, call " 321 ", DK/GC "268 2681515 ". Good signal, much better than on the $3^{\text {rd }}$. Ended with DK "268 268" but no GC or
"zeroes" heard.
1-Dec-11:- 4,836 kHz, started early again, after 2029 UTC. Call"321", DK/GC "486 48615 15".
15-Dec-11:- $4,836 \mathrm{kHz}$, "321" and "486 4861515 " again, weak signal. Had the rasping noise on the speech noted earlier in the year but which seemed to have been fixed in recent times and was also present on the previous day's $1920+2020 \mathrm{z}$ E06, see below.

Friday 2130 UTC Schedule:-
4-Nov-11:- $4,760 \mathrm{kHz}$, started approx. 45 seconds early, call "472", DK/GC "353 35315 15". Good signal.
18-Nov-11:- $4,760 \mathrm{kHz}$, call-up in progress when tuned in 30 s before the half-hour, " 472 " and "353 3531515 ", same as last time.
2-Dec-11:- $4,760 \mathrm{kHz}$, call-up in progress when tuned in just after 2129 UTC, call "472",
DK/GC "553 55315 15"

16-Dec-11:- 4,760 kHz, "472" and "553 55315 15", with that unpleasant rasping distortion.
Second Wednesday in the Month $1920+2020$ UTC Schedule:-
14-Dec-11:- 1920 UTC, $4,036 \mathrm{kHz}$, "829 82982900000 ". I usually manage to miss this schedule, mainly I think, because of its unusual start time of twenty minutes past the hour.
Made sure of it today by setting an alarm clock to 7.15 pm in readiness! Shown in E2k67 as being on $4,036 \mathrm{kHz}$ in November so no change in December. Had the same rasping distortion on the speech noted on the Thursday and Friday evening schedules in the past -
and which returned again on Thursday 15-December after having gone away for some time.
2020 UTC, $3,842 \mathrm{kHz}$, second sending with the same distortion, not found until about two minutes into the transmission, hadn't expected it to be so close to the 1920 z frequency. Spent a couple of minutes searching inside the 80 metre amateur band and down to $3,000 \mathrm{kHz}$ until tuning up towards 3,842.

E07 [1B]
We open E07[Fan IB] with PoSW's logs:
Sunday + Wednesday Schedule, 1800 UTC Start:-
6-Nov-11, Sunday:- 1800 UTC, $8,183 \mathrm{kHz}$, "199 199199 1", DK/GC "502 34" x 2.
1820 UTC, $6,982 \mathrm{kHz}$, second sending, S9+ carrier but with low audio at first, after about 30 seconds suddenly dropped to $\mathrm{S7}$ but with better modulation.
1840 UTC, $5,938 \mathrm{kHz}$, third sending, difficult copy due to being inside the 49 metre band.
13-Nov-11, Sunday:- 1800 UTC, 8,183 kHz, "199 199199000 ". S9 carrier, audio low but readable.
16-Nov-11, Wednesday:- 1820 UTC, $6,982 \mathrm{kHz}$ " "199 199199000 ".
20-Nov-11, Sunday:- 1800 UTC, $8,183 \mathrm{kHz}$, "199 199199 1", DK/GC "796 94" x 2 . S9 signal with better than usual audio. 1820 UTC, $6,982 \mathrm{kHz}$, second sending, S9 with deep QSB, good audio.
1840 UTC, $5,938 \mathrm{kHz}$, third sending suffering from broadcast interference.
4-Dec-11, Sunday:- 1800 UTC, $6,982 \mathrm{kHz}$, "989 989989 1", DK/GC "931 76" x 2. Mod low but readable.
1820 UTC, $5,836 \mathrm{kHz}$, second sending, inside 49 metre band with broadcaster interference and also, strangely for this part of the spectrum, a data signal, SITOR or similar.
1840 UTC, $4,938 \mathrm{kHz}$, third sending, peaking over S9, reasonable audio, best sending of the three by far.
11-Dec-11, Sunday:- 1800 UTC, $6,982 \mathrm{kHz}$, very low mod, unreadable, full message format, carrier went QRT 1806z.
1820 UTC, $5,836 \mathrm{kHz}$, second sending, also unreadable.
1840 UTC, $4,938 \mathrm{kHz}$, S9 signal, audio not great but readable, "989 989989 1", DK/GC "613 33" x 2 . Heterodyne from a carrier on 4,940 started towards the end of the call-up,
probably a tropical broadcaster starting up for the evening.
18-Dec-11, Sunday:- 1800 UTC, $6,982 \mathrm{kHz}$, "989 989989 000", audio weak but readable.
Monday + Wednesday Schedule, 2000 UTC Start:-
2-Nov-11, Wednesday:- 2000 UTC, $7,724 \mathrm{kHz}$, "798 798798000 ", low audio but readable.
2020 UTC, $6,924 \mathrm{kHz}$, second sending, S9+ signal, better modulation than first sending.
7-Nov-11, Monday:- 2000 UTC, 7,724 kHz, "798 798798 000".
28-Nov-11, Monday:- 2000 UTC, $7,724 \mathrm{kHz}$, very weak signal, unreadable at my QTH, appeared to go off shortly before 2002 and 30 seconds UTC so looks like "no message".
2020 UTC, $6,924 \mathrm{kHz}$, second sending, very weak, unreadable.
12-Dec-11, Monday:- 2000 UTC, $7,478 \mathrm{kHz}$, tuned in approx. 2003 UTC, "full message" in progress, very low audio, E07 OM only just audible. This frequency used in December last year but then there was interference from a strong broadcast station on 7,475 identified as The Voice of Greece in their native language; not observed today, I suppose since the old Bubble-and-Squeaks exchanged all their Drachmas for Euros they no longer have any coins for the electricity meter which supplies the transmitters!
2020 UTC, $6,778 \mathrm{kHz}$, second sending, much better audio, "472 472472 1", DK/GC " 577 20" x 2, ended with " 000000 " 2024 and 35 s UTC.
2040 UTC, $5,278 \mathrm{kHz}$, third sending, best signal of the three.
Thursday Schedule, 2110 UTC Start:-
3-Nov-11:- 2110 UTC, $6,777 \mathrm{kHz}$, " 744744744000 ".
2130 UTC, $5,449 \mathrm{kHz}$, second sending, close to RAF VOLMET 1 kHz up.
10-Nov-11:- 2110 UTC, $6,777 \mathrm{kHz}$, "744 744744000 ", strong "XJT" on frequency, not noted last time.
24-Nov-11:- $2110 \mathrm{kHz}, 6,777 \mathrm{kHz}$, "744 744744000 ", good signal with reasonable audio.
2130 UTC, $5,449 \mathrm{kHz}$, second sending, chatter from VOLMET on 5,450.
8-Dec-11:- 2130 UTC, $5,449 \mathrm{kHz}$, missed 2110 z sending, warming up for a "full message",
"744 744744 1", DK/GC " 582 47" x 2, S9 signal with better audio than of late.
2150 UTC, $4,483 \mathrm{kHz}$, third sending, peaking over S9 with good audio.
15-Dec-11:- 2110 UTC, $6,777 \mathrm{kHz}$, carrier up but audio so low as to be unreadable, went off a bit before 2112 and 30s UTC so looks like "no message".
2130 UTC, $5,449 \mathrm{kHz}$, "744 744744000 ", much clearer than the first sending.
Wednesday E07a SSB Schedule, 2100 UTC Start:-
2-Nov-11:- 2100 UTC, $5,864 \mathrm{kHz}$, "815 815815162128 ", a 5 F group in the call-up standard practice for the SSB E07 variant for some reason. DK/GC "124 69" x 2 . Very strong signal.
2120 UTC, $5,164 \mathrm{kHz}$ and 2140 UTC, $4,564 \mathrm{kHz}$, repeats. Both S9+ SSB signals.

16-Nov-11:- 2100 UTC, $5,864 \mathrm{kHz}$, "815 815815000 ".
2120 UTC, $5,164 \mathrm{kHz}$, second sending.
30-Nov-11:- 2100 UTC, 5,864 kHz, "815 815815000 ".
7-Dec-11:- 2100 UTC, $5,864 \mathrm{kHz}$, "815 815815162128 ", DK/GC "124 69" x 2. Looks like the return of the message transmitted on 2-November. 2120 UTC, $5,164 \mathrm{kHz}$ and 2140 UTC, $4,564 \mathrm{kHz}$, repeats.

## RNGB's logs read:

E07 November log:

| Weds | 2nd | 20.00 | 7724 | '798' 000 |
| :--- | :--- | :--- | :--- | :--- |
| Thursday | 3rd | 08.20 | 6767 | '873' 000 |
| Sunday | 6th | 18.20 | 6982 | '199' 1502349305 ? 04254 etc |
| Weds | 16th | 18.00 | 8183 | '199' 000 |
|  |  | 20.00 | 7724 | '798' 000 |
| Sunday | 20th | 18.00 | 8183 | '199' 17969473038531531189676788 etc |
| Weds | 23rd | 20.00 | 5864 | '815' 000 |
| Sunday | 27th | 18.00 | 8183 | '199' $41536824219873775723 . . . .$. |
| Monday | 28th | 20.20 | 6924 | '798' 000 |
| Weds | 30th | 21.00 | 5864 | '815' 000 |

## E07 log December

| Weds | 7th | 18.40 | 4938 | '989' $931765152581607 . \ldots .$. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Thursday | 8th | 21.10 | 6777 | '744' $5824759126436164052735893 \ldots .$. |
| Weds | 14th | 18.00 | 6982 | '989' $61333989550518894007 \ldots .$. |
|  |  | 21.00 | 5864 | '815' 000 |
| Sunday | 18th | 18.00 | 6982 | '989' 000 |
| Thursday | 22nd | 21.30 | 5449 | '744' $2384621332827408513123351 \ldots .$. |
| Weds | 28th | 21.00 | 5864 | '815' 000 |

NOTE: The 0800 z Tues/Thurs schedule has not been heard since beginning of November.
Onto others' logs:
November 2011:

| 5449 kHz 2130 z | 03/11[744 744744 000] 2132z Weak VOLMETQRM2 QSB2 |
| :---: | :---: |
| 2130z | 10/11[774 000] Medium signal strength, weak/moderate signal, strong bleeding from VOLMET |
| 2130z | 17/11[744 744744 000...] VERY WEAK 000 2132z |
| 5867 kHz 0800 z | 01/11 Strong carrier only |
| 0800z | 03/11 Strong carrier only |
| 5938kHz1840z | 02/11[199 msg txt 000 000] |
| 1840z | 06/11 Strong bleeding, no audio could be heard |
| 1840z | 09/11[199 150234 ........... 000 000] Very weak |
| 1840z | 20/11[199 17969473038 ... 97047000 000] Odd characters BCQRM3/4 |
| 1840z | 23/11 BCQRM5 |
| 1840z | 27/11[199 $14153682421 \ldots 11548000$ 000] Weak \& noisy |
| 6767 kHz 0820 z | 01/11 XJTQRM5 |
| 0820z | 03/11 Strong carrier only |
| 0820z | 10/11[873 000] Strong |
| 6777 kHz 2110 z | 03/11[744 744744 000] 2112z Weak QRN3 QSB3 |
| 2110z | 10/11[774 000] Strong signal, weak/moderate noise noise |
| 2110z | 17/11[744 744744 000...] VERY WEAK 000 2112z |
| 6924kHz2020z | 02/11[ 798798798000$]$ WEAK QSB2 000 2022z |
| 2020z | 07/11[798 000] Weak and noisy |
| 2020z | 14/11[798 000] Weak and noisy |
| 2020z | 16/11[798 000]Strong |
| 2020z | 21/11[798 000]Fair audio, strong, noisy carrier |
| 2020z | 23/11[798 000]Fair |
| 2020z | 30/11[798 000]Strong |
| 6982kHz1820z | 02/11[199 msg txt 000 000] |
| 1820z | 06/11[199 15023449305 ... 03839000 000] Strong signal, very strong noise, fading |
| 1820z | 09/11[199 150234 ........... 000 000] Weak |
| 1820z | 13/11[199 000] Weak audio and noisy |
| 1820z | 16/11[199 000] Strong carrier, weak audio |
| 1820z | 20/11[199 17969473038 ... 97047000 000] Strong |
| 1820z | 23/11[199 17969473038 ... 97047000 000] Weak, QRM2 |
| 1820z | 27/11[199 $14153682421 \ldots 11548000$ 000] Weak \& noisy |
| 7724kHz2000z | 02/11[798798798000...] FAIR QSB1 000 2002z |
| 2000z | 07/11 Strong carrier only PLdn MON |
| 2000z | 14/11[798798798 000] 2002z Fair QRN2 QSB3 |


|  | Spectre | THU |
| :---: | :---: | :---: |
|  | FR, PLdn | THU |
|  | AIK | THU |
|  | PLdn | TUE |
|  | PLdn | THU |
| (10m15s) | PLdn | WED |
|  | FR, AIK | SUN |
|  | PLdn | WED |
| (12m06s) | PLdn, FR,AIK | SUN |
| (12m06s) | HJH, PLdn | WED |
| (6m51s) | AIK, FR | SUN |
|  | PLdn | TUE |
|  | PLdn | THU |
| (2m13s) | PLdn | THU |
|  | Spectre | THU |
|  | FR | THU |
|  | AIK | THU |
|  | AIK | WED |
| (2m13s) | PLdn | MON |
| (2m13s) | PLdn, FN | MON |
| (2m13s) | FN, PLdn, Spectre | WED |
| (2m13s) | PLdn, Spectre | MON |
| (2m13s) | Spectre, PLdn | WED |
| (2m13s) | PLdn | WED |
| (10m15s) | PLdn | WED |
|  | FR, AIK | SUN |
|  | PLdn | WED |
| (2m13s) | PLdn | SUN |
| (2m13s) | FN, PLdn | WED |
| (12m06s) | PLdn, FR,AIK | SUN |
| (12m06s) | PLdn | WED |
| (6m51s) | AIK, FR | SUN |
|  | AIK | WED |
|  | SpectrePLdn, FN | MON |


| 2000z | 16/11[798 798798 000] 2002z Weak QRN3 QSB3 |
| :---: | :---: |
| 2000z | 21/11[798 000]Weak, QRM4 |
| 2000z | 23/11[798 000]Fair, QRM2 |
| 2000z | 30/11 QRM5 |
| 8183kHz1800z | 02/11[199 msg txt 000 000] |
| 1800z | 06/11[199 15023449305 ... 03839000 000] Very strong signal, weak/moderate noise, fading |
|  | 199150234 |
|  | 4930504214023550506173650 |
|  | 0296527955777291703752758 |
|  | 9405938157307730193350727 |
|  | 9955284455514786540973990 |
|  | 2592625974779950433087035 |
|  | 0515892259838529441852528 |
|  | 72456249120326603839 |
|  | 000000 Courtesy FR |
| 1800z | 09/11[199 150234 ........... 000 000] Weak, almost inaudible |
| 1800z | 13/11[199 000] Very strong signal, weak noise |
| 1800z | 16/11[199 000] Strong carrier, weak audio |
| 1800z | 20/11[199 17969473038 ... 97047000 000] Fair |
| 1800z | 23/11 NRH |
| 1800z | 27/11[199 $14153682421 \ldots 11548000$ 000] Weak \& noisy |
|  | 199141536 |
|  | 8242198737757238517668695 |
|  | 1588431366128354123582228 |
|  | 7715290018690619177540033 7574118458291299692901760 |
|  | 1222421360327582013999511 |
|  | 3909847372913124131043944 |
|  | 1033403642329981008455414 |
|  | 11548000000 Courtesy AIK |


|  | Spectre,FN, PLdn | WED |
| :--- | :--- | :--- |
| $(2 \mathrm{~m} 13 \mathrm{~s})$ | PLdn | MON |
| $(2 \mathrm{~m} 13 \mathrm{~s})$ | Spectre, PLdn | WED |
| $(2 \mathrm{~m} 13 \mathrm{~s})$ | PLdn | WED |
|  |  |  |
| $(10 \mathrm{~m} 15 \mathrm{~s})$ | PLdn | WED |
|  | FR, AIK | SUN |


|  | PLdn | WED |
| :--- | :--- | :--- |
| $(2 \mathrm{~m} 13 \mathrm{~s})$ | FR, PLdn | SUN |
| $(2 \mathrm{~m} 13 \mathrm{~s})$ | FN, PLdn | WED |
| $(12 \mathrm{~m} 06 \mathrm{~s})$ | PLdn, FR,AIK | SUN |
|  | PLdn | WED |
| $(6 \mathrm{~m} 51 \mathrm{~s})$ | AIK, FR | SUN |

## December 2011:

| 4483kHz2150z | 01/12[744 15824759126 ... 23752000 000] Very strong signal, moderate noise |
| :---: | :---: |
| 2150z | 08/12[744 15824759126 ... 23752000 000] 2157z Fair |
| 2150z | 22/12[774 12384821334 ... 66737000000$] 2157 \mathrm{z}$ |
| 2150z | 29/12[744 $12384621332 \ldots 66937000$ 000] Strong with noise |
| 4938kHz1840z | 04/12[989 1931 n7 (51525) ... 43163000 000] 1850z Weak, QRN3 |
| 1840z | 11/12]989 1............................. 000000 ] Very weak, QRM3/4 |
| 1840z | 14/12[989 989989 1......] weak |
| 5278kHz2040z | 12/12[472 15772011033 ... 08282000 000] 2044z baD fading |
| 2040z | 14/12[472 15772020492 ... 08282000 000] |
| 5836 kHz 1820 z | 18/12[989 000] Weak, BCQRM3 |
| 5449kHz2130z | 01/12[744 15824759126 ... 23752000000 ]Strong signal, weak noise, strong bleeding |
| 2130z | 22/12[774 12384821334 ... 66737000 000] 2137z Fair, QRM3 |
| 2130z | 29/12[744 12384621332 ... 66937000 000] Fair, VOLMETQRM3 |
| 6777kHz2110z | 01/12[744 15824759126 ... 23752000 000] Very strong signal, weak noise, minor fading |


|  | FR | THU |
| :--- | :--- | :--- |
|  | AIK | THU |
|  | AIK | THU |
| (7m13s) | PLdn | THU |
|  |  |  |
| (10m13s) | PLdn | SUN |
|  | M8, PLdn | SUN |
|  | M8 | WED |
|  |  |  |
|  | M8, AIK, PLdn | MON |
|  | M8 | WED |
| (2m13s) | AIK, PLdn | SUN |
|  |  |  |
|  | FR | THU |
|  | AIK | THU |
| (7m13s) | PLdn | THU |
|  |  |  |
|  | FR |  |
|  |  |  |

744158247
5912643616405273589368306
4293166599327199288210398
9381103436987167583550378
0584600311907263719510529
6421656462604360728399174
3864190696919026710627008
7680695617161647679371152
2051501620952414120204870
2767239162210776910215112
$000000 \quad$ Courtesy Fox
2030z
2110z
$6778 \mathrm{kHz2020z}$
2020z 12/12[[472 $15772020492 \ldots 08282000$ 000]] 2024z QSB
2020z 19/12[472 000] 2002z Weak, noisy
2020z 21/12[472 000]2022z Weak and noisy
2020z 26/12[472 472472 000] 2022z QRN3 QSB2
2020z 28/12[472 000] Strong signal, moderate noise
6982kHz1800z 14/12[989 989989 1.....] weak
1800z 18/12[989 000] Fair
1800 z 28/12[989 1 ....] Weak noisy

2000z
2000z

19/12[472 000] 2002z Weak, noisy
26/12[472 472472 000] 2002z BCQRM3 QSB2
(2m13s) PLdn
MON
Spectre
MON

## E07a

November 2011:

| 4564kHz2140z | 02/11[815 $1621281246964125 \ldots 53799000$ 000]Very strong |
| :---: | :---: |
| 5146kHz0540z | 03/11[188 $1621281246964125 \ldots 53799000$ 000]Very strong |
| 0540z | 10/11[188 000] Strong |
| 0540z | 17/11[188 000] Very strong |
| 0540z | 23/11[188 000] Very strong |
| 5164 kHz 2120 z | 02/11[815 $1621281246964125 \ldots 53799000$ 000]Very strong |
|  | 815815815162128815815815162128815815815162128 815815815162128815815815162128815815815162128 |
|  | 1246912469 |
|  | 64125707350439165921901073518085225196952307864391 |
|  | 14205196082366260316033654043588857388681178745539 |
|  | 85959345560087668541726982495973108944161504922577 |
|  | 02214489402068306035718273455939715903843309915243 |
|  | 79068139635778976291732292549546863729366381979582 |
|  | 84172382452710112270855073570107507744049779597722 |
|  | 062478952863362482864308543465928191081153799 |
|  | 000000 Courtesy AIK \& Spectre |
| 2120z | 09/11[815 000] Strong, BCQRM3 |
| 2120z | 16/11[815 000] Very strong |
| 2120z | 23/11[815 000] Very strong |
| 2120z | 30/11[815 000] Very strong |
| 5846kHz0600z | 03/11[188 $1621281246964125 \ldots 53799000$ 000]Very strong |
| 0600z | 10/11[188 000] Strong |
| 0600z | 17/11[188 000] Very strong |
| 0600z | 23/11[188 000] Very strong |
| 5864 kHz 2100 z | 02/11[815 $1621281246964125 \ldots 53799000$ 000]Very strong |
| 2100z | 09/11[815 000] Strong, BCQRM3 |
| 2100z | 16/11[815 000] Strong, BCQRM4 |
| 2100z | 23/11[815 000] Very strong, BCQRM2 [Bleeps and Hets] |
| 2100 z | 30/11[815 000] Very strong, BCQRM2 [Bleeps and Hets] |
| 6846kHz0620z | 03/11[188 $1621281246964125 \ldots 53799000$ 000]Very strong |
| 0620z | 10/11[188 000] Strong |

## E07a

December 2011:

4564 kHz 2140 z

5146kHz0530z
0530
15/12[188 000] 0532z Very strong
0530z 0530z

5164 kHz 2120 z
01/12[188 000] 0532z Very strong

22/12[188 000] Very strong
29/12[188 000] Very strong

07/12[815 1621281246964125 . . 53799000 000]Very strong (Rpts Msg sent 02-03/11)

07/12[815 1621281246964125 .. 53799000 000]Very strong (Rpts Msg sent 02-03/11)
(8m17s) Spectre,PLdn, AIK

| (8m17s) | PLdn | THU |
| :--- | :--- | :--- |
| $(2 m 13 s)$ | PLdn | THU |
| $(2 m 13 s)$ | PLdn | THU |
| $(2 m 13 s)$ | PLdn | THU |
|  |  |  |
| $(8 m 17 s)$ | RNGB, PLdn, AIK | WED |


| (2m13s) | PLdnSpectre | WED |
| :--- | :--- | :--- |
| (2m13s) | AIK, PLdn, Spectre | WED |
| (2m13s) | HJH, FN, Spectre | WED |
| (2m13s) | PLdn, Spectre | WED |
| (8m17s) | PLdn | THU |
| $(2 m 13 s)$ | PLdn | THU |
| (2m13s) | PLdn | THU |
| (2m13s) | PLdn | THU |
|  |  |  |
| (8m17s) | PLdn, AIK, Spectre | WED |
| (2m13s) | PLdn, Spectre | WED |
| $(2 m 13 s)$ | AIK, PLdn, Spectre | WED |
| $(2 m 13 s)$ | HJH, FN, Spectre | WED |
| (2m13s) | PLdn, Spectre | WED |
|  |  |  |
| $(8 m 17 s)$ | PLdn | THU |
| (2m13s) | PLdn | THU |

## 81516212812469

64125707350439165921901073518085225196952307864391
14205196082366260316033654043588857388681178745539
85959345560087668541726982495973108944161504922577
02214489402068306035718273455939715903843309915243 79068139635778976291732292549546863729366381979582 84172382452710112270855073570107507744049779597922
062478952863362482864308543465928191081153799
$000000 \quad$ Courtesy Spectre

| $2120 z$ | $14 / 12[815000]$ Very strong |
| :--- | :--- |
| $2120 z$ | $21 / 12[815000]$ Very strong |
| $2120 z$ | $28 / 12[815000]$ Strong |


| $(2 \mathrm{~m} 13 \mathrm{~s})$ | Spectre, M8 |
| :--- | :--- |
| $(2 \mathrm{~m} 13 \mathrm{~s})$ | PLdn |
| $(2 \mathrm{~m} 13 \mathrm{~s})$ | Spectre, HJH |


| 5846 kHz 0550 z | $01 / 12[188000] 0532 \mathrm{z}$ Very strong |
| ---: | :--- |
| 0550 z | $08 / 12[188162128124696412570735 \ldots 53799] 0558 \mathrm{z}$ Strong QSB2 |
| 0550 z | $15 / 12[188000] 0532 \mathrm{z}$ Very strong |
| 0550 z | $22 / 12[188000]$ Very strong |
| 0550 z | $29 / 12[188000]$ Very strong |
|  |  |
| 5864 kHz 2100 z | $07 / 12[8151621281246964125 \ldots 53799000$ 000] Very strong (Rpts Msg sent 02-03/11) |
| 2100 z | $14 / 12[815000]$ Very strong, BCQRM2 |
| 2100 z | $21 / 12[815000]$ Very strong, BCQRM2 |
| 2100 z | $28 / 12[815000]$ Fair, BCQRM3/4 |
|  |  |
| 6846 kHz 0610 z | $08 / 12[1881621281246964125 \ldots 53799000000]$ Strong |


| (2m213) | PLdn <br>  <br>  <br> Hans, MalcF <br> (2m13s) | MalcF |
| :--- | :--- | :--- |
| PLdn | THU |  |
| (2m13s) | PLdn | THU |
|  |  | THU |
| (8m15s) | PLdn, M8 | THU |
| (2m13s) | PLdn, M8 | WED |
| (2m13s) | PLdn | WED |
| $(2 m 13 s)$ | PLdn, FR | WED |
|  |  |  |
|  | MalcF | THU |

## E11[III]

E11 log Nov/Dec:

| 3838 kHz 1855 z | 11/11 [262/00] Good | RNGB | FRI |
| :---: | :---: | :---: | :---: |
| 4441 kHz 0900 z | 05/11 [248/00] Very weak | RNGB | SAT |
| 0900z | 10/11 [248/00] 0903z Very Weak QRN3 QSB3 | Spectre | THU |
| 1445z | 12/11 [287/00] | Danix | SAT |
| 1445z | 26/11 [287/00] Fair | RNGB | SAT |
| 1445z | 10/12 [287/00] Very weak, buried in noise | Malc | SAT |
| 1445z | 14/12 [287/00] Fair | RNGB | WED |
| 0900z | 15/12 [248/00] Weak | RNGB | THU |
| 0900z | 17/12 [248/00] Weak | RNGB | SAT |
| 1445z | 17/12 [287/00] Very strong | Danix. RNGB | SAT |
| 0900z | 31/12 [248/00] Very weak | RNGB | SAT |
| $4958 \mathrm{kHz} \mathrm{1240z}$ | 13/11 [349/00] after 3 minutes 18 secs, she sent one group message, 51279! | Danix | SUN |
| 1240z | 15/11 [349/00] | Fritz | TUE |
| 1240z | 27/11 [349/00] Strong signal, strong noise | Fox | SUN |
| 1240z | 29/11 [349/00] 1243z Weak QRN3 QSB3 | Spectre | TUE |
| 1240z | 11/12 [349/00] | RNGB | SUN |
| 1240z | 18/12 [349/00] Weak | RNGB | SUN |
| 1240z | 27/12 [349/00] | RNGB, Dannix | TUE |
| $4909 \mathrm{kHz} \mathrm{2000z}$ | 20/12 [757/00000/00] 2 min, "out" | Fritz | TUE |
| $5082 \mathrm{kHz} \mathrm{0450z}$ | 14/11 [416/00] | Fritz | MON |
| 1730z | 17/11 [416/00] 1733z Weak QRN3 QSB3 | Spectre | THU |
| 1730z | 24/11 [416/00] | RNGB | THU |
| 1729z | 01/12 [416/00] Strong, Out 1732z | Douglas | THU |
| 1730z | 08/12 [416/00] Strong, QRM4(XJT), Out 1732z | Douglas, RNGB | THU |
| 1730z | 15/12 [416/00] Good | RNGB | THU |
| 1730z | 29/12 [416/00] Good | RNGB | THU |
| $7317 \mathrm{kHz} \mathrm{0820z}$ | 03/11 [438/00] | RNGB | THU |
| 0820z | 07/11 [438/00] | RNGB | MON |
| 0820z | 10/11 [438/00] 0823z Weak QRN3 QSB2 | Spectre | THU |
| 0820z | 21/11 [438/00] | RNGB | MON |
| 0820z | 24/11 [438/00] | RNGB | MON |
| 0820z | 28/11 [438/00] Good | RNGB | MON |
| 0820z | 01/12 [438/00] | RNGB | THU |
| 0820z | 12/12 [438/00] | RNGB | MON |
| 0820z | 19/12 [438/00] | RNGB | MON |
| 0820z | 22/12 [438/00] Good | RNGB | THU |
| 0820z | 26/12 [438/00] Good | RNGB | MON |
| $7840 \mathrm{kHz} \mathrm{0645z}$ | 22/11 [517/00] | Fritz | TUE |
| 0645z | 08/12 [517/00] | RNGB | THU |
| 0645z | 13/12 [517/00] | RNGB | TUE |
| 0645z | 15/12 [517/00] | RNGB | THU |
| 0645z | 27/12 [517/00] | Ary | TUE |
| $8091 \mathrm{kHz} \mathrm{1045z}$ | 02/11 [469/00] | RNGB | WED |
| 1045z | 22/11 [469/00] 1048z Weak Carrier QRM3 QSB2 | Spectre | TUE |
| 1045z | 23/11 [469/00] 1048z Weak Carrier QRM3 QSB2 | Spectre | WED |
| 1045z | 29/11 [469/00] mYL, RST 51 | Brixmis | TUE |
| 1045z | 30/11 [469/00] 1048z Weak QRN3 QSB3 | Spectre | WED |
| 1045z | 06/12 [469/00] | RNGB | TUE |
| 1045z | 07/12 [469/00] | RNGB | WED |
| 1045z | 13/12 [469/00] | RNGB | TUE |
| 1045z | 20/12 [469/00] | RNGB | TUE |
| 1045z | 21/12 [469/00] | RNGB | WED |
| $8102 \mathrm{kHz} \mathrm{1900z}$ | 23/11 [747/0000/00] | RNGB | WED |
| 1900z | 30/11 [747/0000/00] Good | RNGB | WED |


| 9079kHz | 0930z | 02/11 [270/00] | RNGB | WED |
| :---: | :---: | :---: | :---: | :---: |
|  | 0930z | 03/11 [270/00] | RNGB | THU |
|  | 0930z | 10/11 [270/00] 0933z Fair QRN3 QSB3 | Spectre | THU |
|  | 0930z | 16/11 [270/00] | RNGB | WED |
|  | 0930z | 17/11 [270/00] 0933z Fair QRN3 QSB2 | Spectre | THU |
|  | 0930z | 30/11 [270/00] YL, RST 41, | Brixmis | WED |
|  | 0930z | 14/12 [270/00] | RNGB | WED |
|  | 0930z | 21/12 [270/00] | RNGB | WED |
|  | 0930z | 22/12 [270/00] Out 0933z | Malc | THU |
| 9446 kHz | 0900z | 02/11 [534/00] | RNGB | WED |
|  | 0830z | 03/11 [649/00] | RNGB | THU |
|  | 0900z | 14/11 [534/00] | Brixmis | MON |
|  | 0900z | 16/11 [534/00] | RNGB | WED |
|  | 0900z | 21/11 [534/00] | RNGB | MON |
|  | 0900z | 23/11 [534/00] mYL, RST 51 | Brixmis | WED |
|  | 0830z | 24/11 [649/00] 0833z ended 'Out'. | Malc | THU |
|  | 0830z | 28/11 [649/00] Good | RNGB | MON |
|  | 0830z | 01/12 [649/00] | RNGB | THU |
|  | 0830z | 05/12 [649/00] QSA2, QSB2, digi QRM2 | MG | MON |
|  | 0830z | 12/12 [649/00] | RNGB | MON |
|  | 0900z | 12/12 [534/00] | RNGB | MON |
|  | 0900z | 14/12 [534/00] | RNGB | WED |
|  | 0900z | 21/12 [534/00] | RNGB | WED |
|  | 0830z | 26/12 [649/00] | RNGB | MON |
|  | 0900z | 26/12 [534/00] Fair | RNGB | MON |
|  | 0900z | 28/12 [534/00] Fair | RNGB | WED |
| 10800 kHz | 0710z | 04/11 [633/00] Strong | RNGB | FRI |
|  | 0710z | 15/11 [633/00] | RNGB | TUE |
|  | 0710z | 25/11 [633/00] | RNGB | THU |
|  | 0710z | 29/11 [633/00] | RNGB | TUE |
|  | 0710z | 02/12 [633/00] Very strong signal, weak noise | Fox | FRI |
|  | 0710z | 13/12 [633/00] | RNGB | TUE |
|  | 0710z | 16/12 [633/00] | RNGB | FRI |
|  | 0710z | 20/12 [633/00] | RNGB | TUE |
|  | 0710z | 23/12 [633/00] | RNGB | FRI |
|  | 0710z | 30/12 [633/00] Good | RNGB | FRI |
| 15632 kHz | 1540z | 06/11 [228/00] Good | RNGB | SUN |
|  | 1155z | 10/11 [718/00] Good | RNGB | THU |
|  | 1540z | 14/11 [228/00] Good | RNGB | MON |
|  | 1155z | 01/12 [718/00] | RNGB | THU |
|  | 1155z | 07/12 [718/00] | RNGB | WED |
|  | 1155z | 14/12 [718/00] Good | RNGB | WED |
|  | 1155z | 21/12 [718/00] Good | RNGB | WED |
| 16112 kHz | 0745z | 15/11 [335/00] mYL RST 51 | Brixmis | TUE |
|  | 0745z | 17/11 [335/00] mYL RST 51 | Brixmis | THU |
|  | 0745z | 22/11 [335/00] Tx broke after 2 calls, then restarted | RNGB | TUE |
|  | 0745z | 24/11 [335/00] Good | RNGB | THU |
|  | 0745z | 29/11 [335/00] | RNGB | TUE |
|  | 0745z | 01/12 [335/00] | RNGB | THU |
|  | 0745z | 06/12 [335/00] Weak with an echo | RNGB | TUE |
|  | 0745z | 08/12 [335/00] | RNGB | THU |
|  | 0745z | 20/12 [335/00] Good | RNGB | TUE |
|  | 0745z | 22/12 [335/00] | RNGB | THU |
| E11a log Nov/Dec: |  |  |  |  |
| 3838 kHz | 1855z | 25/11 [266/34 51580104792003694349 82653.....] | RNGB | FRI |
| 4441 kHz | 1050z | 20/11 [128/32 3617664982196585123550460 ... 71990] | Danix, Spetcre | SUN |
| 4958 kHz | 1240z | 06/11 [347/32 $0474163085474470724073204 \ldots$...] Very weak | RNGB | SUN |
| 5082 kHz | 1730z | 10/11 [412/38 54537237542973929604 37310....67874] | RNGB | THU |
|  | 1730z | 22/12 [418/31 A 4797531112 .... 02207] Out 1740z Strong QSB2 | Hans | THU |
| 6923 kHz | 1710z | 11/11 [959/30 06920854814122371536 96102....12273] Out 1719, Strong | RNGB | FRI |
|  | 1710z | 14/11 [953/28 09507133952830825982 18292....19133] Strong | RNGB | MON |
|  | 1710z | 21/11 [957/30 00002698052225805211 55345.....87490] Good | RNGB | MON |
|  | 1710z | 25/11 [959/30 63920971634823051965 33746....16564] | RNGB | FRI |
|  | 1710z | 02/12 [955/30 52237825511405733277 42669.....59275] | RNGB | FRI |
|  | 1710z | 09/12 [955/30 60962712856648676171 16600....78894] | RNGB | FRI |
|  | 1710z | 19/12 [959/27 10051972934864073857 27686.....12233] Good | RNGB | MON |
|  | 1710z | 23/12 [953/20 $7138641793527240142750302 \ldots . .45115]$ Fair, QRM | RNGB | FRI |
| 7317 kHz | 0820z | 17/11 [436/38 63554 19137.....] | Brixmis | THU |
| 7840 kHz | 0645z | 03/11 [514/34 30445715371719802388 26663....78805] | RNGB | THU |
|  | 0645z | 20/12 [517/35 88034061595364049820 08150....06402] Fair | RNGB | TUE |


| 8091 kHz | 1045z | 01/11 [469/38 63692593974408334122 16678....41377] |
| :---: | :---: | :---: |
|  | 1045z | 15/11 [462/31 10871999784627722850 86323.....34987] Fair |
|  | 1045z | 27/12 [463/34 60249104758702293460 15633....27869] Good |
| 9079kHz | 0930z | 23/11 [275/35 03217 89739......93805] |
|  | 0930z | 24/11 [275/35 03217897399580577612 68509....93805] |
|  | 0930z | 07/12 [277/36 06932115037162009169 27970.....31344] |
| 9446kHz | 0830z | 14/11 [640/33 3455652455336341841600152 ....95571] |
|  | 0830z | 17/11 [640/33 3455652455 .....] repeat of Monday |
|  | 0900z | 28/11 [537/32 33621782309357671057 90066.....62421] |
|  | 0900z | 30/11 [537/32 33261 etc] repeat of Monday |
|  | 0900z | 05/12 [537/36 31130501379420926635 96265.....89306] Out 0909z |
|  | 0900z | 07/12 [537/36 31130 etc] repeat of Monday |
|  | 0830z | 22/12 [640/38 95574622887247162763 90582.....06446] Good |
| 10690 kHz | 1400z | 01/11 [987/10 66081088068374519034 02011....98543] |
|  | 1400z | 05/11 [981/10 41998203650142965876 82423.....50811] |
|  | 1400z | 15/11 [980/10 05842844018281343276 81236.....11034] Good |
|  | 1400z | 19/11 [984/10 62532574317206985145 99464.....20157] Out 14.7.30z |
|  | 1400z | 22/11 [985/10 44626681021976152223 23052....43045] |
|  | 1400z | 26/11 [985/10 $5742536152923924367069075 \ldots . .79463]$ |
|  | 1400z | 29/11 [981/10 60014668581589683917 44627.....85125] |
|  | 1400z | 06/12 [981/10 $1249147780002993425465305 \ldots . .75915]$ |
|  | 1400z | 13/12 [981/10 04594439806719688966 23923....64692] |
|  | 1400z | 17/12 [987/10 57004875562623152092 43953.... 77631] Out 1405z |
|  | 1400z | 20/12 [983/10 21247726799939596882 42824.....45179] |
|  | 1400z | 24/12 [985/10 72846765965918665642 98396.....78061] Good |
|  | 1400z | 27/12 [987/10 32919271607101036043 79961.....06466] Good |
| $\begin{array}{r} 10800 \mathrm{kHz} 0710 \mathrm{z} \\ 0710 \mathrm{z} \end{array}$ |  | 11/11 [633/37513309876654198 89023 87709....13953] Very strong |
|  |  | 09/12 [631/36 $5113347025293569892854262 . \ldots . .08563$ ] |
| 12153 kHz | 1600z | 03/11 [640/26 91782827550474069153 76925....06943] |
|  | 1600z | 10/11 [641/23 63482082333217174990 28785.....44789] |
|  | 1600z | 14/11 [641/24 87530032355391042399 76295.....45301] |
|  | 1600z | 17/11 [644/20 72723624691607829849 19290.....66265] |
|  | 1600z | 21/11 [64?/20 18479731727217097888 33764....63007] Good |
|  | 1600z | 24/11 [645/25....] Unable to copy message due fading in and out 1607z |
|  | 1600z | 28/11 [641/20 053144896386069 9§025 82529.....67638] |
|  | 1600z | 01/12 [641/24 07978372290210562002 53900....33580] Good, Out 1608z |
|  | 1600z | 05/12 [640/30 $0897081092120307806253548 . . . .23371]$ Out 1608z, S9 |
|  | 1600z | 08/12 [645/25 $0246529950538983353180151 \ldots . .17605]$ |
|  | 1600z | 12/12 [641/21....] too weak to copy |
|  | 1600z | 15/12 [641/23 35619148469717946136 96070.....87602] QSB, QRM |
|  | 1600z | 22/12 [641/23 05671404092704410084 15840.... 72595] Good, QRM |
|  | 1600z | 29/12 [641/24 77427803231354601897 09598.....72372] Out 1608z |
| 14410khz | 1110z | 02/12 [950/35 $8072910674877051931819372 \ldots . .09907]$ |
| 15632 kHz | 1155z | 17/11 [71?/31 47541822771634361479 20213....28776] Good |
|  | 1540z | 21/11 [225/31 97993792410057974619 23146....19442] Strong |
|  | 1540z | 27/11 [225/3197993 792410057974619 23146....19442] |
|  | 1155z | 28/12 [713/3150543 485178741319691 60317.....90045] Strong |
| 16112 kHz | 0745z | 01/11 [333/32 06797945825530848360 81063.....09055] Very strong |
|  | 0745z | 03/11 [333/32 06797 etc] repeat of Tuesday |
|  | 0745z | 13/12 [332/30 $5789694480673495963152119 \ldots . . .02130]$ Good, Out 0754z |
|  | 0745z | 15/12 [332/30 57896 etc] repeat of Tuesday |


| RNGB | TUE |
| :---: | :---: |
| RNGB, Spectre | TUE |
| RNGB, Malc | TUE |
| Brixmis | WED |
| RNGB | THU |
| RNGB | WED |
| Fritz, Spectre | MON |
| Brixmis | THU |
| RNGB | MON |
| RNGB | WED |
| Malc | MON |
| RNGB | WED |
| RNGB | THU |
| RNGB | TUE |
| RNGB | SAT |
| RNGB | TUE |
| RNGB | SAT |
| RNGB | TUE |
| RNGB | SAT |
| RNGB | TUE |
| RNGB | TUE |
| RNGB | TUE |
| Malc | SAT |
| RNGB | TUE |
| RNGB, Douglas | SAT |
| RNGB, Malc | TUE |
| Fox | FRI |
| RNGB | FRI |
| RNGB | THU |
| RNGB | THU |
| RNGB | MON |
| RNGB | THU |
| RNGB | MON |
| Malc | THU |
| RNGB | MON |
| RNGB | THU |
| Malc | MON |
| RNGB | THU |
| RNGB | MON |
| RNGB | THU |
| RNGB | THU |
| Malc | THU |
| RNGB | FRI |


| RNGB | THU |
| :--- | :--- |
| RNGB | MON |
| RNGB | SUN |
| RNGB | WED |
|  |  |
| RNGB | TUE |
| RNGB | THU |
| RNGB | TUE |
| RNGB | THU |

## E17z

November 2011:

| 8658 kHz 0800 z | $24 / 11[674 \mathrm{x} 300000]$ |
| ---: | ---: |
| 9248 kHz 0810 z | $24 / 11[674 \times 300000]$ |
| 10233 kHz 0820 z | $24 / 11[674 \times 300000]$ |
| 10607 kHz 0830 z | $24 / 11[674 \times 300000]$ |
| 11427 kHz 0840 z | $24 / 11[674 \times 300000]$ |
| 12543 kHz 0850 z | $24 / 11[674 \times 300000]$ |


| GD | THU |
| :--- | :---: |
| GD | THU |
| GD | THU |
| GD | THU |
| GD | THU |
| GD | THU |

## December 2011:

| 8658 kHz 0800 z | $01 / 12[674 \times 300000]$ | GD |
| :--- | :--- | :--- |
| 9248 kHz 0810 z | $01 / 12[674 \times 300000]$ | GD |
| 10233 kHz 0820 z | $01 / 12[674 \times 300000]$ | GD |
| 10607 kHz 0830 z | $01 / 12[674 \times 300000]$ | GD |
| 11170 kHz 0800 z | $22 / 12[67498357357574501455104874353224]$ | GD |
| 11427 kHz 0840 z | $01 / 12[674 \times 300000]$ | GD |
| 12543 kHz 0850 z | $01 / 12[674 \times 300000]$ | GD |

E23 [ XI ] Frequencies and Times. All SSB [From AnonUK]
Since December 2004 skeds have become erratic, and may not stick to correct weeks. Some voice transmissions have been heard in week 2
Week 1 Usually starts on the first Monday of the Month, but there have been variations to this.
Times are not rigid, has been known to start as early as Hour + 52 [Tnx AnonUK]. Week 2 was M04 Not heard since September 2000

|  | Week 1 |  | Week2 |  | Week 3 |  |  | Week 4 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  | Time | Freq | Time | Freq | Time | Freq | Time | Freq |  |
| Monday | 0957 | 6507 |  |  | 0757 | 4832 | 0757 | 5340 |  |
|  | 1157 | 8188 |  |  | 0957 | 6200 | 0957 | 8188 |  |
|  | 1257 | 5340 |  |  | 1157 | 8188 | 1157 | 7250 |  |
|  |  |  |  |  | 1257 | 6507 |  |  |  |
| Wednesday | 0957 | 6507 |  |  | 0757 | 4832 | 0757 | 5340 |  |
|  | 1157 | 8188 |  |  | 0957 | 6200 | 0957 | 8188 |  |
|  | 1257 | 5340 |  |  | 1157 | 8188 | 1157 | 7250 |  |

## E25 [ O ]

E25 operators occasionally transmit music, for unknown reasons. Maybe the purpose is to test their equipment or to send a special signal to someone out there. This time a different song was heard during 13/11, 14/11, 15/12 and 28/12. The song is called "Ahwak" (which means "I love you") from one of the most popular Egyptian singers, Abdel Halim Hafez [http://en.wikipedia.org/wiki/Abdel_Halim_Hafez]. You can hear a version which resembles the one E25 operators use at [http://www.youtube.com/watch?v=Woh0e8Dllb4]. Apart from the usual YL transmissions, haunted with errors and Windows XP sounds, four live transmissions occurred on 03/11 and 06/12.

And now let's do some message analysis.
The first group of ID 116 appears to be a serial/group-count group. The principle to convert a group to a group-count and serial number is: If ABCD is the serial/group-count group, BA is the serial and DC is the group count.

The first group of ID 169 messages contains a serial group. The serial number of the last log from the previous NL (see log of $09 / 10$ ) was 10 . On $13 / 11$ it was 11 and on $12 / 12$ it was 12 .

Furthermore, some IDs' messages posses a date group. For example, ID 555 messages posses such a group i.e. a group which corresponds to the date of the first transmission of a message. Again, the principle to obtain the message date is: If XYZW is the date group; the date of the first sending of the particular message is YX/WZ. On 2/11 there was no date group for 555, while on $12 / 12$ the date group was there. This had happened again in the past.

That "disappearance" of date group also happened for ID 111, on 24/11. ID 014 got the same message after 11 days, 02/11 and 13/11 (red star in logs). That's an unusual long period of time, but don't forget that in the recent past, messages were repeated for more days.

## November 2011

| $6140 \mathrm{kHz} \mathrm{0800z}$ | 01/11[016 812157379020888277556334458844320390528183380233118017 89]0804z | MG | TUE |
| :---: | :---: | :---: | :---: |
| 0930z | 01/11[333 $2001 \underline{4260} 4357820810359028660582525733$ 4260]0934z YL, EOM | MG | TUE |
| $9450 \mathrm{kHz} \mathrm{1318z}$ | 01/11[785 10117884568 9]1320z carrier 1307z, YL, 7 rptd Mx3, Rx3, EOM, QRT 1323z | MG | TUE |
| $6140 \mathrm{kHz} \mathrm{0759z}$ | 02/11[116 910148322301854588551060285503648712 3865]0804z YL, EOM, AM, carrier | MG | WED |
| 0814z | 02/11[014 2955826018821474369242143202413058632298785282228260 0241]0819z* carrier, YL, EOM only, carrier, AM | MG | WED |
| 0829z | 02/11[702 19]0836z carrier, YL, break at 0831z, 0833z WinXP startup sound, Mx3, AM | MG | WED |
| $9450 \mathrm{kHz} \mathrm{1232z}$ | 02/11[555 20301021865071305710755799740130517017767338 8650]1240z carrier up 1226z, 555, ALM, YL, EOM, brief ALM | MG | WED |
| $6140 \mathrm{kHz} \mathrm{0816z}$ | 03/11[185 24938010446954167143272362239133 3991]0820z Distorted tone, OM live | MG | THU |
| 0930z | 03/11[133 667933656181935902702032235302908172 4495]0935z |  |  |
|  | Distorted tone, OM live, pause | MG | THU |
| $9450 \mathrm{kHz} \mathrm{1232z}$ | 03/11[557 1]1240z carrier 1210z, Windows sounds, ALM, YL, Mx1 | MG | THU |
| 1303z | 03/11[277 1]1306z 1241z carrier, YL | MG | THU |
| $6140 \mathrm{kHz} \mathrm{0814z}$ | 04/11[185 (as of 03/11)]0818z YL, EOM, AM | MG | FRI |
| 0930z | 04/11[133 (as of 03/11)]0934z YL, sl. digi QRM, EOM | MG | FRI |
| 1116z | 04/11[880 227051011096756632874310576889869135 2270] $1120 z$ |  |  |
|  | YL, Win sound, pause, EOM | MG | FRI |


$6140 \mathrm{kHz} 0915 z$
6140 kHz 0800 z
0830z 0930z

## December 2011

6140 kHz 0932 z
6140 kHz 0801 z
0930 z
1032 z
1046 z

01/12[135 (as of 29/11)]0937z YL, Mx3, AM, QSA4, QSB3
03/12[360 6580601015143896118992426010 1007]0803z YL, EOM, AM, QSA4, QSB2
1032z
1046z

6140 kHz 0930 z
1029z
6140 kHz 0801 z
0816z
0929z
1044z

6140 kHz 0800 z
0816z
0931z
0931z
1045z
6140 kHz 0802 z
0815z
6140 kHz 0800 z 0831z

0845z
1000z
1046z
9450 kHz 1245 z

6140 kHz 0830 z
13/12[702 22]0834z tone, YL, AM, carrier
$0845 z$
0930z 0959z 1115z
9450kHz 1229z
1317z
1346z

6140 kHz 0758 z
0830z
0946z

0837z
$9450 \mathrm{kHz} 1305 z$
1317z
1327 z
$6140 \mathrm{kHz} \mathrm{1045z}$
1100z
6140 kHz 0800 z 0917z
9450 kHz 1301 z
$1044 z \quad$ 20/12[128 67657921393087857711819444744021038520758861 3930]1049z carrier 1040z, tone, YL, EOM, QRT 1051z, AM

[^0]THU

SAT

| 9450 kHz 1315z | 20/12[7855788 4] 1318z tone, YL, <br> 1317z 7 rptd, Mx3, R, 4, tone, starts again, EOM EOT, AM, QSA5, QSB1, digi QRM1 | MG | TUE |
| :---: | :---: | :---: | :---: |
| 6140 kHzz 1048 z | 21/12[128 (as of 20/12)]1051z YL, EOM | MG | WED |
| 6140 kHzz 1046 z | 22/12[128 $986189615750484806530324172078922525390572267331725420588852 \underline{5750}$ 127]1052z tone, YL, EOM only | MG | THU |
| 6140 kHz 1045 z | 23/12[127 128 (as of 22/12)]1050z tone, YL | MG | FRI |
| 6140 kHzz 0929 z | 24/12[333 700101205159691286650803704443864328 0120]0933z tone, YL, AM | MG | SAT |
| 0933z | 24/12 3 Windows "dings", 0936z single Windows "ding", XMTR closes 0937z | AIK | SAT |
| 1030z | 24/12[675 88]1032z tone, YL, EOM EOT | MG | SAT |
| 1030z | 24/12[675 88] very strong tone/carrier a few secs prior to TX, YL, EOM EOT 1032z | AIK | SAT |
| $6140 \mathrm{kHzz} \mathrm{0900z}$ | 25/12[1115221 331020416393056142910549984279635568164286053736 3310] $0905 z$ tone, YL, AM, QSA2, QSB2 | MG | SUN |
| 6140 kHz 0900z | 26/12[200 1]0903z tone, YL, AM, QSA4, QSB2 | MG | MON |
| 6140 kHzz 0935 z | 27/12[333 8011493096076631463632680436156064015733 4930]0939z YL, EOM | MG | TUE |
| 1045z | 27/12[128 $2566 \mathbf{9 9 9 0} \underline{\underline{9960}} 77682247717730262974 \underline{2960] 1050 z}$ tone, EOM, QSA4, QSB3 | MG | TUE |
|  | 28/12 I lost 2 transmissions: 0830z (Song) and $333+$ E25a |  |  |
| 6140 kHz 1045 z | 28/12[128 (as of 27/12)]1050z tone, YL, EOM, WinXP "clicks" carrier afterwards | MG | WED |
| 6140 kHzz 0839 z | 29/12 "Spider Solitaire" sounds, digi QRM due to E25 carrier, QRT 1020z | MG | THU |
| 9450 kHz 1215 z | 31/12[830 1]1222z carrier, tone, IO, YL, AM, QSA5, digi QRM2 in AM | MG | SAT |
| 1315z | 31/12[780 $97931060 \underline{6110} 56452817 \underline{6110} 7884$ 6]1318z tone, YL, 7 rptd, EOM, BC QRM2 | MG | SAT |
| 1320z | 31/12[(as of 1315z)]1323z YL | MG | SAT |

## G06[1A]

PoSW's logs open G06 this issue:
Second + Fourth Thursdays 1830 UTC Schedule:-
10-Nov-11:- $4,519 \mathrm{kHz}$, a seasonal change of frequency from $5,934 \mathrm{kHz}$ of September and October. Calling "271", DK/GC "237 2371515 ". Started approx. 50 seconds before the half-hour, interference from that strong carrier frequency swept at about a one second rate which lives in this part of the band and whose reason for existing can only be guessed at!

24-Nov-11:- $4,519 \mathrm{kHz}$, "271" and "237 2371515 ", early start and swept carrier interference, all as on the $10^{\text {th }}$.
8-Dec-11:- 4,519 kHz, call "271", DK/GC "228 22815 15". Good signal with the swept carrier in attendance.
22-Dec-11:- $4,519 \mathrm{kHz}$, must have started early or the call-up was much shorter than the usual four minutes, tuned in just after the half hour to hear the DK/GC "228 22815 15",
weak signal with the usual sweeper, ended after 1833z.
Friday 1930 UTC Schedule:-
11-Nov-11:- $4,792 \mathrm{kHz}$, call " 436 ", DK/GC "155 1551515 ". Good signal on a clear frequency. As with yesterday's 1830 z sending, started well before the half-hour.

9-Dec-11:- 4,792 kHz, started almost two minutes before the half-hour, call "436", DK/GC "696 69615 15".
23-Dec-11:- $4,792 \mathrm{kHz}$, started pretty much on the half-hour, most unusual for this schedule!
" 436 " and "696 6961515 ", as on 9-December.
First + Second Mondays in the Month $1700+1800$ UTC Schedule:-
7-Nov-11:- 1800 UTC, $4,587 \mathrm{kHz}$, "439 43943900000 ". Good signal, second sending. Following the "fall back" of the clocks with the end of summertime this schedule now runs at 5 pm and 6 pm in this here United Kingdom of Great Britain and Northern Ireland, and I am not likely to be back home at 5 pm to hear the first sending! Started early, was in progress when tuned in approx. 20 seconds before the hour and stopped after 1803z.

14-Nov-11:- 1800 UTC, $4,587 \mathrm{kHz}$, "439 43943900000 ", again an early start, was up and running when tuned in after 1759 z , stopped after 1603 .
5-Dec-11:- 1800 UTC, $4,587 \mathrm{kHz}$, "439 43943900000 ". Was in progress when tuned in half a minute before the hour.

## And onto others' logs:

## November 2011:

$4519 \mathrm{kHz} 1830 \mathrm{z} \quad 10 / 11[2712371524156$... 894562371500000 ] Strong signal, moderate noise, local interference

## December2011:

| $3854 \mathrm{kHz1700z}$ | 05/12[439 43943900000 followed by 43123456789] |  | AIK, elm | MON |
| :---: | :---: | :---: | :---: | :---: |
| 1700z | 12/12[439 00000] Strong, QRM |  | M8 | MON |
| 4519kHz1830z | 22/12[261 2281567845 ... 4356722815 00000(s)]1834z Fair, XWPQRM3 | (3m34s) | PLdn | FRI |
| $4587 \mathrm{kHz1800z}$ | 12/12[439 00000] 1804z |  | M8 | MON |
| 4792 kHz 1930z | 09/12[436 696 15]Fair, QRM2 QSB3 |  | GD, PLdn | FRI |
| 1930z | 23/12[436 6961556378 ... 3789769615 00000(s)] 1937z Fair, LocalQRM2 | (7m22s) | HJH,PLdn | FRI |

## G11(III) $\log$ Nov/Dec:

| $4441 \mathrm{kHz} \mathrm{2000z}$ | 06/11 [262/00] Strong |
| :---: | :---: |
| 2000z | 11/11 [266/38 36442971191577706778 12875.....02681] Good |
| 2000z | 13/11 [266/38 36442 etc] repeat of Friday |
| 2000z | 18/11 [262/00] |
| 2000z | 20/11 [262/00] Very strong signal, weak noise, Link-11 beeping |
| 2000z | 25/11 [262/00] |
| 2000z | 27/11 [262/00] Very strong signal, weak noise |
| 2000z | 09/12 [262/00] Ende 2003z |
| 2000z | 11/12 [262/00] |
| 2000z | 16/12 [262/00] |
| 2000z | 23/12 [262/00] Good |
| 2000z | 30/12 [262/00] Good |
| 6433kHz1755z | 01/11 [270/00] |
| 1325z | 11/11 [296/37 51701307099132798620 63485....22232] |
| 1325z | 19/11 [299/00] |
| 1755z | 22/11 [270/00] |
| 1325z | 25/11 [299/00] Fair, Ende 1328 |
| 1755z | 27/11 [270/00] |
| 1755z | 29/11 [270/00] Fair, Ende 1758z |
| 1755z | 06/12 [278/31 03949572612682746970 32495....41569] |
| 1755z | 10/12 [299/00] |
| 1325z | 16/12 [299/00] Very Strong, Ende1328z |
| 1755z | 18/12 [270/00] |
| 1755z | 20/12 [270/00] |
| 1325z | 24/12 [299/00] Fair, Ende 1328z |
| 1755z | 27/12 [270/00] Strong |
| $6480 \mathrm{kHz} \mathrm{0940z}$ | 10/11 [275/00] |
| 0940z | 14/11 [275/00] Good |
| 0940z | 17/11 [275/00] |
| 0940z | 21/11 [271/37 63287621134660622837 62577.....07573] Good |
| 0940z | 24/11 [271/37 63287 etc] repeat of Monday |
| 0940z | 28/11 [275/00] |
| 0940z | 01/12 [275/00] |
| 0940z | 05/12 [275/00] S9+10 low noise, Ende 0943z |
| 0940z | 08/12 [275/00] |
| 0940z | 12/12 [276/33 47784218128715819010 19148....73626] Ende 0950z |
| 0940z | 15/12 [276/33 47784 etc] Strong, repeat of Monday |
| 0941z | 19/12 [275/00] Late start! |
| 0942z | 26/12 [275/00] 2 mins late |
| 0940z | 29/12 [275/00] |


| RNGB | SUN |
| :--- | :--- |
| RNGB | FRI |
| RNGB | SUN |
| Gary | FRI |
| Fox | SUN |
| RNGB | FRI |
| Fox | SUN |
| Malc | FRI |
| RNGB | SUN |
| Fritz | FRI |
| RNGB | FRI |
| RNGB | FRI |
|  |  |
| RNGB | TUE |
| Fox | FRI |
| RNGB, Fanis | SAT |
| RNGB | TUE |
| Douglas | FRI |
| RNGB | SUN |
| Douglas | TUE |
| RNGB | TUE |
| RNGB | SAT |
| Douglas | FRI |
| RNGB | SUN |
| RNGB | TUE |
| Douglas | SAT |
| RNGB | TUE |
| RNGB |  |
| RNGB, Fritz | THU |
| RNGB | MON |
| RNGB | THU |
| RNGB | MON |
| RNGB | THU |
| RNGB | MON |
| Malc | THU |
| RNGB | MON |
| RNGB | THU |
| RNGB | MON |
| RNGB | THU |
| RNGB | MON |
| RNGB | MON |
|  | THU |
|  |  |

## S06

We start with RNGB's S06 November log:

| Saturday | 5th | 16.00 | 7728 | '134’ 00000 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 19.35 | 3842 | '366' 00000 |
|  |  | 20.00 | 3867 | '837' 00000 |
|  |  | 21.00 | 3237 | '837' 00000 |
| Weds | 9th | 18.00 | 3534 | '471' 00000 |
|  |  | 18.20 | 4528 | '632' 00000 |
| Thursday | 10th | 19.00 | 3192 | '349' 00000 |
| Saturday | 12th | 16.05 | 6788 | '134’ 00000 |
| Monday | 14th | 09.31 | 18654 | '843' 6107282290286285272280584 29587..... 23152 |
|  |  | 19.05 | 3838 | '349' 00000 |
| Weds | 16th | 18.20 | 4528 | '632' 00000 |
| Saturday | 19th | 16.00 | 7728 | '134' 00000 |
|  |  | 20.00 | 3870 | '837' 00000 |
|  |  | 21.00 | 3237 | '837' 00000 |
|  |  | 21.30 | 4024 | '703' 00000 |


| Monday | 21st | 09.30 | 18654 | ' 843 ' 275690759986085 ? (very weak) |
| :--- | :--- | :--- | :--- | :--- |
| Saturday | 26th | 16.05 | 6788 | '134' 00000 |
| Monday | 28th | 22.15 | 5315 | ' 219 ' 00000 |
| Weds | 30th | 18.05 | 3160 | ' 471 ' 00000 |

S06s November
Still a few IDs taking time off from normal message sending.
ID 352 using 9345/10182/10620/11165/11825/12245
ID 745 using 7440/9390/9950/11550/12145/13380
ID 328 using 9635/10576/11440/11875/12165/12647
E17z ID 674 using 8658/9248/10607/11427/12543
from 25th Oct to 15th Nov
from 23rd Nov to14th Dec
from 26th Oct to 16th Nov
from17th Nov to 8th Dec

S06s November log:


Repeated messages;

| Weds | $09 / 11 / 2011$ | 19.00 | 8530 |  | 3714506541466694140521886957812665251 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Thursday | $18 / 08 / 2011$ | 08.00 | 16780 | E17z | 67491855414666941405218869578126 |
| Thurs | $01 / 04 / 2010$ | 08.00 | 14260 | E17z | 67420855414666941405213869578126 |
| Thursday | $04 / 03 / 2010$ | 09.10 | 12310 |  | 16780955414666941405218869578126 |


| Tuesday | $21 / 12 / 2010$ | 08.10 | 10265 | 3524896541466694140521886957812665351 |
| :--- | :--- | :--- | :--- | :--- |
| Tuesday | $12 / 07 / 2011$ | 12.30 | 7650 | 2784596541466694140521886957812665351 |
| Friday | $16 / 09 / 2011$ | 06.00 | 6340 | 9342856541466694140521886957812695679 |
| Tuesday | $03 / 08 / 2010$ | 08.00 | 14373 | 3528406541566694140521886957812665351 |
|  |  |  |  |  |
| Thursday | $17 / 11 / 2011$ | 09.00 | 12952 | 167945846062686729747839685304859663252537 |
|  |  |  | 53317 |  |
| Weds | $16 / 06 / 2010$ | 19.00 | 10170 | 37182954606268672974783968530485 |
| Saturday | $27 / 03 / 2010$ | 10.10 | 7340 | 89340754606268672974783968530485 |
| Tuesday | $13 / 12 / 2011$ | 07.00 | 5250 | 371265846062686729747839685304859663252537 |
|  |  |  | 53317 |  |
| Thursday | $17 / 11 / 2011$ | 12.00 | 12155 | 4259036217675367211834810223690341412 |
| Thursday | $01 / 04 / 2010$ | 09.00 | 12952 | 1674952167653672118348102236903 |
| Tuesday | $16 / 02 / 2010$ | 08.00 | 10265 | 3529706217673567211834810223690341412 |
| Thursday | $01 / 04 / 2010$ | 12.10 | 13065 | 4259736217673567211834810223690341412 |
|  |  |  |  |  |
| Friday | $25 / 11 / 2011$ | 07.00 | 7150 | 19684355240163919926991460074248 |
| Tuesday | $21 / 12 / 2010$ | 12.30 | 5810 | 27840955240163919926991460074248 |
| Weds | $22 / 06 / 2011$ | 07.30 | 7335 | 7458926524016391992699146007424848754 |

Onto December:
S06 December log:

| Thursday | 1st | 19.05 | 3838 | '349' 00000 |
| :---: | :---: | :---: | :---: | :---: |
| Tuesday | 6th | 17.59 | 3645 | '617' 00000 |
| Weds | 7th | 18.25 | 4032 | '632' 00000 |
| Thursday | 8th | 19.00 | 3192 | '349' 00000 |
| Saturday | 10th | 19.35 | 3842 | '366' 00000 |
| Monday | 12th | 19.00 | 3192 | '349' 00000 |
|  |  | 21.15 | 6870 | '852' 00000 |
|  |  | 22.15 | 4630 | '852' 00000 |
| Tuesday | 13th | 18.00 | 3645 | '617' 00000 |
| Weds | 14th | 18.00 | 3540 | '471' 00000 |
|  |  | 18.25 | 4032 | '632' 00000 |
| Thursday | 15th | 19.00 | 3192 | '349' 00000 |
| Saturday | 17th | 19.35 | 3842 | '366' 00000 |
|  |  | 20.00 | 3867 | '837' 00000 |
|  |  | 21.00 | 3237 | '837' 00000 |
|  |  | 21.30 | 4024 | '703' 00000 |
| Monday | 19th | 19.05 | 3838 | '349' 00000 |
| Saturday | 24th | 16.05 | 6788 | '134' 00000 |
|  |  | 19.30 | 3209 | '134' 00000 |
| Monday | 26th | 22.15 | 4630 | '852' 00000 |
| Weds | 28th | 18.05 | 3160 | '471' 00000 |
|  |  | 18.25 | 4032 | '632' 00000 |
| Thursday | 29th | 08.30 | 17435 | '842' $795384968197755682534129083972 . \ldots . .90215$ |
|  |  | 09.30 | 14380 | '842' $795384968197755682534129083972 . . . .90215$ |
|  |  | 19.05 | 3838 | '349' 000000 |

## S06s December

ID 471 started sending nulls from the 21st using 6015/6505/7010/7525/8065/8365kHz
ID 934 started sending nulls from the 9th using ?/6780/7385/7715/8440/8813kHz
ID 674 E 17 z returned to message sending on the 15th
ID 872 has not been heard this month - Did it ever have a schedule ?
S06s December log:

## Monday

5th/12th

## 19th/26th

5th/12th 19th/26th

| $1300 / 1310$ | $8420 / 10635$ |
| :--- | :--- |
| $1600 / 1610$ | $7436 / 6668$ |

## Tuesday

6th/13th

20th/21st
6th/13th 20th/21st 6th/13th 20th/21st 6th/13th 20th/21st 6th/13th 20th/21st

| $0700 / 0715$ | $5250 / 6320$ |
| :---: | :---: |
| 53317 |  |
| $0800 / 0810$ | $10265 / 9135$ |
| $1000 / 1010$ | $6440 / 5660$ |
| $1230 / 1240$ | $5810 / 6770$ |
| $1500 / 1510$ | $5070 / 6337$ |

‘831’ 4576795287160519276610556428640817 ‘831’ 96452204455681843102852416157 ‘176’ 23458967545312786953433109786 '176' 94851048025195584058352351074

## Wednesday

| 7th/14th | $0530 / 0540$ | $9435 / 11075$ | '153' $4967254327047414688841416653546056-6144$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 21st/28th |  | '153' 476819028367456754678912339086574892837 |  |


| 7th/14th | 0820/0830 | 6880/7840 | '471'508684119 9744927398586854434525866 |
| :---: | :---: | :---: | :---: |
| 21st/28th | 0820/30/40/50/00/10 6015/6505/7010/ 7525/8065/8365 |  |  |
|  |  |  | '471' 00000 |
| 7th/14th | 0830/0840 | 7440/ | '745' 00000 |
| 21st/28th |  | 7335/11830 | ‘745’ 2136674538967412108674532231709781 |
| 7th/14th | 0840/0850 | 9260/11415 | '328' 5046285434414519387792587621684022 |
| 21st/28th |  |  | '328'9516764537867590867 321546647387875 |
| 7th/14th | 1000/1010 | 12365/14280 | '729'50362466899399 95602461541510356626 |
| 21st/28th |  |  | '729'531665653 8975631208979563433186761 |
| 7th/14th | 1200/1210 | 7030/6305 | '481' 5096886205806961732745375744010597 |
| 21st/28th |  |  | '481' 96055642379745123167856387873 |
| 7th/14th | 1230/1240 | 4580/6420 | '967' 41053953417228156364789123247 |
| 21st/28th |  |  |  |
| 7th/14th | 1900/1910 | 8530/7520 | '371'520 611171643858270706123 225-6 78280 |

Thursday


## Group repeats December:

| Tuesday | 13/12/2011 | 07.00 | 5250 | '371’ 26584606268672974783968530485966325253753317 |
| :---: | :---: | :---: | :---: | :---: |
| Weds | 16/06/2010 | 19.00 | 10170 | '371' 82954606267672974783968530485 |
| Saturday | 27/03/2010 | 10.10 | 7340 | '893' 40754606268672974783968530485 |
| Thursday | 17/11/2011 | 09.00 | 12952 | '167' 94584606268672974783968530485966325253753317 |
| Weds | 21/12/2011 | 08.30 | 7335 | ‘745’ 2136674538967412108674532231709781 |
| Weds | 23/03/2011 | 10.00 | 13365 | '729' 80656745389674342155655389660 |
| Weds | 07/12/2011 | 12.00 | 7030 | '481' 5096886205806961732745375744010597 |
| Tuesday | 06/07/2010 | 08.00 | 7245 | '418' 96758862068069617327453757440 |
| Thursday | 15/12/2011 E17z | 08.00 | 11170 | '674’ 98357357574501455104874353224 |
| Weds | 14/09/2011 | 19.00 | 9220 | '371' 98657357474501455104874353224 |
| Monday | 12/09/2011 | 12.10 | 11460 | '831’ 465773574745014551048743532242681320575 |
| Thursday | 15/12/2011 | 12.00 | 12155 | 4259306485541884486169354100578559077 |
| Monday | 12/09/2011 | 16.00 | 8040 | 17620454855418844861693541005785 |
| Thursday | 15/12/2011 | 12.40 | 5310 | 31497058074515454858335128550841 |
| Tuesday | 13/09/2011 | 06.00 | 14080 | 438265780745154548583351285508411735845175 |

## PoSW's logs:

As expected, November saw a seasonal change of frequencies, everything moving lower for the winter. The usual collection of four minutes of "no message".

Saturday 1600 or 1605 UTC Schedule:-
5-Nov-11:- 1600 UTC, $7,728 \mathrm{kHz}$, "134 13413400000 ", good signal on a clear frequency.
Heard at 1600 z on $8,162 \mathrm{kHz}$ or $1605 \mathrm{z}, 7,612 \mathrm{kHz}$ for the past few months.
19-Nov-11:- 1600 UTC, 7,728 kHz, "134 13413400000 ". S9 signal with QSB.
3-Dec-11:- 1605 UTC, $6,788 \mathrm{kHz}$, "134 13413400000 ". Over-riding strong "XJT". Heard on this frequency at five minutes past the hour in January and February of 2011.

17-Dec-11:- 1605 UTC, $6,788 \mathrm{kHz}$, "134 13413400000 ", with "XJT".

First + Third Saturdays in the Month $2030+2130$ UTC Schedule:-
5-Nov-11:- 2030 UTC, $4,859 \mathrm{kHz}$, "703 70370300000 ". Heard on this frequency and time in January and February of this year. 2130 UTC, $4,024 \mathrm{kHz}$, second sending.

19-Nov-11:- 2030 UTC, $4,859 \mathrm{kHz}$, "703 70370300000 ", interference from a swept frequency carrier, a long-time resident of this part of the spectrum.
2130 UTC, $4,024 \mathrm{kHz}$, second sending, S9 signal, interference from a broadcast station on the HF side, not noted last time.
3-Dec-11:- 2030 UTC, $4,859 \mathrm{kHz}$, "703 70370300000 ", very weak signal, only just readable, swept carrier still in attendance.
2130 UTC, $4,024 \mathrm{kHz}$, second sending, much stronger than the first, S9.
17-Dec-11:- 2030 UTC, $4,859 \mathrm{kHz}$, third Saturday in December, "703 70370300000 " with
the swept carrier QRM. Carrier up on 4,859 at 2010 z, tone after 2014 z and single " 703 "
in Russian after 2016z. Carrier stayed up continuously until start-up on the half-hour which is somewhat unusual
2130 UTC, $4,024 \mathrm{kHz}$, second sending of " $703 . .$. " S9+ , by far the strongest signal of the
five frequencies used by S06 this evening.
Saturday 1930 or 1935 UTC Schedule:-
5-Nov-11:- 1935 UTC, 3,842 kHz, "366 366366 00000". S5 to S6.
19-Nov-11:- 1935 UTC, $3,842 \mathrm{kHz}$, "366 36636600000 ", weak but clear.
3-Dec-11:- 1930 UTC, $3,209 \mathrm{kHz}$, alternative time and frequency, "366 36636600000 ". Went off around one minute into the transmission, came back on just before 1932z. Made up for lost time by carrying on until 1935 and 15 seconds UTC.

10-Dec-11:- 1935 UTC, 3,842 kHz, "366 $36636600000 "$.
17-Dec-11:- 1935 UTC, 3,842 kHz, "366 36636600000 ".
Monday + Thursday 1900 or 1905 UTC Schedule:-
7-Nov-11, Monday:- 1900 UTC, $3,192 \mathrm{kHz}$, "349 34934900000 ". Good signal over-riding
"XJT" on the same frequency. $3,192 \mathrm{kHz}$ at 1900 z or $3,838 \mathrm{kHz}$ at 1905 UTC used during last winter.
10-Nov-11, Thursday:- 1900 UTC, $3,192 \mathrm{kHz}$, "349 34934900000 ". Good signal.
14-Nov-11, Monday:- 1905 UTC, $3,838 \mathrm{kHz}$, alternative time and frequency, "349 34934900000 ". Strong signal on a clear frequency.
17-Nov-11, Thursday:- 1905 UTC, $3,838 \mathrm{kHz}$, "349 34934900000 ".
24-Nov-11, Thursday:- 1905 UTC, $3,838 \mathrm{kHz}$, "349 349349 00000", S9.
28-Nov-11, Monday:- 1905 UTC, $3,838 \mathrm{kHz}$, "349 34934900000 ", weaker than usual, S 4 to S 5 at best.
1-Dec-11, Thursday:- 1905 UTC, $3,838 \mathrm{kHz}$, "349 34934900000 ".
5-Dec-11, Monday:- 1905 UTC, $3,838 \mathrm{kHz}$, "349 34934900000 ", S9 signal.
8-Dec-11, Thursday:- 1900 UTC, $3,192 \mathrm{kHz}$, "349 349349 00000". Good signal over-riding "XJT".
15-Dec-11, Thursday:- 1900 UTC, $3,192 \mathrm{kHz}$, "349 34934900000 ". with "XJT" for company.
19-Dec-11, Monday:- 1905 UTC, $3,838 \mathrm{kHz}$, "349 34934900000 ", very weak signal.
22-Dec-11, Thursday:- 1905 UTC, $3,838 \mathrm{kHz}$, "349 34934900000 ", still surprisingly weak.
Wednesday 1800 or 1805 UTC Schedule:-
9-Nov-11:- 1800 UTC, $3,534 \mathrm{kHz}$, "471 47147100000 ".
16-Nov-11:- 1800 UTC, 3,540 kHz, "471 47147100000 ".
23-Nov-11:- 1805 UTC, $3,160 \mathrm{kHz}$, alternative time and frequency, "47147147100000".
30-Nov-11:- 1805 UTC, $3,160 \mathrm{kHz}$, "471 471471 00000", weak but clear signal.
7-Dec-11:- 1805 UTC, $3,153 \mathrm{kHz}$, a bit lower in frequency than usual, "471 47147100000 ". Weak signal.
Second + Fourth Mondays in the Month $2115+2215$ Schedule:-
14-Nov-11:- 2115 UTC, $7,680 \mathrm{kHz}$, "219 21921900000 ". Stronger than usual signal for this schedule, peaking S8.
2215 UTC, $5,315 \mathrm{kHz}$, second sending, not found until about one minute into the transmission, on a lower frequency than I expected! This is the only S06 I monitor which shifts by one hour UTC with the end of summertime so still appears at 9.15 and 10.15 pm in the UK.

28-Nov-11:- 2215 UTC, $5,315 \mathrm{kHz}$, "219 21921900000 ", missed first sending one hour earlier.
12-Dec-11:- 2115 UTC, $6,870 \mathrm{kHz}$, "852 85285200000 ", S6 to S 7 . Unable to find a repeat at 2215 z on a lower frequency.
26-Dec-11:- 2115 UTC, $6,870 \mathrm{kHz}$, "852 85285200000 ", S6 with deep QSB.
2215 UTC, $4,630 \mathrm{kHz}$, the second sending which eluded me last time. Not found until 2217 z , weak signal.
Saturday 2000 and 2100 UTC Schedule:-
3-Dec-11:- 2000 UTC, $3,867 \mathrm{kHz}$, "837 83783700000 ", signal strength S 6 to S 7 . I was not aware of this schedule until I saw it listed in the E2K newsletter on 3,867 for November,
shown as first and third Saturdays in the month.

2100 UTC, $3,237 \mathrm{kHz}$, repeat sending of " $837 \ldots$...", no problem to find, peaking S9. 17-Dec-11:- 2000 UTC, $3,867 \mathrm{kHz}$, "837 83783700000 ", signal strength S5 to S7. 2100 UTC, $3,237 \mathrm{kHz}$, second sending, much weaker than when heard on the $3^{\text {rd }}$.
Others' logs:
S06
November 2011:

| $3160 \mathrm{kHz1805z}$ | 23/11[471 471471 00000] | AB | TUE |
| :---: | :---: | :---: | :---: |
| $3209 \mathrm{kHz1930z}$ | 19/11[366 $3663660000036636636600000 \ldots$..] OM, STRONG 00000 1939z | AIK | SAT |
| $3838 \mathrm{kHz1905z}$ | 14/11[349 00000] Strong | Hans, Fanis, FN | MON |
| $4024 \mathrm{kHz2130z}$ | 19/11[703 00000] Strong signal, moderate noise/interference | FR | SAT |
| 4859kHz2030z | 19/11[703 00000] Very strong signal, weak noise | FR | SAT |
| $6788 \mathrm{kHz1705z}$ | 26/11[134 00000] Very strong signal, weak noise | FR | SAT |
| December 2011: |  |  |  |
| $3645 \mathrm{kHz1800z}$ | 13/12[617 00000 STRONG 1804z | AIK | TUE |
| $3838 \mathrm{kHz1905z}$ | 05/12[349 34934900000349349349 00000...] VERY STRONG QRM1 00000 1908z | AIK | MON |
| 1905z | 19/12 [349 349349 00000] | FN | MON |
| 1905z | 26/12[349 00000] 1909z Fair QRN3 QSB3 | Spectre | MON |
| 1905z | 29/12[349 00000] | HJH | THU |
| $3845 \mathrm{kHz1935z}$ | 17/12[366 3663660000366366366 000...] STRONG 1939z | AIK | SAT |
| 6788kHz1605z | 03/12[134 $1341340000013413413400000 . .$.$] FAIR 00000$ 1608z | AIK,Spectre | SAT |
| 1605z | 17/12[134 13413400000134134134 0000...] WEAK QRM3 1608z | AIK,Spectre | SAT |

## S06c No reports

S06e No reports
S06s
November 2011:

| 4580kHz1230z | 16/11[967 ..] very weak signal | FN | WED |
| :---: | :---: | :---: | :---: |
| 4845kHz1410z | 10/11[624 ... 00000] 1415z Very Weak QRM2 YL | Fanis | THU |
| 1410z | 17/11[624 8105 26634] | FN, Fanis | THU |
| 5070kHz1500z | 15/11[537 204652655$]$ | FN,Spectre | TUE |
| 1500z | 22/11[537 2046526555212463386044140602465543204600000 (s)] 1505z Weak QRN3 QSB3 | Spectre | TUE |
| 5250 kHz 0700 z | 22/11[374 905634484 ] | FN | TUE |
| 5310kHz1240z | 10/11[314 ... 00000] 1245z Very Weak QRM2 YL | Fanis | THU |
| 1240z | 17/11[314 9025 05899] weak signal | FN, Fanis | THU |
| $5320 \mathrm{kHz1400z}$ | 10/11[624 ... 00000] 1405z Very Weak QRM*** YL | Fanis | THU |
| 1400z | 17/11[624 8105 26634] | FN, Fanis | THU |
| 5460 kHz 0600 z | 11/11 [934501687699 54361453259894465476123215016 00000] Very strong signal, weak noise | FR | FRI |
| 0600z | 25/11[934 8506476659409248521638889206911749850600000 ] Medium/strong signal, moderate noise | FR | THU |
| 5810kHz1230z | 01/11[278 $94656485595177575355154125641946500000(\mathrm{~s})$ ] 1235z Weak QRN3 QSB3 | Spectre | TUE |
| 1230z | 08/11[278 94656485595177575355154125641946500000 (s)] 1235z Very Weak QRN3 QSB3 | Spectre | TUE |
| 1230z | 15/11[278510 6785633332099512779905653345438510600000 (s)] 1235z Weak QRN3 QSB3 | Spectre ,FN | TUE |
| 1230z | 22/11[278510 6785633332099512779905653345438510600000 (s)] 1235z Weak QRN3 QSB3 | Spectre | TUE |
| 1230z | 29/11[278 00000(s)] 1234z Weak QRN3 QSB3 | Spectre | TUE |
| 6305kHz1210z | 16/11[481970 519689 ] | FN | WED |
| 6320 kHz 0715 z | 22/11[374 905634484 ] | FN | TUE |
| 6337kHz1510z | 15/11[537 2046 52655] | FN, Spectre | TUE |
| 1510 z | 22/11[537 $2046526555212463386044140602465543204600000(\mathrm{~s})$ ] 1515zWeak STANAGQRM3 QSB3 | Spectre | TUE |
| $6420 \mathrm{kHz1240z}$ | 16/11[967 230504641 ] | FN | WED |
| $6668 \mathrm{kHz1610z}$ | 07/11[176 28359784523165896744543732543283500000 ] Very strong signal, weak noise | FR | MON |
| 1610z | 14/11[176 28359784523165896744543732543283500000 (s)] 1615z Good YL | Fanis, FN, Spectre | MON |
| 1610z | 21/11[176 94257864580956455125643587871942500000 (s)] 1615z Fair QRN3 QSB3 | Spectre | MON |
| 1610z | 28/11[176 $94257864580956455125643587871942500000(\mathrm{~s})$ ] 1615z Weak QRN3 QSB3 | Spectre | MON |
| $6770 \mathrm{kHz1240z}$ | 01/11[278 $94656485595177575355154125641946500000(\mathrm{~s})$ ] 1245z Weak QRN3 QSB3 | Spectre | TUE |
| 1240z | 08/11[278 94656485595177575355154125641946500000 (s)] 1245z Very Weak QRN3 QSB3 | Spectre | TUE |


| 1240z | 15/11[278510 $6785633332099512779905653345438510600000(\mathrm{~s})$ ] 1245z Weak QRN3 QSB3 | FN, Spectre | TUE |
| :---: | :---: | :---: | :---: |
| 1240 z | 22/11[278510 $6785633332099512779905653345438510600000(\mathrm{~s})$ ] 1245z Weak QRN3 QSB3 | Spectre | TUE |
| 1239 z | 29/11[278 00000(s)] 1243z Weak QRN3 QSB3 | Spectre | TUE |
| $6880 \mathrm{kHz0820z}$ | 16/11[471 2506 36807] | FN | WED |
| $7030 \mathrm{kHz1200z}$ | 16/11[481 9705 19689] | FN | WED |
| 7040kHz0610z | 11/11[934 50168769954361453259894465476123215016 00000] Very strong signal, weak noise | FR | FRI |
| 7070kHz0610z | 25/11[934 8506476659409248521638889206911749850600000 ] Medium signal strength, mod noise | FR | THU |
| 7150 kHz 0700 z | 11/11[196 40853321689645343318967408931408500000 ] Very strong signal, weak noise | FR | FRI |
| 7335kHz0830z | 02/11[745 $9206804972933248045128065674524430920600000(\mathrm{~s})$ ] 0835z Fair QRN2 QSB2 | Spectre | WED |
| 0830z | 09/11[745 9206804972933248045128065674524430920600000 (s)] 0835z Fair QRN2 QSB2 | Spectre | WED |
| 7520kHz1910z | 02/11[371 $4506541466694140521886957812665251450600000(s)]$ 1915z Fair BCQRM3 QSB3 | Spectre | WED |
| 1910z | 09/11[371 4506541466694140521886957812665251450600000 (s)] 1915z Fair BCQRM3 QSB3 | Spectre | WED |
| 1910z | 16/11[371 8456528617732455196960165044989741845600000 (s)] 1915z Weak BCQRM4 QSB3 | Spectre, FN | WED |
| 1910z | 23/11[371 84565286177324551969601650449897418456 00000(s)] 1915z Fair BCQRM4 QSB3 | Spectre | WED |
| 7634kHz1600z | 07/11[176 283597845231658967445437325432835 00000] Strong signal, weak noise | FR | MON |
| 1600 z | 14/11[176 $28359784523165896744543732543283500000(\mathrm{~s})$ ] 1605z Weak BCQRM3 QSB3 | Spectre, FR, FN | MON |
| 7840kHz0830z | 16/11[471 2506 36807] | FN | WED |
| 7865kHz1230z | 10/11[314 ... 00000] 1235z Fair QRM2 YL | Fanis | THU |
| 1230 z | 17/11[314 902505899$]$ | FN, Fanis | THU |
| 8215kHz0710z | 11/11[196 408533216896453433189674089314085 00000] Very strong signal, weak/moderate noise | FR | FRI |
| $8260 \mathrm{kHz1210z}$ | 05/11[2549036711435538465416 8542293040737759036 00000] Very strong, with QRM | FR | SAT |
| $8420 \mathrm{kHz1300z}$ | 07/11[831 47056754632143786458095678781470500000 ] Very strong signal, QRM SVO | FR | MON |
| 1300 z | 14/11[831 47056754632143786458095678781470500000 (s)] 1305z Weak QRN2 QSB3 | FN, Spectre | MON |
| 1300z | 21/11[831 9506675347856312316798450907834218950600000 (s)] 1305z Fair QRN3 QSB2 | Spectre | MON |
| 1300 z | 28/11[831 $9506675347856312316798450907834218950600000(\mathrm{~s})$ ] 1305z Weak QRN3 QSB3 | Spectre | MON |
| $8530 \mathrm{kHz1900z}$ | 02/11[371 $4506541466694140521886957812665251450600000(\mathrm{~s})$ ] 1905z Weak QRN2 QSB3 | Spectre | WED |
| 1900z | 09/11[371 $4506541466694140521886957812665251450600000(\mathrm{~s})$ ] 1905z Weak QRN2 QSB3 | Spectre | WED |
| 1900z | 16/11[371 $8456528617732455196960165044989741845600000(\mathrm{~s})$ ] 1905z Weak QRN3 QSB3 | FN, Spectre | WED |
| 1900z | 23/11[371 $8456528617732455196960165044989741845600000(\mathrm{~s})$ ] 1905z Weak QRN4 QSB3 | Spectre | WED |
| $8680 \mathrm{kHz1200z}$ | 05/11[254 9036711435538465416854229304073775903600000$]$ | Danix | SAT |
| 9260 kHz 0843 z | 23/11[328 507676294 ] late start | FN | WED |
| 10635kHz1310z | 07/11[831 47056754632143786458095678781470500000 ] Vvstrong signal, QRM/QSB | FR | MON |
| 1310 z | 14/11[831 $47056754632143786458095678781470500000(\mathrm{~s})$ ] 1315z Weak QRN3 QSB3 | FN,Spectre | MON |
| 1310z | 21/11[831 9506675347856312316798450907834218950600000 (s)] 1315z Fair QRN2 QSB2 | Spectre | MON |
| 1310z | 28/11[831 $9506675347856312316798450907834218950600000(\mathrm{~s})$ ] 1315z weak QRN3 QSB3 | Spectre | MON |
| 10920kHz1210z | 17/11[425 90362176753672118368102236903414129036 00000(s)] 1215z Fair QRN3 QSB2 | FN,FanisSpectre | THU |
| 1210 z | 24/11[425 $9036217675367211836810223690341412903600000(\mathrm{~s})$ ] 1215z Fair QRN3 QSB2 | Spectre | THU |
| 11415kHz0853z | 23/11[328 507676294 ] late start | FN | WED |
| 11780 kHz 0930 z | 11/11[516 482777559044516051044165464231335401484482700000 (s)] 0936z Fair QRN3 QSB3 | Spectre | FRI |
| 0930z | 18/11[516 2807986058525417294146746532176412 52565] | Gert | FRI |
| 0930z | 25/11[516 280798605852541729414674653217641252565280700000 ] Very strong, QRM2/3 | FR | FRI |
| 11830kHz0840z | 02/11[745 $9206804972933248045128065674524430920600000(\mathrm{~s})$ ] 0845z Fair QRN2 QSB2 | Spectre | WED |
| 0840z | 09/11[745 $9206804972933248045128065674524430920600000(\mathrm{~s})$ ] 0845z Fair QRN2 QSB2 | Spectre | WED |
| 12145 kHz 0910 z | 23/11[745745745 000 0]0914z QSA4/5 QSB2 | JO | WED |
| 12155kHz1200z | 17/11[425 90362176753672118368102236903414129036 00000(s)] 1205z Fair QRN3 QSB2 | FN, Spectre | THU |
| 1200 z | 24/11[425 90362176753672118368102236903414129036 00000(s)] 1205z Fair QRN3 QSB2 | Spectre | THU |
| 12365kHz1000z | 02/11[729 $8456157057465190855642443125883515845600000(\mathrm{~s})$ ] 1005z Fair QRN2 QSB2 | Spectre | WED |
| 1000z | 09/11[729 $8456157057465190855642443125883515845600000(\mathrm{~s})$ ] 1005z Fair QRN2 QSB2 | Spectre | WED |
| 1000z | 16/11[729 $5016560882627464288074821064797664501600000(\mathrm{~s})$ ] 1005z Fair QRN2 QSB2 | Spectre | WED |
| 1000z | 23/11[729 $5016560882627464288074821064797664501600000(\mathrm{~s})$ ] 1005z Fair QRN2 QSB2 | FN, Spectre | WED |
| 1000z | 30/11[729 00000(s)] 1004z Fair QRN2 QSB2 Spectre WED |  |  |
| 12570kHz0940z | 11/11[516 4827775590445160510441654642313354014844827 00000(s)] Fair STANAGQRM4 QSB3 | Spectre | FRI |
| 0940z | 18/11[516 2807986058525417294146746532176412 52565] | Gert | FRI |
| 0940z | 25/11[516 280798605852541729414674653217641252565280700000$]$ Very strong, QRM2/3 | FR | FRI |
| 12952kHz0900z | 03/11[167 $29858967534216764538967490734298500000(\mathrm{~s})$ ] 0905z Weak QRN2 QSB2 | Spectre | THU |
| 0900z | 10/11[167 $29858967534216764538967490734298500000(\mathrm{~s})$ ] 0905z Weak QRN3 QSB3 | Spectre | THU |
| 0900z | 17/11[167945 86062686729747839685304859663252537533179458 00000(s)] Fair QRN3 QSB3 | FN, Spectre | THU |

0900z
13565 kHz 0910 z
0910 z
0910 z
0910 z

14280 kHz 1010 z
1010 z
1010 z
1010 z
1009 z

## December 2011:

| 4845kHz1410z | 15/12[NULL] |
| :---: | :---: |
| 5070kHz1500z | 13/12[537 98167791453463654644570944176812299826 00000] STRONG QRN2 1505z |
| 1500z | 20/11[537 4216678523546199018872103429060154421600000$] 1505 z$ |
| 1500z | 27/12 [537 $4216678523546199018872103429060154421600000(\mathrm{~s})$ ] 1505z Weak QRN3 QSB3 |
| $5310 \mathrm{kHz1240z}$ | 15/12[314,314,314,...970,970 5500000$] 1245 z$ S2 M8 THU |
| $5320 \mathrm{kHz1400z}$ | 15/12[624.... weak]1405z S1 |
| $5660 \mathrm{kHzz} \mathrm{1007z}$ | 06/12[893 at 10:10 893...893.... weak] |
| 1010z | 20/12[893 very weak] |
| 1010z | 27/12[893 893...521 52166 000000]1015z weak local QRM |
| 5810kHz1230z | 06/12[782 $9456809270765446789176367941514156945600000(\mathrm{~s})$ ] 1235z Weak QRN3 QSB3 |
| 1230z | 27/12[782 $5146674709191234539587615051028722514600000(\mathrm{~s})$ ] 1235z Weak QRN3 QSB3 |
| $6305 \mathrm{kHz1210z}$ | 14/12[481] poor signal |
| $6337 \mathrm{kHz1510z}$ | 13/12[537 98167791453463654644570944176812299826 00000] FAIR QRN3 1515z |
| 1510z | 20/12[537 4216678523546199018872103429060154421600000$] 1515 z$ |
| 1510z | 27/12[537 $4216678523546199018872103429060154421600000(\mathrm{~s})$ ] 1515z Weak QRN3 QSB3 |
| $6420 \mathrm{kHz1240z}$ | 14/12 [967 967 967......00000] 1245 |
| $6440 \mathrm{kHzz} \mathrm{1000z}$ | 06/12[893....893.... ends 10:05] |
| 6668kHz1610z | 05/12[176 176 176... ] VERY STRONG 00000 1615z |
| 1610z | 19/12[176 9485 10480] |
| 6770kHz1240z | 06/12[782 94568092707654467891763679415141569456 00000(s)] 1245z Weak QRN3 QSB3 |
| 1240z | 27/12[782 $5146674709191234539587615051028722514600000(\mathrm{~s})$ ] 1245z Weak QRN3 QSB3 |
| $6880 \mathrm{kHz0820z}$ | 07/12[471 $5086841199744727398586854434525866508600000(\mathrm{~s})$ ] 0825z Weak QRN3 QSB3 |
| 7030kHz1200z | 07/12[481 50968862058069617327453757440509600000$]$ |
| 1201z | 14/12[481] good signal |
| 7436kHz1600z | 05/12[176 176 176... MSG] FAIR QRM3 00000 1605z |
| 1600z | 19/12[176 9485 10480] |
| 7520kHz1910z | 28/12[508 6976794154457437644799439281438508600000 ] Very strong, BCQRM |
| $\begin{array}{r} 7840 \mathrm{kHz} 0830 \mathrm{z} \\ 0830 \mathrm{z} \end{array}$ | 07/12[4715086841199744727398586854434525866508600000(s)] 0835z Weak QRN3 QSB3 14/12[Very weak] |
| 7865kHz1230z | 15/12[314 ... 97055 00000]1235z S5 |
| 8260kHz1210z | 03/12[25490367114355384654168542293040 73775903600000 ] V strong signal, weak noise |
| 8420kHz1300z | 05/12[831 831.......Traffic....... Ended 13:05 with 55 00000] |
| 8530 kHz 1900 z | 28/12[508 6976794154457437644799439281438508600000 ] Very strong, QRM |
| $8680 \mathrm{kHz1200z}$ | 03/12[25490367114355384654168542293040 73775903600000 ] V strong signal, weak noise |
| 9135kHz0810z | 20/12[352 $352352 . .94768844548490965555259577715925089476000000] 0815 z$ |
| $9260 \mathrm{kHz0840z}$ | 14/12[328 328 ....... 66 00000] 0845z |
| 10265kHz0800z | 20/12[352 94768844548490965555259577715925089476 000000] 0805z |
| 10635kHz1310z | 05/12[831,831.......Traffic....... Ended 13:15 with 55 00000] |
| 10920kHz 1210z | 01/12[425 $8796756438976409091243657856466042879600000(\mathrm{~s})$ ] 1215z Fair QRN2 QSB2 |
| 1210z | 15/12[425...930 66 00000]1215z S9+20 |
| 1209z | 29/12[425 $42542500000 \ldots . .425$ 00000]1213z S9+20 |


| M8 | THU |
| :---: | :---: |
| AIK | TUE |
| M8 | TUE |
| Spectre, M8 | TUE |
| M8 | THU |
| M8 | TUE |
| M8 | TUE |
| M8 | TUE |
| Spectre | TUE |
| Spectre | TUE |
| AG, M8 | WED |
| AIK | TUE |
| M8 | TUE |
| Spectre, M8 | TUE |
| M8 | WED |
| M8 | TUE |
| AIK, M8 | MON |
| FN | MON |
| Spectre, M8 | TUE |
| Spectre | TUE |
| Spectre | WED |
| Elm | WED |
| AG, M8 | WED |
| AIK. M8 | MON |
| FN | MON |
| FR, Spectre | WED |
| Spectre | WED |
| M8 | WED |
| M8 | THU |
| FR | SAT |
| M8 | MON |
| FR | WED |
| FR | SAT |
| M8 | TUE |
| M8 | WED |
| M8 | TUE |
| M8 | MON |
| Spectre | THU |
| M8 | THU |
| M8 | THU |


| 11415kHz0850z | 14/12[3287328 ....... 66 00000] 0855 | M8 | WED |
| :---: | :---: | :---: | :---: |
| 11780kHz0918z | 16/12 [516 ... 88 00000]0935 | M8 | FRI |
| 12145kHz0910z | 07/12[745745745000000] 0914z QSA5 | JO | WED |
| 12155kHz1200z | 01/12[425 87967564389764090912436578564660428796 00000(s)] 1205z Fair QRN2 QSB2 | Spectre | THU |
| 1200 z | 15/12[425...930 66 00000]1205z | M8 | THU |
| 1200z | 29/12[425 425425 00000...425 00000]1203z S9+20 | M8 | THU |
| 12365kHz1000z | 07/12[729 50362466899399956024615415103566265036 00000(s)] 1005z Fair QRN3 QSB2 | Spectre, M8 | WED |
| 1000z | 14/12[729 729 729....... 66 00000] 1010 | M8 | WED |
| 12570kHz0944z | 16/12[516 24787162534526890186758423009676783451232098247800000$] 0946 z$ |  |  |
|  |  | Strong JO | FRI |
| 12952kHz0903z | 08/12[167 $23456754532132890787786084531234500000(\mathrm{~s})$ ] 0908z Fair QRN3 QSB2 | Spectre | THU |
| 0900z | 15/12[167 98055000000 ]0905z | M8 | THU |
| 13565kHz0913z | 08/12[167 $23456754532132890787786084531234500000(s)]$ 0918z Fair QRN3 QSB3 | Spectre | THU |
| 0910z | 15/12[167 ... 98055 00000]0915z | M8 | THU |
| 0910z | 29/12[167 167167 00000.... 167 00000]0913z S7 | M8 | THU |
| 14280kHz1010z | 07/12 [72950362466899399 $95602461541510356626503600000(\mathrm{~s})$ ] 1015z Fair QRN3 QSB2 | Spectre, M8 | WED |
| 1010z | 14/12[729 729 729....... 66 00000] 1015 | M8 | WED |
| S11a[III] |  |  |  |
| S11a log Nov/Dec: |  |  |  |
| 4441 kHz 1355 z | 14/11 [254/00] Strong | Hans | MON |
| 1355z | 27/11 [254/00] Strong signal, strong noise | Fox | SUN |
| $6433 \mathrm{kHz} \mathrm{1020z}$ | 12/11 [221/00] Fair | RNGB | SAT |
| 1020z | 16/11 [221/00] | RNGB | WED |
| 1020z | 19/11 [221/00] | RNGB | SAT |
| 1020z | 03/12 [221/00] | Ary, Fox | SAT |
| 1020z | 07/12 [221/00] | RNGB | WED |
| 1020z | 10/12 [221/00] Konec 1023z | Malc | SAT |
| 1020z | 14/12 [221/00] Fair | RNGB | WED |
| 1020z | 17/12 [221/00] Strong | Danix | SAT |
| 1020z | 21/12 [221/00] Fair | RNGB | WED |
| 1020z | 24/12 [221/00] Fair | RNGB | SAT |
| 1020z | 31/12 [227/32 85955533958970383033 38603...]1030z QSA1 QSB2 | Manolis | SAT |
| 7504kHz0915z | 11/11 [484/00] Very strong | Fox | FRI |
| 0915z | 18/11 [484/00] | Gert | FRI |
| 0915z | 18/11 [484/00] | RNGB | FRI |
| 0915z | 22/11 [484/31 65950 ... 61216] 0923z Weak QRN2 QSB2 | Spectre | TUE |
| 0915z | 29/11 [484/00] | RNGB | TUE |
| 0915z | 02/12 [484/00] | RNGB | FRI |
| 0915z | 06/12 [484/00] | RNGB | TUE |
| 0915z | 09/12 [484/00] | RNGB | FRI |
| 0915z | 13/12 [484/00] | RNGB | TUE |
| 0915z | 16/12 [484/00] Konec 0918z | Malc | FRI |
| 0915z | 27/12 [486/33 $8318052143949745539353917 . .$.$] QSB, faded to nothing$ | RNGB | TUE |
| 0915z | 30/12 [486/33 83180 etc] repeat of Tuesday | Malc | FRI |
| 9610kHz1020z | 11/11 [426/00] Very strong | Fox | FRI |
| 1020z | 15/11 [426/00] | RNGB | TUE |
| 1020z | 22/11 [426/00] 1023z Weak QRN3 QSB2 | Spectre | TUE |
| 1020z | 29/11 [426/00] Ended at 1023z | Malc | TUE |
| 1020z | 02/12 [426/00] Good | RNGB | FRI |
| 1020z | 06/12 [426/00] | RNGB | TUE |
| 1020z | 09/12 [426/00] Ended at 1023z, S7 | Malc | FRI |
| 1020z | 13/12 [425/30 86681594050189662994 89235.....37697] Fair, QRM | RNGB | TUE |
| 1020z | 20/12 [426/00] | RNGB | TUE |
| 1020z | 23/12 [426/00] | RNGB | FRI |
| 1020z | 27/12 [426/00] Good | RNGB | TUE |
| 1020z | 30/12 [426/00] Konec 0925z | Malc | FRI |
| $12530 \mathrm{kHz} \mathrm{1015z}$ | 03/11 [475/00] | RNGB | THU |
| 1015z | 10/11 [475/00] | RNGB | THU |
| 1015z | 14/11 [475/00] Good | RNGB | MON |
| 1015z | 21/11 [479/33 08835237086759223664 61346.....53261] | RNGB | MON |
| 1015z | 28/11 [475/00] Strong signal, very strong noise | Fox | MON |
| 1015z | 01/12 [475/00] | RNGB | THU |
| 1015z | 08/12 [470/34 59584925292484772889 91492....01595] | RNGB | THU |
| 1015z | 12/12 [475/00] | RNGB | MON |
| 1015z | 15/12 [475/00] Konec 1018z, S9+10 | Malc | THU |
| 1015z | 19/12 [475/00] | RNGB | MON |
| 1015z | 22/12 [475/00] Konec 1018z | Malc | THU |
| 1015z | 29/12 [475/00] | RNGB | THU |

S21 [XIV]
November 2011:

3323kHz1842z
$1842 z$
$1842 z$

3823kHz1842z
1842z
1842z

17/11[323 8913646422 ... 5816689136 000] 1853z Weak QRN3 QSB3
Spectre, AB
THU
3323kHz 1842z 17/11 Transcript:
32389136
46422547552460739080537118302491664820721783205317 54259539052500558197102830757106586160250644019945 25350461499619792600563821406719512640435517976188 311593241333249689494004058166
89136000 Courtesy Spectre

22/11[323 8913646422 ... 5816689136 000]
AB
TUE
THU
THU
TUE
THU

## December 2011:

3823kHz1842z
01/12[323 323 323...] OM VERY WEAK 000 1853z

## S28 <br> November 2011:

4582 kHz 2259 z
4582 kHz 2342 z 4582 kHz 2041 z 4582 kHz 2140 z $4582 \mathrm{kHz} 2223 z$

4667kHz 2257z 4667kHz 2039z 4667 kHz 2138 z 4667kHz 2345z 4667 kHz 2203 z 4667kHz 0036z 4667kHz 2247z 4667 kHz 2229 z 4667kHz 2156z 4667 kHz 2347 z 4667kHz 1834z 4667 kHz 0200z 4667 kHz 2245 z

4668 kHz 2340 z 4668 kHz 2221 z 4668 kHz 2245 z 4668 kHz 2114 z $4668 \mathrm{kHz} 2353 z$

4709kHz 2040z 4709kHz 2139z 4709kHz 2346z 4709kHz 2204z 4709kHz 0124z 4709 kHz 0037 z 4709kHz 2248z 4709 kHz 2157 z 4709kHz 2348z 4709 kHz 1835 z 4709kHz 0201z

4710 kHz 2258 z 4710 kHz 2341 z 4710 kHz 2246 z 4710kHz 2115z 4710 kHz 2230 z

4711 kHz 2222 z
4711 kHz 2355 z

01/11 [Harmonic] Very Weak RTTYQRM3 QSB3
02/11 [Harmonic] Weak RTTYQRM4 QSB3
03/11 [Harmonic] Very Weak RTTYQRM5 QSB4
04/11 [Harmonic] Weak RTTYQRM4 QSB3
05/11 [Harmonic] Weak RTTYQRM4 QSB2
01/11 [Harmonic] Weak QRN3 QSB2
03/11 [Harmonic] Fair QRN3 QSB2
04/11 [Harmonic] Weak QRN3 QSB3
07/11 [Harmonic] Weak QRN3 QSB3
08/11 [Harmonic] Weak QRN3 QSB3
12/11 [Harmonic] Very Weak QRN3 QSB3
13/11 [Harmonic] Very Weak QRN3 QSB3
14/11 [Harmonic] Weak QRN3 QSB2
16/11 [Harmonic] Weak QRN3 QSB2
22/11 [Harmonic] Weak QRN3 QSB3
23/11 [Harmonic] Very Weak QRN3 QSB3
24/11 [Harmonic] Very Weak QRN3 QSB3
28/11 [Harmonic] Very Weak QRN3 QSB3
02/11 [Harmonic] Fair QRN3 QSB2
05/11 [Harmonic] Weak QRN2 QSB3
09/11 [Harmonic] Weak QRN3 QSB3
10/11 [Harmonic] Weak QRN3 QSB3
15/11 [Harmonic] Weak QRN3 QSB2
03/11 [Harmonic] Very Weak QRN4 QSB4 04/11 [Harmonic] Very Weak QRN4 QSB3 07/11 [Harmonic] Very Weak QRN3 QSB3 08/11 [Harmonic] Very Weak QRN3 QSB3 11/11 [Harmonic] Very Weak QRN3 QSB3 12/11 [Harmonic] Very Weak QRN3 QSB3 13/11[Harmonic] Very Weak QRN3 QSB3 16/11 [Harmonic] Very Weak QRN3 QSB2 22/11 [Harmonic] Very Weak QRN3 QSB3 23/11 [Harmonic] Very Weak QRN3 QSB3 24/11 [Harmonic] Very Weak QRN3 QSB3

01/11 [Harmonic] Very Weak QRN3 QSB3 02/11 [Harmonic] Weak QRN3 QSB3 09/11 [Harmonic] Very Weak QRN3 QSB3 10/11 [Harmonic] Very Weak QRN3 QSB3 14/11 [Harmonic] Very Weak QRN4 QSB3

05/11 [Harmonic] Very Weak QRN3 QSB3
15/11 [Harmonic] Very Weak QRN3 QSB3

| Spectre | TUE |
| :---: | :---: |
| Spectre | WED |
| Spectre | THU |
| Spectre | FRI |
| Spectre | SAT |
| Spectre | TUE |
| Spectre | THU |
| Spectre | FRI |
| Spectre | MON |
| Spectre | TUE |
| Spectre | SAT |
| Spectre | SUN |
| Spectre | MON |
| Spectre | WED |
| Spectre | TUE |
| Spectre | WED |
| Spectre | THU |
| Spectre | MON |
| Spectre | WED |
| Spectre | SAT |
| Spectre | WED |
| Spectre | THU |
| Spectre | TUE |
| Spectre | THU |
| Spectre | FRI |
| Spectre | MON |
| Spectre | TUE |
| Spectre | FRI |
| Spectre | SAT |
| Spectre | SUN |
| Spectre | WED |
| Spectre | TUE |
| Spectre | WED |
| Spectre | THU |
| Spectre | TUE |
| Spectre | WED |
| Spectre | WED |
| Spectre | THU |
| Spectre | MON |
| Spectre | SAT |
| Spectre | TUE |

## December 2011:

3828kHz 2300z 01/11 [Channel Marker, Heard In UK] Very Weak QRN3 QSB3 3828kHz 2343z 02/11 [Channel Marker, Heard In UK] Weak QRN3 QSB 3828kHz 2045z 03/11 [Channel Marker, Heard In UK] Weak QRN3 QSB3 3828kHz 2156z 04/11 [Channel Marker, Heard In UK] Weak QRN3 QSB2 $3828 \mathrm{kHz} 2228 \mathrm{z} 05 / 11$ [Channel Marker, Heard In UK] Very Weak QRN3 QSB3 3828 kHz 2124 z 06/11 [Channel Marker, Heard In UK] Very Weak QRN3 QSB3 3828kHz 2347z 07/11 [Channel Marker, Heard In UK] Very Weak QRN3 QSB3 3828kHz 2205z 08/11 [Channel Marker, Heard In UK] Very Weak QRN3 QSB3 3828kHz 2247z 09/11 [Channel Marker, Heard In UK] Weak QRN3 QSB3 3828kHz 2116z 10/11 [Channel Marker, Heard In UK] Very Weak QRN3 QSB3 $3828 \mathrm{kHz} 0125 z$ 11/11 [Channel Marker, Heard In UK] Very Weak QRN3 QSB3 3828 kHz 0038 z 12/11 [Channel Marker, Heard In UK] Very Weak QRN3 QSB3 3828kHz 2249z 13/11 [Channel Marker, Heard In UK] Very Weak QRN3 QSB3 3828kHz 2305z 14/11 [Channel Marker, Heard In UK] Very Weak QRN3 QSB3 3828kHz 2356z 15/11 [Channel Marker, Heard In UK] Weak QRN3 QSB3 $3828 \mathrm{kHz} 2158 z$ 16/11 [Channel Marker, Heard In UK] Weak QRN3 QSB3 3828kHz 2246z 17/11 [Channel Marker, Heard In UK] Very Weak QRN3 QSB3 3828 kHz 2254 z 18/11 [Channel Marker, Heard In UK] Very Weak QRN3 QSB3 3828kHz 2337z 19/11 [Channel Marker, Heard In UK] Weak QRN4 QSB3 3828kHz 2147z 20/11 [Channel Marker, Heard In UK] Very Weak QRN3 QSB3 $3828 \mathrm{kHz} 2239 \mathrm{z} 21 / 11$ [Channel Marker, Heard In UK] Weak QRN3 QSB3 3828kHz 2349z 22/11 [Channel Marker, Heard In UK] Very Weak QRN3 QSB3 3828kHz 1836z 23/11 [Channel Marker, Heard In UK] Weak QRN3 QSN3 3828 kHz 0207z 24/11 [Channel Marker, Heard In UK] Weak QRN3 QSB3 3828kHz 2214z 25/11 [Channel Marker, Heard In UK] Weak QRN3 QSB3 3828kHz $2235 z$ 26/11 [Channel Marker, Heard In UK] Weak QRN3 QSB3 3828kHz 2116z 27/11 [Channel Marker, Heard In UK] Weak QRN3 QSB3 $3828 \mathrm{kHz} 2245 z$ 28/11 [Channel Marker, Heard In UK] Very Weak QRN3 QSB3 3828kHz 2305z 28/11 [Channel Marker, Heard In UK] Very Weak QRN3 QSB3 3828kHz 2138z 28/11 [Channel Marker, Heard In UK] Very Weak QRN3 QSB3

| Spectre | TUE |
| :--- | :--- |
| Spectre | WED |
| Spectre | THU |
| Spectre | FRI |
| Spectre | SAT |
| Spectre | SUN |
| Spectre | MON |
| Spectre | TUE |
| Spectre | WED |
| Spectre | THU |
| Spectre | FRI |
| Spectre | SAT |
| Spectre | SAT |
| Spectre | MON |
| Spectre | TUE |
| Spectre | WED |
| Spectre | THU |
| Spectre | FRI |
| Spectre | SAT |
| Spectre | SUN |
| Spectre | MON |
| Spectre | TUE |
| Spectre | WED |
| Spectre | THU |
| Spectre | FRI |
| Spectre | SAT |
| Spectre | SUN |
| Spectre | MON |
| Spectre | TUE |
| Spectre | WED |

## V02a [XVIII]

PoSW's reports on this station, usually received better in the Americas:
The 0700 and 0800 UTC transmissions from the Señorita from Havana now much stronger than in the summer months. Appears one hour earlier local with the end of summertime, the 0700 UTC on at 7 am in the UK so us members of the suburban proletariat can check it out over the Shredded Wheat at breakfast time. Starting a minute or more before the top of the hour is commonplace as is starting up on the wrong frequency.

30-Oct-11, Sunday, 0659 UTC, $5,800 \mathrm{kHz}$, started up on the wrong frequency, "Atencion, 182718404246851 ". Went off at 0701 z and came up on the correct frequency $5,883 \mathrm{kHz}$.
0759 UTC, $5,883 \mathrm{kHz}$, wrong frequency again, call-up as earlier, a somewhat weaker signal made worse by a strong DRM broadcaster on the LF side. Vanished from 5,883 at 0805 z , found on the correct frequency $5,898 \mathrm{kHz}$.

31-Oct-11, Monday, 0659 UTC, 5,883 kHz, "Atencion, $004722765106471 "$, S9+ signal.
1-Nov-11. Tuesday, 0659 UTC, 5,883 kHz, "Atencion, 7337101612 73502", S9+.
3-Nov-11, Thursday:- 0659 UTC, 5,883 kHz, "Atencion, 331811701137481 ", S9+ .
4-Nov-11, Friday:- 0659 UTC, $5,883 \mathrm{kHz}$, "Atencion, 303315828105321 ", continues to be a very strong signal in the UK.
5-Nov-11, Saturday:- 0659 UTC, $5,883 \mathrm{kHz}$, "Atencion, 033710225103512 ".
0759 UTC, $5,898 \mathrm{kHz}$, "03371 $0225103512 "$, as earlier.
8-Nov-11, Tuesday:- 0700 UTC, $5,883 \mathrm{kHz}$, "Atencion, 032727530201741 ", call-up in progress when tuned in 30s before the hour, "03272" repeated and into 5Fs before 0702z.

11-Nov-11, Friday:- 0659 UTC, 5,883 kHz, "Atencion, 1454164081 11121".
12-Nov-11, Saturday:- 0758 and 30 seconds UTC by my clock, $5,898 \mathrm{kHz}$, "Atencion, 567615558202632 ".
13-Nov-11, Sunday:- 0758 \& 30s UTC, 5,898 kHz "Atencion, 316226715252771 ".
14-Nov-11, Monday, 0659 UTC, $5,883 \mathrm{kHz}$, call-up in progress, "Atencion, 600414804137582 ".
15-Nov-11, Tuesday:- 0659 UTC, $5,883 \mathrm{kHz}$, "Atencion, 184316252255241 "; vanished at 0701 z , found the transmission had moved to 5,800 ! Within a few seconds of tuning in went off this frequency and moved back to 5,883 .

17-Nov-11, Thursday:- 0659 UTC, $5,883 \mathrm{kHz}$, more erratic behaviour from Cuba this morning, usual call-up routine with "10382 7330277821 ", paused for a few seconds then continued with, "83832 2138260132 ".

18-Nov-11, Friday:- 0659 UTC, 5,883 kHz, "Atencion, 7254206362 27652". S9 signal.
19-Nov-11, Saturday:- 0659 UTC, 5,883 kHz, "Atencion, 058611568172651 ".
0759 UTC, $5,883 \mathrm{kHz}$ - started up on the wrong frequency with same call-up as earlier. Vanished just before 0800 z and came up on 5,898 .

20-Nov-11, Sunday:- 0700 UTC, $5,883 \mathrm{kHz}$, something a bit unusual this morning, no number station heard at first but what appeared to be a relay of a broadcast perhaps of a news or current affairs programme alternating between YL and OM voices in Spanish. Stopped after a short while when the usual V02a voice came up repeating "37431" and into 5Fs around 0702z.
0759 UTC, $5,898 \mathrm{kHz}$, no problems here, "Atencion, 3743133681 85701".
24-Nov-11, Thursday:- 0659 UTC, $5,883 \mathrm{kHz}$, "Atencion, 530011887131862 ". Strong carrier but audio seemed to be low in relation.
25-Nov-11, Friday:- 0658 and 35 seconds UTC - managed to be there right at the start!
$5,883 \mathrm{kHz}$, "Atencion, 147717547208572 ".
26-Nov-11, Saturday:- 0758 and 35s UTC, $5,898 \mathrm{kHz}$, "Atencion, 731621642210051 ".
28-Nov-11, Monday:- 0659 UTC, $5,883 \mathrm{kHz}$, "Atencion, 585816535133171 ", much weaker signal than in recent times, S6 to S7.
2-Dec-11, Friday:- 0659 UTC, $5,883 \mathrm{kHz}$, "Atencion, 3672276562 66852". S7 with deep QSB
4-Dec-11, Sunday:- 0758 and 30s UTC, to be precise, $5,898 \mathrm{kHz}$, "Atencion, 400512472245112 . S9 but audio seemed low in relation to carrier strength.

8-Dec-11, Thursday:- 0659 UTC, 5,883 kHz, "Atencion, 337826741277702 ".
10-Dec-11, Saturday:- 0758 and 25 s UTC, early starts are becoming even earlier!, $5,898 \mathrm{kHz}$, "Atencion, 7084280671 17672", not as strong as in recent weeks, S 7 at best.

12-Dec-11, Monday:- 0700 UTC, $5,800 \mathrm{kHz}$, not on the usual frequency of 5,883. "Atencion, 180018700256711 ". S8 carrier, audio somewhat weak. Didn't have time to hang around to see if there was a QSY to 5,883 .

15-Dec-11, Thursday:- 0700 UTC minus 30s approx, timing somewhat improved! 5,883 kHz, "Atencion, 1508210882 03511".
16-Dec-11, Friday:- 0700 UTC minus 30s, $5,883 \mathrm{kHz}$, "Atencion, 067010212226572 ".
17-Dec-11, Saturday:- 0800 UTC, $5,898 \mathrm{kHz}$, call-up in progress when tuned in 15 s before the hour, "Atencion, 804221107237171 ". S9 signal.
18-Dec-11, Sunday, 0759 and 30 seconds UTC - to be precise! - 5,898 kHz, "Atencion, 528425758134552 ".
And two to finish off the year:-
28-Dec-11, Wednesday:- 0911 UTC, $9,040 \mathrm{kHz}$, transmission in progress, S 6 to S7, interference from a strong FSK station about 3 kHz higher. 1019 UTC, $9,240 \mathrm{kHz}$, another V02a in full flow, S7 with rapid QSB.
I would not normally be at home on a Wednesday to find these two, but this is the holiday "No Man's Land" between Christmas and the New Year.
And others' logs with a strong UK presence $\cdot$ :
November 2011:

| 5883kHz0659z | 18/11[A72542 06362 27652] Strong |  | Hans | FRI |
| :---: | :---: | :---: | :---: | :---: |
| 0657z | 19/11 weak, fades in/out 0740z |  | k5knt | SAT |
| 0659z | 26/11[A73162 1642210051 LG73283 Finalé(R3)] 0741z Strong, QSB3 | (41m33s) | DanAr, PLdn | SAT |
| 0659z | 27/11[A36802 7405231182 LG18055 Finalé(R3)] 0741z Fair, QRM3 | (40m49s) | PLdn | SUN |
| 0659z | 28/11[A58581 6535133171 LG75526 Finalé(R3)]0741z Strong | (41m32s) | PLdn | MON |
| 0659z | 29/11[A54372 6658186381 LG46307 Finalé(R3)] 0741z Strong, QRN2 | (42m00s) | DanAr,PLdn | TUE |
| $5898 \mathrm{kHz0800z}$ | 19/11 in progress |  | k5knt | SAT |
| 0759z | 27/11[A36802 7405231182 LG73661 Finalé(R3)] 0841z Strong, QRM2 | (42m01s) | PLdn | SUN |
| 0759z | 28/11[A58581 6535133171 LG75526 Finalé(R3)]0841z Strong | (41m32s) | PLdn | MON |
| 0759z | 29/11[A54372 6658186381 LG67720 Finalé(R3)] 0841z Strong, QRN2 | (41m56s) | PLdn | TUE |
| $6768 \mathrm{kHz0100z}$ | 19/11 SS YL groups of 5f |  | Rich | SAT |
| December 2011: |  |  |  |  |
| 4028kHz0127z | 02/12 fair |  | gil | FRI |
| $4035 \mathrm{kHz0400z}$ | 19/12 [xxxxx 82671 xxxxx] in progress, missed callup. |  | J-FL | MON |
| 5883kHz0659z | 01/12[A01431 8085135312 LG48476 Finalé(R3)] Very strong | (42m01s) | PLdn | THU |
| 0659z | 02/12[A36722 7656266856 LG 10015 Finalé(R3)] Weak | (42m01s) | PLdn | FRI |
| 0659z | 03/12[A45222 7085147722 LG78727 Finalé(R3)] 0741z Fair, QRN3 | (41m27s) | PLdn, gil | SAT |
| 0659z | 04/12 Weak and unreadable, QRM3 |  | PLdn | SUN |
| 0657z | 05/12[A68562 6141122472 LG37238 Finale(R3)] Fair | (40m27s) | DanAr, PLdn | MON |
| 0658z | 08/12[ 77702] Rx problems; Strong |  | PLdn | THU |
| 0659z | 11/12[A20311 4011264562 LG54848]Finalé(R3) 0741z Weak, QRM2 QSB2 | (41m32s) | PLdn | SUN |
| 0659z | 13/12[A06401 7142122481 LG73351 Finalé(R3)]0741z Strong | (41m31s) | PLdn | TUE |
| 0659z | 15/12[A15082 1088203511 LG06520 Finalé(R3)] 0741z Fair | (42m00s) | PLdn | THU |
| 0659z | 16/12[A06751 0212226572 LGnnnnn] Weak and noisy |  | PLdn | FRI |
| 0659z | 17/12[A80422 nnnnn nnnnn] Very weak, QRM3/4 |  | PLdn | SAT |
| 0659z | 18/12[A ........Finalé (R3)] Very poor, QRM4 0741z |  | PLdn | SUN |
| 0659z | 19/12[A20512 0871240021 LG64486Finalé(R3)] 0741z Weak to start; fair by end. | (41m26s) | PLdn | MON |
| 0659z | 20/12[A83501 8247155361 LG75025 Finalé(R3)] 0741z Weak | (41m26s) | PLdn | TUE |
| 0700z | 22/12[A23571 0578168682 LG50353]0742z Strong | (42m08s) | PLdn | THU |
| 0700z | 23/12[A73022 4851185641 LG67183 Finalé(R3)] 0742z Strong | (42m01s) | PLdn | FRI |
| 0700z | 24/12[A06662 7641178611 LG22756Finalé(R3)]0742z Fair | (42m00s) | PLdn | SAT |
| 0700z | 25/12[A57271 8376256651 LG77543Finalé(R3)]0742z Fair, QRN2 | (41m55s) | PLdn | SUN |
| 0700z | 26/12[A84162 1657288462 LG26002 Finalé(R3)]0742z Fair | (42m01s) | PLdn | MON |


| 0700z | 27/12[A12661 8171184432 LG n4466 Finalé(R3)]0742z Strong, QSB3 |
| :---: | :---: |
| 0700z | 29/12[A84332 1488218511 LG50677Finalé(R3)]0742z Strong, QRM2 |
| 0700z | 30/12[A21621 5067248221 LG45612 Finalé(R3)] 0742z Strong |
| 0700z | 31/12[A14851 3788212472 LG15812 Finalé(R3)]0742z Weak and noisy, QSB2/3 |
| 5898kHz0759z | 01/12[A01431 8085135312 LG77425 Finalé(R3)] Very strong |
| 0759z | 02/12[A36722 7656266856 LG 24207 Finalé(R3)] Weak |
| 0759z | 03/12[A45222 7085147722 LG75484 Finalé(R3)] 0741z Fair, QRN3 |
| 0759z | 04/12[A40051 2472245012 ] Weak, QRM3 QSB2 to nil by end. |
| 0757z | 05/12[A68562 61411 22472] Fair, QRM4/5 |
| 0759z | 06/12[A07602 7346103842 LG02438 Finalé(R3)] 0840z Fair, QRM2 QRN2 |
| 0758z | 08/12[A33782 61412 77702] Started Fair, faded before end |
| 0758z | 10/12[A70846 8067117672 LG38825 Finalé(R3)]0840z Fair, QSB2 |
| 0800z | 11/12[A20311 4011264562 LG25466]Finalé(R3) 0742z Fair |
| 0759z | 13/12[A06401 7142122481 LG85886 Finalé(R3)]0841z Strong |
| 0759z | 15/12[A15082 1088203511 LG24041 Finalé(R3)] 0841z Strong |
| 0759z | 16/12[A06751 0212226572 LG67777 Finalé(R3)] 0741z Weak and noisy |
| 0759z | 17/12[A80422 1107237171 LG20448 Finalé(R3)] 0841z Fair, QRM3 |
| 0759z | 18/12[A52842 5758134552 LG25518 Finalé(R3)] 0841z Fair, QSB2 |
| 0759z | 19/12[A20512 0871240021 LG85301Finalé(R3)] 0841z QRM3/4 at start, Fair to end. |
| 0759z | 20/12[A83501 8247155361 LG44580 Finalé(R3)] 0841z Weak/fair |
| 0800z | 22/12[A23571 0578168682 LG56854]0842z Strong, QSB2 |
| 0808z | 23/12[n nnnnn 1065208211 LG06166 Finalé(R3)] 0842z Strong Started late, carrier up at 0751z |
| 0800z | 24/12[A06662 7641178611 LG36021Finalé(R3)]0842z Fair |
| 0813z | 25/12[ started late 8376256651 LG51028Finalé(R3)] 0842z Fair, QSB2/3 SK01QRM3/4 |
| 0800z | 26/12[A84162 1657288462 LG81767 Finalé(R3)] 0842z Strong |
| 0800z | 27/12 Expected V02a was SK01 |
| 0800z | 29/12[A84332 1488218511 LG66830Finalé(R3)]0842z Fair, QRM2 |
| 0800z | 30/12[A21621 5067248221 LG20473 Finalé(R3)] 0842z Strong. |
| 0800z | 31/12[A14851 3788212472 LG27347 Finalé(R3)]0842z Fair and noisy |
| $6768 \mathrm{kHz0419z}$ | 05/12[] weak |
| 0400z | 19/12[] very weak. |
| 13380kHz2019z | 08/12[] strong |


| (42m11s) | PLdn | TUE |
| :---: | :---: | :---: |
| (41m57s) | PLdn | THU |
| (42m03s) | PLdn | FRI |
| (42m00s) | PLdn | SAT |
| (42m01s) | PLdn | THU |
| (42m01s) | PLdn | FRI |
| (41m27s) | PLdn, gil | SAT |
|  | PLdn | SUN |
|  | PLdn | MON |
| (41m22s) | PLdn | TUE |
|  | PLdn, gil | THU |
| (40m59s) | PLdn | SAT |
| (41m36s) | PLdn | SUN |
| (41m31s) | PLdn | TUE |
| (42m01s) | PLdn | THU |
| (41m26s) | PLdn | FRI |
| (42m00s) | PLdn | SAT |
| (41m24s) | PLdn | SUN |
| (41m26s) | PLdn | MON |
| (41m26s) | PLdn | TUE |
| (42m08s) | PLdn | THU |
| (41m55s) | PLdn | FRI |
| (41m47s) | PLdn | SAT |
| (41m47s) | PLdn | SUN |
| (42m01s) | PLdn | MON |
|  | PLdn | TUE |
| (41m57s) | PLdn | THU |
| (42m02s) | PLdn | FRI |
| (42m02s) | PLdn | SAT |
|  | gil | MON |
|  | J-FL | MON |
|  | gil | THU |

## V07 [ IB ]

V07 remains active and well heard on the west coast of the US in its Sunday morning schedule. It is still in the 0100/0120/0140 time period for the 3rd month in a row, however the frequencies for December are different from the ones used in October and November. If the pattern holds true the station might continue using 0100/0120/0140 for January, February, and March of 2012, moving to the 0300/0320/0340 slot in April.

The chart of trends, times, and frequencies used for 2011 is here:
http://token_radio.home.mchsi.com/V07_latest_sched.JPG

V07 Observations May to December of 2011

|  | May <br> Call 511 | June <br> Call ??? | July <br> Call 512 | August <br> Call 845 | September <br> Call 661 | October <br> Call 883 | November <br> Call 883 | December <br> Call 661 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{0 1 0 0}$ |  |  |  |  |  | 18074 | 18074 | 16037 |
| $\mathbf{0 1 2 0}$ |  |  |  |  |  | 15874 | 15874 | 14637 |
| $\mathbf{0 1 4 0}$ |  |  |  |  |  | 14374 | 14374 | 12137 |
| $\mathbf{0 3 0 0}$ |  |  |  |  | 16037 |  |  |  |
| $\mathbf{0 3 2 0}$ |  |  |  |  | 14637 |  |  |  |
| $\mathbf{0 3 4 0}$ |  |  |  |  | 12137 |  |  |  |
| $\mathbf{0 5 0 0}$ | $?$ |  |  | 14823 |  |  |  |  |
| $\mathbf{0 5 2 0}$ | 12182 |  |  | 13423 |  |  |  |  |
| $\mathbf{0 5 4 0}$ | $?$ |  |  | 11523 |  |  |  |  |
| $\mathbf{0 7 0 0}$ |  | $?$ | 13582 |  |  |  |  |  |
| $\mathbf{0 7 2 0}$ |  | 11182 | 12182 |  |  |  |  |  |
| $\mathbf{0 7 4 0}$ |  | $?$ | 10282 |  |  |  |  |  |

Note that on November 20 in the 0100 and 0120 time slots a CW station was sent instead of V07. In this case I believe it is M12. The same ID was sent, 883, as should have been sent for V07 in that time slot. This was a null msg so the 0140 time slot was not populated. Based on this reception I have been assuming there might be an M12 related to this V07 schedule, but looking in the hours before and after the V07 times I have not yet found one.

T!
Mojave Desert, California USA
Logs:
The CW msg for November 20, 2011 was as follows:
883883883 T T T 883883883 T T T 883883883 T T T 883883883
T T T
883883883 T T T 883883883 T T T 883883883 T T T 883883883 T T T

11/06/2011, 0100 UTC, 18074 kHz, USB, V07, YL SS 5f, Callup 883, ID 522, 67 grps 11/06/2011, 0120 UTC, 15874 kHz, USB, V07, YL SS 5f, Callup 883, ID 522, 67 grps 11/06/2011, 0140 UTC, 14374 kHz, USB, V07, YL SS 5f, Callup 883, ID 522, 67 grps 11/13/2011, 0100 UTC, 18074 kHz, USB, V07, YL SS 5f, Callup 883, null msg 11/13/2011, 0100 UTC, 15874 kHz, USB, V07, YL SS 5f, Callup 883, null msg 11/20/2011, 0100 UTC, 18074 kHz , CW, M12, Callup 883, null msg 11/20/2011, 0120 UTC, 15874 kHz, CW, M12, Callup 883, null msg 11/27/2011, 0100 UTC, 18074 kHz, USB, V07, YL SS 5f, Callup 883, ID 957, 93 grps 11/27/2011, 0120 UTC, 15874 kHz, USB, V07, YL SS 5f, Callup 883, ID 957, 93 grps 11/27/2011, 0140 UTC, 14374 kHz, USB, V07, YL SS 5f, Callup 883, ID 957, 93 grps

December 2011 receptions:
The first Sunday of the month (Dec 4, 2011) I was not home and only recorded the frequencies that had been in use the last 2 months, no activity recorded as the station had shifted frequencies.

12/11/2011, 0100 UTC, 16037 kHz, USB, V07, YL SS 5f, Callup 661, ID 567, 79 grps 12/11/2011, 0120 UTC, 14637 kHz , USB, V07, YL SS 5f, Callup 661, ID 567, 79 grps 12/11/2011, 0140 UTC, 12137 kHz , USB, V07, YL SS 5f, Callup 661, ID 567, 79 grps 12/18/2011, 0100 UTC, 16037 kHz, USB, V07, YL SS 5f, Callup 661, null msg 12/18/2011, 0120 UTC, 14637 kHz, USB, V07, YL SS 5f, Callup 661, null msg 12/25/2011, 0100 UTC, 16037 kHz , USB, V07, YL SS 5f, Callup 661, ID 676, 65 grps 12/25/2011, 0120 UTC, 14637 kHz , USB, V07, YL SS 5f, Callup 661, ID 676, 65 grps 12/25/2011, 0140 UTC, 12137 kHz, USB, V07, YL SS 5f, Callup 661, ID 676, 65 grps

## V13 [0] <br> November 2011:

| 13200kHz0603z | 01/11 YL with msg -without laute music intro- until $06: 33 \mathrm{z}$; low signal, QRM from EAM msg | DanAr | TUE |
| :---: | :---: | :---: | :---: |
| 13200kHz1200z | 01/11 YL with msg -with laute music intro- until 12:33z ; good signal, QRM from test msg from EAM | DanAr | TUE |
| 13200kHz1300z | 01/11 YL with msg -with laute music intro- weak signal. | DanAr | TUE |
| December2011: |  |  |  |
| 7580kHz1013z | 15/12 i/p | Joh | THU |
| 1200z | 16/12 [NULL] | M8 | FRI |
| 1300z | 16/12 [NULL] | M8 | FRI |

## V21

$5637 \mathrm{kHz} 1400 \mathrm{z} 31 / 12$ heard a microphone keyed several times then heard " 41 " or 401 - good signal,

## V24

V24 and M94 have once again undergone some fairly substantial changes in frequencies and schedule.
Starting November 6, 2011, I noticed a new frequency in use by V24, 6310 kHz .
Since a couple weeks before that date I have not seen 6730 or 6330 kHz in use.
My assumption is that about November 1, 2011, the frequencies of 6730 kHz and 6330 kHz were discontinued and the new frequency of 6310 kHz was added.
The total number of messages each month have not reduced by any appreciable number, so it appears the activity that was on 6730 and 6330 kHz has shifted to the still active freqs. For the most part the 6730 kHz activity appears to have shifted to 6310 kHz and the former 6330 kHz activity has shifted to the remaining freqs, for example the 6330 kHz M94 slots have moved to 5715 kHz , but on the same days and at the same times as when on 6330 kHz .

Fewer and fewer 4 f format messages are being sent, the vast majority are now 5 .
The latest schedule of V24 and M94 transmissions can be found here:
http://token_radio.home.mchsi.com/V24_M94_latest_sched.JPG

Schedule for V24 and M94 transmission predictions, Version 4. The last four remaining M94 time slots are highlighted in BLUE. $4600,4900,5115,5715,6215$, and 6310 kHz are all active. 6310 noted in use Nov 05, and 6730 and 6330 have been removed from use. Most 6730 fregs appear to have converted to 6310 and most 6330 have converted to 5715

Some time slots are only used every other month
$(P)=$ Possible based on past habits but not yet confirmed.
?? = Formerly on 6730 or 6330 but not yet confirmed on new frequencies or in new time slots.
V24/M94 Schedule as of December 31, 2011

| Day | 1200 | 1230 | 1240 | 1300 | 1330 | 1400 | 1430 | 1500 | 1530 | 1600 | 1630 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  | 5715 (P) |  |  |  | ?? | 4900 |  |  |
| 2 |  |  |  | 5715 (P) |  |  |  | 6215 | 5115 |  |  |
| 3 |  |  |  | 5715 (P) | ?? |  | 5715 | 6215 | 5115 |  |  |
| 4 |  |  |  | 5715 (P) | ?? |  | 5715 | 4900 |  |  |  |
| 5 |  |  |  |  |  | 5115 | ?? | 4900 |  |  | 6310 |
| 6 |  |  |  | 6310 |  | 5115 | ?? |  | 6310 | 6215 (P) | 6310 |
| 7 |  |  |  | 6310 |  |  | 4600 |  |  | 6215 (P) |  |
| 8 |  |  |  |  |  |  | 4600 |  | 4600 |  |  |
| 9 |  | 6215 (P) |  |  | 6310 |  |  |  | 4600 | 6215 (P) |  |
| 10 |  | 6215 (P) |  |  | 6310 | M94 5715 | 5715 | 6215 | ?? | 6215 (P) | 5115 |
| 11 |  |  |  |  |  | M94 5715 | 5717 | 6215 | 5715 | 6215 | 5115 |
| 12 | 5715 (P) |  |  |  |  |  |  |  | 5715 |  | 5115 (P) |
| 13 | 5715 (P) |  |  |  |  |  | 5715 (P) |  | 6310 |  | 5115 (P) |
| 14 | 4900 (P) |  |  | ?? |  |  |  |  | 6310 |  |  |
| 15 | 4900 ( F ) |  |  |  |  |  | 6310 |  |  |  |  |
| 16 |  |  |  |  |  |  | 6310 | 4900 |  |  |  |
| 17 |  |  |  |  |  |  |  | 4900 | 5115 |  |  |
| 18 |  |  |  | 5715 | ?? |  |  | 6215 | 5115 |  |  |
| 19 |  |  |  | 5715 | ?? |  |  | 6215 |  |  | 6310 |
| 20 |  |  |  |  |  | 5115 | 5715 | 5115 |  |  | 6310 |
| 21 |  |  |  |  |  | 5115 | 5715 | 5115 | ?? | 6215 (P) |  |
| 22 |  |  |  | ?? |  |  | 4600 |  | ?? | 6215 (P) | 5115 |
| 23 |  |  |  |  | 6310 |  | 4600 |  |  |  | 5115 |
| 24 |  |  |  | 5715 | 6310 |  |  |  | 4600 | 6215 (P) |  |
| 25 |  |  | 5715 | 5715 |  |  |  |  | 4600 |  |  |
| 26 |  |  |  |  |  | M94 5715 |  | 6215 |  |  |  |
| 27 |  |  |  | 6310 |  | M94 5715 |  | 6215 |  |  |  |
| 28 |  |  | 4900 | 6310 |  |  |  |  | 5715 | 6215 |  |
| 29 |  |  |  |  |  |  |  |  | 5715 | 6215 |  |
| 30 |  |  |  |  |  |  |  |  |  |  |  |
| 31 |  |  |  |  |  |  |  | 5115 | 4900 |  |  |

This schedule is still somewhat tentative and in work, but should be fairly accurate. But notice I am no longer including the version number or date in the URL, the intent is to keep the most current version at that URL from now on.
Note that the schedule contains a time column not seen on previous schedules I made, in this case 1240 UTC. There have been a couple of transmissions in this time slot so I have included it on the schedule, but I will remove that column if these transmission do not repeat in the future. In the past V24 has used XX20 and XX40 time slots, but never for very long other than the 1620 time slot, which was used for over a year. In fact a few times it has used the XX20 and XX40 before the normal 1200 UTC start time.

T!
Mojave Desert, California, USA
Logs:
November receptions of V24:
11/04/2011, 1430 UTC, 5715 kHz, AM, V24, YL KK $5 f$ 11/04/2011, 1500 UTC, 4900 kHz, AM, V24, YL KK $5 f$ 11/05/2011, 1400 UTC, 5115 kHz, AM, V24, YL KK $5 f$ 11/06/2011, 1400 UTC, 5115 kHz, AM, V24, YL KK $5 f$ 11/06/2011, 1530 UTC, 6310 kHz, AM, V24, YL KK $5 f$ 11/06/2011, 1630 UTC, 6310 kHz, AM, V24, YL KK $5 f$ 11/07/2011, 1300 UTC, 6310 kHz, AM, V24, YL KK $5 f$ 11/09/2011, 1330 UTC, 6310 kHz, AM, V24, YL KK $5 f$

11/10/2011, 1430 UTC, 5715 kHz, AM, V24, YL KK $5 f$ 11/10/2011, 1500 UTC, 6215 kHz, AM, V24, YL KK $5 f$ 11/11/2011, 1430 UTC, 5715 kHz, AM, V24, YL KK $5 f$ 11/11/2011, 1500 UTC, 6215 kHz, AM, V24, YL KK $5 f$ 11/11/2011, 1530 UTC, 5715 kHz, AM, V24, YL KK $5 f$ 11/11/2011, 1600 UTC, 6215 kHz, AM, V24, YL KK 4f 11/11/2011, 1630 UTC, 5715 kHz, AM, V24, YL KK 4f 11/19/2011, 1500 UTC, 6215 kHz, AM, V24, YL KK $5 f$ 11/19/2011, 1630 UTC, 6310 kHz, AM, V24, YL KK $5 f$

December receptions of V24
12/02/2011, 1500 UTC, 6215 kHz, AM, V24, YL KK $5 f$ 12/02/2011, 1530 UTC, 5115 kHz, AM, V24, YL KK $5 f$ 12/03/2011, 1430 UTC, 5715 kHz, AM, V24, YL KK $5 f$ 12/03/2011, 1500 UTC, 6215 kHz , AM, V24, YL KK $5 f$ 12/03/2011, 1530 UTC, 5115 kHz, AM, V24, YL KK $5 f$ 12/04/2011, 1430 UTC, 5715 kHz, AM, V24, YL KK $5 f$ 12/04/2011, 1500 UTC, 4900 kHz, AM, V24, YL KK $5 f$ 12/09/2011, 1330 UTC, 6310 kHz, AM, V24, YL KK $5 f$ 12/09/2011, 1530 UTC, 4600 kHz, AM, V24, YL KK 4 f

12/10/2011, 1330 UTC, 6310 kHz, AM, V24, YL KK $5 f$ 12/10/2011, 1430 UTC, 5715 kHz, AM, V24, YL KK $5 f$ 12/10/2011, 1500 UTC, 6215 kHz, AM, V24, YL KK $5 f$ 12/10/2011, 1630 UTC, 5115 kHz , AM, V24, YL KK 4 f 12/11/2011, 1430 UTC, 5715 kHz, AM, V24, YL KK $5 f$ 12/11/2011, 1500 UTC, 6215 kHz, AM, V24, YL KK $5 f$ 12/11/2011, 1530 UTC, 5715 kHz , AM, V24, YL KK $5 f$ 12/11/2011, 1630 UTC, 5115 kHz, AM, V24, YL KK $4 f$ 12/15/2011, 1430 UTC, 6310 kHz , AM, V24, YL KK $5 f$ 12/16/2011, 1430 UTC, 6310 kHz, AM, V24, YL KK $5 f$ 12/16/2011, 1500 UTC, 4900 kHz, AM, V24, YL KK $5 f$ 12/17/2011, 1500 UTC, 4900 kHz, AM, V24, YL KK $5 f$ 12/17/2011, 1530 UTC, 5115 kHz, AM, V24, YL KK $5 f$ 12/18/2011, 1500 UTC, 6215 kHz, AM, V24, YL KK $5 f$ 12/18/2011, 1530 UTC, 5115 kHz, AM, V24, YL KK $5 f$ 12/19/2011, 1300 UTC, 5715 kHz, AM, V24, YL KK $5 f$ 12/19/2011, 1330 UTC, 6310 kHz, AM, V24, YL KK $4 f$

11/20/2011, 1430 UTC, 5715 kHz, AM, V24, YL KK $5 f$ 11/20/2011, 1500 UTC, 5115 kHz, AM, V24, YL KK $5 f$ 11/20/2011, 1630 UTC, 6310 kHz, AM, V24, YL KK $5 f$ 11/24/2011, 1300 UTC, 5715 kHz, AM, V24, YL KK $5 f$ 11/24/2011, 1330 UTC, 6310 kHz, AM, V24, YL KK $5 f$ 11/24/2011, 1530 UTC, 4600 kHz, AM, V24, YL KK $5 f$ 11/25/2011, 1530 UTC, 4600 kHz, AM, V24, YL KK $5 f$ 11/26/2011, 1500 UTC, 6215 kHz, AM, V24, YL KK $5 f$ 11/27/2011, 1500 UTC, 6215 kHz, AM, V24, YL KK $5 f$ 11/28/2011, 1300 UTC, 6310 kHz, AM, V24, YL KK $5 f$

12/23/2011, 1330 UTC, 6310 kHz, AM, V24, YL KK $5 f$ 12/23/2011, 1630 UTC, 5115 kHz , AM, V24, YL KK 4 f 12/24/2011, 1330 UTC, 6310 kHz, AM, V24, YL KK $5 f$ 12/24/2011, 1530 UTC, 4600 kHz, AM, V24, YL KK 4f 12/25/2011, 1240 UTC, 5715 kHz, AM, V24, YL KK $5 f$ 12/25/2011, 1300 UTC, 5715 kHz, AM, V24, YL KK $5 f$ 12/25/2011, 1530 UTC, 4600 kHz, AM, V24, YL KK 4f 12/31/2011, 1500 UTC, 5115 kHz, AM, V24, YL KK $5 f$ 12/18/2011, 1530 UTC, 4900 kHz, AM, V24, YL KK $5 f$

December receptions of M94
12/10/2011, 1400 UTC, 5715 kHz, MCW, M94, ID 935
12/11/2011, 1400 UTC, 5715 kHz , MCW, M94, ID 935

## V30

November 2011:
$10255 k H z 1556 z \quad 04 / 11[O M 50$ Group Message Rx3] 1609z Fair QRM3 QSB3

## Spectre

V30 10255kHz 1556z 04/11 Transcript:
Son Ca Goi Hai Dang Nam Hai Nam Ba Rx6
So dien 65
Tin nhan Rx3
So dien 65 Rx2
Tin nhan Rx3
So nhom 45 Rx 2
Son Ca Goi Hai Dang Nam Hai Nam Ba Rx6
So dien 65
Tin nhan Rx3
So dien 65 Rx2
Tin nhan Rx3
So nhom 45 Rx 2
Noi Dung Sua Dau
01340354247513228860736141928605659093431254826981
94697745540630964246118131822387829182605607897189 87747113084222619905785586963349068463474784942237 05773705881874976178569926604053426549632079427651 39339438673777237723530640679537525698255323690922

Son Ca Goi Dang Nam Nam Nam Ba Rx2
$R=$ Repeat
(Note transcript may not be correct due to shortwave reception. Same message as $25 / 05 / 2011$ )

## POLYTONES

## XPA b

This station whose schedule is heard at 0540/0600/0620z, with summer time variation, on Tuesdays and Thursdays is very strong in and around Europe. Those who have followed this station or its report will be aware that the message count has been larger than most stations.

When GSG-9 took the door down on the $18^{\text {th }}$ October, 2011 Heidrun Aschlung was reportedly sitting at a table with her radio linked to a laptop computer and in the process of receiving a message.
Much has been said of M12 the rapid Morse station that some say is for auto recording and machine decryption. Well the machine decryption maybe true and recording it means it's done automatically but the machine cannot make a decision on the missing character caused by splatter or the sudden reduction in gain due to a variety or reasons. There are five members of ENIGMA2000 who are quite capable of taking down M12 as it is sent; indeed I have sat next to Naval trained and two RAF trained ops who have taken fast traffic whilst holding a conversation, such are their skills.

The media reported hearing 'musical tones' as the raid continued; not the well known sound of Morse. In any case they only M12 active at the time of the raid ~0630 local was sending a null message.

That leads us to the voice stations - nothing known to be active at that time and there's apparently none now known touse music as tuning signals.
With nothing else available that points to the polytones and the known schedules of XPA ,b the first sending on 18/10/2011 was at 0440 z or 0640 local time in Germany.

On the day of the raid XPA b was sending a 777 group message over a 10 m 26 s slot as reported in these pages and followed by a nul message on $20^{\text {th }}$ October 2011 .

| XPA b | 5762 kHz | 0440 z | $18 / 10 / 2011$ | $[799100217007779306764746]$ Very strong | (10m26s) | PLdn | TUE |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| XPA b | 6962 kHz | 0500 z | $18 / 10 / 2011$ | $[799100217007779306764746]$ Very strong | (10m26s) | PLdn | TUE |
| XPA b | 7962 kHz | 0520 z | $18 / 10 / 2011$ | $[799100217007779306764746] V e r y ~ s t r o n g$ | $(10 \mathrm{~m} 26 \mathrm{~s})$ | PLdn | TUE |


| XPA b | 5762 kHz | 0440 z | $20 / 10 / 2011$ | $[79900005343000010000010140]$ Very strong | (2m26s) | PLdn | THU |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

However following the almost expected nul message after the arrest XPA b transmitted two full messages, on $25^{\text {th }}$ and $27^{\text {th }}$ October 2011 as my log records:

| XPA b | 5762 kHz | 0440 z | $25 / 10 / 2011$ | $[799100465005836486052151]$ Strong | (8m48s) | PLdn | TUE |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| XPA b | 5762 kHz | 0440 z | $27 / 10 / 2011$ | $[799100731003677085837632]$ Strong | NR | PLdn | THU |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Since this last full message sending the signals from XPA b have remained strong but the content has been a nul message.
There has been a discussion concerning the two full messages highlighted above as to why they were sent with the possibility there was no one to listen to them. There were two ideas put forward.

The first suggested the messages has already been composed and were sent anyway.
The second idea wassomewhat more insidious and suggests that the two arrested were performing the same functions as the Krogers [actually Cohen's] in the Portland Spy Ring - that of postmasters and communicators. If that is the case there may well be a fall back system for the 'agents' left out in the cold who have their own OTP/bespoke computer program and were already briefed to listen at a certain time [in this case for two sendings after the nul or the next week] for that instructional message should things go wrong.

The simple histogram shown below illustrates the total message count vs month across 2011 and the effect of the arrest:


Whether XPA, schedule b, continues in 2012 is unknown but it's worth remembering the Sunday 1830/1930 E06 schedule took some time to close after the arrest of its suspected user, Hermann Simm.

## XPA2

November 2011:

## Sun

16238kHz1320z
27/11[01813 000010000010140 ]
(2m11s) IW
Tue/Thu

5336kHz2030z
4636kHz2050z
4536kHz2110z

5336kHz2030z
4636kHz2050z
4536 kHz 2110 z
5336kHz2030z
4636kHz2050z
4536kHz2110z

5336kHz2030z
4636kHz2050z
4536kHz2110z
5336kHz2030z
4636kHz2050z
4536kHz2110z
5336kHz2030z
4636kHz2050z
4536kHz2110z
5336kHz2030z 4636kHz2050z
4536kHz2110z
5336kHz2030z
4636kHz2050z
4536kHz2110z

5336kHz2030z
4636kHz2050z 4536kHz2110z

## December 2011:

Tue
14538kHz1300z

Tue/Thu
4439kHz2030z 4639kHz2050z 5239kHz2110z

4439kHz2030z 4639kHz2050z $5239 k H z 2110 z$

4439kHz2030z
4639kHz2050z 5239 kHz 2110 z

4439kHz2030z 4639kHz2050z 5239kHz2110z

4439kHz2030z 4639kHz2050z 5239 kHz 2110 z

4439kHz2030z 4639kHz2050z 5239kHz2110z

4439kHz2030z 4639kHz2050z $5239 \mathrm{kHz2110z}$

06/12[00665 0008960326 64260] Very strong
01/11[00530 0021955165 73574] Very strong 01/11[00530 0021955165 73574] Very strong 01/11[00530 002195516573574$]$ Very strong

03/11[00530 0021955165 73574] Very strong 03/11[00530 002195516573574$]$ Very strong 03/11[00530 0021955165 73574] Very strong

08/11[06160 0000100000 10140] Very strong 08/11[06160 0000100000 10140] Very strong 08/11[06160 0000100000 10140] Very strong

10/11[06160 0000100000 10140] Very strong 10/11[06160 0000100000 10140] Very strong 10/11[06160 0000100000 10140] Very strong

15/11[06160 0000100000 10140] Very strong 15/11[06160 0000100000 10140] Very strong 15/11[06160 0000100000 10140] Very strong

17/11[06160 0000100000 10140] Very strong 17/11[06160 0000100000 10140] Very strong 17/11[06160 0000100000 10140] Very strong

22/11[00977 001657168073360$]$ Very strong 22/11[00977 001657168073360$]$ Very strong 22/11[00977 001657168073360$]$ Very strong

24/11[00977 001657168073360 ] Very strong 24/11[00977 001657168073360 ] Very strong 24/11[00977 001657168073360$]$ Very strong

29/11[05948 0000100000 10140] Very strong 29/11[05948 0000100000 10140] Very strong 29/11[05948 0000100000 10140] Very strong
$\qquad$

01/12[06160 0000100000 10140] Very strong 01/12[06160 0000100000 10140] Very strong 01/12[06160 0000100000 10140] Very strong

06/12[06160 0000100000 10140] Very strong 06/12[06160 0000100000 10140] Very strong 06/12[06160 0000100000 10140] Very strong

08/12[06160 0000100000 10140] Very strong 08/12[06160 0000100000 10140] Very strong 08/12[06160 0000100000 10140] Very strong

13/12[00896 001876174345511$]$ Very strong 13/12[00896 001876174345511$]$ Very strong 13/12[00896 0018761743 45511] Very strong, QSB2

15/12[00896 0018761743 45511] Fair 15/12[00896 0018761743 45511] Strong 15/12[00896 0018761743 45511] Strong

20/12[06160 0000100000 10140] Fair 20/12[06160 0000100000 10140] Fair 20/12[06160 0000100000 10140] Fair

22/12[06160 0000100000 10140] Very strong 22/12[06160 0000100000 10140] Very strong 22/12[06160 0000100000 10140] Very strong

| (4m59s) | PLdn | TUE |
| :---: | :---: | :---: |
| (4m59s) | PLdn | TUE |
| (4m59s) | PLdn | TUE |
| (4m59s) | PLdn | THU |
| (4m59s) | PLdn | THU |
| (4m59s) | PLdn | THU |
| (2m11s) | AIK, PLdn | TUE |
| (2m11s) | PLdn | TUE |
| (2m11s) | PLdn | TUE |
| (2m11s) | PLdn | THU |
| (2m11s) | PLdn | THU |
| (2m11s) | PLdn | THU |
| (2m11s) | PLdn | TUE |
| (2m11s) | PLdn | TUE |
| (2m11s) | PLdn | TUE |
| (2m11s) | PLdn | THU |
| (2m11s) | PLdn | THU |
| (2m11s) | PLdn | THU |
| (4m18s) | PLdn | TUE |
| (4m18s) | PLdn,AIK | TUE |
| (4m18s) | PLdn | TUE |
| (4m18s) | PLdn | THU |
| (4m18s) | PLdn | THU |
| (4m18s) | PLdn | THU |
| (2m11s) | AIK,PLdn | TUE |
| (2m11s) | AIK,PLdn | TUE |
| (2m11s) | AIK,PLdn | TUE |

(3m19s) Spectre
TUE

| (2m11s) | PLdn | THU |
| :---: | :---: | :---: |
| (2m11s) | PLdn | THU |
| (2m11s) | PLdn | THU |
| (2m11s) | PLdn | TUE |
| (2m11s) | PLdn | TUE |
| (2m11s) | PLdn | TUE |
| (2m11s) | PLdn | THU |
| (2m11s) | PLdn | THU |
| (2m11s) | PLdn | THU |
| (4m34s) | PLdn | TUE |
| (4m34s) | PLdn | TUE |
| (4m34s) | PLdn | TUE |
| (4m34s) | PLdn | THU |
| (4m34s) | PLdn | THU |
| (4m34s) | PLdn | THU |
| (2m11s) | PLdn | TUE |
| (2m11s) | PLdn | TUE |
| (2m11s) | PLdn | TUE |
| (2m11s) | AIK,PLdn | THU |
| (2m11s) | AIK,PLdn | THU |
| (2m11s) | PLdn | THU |

4439kHz2030z
4639kHz2050z 5239kHz2110z

| (3m30s) | PLdn | TUE |
| :--- | :--- | :--- |
| $(3 \mathrm{~m} 30 \mathrm{~s})$ | PLdn | TUE |
| $(3 \mathrm{~m} 30 \mathrm{~s})$ | PLdn | TUE |
| $(3 \mathrm{~m} 30 \mathrm{~s})$ | PLdn | THU |
| $(3 \mathrm{~m} 30 \mathrm{~s})$ | PLdn | THU |
| $(3 \mathrm{~m} 30 \mathrm{~s})$ | PLdn | THU |

## XSL

6250kHz 2042z
6250kHz 2141z 6250 kHz 2225 z

6250kHz 2117z
6445kHz 2044z
6445 kHz 2142 z 04/11 [Japanese Slot Machine] Very Weak QRN3 QSB3

03/11 [Japanese Slot Machine] Very Weak QRN3 QSB3
Spectre
THU
04/11 [Japanese Slot Machine] Very Weak QRN3 QSB3
05/11 [Japanese Slot Machine] Very Weak QRN4 QSB3
10/11 [Japanese Slot Machine] Very Weak QRN3 QSB3
03/11 [Japanese Slot Machine] Very Weak QRN3 QSB3
10/11 [Japanese Slot Machine] Very Weak QRN3 QSB3

Spectre
FRI
Spectre
SAT
Spectre THU
Spectre
THU
Spectre
FRI
Spectre
THU

## Digital, Incursions and Unexplained Signals

Welcome to the last column of 2011 and my thanks to all of those who have helped by either sending me logs, suggesting features and modes for the Rivet decoder or just helping out generally. I had hoped to make a little more progress with Rivet over the last few months but work and home commitments have really limited the amount of time I have been able to spend on it. As a result I have partly added a new mode that it now partly decodes but made very little progress with CROWD36 decoding.

The new mode goes by the technical names FSK 200/500 (in other words Frequency Shift Keying at a speed of 200 baud with a 500 Hz shift) and also FSK 200/1000 (the same again but with a 1000 Hz shift this time). Hans-Friedrich Dumrese sent a very interesting post to the group back on 10th September 2011 giving a frequency list and time table for stations using this mode he also suggested these stations may well be linked to Family 1B. Mike Chace-Ortiz also mentioned these stations in his excellent column in "Monitoring Times" magazine saying they had been around since the late 1990's. Sadly this station doesn't use the common Baudot code to encode its characters so all Rivet is able to do for now is display the FSK in a binary format. It has been suggested that these stations appear to send data in 288 bit blocks which may well suggest the data is Convolution coded for error correction which would also mean it isn't immediately readable. I really need some help from other members with this station. First we need someone to work out the frequencies it uses (which change monthly) and its full timetable. This will enable us to look at the traffic and see what progress can be made. For instance Mike suggests that you can tell by listening if a null message is being sent. So it would be useful to see if there is any link between when null messages are sent by these stations and by other Family 1B stations. Likewise if a really long message is sent by another Family 1B station is a long message sent by this data station ? Once we know that we can establish if there really is a link. Thanks to UDXF member "linkz" we know the January 2012 frequencies for the FSK200/1000 station which transmits once a week ..

| Tuesday | $08: 00$ | 10175 KHz |
| :--- | :--- | :--- |
| Tuesday | $08: 10$ | 8153.0 KHz |
| Tuesday | $08: 20$ | 6807.0 KHz |
| Tuesday | $14: 00$ | 14389 KHz |
| Tuesday | $14: 10$ | 12216 KHz |
| Tuesday | $14: 20$ | 10418 KHz |

The FSK200/500 station has schedules every Monday and Tuesday but I don't have the January frequencies for it yet I'm afraid. If you are interested in helping me with these stations please contact me directly.

Sadly I have little progress to report with CROWD36. The more I look at this the more I am convinced it is used purely in the link setup stage between Moscow Centre and a few far flung embassies. Once the link has been established I believe the actual message is send using OFDM. However I remain sure that the CROWD36 does contain some decodable and interesting information it just needs a little work. Regular E2K monitor Spectre has been busy logging CROWD36 and thanks to him we can confirm that the 14656 KHz 1300 weekday schedule is still active. In addition he has logged CROWD36 on the following frequencies which I haven't seen it logged on before ..

14454kHz 0835z 08/12 [In Progress] 0837z Fair QRN3 QSB3 Spectre THU
$16167 \mathrm{kHz} 0839 z$ 08/12 [In Progress] 0853z Fair QRN3 QSB3 Spectre THU
16306kHz 0707z 08/12 [In Progress] 0719z Weak QRN3 QSB3 Spectre THU
My thanks to Spectre for those.
My old friend Daniel in Argentina has been busy investigating a data signal new to this group which is used for communications between North Korean Embassies and the North Korean MFA. They are using a mode unique to North Korea which uses FSK (Frequency Shift Keying) at data rates of 600 baud and 1200 baud (depending presumably on the quality of the radio link). The system transmits data in bursts with the other side of link sending a data burst to confirm receipt then more data is sent. Daniel has found what appears to be a regular schedule operating on 16320 KHz at various times between 07:00 and 08:00. On the 8th December 2011 there seemed to be some kind of transmitter problem so at 09:10 the operators went back to using CW morse code and Daniel logged the entire exchange below ..

QSY 19503 QSY 19503
RYP RYP RYP V V V V V V V V
BK BK BK
QSL Z K
V (x18) BK QST I I I
QSA WD K
RYP 5 K V (x6)
OK V
R P T T T
RPT K RPT K
OK
ETS
OM T N T S
TKS G B SK
SIIOMTKS
GBSK
QSA 1 R P T K SK
I didn't hold out a lot of hope of hearing this schedule as I am located in Northern England its still dark until around 08:15 at the moment plus I suffer some QRM around 16 MHz from a neighbours plasma TV. However on 12th December 2011 I set my automatic system recording and left for work just after 07:00. When I got home and looked at the recordings I was rewarded with brief bursts of data between 07:05 and 07:11 that were characteristic of this North Korean data. This mode has also been logged on 16117 KHz and 17417 KHz and so its possible that there are more frequencies and schedules out there. We will be looking more closely at this mode in a future column so I welcome any further logs to the groups mailing list. Also my thanks to Daniel for all his work and investigations with this mode.


The screenshot above shows some 1200 baud North Korean FSK data on 16117 KHz (the data is marked with the red rectangle) when I recorded this image I didn't know what this data was. Many thanks to Leif D on the UDXF list for identifying it.

## Jochen's transcript:

SWR3 contribution about numbers stations,
time of transmission: Tue, Oct 25th, ca. 1120 UTC (that's 1320 CEST), reporter: Anno Wilhelm:
[Translation by Kopf]
Whenever both agents had to know, what their next job is, they turned the radio on. They got their orders via shortwave. Everybody could listen, also the "Bundesnachrichtendienst". On different frequencies, you can or could always hear monotone spoken groups of 5 numbers, beginning with an identification melody [then a sample of G04, beginning with the 3-note oddity, followed by "Achtung Achtung" and some 5 -figure groups]. Everybody can listen to the messages, but only the persons, for whom they're made, can decode them. The agents possess not only a reciever, but also a codebook, comparable for example with TAN lists, which you get from your bank.

The number groups, that are transmitted via radio, are combined by the agents with the numbers from their book, and the message itself is hidden in the new created number group.

Like the TANs from the bank, the codes are unusual after transmitting them.
They are never used again in this special combination. It's a one-way system, and that's why it's uncrackable for agents' hunters in Germany
On this simple but effective way, already the GDR led their West agents. Also the West German BND informed spies in foreign countries via shortwave till 1999 . Agents, who were placed for example in Germany before the re-unification, like the arrested couple, work in this way till today. But the main interest of the agents has changed strongly.

Today it less goes about the number of armor plates or the strength of soldiers in caserns, it more goes about patents, offics statistics, announcements or building plans.

The arrested man, a learned machine builder, is suspicious to have spied out office secrets at the car delivering company "Faurecia" in Hagenbach near Landau for many years.
"Faurecia" is one of the biggest car delivering companies in the world. It's specialized on car seats or complete exhaust systems, and it delivers all big car makers; the biggest customer is VW. The man had his last job in Balingen. Special interest in these informations of the industry have the Russians and the Chinese, says the report of the German Constitution's Protection ("Verfassungsschutz"). And also the technology changed with the years.

Assumedly, the work with number codes via shortwave is rare to find.
Note also that the spying couple has a daughter, the moderator of the whole transmission said in her introduction. Now we also know the house in MarburgMichelbach, where the couple was arrested: Im Ewigen Tal 3 (you'd translate it as "In the Eternal Valley 3")

Thanks Jochen

## PoSW's Items of interest in the media:-

## Items of Interest in the Media:-

Death of a dictator - and of a former dictator's daughter:- December the $20^{\text {th }}$ saw the news of the death of Kim Jong-il - ruler of North Korea reported widely. A strange character to say the least, living in luxury himself while the population of North Korea exist on the verge of starvation and at the same time pulling out all the stops to acquire nuclear weapons.


Perhaps the fires of Hell are burning a little brighter these days. Mr Kim enjoyed a modicum of fame a few years back when he featured in puppet form in the film, "Team America: World Police", well worth a look - turns up on TV every once in a while.

Also reported, towards the end of November, was the death of Joseph Stalin's daughter,
Svetlana. Joseph Stalin, for those who don't know, was the somewhat unpleasant ruler of the USSR for many years and no doubt a source of inspiration for Kim Jong-il, see above.

And unlikely as it may seem, there is a connection between Joseph and my part of the world because Svetlana's daughter - so that would be Stalin's granddaughter - went to school in the North Essex town of Saffron Walden, in the 1980s. I have often mentioned this to people over the years only to be met with disbelieving howls of derisive laughter - and of course, younger people have no idea who Stalin was; and in a similar vein they only know the name Churchill as a talking dog in a TV commercial for car insurance, and they probably think Roosevelt is a trendy American beer, alcohol by volume $3.8 \%$, please drink responsibly. However, a piece in my local paper the Weekly News of 1-December confirmed I had got it right and my memory was not playing tricks. The headline says, "School link with daughter of Stalin who has died in the US", and continues, "Soviet dictator Joseph Stalin's daughter, who lived in Cambridge after defecting to the West in the 1960's has died.

Svetlana Alliluyeva, who was also known as Lana Peters, quit the Soviet Union in 1967 and became a best-selling author
She initially settled in the USA, in Wisconsin, but in 1982 moved to Cambridge, where she lived in a flat of the Chaucer Road home of a Cambridge professor.
Her American-born daughter, Olga, then a teenager, went to the Friends School at Saffron Walden.
Mrs Peters' defection caused huge embarrassment to Communist leaders in Moscow, and was a public relations coup for the US government. She was critical of the Communist regime, and claimed she left the Soviet Union because the authorities there had mistreated her then husband, Brijesh Singh. On her arrival in New York City in 1967, she said: 'I have come here to seek the self-expression that has been denied me for so long in Russia.' She published a memoir about her life in Russia called Twenty Letters To A friend, which was a big success. In it she described her father, who died in 1953 after ruling the nation for 29 years, as a distant and paranoid man.

Soviet premier Alexei Kosygin denounced her as a 'morally unstable' and 'sick person' and added: 'We can only pity those who wish to use her for any political aim or for any aim of discrediting the Soviet country.'
The defection came at a high personal cost. She left two children behind in Russia - Josef and Yekaterina - from previous marriages.
Her remarkable story took another twist when in 1984 she left Cambridge and returned to Moscow. At a press conference there, she told reporters that she 'felt like a prisoner in exile' while living in the West.'
She later returned to Wisconsin, became a US citizen, and died there, aged 85, of cancer."
The "Friends School" in Saffron Walden, by the way, is an "independent", i.e. fee paying school outside the State education system, established by the Quaker "Society of Friends" many years ago. You need to have serious money to be be able to send your kids there,
unless he or she is exceptionally bright enough to win a scholarship. Never made it there myself, I went to the bog-standard County High across the other side of town - but I do recall we used to lust after the Friends School sixth-form girls in their smart green uniforms.

Albania - a post-Communist hell-hole of corruption run by gangsters of every variety, allegedly, soon to be a full member of the European Union which means that large numbers of the inhabitants of this poverty stricken cesspit will soon be heading to the United Kingdom to take full advantage of the British welfare system to which they will be fully entitled - and no politician in any of the three main political parties thinks this is a bad thing. Already Albanian criminals are reportedly well established here, especially in the nation's capital where they control much of the prostitution and people trafficking trade and are so known for their fearful violence and cruelty that the Metropolitan Police are afraid to go up against them and even if they do the Judiciary are scared of imposing long custodial sentences and deporting them. Just further examples of the lack of moral fibre in the Institutions which my generation were brought up to respect. So, then, it was no surprise to read a piece in the Metro newspaper of 8-December headlined, "Albanian spy chief on the run in Britain" which says:- "Albania's former intelligence chief is hiding in Britain as he tries to dodge extradition to his homeland where he faces torture and kidnapping charges.
Ilir Nazmi Kumbargo was due to appear at Westminster magistrates' court in London for an extradition hearing last Thursday but failed to attend.
The 58 -year old is accused of six offences of torture and abduction, including the kidnap of father-of-five Remzi Hoxha, who went missing in 1995. He has left his home in Fulham, west London, and police believe he is being harboured by friends.
'Although he does not pose a threat to members of the public, he is wanted in Albania,' said Detective Superintendent Pete Rance.
'The seriousness of his alleged crimes is the reason we want to find him. This is a high -profile international investigation that has involved public expense in the UK.'
Kumbargo claimed asylum in Britain 15 years ago by posing as a Kosovan refugee. Using the name Shaqa Shatri he was granted leave to remain and issued with a British passport.
He lived in a council house and his double life was only brought to an end in 2008 when he inadvertently used his real name to apply for welfare benefits.
Detectives, who had been looking for Kumbargo since June 2008 at the request of the Albanian government, were alerted and he was arrested three months later.
He has twice been granted bail since his capture despite objections from the Crown Prosecution Service which feared he may abscond."
Wars and rumours of wars:- Much speculation as to when the US/UK/Israeli attack on the Islamic Republic of Iran, and more specifically on the nuclear research facilities of that country, will take place. Things seemed to take a turn for the worse a few weeks back when an unruly mob broke into the British Embassy in Tehran and the British government expelled Iranian diplomatic personal from London in reprisal. Prime Minister Cameron has already indicated that Britain is ready, willing and able to take part in the forthcoming hostilities - although with the constant reduction in Britain's armed forces this will be somewhat limited in scope. Mr Cameron seems to be very pleased with himself following the perceived success of the recent campaign in Libya - don't rejoice too soon Mr C, things could still go horribly wrong - and he seems to be looking round at the Middle East and saying, "Now, ....... who's next? He doesn't seem to be able to make up his mind as to whether Syria should be up for some intervention or not. It has long been the goal of the West to bring about "regime change" in Iran. The son of the last Shah of Iran has turned up being interviewed on TV news programmes several times in the past few years. He is living "somewhere in the USA", his exact location is not allowed to be revealed, and the impression is that here is a head of state in waiting. No doubt he expects his well-nourished backside to be firmly placed upon the Peacock Throne before too long. This would be a re-run of the events which took place in Iran in 1951 when the United States and Britain intervened in Iran to overthrow a government which had nationalised Western oil interests.
Confirmation of the current British government's willingness to do it all again was reported in the Metro of 3-November under the headline, "British plan for raids on nuclear Iran" and says, "British armed forces are stepping up preparations for potential military strikes on Iran as the country triples its nuclear enrichment programme.
Pressure is being increased by Britain after it emerged the middle-eastern state is making more nuclear material in centrifuges inside a heavily fortified military base in the city of Qom.
In anticipation of a potential attack, military planners are reported to be examining where best to deploy Royal Navy ships and submarines as part of what would be an air and sea-launched campaign led by the US.
The RAF could also provide air-to-air refuelling and some surveillance capability, should it be required.
A Foreign Office official told Metro last night: 'Iran's nuclear plans give the lie to its claim that its programme is purely for peaceful purposes - its plan to triple its 20 per cent enrichment capacity and move it to Qom do not have a plausible peaceful explanation. If Iran gets nuclear weapons it could destroy the prospects for peace in the Middle East.
'There will be a real risk of a nuclear arms race and further conflict throughout the region.
'The international system for preventing nuclear proliferation - the non-proliferation treaty - could unravel and the dangers we and other countries face will multiply.'
Last night the Ministry of Defence played down strike preparations, saying they have been in place for some time.
It said they were secondary to a dual track strategy of pressure and engagement for a 'negotiated solution' in order to avoid a regional conflict.
However, one insider told Metro: 'We are worried about Iran's nuclear programme.' "
To end with, a sad "showbiz" story with a slight connection with the Kim Jong-il story.
One of the best TV series ever to come out of the USA was $\mathrm{M}^{*} \mathrm{~A}^{*} \mathrm{~S}^{*} \mathrm{H}$, set in the Korean War, and ran on BBC TV in the seventies. The Metro of 8 -December reported the death of the actor who played the part of Colonel Potter. "Col Potter dies at 96 " is the headline and says, " $\mathrm{M} * \mathrm{~A} * \mathrm{~S} * \mathrm{H}$ star Harry Morgan died yesterday aged 96. The actor, who won an Emmy for playing Col Sherman Potter in the long-running TV series, also featured in 50 films and a number of Broadway roles. Making his way to Hollywood in 1942 'without any assurance I would find work'. Morgan appeared on the gig screen opposite Henry Fonda, John Wayne, James Garner, Elvis Presley and Dan Aykroyd. He died at his home in Brentwood, California, after suffering from pneumonia.

Thanks Peter

## Now onto other news items

## Gizza Job



- Degree educated?
- Solid work experience as a Journalist in an Arab newspaper, television/radio station, or online website, or as a media monitor in a major organization responsible for monitoring and reporting on Arab media?
- Fluency in written and spoken Arabic and English?

If answering 'yes' to all of the above, please visit http://london.usembassy.gov/hrd/index.html or call 0207894 0205/0208, to find out further information about this unique job opportunity.


## Security at the Olympic games

## MI5 gets ready for the starter's gun

Thwarting the terrorist threat that hangs over the London Olympics
Oct 15th 2011 | from the print edition
http://www.economist.com/node/21532318
THE clock counting down the minutes to the 2012 London Olympics in the foyer of the riverside headquarters of MI5 is a reminder that the agency is preparing for what one source calls "a monstrous challenge in terms of scale and speed". Nearly all leave has been cancelled for that summer. Not surprisingly: it will be the first time that an Olympics has been held in a country where there is considered to be a high threat of terrorist attack. Only a few weeks ago, seven people from Birmingham were charged with terrorist offences.

Other agencies, not least the police, share responsibility for the security of the games. As well as terrorism, the authorities have identified public disorder, crime and "non-malicious hazards" (anything from summer flooding to an epidemic of infectious disease) as threats to their smooth running. But it is the magnet of the Olympics as the backdrop for a terrorist "spectacular", or a series of smaller attacks, that is most dreaded, and which it is above all the job of MI5 to identify and disrupt.

The sheer size of the games is daunting. There will be teams from 205 countries, at least 120 heads of state and 50,000 journalists. Over 10 m tickets will have been sold (including nearly 2 m for the Paralympics) for events at 34 sites around the country. The activities stretch over most of the summer, from a ten-week torch relay beginning on May 19th to the closing ceremony of the Paralympics on September 9th.

Nor is it only the official venues that will require protection: hundreds of parallel events will attract large crowds, such as televised screenings in London parks. As well as taking the lead on counter-terrorism, MI5 is expected to provide daily briefings for its counterparts from other countries, and to ensure that none of the hundreds of thousands of accredited volunteer helpers is a security risk.

There are four main types of threat that MI5 is on the lookout for. Three of them are "business as usual" for the service: organised plots hatched by al-Qaeda or affiliated jihadist groups; an individual with an Islamist background intent on carrying out a "lone wolf" attack; an attempt by a rogue Irish republican group to do something attention-getting on the mainland. The fourth is an "imported problem"-dissident groups from other countries who see an opportunity to strike at the head of a hated government while he is in London.

At present, it seems MI5 has no credible and specific intelligence about any planned attack during the games, though al-Qaeda has been trying without success to pull off another spectacular since the London bombings on July 7th 2005. Of the four main threats, it is the lone individual, self-radicalised on the internet and with no suspicious contacts or record of activism, who is the hardest to identify and deal with: organised networks are vulnerable to penetration. And since the destructive rampage of Anders Behring Breivik in Norway that left nearly 80 people dead, it is no longer assumed that such a person may be capable of doing only limited harm.

As the games draw closer, MI5 expects the number of intelligence leads to start mounting steeply, partly because other agencies will begin passing on "stuff" that they might normally ignore or filter. Even though most of the incoming intelligence may well be what is known as CRAPINT, the service is preparing to handle unprecedented volumes of material through a new sort of "leads triage" to determine priorities quickly. Big investments have been made in upgrading computer systems to speed up the processing of intelligence and the decisions that flow from it. The balance between gathering evidence for an arrest and acting promptly to disrupt a dangerous-looking plot will swing firmly towards the latter during the Olympics.

With seven years to prepare and an overall security budget for the games of $£ 600 \mathrm{~m}$, MI5 is confident that it is as ready as it can be, and so too are the police and other agencies with which it works closely. But terrorists have also had seven years to refine their plans and, as the service wearily says, not every threat can be stopped.
http://www.economist.com/node/21532318 [Thanks E]

They're still working on us to to keep us scared witless; why are they under the opinion that we can find TfL staffs or Police when we want them?

One thing is true; where suspicious persons and items need to be seen there really isn't anything quite like the Mk1 Human Eyeball.


## GCHQ spy recruitment code solved

The code which GCHQ, the intelligence agency, posted online to recruit a new generation of tech-savvy spies has been solved within hours of going online.
http://www.telegraph.co.uk/news/uknews/defence/8928134/GCHQs-search-for-new-generation-of-spies-goes-viral-on-Twitter.html
_Can you crack it?



Players are presented with a seemingly meaningless grid of 160 pairs of letters and numbers, and a countdown clock

By Katherine Rushton and Andy Bloxham

## 11:56AM GMT 01 Dec 2011

The agency told The Daily Telegraph that "a number of people" had solved the seemingly baffling grid of numbers and letters by noon on Thursday.

The feat was performed by the select few well within the deadline of midnight on the night of Sunday 11 December.

GCHQ declined to say how many people had cracked it or how quickly it had been done but it is understood that every individual who solves the problem will be offered a fast-track path to a job.

To be eligible for a job with the secret agency, however, the code-cracker must be a British citizen.

GCHQ introduced the puzzle - which contains no reference to the agency - to try to find people with the right skills for espionage in the computer age.
The viral campaign on Facebook and Twitter directs users to a website called "Can you crack it?"

Players who can crack a code are directed to the GCHQ website and invited to apply for a job. [See later]

After following the link, players are presented with a seemingly meaningless grid of 160 pairs of letters and numbers, and a countdown clock.

The game aims to attract a new generation of spies equipped with the right kind of mathematical skills to help Britain step up its security, in the face of "disturbing" levels of cyber crime.
"Code cracking skills are vital to secure the very best talent and to support the GCHQ mission in its fight against cyber threats," a GCHQ spokesman said. "Our target audience is not typically attracted to traditional advertising methods and may be unaware that we are recruiting for these kinds of roles.
"Their skills may be ideally suited to our work and yet they may not understand how they could apply them to a working environment, particularly one where they will have the opportunity to contribute so much.
"Traditionally, cyber specialists enter the organisation as graduates. However, with the threats to information and computer technology constantly evolving, it is essential that GCHQ allows candidates who may be self taught, but have a keen interest in code breaking and ethical hacking, to enter the recruitment route too."

GCHQ is looking to hire around 35 spies over the next few months, with expert code-breaking skills as well as other skills such as knowledge of rare languages.

The recruitment drive was launched after William Hague, the Foreign Secretary, disclosed an "exponential rise" in the number of cyber attacks, claiming there were now more than 600 "malicious" attacks on British government systems every day.

In October, Iain Lobban, who runs GCHQ, warned that the "UK's continued economic wellbeing" was under threat because sensitive data on government computers was being targeted. There was one particularly significant but unsuccessful attempt to steal data from the Foreign Office this summer, he said.
"We are witnessing the development of a global criminal market place - a parallel black economy where cyber dollars are traded in exchanged for UK citizens' credit card details," he added.

Cyber attacks on the UK's information technology systems were identified in last year's Strategic Defence and Security Review as one of the four most serious threats to national security, alongside terrorism, natural disasters and major accidents.

MI5 has been openly advertising for recruits since the 1990s. Historically, particularly bright students were invited for a "cup of tea and a chat" by the service.

Gentlemen do not read each other's mail
http://www.telegraph.co.uk/news/uknews/defence/8928134/GCHQs-search-for-new-generation-of-spies-goes-viral-on-Twitter.html

So having cracked the code you are presented with this screen:


You opt to find out more, only to read:


You push 'Apply' and then, after a couple of hours hard slog you are taken to the grist:
Vacancy Details
CYBER SECURITY SPECIALIST
Ref CYBER/SEC/SPEC/11 PHASE 2
Region South West
Location Cheltenham
Salary $£ 25,446$ (GC10) £31,152 (GC9)
Discipline Cyber
Grade GC10/GC9

Closing date for applications is 12 December 2011
VACANCY DESCRIPTION
Cyber Security Specialist - GC10
Senior Cyber Security Specialist - GC9
GCHQ is at the forefront of the nation's cyber security strategy and is dedicated to ensuring our government can operate in cyber space with confidence. We are committed to staying ahead of the swift pace demanded by the evolving digital world.

In a game where our adversaries operate with no rules and unknown boundary lines, you will be exploring the possibilities and inventing the seemingly impossible. We need pioneers that can push the technical boundaries and cope with the unknown. Our work involves a journey to the very depths of operating systems, complex networks and IT security fundamentals.

## REQUIREMENTS

We are looking for high calibre, enthusiastic and innovative individuals with strong technical skills. You need to be good at problem solving, delivering at pace and have the ability to work as part of a team.

## QUALIFICATIONS

Graduate Level: We are looking for graduates with a minimum 2:1 degree in a STEM related subject (Science, Technology, Engineering and Mathematics), preferably with a significant IT component.

Experienced: We are looking for people with specialist knowledge, professional qualifications and/or practical experience gained in a formal or informal setting.
Please ensure if you are an existing Civil Servant or have been involved in Government work in any capacity that the responses on your application and the content within your CV remains at an Unclassified level.

## RESPONSIBILITIES

Successful candidates will be engaged in a wide variety of roles where their problem solving skills will be key. The roles are across a number of areas within GCHQ's cyber mission, this is due to the wide remit we have to assist in the protection and defence of HMG and the Critical National Infrastructure. This remit includes the protection of government IT systems, carrying out research and development, discovering new threats, providing forensic, malware and intrusion analysis as well as being an expert in the wide variety of technologies used in the cyber world today and in the future.

We are not just looking for good people, we are looking for people who are, or have the potential to become, experts in their field. You will be using your technical expertise to pioneer solutions to complex problems, rather than just delivering to specification and as a result, you will often need to combine your technical skills with an enquiring mind.

## ADDITIONAL INFORMATION

## Salary

The starting salary for the GC10 position is $£ 25,446$.
The starting salary for the GC9 position is $£ 31,152$.
GCHQ reserves the right to assess candidates at both grades.
Your salary will be based upon working a 5 day week of 42 hours, including lunch intervals of 1 hour ( 37 hours net). A system of flexible working hours is in operation in most areas, dependant on business needs. Where available, this allows individuals to vary the times they start and finish work each day, enabling them to take up to 4 days additional leave ('flexi') per 4-week period.

GCHQ operates a non-consolidated performance related payment scheme which enables staff achieving prescribed levels of performance to attract the payment of a non-consolidated performance payment. Salary is paid in arrears by monthly transfer. Salary scales are reviewed annually in October.

Annual Leave
New entrants to GCHQ are given a basic holiday entitlement (otherwise known as 'leave') of 22 days per year, rising to 25 days after one years service.
After 10 years service your leave entitlement will rise to 30 days per year. GCHQ is flexible in the accrual of leave, enabling staff to carry over or anticipate annual leave from one year to another.

In addition, there are 10.5 days for public and privilege holidays.

## Pension

When you join GCHQ you are eligible to join the Civil Service pension arrangements. We offer two types of pension:

- NUVOS - This is an occupational pension scheme that currently has a $3.5 \%$ member contribution rate. As your employer we meet the rest of the cost of the scheme.
- PARTNERSHIP PENSION ACCOUNT - This is a stakeholder pension with a contribution from your employer. How much we pay is based on your age. We pay this regardless of whether you choose to contribute anything. You do not have to contribute, but if you do, we will also match your contributions up to $3 \%$ of your pensionable earnings. The contributions are in addition to the age-related contribution mentioned above.

The Application Process
NOTE: Application is On-line only. You are encouraged to complete the application form thoroughly, as an invitation to the next stage is based on this information. We cannot, unfortunately, pursue those applicants who do not provide all the relevant information on the application form.

Please also ensure you maintain your 'Main Details' section with any changes to your contact details -especially your email address - as this will be our main method of communicating with you.

Fully completed applications are then subject to the processes described in the Selection Process section below. Candidate expenses may be payable to candidates attending an Assessment Centre or Interview.

## Candidate Expenses

Applicants attending an Assessment Centre will have their qualifying UK incurred expenses paid, subject to a maximum 55 GBP for justifiable overnight accommodation, standard rail fares only or basic mileage allowance ( 15 pence per mile) if travelling by car. Details of how to claim will be provided by staff when you attend your assessment centre or interview. GCHQ does not pay claims for testing events.

## YOUR PUBLIC PROFILE

GCHQ is an organisation that has secrets of crucial importance to the security, defence and economic wellbeing of the UK. Foreign Intelligence Services are active in this country and are targeting these secrets. They are interested in members of the security or intelligence agencies and, in particular, those at the start of their career.

To protect yourself and the UK's secrets, don't take everyone at face value. Be particularly wary of anyone who shows undue interest in your future job plans; think about the security aspects of what you do. For example, be mindful of how you present yourself on the internet - do not post on social networking sites that you have applied to GCHQ! Think twice before you tell anyone where you may be going to work! Click here to read further about how you should manage your public profile.

If you'd like some more advice about staying secure on social networking sites, click here.
SELECTION PROCESS

## Application

Application is on-line only; Closing date for the campaign is 12 December 2011.

## Paper Sift

The initial paper sift of completed applications will be conducted by the Recruitment team to ensure applicants meet the minimum criteria and the nationality/residency requirements. (This sift also takes into account candidates who have declared a disability and who meet the minimum criteria).

Tests
Candidates successful at the sift stage will be invited to sit ability tests. Tests will be held in Manchester on 10 January 2012 and in Cheltenham on 14 January 2012

Applicants successful at the test stage will be invited to attend an assessment centre at GCHQ. The assessment centres are scheduled for 20 Feb to 09 Mar 2012 . As part of the normal selection and vetting process you will also talk to a Vetting Officer and you will be required to take a drugs test at this time.

Note: Applicants who are selected to attend an Assessment Centre and will be expected to bring with them their Degree or Professional Qualification Certificates as detailed in the minimum entry requirements above. Applicants awaiting qualification results must provide evidence of their result before a formal offer of appointment can be made.

Your invite to attend an Assessment Centre will also contain guidance on how to obtain a Credit Check Reference Agency Report. Please bring your report to the Assessment Centre stage as this will help to speed up the Background Enquiry Process should you be successful.

Background Enquiry Process
If successful, you will progress to the next stage of the recruitment process where we enquire into nationality, health, security and other matters. A formal offer of appointment cannot be made until these enquiries have been satisfactorily completed. This stage takes, on average, 3-5 months (but can be longer).

GCHQ operates a strict policy on the use of illegal drugs and the misuse or abuse of legal drugs.
Contacting Your Employer
As part of the background enquiry process and before the granting of any security clearance can be considered, a representative from our Personnel Security will need to contact your current employer. This is normally towards the end of the background enquiry process after your consent to contact them has been sought.

## Joining

Upon successful completion of background enquiries, candidates will be given a formal job offer. The Recruitment Team will call or email you to arrange a mutually convenient date to start work at GCHQ and will issue the relevant paperwork. All new entrants begin their careers by attending an induction course (run monthly).

Deployment
The roles available in the department are wide and varied. GCHQ will aim to identify people to work in specific areas from the very first stages of the recruitment process. Therefore you will need to ensure you answer all questions as honestly and comprehensively as you can. Every stage of the recruitment process is aimed at identifying the skills and competencies that GCHQ can best use. This could mean that you have a preference for one particular area of work but GCHQ places you in another. This is in recognition of the fact that GCHQ has identified you have aptitude in skills that match to other business areas needs. Therefore, your first posting is likely to be for a minimum of 3 years, in line with the departmental standard; after this you will be able to express a preference for subsequent roles.

## From Peter Staal, an excellent breakdown of events surrounding the activities of Erwin van Haarlem:

Quartly summary BVD - Q4-1989
translated by Peter Staal

## Index:

1 - International political developments the turnover in the DDR $\backslash$ interim review
2 - Activities of foreign intelligence- and security services

- Eastern European espionage in a changing political context
- Erwin van Haarlem. An "illegal" from the Czechoslovakian intelligence service.

3 - Anti-democratic currents?
4 - Political (violent) activism

- the anti-emperialistic undercurrent within the Dutch political activist movement
- squatting activism. Clearing Tesselschadestraat, Amsterdam
- Cooperation-agreement MARINEE
- Action-committtee Shell from South-Africa

5 - Terrorism

- RAF (rote armee fraction) attack on the president of the "Deutsche Bank".
- Developments in dissident Palestinian organisations

6 - Minorities
Great unrest in Suriname resistence

## Erwin van Haarlem, ILLEGAL FROM THE CZECHOSLOVAKIAN INTELLIGENCE SERVICE

## Introduction

Saturday morning on April 21988 the Dutchman Erwin van Haarlem was arrested in his flat in North London.
At the time of his arrest he was busy receiving a coded message, sent from Prague
Two days later Van Haarlem later transferred to the Ministry of Justice as a suspect for violation of Article 7 (espionage) of the "Official Secrets Act 1920".
The case against Erwin van Haarlem was held on March 1989 before the Old Bailey in London.
He was sentenced to 10 years imprisonment, to after that be followed-up by deportation from the United Kingdom.
Van Haarlem was an "illegal" of the Czechoslovakian intelligence service.

## Cause

The investigation in this case began in April 1986 after a possible chance of contact was observed between Van Haarlem and a London resident who was a suspected Soviet intelligence officer of the GRU.
Initially Van Haarlem was a suspected agent of the Soviet Military Intelligence GRU. However, as more became known about his background it became clear that they were dealing with an "illegal."

## Van Haarlem's background

Erwin van Haarlem was born in August 24, 1944 in a home for unwed mothers in Amsterdam.
His mother, [CENSORED], came from a strict religious family, that was heavily oriented towards the NSB (National Socialist Movement / Nationaal-Socialistische Beweging) in The Netherlands.

In that situation there was a short relationship with a German soldier of Polish origin that led to her pregnancy. Before birth, this soldier was transferred to France where he was killed in battle at Caen.
She was because of her extramarital pregnancy disowned by her parents.
In October 1944, fearing the consequences of her collaboration with the Germans she fled with her sister and child to Germany where, after wanderings she ended up in the Sudetenland.
The sisters were going to work in the war industry and she, who could no longer take care of her baby, left it at an orphanage in Teplitz.
After the war she returned to The Netherlands; Erwin was left-behind at the orphanage.
In the following years correspondence came through the Red Cross about the future of Erwin.
Under pressure from her parents she placed Erwin with foster parents in 1947.
The last thing that was heard about the real Erwin van Haarlem was is adoption.
Make up of legend
As the investigation has determined; the Czechoslovakian intelligence service has began with preparations for the legend of this illegal Erwin van Haarlem in
1970
In April of that year an inquiry, by request of the Czechoslovakian service, was instigated in Opole, the former residency of Erwin's biological father. [CENSORED]'s data was then removed from the population register.
In Sptember 1972 "Erwin van Haarlem" travelled, with a Czechoslovakian passport in his posession and with the permission of the Czechoslovakian authorities, to Austria to specialize himself for a couple of years in the hotel industry.
Six months later he wrote a letter to Her Majesty the Queen where he describes his personal circumstances and requests to be granted the Dutch nationality. Administrative inquiry showed that an "Erwin van Haarlem" on August 241944 was born in Amsterdam as a illegitimate child of a Dutch mother an got the Dutch nationality by birth and that he had never lost it.
On June 4th 1973 a Dutch passport was handed out to (the illegal) Erwin van Haarlem.

## Settlement in the United Kingdom

Erwin van Haarlem in 1975 became employed in [CENSORED] and settled in London.
During 10 years Van Haarlem worked at two branches of [CENSORED]. He rose from bar-tender to import chief and was a respected colleague.
In the period of July - October 1984 he left [CENSORED] temporarily to start a small store for himself.
In July 1985 he filed his resignation for October that same year. In that same time he changed from a rental apartment to a bought apartment, where he started his new business: an art trade.

## Investigation into the activities of Van Haarlem

Soon it appeared that Van Haarlem, although he had some artistic talent, knew very little about the trade of art.
His business hardly enabled him to make a living. Most of his time he spended at home, watching television. He didn't had any good friends, except for his bookkeeper and a doctor, both Jewish and who were his only acquaintances.
Since 1979 Van Haarlem showed an interest in Jewish subjects.
He became a member of several organisations who supported Russian "refuseniks" and predominantly maintained correspondence in Russian.
To his Jewish contacts he was keeping up appearances that he himself was half Jewish who left the CSSR (Czechoslovakia) in 1968/69 as a refugee.
He opened 2 bank accounts in 2 different Israeli banks. After that his activities increased and travelled on behalf of different organisations to countries including Israel, the USA and the USSR.
Trips
Besides the before mentioned trips Van Haarlem was going on business trips about twice a year to West-Germany, Austria or Switzerland.

Upon return he had large amounts of money at his disposal, that he deposited this money in several bank accounts.
[CENSORED]
It would be impossible that this money came from his employment at [CENSORED] or his art trade.

## Arrest

On November 1987 it became apparent that there was a certain pattern in Erwin van Haarlem's lifestyle.
He was, for example, at home every Saterday morning at the time a radio coded-message was transmitted from Prague.
Till now it was assumed that Van Haarlem was working for the Russian secret service.
The knowledge that Van Haarlem, having a glance at the reception of coded messages from Prague and was probably a Czechoslovakian illegal, led to a more focused investigation.
Although only little was known about Van Haarlem's actual intelligence activities it was decided to arrest him before his next trip to the mainland.
This opportunity arose on April 2nd 1988.
Scotland Yard Special Branch personnel entered his apartment Saturday morning on the moment when he was receiving coded message from Prague
Van Haarlem, who was totally flabbergasted, fell from his chair and lost his radio-earpiece from which Morse code clearly sounded.
Immediately after his arrest Van Haarlem assisted Scotland Yard in their initial assessment of his apartment.
On his directions cipher material was found, hidden in a bar of soap, between brackets in his meter cabinet.
On this last spot was also a draft intelligence report found.
Erwin van Haarlem, who did not use his false Dutch identity, claimed to be Czech and asked the Czechoslovakian Embassy in London to be notified of his arrest.
Shortly after his arrest he was transferred to a police station where he gave his first testimony based on his legend.
At the time compromising questions were being asked he became silent and refused every sort of coorporation.
From his bookkeeping-records it was ascertained that Van Haarlem "puts" his intelligence rapports in magazines.
Research on "Secret Writing" on 2 copies, who were ready for delivery, turned out negative,
N.B.: The Czechoslovakian intelligence service is known for using these advanced shortwave-techniques.

## The Trial

During the trial the defense argued that the suspect had not been conducting suspicious activity that focused against interests of the United Kingdom.
The prosecutor opposed that by stating that Van Haarlem, through his contact with the Czechoslovakian intelligence service, could have bring great harm to national security.

The evidence that was submitted showed that Van Haarlem was the recipient of 200 operational coded messages during the period 1975-1988. There was no doubt about his false identity.

The sentence was in accordance with the demand of the prosecutor.

## Thanks Peter

# Chart Section Index 

1. Logging Abbreviations Explained
2. European Number Systems
3. Prediction Chart
4. M01, M01b and M45 Schedules
5. M12 December 2011 and Yearly repeat schedules
6. Family 1a History and predictions
7. Family 1b [E07]
8. Family III
9. G06
10. S06s Regular Schedule
11. Cuban Schedules, November and December 2011
12. XPA Polytone Schedules, November and December 2011
13. European Counting Systems from '5Z4'

## Logging Abbreviations explained.

The ENIGMA 2000 Standard logging should take this form without any personalised abbreviations:


Repeated: $\quad$ R5m [repeated 5 mins]; R5s[repeated 5seconds], R5x [Repeated 5 times]

## Received signal strength assessment.

Some receivers possess ' $S$ ' meters that give a derived indication of signal strength caused by changes within that receiver. Calibration may, or may not be accurate and the scale, may or may not, be the same as that on other receivers. Some receivers have no meter yet produce acceptable results.

Therefore we prefer the quality of the signal to be assessed by the particular monitor.
Guidance for this can be sought from the Q code:
QSA What is the strength of my signals (or those of...)?
The strength of your signals (or those of...) is...

1) scarcely perceptible.
2) weak.
3) fairly good.
4) good.
5) very good.
[QSA1 S0 to S1; QSA2 S1 to S3; QSA3 S3 to S6; QSA4 S6 to S9; QSA4 S9 and above]
Sooner than put a numerical value we state: Very Weak, Weak, Fair, Strong or Very Strong.

## Noise, Static and Fading.

Again guidance from the Q code:

## Noise:

QRM Are you being interfered with?
I am being interfered with

1) nil
2) slightly
3) moderately
4) severely
5) extremely.

Note: in the sample the monitor has stated QRM2 which means 'slight noise'; had the interference been from a broadcast station you might have read 'BC QRM2' and so on.

Static [Lightning and other atmospheric disturbance]:
QRN Are you troubled by static?
I am troubled by static

1) nil
2) slightly
3) moderately
4) severely
5) extremely.

Fading [Propagational disturbance]
QSB Are my signals fading?
Your signals are fading

1) nil
2) slightly
3) moderately
4) severely
5) extremely.

Note: in the sample the monitor has stated QSB2 which means 'slight fading' where the received signal obviously fades but the message is still intelligible.

The use of QRM1, QRN1 and QSB1 is not expected; if there is no such aberration to the signal it need not be stated.

## Day Abbreviation

Self explanatory: SUN, MON, TUE, WED, THU, FRI, SAT

## Mode used in transmission

Generally the mode of transmission is not stated, being available in the ENIGMA Control List. Should the expected mode change then this can be stated as: CW [Carrier Wave] MCW[Modulated Carrier Wave] ICW [Interrupted Carrier Wave] generally associated with Morse transmission; AM [Amplitude Modulation], LSB [Lower Sideband], USB[Upper Sideband] generally associated with Voice transmission.

## Languages used

The ident of a station generally states the language in use, E [English], G[German] S [Slavic], V[All other languages].

## Non voice stations

M [Morse and TTY] SK [Digital modes] X [Other modes]

Ideally we would like to see logs offered in our standard format allowing the editorial staff to process the results quickly rather than having to manually re-format. Anyone submitting logs should refrain from using their own abbreviations or shortening our abbreviations eg. Su Mo Tu etc.

See a correct example below which is now self explanatory:
V02a 5883kHz 0700z 06/06[A63752 57781 31521] Fair QRN2 end uk PLdn SAT
And the incorrect version:
V2a 5883k 07:00 06/06/2009 A/63752-57781-31521 S3 PLdn SA

## Additional Info:

Own station idents should not be used.
When an unidentifiable station is submitted please supply the obvious details:
Freq, Time start and end, Date, Message content, particularly preamble and message content and ending. Language details are helpful, particularly any strange pronunciations.

## European Number Systems

| English | zero | one | two | three | four | five | six | seven | eight | nine |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Bulgarian | nul | edín | dva | tri | chétiri | pet | shest | sédem | ósem | dévet |
| French | zero | un | deux | trois | quatre | cinq | six | sept | huit | neuf |
| German^ | null | eins | zwei | drei | vier | fünf | sechs | sieben | acht | neun |
| Spanish | cero | uno | dos | tres | cuatro | cinco | seis | siete | ocho | nueve |
| Czech | nula | jeden | dva | tr^i | chtyr^i | pêt | shest | sedm | osm | devêt |
| Polish | zero | jeden | dwa | trzy | cztery | pie,c' | szes'c' | siedem | osiem | dziewie,c' |
| Romanian | zero | unu | doi | trei | patru | cinci | s,ase | s,apte | opt | nouâ |
| Slovak* | nula | jeden | dva | tri | shtyri | pät' | shest' | sedem | osem | devät' |
| *West | nula | jeden | dva | try | shtyry | pet | shest | sedem | ossem | devat |
| *East | nula | jeden | dva | tri | shtyri | pejc | shesc | shedzem | osem | dzevec |
| Serbo-Croat | nula | jèdan | dvâ | trî | chètiri | pêt | shêst | sëdam | ösam | dëve:t |
| Slovene | nula | ena | dva | tri | shtiri | pet | shest | sedem | osem | devet |
| Russian | null | odín | dva | tri | chety're | pyat' | shest' | sem' | vósem' | dévyat' |

$\wedge$ Some German numerals have a radio accent. The numbers in question are:

$$
\begin{aligned}
& 2 \text { ZWEI pronounced by some TXs, as TSWO. } \\
& 5 \text { FUNF some pronounce it as FUNUF poss hrd as a fast TUNIS } \\
& 9 \text { NEUN pronounced by some as NEUGEN. }
\end{aligned}
$$

This is totally in keeping with some German armed forces stations and corresponds to our WUN, FOWER, FIFE, NINER

## Arabic Numerals [E25 and V08]

| English | zero | one | two | three | four | five | six | seven | eight | nine |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Arabic | sifr | wahid | itnien | talata | arba | khamsa | sitta | saba | tamanya | tissa |
|  | $\cdot$ | 1 | $\zeta$ | $r$ | $\varepsilon$ | 0 | 7 | $\vee$ | $\wedge$ | 9 |

## Numeral systems used on selected Slavic Stations [Stations apparently discontinued]

|  | S11a <br> Cherta | S11 <br> Kreska | Actual <br> Polish[S11] | S10d | S17c |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| $\mathbf{0}$ | nul | zero | zero | Nula* | Nula* |  |
| $\mathbf{1}$ | adinka | yezinka | jedynka | Jeden^ | Jeden^ |  |
| $\mathbf{2}$ | dvoyka | dvonta | dwójka | dva | dva |  |
| $\mathbf{3}$ | troyka | troika | trójka | tri ‘ | tri ‘ |  |
| $\mathbf{4}$ | chetyorka | chidiri | cztery | shytri | shytri |  |
| $\mathbf{5}$ | petyorka | peyonta | piątka | pyet | pyet |  |
| $\mathbf{6}$ | shest | shes | sześć | shest | shest |  |
| $\mathbf{7}$ | syem | sedm | siedem | sedoom | sedoom |  |
| $\mathbf{8}$ | vosyem | osem | osiem | Osoom~ | Osoom~ |  |
| $\mathbf{9}$ | dyevyet | prunka | dziewięć | devyet | devyet |  |
|  |  |  |  |  |  |  |


| ¢ | $\begin{aligned} & \underset{\sim}{0} \\ & \underset{H}{3} \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & 3 \end{aligned}$ | $\underset{\underset{H}{\mathrm{~J}}}{\substack{\text { a }}}$ | $\begin{aligned} & -4 \\ & -4 \\ & y \\ & \hline 10 \end{aligned}$ | $\begin{aligned} & +\underset{\sim}{\tilde{0}} \\ & \sim \end{aligned}$ | $\begin{aligned} & \text { E } \\ & \text { ๙ } \end{aligned}$ | UTC | wk | Stn | Fam | $\begin{aligned} & \text { Jan } \\ & \mathrm{kHz}, \quad \text { ID, .. } \end{aligned}$ | $\begin{aligned} & \text { Feb } \\ & \text { kHz, ID, . . } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | x | x | 0130/0230 |  | E06 | 01A | $\begin{aligned} & 5783 / 4489 \\ & 759 \end{aligned}$ | $\begin{aligned} & 5845 / 4820 \\ & 759 \end{aligned}$ |
|  | x |  | x |  |  |  | 0440/0500/0520 |  | M12 | 01B | $\begin{aligned} & 4443 / 5043 / 5843 \\ & 408 \end{aligned}$ | $\begin{aligned} & 5872 / 6772 / 7672 \\ & 876 \end{aligned}$ |
| x |  |  |  |  |  |  | 0450 |  | E11 | 03 | $\begin{gathered} 5082 \\ 416 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 5082 \\ 416 / 00 \end{gathered}$ |
|  |  | x |  |  |  |  | 0530/0540 |  | S06S | 01A | $\begin{aligned} & 9435,11075 \\ & 153 \end{aligned}$ | $\begin{aligned} & 9435,11075 \\ & 153 \end{aligned}$ |
|  |  |  | x |  |  |  | 0530/0550/0610 |  | E07A | 01B | $\begin{aligned} & 5146 / 5846 / 6846 \\ & 188 \end{aligned}$ | $\begin{aligned} & 5146 / 5846 / 6846 \\ & 188 \end{aligned}$ |
|  |  | x |  | x |  |  | 0545 |  | E11 | 03 | 348/00, search | 348/00, search |
|  |  |  |  | x |  |  | 0600/0610 |  | S06S | 01A | $\begin{aligned} & 5460 / \\ & 934, \text { search } \end{aligned}$ | $\begin{aligned} & 5460 / \\ & 934, \text { search } \end{aligned}$ |
|  |  |  | X | x |  |  | 0600/0700 |  | E06 | 01A | $\begin{array}{r} \text { /15810 } \\ 139, \text { search } \end{array}$ | $\begin{array}{r} / 17470 \\ 702, \\ \text { search } \end{array}$ |
|  | x |  | x |  |  |  | 0645 |  | E11 | 03 | $\begin{gathered} 7840 \\ 517 / 00 \end{gathered}$ | $\begin{gathered} 7840 \\ 517 / 00 \end{gathered}$ |
|  |  |  |  |  |  | x | 0700 |  | M01 | 14 | $\begin{aligned} & 5465 \\ & 197 \end{aligned}$ | $\begin{gathered} 5465 \\ 197 \end{gathered}$ |
|  |  |  |  | x |  |  | 0700/0710 |  | S06S | 01A | $\begin{aligned} & 7150 / 8215 \\ & 169 \end{aligned}$ | $\begin{aligned} & 7150 / 8215 \\ & 169 \end{aligned}$ |
|  | x |  |  |  |  |  | 0700/0710(15) |  | S06S | 01A | $\begin{aligned} & 5250 / 6320 \\ & 374 \end{aligned}$ | $\begin{array}{r} 5250 / 6320 \\ 374 \end{array}$ |
|  |  |  |  | x |  |  | 0700/0720/0740 |  | M12 | 01B | $\begin{aligned} & 9138 / 10538 / 12138 \\ & 138 \end{aligned}$ | $\begin{aligned} & 9338 / 10638 / 12138 \\ & 238 \end{aligned}$ |
|  | x |  |  | x |  |  | 0710 |  | E11 | 03 | $\begin{aligned} & 10800 \\ & 633 / 00 \\ & \hline \end{aligned}$ | $\begin{aligned} & 10800 \\ & 633 / 00 \end{aligned}$ |
|  | x |  | x |  |  |  | 0745 |  | E11 | 03 | $\begin{aligned} & 16112 \\ & 335 / 00 \end{aligned}$ | $\begin{aligned} & 16112 \\ & 335 / 00 \end{aligned}$ |
|  |  |  | x |  |  |  | 0800 |  | E17Z | 01A | $\begin{aligned} & 11170,9820 \\ & 674 \end{aligned}$ | $\begin{aligned} & 11170,9820 \\ & 674 \end{aligned}$ |
| x |  |  |  |  |  |  | 0800 |  | G0 6 | 01A | $\begin{aligned} & 5363 \\ & 215 \end{aligned}$ | $\begin{aligned} & 5363 \\ & 215 \end{aligned}$ |
|  | x |  |  |  |  |  | 0800/0810 |  | S06S | 01A | $\begin{aligned} & 10265 / 9135 \\ & 352 \end{aligned}$ | $\begin{aligned} & 10265 / 9135 \\ & 352 \end{aligned}$ |
|  | x | x |  |  |  |  | 0800/0810 |  | S06S | 01A | $\begin{aligned} & 5810 / 7440 \\ & 418 \end{aligned}$ | $\begin{array}{\|l\|l\|} \hline 5810 / 7440 \\ 418 \end{array}$ |
|  | x |  | x |  |  |  | 0800/0820/0840 |  | E07 | 01B | 5416/5816/ 6916 489, search | $\begin{aligned} & 5867 / 6767 / 7367 \\ & 873 \end{aligned}$ |
| x |  | x |  |  |  |  | 0800/0820/0840 |  | M12 | 01B | $\begin{aligned} & 14736 / 13536 / 12136 \\ & 751 \end{aligned}$ | $\begin{aligned} & 17427 / 15827 / 14527 \\ & 485 \end{aligned}$ |
|  | x |  | x |  |  |  | 0820 |  | E11 | 03 | $\begin{gathered} 7317 \\ 438 / 00 \end{gathered}$ | $\begin{gathered} 7317 \\ 438 / 00 \end{gathered}$ |
|  |  |  |  | x |  | x | 0820 |  | M03 | 03 | $\begin{gathered} 4828 \\ 761 / 00 \end{gathered}$ | $\begin{gathered} 4828 \\ 761 / 00 \end{gathered}$ |
|  |  | x |  |  |  |  | 0820/0830 |  | S06S | 01A | $\begin{aligned} & 6880 / 7840 \\ & 471 \end{aligned}$ | $\begin{array}{\|l} 6880 / 7840 \\ 471 \end{array}$ |
| x |  |  | x |  |  |  | 0830 |  | E11 | 03 | $\begin{array}{r} 9446 \\ 649 / 00 \\ \hline \end{array}$ | $\begin{array}{r} 9446 \\ 649 / 00 \\ \hline \end{array}$ |
|  |  | x |  |  |  |  | 0830/0840 |  | S06S | 01A | $\begin{aligned} & 7335 / 11830 \\ & 745 \end{aligned}$ | $\begin{aligned} & 7335 / 11830 \\ & 745 \end{aligned}$ |
|  |  |  | x |  |  |  | 0840/0850 |  | S06S | 01A | $\begin{aligned} & 9260 / 11415 \\ & 328 \end{aligned}$ | $\begin{aligned} & 9260 / 11415 \\ & 328 \end{aligned}$ |
| x |  | x |  |  |  |  | 0900 |  | E11 | 03 | $\begin{gathered} 9446 \\ 534 / 00 \\ \hline \end{gathered}$ | $\begin{array}{r} 9446 \\ 534 / 00 \\ \hline \end{array}$ |
|  |  |  | x |  | x |  | 0900 |  | E11 | 03 | $\begin{gathered} 4441 \\ 248 / 00 \end{gathered}$ | $\begin{gathered} 4441 \\ 248 / 00 \\ \hline \end{gathered}$ |
|  |  |  | X |  |  |  | 0900/0910 |  | S06S | 01A | $\begin{aligned} & 12952 / 13565 \\ & 167 \end{aligned}$ | $\begin{aligned} & 12952 / 13565 \\ & 167 \end{aligned}$ |
|  | x |  |  | x |  |  | 0915 |  | S11A | 03 | $\begin{gathered} 7504 \\ 484 / 00 \end{gathered}$ | $\begin{gathered} 7504 \\ 484 / 00 \end{gathered}$ |
|  |  | x | x |  |  |  | 0930 |  | E11 | 03 | $\begin{gathered} 9079 \\ 270 / 00 \end{gathered}$ | $\begin{gathered} 9079 \\ 270 / 00 \end{gathered}$ |


| ¢ | $\begin{gathered} 0 \\ \underset{H}{3} \end{gathered}$ | $\begin{aligned} & 0 \\ & 0 \\ & 3 \end{aligned}$ | $$ |  | $$ | $\begin{aligned} & \xi \\ & \xi \\ & \vdots \end{aligned}$ | UTC | wk | Stn | Fam | $\begin{array}{lll} \hline \text { Jan } \\ \mathrm{kHz}, ~ I D, ~ . . . ~ \end{array}$ | $\begin{array}{ll} \hline \text { Feb } \\ \text { kHz, ID, . . } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | x |  |  | 0930/0940 |  | S06S | 01A | $\begin{aligned} & 11780 / 12570 \\ & 516 \\ & 9445 / 10195 \text { search } \end{aligned}$ | $\begin{aligned} & 11780 / 12570 \\ & 516 \\ & 9445 / 10195 \text { search } \end{aligned}$ |
| x |  |  | x |  |  |  | 0940 |  | G11 | 03 | $\begin{gathered} 6480 \\ 275 / 00 \end{gathered}$ | $\begin{gathered} 6480 \\ 275 / 00 \end{gathered}$ |
|  |  | x |  |  |  |  | 1000/1010 |  | S06S | 01A | $\begin{aligned} & 12365 / 14280 \\ & 729 \end{aligned}$ | $\begin{aligned} & 12365 / 14280 \\ & 729 \end{aligned}$ |
| x |  |  | x |  |  |  | 1015 |  | S11A | 03 | $\begin{aligned} & 12530 \\ & 475 / 00 \\ & \hline \end{aligned}$ | $\begin{aligned} & 12530 \\ & 475 / 00 \\ & \hline \end{aligned}$ |
|  | x |  |  | x |  |  | 1020 |  | S11A | 03 | $\begin{array}{r} 9610 \\ 426 / 00 \\ \hline \end{array}$ | $\begin{array}{r} 9610 \\ 426 / 00 \\ \hline \end{array}$ |
|  |  | x |  |  | x |  | 1020 |  | S11A | 03 | $\begin{gathered} 6433 \\ 221 / 00 \end{gathered}$ | $\begin{gathered} 6433 \\ 221 / 00 \end{gathered}$ |
|  | x | x |  |  |  |  | 1045 |  | E11 | 03 | $\begin{array}{c\|} \hline 8091 \\ 469 / 00 \\ \hline \end{array}$ | $\begin{gathered} 8091 \\ 469 / 00 \\ \hline \end{gathered}$ |
| x |  |  |  |  |  | x | 1045/1050 |  | E11 | 03 | $\begin{gathered} 4441 \\ 127 / 00 \end{gathered}$ | $\begin{gathered} 4441 \\ 127 / 00 \end{gathered}$ |
|  | x | x | x |  |  |  | 1115 |  | M03 | 03 | $\begin{array}{\|cl} 4828 & \\ 272 / 00 & \text { (Tue) \& } \\ 650 / 00 & \text { (Wed/Thu) } \end{array}$ | $\begin{array}{\|cl} 4828 & \\ 272 / 00 & \text { (Tue) \& } \\ 650 / 00 & \text { (Wed/Thu) } \end{array}$ |
|  |  |  |  |  |  | $x$ | 1120/1220 | 2 | E06 | 01A | $\begin{aligned} & 6946 / 5913 \\ & 829 \\ & \hline \end{aligned}$ | $\begin{aligned} & 6946 / 5913 \\ & 829 \end{aligned}$ |
|  | x |  |  |  | x |  | 1135/1140 |  | M03 | 03 | $\begin{gathered} 5358 \\ 786 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 5358 \\ 786 / 00 \\ \hline \end{gathered}$ |
|  |  | x | x |  |  | x | 1155 |  | E11 | 03 | $\begin{aligned} & 15632 \\ & 718 / 00 \\ & \hline \end{aligned}$ | $\begin{aligned} & 15632 \\ & 718 / 00 \end{aligned}$ |
|  |  | x |  |  |  |  | 1200 |  | G06 | 01A | $\begin{gathered} 4778 \\ 439 \\ \hline \end{gathered}$ | $\begin{gathered} 4778 \\ 439 \\ \hline \end{gathered}$ |
|  |  |  | x |  |  |  | 1200 |  | G06 | 01A | 215, search | 215, search |
|  |  | x |  |  |  |  | 1200/1210 |  | S06S | 01A | $\begin{aligned} & 7030 / 6305 \\ & 481 \\ & \hline \end{aligned}$ | $\begin{aligned} & 7030 / 6305 \\ & 481 \\ & \hline \end{aligned}$ |
|  |  |  | x |  |  |  | 1200/1210 |  | S06S | 01A | $\begin{aligned} & 10580 / 9950 \\ & (12155 / 10920) \\ & 425 \end{aligned}$ | $\begin{aligned} & 10580 / 9950 \\ & (12155 / 10920) \\ & 425 \end{aligned}$ |
|  |  |  |  |  | x |  | 1200/1210 |  | S06S | 01A | $\begin{aligned} & 8680 / 8260 \\ & 254 \\ & \hline \end{aligned}$ | $\begin{aligned} & 8680 / 8260 \\ & 254 \end{aligned}$ |
|  | x |  |  |  |  |  | 1230/1240 |  | S06S | 01A | $\begin{aligned} & 5810 / 6770 \\ & 278 \end{aligned}$ | $\begin{aligned} & 5810 / 6770 \\ & 278 \end{aligned}$ |
|  |  | x |  |  |  |  | 1230/1240 |  | S06S | 01A | $\begin{aligned} & 4580 / 6420 \\ & 967 \end{aligned}$ | $\begin{aligned} & 4580 / 6420 \\ & 967 \\ & \hline \end{aligned}$ |
|  |  |  | x |  |  |  | 1230/1240 |  | S06S | 01A | $\begin{aligned} & 7865 / 5310 \\ & 314 \\ & \hline \end{aligned}$ | $\begin{aligned} & 7865 / 5310 \\ & 314 \\ & \hline \end{aligned}$ |
|  | x |  |  |  |  | x | 1240 |  | E11 | 03 | $\begin{gathered} 4958 \\ 349 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 4958 \\ 349 / 00 \end{gathered}$ |
|  |  |  | x |  |  |  | 1300 |  | G06 | 01A | 215, search | 215, search |
| x |  |  |  |  |  |  | 1300/1320/1340 |  | M12 | 01B | $\begin{aligned} & 12217 / 11117 / 10417 \\ & 214 \end{aligned}$ | $\begin{aligned} & 12217 / 11117 / 10417 \\ & 214 \end{aligned}$ |
| x |  |  |  |  |  |  | 1300/1310 |  | S06S | 01A | $\begin{aligned} & 8420 / 10635 \\ & 831 \end{aligned}$ | $\begin{aligned} & 8420 / 10635 \\ & 831 \end{aligned}$ |
|  |  |  | x |  |  | x | 1320 |  | M03 | 03 | $\begin{gathered} 4828 \\ 437 / 00 \end{gathered}$ | $\begin{gathered} 4828 \\ 437 / 00 \\ \hline \end{gathered}$ |
|  |  |  |  | x | x |  | 1325 |  | G11 | 03 | $\begin{gathered} 6433 \\ 299 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 6433 \\ 299 / 00 \end{gathered}$ |
| x |  |  |  |  |  | x | 1355 |  | S11A | 03 | $\begin{gathered} 4441 \\ 254 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 4441 \\ 254 / 00 \\ \hline \end{gathered}$ |
|  | x |  |  |  | x |  | 1400 |  | E11 | 03 | $\begin{aligned} & 10690 \\ & 98 \# / 00 \end{aligned}$ | $\begin{aligned} & 10690 \\ & 98 \# / 00 \end{aligned}$ |
|  |  |  | x |  |  |  | 1400/1410 |  | S06S | 01A | $\begin{aligned} & 5320 / 4845 \\ & 624 \end{aligned}$ | $\begin{aligned} & 5320 / 4845 \\ & 624 \end{aligned}$ |
|  | x |  |  |  |  | x | 1400/1420/1440 |  | XPA | 01B | 5867/ 5467/4567 | 5767/5267/4467 |
|  |  | x |  |  | x |  | 1445 |  | E11 | 03 | $\begin{gathered} 4441 \\ 267 / 00 \quad(287 / 00 ?) \\ \hline \end{gathered}$ | $\begin{array}{\|c} 4441 \\ 267 / 00 \quad(287 / 00 ?) \\ \hline \end{array}$ |



| $\begin{aligned} & E \\ & \Sigma \\ & \Sigma \end{aligned}$ | $\underset{\substack{0 \\ \underset{H}{2}}}{\substack{\text { n }}}$ | $\begin{aligned} & 0 \\ & 0 \\ & 3 \end{aligned}$ | $\underset{\underset{H}{3}}{\underset{\sim}{3}}$ | $\begin{aligned} & .-1 \\ & H \\ & H \end{aligned}$ | $\begin{aligned} & \stackrel{+}{\sigma} \\ & \sim \end{aligned}$ | $\begin{aligned} & \text { E } \\ & \text { ひ } \end{aligned}$ | UTC | wk | Stn | Fam | $\begin{aligned} & \text { Jan } \\ & \mathrm{kHz}, \quad \text { ID, ... } \end{aligned}$ | $\begin{aligned} & \text { Feb } \\ & \mathrm{kHz}, \quad \text { ID, . . } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | X |  |  |  |  | 1920/2020 | 2 | E06 | 01A | $\begin{aligned} & 4523 / 3892 \\ & 829 \end{aligned}$ | $\begin{aligned} & 4523 / 3892 \\ & 829 \end{aligned}$ |
|  |  | X |  |  |  |  | 1920 | 2 / 4 | M1 4 | 01A | $\begin{aligned} & 4761 \\ & 748 \end{aligned}$ | $\begin{aligned} & 4761 \\ & 748 \end{aligned}$ |
|  |  |  |  | x |  |  | 1930 | $2 / 4$ | G06 | 01A | $\begin{aligned} & 4792 \\ & 436 \end{aligned}$ | $\begin{aligned} & 4792 \\ & 436 \end{aligned}$ |
|  |  |  |  |  | X |  | 1930 (1935) |  | S06 | 01A | $\begin{aligned} & 3209 / 3842 \\ & 366 \end{aligned}$ | $\begin{aligned} & 3209 / 3842 \\ & 366 \end{aligned}$ |
|  |  |  | x |  |  |  | 1932 |  | M01B | 14 | $\begin{aligned} & 2466,3545 \\ & 910 \end{aligned}$ | $\begin{aligned} & 2466,3545 \\ & 910 \end{aligned}$ |
|  |  |  |  | x |  | X | 2000 |  | G11 | 03 | $\begin{gathered} 4441 \\ 262 / 00 \end{gathered}$ | $\begin{gathered} 4441 \\ 262 / 00 \end{gathered}$ |
|  | x |  | x |  |  |  | 2000 |  | M01 | 14 | $\begin{aligned} & 4490 \\ & 197 \end{aligned}$ | $\begin{gathered} 4490 \\ 197 \\ \hline \end{gathered}$ |
| x |  | x |  |  |  |  | 2000/2020/2040 |  | E07 | 01B | $\begin{aligned} & 6982 / 5882 / 5182 \\ & 988 \end{aligned}$ | $\begin{aligned} & 7724 / \text { 6924/ } 5824 \\ & 798 \end{aligned}$ |
| x |  |  | x |  |  |  | 2000/2020/2040 |  | M12 | 01B | $\begin{aligned} & 9176 / 7931 / 6904 \\ & 257 \end{aligned}$ | $\begin{aligned} & 9176 / 7931 / 6904 \\ & 257 \end{aligned}$ |
|  |  |  |  | x | X |  | 2000/2100 | 1/3 | M1 4 | 01A | $\begin{aligned} & 3825 / 4470 \\ & 724 \end{aligned}$ | $\begin{aligned} & 4830 / 4471 \\ & 724 \end{aligned}$ |
|  |  |  |  | x |  |  | 2002 |  | M01B | 14 | $\begin{aligned} & 2655,3197 \\ & 866 \end{aligned}$ | $\begin{aligned} & 2655,3197 \\ & 866 \end{aligned}$ |
| x |  |  |  |  |  |  | 2015 |  | M01B | 14 | $\begin{aligned} & 2427,3205 \\ & 375 \end{aligned}$ | $\begin{aligned} & 2427,3205 \\ & 375 \end{aligned}$ |
|  |  |  | x |  |  |  | 2030 |  | E06 | 01A | $\begin{gathered} 4836 \\ 321 \end{gathered}$ | $\begin{gathered} 4836 \\ 321 \end{gathered}$ |
|  |  |  |  |  | x |  | 2030/2130 |  | S06 | 01A | $\begin{aligned} & 4859 / 4024 \\ & 703 \end{aligned}$ | $\begin{aligned} & 4859 / 4024 \\ & 703 \end{aligned}$ |
|  |  |  | x |  |  |  | 2042 |  | M01B | 14 | $\begin{aligned} & 2485,3160 \\ & 382 \end{aligned}$ | $\begin{aligned} & 2485,3160 \\ & 382 \end{aligned}$ |
|  |  | x |  |  |  |  | 2100/2120/2140 |  | E07A | 01A | $\begin{aligned} & 5864 / 5164 / 4564 \\ & 815 \end{aligned}$ | $\begin{aligned} & 5864 / 5164 / 4564 \\ & 815 \end{aligned}$ |
|  |  |  |  | x |  |  | 2110 |  | M01B | 14 | $\begin{aligned} & 2405,3180 \\ & 610 \end{aligned}$ | $\begin{aligned} & 2405,3180 \\ & 610 \end{aligned}$ |
|  |  |  | x |  |  |  | 2110/2130/2150 |  | E07 | 01B | $\begin{aligned} & 6777 / 5449 / 4483 \\ & 774 \end{aligned}$ | $\begin{aligned} & 6777 / 5449 / 4483 \\ & 774 \end{aligned}$ |
| x |  |  |  |  |  |  | 2115/2215 | $2 / 4$ | S06 | 01A | $\begin{array}{r} 6920 / 5180 \\ 121, \text { search } \end{array}$ | 6965/ 5320 684, search |
|  |  |  |  | x |  |  | 2130 |  | E06 | 01A | $\begin{gathered} 4760 \\ 472 \end{gathered}$ | $\begin{gathered} 4760 \\ 472 \end{gathered}$ |
|  |  | x |  |  |  |  | 2200/2220/2240 |  | M12 | 01B | $\begin{aligned} & 5361 / 4461 / \\ & 340, \text { search } \end{aligned}$ | $\begin{aligned} & 5429 / 4629 / 4029 \\ & 460 \end{aligned}$ |

## M01 M01b M45 Frequency Schedule 2009

M01 Sunday

|  | Jan | Feb | Mar | Apr | May | Jun | Jly | Aug | Sept | Oct | Nov | Dec |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ID | $\mathbf{1 9 7}$ | 197 | 463 | 463 | 025 | 025 | 025 | 025 | 463 | 463 | 197 | 197 |
| $\mathbf{0 7 0 0}$ | 5464 | 5464 | 6508 | 6508 | 6780 | 6780 | 6780 | 6780 | 6508 | 6508 | 5464 | 5464 |

M01b Monday

|  | Jan | Feb | Mar | Apr | May | Jun | Jly | Aug | Sept | Oct | Nov | Dec |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ID |  |  |  | 420 | 364 | 364 | 364 | 364 | 420 | 420 |  |  |
| 1810 |  |  |  | 3535 | 5125 | 5125 | 5125 | 5125 | 3535 | 3535 |  |  |
| $/ /$ |  |  |  | 4590 | 5735 | 5735 | 5735 | 5735 | 4590 | 4590 |  |  |
| ID | 853 | 853 | 420 |  |  |  |  |  |  |  | 853 | 853 |
| 1910 | 2435 | 2435 | 3535 |  |  |  |  |  |  |  | 2435 | 2435 |
| $/ /$ | 3520 | 3520 | 4590 |  |  |  |  |  |  |  | 3520 | 3520 |
| ID |  |  |  | 771 | 858 | 858 | 858 | 858 | 771 | 771 |  |  |
| 1915 |  |  |  | 3644 | 5150 | 5150 | 5150 | 5150 | 3644 | 3644 |  |  |
| // |  |  |  | 4454 | 5475 | 5475 | 5475 | 5475 | 4454 | 4454 |  |  |
| ID |  |  |  | 298 | 729 | 729 | 729 | 729 | 298 | 298 |  |  |
| 2010 |  |  |  | 4991 | 5815 | 5815 | 5815 | 5815 | 4991 | 4991 |  |  |
| // |  |  |  | 5336 | 6769 | 6769 | 6769 | 6769 | 5336 | 5336 |  |  |
| ID | 375 | 375 | 771 |  |  |  |  |  |  |  | 375 | 375 |
| 2015 | 2427 | 2427 | 3644 |  |  |  |  |  |  |  | 2427 | 2427 |
| // | 3205 | 3205 | 4454 |  |  |  |  |  |  |  | 3205 | 3205 |
| ID | 136 | 136 | 298 |  |  |  |  |  |  |  | 136 | 136 |
| 2110 | 4615 | 4615 | 4991 |  |  |  |  |  |  |  | 4615 | 4615 |
| $/ /$ | 5065 | 5065 | 5336 |  |  |  |  |  |  |  | 5065 | 5065 |

M01 Tuesday/Thursday

|  | Jan | Feb | Mar | Apr | May | Jun | Jly | Aug | Sept | Oct | Nov | Dec |
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| ID | $\mathbf{1 9 7}$ | $\mathbf{1 9 7}$ | 463 | 463 | $\mathbf{0 2 5}$ | $\mathbf{0 2 5}$ | $\mathbf{0 2 5}$ | $\mathbf{0 2 5}$ | 463 | 463 | $\mathbf{1 9 7}$ | $\mathbf{1 9 7}$ |
| $\mathbf{1 8 0 0}$ | 5320 | 5320 | 5474 | 5474 | 5280 | 5280 | 5280 | 5280 | 5474 | 5474 | 5320 | 5320 |
| $\mathbf{2 0 0 0}$ | 4490 | 4490 | 5017 | 5017 | 4905 | 4905 | 4905 | 4905 | 5017 | 5017 | 4490 | 4490 |


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|  | 000 | 0SE | －－－ | 0ちてZ | ZISt | 0ZZZ | ZIES | 0072 |  |
| 09 | S6S9 | 886 | vLZE6 | 0I6I | v86S0I | 0S8I | vSEtII | 0ع8I |  |
| 6S | SLES | \＆9t | 88LS | 0t ${ }^{\text {a }}$ | Z089 | 0ZLI | Lち08 | 00LI |  |
| ELI | ZEt | †IZ | 60LS | 0tSI | 6069 | 0ZSI | 60SL | 00SI | $\angle$ P2M |
|  |  |  |  |  |  |  |  |  |  |
| S9 | SESt | †ZI | v9118 | 0I6I | vt976 | 0S8I | vEtE0I | 0ع8I |  |
| EIZ | ZI9 | 80t | ¢t8S | 0ZS0 | とt0S | 00S0 | とカカt | 0ヵt0 | 9 วnL |
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| †L | IEtt | LSZ | †069 | 0ャ6I | vIE6L | 076I | v9LI6 | 006I |  |
| ¢9 | †18 | LSZ | †069 | 0ヶ8I | IE6L | 078I | 9LI6 | 008I |  |
| SL | E6SS | LSZ | †069 | 0t ${ }^{\text {a }}$ | IE6L | 0ZLI | 9LI6 | 00LI |  |
| L6 | ع9t6 | 9tS | IILOI | 0t9I | 99SII | 0Z9I | Z9IZI | 009I |  |
|  | 000 | LIt | －－－ | 0L90 | LSIS | 0SS0 | LStt | 0¢S0 | S UOW |
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| 28 | S008 | †ZI | 9II8 | 0ヶ9I | †976 | 0Z9I | EtE0I | 009I | Z ！${ }^{\text {W }}$ |
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| 99 | †IS | ヤZI |  |  |  |  |  | EZIW |  |
| ／OS | 1688 | カてI | 9II8 | 0ヶ8I | †976 | 0Z8I | EtE0I | 008I |  |
| 04 | Sع19 | カZI | 91I8 | 0tLI | t976 | 0ZLI | vEtE0I | 00LI |  |
| 68 | IL8E | LSZ | †069 | 0tLI | IE6L | 0ZLI | v9LI6 | 00LI |  |
|  | 000 | LLZ | －－－ | 0180 | †8LS | 0S $\angle 0$ | ち8ZS | 0ع $\angle 0$ |  |
|  | 000 | 80t | －－－ | 0ZS0 | \＆t0S | 00S0 | と切t | 0ヶt0 | I n¢L |
|  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { •ON } \\ & \text { dion } \end{aligned}$ | $\begin{gathered} \text { Кәу } \\ \text { әроәәव } \end{gathered}$ | （II | $\begin{gathered} \hline \text { (zHY) } \\ \text { bдад } \end{gathered}$ | $\begin{gathered} \text { (ОLИ) } \\ \text { әய!L } \end{gathered}$ |  | $\begin{gathered} \text { (DLS) } \\ \text { әய!L } \end{gathered}$ | $\begin{gathered} \text { (zHy) } \\ \text { bəy, } \end{gathered}$ | $\begin{gathered} \text { (ОLИ) } \\ \text { әய!L } \end{gathered}$ |  |


| 둥 | ลิ | ¢ | n | ㅇ앙 | n | n | ス |  | $\stackrel{\text { 뇩 }}{ }$ |  | N | $\infty$ |  | ¢ | § |  | ก | N | $\infty$ |  |  |  |
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|  | $\underset{\sim}{\sim}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \mathrm{N} \\ & \mathrm{~N} \\ & 0 \end{aligned}$ |  |  | $\stackrel{9}{\sim}$ | $\begin{gathered} \circ \\ \mathrm{N} \\ 0 \end{gathered}$ |  | $\left\lvert\, \begin{gathered} \infty \\ \underset{子}{f} \end{gathered}\right.$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ | N | － |  | $\stackrel{\mathrm{N}}{\mathrm{n}}$ | $\begin{array}{\|c} \substack{\mathrm{M} \\ \mathrm{y}} \\ \hline \end{array}$ | $\left\lvert\, \begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & \substack{\infty\\ } \\ & \hline \end{aligned}\right.$ | N | $\underset{+}{\circ}$ |  | $\begin{array}{l\|} 0 \\ 0 \\ 0 \end{array}$ |  |
| O | oo | N | へิ | $\underset{\sim}{\text { a }}$ | 式 | へู | $\underset{\underset{\sim}{*}}{\underset{\sim}{2}}$ |  | 守 | $\stackrel{\rightharpoonup}{7}$ | $\stackrel{ \pm}{\sim}$ | ¢ |  | へิ | へิ | $\underset{\sim}{\infty}$ | $\underset{\sim}{7}$ | $\stackrel{ \pm}{\text { N }}$ | ¢ |  | 俞 |  |
| 只莅 | $\left\lvert\, \begin{gathered} \underset{\sim}{\infty} \\ \underset{\sim}{\circ} \\ \hline \end{gathered}\right.$ |  | $\begin{aligned} & \mathrm{t} \\ & 0 \\ & \hline \end{aligned}$ |  |  | $\underset{\substack{4 \\ \hline \\ \hline \\ \hline}}{ }$ | $\left\|\begin{array}{c} 0 \\ \underset{\infty}{7} \end{array}\right\|$ |  | $\left\|\begin{array}{c} 0 \\ 0 \\ \underset{N}{2} \end{array}\right\|$ |  | $\left\|\begin{array}{c} n \\ 0 \\ \underset{N}{2} \end{array}\right\|$ | $\stackrel{7}{\mathrm{i}}$ | $\begin{aligned} & 7 \\ & 8 \\ & \hline \end{aligned}$ | $\begin{aligned} & 7 \\ & \hline \\ & \hline \end{aligned}$ | $\underset{\substack{4 \\ \hline \\ \hline}}{ }$ |  | $\left\lvert\, \begin{gathered} 0 \\ \underset{\infty}{7} \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} 9 \\ \stackrel{\rightharpoonup}{\mathrm{O}} \\ \hline \end{gathered}\right.$ |  |  | $\begin{aligned} & 1 \\ & \vdots \\ & \hline \end{aligned}$ |  |
| 首苞首 | $\begin{array}{\|c} \mathrm{N} \\ \mathrm{~N} \end{array}$ | $0$ | $\begin{gathered} 9 \\ \\ -1 \end{gathered}$ | $\stackrel{9}{\Delta} \underset{-1}{9}$ |  |  | $\begin{array}{\|} o \\ 9 \\ 0 \end{array}$ |  | $\left.\begin{array}{\|c} 9 \\ \hline 9 \end{array} \right\rvert\,$ | $\begin{aligned} & 0 \\ & 0 \\ & 8 \end{aligned}$ | $\left\lvert\, \begin{gathered} o \\ \underset{\sim}{2} \end{gathered}\right.$ | O |  | $\begin{aligned} & 9 \\ & 0 \\ & 0 \end{aligned}$ | $\underset{\sim}{9}$ | $\left\lvert\, \begin{gathered} \mathrm{N} \\ \mathrm{~N} \\ \hline \end{gathered}\right.$ | $\underset{-1}{9}$ | $\stackrel{8}{9}$ |  |  | $\begin{array}{\|c} \underset{\sim}{\mathrm{N}} \end{array}$ |  |
|  | $\left\lvert\, \begin{gathered} \mathfrak{m} \\ \underset{\circ}{n} \\ \hline \end{gathered}\right.$ | $\left\lvert\, \begin{aligned} & \substack{\infty \\ \hat{n} \\ \hline} \end{aligned}\right.$ | $\begin{aligned} & < \\ & \underset{\sim}{2} \\ & \end{aligned}$ |  |  | $\begin{aligned} & \leq \\ & \stackrel{\Omega}{2} \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { d} \\ \underset{\alpha}{\mid} \end{gathered}\right.$ |  | $\left\|\begin{array}{c} \infty \\ \underset{R}{N} \\ \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \mathrm{N} \\ \stackrel{n}{n} \end{gathered}\right.$ | $\stackrel{\square}{\infty}$ | ， | $\stackrel{\rightharpoonup}{n}$ | $\stackrel{\rightharpoonup}{N}$ | $\stackrel{\rightharpoonup}{N}$ | $\left\lvert\, \begin{gathered} n \\ \underset{\sim}{n} \\ \hline \end{gathered}\right.$ | $\begin{aligned} & \text { d } \\ & \mathbf{N} \\ & \text { Non } \end{aligned}$ | $\left\lvert\, \begin{aligned} & 9 \\ & \hline 8 \\ & \hline 0 \end{aligned}\right.$ | $\bigcirc$ |  | $\begin{array}{\|c} \underset{y}{v} \\ \underset{\sim}{2} \end{array}$ |  |
|  | 앙 | $\begin{aligned} & \mathrm{e} \\ & \mathrm{n} \end{aligned}$ | $\stackrel{ }{N}$ |  |  |  | $\left\|\begin{array}{c} \underset{\sim}{0} \\ \underset{\sim}{2} \end{array}\right\|$ | $$ | $\left\|\begin{array}{c} \stackrel{0}{\mathrm{n}} \\ \underset{\sim}{0} \end{array}\right\|$ | 웅 | $\underset{\sim}{\underset{\sim}{2}}$ |  | $\stackrel{0}{N}$ | $\stackrel{\rightharpoonup}{\infty}$ | $\underset{\sim}{2}$ | $0$ | $\stackrel{\stackrel{i}{0}}{\stackrel{0}{9}}$ | － |  |  | $\underset{\sim}{\mathrm{N}}$ |  |
| 守空 | $\mathfrak{m}$ | $\begin{aligned} & \underset{\sim}{\infty} \\ & \underset{N}{n} \end{aligned}$ | $\begin{aligned} & \stackrel{\iota}{\circ} \\ & \stackrel{\rightharpoonup}{\sigma} \end{aligned}$ |  |  | $\begin{aligned} & \grave{\varrho} \\ & \stackrel{1}{a} \end{aligned}$ | $\left\lvert\, \begin{gathered} \underset{\sim}{\mathbf{0}} \\ \underset{\sim}{0} \end{gathered}\right.$ | $\begin{aligned} & : \bar{z} \\ & \frac{0}{0} \end{aligned}$ |  | $\begin{array}{\|c} \hat{y} \\ 寸 \end{array}$ | $\underset{\substack{N \\ \underset{\sim}{N} \\ \hline}}{ }$ | $\underset{\underset{\sim}{\underset{N}{2}}}{\substack{0}}$ | $\begin{aligned} & \grave{\varrho} \\ & \hat{\sigma} \end{aligned}$ | $\begin{aligned} & \hat{\jmath} \\ & \hat{\sigma} \end{aligned}$ | $\begin{aligned} & \frac{s}{0} \\ & \stackrel{\rightharpoonup}{\sigma} \end{aligned}$ | $\underset{F}{q}$ | $\begin{gathered} \underset{\sim}{\infty} \\ \underset{\sim}{0} \\ \hline ⿴ 囗 十 \end{gathered}$ | 号 | $\stackrel{<}{\circ}$ |  | $\left\lvert\, \begin{aligned} & \underset{\sim}{n} \\ & \hline \end{aligned}\right.$ |  |
|  | 君 | $\stackrel{0}{\hat{N}}$ |  | $\begin{aligned} & 8 \\ & \end{aligned}$ |  |  | $\begin{aligned} & 8 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ | $\stackrel{\rightharpoonup}{\mathrm{z}}$ | $\left\|\begin{array}{c} \underset{\sim}{\infty} \\ \underset{\sim}{2} \end{array}\right\|$ | N్గ్ర | $: \begin{aligned} & 0 \\ & \\ & \hline \end{aligned}$ | $\underset{0}{8}$ | $\begin{aligned} & 8 \\ & 0 \\ & \hline \end{aligned}$ | $\underset{\sim}{\infty}$ | $8$ | O |  | \％ | － |  | $\left\lvert\, \begin{aligned} & \mathrm{O} \\ & \text { N} \end{aligned}\right.$ |  |
|  |  |  |  |  |  |  | $\left\|\begin{array}{l} 0 \\ \square \\ i v \end{array}\right\|$ | $\left\|\begin{array}{l} \stackrel{1}{n} \\ \stackrel{\pi}{n} \end{array}\right\|$ | － | \％ |  |  |  |  |  | $\left\|\begin{array}{c} \stackrel{\rightharpoonup}{N} \\ 2 \\ \end{array}\right\|$ |  | ה |  |  |  |  |

－－－Indicates no $3^{\text {rd }}$ transmission sent as message 000
－Weak reception

| M12 Log2 Dec 2011 |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (Residue) Brian - S.E. England |  |  |  |  |  |  |  |  |
| Day / <br> Date Time <br> (UTC) Freq <br> (kHz) Time <br> (UTC) Freq <br> (kHz) Time <br> (UTC) Freq <br> (kHz) ID Decode <br> Key Grp <br> No. <br>           <br> Cont...          <br>           <br>           <br> Thu 29 0440 4443 0500 5043 0520 5843 408 548 189 <br> Dec 0730 5284 0750 5784 0810 --- 277 000  <br>  1700 $9176 \wedge$ 1720 7931 1740 6904 257 2801 67 <br>  1700 10343 1720 9264 1740 8116 124 7315 73 <br>  1800 10343 1820 9264 1840 8116 124 1042 82 <br>           <br> Fri 30 1600 10343 1620 9264 1640 8116 124 8916 76 <br> Dec          <br>           <br> Sat 31 0600 5784 0620 $7584 \wedge$ 0640 $9184 \wedge$ 751 740 95 <br> Dec          <br>           <br>           <br>           |  |  |  |  |  |  |  |  |


| M12 Log2 Nov 2011 |  |
| :--- | :---: |
| (Residue)          <br> Day / <br> Date Time <br> (UTC) Freq <br> (kHz) Time <br> (UTC) Freq <br> (kHz) Time <br> (UTC) Freq <br> (kHz) ID Decode <br> Key Grp <br> No. <br>           <br> Cont...          <br>           <br>           <br> Tue 29 0440 5872 0500 6772 0520 --- 876 000  <br> Nov 1830 10343 1850 9264 1910 8116 124 8196 58 <br>           <br> Wed 30 1500 8112 1520 7552 1540 6792 106 517 211 <br> Nov 1700 $8047 \wedge$ 1720 6802 1740 5788 463 6517 84 <br>  1830 $11435 \wedge$ 1850 $10598 \wedge$ 1910 $9327 \wedge$ 938 $? ? ?$ $? ?$ <br>  2200 5429 2220 4629 2240 --- 460 000  <br>           <br>           <br>           <br>           <br>           <br>           <br>           |  |

Highlighted cell indicates new or changed loggings
--- Indicates no $3^{\text {rd }}$ transmission sent as message 000




| い |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| の |  |  |  |  | $x$ |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 项 |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ［－1 | x |  |  |  |  |  |  |  |  |  |  |  |  | $x$ |  |  |  |  |  |  | x |  |  | × |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  | x | $x$ |  |  | $x$ |  |  |  |  |  |  |  |  | $x$ | $x$ |  |  |  |  |  | $x$ |  |  |  |  |  |
| H | $\times$ |  |  |  |  |  |  |  |  |  |  |  |  | $x$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\sum$ |  | × |  | $x$ |  |  |  | × | $\times$ |  |  |  |  |  | $x$ |  | $x$ |  |  |  |  | $x$ |  |  | x |  |  |  |  |  |  |
| E |  | $\frac{0}{6}$ | $\frac{7}{4}$ | m | $\frac{9}{\sigma}$ | $\mid \underset{m}{\ddagger}$ | $\left\|\begin{array}{c} 3 \\ \underset{\gamma}{*} \end{array}\right\|$ | $\|\stackrel{N}{\mathrm{~N}}\|$ | $\stackrel{N}{\mathrm{~N}}$ | $\stackrel{\infty}{\sim}$ |  |  |  | $\underset{7}{7}$ | $\left\|\begin{array}{l} \hat{N} \\ \infty \end{array}\right\|$ | $\|\vec{\sigma}\|$ | 눈 | － | $\stackrel{\sim}{\circ}$ | Oु | へ | へ |  | $\underset{\sim}{4}$ | へ | oু |  |  |  |  |  |
|  | $\frac{10}{2}$ | ： | $\left\|\begin{array}{l} \underset{~}{J} \\ \underset{\sim}{7} \end{array}\right\|$ | $\underset{\underset{\sim}{\mathrm{N}}}{\underset{\sim}{\mathrm{~N}}}$ |  | $\left\lvert\, \begin{aligned} & \bullet \\ & \underset{N}{N} \\ & \\ & \hline \end{aligned}\right.$ | $\left\|\begin{array}{c} \infty \\ \infty \\ \hat{n} \end{array}\right\|$ | $\left\lvert\, \begin{aligned} & \pm \\ & \underset{8}{0} \end{aligned}\right.$ | $\left\|\begin{array}{l}  \pm \\ 0 \\ \hline \end{array}\right\|$ | $\vec{\square}$ |  |  |  | $\begin{aligned} & n \\ & \underset{\sim}{2} \\ & \hline \end{aligned}$ | $\underset{\sim}{\infty}$ | $\left\|\begin{array}{l} \underset{\sim}{4} \\ \underset{\sim}{7} \end{array}\right\|$ | $\begin{aligned} & \text { N } \\ & \text { N } \\ & \end{aligned}$ | $\begin{aligned} & n \\ & \underset{\sim}{z} \end{aligned}$ | $\left\|\begin{array}{l} \underset{\sim}{\underset{~}{~}} \end{array}\right\|$ | $\left\lvert\, \begin{aligned} & \infty \\ & \infty \\ & \stackrel{\infty}{\circ} \end{aligned}\right.$ | স্ট |  |  | $\frac{0}{\infty}$ | $\left\|\begin{array}{l}  \pm \\ \hline \mathbf{S} \end{array}\right\|$ | $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ |  |  |  |  |  |
| $\begin{aligned} & \vec{y} \\ & \text { 둘 } \end{aligned}$ | $\frac{N}{\sigma}$ | $\underset{\sigma}{\boldsymbol{\sigma}}$ | $\left\|\begin{array}{l} \underset{\sim}{Z} \\ \underset{\sim}{\lambda} \end{array}\right\|$ | $\underset{\sim}{N}$ | $\left\|\begin{array}{l} 0 \\ \underset{\sim}{\mathrm{~N}} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \underset{\sim}{2} \\ \underset{\sim}{2} \\ \hline \end{gathered}\right.$ | $\left\|\begin{array}{l} \mathrm{N} \\ 0 \\ 0 \end{array}\right\|$ | $\stackrel{\rightharpoonup}{\tilde{N}} \mid$ | $\left\lvert\, \begin{aligned} & \underset{\sim}{\Omega} \\ & \hline \end{aligned}\right.$ | $\underset{\substack{7\\}}{ }$ |  |  |  | $\left\|\begin{array}{l} n \\ \bar{\sigma} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \infty \\ \underset{\sim}{\hat{2}} \\ \underset{\sim}{2} \end{gathered}\right.$ | $\left\|\begin{array}{l} \underset{\sim}{Z} \\ \underset{\sim}{I} \end{array}\right\|$ | $\underset{\sim}{N}$ | $\begin{aligned} & n \\ & \underset{\sim}{n} \\ & \end{aligned}$ | $\left\|\begin{array}{c} \underset{N}{N} \\ \underset{\sim}{2} \end{array}\right\|$ | 장 | হু |  |  | $\begin{aligned} & \text { Z } \\ & \text { 人ै } \end{aligned}$ | $\|\vec{N}\|$ | $\left\|\begin{array}{c} \infty \\ \infty \\ 8 \\ 8 \end{array}\right\|$ |  |  |  |  |  |
|  | $\bigcirc$ | $\stackrel{\rightharpoonup}{7}$ | $\left\lvert\, \begin{gathered} \underset{\sim}{4} \\ -\infty \\ 0 \\ \hline \end{gathered}\right.$ | $\underset{\sim}{N}$ |  | $\left\|\begin{array}{l} \underset{\sim}{\underset{\sim}{2}} \\ \underset{\sim}{f} \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \hat{8} \\ \infty \end{gathered}\right.$ | $\left\lvert\, \begin{aligned} & 0 \\ & \hat{\sigma} \\ & \stackrel{1}{2} \end{aligned}\right.$ | $\left\|\begin{array}{l} 0 \\ \stackrel{a}{\sigma} \end{array}\right\|$ | $\underset{\text { ন্寸 }}{\underset{\sim}{n}}$ |  |  |  | $\left\|\begin{array}{l} \infty \\ \underset{\infty}{\infty} \end{array}\right\|$ | $\left\lvert\, \begin{aligned} & \infty \\ & \infty \\ & \infty \end{aligned}\right.$ | $\left\|\begin{array}{c}  \pm \\ \underset{\infty}{\infty} \\ \mathbf{O} \end{array}\right\|$ | ホ | $\left\lvert\, \begin{gathered} n \\ \infty \\ \underset{\sim}{\infty} \\ \hline \end{gathered}\right.$ | $\left\|\begin{array}{l} \underset{~}{+} \\ \underset{\sim}{8} \end{array}\right\|$ | $\underset{\infty}{\stackrel{1}{\prime}}$ | $\begin{aligned} & \bullet \\ & \stackrel{\rightharpoonup}{\sigma} \end{aligned}$ |  |  | $\underset{\sim}{3}$ | $\left\|\begin{array}{l} \circ \\ \stackrel{\rightharpoonup}{\sigma} \end{array}\right\|$ | $\left\|\begin{array}{l} \infty \\ \infty \\ 8 \\ \hline \end{array}\right\|$ |  |  |  |  |  |
|  | $\underset{\underset{\sim}{\mathrm{Y}}}{\substack{\text { ( }}}$ | 영 | $\left\lvert\, \begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}\right.$ | $\mid \underset{-}{\mathrm{O}}$ | $\begin{aligned} & \mathrm{O} \\ & \mathrm{M} \\ & \mathbf{M} \end{aligned}$ | $\left\|\begin{array}{c} 9 \\ \stackrel{y}{4} \\ \hline \end{array}\right\|$ | $\left\lvert\, \begin{gathered} 9 \\ \underset{4}{4} \end{gathered}\right.$ | $\left\|\begin{array}{c} 0 \\ \infty \\ -\infty \end{array}\right\|$ | $\left\lvert\, \begin{aligned} & \mathrm{O} \\ & \mathrm{O} \end{aligned}\right.$ | $\stackrel{\stackrel{-}{寸}}{\underset{\sim}{n}}$ |  |  |  | $\left\lvert\, \begin{aligned} & \underset{\sim}{2} \\ & \underset{O}{2} \end{aligned}\right.$ | 앙 | $\left\|\begin{array}{l} 0 \\ \mathbf{o} \\ \hline 0 \end{array}\right\|$ | $\frac{0}{9}$ | $\begin{array}{\|c} \stackrel{0}{2} \\ \underset{\sim}{0} \end{array}$ | $\left\lvert\, \begin{gathered} 0 \\ \stackrel{y}{\mathrm{H}} \\ \hline \end{gathered}\right.$ | $\frac{9}{4}$ | $\stackrel{?}{\mathrm{~N}}$ |  |  | $\underset{\sim}{0}$ | ¢ | 억 |  |  |  |  |  |
| $\left\lvert\, \begin{aligned} & \dot{a} \\ & \stackrel{\rightharpoonup}{g} \end{aligned}\right.$ | $\bigcirc$ | No | $\begin{aligned} & 0 \\ & \hline \mathbf{O} \\ & \hline \end{aligned}$ | $\underset{\sim}{\text { ®N}}$ | প্ল্য় | $\left\|\begin{array}{c} \stackrel{\rightharpoonup}{N} \\ \underset{\sim}{2} \end{array}\right\|$ | $\left\|\begin{array}{l} \mathrm{N} \\ \mathrm{~N} \end{array}\right\|$ | $\left\|\begin{array}{c} 0 \\ \underset{\sim}{0} \\ -1 \end{array}\right\|$ | $\begin{aligned} & \stackrel{\rightharpoonup}{\mathrm{O}} \\ & \underset{\sim}{2} \end{aligned}$ | $\stackrel{\stackrel{\rightharpoonup}{N}}{\stackrel{1}{2}}$ |  |  |  | 守 | 응 | $\left\|\begin{array}{\|c} 0 \\ 0 \\ 0 \end{array}\right\|$ | － | $\begin{aligned} & \underset{\sim}{\sim} \\ & \underset{\sim}{2} \end{aligned}$ | $\stackrel{\sim}{\sim}$ | 슻 | 윽 | － |  | $\begin{aligned} & 0 \\ & 0 \\ & \hline \end{aligned}$ | － | － |  |  |  |  |  |
|  |  | 응 | $8$ | $\stackrel{8}{2}$ | $\frac{9}{9}$ | $\left\|\begin{array}{c} 8 \\ \stackrel{0}{0} \end{array}\right\|$ | $\stackrel{8}{8}$ | $\left\|\begin{array}{l\|} \hline 8 \\ 0 \\ 0 \end{array}\right\|$ | $\begin{array}{l\|} \hline 8 \\ \hline-9 \end{array}$ | $\frac{8}{\mathrm{~A}}$ |  |  | E | ¢ | 응 | 8 | $\stackrel{\circ}{\text { ¢ }}$ | $\underset{\sim}{\mathrm{m}}$ | $\left\lvert\, \begin{aligned} & 8 \\ & \stackrel{8}{\mathrm{~L}} \\ & \hline \end{aligned}\right.$ | $\stackrel{8}{8}$ | $\stackrel{8}{\circ}$ | $\bigcirc$ |  | 8 | $\|\stackrel{\rightharpoonup}{9}\|$ |  |  |  |  |  |  |





Family 1A History and January predictions - 7th Jan 2011

| Station <br> Day | time (utc) | $2011$ <br> October | $2011$ <br> November | $2011$ <br> December | $\begin{gathered} 2012 \\ \text { January } \end{gathered}$ | $\begin{gathered} \text { ID } \\ \text { Oct } \\ \hline \end{gathered}$ | ID <br> Nov | ID <br> Dec | $\begin{gathered} \text { ID } \\ \text { Jan } \end{gathered}$ | week |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G06 mon | 08.00 | 6774 | 5463 | 5463 | 5463 | 215 | 215 | 215 | 215 | every |
| S06 mon | 09.30 | 18654 | 18654 |  |  | ? | 843 | 843 |  | ? |
| G06 mon | 17.00 | 4457 | 3854 | 3854 | 3754 | 439 | 439 | 439 | 154 | 1 \& 2 |
| G06 mon | 18.00 | 4864 | 4587 | 4587 | 4467 | 439 | 439 | 439 | 154 | 1 \& 2 |
| S06 mon | 19.00/05 | 5784/5127 | 3192/3838 | 3192/3838 | 3192/3838 | 349 | 349 | 349 | 349 | every |
| S06 mon | 21.15 | 7760 | ? | 6870 | 6920? | 621 | 219 | 852 | 121 | 2 \& 4 |
| S06 mon | 22.15 | xxxxx | 5315 | 4630 | 5175? | xxx | 219 | 852 | 121 | 2 \& 4 |
| M14 tues | 07.00 |  |  | 5785 |  |  |  | 178 |  | 2 |
| M14 tues | 08.00 |  |  | ? |  |  |  | 178 |  | 2 |
| M14 tues | 16.00 | 4518 |  |  |  | 913 |  |  |  | 1st |
| S06 tues | 18.00 | 5890 |  | 3645 |  | 286 |  | 617 |  | 1 \& 2 |
| M14 tues | 18.20 | 5947 | 4636 | 4636 | 4636 | 346 | 186 | 186 | 186 | 2 \& 4 |
| M24 wed | 09.00 |  | 11073 | 11073 | NH |  | 352 | 352 |  | every |
| G06 wed | 12.00 | 5864 | 4778 | 4778 |  | 439 | 439 | 439 | 154 | 1 \& 2 |
| G06 wed | 13.00 | 5362 | 4039 | 4039 |  | 439 | 439 | 439 | 154 | 1 \& 2 |
| M24 wed | 17.00 |  | 5410 | 5410 |  |  | 352 | 352 |  | every |
| S06 wed | 18.00/05 | 5735/5070 | 3540/3160 | 3540/3160 |  | 471 | 471 | 471 | 471 | every |
| S06 wed | 18.20/25 | 6783/ | 4528/ | ?/4032 |  | 632 | 632 | 632 |  | every |
| M14 wed | 19.20 | 5463 | 4761 | 4761 | 4761 | 537 | 748 | 748 | 748 | 2 \& 4 |
| E06 wed | 19.20 | 4523 | 4036 | 4036 |  | 829 | 829 | 829 |  | 2 |
| S06 wed | 19.30/05 |  |  |  |  | 366 | 366 | 366 |  | Sat R |
| S06 wed | 20.00/05 | 5413 |  |  |  | 134 | 134 | 134 | 134 | Sat R |
| E06 wed | 20.20 | 3892 | 3842 | 3842 |  | 829 | 829 | 829 |  | 2 |
| E06 thur | 06.00 | 16320 | 16200 | 13910 |  | 186 | 507 | 923 | 139 | every |
| E06 thur | 07.00 | xxxxx | 18200 | 15940 | 15810 | xxx | 507 | 923 | 139 | every |
| S06 thurs | 08.30 |  |  | 17435 |  | 842 | 842 | 842 |  | every |
| S06 thurs | 09.30 |  |  | 14380 |  | 842 | 842 | 842 |  | every |
| G06 thur | 18.30 | 5934 | 4519 | 4519 | 4519 | 579 | 271 | 271 | 271 | 2 \& 4 |
| S06 thur | 19.00/05 | 5784/5127 | 3192/3838 | 3192/3838 | 3192/3838 | 349 | 349 | 349 | 349 | every |
| E06 thur | 20.30 | 5186 | 4836 | 4836 | 4836 | 891 | 321 | 321 | 321 | $1 \& 3$ |
| M14 fri | 18.00 | 8193 | 6769 |  |  | 269 | 269 | 269 | 269 | 1st |
| G06 fri | 19.30 | 5442 | 4792 | 4792 | 4792 | 947 | 436 | 436 | 436 | 2 \& 4 |
| E06 fri | 21.30 | 5197 | 4760 | 4760 | 4760 | 634 | 472 | 472 | 472 | 1 \& 3 |
| E06 sat | 01.30 | 5122 | 5837 | 5796 | 5783 | 759 | 759 | 759 | 759 | every |
| E06 sat | 02.30 | xxxxx | 4583 | 4516 | 4489 | xxx | 759 | 759 | 759 | every |
| S06 sat | 16.00/05 | 8162/7612 | 7728/6788 | 7728/6788 | 7728/6788 | 134 | 134 | 134 | 134 | every |
| S06 sat | 19.30/35 | 5787/4628 | 3209/3842 | 3209/3842 |  | 366 | 366 | 366 |  | every |
| S06 sat | 20.00 |  | 3867 | 3867 | 4481 | 837 | 837 | 837 | 416 | $1 \& 3$ |
| S06 sat | 20.30 | 6791 | 4859 | 4859 | 5118 | 703 | 703 | 703 | 314 | ! \& 3 |
| S06 sat | 21.00 | xxxxx | 3237 | 3237 | 3626 | xxx | 837 | 837 | 416 | $1 \& 3$ |
| S06 sat | 21.30 | 5848 | 4024 | 4024 | 4452 | 703 | 703 | 703 | 314 | 1 \& 3 |
| E06 sun | 11.20 | 7409 | 6 mhz ? | 6 mhz ? |  | 829 | 829 | 829 |  | Wed R |
| E06 sun | 12.20 | 6793 | 5913 | 5913 | 5913? | 829 | 829 | 829 |  | Wed R |

SAT R = repeat if there is a message on Saturday
WED R = repeat of 2nd Weds $\quad$ NH = Not heard

E07 Regular Schedules
Monday

|  | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1900 |  |  |  | 12108 | 14812 | 15824 | 14812 | 14378 | 12108 | 10243 |  |  |
| 1920 |  |  |  | 10708 | 13412 | 14624 | 13412 | 13458 | 10708 | 9243 |  |  |
| 1940 |  |  |  | 9208 | 11512 | 13524 | 11512 | 10958 | 9208 | 7943 |  |  |
| 2000 | 6982 | 7724 | 9273 |  |  |  |  |  |  |  | 7724 | 7478 |
| 2020 | 5882 | 6924 | 7873 |  |  |  |  |  |  |  | 6924 | 6778 |
| 2040 | 5182 | 5824 | 6873 |  |  |  |  |  |  |  | 5824 | 5278 |

## Tuesday

|  | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0700 |  |  |  | 6941 | 7978 | 8127 | 8127 | 6941 | 6893 | 5782 |  |  |
| 0720 |  |  |  | 8041 | 9178 | 9327 | 9327 | 8041 | 7493 | 6982 |  |  |
| 0740 |  |  |  | 9241 | 9978 | 10127 | 10127 | 9241 | 8193 | 7582 |  |  |
| 0800 | 5416 | 5867 | 6893 |  |  |  |  |  |  |  | 5867 | 5234 |
| 0820 | 5816 | 6767 | 7493 |  |  |  |  |  |  |  | 6767 | 5734 |
| 0840 | 6916 | 7367 | 8193 |  |  |  |  |  |  |  | 7367 | 6834 |

## Wednesday

|  | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1700 |  |  |  | 12123 | 13388 | 13468 | 13468 | 13388 | 12223 | 11454 |  |  |
| 1720 |  |  |  | 10703 | 12088 | 12141 | 11454 | 12088 | 11062 | 9423 |  |  |
| 1740 |  |  |  | 8123 | 10118 | 10436 | 10126 | 10504 | 10116 | 8123 |  |  |
| 1800 | 6774 | 7697 | 9923 |  |  |  |  |  |  |  | 8183 | 6982 |
| 1820 | 5836 | 6863 | 9068 |  |  |  |  |  |  |  | 6982 | 5836 |
| 1840 | 4893 | 5938 | 7697 |  |  |  |  |  |  |  | 5938 | 4938 |
| 1900 |  |  |  | 12108 | 14812 | 15824 | 14812 | 14378 | 12108 | 10243 |  |  |
| 1920 |  |  |  | 10708 | 13412 | 14624 | 13412 | 13458 | 10708 | 9243 |  |  |
| 1940 |  |  |  | 9208 | 11512 | 13524 | 11512 | 10958 | 9208 | 7943 |  |  |
| 2000 | 6982 | 7724 | 9273 |  |  |  |  |  |  |  | 7724 | 7478 |
| 2020 | 5882 | 6924 | 7873 |  |  |  |  |  |  |  | 6924 | 6778 |
| 2040 | 5182 | 5824 | 6873 |  |  |  |  |  |  |  | 5824 | 5278 |
| 2000 |  |  |  | 8173 | 8173 | 8173 | 8173 | 8173 | 8173 | 5864 |  |  |
| 2020 |  |  |  | 7473 | 7473 | 7473 | 7473 | 7473 | 7473 | 5164 |  |  |
| 2040 |  |  |  | 5773 | 5773 | 5773 | 5773 | 5773 | 5773 | 4564 |  |  |
| 2100 | 5864 | 5864 | 5864 |  |  |  |  |  |  |  | 5864 | 5864 |
| 2120 | 5164 | 5164 | 5164 |  |  |  |  |  |  |  | 5164 | 5164 |
| 2140 | 4564 | 4564 | 4564 |  |  |  |  |  |  |  | 4564 | 4564 |

## Thursday

|  | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0430 |  |  |  | 7437 | 7437 | 7437 | 7437 | 7437 | 7437 | 5146 |  |  |
| 0450 |  |  |  | 8137 | 8137 | 8137 | 8137 | 8137 | 8137 | 5846 |  |  |
| 0510 |  |  |  | 9137 | 9137 | 9137 | 9137 | 9137 | 9137 | 6846 |  |  |
| 0530 | 5146 | 5146 | 5146 |  |  |  |  |  |  |  | 5146 | 5146 |
| 0550 | 5846 | 5846 | 5846 |  |  |  |  |  |  |  | 5846 | 5846 |
| 0610 | 6846 | 6846 | 6846 |  |  |  |  |  |  |  | 6846 | 6846 |
| 0700 |  |  |  | 6941 | 7978 | 8127 | 8127 | 6941 | 6893 | 5782 |  |  |
| 0720 |  |  |  | 8041 | 9178 | 9327 | 9327 | 8041 | 7493 | 6982 |  |  |
| 0740 |  |  |  | 9241 | 9978 | 10127 | 10127 | 9241 | 8193 | 7582 |  |  |
| 0800 | 5416 | 5867 | 6893 |  |  |  |  |  |  |  | 5867 | 5234 |
| 0820 | 5816 | 6767 | 7493 |  |  |  |  |  |  |  | 6767 | 5734 |
| 0840 | 6916 | 7367 | 8193 |  |  |  |  |  |  |  | 7367 | 6834 |
| 2010 |  |  |  | 9387 | 11539 | 12213 | 11539 | 10753 | 9387 | 7516 |  |  |
| 2030 |  |  |  | 7526 | 10547 | 10714 | 10547 | 9147 | 7526 | 5836 |  |  |
| 2050 |  |  |  | 5884 | 9388 | 9347 | 9388 | 7637 | 5884 | 4497 |  |  |
| 2110 | 6777 | 6777 | 7516 |  |  |  |  |  |  |  | 6777 | 6777 |
| 2130 | 5449 | 5449 | 5836 |  |  |  |  |  |  |  | 5449 | 5449 |
| 2150 | 4483 | 4483 | 4497 |  |  |  |  |  |  |  | 4483 | 4483 |

## Sunday

|  | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1700 |  |  |  | 12123 | 13388 | 13468 | 13468 | 13388 | 12223 | 11454 |  |  |
| 1720 |  |  |  | 10703 | 12088 | 12141 | 11454 | 12088 | 11062 | 9423 |  |  |
| 1740 |  |  |  | 8123 | 10118 | 10436 | 10126 | 10118 | 10116 | 8123 |  |  |
| 1800 | 6774 | 7697 | 9923 |  |  |  |  |  |  |  | 8183 | 6982 |
| 1820 | 5836 | 6863 | 9068 |  |  |  |  |  |  |  | 6982 | 5836 |
| 1840 | 4893 | 5938 | 7697 |  |  |  |  |  |  |  | 5938 | 4938 |

The hundredths digit in each frequency trio gives the ID
i.e. $677458364893=788$

The status of Tuesday and Thursday 0700/0800 schedule is unknown. Last heard early Nov 11 It may have ended?
Revised 7 ${ }^{\text {th }}$ January 2012

|  |  |  |  |  |  |  | wk | StnE11 | $\begin{gathered} \text { Fam } \\ \hline 03 \end{gathered}$ | Jan <br> kHz, ID, <br> 5082 <br> $416 / 00$ | Feb <br> kHz, ID, <br> 5082  <br>   <br> $416 / 00$  | Nov <br> NHz, <br> kH, <br> 5082   <br>    <br> $416 / 00$   | Dec   <br> kHz, ID, $\ldots$ <br>  5082  <br> $416 / 00$   | General Remarks |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\times$ |  |  |  |  |  | 0450 |  |  |  |  |  |  |  | since | 02/10, | last 1 | $\log 0$ | 09/11 |
|  |  | $\times$ |  | x |  | 0545 |  | E11 | 03 | 348/00, search | 348/00, search | 348/00, search | 348/00, search | since | 06/11, | last 1 | $\log 1$ | 10/11 |
|  | x |  | x |  |  | 0645 |  | E11 | 03 | $\begin{array}{\|c\|} \hline 7840 \\ 517 / 00 \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline 7840 \\ 517 / 00 \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline 7840 \\ 517 / 00 \\ \hline \end{array}$ | $\begin{gathered} 7840 \\ 517 / 00 \\ \hline \end{gathered}$ | since | 07/09, | last 1 | $\log 1$ | 11/11 |
|  | x |  |  | $\times$ |  | 0710 |  | E11 | 03 | $\begin{array}{\|l\|l\|} \hline 10800 \\ 633 / 00 \\ \hline \end{array}$ | $\begin{aligned} & 10800 \\ & 633 / 00 \\ & \hline \end{aligned}$ | $\begin{aligned} & 10800 \\ & 633 / 00 \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|l\|} \hline 10800 \\ 633 / 00 \\ \hline \end{array}$ | since | 02/11, | last 1 | 1091 | 12/11 |
|  | x |  | x |  |  | 0745 |  | E11 | 03 | $\begin{aligned} & 16112 \\ & 335 / 00 \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 16112 \\ 335 / 00 \\ \hline \end{array}$ | $\begin{aligned} & 16112 \\ & 335 / 00 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 16112 \\ & 335 / 00 \\ & \hline \end{aligned}$ | since | 10/11, | last 1 | $\log 1$ | 12/11 |
|  | $\times$ |  | $\times$ |  |  | 0820 |  | E11 | 03 | $\begin{gathered} 7317 \\ 438 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 7317 \\ 438 / 00 \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 7317 \\ 438 / 00 \\ \hline \end{array}$ | $\begin{gathered} 7317 \\ 438 / 00 \end{gathered}$ | since | 10/09, | last 1 | $\log 1$ | 12/11 |
|  |  |  |  | $\times$ |  | 0820 |  | M03 | 03 | $\begin{gathered} 4828 \\ 761 / 00 \end{gathered}$ | $\begin{gathered} 4828 \\ 761 / 00 \end{gathered}$ | $\begin{gathered} 4828 \\ 761 / 00 \end{gathered}$ | $\begin{gathered} 4828 \\ 761 / 00 \end{gathered}$ | since | 11/10, | last 1 | $\log 0$ | 08/11 |
| $\times$ |  |  | $\times$ |  |  | 0830 |  | E11 | 03 | $\begin{gathered} 9446 \\ 649 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 9446 \\ 649 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 9446 \\ 649 / 00 \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 9446 \\ 649 / 00 \\ \hline \end{array}$ | since | 01/10, | last 1 | $\log 1$ | 11/11 |
| x |  | $\times$ |  |  |  | 0900 |  | E11 | 03 | $\begin{gathered} 9446 \\ 534 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 9446 \\ 534 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 9446 \\ 534 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 9446 \\ 534 / 00 \\ \hline \end{gathered}$ | since | 10/09, | last 1 | 1091 | 12/11 |
|  |  |  | x |  | $\times$ | 0900 |  | E11 | 03 | $\begin{array}{\|c\|} \hline 4441 \\ 248 / 00 \\ \hline \end{array}$ | $\begin{gathered} 4441 \\ 248 / 00 \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 4441 \\ 248 / 00 \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline 4441 \\ 248 / 00 \\ \hline \end{array}$ | since | 02/10, | last 1 | $\log 1$ | 11/11 |
|  | $\times$ |  |  | $\times$ |  | 0915 |  | S11A | 03 | $\begin{array}{\|c\|} \hline 7504 \\ 484 / 00 \\ \hline \end{array}$ | $\begin{gathered} 7504 \\ 484 / 00 \end{gathered}$ | $\begin{array}{\|c\|} \hline 7504 \\ 484 / 00 \\ \hline \end{array}$ | $\begin{gathered} 7504 \\ 484 / 00 \end{gathered}$ | since | 01/10, | last 1 | $\log 1$ | 11/11 |
|  |  | $\times$ | $\times$ |  |  | 0930 |  | E11 | 03 | $\begin{gathered} 9079 \\ 270 / 00 \\ \hline \end{gathered}$ | $\begin{array}{\|c} 9079 \\ 270 / 00 \\ \hline \end{array}$ | $\begin{gathered} 9079 \\ 270 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 9079 \\ 270 / 00 \\ \hline \end{gathered}$ | since | 02/10, | last 1 | 1091 | 12/11 |
| $\times$ |  |  | $\times$ |  |  | 0940 |  | G11 | 03 | $\begin{gathered} 6480 \\ 275 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 6480 \\ \hline 275 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 6480 \\ 275 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 6480 \\ 275 / 00 \end{gathered}$ | since | 01/10, | last 1 | 1091 | 12/11 |
| $\times$ |  |  | $\times$ |  |  | 1015 |  | S11A | 03 | $\begin{aligned} & 12530 \\ & 475 / 00 \\ & \hline \end{aligned}$ | $\begin{aligned} & 12530 \\ & 475 / 00 \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|l\|} \hline 12530 \\ 475 / 00 \\ \hline \end{array}$ | $\begin{array}{\|l\|l\|} \hline 12530 \\ 475 / 00 \\ \hline \end{array}$ | since | 04/10, | last 1 | $\log 1$ | 12/11 |
|  | $\times$ |  |  | $\times$ |  | 1020 |  | S11A | 03 | $\begin{array}{\|c\|} \hline 9610 \\ 426 / 00 \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline 9610 \\ 426 / 00 \\ \hline \end{array}$ | $\begin{gathered} 9610 \\ 426 / 00 \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 9610 \\ 426 / 00 \\ \hline \end{array}$ | since | 02/10, | last 1 | $10 g 1$ | 12/11 |
|  |  | x |  |  | $\times$ | 1020 |  | S11A | 03 | $\begin{gathered} 6433 \\ 221 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 6433 \\ 221 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 6433 \\ 221 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 6433 \\ 221 / 00 \\ \hline \end{gathered}$ | since | 01/09, | last 1 | 1091 | 12/11 |
|  | x | x |  |  |  | 1045 |  | E11 | 03 | $\begin{gathered} 8091 \\ 469 / 00 \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 8091 \\ 469 / 00 \\ \hline \end{array}$ | $\begin{gathered} 8091 \\ 469 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 8091 \\ 469 / 00 \\ \hline \end{gathered}$ | since | 03/10, | last 1 | $\log 1$ | 12/11 |
| x |  |  |  |  |  | x 1045/1050 |  | E11 | 03 | $\begin{gathered} 4441 \\ 127 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 4441 \\ 127 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 4441 \\ 127 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 4441 \\ 127 / 00 \\ \hline \end{gathered}$ | since | 01/10, | last 1 | 1091 | 10/11 |
|  | $\times$ | x | x |  |  | 1115 |  | M03 | 03 | 4828  <br> $272 / 00$  <br> $650 / 00$ (Wed/Thu) | 4828  <br> $272 / 00$  <br> $650 / 00$ (Wed/Thu) | 4828  <br> $272 / 00$  <br> $650 / 00$ (Wed/Thu) | 4828  <br> $272 / 00$  <br> $650 / 00$ (Wed/Thu) | since | 10/09, | last 1 | 1091 | 12/11 |
|  | $\times$ |  |  |  | x | 1135/1140 |  | M03 | 03 | $\begin{array}{\|c\|} \hline 5358 \\ 786 / 00 \\ \hline \end{array}$ | $\begin{gathered} 5358 \\ 786 / 00 \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 5358 \\ 786 / 00 \\ \hline \end{array}$ | $\begin{gathered} 5358 \\ 786 / 00 \\ \hline \end{gathered}$ | since | 02/10, | last 1 | $\log 1$ | 11/11 |
|  |  | x | x |  |  | x 1155 |  | E11 | 03 | $\begin{aligned} & \hline 15632 \\ & 718 / 00 \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 15632 \\ 718 / 00 \\ \hline \end{array}$ | $\begin{aligned} & \hline 15632 \\ & 718 / 00 \\ & \hline \end{aligned}$ | $\begin{aligned} & 15632 \\ & 718 / 00 \\ & \hline \end{aligned}$ | since | 04/11, | last 1 | 1091 | 12/11 |
|  | $\times$ |  |  |  |  | x 1240 |  | E11 | 03 | $\begin{gathered} 4958 \\ 349 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 4958 \\ 349 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 4958 \\ 349 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 4958 \\ 349 / 00 \\ \hline \end{gathered}$ | since | 08/09, | last 1 | 1091 | 12/11 |
|  |  |  | x |  |  | x 1320 |  | M03 | 03 | $\begin{gathered} 4828 \\ 437 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 4828 \\ 437 / 00 \end{gathered}$ | $\begin{gathered} 4828 \\ 437 / 00 \end{gathered}$ | $\begin{array}{\|c\|} \hline 4828 \\ 437 / 00 \\ \hline \end{array}$ | since | 02/11, | last 1 | $\log 1$ | 11/11 |
|  |  |  |  | $\times$ | x | 1325 |  | G11 | 03 | $\begin{gathered} 6433 \\ 299 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 6433 \\ 299 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 6433 \\ 299 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 6433 \\ 299 / 00 \\ \hline \end{gathered}$ | since | 03/10, | last 1 | 1091 | 12/11 |
| $\times$ |  |  |  |  | $\times$ | x 1355 |  | S11A | 03 | $\begin{gathered} 4441 \\ 254 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 4441 \\ 254 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 4441 \\ 254 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 4441 \\ 254 / 00 \\ \hline \end{gathered}$ | since | 01/11, | last 1 | log 0 | 09/11 |
|  | x |  |  |  | x | 1400 |  | E11 | 03 | $\begin{aligned} & 10690 \\ & 98 \# / 00 \end{aligned}$ | $\begin{aligned} & 10690 \\ & 98 \# / 00 \\ & \hline \end{aligned}$ | $\begin{aligned} & 10690 \\ & 98 \# / 00 \end{aligned}$ | $\begin{aligned} & 10690 \\ & 98 \# / 00 \end{aligned}$ | since | 10/11, | last 1 | $\log 1$ | 12/11 |
|  |  | x |  |  | $\times$ | 1445 |  | E11 | 03 | $\begin{array}{\|cc\|} \hline 4441 \\ 267 / 00 \quad \text { (287/00?) } \\ \hline \end{array}$ | $\begin{array}{\|cc\|} \hline 4441 \\ 267 / 00 \quad \text { (287/00?) } \\ \hline \end{array}$ | $\begin{gathered} 4441 \\ 267 / 00 \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 4441 \\ 267 / 00 \\ \hline \end{array}$ | since | 01/10, | last 1 | 1091 | 12/11 |
|  | $\times$ |  |  | $\times$ | $\times$ | 1535 |  | M03 | 03 | $\begin{gathered} 5358 \\ 798 / 00 \end{gathered}$ | $\begin{gathered} 5358 \\ 798 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 5358 \\ 798 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 5358 \\ \hline 798 / 00 \\ \hline \end{gathered}$ | since | 11/10, | last 1 | $\log 1$ | 11/11 |
| x |  |  |  |  |  | x 1540 |  | E11 | 03 | 228/00, search | 228/00, search | 228/00, search | 228/00, search | since | 03/11, | last 1 | $\log 1$ | 10/11 |
| x |  |  | x |  |  | 1600 |  | E11 | 03 | $\begin{array}{\|l\|} \hline 12153 \\ 64 \# / 00 \\ \hline \end{array}$ | $\begin{aligned} & 12153 \\ & 64 \# / 00 \\ & \hline \end{aligned}$ | $\begin{aligned} & 12153 \\ & 64 \# / 00 \\ & \hline \end{aligned}$ | $\begin{aligned} & 12153 \\ & 64 \# / 00 \end{aligned}$ | since | 03/11, | last 1 | $\log 1$ | 12/11 |
|  |  |  | x |  |  | 1730 |  | E11 | 03 | $\begin{array}{\|c} \hline 5082 \\ 416 / 00 \\ \hline \end{array}$ | $\begin{gathered} 5082 \\ 416 / 00 \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 5082 \\ 416 / 00 \\ \hline \end{array}$ | $\begin{gathered} 5082 \\ 416 / 00 \\ \hline \end{gathered}$ | since | 03/10, | last 1 | 1091 | 12/11 |
|  | $\times$ |  |  |  |  | x 1755 |  | G11 | 03 | $\begin{gathered} 6433 \\ 270 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 6433 \\ 270 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 6433 \\ 270 / 00 \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 6433 \\ 270 / 00 \\ \hline \end{array}$ | since | 02/10, | last 1 | $\log 1$ | 12/11 |
|  |  |  |  | $\times$ |  | 1855 |  | E11 | 03 | $\begin{gathered} 3838 \\ 262 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 3838 \\ 262 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 3838 \\ 262 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 3838 \\ 262 / 00 \\ \hline \end{gathered}$ | since | 09/11, | last 1 | $\log 1$ | 12/11 |
|  |  |  |  | $\times$ |  | $\times 2000$ |  | G11 | 03 | $\begin{gathered} 4441 \\ \hline 262 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 4441 \\ 262 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 4441 \\ \hline 262 / 00 \\ \hline \end{gathered}$ | $\begin{gathered} 4441 \\ 262 / 00 \\ \hline \end{gathered}$ | since | 01/11, | last 1 | $\log 1$ | 12/11 |


|  |  |  |  |  |  | wk | Stn | Fam | Jan $\mathrm{kHz}, ~ I D, \ldots$ | $\begin{array}{lll} \hline \text { Feb } & & \\ \mathrm{kHz}, ~ I D, ~ \ldots . \\ \hline \end{array}$ | $\begin{aligned} & \text { Nov } \\ & \text { kHz, ID, } \ldots \end{aligned}$ | $\begin{aligned} & \text { Dec } \\ & \mathrm{kHz}, ~ I D, \ldots \end{aligned}$ | General Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| x |  |  |  |  | 0800 |  | G06 | 01A | $\begin{gathered} 5363 \\ 215 \\ \hline \end{gathered}$ | $\begin{gathered} 5363 \\ 215 \\ \hline \end{gathered}$ | $\begin{gathered} 5363 \\ 215 \\ \hline \end{gathered}$ | $\begin{gathered} 5363 \\ 215 \\ \hline \end{gathered}$ | since 07/10, last log 10/11 |
|  | $\times$ |  |  |  | 1200 |  | G06 | 01A | $\begin{gathered} 4778 \\ 439 \\ \hline \end{gathered}$ | $\begin{gathered} 4778 \\ 439 \end{gathered}$ | $\begin{array}{\|c\|} \hline 4778 \\ 439 \\ \hline \end{array}$ | $\begin{gathered} 4778 \\ 439 \\ \hline \end{gathered}$ | since 01/11, last log 12/11 |
|  |  | x |  |  | 1200 |  | G06 | 01A | 215, search | 215, search | 215, search | 215, search | since 09/11, last $\log 10 / 11$ |
|  |  | x |  |  | 1300 |  | G06 | 01A | 215, search | 215, search | 215, search | 215, search | since 09/11, last log 10/11 |
| x |  |  |  |  | 1700 | 1/2 | G06 | 01A | $\begin{gathered} 3854 \\ 439 \\ \hline \end{gathered}$ | $\begin{gathered} 3854 \\ 439 \\ \hline \end{gathered}$ | $\begin{array}{r} 3854 \\ 439 \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline 3854 \\ 439 \\ \hline \end{array}$ | since 04/10, last log 12/11 yearly changing id |
| x |  |  |  |  | 1800 | 1/2 | G06 | 01A | $\begin{gathered} 4587 \\ 439 \\ \hline \end{gathered}$ | $\begin{gathered} 4587 \\ 439 \\ \hline \end{gathered}$ | $\begin{gathered} 4587 \\ 439 \\ \hline \end{gathered}$ | $\begin{gathered} 4587 \\ 439 \\ \hline \end{gathered}$ | $\begin{aligned} & \text { since 05/09, last log 12/11 } \\ & \text { yearly changing id } \end{aligned}$ |
|  |  | x |  |  | 1830 | 2/4 | G06 | 01A | $\begin{aligned} & 4519 \\ & 271 \end{aligned}$ | $\begin{aligned} & 4519 \\ & 271 \end{aligned}$ | $\begin{aligned} & 4519 \\ & 271 \end{aligned}$ | $\begin{gathered} 4519 \\ 271 \\ \hline \end{gathered}$ | since 05/01, last $\log 11 / 11$ |
|  |  |  | $\times$ |  | 1930 | 2/4 | G06 | 01A | $\begin{gathered} 4792 \\ 436 \\ \hline \end{gathered}$ | $\begin{gathered} 4792 \\ 436 \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 4792 \\ 436 \\ \hline \end{array}$ | $\begin{gathered} 4792 \\ 436 \\ \hline \end{gathered}$ | $\begin{aligned} & \begin{array}{l} \text { since 04/01, last log 12/11 } \\ \text { rpt of Thu } 1830 \mathrm{Z} \end{array} \\ & \hline \end{aligned}$ |



Status of ID 934, 418 and 872 are unknown

| $\underset{\sim}{Z}$ | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 9124(SK)0600 | 5883(P) |
|  |  |  |  |  |  |  | 9063(SK)0630 |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 5898(P) | 5800(S) |  |


| $\sum_{i}^{\text {Z }}$ | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 6855(P) | 6768(S) | 13380(SK) | 11435(SK) | 5883(P) |
|  |  |  |  | 5800() | 5117 () | 12180(SK)(?) | 11532(SK)(?) |  |
|  |  |  |  |  | 4174() |  |  |  |
|  |  |  |  |  | 4035() |  |  |  |
|  |  |  |  | 6376() |  | 5898(P) | 5800(S) |  |


| $\frac{1}{3}$ | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 6768() | 12120(SK) |  | 5883(P) |
|  |  |  |  |  | 5117 () | 13380(SK) |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  | 6380() |  | 5898(P) | 5800(S) |  |


| $\begin{aligned} & \mathrm{y} \\ & 3 \end{aligned}$ | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 12120(SK) | 11435(SK) | 5800(SK) |
|  |  |  |  |  |  | 13380(SK) | 11532(SK) |  |
|  |  |  |  |  |  |  | 9063(SK)0600 |  |
|  |  |  |  |  |  |  | 5898(SK)0630 |  |
|  |  |  |  |  |  | 5810(P)(?) | 5810(S)(?) | 9153(P) |


| 号 | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 5883() | 13380(SK) | 9124(SK)0600 | 5883(P) |
|  |  |  |  |  |  | 12120(SK) | 9063(SK)0630 |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  | 8009(P) | 8009(S) |  |  |  |
|  |  |  | 9620() | 10445(P) | 11565(S) | 5898(P) | 5800(S) |  |


| حِ | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6768(P) | 5417(S) |  |  | 12120(SK) | 11435(SK) | 5883(P) |
|  |  | 4028() |  |  |  | 13380(SK) | 11532(SK) |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 5898(P) | 5800(S) | 9153(P) |


| $\stackrel{E}{E}$ | 0000 | 0100 | 0200 | 0300 | 0400 | 0500 | 0600 | 0700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6768(P) | 5417(S) | 6855() |  |  | 11435(SK) | 5883(P) |
|  |  |  | 5768() |  |  |  | 11532(SK) |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 5898(P) | 5800(S) |  |

New possible skeds found:

| Mon | $0400 z$ | V02a | $4035 m$ | Jon-FL \& Gil |
| :--- | :--- | :--- | :--- | :--- |
| Thu | $0400 z$ | V02a | 5883 m | Daniel |
| Sat | $0200 z$ | V02a | 5768 m | Gil |

## Thanks

Current Cuban Skeds Heard From 0800-1500 UTC
This covers 0300-1000 local EDT in the USA (November-December 2011)


## New skeds found:

None this month

## Thanks

## Current Cuban Skeds Heard From 1600－2300 UTC

This covers 1100－1800 local EDT in the USA （November－December 2011）

| 奀 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { Z } \\ & \sum_{2}^{0} \end{aligned}$ | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|  | 6768（SK） |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  | 6785（P） | 7554（S） |  | 7519（P） | 8009（S） |
|  |  |  | 8097（P） | 8097（S） |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|  | 6768（SK） |  |  | 12180（P） | 13380（S） |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  | 6785（P） | 7554（S） |  | 7526（P） | 8135（S） |
|  |  |  |  |  |  |  |  |  |
| $\frac{9}{3}$ | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|  | 6768（SK） |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  | 6785（P） | 7554（S） |  | 7519（P） | 8009（S） |
|  |  |  | 8097（P） | 8097（S） |  | 6932（P） | 6854（S） |  |
|  |  |  |  |  |  |  |  |  |
| 号 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|  | 6768（SK） |  |  | 12180（P） | 13380（S） |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  | 6785（P） | 7554（S） |  | 8009（P） | 8135（S） |
|  |  |  |  |  |  | 6932（P） | 6854（S） |  |
|  |  |  |  |  |  |  |  |  |
| 吴 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|  | 6768（SK） |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  | 6785（P） | 7554（S） |  | 7519（P） | 8135（S） |
|  |  |  | 8097（P） | 8097（S） |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| $\underset{~ E ~}{E}$ | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  | 6785（P） | 7554（S） |  |  |  |
|  |  |  | 8097（P） | 8097（S） |  |  |  |  |

## Notes：

Skeds in MCW mode indicated in shaded cell．
V2a skeds are indicated in italic fonts．
M8a skeds are indicated in normal fonts．
The primary or first sked is indicated with（ P ）．
The secondary，second or repeat sked is indicated with（S）．
All skeds normally begin on the hour
Frequencies listed as（ ），denote primary or secondary sked not determined．
Frequencies listed without（ ），denotes a possible sked．
Skeds with（？）have not been heard in over two months．
SK01 notes：
At present SK01 seems to be using exclusively RDFT mode．
－－Updated December 29，2011—

## Cuban Desk Contributors：

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Kd4kym（South Carolina，USA）synesthetix
Gilbertovernamas
BigD（East Coast，USA）
Jon－FL

## Chris（California，USA）

William Kibler（Kansas，USA）
Daniel
Westt1us
XPA Polytones
November2011
XPA b［MFSK－20 Russian Intelligence Multitone System］10bd
1． 0540 z 6839kHz $2.0600 \mathrm{z}: 8139 \mathrm{kHz} \quad 3.0620 \mathrm{z}: 9139 \mathrm{kHz}$ ID811 Mode：USB
ID／msg／serial no／gc／dk／end grp
［2m26s］
⿹\zh26灬
N
ה

⿹勹口
N
ה W
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ה ज
N
ה⿹\zh26灬
N
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 ज्0
ה্N XPA d 1400z Schedule
Split freq schedule，Sunday morning freqs not found．
Variation of signal strengths across the month from NRH and inaudible to fair and strong．These sigs believed not to be for Western Europe．

1．1400z： $5867 \mathrm{kHz} 2.1420 \mathrm{z}: 5467 \mathrm{kHz}$ 3．1440z： 4567 kHz
ID／msg／serial no／gc／dk／end grp
01Tue $\quad 69100009974000010000010140$ $\begin{array}{ll}\text { 01Tue } & 69100009974000010000010140 \\ \text { 06Sun } & \text { NRH }\end{array}$

08Tue 69100001174000010000010140 NRH

15Tue 69100009974000010000010140 20Sun NRH
［2m26s］
［2m26s］

##  <br> ID691 Mode：USB <br> Mode：USB［Sun／Tue］

6S
13Sun
15Tue
20Sun
22Tue 69100009974000010000010140 NRH

29Tue 69100004317000010000010140

XPA e1900z schedule
Fair to Strong across the monthly schedule．Some BCQRM2 noted on the 1920 z frequency but usually strong．

1940 z sending consistently strong．
XPA e［MFSK－20 Russian Intelligence Multitone System］ 10 bd
1．1900z： $8164 \mathrm{~Hz} 2.1920 \mathrm{z}: 7364 \mathrm{kHz} 3.1940 \mathrm{z}: 5864 \mathrm{kHz}$ Mode：USB［Mon／Wed］
［2m26s］
［4m45s］ ［4m45s］⿹\zh26灬
ה्र ज्0
ה్ర $\overline{0}$
年 ［scowt］
尔
而 Diden
ID／msg／serial no／gc／dk／end grp
01Thu 13800001717000010000010140
06Tue 138100212002277119221062 08Thu 138100212002277119221062 13Tue 13800001717000010000010140


22Thu Too weak for process
27Tue 138100911 nnnnn 33371 nnnnn
29Thu 138100911002433337112533

XPA e 1900 z schedule
Variable strengths，QRM badly affecting this schedule in UK

Morning fres looked for，not found．
XPA d 1400 z Schedule
Variable strengths across the schedule．
XPA b［MFSK－20 Russian Intelligence Multitone System］10bd
1． $0540 \mathrm{z} 5818 \mathrm{kHz} \quad 2.0600 \mathrm{z}: 6918 \mathrm{kHz} \quad 3.0620 \mathrm{z}: 8018 \mathrm{kHz}$ ID890 Mode：USB［Mon／Wed was Tue／Thu］

| ID／msg／serial no／gc／dk／end grp |  |  |
| :---: | :---: | :---: |
| 01Thu | 89000008764000010000010140 | ［2m26s］ |
| 06Tue | 89000008764000010000010140 | ［2m26s］ |
| 08Thu | 89000003985000010000010140 | ［2m26s］ |
| 13Tue | 89000003985000010000010140 | ［2m26s］ |
| 15Thu | 89000003985000010000010140 | ［2m26s］ |
| 20Tue | 89000003985000010000010140 | ［2m26s］ |
| 22Thu | 89000003985000010000010140 | ［2m26s］ |
| 27Tue | 89000003985000010000010140 | ［2m26s］ |
| 29Thu | 89000003985000010000010140 | ［2m26s］ | ［2m26s］ 29Thu－890 0000398500001000001014

December 2011

ENI GMA 2000 SPOKEN NUMERALS:
EUROPEAN \& ARABIC LANGUAGE VARIATIONS

| English | zero | one | t wo | three | four | five | six | seven | eight | nine |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Russian | nul I | odín | dva | tri | chet y ${ }^{\text {r }}$ e | pyat ${ }^{\text {' }}$ | shest ${ }^{\prime}$ | sem' | vós em' | dévyat ${ }^{\text {' }}$ |
| German 1,2 | nul 1 | eins | z wei | drei | vier | füf | sechs | sieben | acht | neun |
| ${ }^{1}$ variation | zerau |  | t swo |  |  | funuf |  |  |  | neugen |
|  |  |  | zvou |  |  | tunis |  |  |  |  |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| French | zero | un | deux | trois | quatre | cinq | six | sept | huit | neuf |
| Spanish | cero | uno | dos | tres | cuatro | cinco | seis | siete | ocho | nueve |
| Romani an | zero | unu | doi | trei | patru | cinci | s, as e | s, apte | opt | nouâ |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Polish | zero | jeden | d wa | trzy | cztery | pie, c' | szes'c' | siedem | osiem | dziewie, c |
| Bulgarian | nul | edín | dva | tri | chétiri | pet | shest | sédem | ósem | évet |
| Slovak* | nula | eden | dva | tri | shtyri | pät ${ }^{\text {l }}$ | shest ${ }^{\prime}$ | sedem | osem | devät' |
| * West | nula | jeden | dva | try | shtyry | pet | shest | sedem | ossem | devat |
| * East | nul a | jeden | dva | tri | shtyri | pejc | shesc | shedzem | osem | dzevec |
| Serbo-Croat | nul a | jèdan | $d v a ̂$ | trî | chètiri | pêt | shêst | sëdam | ös am | dëve: t |
| Slovene | nul a | ena | dva | tri | shtiri | pet | shest | sedem | osem | devet |

${ }^{2}$ Some German numerals have a radio accent. The numbers in question are:

```
2 - ZWEI pronounced by some TXs, as TSWO
5 - FUNF some pronounce it as FUNUF, possibly heard as a fast TUNIS
9 - NEUN pronounced by some as NEUGEN.
```

This is totally in keeping with some German armed forces stations and corresponds to our WUN, FOWER, FIFE, NINER

Numeral systems used on selected SI avic Stations [Stations apparently discontinued]

| No. | Sl1a Cherta | Slod | Sl1 Presta | S17c |
| :---: | :---: | :---: | :---: | :---: |
| 0 | nul | nula | zero | nula |
| 1 | adinka | jeden |  |  |
| 2 | dvoyka | dva | yezinka | jeden |
| 3 | troyka | tris | dvonta | dva |
| 4 | chetyorka | shytri | troika | tris |
| 5 | petyorka | pyet | peyonta | pyet |
| 6 | shest | shest | shes | shest |
| 7 | syem | sedoom | sedm | sedoom |
| 8 | vosyem | osoom | osem | osoom |
| 9 | dyevyet | devyet | prunka | devyet |

/ / / NOTES
Nula heard as nul
Jeden heard as yedinar
Tri heard as 'she'
Osoom often heard as bosoom or vosoom.

Arabic Numerals [E25 and V08]

| Arabic: | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | sifr | wahid | itnien | talata | arba | khams a | sitta | saba | t a many | tissa |
|  | - | 1 | r | $r$ | $\varepsilon$ | 0 | 7 | V | $\wedge$ | 9 |

## SPECIAL MATTERS:

Operation Jallaa: 0

## MESSAGES:

## RELEVANT WEBSITES

ENIGMA 2000 Website:
Frequency Details can be downloaded from:
More Info on 'oddities' can be found on Brian of Sussex' excellent web pages:

Time zone information:

Encyclopedia of Espionage, Intelligence, and Security

EyeSpyMag!
http://www.enigma2000.org.uk
http://www.cvni.net/radio/
http://www.brogers.dsl.pipex.com/page2.html
http://www.timeanddate.com/library/abbreviations/timezones/
http://www.espionageinfo.com/



[^0]:    MG

