

# ENIGMA 2000 NEWSLETTER

<http://www.enigma2000.org.uk>



## Russian Embassy, Cuba

Apart from the antenna gallery on tower block note the beam,  
bottom L and Satellite dishes on Domiciliary block .

C Band satellite dishes can be seen elsewhere  
in the grounds [near perimeter fence].

Contributor: 'Oscar'

## ISSUE 65

## July 2011

<http://www.enigma2000.org.uk>

# IN MEMORIAM

On Monday 28<sup>th</sup> June 2011 at around 1845 I received a telephone call from a lady who introduced herself as Bob Meech's daughter. The sad news she had to impart was that Bob had recently passed away due to a short sickness, sadly linked to an ongoing malady.

Bob Meech joined the Group on the off chance of finding out more about E10; his favourite station. Using an Icom PCR 1000 computer controlled receiver he chased and caught E10 right across its spectrum of operations with the simplest on indoor aerials.

His interest was so great that he began to compile E10 listings and an analysis that he also posted to ENIGMA 2000 for other users to benefit from. It was this listing that became the respected E10 column that was taken over by Ian Wraith until Bob got a little better, sadly he didn't.

Bob was a man of many coats; he had served in the Royal Artillery, with which he kept a tenuous link at Woolwich through his wife. His stories of the radios he had operated during his service were very interesting and he had also travelled, as one might expect.

He also had a very friendly nature and a good sense of humour.

During our phone calls Bob's wife would always be playing Mah Jong; at least that is what he always told me. He gave me such a boost with his wife that she used to answer the phone to me and announce to Bob that it was the 'Major.' Obviously his sense of humour was never wasted on me.

Sadly Bob fell very ill with problems with his legs; problems that although he was assured would get better never actually did. Although he was unable to contribute his column, or indeed use his radio, Bob enjoyed receiving a hard copy of the Newsletter.

After some years with this ongoing problem and confined to a chair Bob became more ill, contracted pneumonia and sadly passed away.

It is perhaps fitting that Bob, who took much pleasure in the now gone E10, also passed on around the same time as E10 disappeared from our dials.

Bob Meech was 72.

Our sympathy to his wife and daughter [*representation already made*].

## EDITORIAL

Welcome all to Issue 65.

It is very encouraging for us here at Enigma Towers to note that a number of our newly joined members are already making quite significant contributions to the group.

Once again the Northern Hemisphere is well into its holiday season, we know this as the expected 'fun and games' abound, including but not limited to:-  
A whole bunch of EU countries are contemplating the spectre of economic collapse, and the possible Domino Effect is a horrendous possibility that could involve some 500 million people - so our "Politerati" keep investing in ever bigger boxes of Sticking Plasters.  
The Arab Spring may yet turn out to be an Arab Winter - at least for some - as the initial aspirations of many of those involved slowly start to be undermined in the face of systematic, and in some cases brutal, reactions.  
But - once the people taste freedom .....

This then leads us on from the comments made in both Newsletters 62 & 63 as to the effects in number station behaviour, which had been more or less minimal. This time around a notable increase in activity has been logged for some of the Family I stations, notably S06 and X06.  
These can generally be looked at as being the 'covert' and 'diplomatic' arms of a related entity.  
There has been a major effort across a wide grouping of interested parties to understand and document this activity and much information is included, from differing sources, later in the Newsletter.

E2k recognises and appreciates the amount of effort involved.

Sadly members will have noted the passing of Bob Meech who ably ran the E10 column until his ongoing illness made it impossible for him to enjoy chasing E10 and writing his column.

The gremlins have once again struck us; this time PoSW has suffered a PC breakdown preventing him from sending his newspiece and splendid logs. Let's hope PoSW's machine is soon fixed.

Enjoy, once again, our efforts

Paul & Mike L

## The quick roundup

**V30** is assigned, effective **1 July 2011**, in respect of the Vietnamese station found on 10255kHz, please update your Control Lists.  
It also started using the male voice in May, for the first time during 2011.

E25, a series of very interesting speculations as to the use of 'Computer Games' by the operators of this station were posted to group site.

M12 comes up with a very unusual Test Sequence - see entry

The 'Enigma European Number Systems' (ENS) document has been updated following receipt of new information.

**Unid, CW**, time sig in cut numbers, 5357, 11.43z, 29 Mar / 23.26z 03 Apl + others  
Sending (example, AU3456DNT AN43 - 44,45 etc) J-PL

Our new **DIGI Desk** kicks off in this issue, it is being ably managed by Ian after his 'forced redundancy' from the E10 desk, and it keeps him from under the XYLs feet ☺.

We hope it will add an additional interest for members and Ian will appreciate any suitable input.

## Comment

Middle East is in chaos but the Mainstream Media, particularly European, carries little significant info unless it can be condensed into a one line Headline – and be forgotten in 24hrs.

E2k, West Wing, (and the Boys in the Basement. Ed) is increasingly using Russia Today and Al Jazeera on TV and RCI & RAI on radio for the most reliable info, and intelligent comment.

(What is happening to our investigative journalism. It looks as if they are getting very lazy and feeding on 'pre-cooked' Press Releases

We see that another 'discovery' of 'illegal radio equipment' has been made in the mountains of Lebanon by the same organisation as involved the previous finds, then again handed to the Lebanese Army for 'technical investigation'.

Turns out, from the published photos, once again to be more 30+ year old kit.

We think we have an answer for this – a 'radio buff' - probably about the same age as Mike L - is having a major shack clearance, as the kit is remarkably similar to Mikes' recent donations to the Electrical Recycling Centre – courtesy of the EU.

Considering the current tensions in Lebanon it's probably much safer to surreptitiously dump it in the mountains rather than try to use the local refuse facility, and its prying eyes. ☺ ☺

(Note: if anyone has a use for some precision VHF Cavity Filters drop Mike L an email)

As we resign ourselves to the loss of E10 and look back on its activities over the years, and with large areas of the Middle East now in virtual meltdown, its closure is posing far more questions for us than its existence ever did.

## Morse Stations

Freqs are generally  $\pm 1\text{kHz}$

This is a representative sample of the logs received, giving an indication of station behaviour and the range of times/freqs heard. These need to be read in conjunction with any other articles/charts/comments in this issue.

**M01/3 XIV** MCW, hand (025 skeds, May – Aug))

Will change to M01/2 sked ID 463 for Sept - Oct)

No repeat mssgs sent

Mar – Apl, no great surprises, the usual sprinkling of (deliberate) errors and swamping by b/c TXs

5280	18.00z	03 May	'025' 234 30 == 19015, weak, med, good op
4905	20.00z	"	'025' 901 30 == 27624, strong, fast, exlt op
6435	15.00z	07 May	'025' 069 30 == 49777 ?, v.weak, QRM
6780	07.00z	08 May	'025' 205 30 == 48903, v.weak, XJT QRM4
6435	15.00z	14 May	'025' 789 40 == 21234 – note <b>M01b</b> sending 21231
6780	07.00z	15 May	'025' 350 30 == 90112, strong, fast, exlt op
5320	18.00z	18 May	'025' 525 30 == 22329, v.weak
4905	20.00z	"	'025' 841 30 == 64797, fair
5280	18.00z	24 May	'025' 139 30 == 90373, fair, med, exlt op.
4905	20.00z	"	'025' 497 30 == 17054, strong, slow, exlt op
5289	18.00z	26 May	'025' 251 30 == 26281 – 17 of the gps start with '1' !!
4905	20.00z	02 June	'025' 238 30 == 44868, strong, slow, lots errors

Per SPECTRE

6434	15.00z	04 June	'025' 419 30 == 37067, fair, clean, nice readable
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Note: this particular sked is often v.weak, or totally unreadable, in Europe – wonder if it's beamed Westwards. Ed

5280	18.00z	07 June	'025' 417 30 == 75848, strong, slow, fast 000 ending
4905	20.00z	"	'025' 212 30 == 52886, strong, slow, fast 000 ending.
5280	18.00z	14 June	'025' 687 30 == 56395, good, med, exlt op
4905	20.00z	"	'025' 520 30 == 14800, strong, fast, exlt op
5280	18.00z	21 June	'025' 451 30 == 75878, good, slow, exlt op
4905	20.00z	"	'025' 563 30 == 17711, strong, slow, exlt op
5280	18.00z	28 June	'025' 034 30 == no copy static storms
4905	20.00z	"	'025' 687 30 == 27577, strong – cuts thro noise
5280	18.00z	30 June	too weak to copy
4905	20.00z	"	'025' 908 30 == 61797, strong, fast, ( huge difference in the two TXs for 28/30th, Ed)

M01 sample logs courtesy Spectre:

M01

6434kHz 1500z	04/06[ 025 419 30 37067 ..... 99269 419 30 0 0 0 ]	1509z Fair	SPECTRE	SAT
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025  
419 30  
37067 96906 37812 11620 18163  
95156 56592 85388 14363 12474  
66512 12629 37316 10625 51510  
80844 26669 91844 54219 22130  
44362 70526 57493 31496 57420  
53009 87822 11867 57858 99269  
419 30  
0 0 0

4905kHz 2000z 14/06 [025 520 30 == 14800 ..... 10565 == 520 30 000] 2008z Fair QRN2 Spectre TUE

025 520 30 ==  
14800 11860 91248 69079 83056 82673 11514 86140 10624 80955  
83406 11939 94242 72374 62143 73175 52338 69777 19363 93543  
19723 53025 26963 50347 79993 20935 25360 10600 98250 10565  
== 520 30 000

**M01a** (formerly end of month TXs, now random)

Mar – Apl, 12457	09.05z	30 Mar	i/p 567 567 567 71977 71977 rpt to 19.07z
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### **M01b**

Messages repeated

Mar – Apl, all as expected but did they appeared to bring a new Txer on line in March, vast improvement in some sigs.

5125//5735	18.01z	02 May	'364' 573 36 == 92418
5150//5475	19.15z	"	'858' 573 36 == 92418
5065//5805	<b>19.40z</b>	05 May	'936' 573 36 == 93418 ??
5127//5737	18.10z	09 May	'364' 495 31 == 21231
5477//5152	19.10z	"	'858' 495 31 == 31231 ??
strange one			
10300	19.15z	"	'858' 495 31 == 21231, S9 harmonic of 5150 ???
5095//5760	18.32z	12/26 Ma y	'815' 495 31 == 21231
5805	19.40z	"	'936' 495 31
5821	15.13z	13 May	'158' 715 30 == 96821
5077//5467	19.02z	"	'336' 495 31 == 21231
4896//5341	20.10z	"	'467' 495 31 == 21231 (4896 drops sig during callup)
5475	19.15z	30 May	'858' 495 31 == 21231
5096//5761	18.32z	02 June	'815' 495 31 == 21231
5066//5806	19.41z	"	'936' 495 31 == 21231
5126//5736 18.10z		06 June	'364' 495 31 == 21231
5151//5476 19.15z		"	'858' 495 31 == 21231
5095	18.34z	09 June	'815' 938 30 == 13348
5085	19.42z	"	'936' 938 30 == 13348
5810	15.15z	10/17 July	'158' 934 30 == 26487 – (SPECTRE)
5075//5466	19.02z	10/17 July	'336' 938 30 == 13348 – (SPECTRE)
4895//5341	20.10z	"	'467' 938 30 == 13348 – (SPECTRE)
5340	20.10z	24 June	'463' 938 30 == 13348 – (SPECTRE)

After '000' it played WinXP closing sound.

SPECTRE commented " I thought they would be sending using old analogue gear (considering the stations age. Ed) but they were probably using a laptop with USB morse key instead – it was quite a surprise"

5475	19.17z	27 June	'858' 938 30 - - 13348
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M01b sample log:

5075kHz 1902z 17/06 [336 938 30 == 13348 ..... 13746 == 938 30 000] 1918z Fair QRN2

Spectre

FRI

336 938 30 ==  
13348 47395 09507 78058 90885 03505 53483 03323 56950 22105  
08352 75220 49965 24188 67320 79332 20701 30180 33558 10848  
87920 48080 98717 48432 28246 64244 54279 27715 01907 13749  
== 938 30 000

### **M01c**

Mar – Apl

4307	18.29z	30 Mar	i/p 333 43284 111 43179 111 111 111 000
4343	18.45z	30 Mar	i/p looping 536 58052, 536 050 333, 536 111 222 15 etc

May – June

No reports

### **M03 III** ICW, some CW

Mar – Apl, changed freqs from the Jan – Feb ones (to 5176, 6977)

6524	08.20z	01 May	761/00
7837	13.20z	"	437/00
7837	11.15z	10 May	272/00
6524	11.40z	"	786/30 == 41362
7837	11.15z	18 May	650/00
7837	11.15z	24 May	276/34 == 87629
6524	15.35z	28 May	794/33, v.weak
"	"	07 June	786/00, fair QSB3 – from USA
7837	11.15z	09/15 June	650/00
7837	13.20z	26 June	437/00

### **M03b**

Fritz N, possibly catches this very rare beast.

7991	11.55z	07 June	i/p ending .... 97292 97292 == 943 943 55 55 000
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### **M03c** (Stutter groups)

No reports

### **M03d**

No reports

### **M03e**

No reports

### **M08a XVIII** ICW / CW, some MCW

These are the frequencies logged during the period, to be read in conjunction with Mark Slatens charts.

# Freqs

5800, 5898, 9063, 9112, 9153, 10432, 10857, 12180, 13380,  
Above use/are MCW

6785, 6854, 6932, 7554, 8009, 8097, 8135, 10445, 11565, 12134,

## M08c

No reports

## M08d

Been coming up daily

5800	06.00z	03 May	11002 27371 .....
"	"	05 May	71210 70662 .....
"	"	12 May	28411 90681 .....
"	"	17 May	75631 01601 .....
"	"	26 May	88322 85102 .....
"	"	07 June	43252 11761 .....
"	"	10 June	02221 26331 .....

## M12 IB ICW, some MCW / CW, short 0. Reuses many freqs year on year.

To be read in conjunction with Brians included monthly charts.

New ID's may be only for the month/sked shown, but not necessarily unknown, all are clearly identified on Brians charts. The reason for their reuse, some after long periods of time, is unknown

Mar – Apl, new Id, '796' while IDs 124/257 change their TX pattern.

Where has the Mon/Wed 04.00z sked gone to ?

7611/9111/10511	05.00/20/40z	02 May	615 1
10114/8114/5914	21.00/20/40z	03 May	<b>514</b> New sked
8173/9173/10173	03.40/04.05/33	03 May	111 1 long mssg
12217/10617/9317	18.30/50/19.10z	04 May	<b>263 1</b> New sked
14492/13392/12126	15.00/20/40z	12 May	344 1
9176	17.00z	12 May	257 1 9050 53
10343	17.00z	"	124 1 7051 71
10343	18.00z	"	124 1 6509 87
9176	19.00z	"	257 1 9195 58
12217/10617/9317	18.30/50/19.10z	15 May	263 1 329 81
6857/7557	04.30/50z	16 May	<b>850 000</b> New ID
14372/13472/11472	13.00/20/40z	16 May	344 1 298 229
12162/11566/10711	16.00/20/40z	16 May	<b>546 1</b> 5726 100, ID back after 4 years
7984/9184	06.30/50z	19 May	<b>911 000</b> New ID
12217	18.30z	29 May	263 1 867 81446
10814/12114/13414	06.00/20/40z	20 May	514 1
14372/13472/11472	13.00/20/40z	30 May	344 1 372 64 23368 .....
12162/11566/10711	16.00/20/40z	"	546 1 4449 92 10857 .....
8047/6802/5788	17.00/20/40z	01 June	463 1
9243	18.50z	05 June	828 000 <b>New ID</b>
9176/7931/6904	18.00/20/40z	06 June	257 1
9176	17.00z	06 June	257 1 2721 72
9176	18.00z	"	257 1 5454 59
6904	19.40z	"	257 1 4912 93
8173/9173/10173	03.40/04.00/20z	07 June	111 1

From BR

On the evening of 8<sup>th</sup> June while pre-tuned to 11435kHz waiting for the 18.30z start of a recently found sked the freq came alive early, 18.20z, with a previously unheard TX sequence :

12345 / 67890 = 12345 / 67890 = 12345 / 67890 0 0 0 0 0 0 0 all repeated twice more.

Then into the expected call-up.

Heard again on 16 June, 9176kHz, 17.00z & 9264kHz, 17.20z

(Brian will monitor. Ed)

10114/8114/5914	21.00/20/40z	07 June	<b>614 1</b> 528 159 <b>New ID</b>
14964/13972/12164	15.00/20/40z	08 June	555 1 249 155 58748
11435/10598/9327	18.30/50/19.10z	08 June	<b>938</b> <b>New sked</b>
10814/12114/13414	06.00/20/40z	10 June	614 1 528 159 52045
10843/9243/7843	18.30/50/19.10z	12 June	<b>828</b> <b>New sked</b>
9239	05.20z	13 June	827 1 179 84 2286 07509
14524/13524/11524	13.00/20/40z	"	555 1 965 113 85130
9176	19.00z	"	257 1 6366 50 89515
7838MCW	05.00z	20 June	827 000
9176/7391CW	18.00/20z	"	257 1 4290 40 06267
9176CW	19.00z	"	257 1 4663 61 65382
13369	22.00z	22 June	i/p ends 22.03z 000 000 <b>New sked</b>
16269	21.14z	25 June	i/p ends 01330 59 365 000 000 <b>New sked</b>
14524/-----/11524	13.00/40z	27 June	555 1 125 129 53485
12162	16.00z	27 June	546 1 1032 80 00879
10173	04.20z	28 June	111 1 167 261 53743
14964	15.07z	29 June	i/p strong sig
16269/14669/(13369)	21.10/30z	29 June	<b>263 000</b> <b>New sked</b>

**Note**, the '614' sked for Tue/Fri did not appear on 21/6 or 24/6 – has it finished ??

M12 sample log:

7839kHz0500z	06/06[827 1 179 84 22286 ..... 68135 000 000]0508z. Strong QSB2	SPECTRE	MON
9239kHz0520z	06/06[827 1 179 84 22286 ..... 68135 000 000]0528z. Strong QSB2	SPECTRE	MON
10739kHz0540z	06/06[827 1 179 84 22286 ..... 68135 000 000]0508z. Fair QRN3 QSB2	SPECTRE	MON

827 1 179 84 179 84  
 22286 07509 63893 12419 19633  
 09959 98495 95491 95736 37423  
 20926 49904 66180 57651 64190  
 10106 41892 97768 88560 67270  
 27034 11798 77866 13646 46232  
 12867 91288 32408 62984 54877  
 76202 37070 24039 66039 03364  
 00699 18969 94761 29875 84381  
 53352 77537 11244 99882 15505  
 75375 97601 16461 20815 93254  
 84231 08403 55573 17081 37678  
 22750 36167 84176 85908 66848  
 64684 39584 75545 84956 88196  
 67603 53209 91186 72255 26778  
 37548 29440 53951 65315 03521  
 66769 64606 93423 38425 72950  
 69993 73904 14082 68135  
 000 000

**M12a** (two message variant)

The entries are good examples of the M12a behaviour for repeat messages. The first message in one TX becomes the second of the next TX. See Brians charts for further detail.

No reports

**M14 IA** MCW / ICW / MCWCC, some CW, short 0

Mar – Apl, CW sendings on 8 Mar/12 Apl, 07.00/08.00z

(changed its times on 20/21 Mar ? – BST started 27/28 Mar)

9125/8194 17/18.0z 01 Apl 269 00000 New 1<sup>st</sup>/3<sup>rd</sup> Fri sked ?

6856MCW	18.20z	10/24 May 163 573 15 = 45387
5936	19.20z	29 June 417 903 15 = 41702

**M14a** (two message variant)

No reports

**M18 IC**

Mar – Apl

4073	18.27z	07 Apl	0234 0234 0234 (off time!)
4073	21.50z	08 Apl	still off time

No May-June reports

**M23 O**

Mar – Apl

5450//5914 13/14/15/16.00z (some or all) 10/15/17/18/21/22/28/31 Mar ‘747’ R17/R18

Unusual sequence!, and much longer TXs than the expected 10 mins.

**M24 IA** MCW / ICW / MCWCC (high speed version of M14), short 0

16318/13955 11.00/30z 15 July 301 948 126 = 08681

**M24a**, as M24 with 2<sup>nd</sup> addressee hand keyed, rarely intercepted.

No reports

**M39 ICX?** ICW / MCW

No reports

**M44**

No reports

**M44a**

Possible intercept of this very rare ‘Cyrillic Letters’ station

9450	13.00z	14 June	separate letters, very slow.
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**M45/3 XIV** (May - Aug) MCW, slow, hand, paired gps

Mar – Apl, an improvement in sigs received compared to previous few months.

5074//5474	17.02z	03 May	074 760 31 = = 70528, strong
5074	17.02z	23 June	074 933 33 = = 47723, fair

M45 Sample log:

5074kHz 1701z 07/06

SPECTRE

TUE

074 933 33 ==  
47723 20934 02736 91860 66631 69391 29818 49761 47320 61777  
25282 88585 43539 80016 69292 45860 39457 32969 01737 16914  
90776 79582 48115 10578 58792 07470 26908 31809 69830 77084  
73858 93598 87533  
== 933 33 000

**M50 XIV** MCW

No reports

**M55 O**

No reports

**M62 O**

No reports

**M76 O** Uses 'barred' letters, difficult in Europe as often under an XJT

Mar – Apl

3820	17.50z	12 Mar	HUWT de CGF1 QTC 157 31 BT
3820	16.45z	13 Mar	I8C1 de KQO3 QTC 243 60 14 1835 BT

**M87 O**

No reports

**M89 O**

The VVV x3 calls and 'QSA' endings still being set.

J-PL keeps his eye on this station and makes good use of the Global Tuners network as an aid.

Mar – Apl, continued to come up with more new (previously unlogged) calls. **4592** in use as new freq.

Short messages being sent by hand, some random examples shown.

(5500//4225 12.00z 01 Apl ... COM BT 5371/2030z17/3989 AR, all x2 by hand)

Then again by hand, poor OP, poor sig.

7602 00.20z 08 Apl Poss format

UGT COM BT 645/5325/5868/04/08/0310/888/A/84/10 AR QSL ? HW NR 42

Then again by hand, but with long zeros, better sig, all x3

4532 17.20z 08 Apl UGT COMM BT 654/5588/5868/04/09/-150/817/B/80/10 AR

4225//5500	22.32z	01 May	V 7NPE de QV5B
7582//8110	22.53z	"	" " message at 23.59z as above
6840//10640	12.19z	02 May	VVV Q2M de NYZ
5500//8110	12.24z	"	V 7NPE de CI4W message sent
4225//5500	20.11z	02 May	V 7NPE de CI4W then changes to QV5B

and this mssg at 20.32z

VVV HR 7GGA (x3)

7GNR 02/CCK 25 37 0503-430 RMKS

873801829/1103/1294/8698/1371/8731/1328/8436 (x2)

7GNR BT (x3)

NT54 745U **45NA** U734 4U7T **446N** 74NA **446N** 4674 7U6N

T5NA 454U 746N 4460 4U7N N4UN **45NA** **45NA** N4UA **45NA**

7545 **N446** 7434 7N4N 477N AR AR

(Interesting repeated groups, wonder if gp 22 should be 446N ?.Ed)

3297	16.09z	10 May	V GKVZ de Q7NW
11432 A1A CW	18.17z	11 May	V RXP7 de CZT2, unstable carrier, <b>New freq?</b>
7602	16.17z	15 May	V DKG6 de 3A7D
4523//3327	11.02z	16 May	V QPZM de WOXN

Message transmissions continued to be sent at random times.

11432	22.12z	19 May	VDKG6 de 3A7D
10475//11432	18.41z	20 May	RXP7 de CZT2
6773//8040	10.53z	26 May	V H2FL de DRV8, <b>new freqs &amp; calls</b>
10643	21.37z	02 June	V DKG6 de 3A7D
4225	16.34z	14 June	V 7NPE de QV5B
3297	19.39z	26 June	V GKVZ de Q7NW
4860//6840	16.20z	27 June	VVV Q2M de NYZ
6840//10640	11.21z	29 June	VVV Q2M de NYZ
10640//6840	09.20z	30 June	VVV Q2M de NYZ

**M94** CW, MCW, partner station to V24

Both these stations are undergoing extensive changes.

It is suggested that those interested pay close attention to T\_O\_K\_E\_N's detailed mails to group.

Once the changes are more settled we will provide details in a future Newsletter.

**SK01** (Data Mode generic classification, Cuban TX's)

See comments in Issue 49 which still apply, and DJs log mails for ongoing developments.

Freqs used.

5800, 5898, 7890, 8180, 8186, 9063, 9124, 11435, 11532, 12120, 13380,

The SK01 monitoring group have built up a wide picture of the stations activities but even with their extensive monitoring, like most number stations, some things catch them out.

The new TUE & THU 05.00/05.30 TXs remain elusive – unless someone here knows !!

AB, BR, CB, FN, FS, Gert, GN, HFD, HS, JO, Jon-FL, MB, ML, MP, MS, PoL, PP, RNGB, SPECTRE, Westli, Westt1us, Anon UK, Anon2EU

## **GERMAN BRANCH REPORT**

Many interesting X06 facts and logs – The report from E2Kde and the X06 team

Hallo liebe Freunde und Kollegen der deutschen Branche und des X06 Teams von E2K (Hello dear friends and colleagues of E2K's German Branch and the X06 team)

Since June it's exactly 5 years ago, that I became co-moderator of E2K. Since 2006, E2Kde is volunteered through the "Kopf" in E2K's moderator team. After me, Richard Ness entered the team some years later, so that we are 5 moderators now (2 senior owners and 3 co-moderators), who admin and work to the best of E2K.

This time we have only interesting facts and logs of X06. From the German Branch we will have more news in the next report.

X06

Our team has 2 new members from the UK: Gary Neville and Ian Wraith – last one best known as former E10 desk manager (or to say it in my own words: "E10 Teamkopf"). They logged X06 recently, as you will see below in the logs section. Welcome both of you, and we look forward to your next logs.

After the X06 logging weeks in March/April (see last newsletter), Peter, our "vice-Kopf", made an interesting analysis of the X06 signals, which brings us new results about the whole X06 development. Many thanks Peter for your great efforts.

So far we have up to 130 matches found, and from EN66 on we will give on the matches with number (for example as "M131") and the random catches (as "R").

'X06 Developments' a piece penned by Peter can be seen at the end of this Newsletter after the charts section.

## **X06 Mazielka (1C) logs section**

First a little correction to the last report in EN64: The scale in the long-running X06b on April 11<sup>th</sup> (8500 kHz, between 0729 and 0835 UTC) was "6—1—".

In this section, the logs from Peter, which only show the start times, are usually so called "automatic (or auto) recordings", and it's not clear, when the transmissions ended.

Date	Day	UTC	Freq	Scale	Monitor	Comments
20110501	Sun	1700	13388	1--6--	Hans/NO	Very short X06b before E07!
20110502	Mon	1119-1139	14650	215346	Peter/UK	Poor with fading
20110503	Tue	0828-0830	11085	154263	RNGB	Monitored in progress
20110503	Tue	1309-1318	13506	164532	Hans	Alert type 2(1) Weak with QRM(1)
20110503	Tue	1318-1322	11411	164532	Hans	2(2) Fair/strong(1)
20110504	Wed	0637-0645	13506	164532	Hans	Alert 3(1) V. weak/weak
20110504	Wed	0646-0652	9197	164532	Hans	3(2) V. weak/weak
20110504	Wed	0656	9105	164532	Peter	3(3) Good
20110504	Wed	0750-0756	14377	432516	Peter, Hans	Good/UK, weak with jet QRM/NO
20110504	Wed	0825-0826	14631	362154	Peter	Good
20110504	Wed	0947	18346	214356	Peter	Fair but clear
20110504	Wed	1047-1055	14650	215346	Peter	Alert 2(1) Fair with QSB
20110504	Wed	1055	16115	215346	Peter	2(2) Good with heavy noise floor
20110504	Wed	1349	14871	156234	Peter	Weak shortie (only 21 secs)
20110504	Wed	1434-1440	14650	215346	Peter	Good
20110504	Wed	1440	12091	216354	Hans	Shortie (only 30 secs)
20110504	Wed	1444-1508	14871	156234	Peter	Good
20110504	Wed	1748	11525	156234	Peter	Weak
20110505	Thu	0744-0746	14448	162543	Peter	With breaks, recorded in SSB
20110506	Fri	0600		213546	Peter	Strange/new scale(2)
20110506	Fri	0643-0659	13506	164532	Peter, Eddy	
20110506	Fri	1002-1003	12215	361245	Peter	New style with delayed gaps
20110506	Fri	1035	14824	625413	Peter	Again new style with delayed gaps
20110506	Fri	1118	14896	164532	Eddy/AU	Shortie w/ longer breaks than usual
20110506	Fri	1727	14871	156234	Peter	
20110508	Sun	1020-1025	14871	156234	Peter	Fair to weak with fading
20110508	Sun	1120	16060	261453	Peter	Rare scale
20110510	Tue	0838-0843	14861	542136	Hans	Weak/fair
20110510	Tue	1007	11025	612534	Peter	Fair
20110511	Wed	0753	16045	435621	Peter	Good
20110511	Wed	0825	9061	123456	Peter	Weak X06c
20110511	Wed	0852	16116	134265	Peter	Fair
20110511	Wed	1033	15878	621543	Peter	Fair (rare scale & freq)
20110512	Thu	0740	9388	561243	Peter	Good
20110512	Thu	0937	13506	164532	Peter	Good

Date	Day	UTC	Freq	Scale	Monitor	Comments
20110512	Thu	1519	10535	564213	Peter	Very strong
20110513	Fri	0743	11556	615243	Peter	Good
20110513	Fri	0743	10653	356412	Peter	Good
20110513	Fri	0819	16153	153624	Peter	Good (rare scale & freq)
20110516	Mon	1642-1645	17475	156234	Ian Wraith	Rare freq
20110517	Tue	0917-0924	14812	246531	Mikesndbs	S5
20110517	Tue	2053-2059	7560	215346	Hans	Strong / very strong
20110518	Wed	0751	14377	432516	Peter	
20110519	Thu	0727	16276	314265	Peter	
20110520	Fri	0636	16320	241563	Peter	Shortie (only 3 tones seen/heard)
20110520	Fri	0957	14501	361245	Peter	
20110520	Fri	1020	14824	625413	Peter	Alert 2(1)
20110520	Fri	1028	12194	625413	Peter	2(2)
20110524	Tue	0526-0529	6962	164532	Hans	Alert 2(1) Fair
20110524	Tue	0529-0539	10193	164532	Hans	2(2) Strong start, then heavy fades
20110524	Tue	1810-1812	12195	314265	RNGB	Alert 2 (both in progress) (1)
20110524	Tue	1815-1817	13940	156234	RNGB	In progress
20110524	Tue	1819	10731	314265	RNGB	2(2) Shortie
20110527	Fri	0755-0802	10653	356412	Hans	Weak with QSB (new style with gaps)
20110531	Tue	1100-1104	13510	612534	RNGB	Alert 2 (both in progress) (1)
20110531	Tue	1105-1109	11025	612534	RNGB	2(2)
20110601	Wed	0738	12152	432516	Peter	Weak
20110601	Wed	0829	14630	621543	Peter	Weak
20110601	Wed	0950	14501	214356	Peter	Weak
20110601	Wed	1813-1816	14871	156234	Peter	Fair
20110602	Thu	0648-0650	16277	436512	Peter, Spectre/UK	Fair
20110602	Thu	1228-1231	16132	352416	Peter	Good
20110603	Fri	0958	14501	361245	Peter	Alert 2(1) Strong with some fading
20110603	Fri	1011-1015	12215	361245	Peter	2(2) Good
20110603	Fri	1021	14824	625413	Peter	Fair
20110603	Fri	1636	18321	156234	Peter	Alert 2(1) Very weak
20110603	Fri	1647-1657	14871	156234	Ian, LU5EMM, Peter	2(2) Weak with QRM in AR
20110603	Fri	1658	13961	216354	Peter	Alert 2(1) Good
20110603	Fri	1700	16025	216354	Peter	2(2) Fair on unusual freq
20110603	Fri	1704	12207	215346	Peter	Weak
20110608	Wed	0804	9061	412356	RNGB	In progress
20110608	Wed	0855-0856	16116	134265	Hans	Very weak (i. P.)
20110608	Wed	1455	14871	156234	Gary/UK	Weak but readable w/ strong fading
20110609	Thu	1028-1037	12215	361245	Peter	S5 fair with some fading
20110609	Thu	1436-1440	13506	164532	Peter	Good
20110609	Thu	1518-1519	12158	564213	Peter	Very good
20110609	Thu	2234-2236	7635	156234	Gary	Weak but readable
20110610	Fri	0747	12213	615243	Peter	Good
20110610	Fri	0750	10653	356412	Peter	Fair
20110610	Fri	0810	16153	153624	Peter	Very faint
20110610	Fri	1006-1013	19611	256134	Peter	Fair
20110614	Tue	0804-0806	11545	534216	Peter	Good
20110614	Tue	1042	11025	612534	Peter	Very weak
20110614	Tue	1442	14871	156234	Peter	Poor with fading
20110615	Wed	0649-0651	12156	256341	Hans	Very weak
20110615	Wed	0801	12149	432516	Peter	Poor
20110615	Wed	0813	14635	362154	Peter	Poor
20110616	Thu	1001-1002	14650	215346	Peter	Alert with new style 1(1) Weak
20110616	Thu	1006-1007	14650	215346	Peter	1(2) Stronger
20110616	Thu	1015-1023	16276	314265	Peter	S2-6
20110617	Fri	0435	9056	615243	Peter/NL	New style
20110620	Mon	1539	13395	532614	Peter/UK	Fair
20110621	Tue	0603	14650	215346	Peter	1(1)
20110621	Tue	0651	14650	215346	Peter	1(2)
20110621	Tue	0757	12157	165423	Peter	
20110621	Tue	0901-0906	14944	621543	Hans	Weak/fair
20110621	Tue	0937	18206	246531	Peter	2(1)
20110621	Tue	0947	17421	246531	Peter	2(2)
20110621	Tue	1059	17421	246531	Peter	Comeback
20110622	Wed	0657-0703	12100	123456	Hans	X06c i. p., weak on Christian BC
20110622	Wed	0735	16045	435621	Peter	
20110622	Wed	0746-0748	12100	123456	Hans	X06c, stronger on a weaker BC
20110622	Wed	0755	13419	465132	Peter	
20110622	Wed	0800-0806	11483	412356	Hans	Alert 2(1) Fair/strong
20110622	Wed	0807-0835	9061	412356	Hans	Fair with QRM from nearby stations
20110622	Wed	0856	16116	134265	Peter	

Date	Day	UTC	Freq	Scale	Monitor	Comments
20110622	Wed	0857-0914	12100	123456	Peter	X06c comeback
20110622	Wed	1147-1148	11090	123456	Spectre	X06c - weak, QRN2 (i. p.)
20110622	Wed	1219	12100	123456	Peter	X06c 2 <sup>nd</sup> comeback
20110623	Thu	0759	12626	521634	Peter	
20110623	Thu	1032	13506	164532	Peter	Good
20110623	Thu	1137	14871	156234	Peter	
20110623	Thu	1352	14871	156234	Peter	Weak comeback
20110623	Thu	1501	14871	156234	Peter	2 <sup>nd</sup> comeback
20110624	Fri	0746	12213	615243	Peter	Weak
20110624	Fri	0812	14650	215346	Peter	
20110624	Fri	0913-1056	12100	123456	Danix/PL, Mike, Peter, Hans	X06c: S9+ (PL), S2 (NO)(3)
20110624	Fri	1043-1056	14450	123456	Danix, Mike, Peter, Hans	Parallel TX: S9+20 (PL), S2 (NO)(3)
20110624	Fri	1050-1056	11090	123456	FrankeE2Kde, Kopf, Peter	2 <sup>nd</sup> parallel TX (strong)!
20110624	Fri	1103-1116	19611	256134	Peter, Kopf	Weak with new style
20110624	Fri	1457-1506	14871	156234	Peter	
20110627	Mon	0813-0821	11538	421635	Peter	Heavy data QRM for the first mins
20110627	Mon	0936	16117	463125	Peter	Good
20110627	Mon	0942	10372	431625	Peter	Good
20110627	Mon	1232	14871	156234	Peter	
20110627	Mon	1645	14871	156234	Peter	Comeback
20110628	Tue	1012	11570	123456	Danix	X06c shortie (only a few secs)
20110628	Tue	1013	13510	612534	Peter	
20110628	Tue	1430	14871	156234	Peter	
20110628	Tue	1728-1735	16276	314265	Scansweden, Spectre	Fair, QRN2 QSB2 (i. p.)
20110629	Wed	0937-0947	12100	123456	Peter	Strange X06c(4)
20110629	Wed	1039-1043	14944	621543	Peter	
20110629	Wed	1909	14655	156234	Peter	Alert 2(1)
20110629	Wed	1922-1927	10731	314265	LU5EMM	Low/QRM
20110629	Wed	1925-1929	13506	164532	Scansweden, Hans	Fair/strong(5)
20110629	Wed	1928	11525	156234	LU5EMM	2(2) Shortie (only 2 sequences)

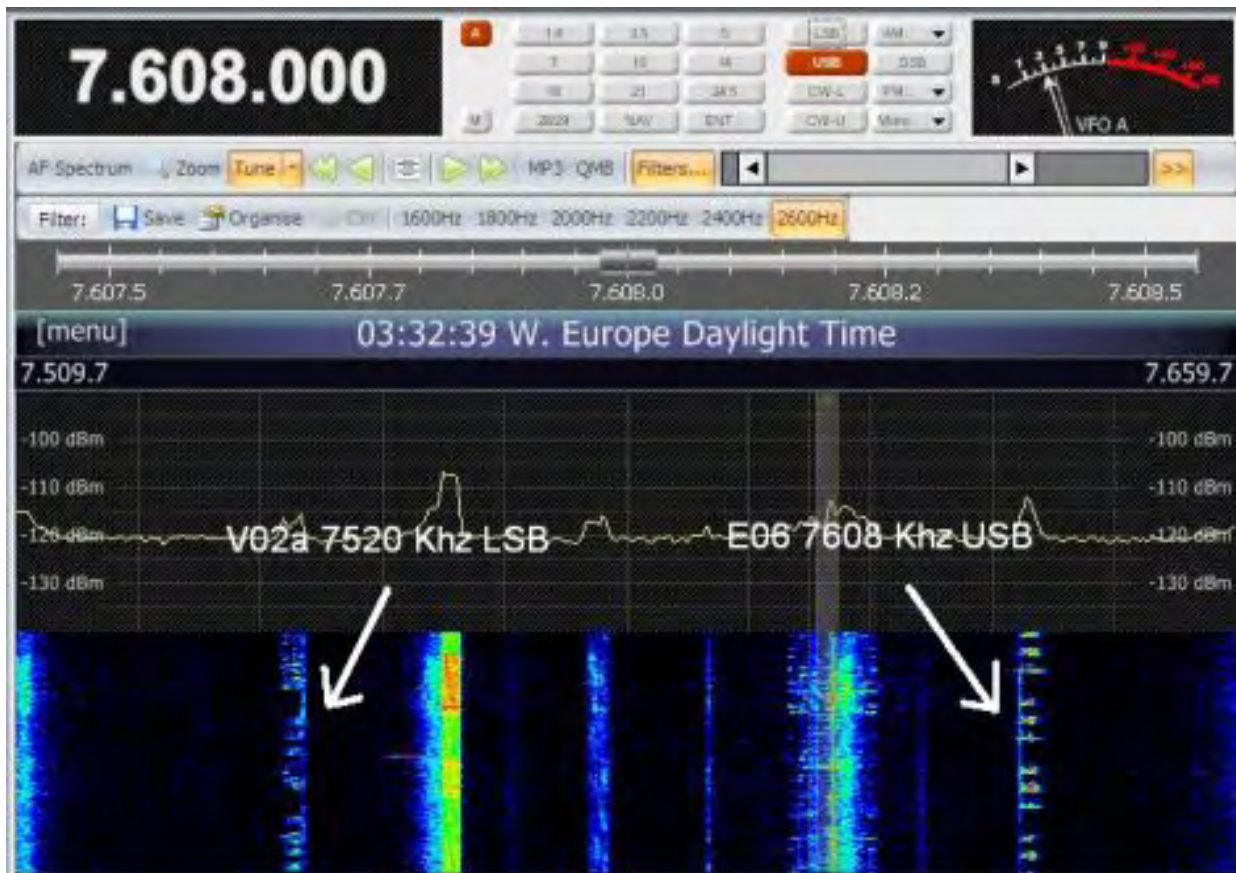
- 1) Strange tone behaviour of both transmissions: longer tones, longer break, little time difference between the tones (delayed gaps).
- 2) Heard on 11411, 11438 or 11440 kHz (auto recording).
- 3) Mike received both TXs on 12100 and 14450 kHz weak, Peter strong (12100 kHz with mirror).
- 4) First unusual introduction, then X06c birst, then birst with new style.
- 5) CROWD36 at 1936 UTC on 10211 kHz.

Nothing to add - only: Next time will come more. Till then as usual: "Auf Wiedersehen" and "Good-bye"

*Jochen Schäfer, KopfE2Kde and X06 Teamkopf*

## VOICE STATIONS

The reason I am writing to you today, is because I had a very nice surprise last night. As at around about 0130 UTC, I was waiting for my favorite broadcasting of E06's second transmission (0130z 7608Khz USB only) to discover that V02a was also broadcasting at the same time, here in the UK at 7520 in LSB mode. I know it is very common for European Number Stations to broadcast at the same time, but to catch V02a from Cuba came as a very nice surprise.



To cement the occasion I took a snapshot of the SDR Remote [seen above] I was using to record E06's transmission. The location of the SDR Remote, was Laax in Switzerland. However, I was also recording V02a's transmission using my Eton G3, here in the UK.

Here are the two logs.

7608 E06 Sat 06042011 0130 USB Fair. 759 108 32 85624 ..... 25203 108 32 00000 End 0139z.  
7520 V02a Sat 06042011 0124 LSB Fair signal. V02a in progress. End 0142z. [Telescopic antenna, Eton G3 rx]

I especially enjoyed reading your latest ENIGMA2000 newsletter, your comments in the Gizza A Job section made me laugh.

*Excellent piece SPECTRE, thanks; these logs have also been inserted in the relevant logs also. Glad you liked the humour on 'Gizza Job,' I try to inject a little levity where I can.*

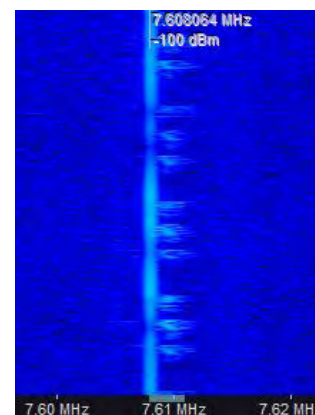
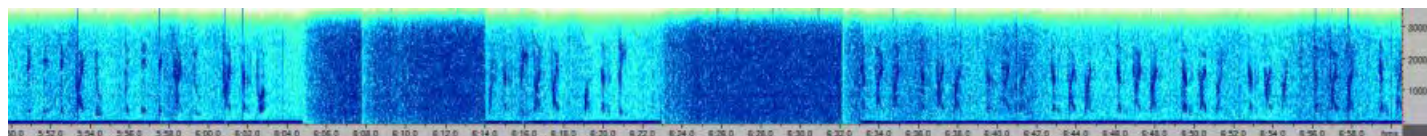
*Continued observation of 7520kHz has yet to reveal V02a.*

**E06** [1A]

**May:**

5133kHz 0130z	01/05[759 306 48 39848 61931 48355 59478 ..... 84870 78437 26282 46943 306 48 00000]		DanAr, PLdn	SUN
5731kHz 2130z	06/05[315 876 15 87653 ... 86421 876 15 00000]2138z Strong, aberration on figure '8.'	(8m07s)	PLdn	FRI
2130z	20/05[315 876 15 87653 06789 45321 65476 ... 86421 876 15 00000] very strong signal		LD, PLdn	FRI
5948kHz 2030z	05/05[724 352 15 27431 ... 5436n 352 15 00000] 2037z Strong, BCQRM3		H-FD, PLdn	THU
6918kHz 0030z	01/05[759 306 48 39848 61931 48355 59478 ..... 84870 78437 26282 46943 306 48 00000]		DanAr, PLdn	SUN
6949kHz 0130z	07/05[759 162 34 71500 ... 71566 162 34 00000(f)] Strong	(10m07s)	DanAr, PLdn	SAT
0130z	08/05[759 162 34 71500 ... 71566 162 34 00000(f)] Very Strong	(10m07s)	DanAr, PLdn	SUN
0130z	14/05[759 841 30 96935 ... 37405 841 30 00000] Strong	(9m27s)	PLdn	SAT
0130z	15/05[759 841 30 96935 ... 37405 841 30 00000] Strong	(9m27s)	PLdn	SUN
0130z	21/05[759 468 31 03221 ... 51537 486 31 00000(f)] 0140z Strong, localQRM2	(9m35s)	PLdn	SAT
0130z	22/05[759 468 31 03221 ... 51537 486 31 00000(f)] 0140z Fair, localQRM2	(9m35s)	DanAr, PLdn	SUN
0130z	28/05[759 264 31 44078 ... 38209 264 31 00000(f)] 0140z Strong, QRN3	(9m38s)	Hans, PLdn	SAT
0130z	29/05[759 2643144078 ... 38209 264 31 00000(f)] 0140z Very strong	(9m38s)	DanAr, PLdn	SUN

460 275 131  
82626 02953 68477 22370 93143  
51724 98159 99511 40938 84890  
65980 57428 89997 90496 43073  
00984 30422 73699 26289 67474  
90957 70597 26676 86364 80036  
91148 63563 47133 21437 73536  
05762 89487 89460 49089 08394  
76809 65373 93527 37578 25811  
25394 74431 77428 62459 85935  
18489 39150 82170 81677 81571  
91267 60205 52456 23645 17013  
63643 53488 99146 ????? ?????  
????? ????? ????? ????? ?????



7608kHz0130z	04/06[759 108 32 85624 ... 25203 108 32 00000(f)] 0140z Very strong	(9m45s)	SPECTRE, PLdn	SAT
0130z	05/06[759 108 32 85624 ... 25203 108 32 00000(f)] 0140z Strong, QSB2	(9m45s)	DanAr,PLdn	SUN
0130z	11/06[759 462 31 55485 ... 45569 462 31 00000(f)] Strong, QRN2	(9m34s)	Spectre, PLdn	SAT
0130z	12/06[759 462 31 55485 45454 ... 29295 45569 462 31 00000]		DanAr, PLdn	SUN
0130z	18/06[759 186 32 20972 68703 .... 33542 21449 186 32 00000]		DanAr, Hans, PLdn	SAT
0130z	19/06[759 186 32 20972 ... 21449 186 32 00000]Strong, QRN2, QSB2 Loss of carrier grp12, recommenced grp8 after two breaks. 38 grps sent.	(12m13s)	PLdn	SUN
0130z	25/06[759 148 32 62452 ... 12262 148 32 00000(f)] 0140z Very strong			
	Testing fm 0106z, test tones to start of msg. Very strong with signal output being adjusted.	(9m47s)	DanAr, Spectre	SAT
0130z	26/06[759 148 32 62452 ... 12262 148 32 00000(f)] 0140z Very strong	(9m47s)	PLdn, Spectre	SUN
8083kHz1120z	12/06[829 00000] 1124z Fair, Strong hum on tx		Hans, Danix	SUN
8142kHz0030z	04/06[759 108 32 85624 ... 25203 108 32 00000(f)] 0040z Very strong	(9m45s)	SPECTRE, PLdn	SAT
0030z	05/06[759 108 32 85624 ... 25203 108 32 00000(f)] 0040z Very strong	(9m45s)	DanAr,PLdn	SUN
0030z	11/06[759 462 31 55485 ... 45569 462 31 00000(f)] Strong, QRN2	(9m34s)	PLdn, Spectre	SAT
0030z	12/06[759 462 31 55485 45454 ..... 29295 45569 462 31 00000]		DanAr, Spectre	SUN
	759 462 31 55485 45454 50501 98141 05428 97564 13181 72859 39049 32911 61547 50121 88718 29226 38737 92937 81192 53771 23408 81396 25870 73336 23512 00254 46496 81530 56488 58648 73519 29295 45569 462 31 00000 <i>Courtesy Spectre</i>			
0030z	18/06[759 186 32 20972 ... 21449 186 32 00000]Weak, QSB2	(9m46s)	PLdn	SAT
0030z	19/06[759 186 32 20972 ... 21449 186 32 00000]0040z Strong	(9m46s)	Spectre,PLdn	SUN
0030z	25/06[759 148 32 62452 ... 12262 148 32 00000(f)] 0040z Very strong	(9m47s)	DanAr, Spectre	SAT
0030z	26/06[759 148 32 62452 ... 12262 148 32 00000(f)] 0040z Very strong	(9m47s)	PLdn, Spectre	SUN
	759 148 32 62452 58123 19475 92668 96904 96558 38498 04188 98209 52734 33779 48080 04392 35893 79621 53470 98735 53559 78013 17709 11184 40581 52708 18743 85902 51802 79304 76358 53488 37098 94178 12262 148 32 00000 <i>Courtesy Spectre</i>			
16240kHz0600z	23/06[328 00000] Weak		Hans	THU
0600z	30/06 [328 00000] Barely audibleV.weak		Hans	THU
<b>E07 [1B]</b>				
<b>May:</b>				
7978kHz 0700z	03/05[919x3 000]		GD	TUE
0700z	05/05[919 000] Weak		Hans, H-FD,PLdn	THU
0700z	10/05[919 919 919 000]		FN, Hans	TUE
0700z	12/05[919 000] Very weak, ending not heard.		PLdn, FN	THU
0700z	17/05[919x3 000]		GD, Hans	TUE
0700z	19/05[919x3 000]		GD	THU
0700z	31/05[919 0 0 0] good signal, some QSB		CB	TUE
9178kHz0720z	10/05[919 919 919 000]		FN	TUE
0720z	12/05[919 919 919 000]		FN,PLdn	THU
0720z	19/05 Carrier, then '000' to finish.	(2m13s)	PLdn	THU
10188kHz 1740z	25/05 [301 ? ??? ???] Weak signal, very strong noise		FR	WED
1740z	29/05[301 1 776 61 13457 ... 87064] 1748z Weak		AEC, FR	SUN
10547kHz2030z	05/05[ 553:0] weak		H-FD	THU
2030z	12/05[553 000]		HJH	THU
2030z	26/05[553 000] Medium/Strong, QRM, QSB		FR, FN	THU
11539kHz2010z	05/05[553:0] weak, QRM		H-FD	THU
2010z	12/05[553 000]		HJH	THU
2010z	26/06 [n. hrd.] bad BCQRM		FN	THU
12088kHz 1720z	01/05[301 000] 1722z Fair		AEC, Hans, PLdn	SUN
1720z	04/05[301 000] 1722z Strong		AEC	WED
1720z	08/05 Strong carrier, audio not heard	(2m59s)	PLdn	SUN
1720z	11/05[301 000] 1722z Fair	(2m13s)	PLdn, FN	WED
1720z	15/05[301 000] 1722z Fair BC QRM3		AEC, PLdn	SUN
1720z	18/05[301 000]Fair	(2m13s)	PLdn	WED
1720z	25/05 [301 ? ??? ???] Weak signal, heavy bleeding, strong noise		FR	WED
1720z	29/05[301 1 77661 13457 ... 87074 000 000] 1728z Fair BCQRM3 Vy low audio		FR, Danix, AEC	SUN
13388kHz1700z	01/05[301 000] 1702z Strong		AEC, PLdn	SUN
1700z	04/05[301 000] 1702z Weak		AEC,GD,Hans	WED
1700z	08/05 Strong carrier, audio not heard	(2m59s)	PLdn	SUN
1700z	15/05[301 000] 1702z Strong		AEC, PLdn	SUN
1700z	18/05[301 000]Fair	(2m13s)	PLdn	WED
1700z	25/05 [301 ? ??? ???] Weak signal, heavy bleeding, strong noise		FR	WED

13388kHz1700z	29/05[301 1 776 61 13457 ... 87074 000 000] 1708z Strong QSB3 Vy low audio		FR, Danix, AEC, CB	SUN
	301 1 776 61 13457 21143 35265 00464 77621 27461 68966 95112 23308 28522 42600 28670 52136 65011 65125 56416 52979 01241 22529 58505 11572 94912 54787 12608 52173 65267 27407 75683 38613 40564 75590 47881 64667 00325 35841 78296 17037 21388 76157 25138 64708 31648 41602 07646 84589 41181 97255 46716 81676 78221 01223 19774 11712 34716 13176 70345 89701 10442 55543 04428 87074 000 000			
13412kHz1920z	09/05[845 845 845 000]		FN, PLdn	MON
1920z	11/05[845 845 845 000]		FN	WED
1920z	16/05[845 000]		HJH	MON
1920z	18/05[845 000]	(2m13s)	DanAr	WED
1920z	23/05[845 000]Fair, XJTQRM3/4	(2m13s)	PLdn	MON
1920z	25/05[845 000] 1922z Strong QRM BC		AEC, Danix, FR	WED
1920z	30/05[845 000] Fair, XJTQRM4/5 odd characters only	(2m13s)	PLdn	MON
14812kHz 1900z	04/05[845 000] 1902z Very Strong		AEC	WED
1900z	09/05[845 845 845 000]		FN, Hans	MON
1900z	11/05[845 000] 1902z Fair	(2m13s)	PLdn, FN	WED
1900z	18/05[845 000]Strong	(2m13s)	PLdn	WED
1900z	23/05[845 000]Fair	(2m13s)	PLdn	MON
1900z	25/05[845 000]Fair	(2m13s)	AEC, Danix, FR	WED
1900z	30/05[845000] 1902z Fair	(2m13s)	PLdn	MON
<b>June:</b>				
8124kHz0700z	07/06[131 131 131 000]		FN	TUE
8127kHz0700z	09/06[131 131 131 000]		FN, PLdn	THU
0700z	14/06[131x3 000]		GD	TUE
0700z	28/06[131 000] Strong		Hans	TUE
9327kHz 0720z	07/06[131x3 000]		GD, FN	TUE
0720z	09/06[131 131 131 000]		FN	THU
0720z	16/06[131 131 131 000] 0722z Fair QRN3 QSB2		Spectre, PLdn	THU
0720z	28/06[131 000] Strong		Hans	TUE
10436kHz1740z	01/06 [414 1 776 61 13457]		FN, PLdn	WED
1740z	05/06 [414 753 72 .....] Weak, QRM2		PLdn	SUN
1740z	08/06[414 1 753 72 36999 ... 11390 000 000] 1750z Strong, PLTQRM2	(9m42s)	PLdn, FN	WED
1740z	15/06[414 1 944 52 44253 ... 94870 000 000] Fair	(7m52s)	PLdn, Spectre	TUE
	414 1 944 52 44253 75483 30427 86579 72944 36475 24423 40226 37410 47206 51479 59481 07343 05860 72619 47981 78546 39318 52256 56011 08189 76561 60915 18057 84974 38169 23217 93164 79886 63565 48182 13204 18356 54958 80*31 34209 78747 10936 34515 95578 17044 23100 76825 11776 75854 20947 81007 76065 84558 57*61 93135 94870 000 000 <i>Courtesy Spectre</i>			
1740z	19/06[414 1 112 69 77741 ... 18033 000 000] 1749z Very strong QRM3 QSB3		Danix, SPECTRE	SUN
1740z	22/06[414 1 112 69 77741 ...18033 000 000]1750z Fair	(9m31s)	PLdn	WED
10714kHz 2030z	09/06[273 1 128 69 90042 ..... 30475 000 000] 2039z Very weak QRN2 QSB4		Spectre, FN, Danix	THU
2030z	30/06[273 000] 2032z Fair Weak audio QRN2 QSB3		Spectre	THU
12141kHz1720z	01/06 [414 1 776 61 13457 21143....] 1727z Strong		Hans, FN, PLdn	WED
1720z	05/06[414 753 72 .....] Weak, QRM3		PLdn	SUN
1720z	08/06[414 1 753 72 36999 ... 11390 000 000] 1730z Strong, HETQRM3	(9m42s)	PLdn, FN, Spectre	WED
1720z	12/06[414 1 944 52 44253 ... 94870 000 000] 1728z Fair BCQRM4		Spectre, Danix	SUN
1720z	15/06[414 1 944 52 44253 ... 94870 000 000] BCQRM 4/5 odd character	(7m52s)	PLdn	TUE
1720z	19/06[414 1... (too heavy BCQRM to copy)] 1729z Weak BCQRM5		Danix	SUN
1720z	22/06[414 1 112 69 77741 ... 18033 000 000]1730z Strong	(9m31s)	PLdn	WED
1720z	26/06[414 000] Fair	(2m13s)	PLdn, Spectre	SUN
1720z	29/06[414 000] Weak audio, strong carrier	(2m13s)	PLdn, Spectre	WED
12213kHz2010z	02/06[273:0]		H-FD	THU
2010z	09/06[273 1 128 69 90042 ..... 30475 000 000] 2019z Weak QRN2 QSB3		Spectre, FN	THU
	273 1 128 69 90042 29953 73555 18054 08875 09771 61923 09838 02058 34522 37504 20888 46827 32966 44152 33822 84174 32421 58090 71598 42123 44857 55307 78825 26682 96291 77563 85596 91254 70622 45278 67146 01323 63320 33836 70865 02089 65729 30900 38793 50342 62239 01075 43005 06930 30942 66671 03405 64054 41973 62490 89373 37307 98810 91128 99383 96932 71933 61885 19229 71335 16766 59450 59435 84286 62742 59624 37752 30475 000 000 <i>Courtesy Spectre</i>			
2010z	30/06[273 000] 2012z Fair Weak audio QRN2 QSB2		Spectre	THU

13468kHz	1700z	01/06[414 1 776 61 13457 ... 87074 000 000] Strong	(8m45s)	PLdn, FN	WED
	1700z	08/06[414 1 753 72 36999 ... 11390 000 000] 1710z Strong	(9m42s)	PLdn, FN, Spectre	WED
		414 1 753 72 36999 76065 54169 78254 43927 69305 56499 25135 01863 18816 07649 13541 55029 23329 98840 26598 36179 61054 37992 31785 43334 86380 55825 38507 74328 52079 08556 30806 59615 17028 17201 38032 28893 17963 88119 48901 21994 78848 91299 66451 18946 21140 42104 42987 09129 35623 11041 80430 77825 28026 59852 39193 01574 42381 66915 30992 36021 77581 11795 06185 18405 50148 45752 08127 91623 02781 69743 90210 29917 32984 83255 12390 000 000 <i>Courtesy Spectre</i>			
	1700z	12/06[414 1 944 52 44253 ... 94870 000 000] 1708z Fair QRN2 QSB2		Spectre, Danix	SUN
		414 1 944 52 44253 75483 30427 86579 72944 36475 24423 40226 37410 47206 51479 59481 07343 05860 72619 47981 78546 39318 52256 56011 08189 76561 60915 18057 84974 38169 23217 93164 71886 63565 48182 13204 18356 54958 80631 34209 78747 10936 34515 95578 17044 23100 76825 11776 75854 20947 81007 76065 84558 57661 93135 94870 000 000 <i>Courtesy Spectre</i>			
	1700z	15/06[414 1 944 52 44253 ... 94870 000 000] Strong/V.strong		Hans	WED
	1700z	19/06[414 1 112 69 77741 ..... 18033 000 000] 1709z Fair QRN3 QSB2*		Spectre, PLdn	SUN
		<i>*See also Spectre's 'More Recording of Number Stations' in the article section of this newsletter</i>			
	1700z	22/06[414 1 112 69 77741 ..... 18033 000 000] 1710z Weak QRN2 QSB2		Spectre	WED
	1700z	26/06[414 000] Fair	(2m13s)	PLdn, Spectre	SUN
	1700z	29/06[414 000] Weak, QRM2	(2m13s)	PLdn	WED
13524kHz	1940z	06/06[865 1 389 45 70612 ... 70864 000 000] Fair, QRM2	(7m05s)	SPECTRE,GD, FN	MON
	1940z	08/06[865 1 389 45 70612 ... 70864 000 000] Fair	(7m05s)	PLdn	WED
	1940z	13/06[865 1 245 41 78702 80046 .... 01163] Strong QSB2		Hans, PLdn	MON
	1940z	15/06[865 1 245 41 78702 – 01163 000 000]Weak	(6m44s)	PLdn	TUE
	1940z	27/06[865 1 127 35 73145 ... 43211 000 000] 1946z Fair/Strong QSB3 MXIQRM2		Danix, Hans, Spectre	MON
		865 865 865 1 127 35 127 35 73145 23578 25876 78856 34261 65161 47489 04778 52685 47103 40499 14331 99828 63497 40926 16166 29688 84208 09028 80547 79159 87423 04302 36734 82163 57502 39721 63374 45212 52214 30355 23583 18778 75852 43211 000 000 <i>Courtesy Danix</i>			
	1940z	29/06[865 1 Difficult to copy] 1946z Fair Weak audio QRN2		Spectre	WED
14624kHz	1920z	01/06[865 865 865 000]		FN	WED
	1920z	06/06[865 1 389 45 70612 ... 70864 000 000] Fair	(7m05s)	SPECTRE.PLdn, FN	MON
	1920z	08/06[865 1 389 45 70612 ... 70864 000 000] Strong	(7m05s)	SPECTRE.PLdn	WED
	1920z	13/06[865 1 245 41 78702 ... 01163 000 000] Strong	(6m44s)	PLdn	MON
	1920z	15/06[865 1 245 41 78702 – 01163 000 000] Fair	(6m44s)	PLdn, Spectre	TUE
		865 1 245 41 78702 80046 22716 58950 55539 94778 76390 95542 20266 37938 58190 50498 00112 83192 24509 73858 48097 76550 10900 77957 87359 92165 93443 31971 55726 67704 86613 42549 76711 11389 38100 00077 64783 31482 55384 40760 22893 75041 20920 29898 01163 000 000 <i>Courtesy Spectre</i>			
	1920z	20/06[865 000]	(2m13s)	PLdn	MON
	1920z	22/06[865 000] Fair	(2m13s)	PLdn, Spectre	WED
	1920z	27/06[865 1 127 35 73147 ... 43211 000 000] Strong	(6m06s)	PLdn, Spectre	MON
	1920z	29/06[865 1 Difficult to copy] 1926z Fair Weak audio QRN2		Spectre	WED
15824kHz	1900z	01/06[865 865 865 000]		FN	WED
	1900z	06/06[865 1 389 45 70612 ... 70864 000 000] BC QRM5 – FN & PLdn	(7m05s)	SPECTRE	MON
		865 1 389 45 70612 40066 79272 38956 89875 57314 58720 09042 60814 49731 97747 46707 32117 27391 21161 79266 74424 07844 62367 12224 25306 25742 82441 90656 59522 21299 03030 34951 23556 73004 22250 19271 10437 69632 95498 74134 97199 95967 27360 23972 24473 09954 25751 43003 70864 000 000 <i>Courtesy Spectre</i>			
	1900z	08/06[865 1 389 45 70612 ... 70864 000 000] 1908z Fair QRN2 BC QRM5 – PLdn		SPECTRE	WED
	1900z	13/06[865 1 245 41 78702 ... 01163 000 000]Fair, BCQRM3/4	(6m44s)	PLdn	MON
	1900z	15/06[865 1 245 41 78702 ... 01163 000 000]Fair, BCQRM3/4	(6m44s)	PLdn, Danix	TUE
15824kHz	1900z	20/06 BCQRM5		PLdn	MON
	1900z	22/06[865 000]Weak, BCQRM3/4	(2m13s)	PLdn, Spectre	WED
	1900z	27/06[865 1 127 35 73145 ..... 43211 000 000] 1906z Fair Weak Audio QRN2 QSB3		Spectre	MON
	1900z	29/06[865 1 Difficult to copy] 1906z Fair Weak audio QRN2		Spectre	WED
<b>E07a</b>					
<b>May:</b>					
5773kHz	2040z	11/05[147 1 17763 452 53 03203 ... 35274 000 000]Strong	(6m56s)	PLdn	WED
	2040z	18/05[147 1 60401 970 59 09581 ... 01244 000 000] Very strong	(7m25s)	PLdn, FR	WED
7437kHz	0430z	05/05[411 000] Strong		PLdn	THU
	0430z	12/05[411 17763 452 53 03203 ... 35274 000 000] Strong	(6m56s)	PLdn	THU
	0430z	19/05[411 1 60401 970 59 09581 ... 01244 000 000] Very strong	(7m25s)	PLdn	THU
	0430z	26/05[411 000] Strong		PLdn	THU

7473kHz	2020z	04/05[147 000] 2022z Very Strong QRM4		BC AEC	WED
	2020z	11/05[147 1 17763 452 53 03203 ... 35274 000 000]Strong, BCQRM2 [2000Hz Het removed]	(6m56s)	PLdn	WED
	2020z	18/05[147 1 60401 970 59 09581 ... 01244 000 000] Very strong, BCQRM3	(7m25s)	PLdn, FR	WED
	2020z	25/05[147 000]Very strong, BCQRM2	(2m13s)	AEC, HJH	WED
8137kHz	0450z	05/05[411 000] Strong		PLdn	THU
	0450z	12/05[411 17763 452 53 03203 ... 35274 000 000] Strong	(6m56s)	PLdn	THU
	0450z	19/05[411 1 60401 970 59 09581 ... 01244 000 000] Very strong	(7m25s)	PLdn	THU
	0450z	26/05[411 000] Strong		PLdn	THU
8173kHz	2000z	04/05[147 000] 2002z Very Strong		AEC, GD	WED
	2000z	11/05[147 1 17763 452 53 03203 ... 35274 000 000]Strong, localQRM2	(6m56s)	PLdn,	WED
	2000z	18/05[147 1 60401 970 59 09581 ... 01244 000 000] Very strong	(7m25s)	DanAr, FR	WED
	2000z	25/05[147 000]Strong	(2m13s)	PLdn, AEC, Danix	WED
9137kHz	0510z	12/05[411 17763 452 53 03203 ... 35274 000 000 Strong]	(6m56s)	PLdn	THU
	0510z	19/05[411 1 60401 970 59 09581 ... 01244 000 000] Very strong	(7m25s)	PLdn	THU
<b>June:</b>					
5773kHz	2040z	01/06[147 1 60401 970 59 09581 ... 01244 000 000] 2047z Very Strong	(7m28s)	Hans, FN	WED
	2040z	15/06[147 1 11006 451 71 98686 ... 48029 000 000] Strong	(8m23s)	PLdn	WED
7437kHz	0430z	02/06[411 1 60401 970 59 09581 ... 01244 000 000] 0437z Very Strong	(7m28s)	PLdn	THU
	0430z	09/06[411 000 Fair]Strong	(2m13s)	PLdn	THU
	0430z	16/06[411 1 11006 451 71 98686 ... 48029 000 000] Fair	(8m23s)	Hans, PLdn	THU
	0430z	23/06[411 000] Fair, QSB2	(2m13s)	PLdn	THU
	0430z	30/06[411 000] Very strong	(2m13s)	PLdn	THU
7473kHz	2020z	01/06[147 1 60401 970 59 09581 ... 01244 000 000] 2027z Very Strong, QRM	(7m28s)	PLdn, FN	WED
	2020z	08/06[147 000] Very strong, BCQRM2	(2m13s)	PLdn, SPECTRE	WED
	2020z	15/06[147 1 11006 451 71 98686 ... 48029 000 000] Very strong	(8m23s)	PLdn	WED
	2020z	22/06[147 000]Very strong, BCQRM2	(2m13s)	PLdn, Spectre	WED
	2020z	29/06[147 000]Very strong, BCQRM2	(2m13s)	PLdn, Spectre	WED
8137kHz	0450z	02/06[411 1 60401 970 59 09581 ... 01244 000 000] 0457z Fair, distorted	(7m28s)	PLdn	THU
	0450z	09/06[411 000 Fair] QRM4 odd character.	(2m13s)	PLdn	THU
	0450z	16/06[411 1 11006 451 71 98686 ... 48029 000 000] Fair	(8m23s)	Hans, PLdn	THU
	0450z	23/06[411 000] Strong	(2m13s)	Hans, PLdn	THU
	0450z	30/06[411 000] Very strong	(2m13s)	PLdn, Hans	THU
8173kHz	2000z	01/06[147 1 60401 970 59 09581 ... 01244 000 000] 2007z Very Strong		AEC, FN	WED
	2000z	08/06[147 000] Very strong, XJTQRM2	(2m13s)	PLdn, SPECTRE	WED
	2000z	15/06[147 1 11006 451 71 98686 ... 48029 000 000] Very strong	(8m23s)	PLdn, Danix, Spectre	WED
147 1 11006 451 71 98636 51931 10364 79122 52187 50634 37474 59873 01465 63594 74699 94845 80884 50503 91886 78410 30698 55798 05695 92938 63660 45565 29920 30934 17689 58417 60675 36220 33892 75302 57121 45335 01780 64180 57790 61495 21483 66785 00548 06973 11900 36941 83134 45125 29351 74972 93191 63917 63340 13510 65694 85146 72936 18465 66817 03304 71357 70553 38355 39177 61803 87742 41116 96945 22113 99260 87381 20373 36118 94222 48029 000 000					
		<i>Courtesy Spectre</i>			
	2000z	22/06[147 000]Very strong	(2m13s)	PLdn, Spectre	WED
	2000z	29/06[147 000]Very strong	(2m13s)	PLdn, Spectre	WED
9137kHz	0510z	02/06[411 1 60401 970 59 09581 ... 01244 000 000] 0517z Fair	(7m28s)	PLdn	THU
	0510z	16/06[411 1 11006 451 71 98686 ... 48029 000 000] Strong	(8m23s)	Hans, PLdn	THU

# E11000

## May/June

3815kHz	1050z	20/06 [127/00] 1053z Strong		Danix	MON
	1050z	27/06 [127/00] 1053z Very strong QSB2		Danix	MON
4909kHz	0900z	14/05 [248/00] V.weak		RNGB	SAT
	1445z	18/05 [287/00] Out 1448z Very strong		Danix	WED
	0900z	21/05 [248/00] Out 0903z Strong		Danix	SAT
	0900z	28/05 [248/00] Weak		Danix	SAT
	1445z	28/05 [287/00] Very strong		Danix	SAT
	0900z	11/06 [248/00] Out 0903z Strong		Danix	SAT
	1445z	11/06 [287/00] Out 1448z Very strong		Danix , Spectre	SAT
	0900z	18/06 [248/00] 0903z Very strong		Danix	SAT
	1445z	18/06 [287/00] 1448z Very strong		Danix	SAT
6252kHz	1240z	12/06 [349/00] 1243z Fair		Danix	SUN
	1240z	19/06 [349/00] 1243z Very strong		Danix	SUN
8088kHz	1730z	12/05 [416/00] V.strong		Hans	THU
	1730z	19/05 [416/00]		RNGB	THU
	1730z	02/06 [416/00] Strong		RNGB	THU
	1730z	09/06 [416/00] Fair		RNGB	THU
	1729z	23/06 [416/00] Fair/Strong		Hans	THU

9610kHz	1045z	10/05 [469/00] Strong		Hans	TUE
	1046z	18/05 [469/00]		GD	WED
	1045z	24/05 [469/00]		RNGB	TUE
	1045z	07/06 [469/00]		RNGB	TUE
	1045z	21/06 [469/00] Strong		Hans, Danix	TUE
10210kHz	0930z	12/05 [270/00]		RNGB	THU
	0930z	18/05 [270/00]		RNGB	WED
	0930z	08/06 [270/00]		RNGB	WED
	0930z	09/06 [270/00] Weak		RNGB	THU
	0930z	29/06 [270/00] 0933z Fair QRN2		Spectre	WED
	0930z	30/06 [270/00]		RNGB	THU
10800kHz	0450z	20/06 [416/00] Weak		RNGB, Danix	MON
12924kHz	0830z	05/05 [649/00]	(3m24s)	RNGB	THU
	0832z	09/05 [649/00] Out 0836z (late start, late finish)		RNGB	MON
	0829z	12/05 [649/00]		RNGB	THU
	0830z	16/05 [649/00]		RNGB	MON
	0830z	19/05 [649/00]		RNGB	THU
	0830z	02/06 [649/00]		RNGB	THU
	0830z	09/06 [649/00] Fair		RNGB	THU
	0830z	20/06 [649/00] Good		RNGB	MON
	0830z	27/06 [649/00] Very weak QSB5		Danix	MON
	0830z	30/06 [649/00] Weak		Hans	THU
13424kHz	0645z	17/05 [517/00]		RNGB	TUE
	0645z	19/05 [517/00]		RNGB	THU
	0645z	24/05 [517/00] Weak		Hans	TUE
	0645z	26/05 [517/00] Fair		RNGB	THU
	0645z	31/05 [517/00] Fair		RNGB	MON
	0645z	02/06 [517/00] Weak		Hans	THU
	0545z	10/06 [348/00] Fair		Hans	FRI
	0645z	14/06 [517/00]		GD	TUE
	0545z	15/06 [348/00] Fair		RNGB	WED
	0645z	16/06 [517/00]		RNGB	THU
	0645z	28/06 [517/00] Fair		RNGB, Hans	TUE
	0545z	29/06 [348/00] Weak		RNGB	WED
	0645z	30/06 [517/00] Fair		Hans	THU
13427kHz	0900z	23/05 [534/00] Fair		RNGB	MON
	0900z	13/06 [534/00] Fair		Hans	MON
	0901z	15/06 [534/00] Good, Out 0903z (late start, normal finish time)		RNGB	WED
	0900z	20/06 [534/00] Weak		RNGB	MON
	0900z	29/06 [534/00] Good		RNGB	WED
14753kHz	0710z	06/05 [633/00]		RNGB	FRI
	0710z	10/05 [633/00] V.weak		Hans	TUE
	0710z	13/05 [633/00]		RNGB	FRI
	0710z	24/05 [633/00] Fair		RNGB	TUE
	0710z	27/05 [633/00]		Hans	FRI
	0710Z	31/05 [633/00] Fair		RNGB	MON
	0710z	14/06 [633/00] Fair		RNGB, GD	TUE
	0710z	17/06 [633/00] Fair		Hans	FRI
	0710z	21/06 [633/00] Weak		RNGB	TUE
	0710z	24/06 [633/00] 0713z Weak		Danix	FRI
16335kHz	0710z	28/06 [633/00] Fair		NGB, Hans	TUE
	1155z	04/05 [718/00]		RNGB	WED
	1540z	08/05 [228/00] Weak		RNGB	SUN
	1155z	19/05 [718/00]		RNGB	THU
	1540z	22/05 [228/00] Good		RNGB	SUN
	1541z	23/05 [228/00] Weak		Hans	MON
	1155z	25/05 [718/00] Good		RNGB	WED
	1540z	30/05 [228/00] Fair		RNGB	MON
	1155z	09/06 [718/00] Weak		RNGB	THU
	1540z	12/06 [228/00] Fair		RNGB	SUN
	1540z	13/06 [228/00] Very weak		RNGB	MON
	1155z	15/06 [718/00] Good		RNGB, Hans	WED
	1540z	11/06 [228/00]		RNGB	SAT
1540z	27/06 [228/00] Fair		RNGB	MON	
E11a log: May/June					
4909kHz	0900z	25/06 [248/34 19739 ... 29240] Weak		Danix	SAT
6280kHz	0820z	28/06 [438/35 57234 73273 42238 32390 95184.....70773]		Danix, RNGB, Hans	TUE
	0820z	30/06 [438/35 A 57234 73273 .... 70773] 0829z Fair QSB2		Hans	THU
8088kHz	1730z	05/05 [418/31 63980 32361 20014 81364 57029.....21013] Strong		RNGB	THU
9610kHz	1045z	03/05 [462/35 56397 83967 62516 15569 37563.....17100]		RNGB	TUE
	1045z	04/05 [462/35 56397 etc] repeat of Tuesday		RNGB	WED
	1045z	14/06 [465/33 02329 47643 02053 35898 55783.....09075]		RNGB	TUE
	1045z	15/06 [465/33 02329 etc] repeat of Tuesday		RNGB	WED

10210kHz 0930z	04/05 [273/33 71900 70595 81303 92601 70051.....79387] Good	RNGB	WED
0930z	15/06 [273/33 59545 16087 24038 63450 52094.....70397] Only 31 groups!!	RNGB	WED
0934z	16/06 [275/31 59545 16087 24038 63450.....70397] Corrected header !	RNGB	THU
10800kHz0450z	13/06 [416/32 A 73857 47653 .... 29389] 0459z Fair	Hans	MON
12153kHz1600z	12/05 [641/20 A 43552 91195 .... 42700] 1606z Strong QSB3	Hans	THU
1600z	09/05 [642/26 34457 58162 86099 88208 16950.....80379] Fair, Out 1608z	RNGB	MON
1600z	16/05 [642/26 53019 03499 66230 28186 10014.....04095] Good	RNGB	MON
1600z	19/05 [641/21 48742 78029 32442 14385 42993.....89626]	RNGB	THU
1600z	23/05 [640/29 13557 66197 04515 90507 63184.....25812] Good	RNGB, Danix	MON
1600z	26/05 [646/29 45759 43023 33651 05759 28001.....82361] Good	RNGB	THU
1600z	30/05 [648/31 27264 63665 53161 20373 99834.....09123] Fair, Out 1609z	RNGB	MON
1600z	02/06 [646/24 94094 88472 16744 53862 69896.....14552]	RNGB	THU
1600z	09/06 [641/20 56237 70829.....53232] Very weak	RNGB	THU
1600z	13/06 [641/24 47757 55779 35061 42776 66691.....64575] Good	(7m55s) RNGB, PLondon	MON
1600z	16/06 [643/21 27508 82924 26179 19332 52653.....25572]	RNGB	THU
1600z	20/06 [645/25 98231 98433 48429 62419 20073.....18614] Fair	RNGB	MON
1600z	27/06 [641/20 27290 06778 61294 12699 00844.....56926] Fair, Out 1608z	RNGB	MON
1600z	30/06 [641/20 A 27290 06778 .... 56296] 1607z Weak/Fair	Hans	THU
12924kHz 0830z	26/05 [647/36 38848 87521 36642 55336 04268.....59957]	RNGB	THU
0830z	13/06 [644/33 A 19221 29913.....] 0839z V.weak/Weak	Hans	MON
0830z	16/06 [644/33 19221 29913 67555 81366 14270.....73177]	RNGB	THU
13424kHz 0645z	10/05 [514/37 06679 96963 00983 27600 87260.....22285] Out 0655.30z	RNGB	TUE
0645z	12/05 [514/37 06679 ....] repeat of Tuesday	RNGB	THU
0645z	21/06 [511/38 62353 25010 67152 54520 03949.....31452] Fair with QSB	RNGB	TUE
13427kHz 0900z	16/05 [533/30 49198 22933 65105 47171 17485.....06619] Fair, Out 0909z	RNGB	MON
0900z	18/05 [533/30 49198 etc] repeat of Monday (9m4s)	RNGB	WED
0900z	08/06 [530/32 06751 65372 01843 13402 34228.....16368] Good, Out 0909z	RNGB	WED
14753kHz 0710z	17/05 [633/36 91483 08990 51621 05940 48357.....60256] Fair, Out 0720z	RNGB	TUE
0710z	07/06 [635/36 94163 39798 99026 07864 79704.....33447] Good	RNGB	TUE
0710z	10/06 [635/36 94163 etc] repeat of Tuesday	RNGB	FRI
16335kHz 1540z	09/05 [225/33 25947 28159 97941 42971 72151.....60691] Fair	RNGB	MON
1540z	15/05 [225/33 25947 etc] Fair, repeat of Monday	RNGB	SUN
1155z	02/06 [712/38 70206 90421 34080 93031 07201.....64609] Good	RNGB	THU

### **E17z**

#### **May:**

12850kHz 0810z	05/05[674 290 5 23146 27745 56314 93785 63651] Fair/Strong	Hans, GD	THU
0810z	12/05[674 290 5 23146 27745 56314 93785 63651] Fair	Hans, FN	THU
0810z	19/05[674 892 5 9508(5) ... n8336 892 5 00000] Vy weak, QRM2	MalcF	THU
0810z	26/05[674 892 5 95085 18218 75354 82567 28336 892 5 0 0 0 0 0]0815z QSA3 QSB2	JO	THU
16780kHz 0800z	05/05[674 290 5 62317 ... 6nnnn nnn n 00000] Poor copy	GA, GD	THU
0800z	12/05[674 290 5 23546]	FN	THU
0800z	19/05[74 821? 5 ...]Rest U/R	GD	THU
0800z	26/05[674 892 5 95085 18218 75354 82567 28336]	GD	THU

#### **June:**

12850kHz 0810z	02/06[674 982 5 77245 94557 01551 28408 73655 982 5 00000(s)] 0805z Very strong	DanixFN, SPECTRE	THU
0810z	16/06[674 293 5 55485 55694 43555 88502 5*44 293 5 00000] 0815z Fair QRN2 QSB4	Spectre	THU
0809z	30/06[674 00000] Fair w/low audio	Hans	THU
16780kHz 0800z	02/06[674 982 5 77245 94557 01551 28408 73655 982 5 00000(s)] 0805z Weak	DanixFN, SPECTRE	THU
0800z	23/06[674 293 5 55485 55694 43555 88503 57444]	Gert	THU
0800z	30/06[674 00000] 0804z Weak QRN2	Spectre	THU

### **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 [Txn 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 ]

The mystery of the origin of the “harp sounds” and other “Windows” sounds heard during some E25 transmissions is solved, thanks to the cooperation of Alex, Linas and Hans, who discovered that the particular sounds are coming from a Windows card game, “Spider Solitaire”. The following video demonstrates the game: [http://www.youtube.com/watch?v=hcS\\_O9q6x4Y](http://www.youtube.com/watch?v=hcS_O9q6x4Y). Alex recorded the following video featuring an E25 transmission with these sounds: [http://www.youtube.com/watch?v=30DqEeKF45s&feature=channel\\_video\\_title](http://www.youtube.com/watch?v=30DqEeKF45s&feature=channel_video_title). Many thanks to Alex and others who identified these “mystery” sounds!

And another interesting thing: take a look at Agent 185: The first group *might* play the role of a “serial number group”.

### May 2011

6140kHz 0849z 1120z	03/05[804 5785 2820 7185 5510 1135 1895 2767 <b>1280</b> ] YL, different structure, msg count still 21 03/05[887 1]1124z Mx3, “1”, Rx3	MG MG	TUE TUE
6140kHz 0847z 1150z	04/05[804 (as of 03/05)] YL 04/05 “Squeaky” tone, OM singing ~1m20s	MG MG	WED WED
9450kHz 1234z	04/05[555 2769 <b>1011</b> <u>0811</u> 5668 4136 2661 9466 0290 0979 3299 <u>0811</u> ]1256z ALM, YL 1240z, EOM EOT at 1246z	MG, LD	WED
1257z	04/05[440 (as of 22/02)]1305z YL, WinXP sounds after EOM EOT	MG, LD	WED
1315z	04/05[780 6518 <b>0151</b> <u>3110</u> 3443 4476 0340 3861 4593 0188 7646 1766 2117 7967 2663 <u>3110</u> ]1326z YL at 1319z, WinXP sounds after EOM EOT	MG, LD	WED
6140kHz 0814z	05/05[185 <b>51</b> 79 0420 3656 2274 5835 5645 3432 3007 0418 2391 7376 4511 1080]0820z sq tone, OM live, 5845 then 5835 at repeat, sq tone	MG	THU
6140kHz 0800z	06/05[185 (as of 05/05)]0808z Carrier off freq, YL, AM, S7-S9, sometimes deep QSB, 15min earlier than yesterday	MG	FRI
6140kHz 0802z	07/05[360 <b>7411</b> <u>0740</u> 4874 1810 7021 8393 8643 8273 9680 <u>0740</u> 1004] YL, AM, WinXP sounds near end of message	MG	SAT
1045z	07/05[128 4867 <b>6541</b> <u>3531</u> 7587 0533 0755 2089 3303 0110 3324 4711 2244 4172 <u>3531</u> ]1052z YL, AM, Strong, some QRN	MG	SAT
6140kHz 0800z	08/05[364 15 116 <b>9051</b> 2735 9050 4178 6765 4783 9923 2043 4799 2342 3878 5589 7521 2187 0510]0804z OM live in progress, “squeaky” tone	MG	SUN
0828z	08/05[140 4537 <u>2160</u> 2687 6267 9080 6697 1903 3232 5969 2216 6209 <b>4331</b> <u>9160</u> ]0834z Sq tone, OM live, 4 <sup>th</sup> grp not said during repeat, sq tone.	MG MG	SUN SUN
1030z	08/05[128 NO MSG]1031z Sq tone, OM live calling 128 four times, sq tone	MG	SUN
1046z	08/05[128 4867 <b>6541</b> <u>3531</u> 7587 0533 0755 2089 3303 0110 3324 4711 2244 4172 <u>3531</u> ]1052z Sq tone, OM live, initially he missed the 5 <sup>th</sup> grp	MG	SUN
09/05 not monitored			
6140kHz 0849z	10/05[804 9584 <u>4921</u> 2586 6227 2242 3034 5317 7123 2236 2780 <u>4921</u> <b>2221</b> ]0852z Sq tone since 0844z, OM live, fast, crackle QRN2, EOM EOT sq. tone	MG	TUE
0914z	10/05[950 <b>9031</b> 0150 <u>7360</u> 8189 9794 9289 3383 8887 6629 2513 5108 9479 <u>7360</u> ]0920z Brief sq tone, OM live, sq. tone	MG	TUE
0944z	10/05[350 6043 <u>6710</u> <b>2160</b> 4333 4841 <u>6710</u> ]0949z Sq tone, OM live, getting louder, EOM EOT, pause, sq. tone	MG	TUE
6140kHz 0800z	11/05[116 0190 1035 012x xxx0 1054 55xx 7852 647x 11xx ...]0807z YL i.p., WinXP sounds during call, no Mx3, irregular, erratic, Rx3 again and again	MG	WED
0812z	11/05[116 0190 1035 0120 ... 1054 554 0190]0817z YL, erratic, WinXP sounds, Rx3 again, QRT during message	MG	WED
0832z	11/05[140 5137 <u>2110</u> 9861 8685 0470 7123 7954 8663 3105 5860 5548 7745 <b>5341</b> <u>2110</u> ] YL	MG	WED
6140kHz 0806z	12/05[116 0190 1035 0120 1054 5544 7852 6475 7832 4428 (as of 11/05)]0810z Sq tone, OM live, different, than 10/05, “serious”, EOM EOT, sq. tone	MG	THU
0820z	12/05[185 <b>61</b> 95 9230 2285 9361 4366 4399 6307 5455 ]0823z Sq tone, OM live (the same as above), EOM EOT, sq tone	MG	THU
0823z	12/05[701 5417 <u>9230</u> <b>4490</b> 1391 9903 6277 3930 5941 <u>9230</u> 140 (as of 11/05)] Sq tone, OM live (as above), mistake: “011...2110” last group, EOM EOT, no sq. tone.	MG	THU
0933z	12/05[135 17 18]0938z Sq tone, OM live (as above), sometimes weak, sq. tone	MG	THU
6140kHz 0814z	14/05[185 <b>71</b> 95 9210 3875 6084 5310 3054] Carrier off-frequency, YL	MG	SAT
0831z	14/05[702 18] YL, sometimes call/2f group repeated, ended “72...end of message...transmission”	MG	SAT
6140kHz 0805z	15/05 In progress, “283” YL, then ALM, QRT 0808z. AM mode, Strong	MG	SUN
0959z	15/05[570 <b>2834</b> 1007 7647 4613 9112 6442 8842 9598 5023]1005z Sq tone, click, OM live, weak, EOM EOT, click, sq tone	MG	SUN
6140kHz 0800z	16/05[012 0201 <u>6040</u> 8476 3036 6099 9641 4373 0507 5801 5924 5738 <u>6040</u> ] sq tone, OM live, sq tone, QRT 0806z. Difficult to distinguish 6 from 8	MG	MON
1000z	16/05[575 60]1004z Sq tone, OM live, sq tone	MG	MON
6140kHz 0801z	17/05[017 82]0807z Sq tone, click, OM live, sq tone, Weak	MG	TUE
0932z	17/05[135 19 20]0937z Sq tone, OM live, initially low volume, click, sq. tone	MG	TUE
6140kHz 0801z	18/05[116 1121 5223 6220 1580 3226 1055 4843 6041 3121 1048 1325 8980]0806z Sq tone, OM live, EOM EOT, click, sq tone	MG	WED
0816z	18/05[185 <b>81</b> 92 7310 1583 0692 4793 5209 7811 4607 3268]0821z Sq tone, pause, OM live, sq tone	MG	WED
6140kHz 0758z	19/05[116 (as of 18/05)]0803z Sq tone, OM live, EOM EOT, click, sq tone	MG	THU
0812z	19/06[185 (as of 18/05)]0818z Sq tone, OM live, EOM EOT, sq tone	MG	THU

9450kHz 1253z	21/05[440 8237 <b>4031</b> 4710 2377 1161 8115 5905 2141 0105 3069 1730 7939 <u>4710</u> (as of 22/02)]1300z YL, pause during call, old message again	MG	SAT
1346z	21/05[222 8040 <b>5490</b> <u>2370</u> 4475 7272 3874 2893 5792 <u>2370</u> (as of 08/04)]1357z ALM, YL at 1351z old message again, EOM only at 1356z	MG SAT	
1345z	21/05 intro music ("Arouh le minh" by Om Kalthoom - most probably -) and the repeated message from April 27th - "End of message" – QTH is Eastern Germany, signal with fading FreakE2Kde	SAT	
6140kHz 0901z	22/05[111 3228 <u>1410</u> <b>9001</b> 6905 4394 3167 8646 6299 4282 <u>1410</u> ]0907z Sq tone, OM live 0903z pauses, then comes back louder, EOM EOT, sq tone	MG	SUN
6140kHz 0859z	23/05[200 8]0904z Sq tone, OM live, initially low audio and QRN, sq tone	MG	MON
6140kHz 0828z	25/05[140 5132 <u>3310</u> 4845 9807 8077 7921 3295 8246 <b>6301</b> <u>3310</u> ] Brief digi QSO prior TX, very strong and a very weak station, sq tone, OM live, sq tone	MG	WED
0844z	25/05[806 1] Sq tone, OM live, slight digi QRM, sq tone	MG	WED
6140kHz 0818z	26/05[185 <u>9195</u> 1650 8829 93xx 9xx0 4271 4452 x74x 7193 0828 3125 2369 6761 8917 4741] OM live, weak, difficult to copy	MG	THU
0930z	26/05[135 21] OM live (the start time is approximate), Fair	MG	THU
6140kHz 0816z	27/05[185 <u>9195</u> 1650 8829 9376 9330 4271 4452 5749 7193 0828 3125 2369 6761 8917 4741 (as of 26/05)] Windows sounds, YL along with Windows sounds, pauses, EOM EOT 0824z, Windows sounds afterwards till 0835z.	MG	FRI
9450kHz 1249z	27/05[440 (as of 22/02)] Carrier up at 1233z, Windows sounds, YL and win sounds, EOM EOT at 1256z, carrier left up, win sounds	MG	FRI
1245z	27/05[440 (as of 22/03)] EOM EOT, YL often harp sound heard, Fair	AE	FRI
1320z	27/05[780 9129 <b>1151</b> <u>5710</u> 9667 1457 0734 7060 3729 3719 7609 1868 8204 9631 0860 <u>5710</u> ] YL win sounds, EOM 1327z, carrier left up, win sounds	MG,	FRI
1316z	27/05[780 9129 1151 5710 9667 1475 0734 7060 3729 3719 7609 1868 8204 9631 0860 5710] EOM only, YL often harp sound heard, Good	AE	FRI
1350z	27/05[222 (as of 08/04)] ALM, YL, repeat at 1400z, missed the rest of it	MG	FRI
1347z	27/05 [222 (as of 08/04)] Song, EOM only, windows shutdown sound, YL, Fair	AE	FRI
9450kHz 1230z	28/05[555 4150 <b>2011</b> <u>8730</u> 2583 7809 7130 5307 9069 6813 3223 <u>8730</u> ] Windows sounds, ALM, YL along with Win sounds, pauses, EOM EOT 1243z, carrier left up, Very Strong	MG, AE	SAT
1246z	28/05[440 (as of 22/02)]YL win sounds, EOM EOT 1252z, carrier left up, win sounds,	MG	SAT
1315z	28/05[440 (as of 22/02)]1323z YL win sounds, misses numbers, pauses, EOM EOT at 1322z, Very Strong	MG	SAT
	28/05[440 (partial copy)]1327z, Weak, QSB3	PLdn	SAT
1323z	28/05 carrier, ALM, carrier, breaks, ALM, QRT 1327z	MG	SAT
1345z	28/05[222 (as of 08/04)]1411z ALM, YL, EOM EOT 1356z, win sounds, Very Strong	MG	SAT
1345z	28/05[222 (as of 08/04)] Still on air at 1410z, with harp sound. Good	AE	SAT
6140kHz 0830z	29/05[140 2353 <u>5230</u> 9811 0671 8745 <b>7370</b> <u>5230</u> ]0835z Sq tone, OM live, sq tone	MG	SUN
6140kHz 0830z	30/05[145 1]0836z sq tone, OM live, sq tone	MG	MON
9450kHz 1249z	30/05[440 (as of 22/02)]1255z sq tone, OM live. Pauses during call, Mx3 at 1252z	MG	MON
<b>E25 June 2011</b>			
6140kHz 0800z	02/06[012 1205 0650 8342 4943 6989 9931]0804z OM live, louder towards end, sq tone	MG	THU
0819z	02/06[185 <u>2695</u> 4610 4285 0107 9332 3220 0276 8515]0821z OM calls 3 times, sq tone	MG	THU
6140kHz 0844z	04/06[804 5784 <u>5160</u> 8099 8852 2785 1390 3706 8203 3199 8994 <u>5160</u> <b>3221</b> ]0851z carrier at 0837z, off-freq. windows sounds, YL with minor problems, EOM only	MG	SAT
9450kHz 1214z	04/06[830 5]1220z carrier i.p., 1214z IO, YL, windows sounds, Very Strong	MG	SAT
1228z	04/06[555 5173 <b>2011</b> <u>0811</u> 5668 4136 2661 9466 0290 0979 3299 <u>0811</u> ]1239z carrier 1221z, ALM, YL repeating first 3 numbers and the 3 numbers of 8 <sup>th</sup> grp, Very Strong	MG	SAT
6140kHz 0843z	05/06[804 (as of 04/06)]0847z sq tone, OM live, EOM EOT, sq tone	MG	SUN
0958z	05/06[570 <b>3835</b> 7036 0820 7681 9044 2567 9628 8596 3534 3984 3278] sq tone ~ 1min after Informatik Radio QRT, other OM, Rx3 3835 70... QRT! 1002Z	MG	SUN
6140kHz 1118z	06/06[880 0410 7041 5793]sq tone, OM live, first 3 grps only, stopped at 1121z	MG	MON
1124z	06/06[880 <u>0410</u> <b>7041</b> 5793 0769 8293 3526 8626 0562 7285 7142 7173 2958 3229 <u>0410</u> ]1128z sq tone, OM live calling 3 times, sq tone	MG	MON
6140kHz 0929z	07/06[135 22]0935z sq tone, OM live, initially low audio, sq tone, QRN, Weak	MG	TUE
1116z	07/06[880 (as of 06/06)]1123z sq tone, OM live, sq tone	MG	TUE
6140kHz 0830z	08/06[140 1032 <u>3210</u> 4032 5239 7406 8546 6741 2048 <b>8301</b> <u>3210</u> ] sq tone, OM live, sq tone	MG	WED
1002z	08/06[570 <b>4834</b> 1066 6476 4821 5754 7286 8660 1815 1379 8730 2177] sq tone, OM live, QRT during repeat of 7 <sup>th</sup> grp	MG	WED
6140kHz 0815z	09/06[185 <u>3694</u> 2430 9224 7526 6307 0244 5244 9410 1808 7305 7741 0789 5565]0819z Sq tone, OM live, sq tone	MG	THU
0830z	09/06[701 7311 <u>1710</u> <b>5421</b> 3554 1288 4017 7926 7048 5796 3565 2279 <u>1710</u> 140 (as of 08/06)]0836z sq tone, OM live, EOM at 0834z, sq tone	MG	THU
1001z	09/06[575 61]1007z sq tone, OM live 1005z, sq tone	MG	THU
9450kHz 1220z	09/06[830 6]1222z sq tone, OM live, Fair	MG	THU
1327z	09/06 Carrier, 1328z 1000 Hz tone, QRT 1348z, Strong	MG	THU

6140kHz 0759z	11/06[360 <b>8490</b> <u>9410</u> 2888 1504 9791 9826 8786 <u>9410</u> 5120]0805z YL, no Mx3, missed/erroneous groups in beginning, AM mode, QSB3, Strong	MG	SAT
0910z	11/06[950 8011 5321 3710 0729 1803 1962 4703 8489 6170 9820 5915]0916z YL, EOM only	MG	SAT
0941z	11/06[350 3512 <u>5610</u> <b>3101</b> 0411 4592 8298 4034 2392 2392 6120 <u>5610</u> ]0954z IO, WinXP sound, YL, probably erroneously repeated 2392, WinXP sound	MG	SAT
1028z	11/06[672 1412 2014 2104 3943 4411 1015 9692 2928 9956]1036z YL, Mx4, some repeats	MG	SAT
1041z	11/06[128 5326 7521 <u>9420</u> 3118 2408 8606 3186 8119 3774 2793 2416 <u>9420</u> ]1048z YL, 9 <sup>th</sup> grp repeated probably by mistake, WinXP sounds, mistakes	MG	SAT
6140kHz 0800z	12/06[360 (as of 11/06)]0803z OM i.p., sq tone	MG	SUN
0814z	12/06[014 5255 <u>4340</u> 4610 1722 1876 0715 5516 8863 5470 <u>4340</u> <b>5111</b> ]0819z sq tone, OM live, sq tone	MG	SUN
0830z	12/06[140 5833 <u>3440</u> 9888 6190 1676 5718 8843 7321 7246 <b>9311</b> <u>3440</u> ]0834z sq tone, OM live, sq tone	MG	SUN
0915z	12/06[955 10]0919z sq tone, OM live, sq tone	MG	SUN
0945z	12/06[355 13]0948z sq tone, OM live, sq tone	MG	SUN
1046z	12/06[126 42]1050z sq tone, OM live, sq tone	MG	SUN
1117z	12/06[317 7]1121z sq tone, OM live, sq tone	MG	SUN
6140kHz 0815z	13/06[185 <b>4697</b> 8010 8261 3839 3885 9386 0754 1768 3440 3332 2210 8658 9346 014 (as of 12/06)]0823z sq tone, OM live, sq tone	MG	MON
0830z	13/06[701 9718 <u>4020</u> <b>5431</b> 6211 7963 0951 5890 7438 9642 0605 7760 0816 <u>4020</u> 140 (as of 12/06)]0838z sq tone, OM live, Rx3 instead of EOM, sq tone	MG	MON
0931z	13/06[133 3237 5308 8590 0095 2027 4856 2922 6431 6397]0936z sq tone, OM live, tone	MG	MON
6140kHz 0800z	14/06[360 <b>9411</b> 1960 8049 9801 7825 3787 5792 9849 2861 <u>1960</u> 3409]0806z OM live, sq tone	MG	TUE
0815z	14/06[187 99]0820z sq tone, OM live, sq tone	MG	TUE
0830z	14/06[701 (as of 13/06)]0835z sq tone, OM live, NO REPEAT, sq tone	MG	TUE
0931z	14/06[133 (as of 13/06)]0936z sq tone, OM live, sq tone	MG	TUE
6140kHz 0800z	15/06[360 (as of 14/06)]0805z i.p. OM live, sq tone	MG	WED
0815z	15/06[014 (as of 12/06 except last grp <b>6111</b> )]0821z sq. tone	MG	WED
0930z	15/06[139 NO MESSAGE]0935z sq tone, OM live, sq tone NEW CALL?	MG	WED
6140kHz 0814z	16/06[014 (as of 15/06)]0818z sq tone, OM live, Rx3 low, EOM EOT low, sq tone	MG	THU
0929z	16/06[133 8502 8487 9827 6349 7394]0932z sq tone, OM live, sq tone, Weak	MG	THU
1116z	16/06[880 <u>2520</u> <b>8090</b> 5694 7950 1842 1979 8911 7404 <u>2520</u> ]1119z, sq tone, OM live, tone, Weak	MG	THU
9450kHz 1315z	18/05[780 9374 3101 6810 3547 6557 8496 1285 3738 5430 6810]1322z 780 x15 Faded heavily from S1 to S7	Hans	SAT
6140kHz 0818z	19/06[014 (as of 12/6 except last grp <b>7111</b> )]0824z sq tone, OM live, sq tone	MG	SUN
0851z	19/06[804 4185 <u>1520</u> 4937 2569 8109 8738 7386 4468 8052 9073 9131 6520 <u>1520</u> <b>4241</b> ]0855z sq tone, OM live, sq tone	MG	SUN
0903z	19/06[200 9]0907z sq tone, OM live, sq tone	MG	SUN
(MON not logged)			
6140kHz 0812z	21/06[185 <b>5697</b> 1550 1343 6412 8631 2004 9267]0816z sq tone, OM live, sq tone, Weak	MG	TUE
1115z	21/06[880 <u>1690</u> <b>9021</b> 2713 8990 5458 3133 5876 5967 4236 8153 4237 <u>1690</u> ]1119z sq tone, OM live, sq tone	MG	TUE
6140kHz 0833z	22/06[140 4738 <u>6210</u> 2371 9788 0205 5681 <b>0480</b> <u>6210</u> ]0837z sq tone, OM live, sq tone, last 2 numbers not sent.	MG	WED
0848z	22/06[806 3]0851z sq tone, OM live, sq tone, weaker than previous TX	MG	WED
9450kHz 1209z	22/06 carrier, 1000Hz tone only, lasted for less than a minute	MG, AE	WED
1239z	22/06 carrier, 1000Hz tone, tone pauses for a while, 1240z music (OM) for ~10 seconds Music sounds a bit like Russian	MG, AE LD	WED
6140kHz 0816z	23/06[185 <b>6649</b> 8740 0894 3876 9154 5444 1214 4447 4938 7284 2023 140 7235 <u>4340</u> 4610 1722 1876 0715 5556 8863 5470 <u>4340</u> <b>8111</b> ]0825z sq tone, OM live, sq tone	MG	THU
0831z	23/06[140 4738 <u>6210</u> 2371 9781 0205 5681 <b>0480</b> <u>6210</u> ] sq tone, OM live, msg nearly identical to 22/06, sq tone, Weak	MG	THU
9450kHz 1231z	24/06[555 <u>4260</u> <u>8011</u> <b>0811</b> 5668 4136 2661 9466 0290 0979 3299 <u>0811</u> ]1245z ALM, slow, 1237z YL, slow, 1240z Mx3, Strong, slight digi QRM	MG, LD	FRI
1234z	24/06[555 4260 8011 0811 5668 4136 2661 9466 0290 0979 3299 0811] Arouh limin, YL, Fair	AE	FRI
1241z	24/06[440 (as of 22/03)] YL, Good	AE	FRI
1246z	24/06[440 (as of 22/02)]1253z YL, clicks before QRT, Strong	MG, LD	FRI
1308z	24/06[785 77 788 71 72 73 74 75 76 788]1328z Tone, "Message", YL, Good	AE	FRI
1310z	24/06[785 77 788 71 72 73 74 75 76 78]1330z Repeated for half hour, at the end "78" (repeated 3x) "Message", YL	LD	FRI
1312z	24/06[788 71 72 73 74 75 76 785 77]1333z 1000Hz tone, 1316z YL slow, 1332z "78" repeated, "Message" once, Strong	MG	FRI
6140kHz 1015z	25/06[672 2429 5087 0634 9844 2225 1344 6406 9993 7682 9366 2527]1032z 1000 Hz tone, 1025z YL, slow pace 1027z Mx3	MG	SAT
6140kHz 1029z	26/06[675 94]1034z sq tone, OM live, 1032z stops, 1033z resumes, sq tone	MG	SUN
6140kHz 0931z	27/06[133 9679 1413 7818 8715 8395]0935z sq tone, OM live, sq tone	MG	MON
6140kHz 0931z	28/06[133 (as of 27/06)]0934z sq tone, OM live, "End of message, end of tr..." then QRT	MG	TUE

**G06[1A]****May:**

4958kHz 1800z	09/05[439 000] Fair		Hans	MON
5943kHz 1930z	13/05[218 393 15 45637 28390 .... 65478] Strong BC-QRM4		Hans	FRI
1931z	27/05[218 393 15 45637 ... 65478 393 15 00000(s)] 1938z Fair, BCQRM3	(7m09s)	PLdn, Danix	FRI
6887kHz 1830z	12/05[842 382 15 58106 ... 43567 382 15 00000(s)] 1837z	(7m10s)	PLdn, HJH, Hans	THU
1830z	26/05[842 382 15 58126 ... 43567 382 15 00000(s)] 1838z Fair	(7m13s)	PLdn, GD	THU
6948kHz 0800z	02/05[215 00000(s)] Fair QSB3		Hans	MON
0800z	09/05 [215 00000(S)] Counts heard 0706z. Strong		Hans	MON

**June**

4958kHz1800z	06/06[439 00000] AM 1804z Strong, Bad audio		Danix	MON
1800z	13/06[439 00000(s)] 1804z Very strong Lots of hum from TX		Danix, RNGB	MON
5427kHz1700z	13/06[439 00000(s)] 1704z Very strong Lots of hum from TX		Danix, RNGB	MON
5943kHz1930z	10/06[218 657 15 13285 ..... (26432) 657 15 00000] 1938z Fair BCQRM5		Spectre , Danix	FRI
1920z	24/06[Difficult to read due to BCQRM] 1939z Weak BCQRM4		Spectre	FRI
6887kHz1830z	09/06[842 391 15 21095 ... 13782 391 15 00000(s)]Strong. Distorted audio – carrier on freq	(7m43s)	PLdn	THU
1830z	23/06[842 391 15 21295 ... 13782 391 15 00000(s)]Fair, QRN3	(7m43s)	Hans,PLdn	THU
6948kHz0800z	06/06[215 00000] 0805z. Weak QRN2		SPECTRE	MON
0800z	13/06[215 00000(s)] Fair QSB3		Hans	MON
0800z	27/06[215 00000(s)] 0804z Fair		Danix	MON

**G11[III]****May/June**

3815kHz 2000z	08/05[262/00] Strong		RNGB	SUN
2000z	15/05[262/00] Strong		RNGB	SUN
2000z	20/05[260/33 83314 20563 85556 17296 53253.....41560		Linax D	FRI
2000z	22/05[260/33 83314 20563 85556 etc] repeat of Friday, Strong		RNGB	SUN
2000z	27/05[262/00] Good		RNGB, Danix	FRI
2000z	05/06[262/30 A 91913 ... 21349 Ende] 2010z Strong	(9m38s)	PLondon	SUN
2000z	10/06[262/00] 2003z Very strong		Danix, RNGB	FRI
2000z	12/06[262/00] 2003z Very strong		Danix, PLondon	SUN
2000z	17/06[262/00] 2003z Very strong		Danix	FRI
2000z	19/06[262/00] Strong (started 8 seconds late)		RNGB, PLondon	SUN
2000z	24/06[262/00] Ende 2003z Strong	(3m20s)	PLondon, Danix	FRI
2000z	26/06[262/00] Ende 2003z Strong	(3m22s)	PLondon	SUN
5815kHz 1755z	01/05[270/00]		RNGB	SUN
1755z	03/05[270/00]	(3m24s)	RNGB	TUE
1755z	08/05[270/00] Strong		RNGB	SUN
1325z	13/05[299/00] Weak		Hans	FRI
1755z	15/05[270/00] Good		RNGB	SUN
1755z	17/05[272/31 16200 ...56042]		PLondon	TUE
1325z	20/05[293/34 61340 09699 51343 74616 27796..... 35944		Linax D	FRI
1755z	22/05[272/31 16200 86452 15535 54079 26338.....56042] Good		RNGB	SUN
1755z	24/05[270/00] 1758z Strong		Danix	TUE
1325z	28/05[299/00] Good		Danix	SAT
1755z	29/05[270/00]		RNGB	SUN
1755z	05/06[270/00]1758z Strong	(3m22s)	PLondon	SUN
1755z	07/06[278/36 17954 80891 76168 99659 37622 .....31974]		Danix	TUE
1325z	10/06[298/35 21330 05050 97812 18405 75220..... 40419] 1335z Strong		Danix, Spectre	FRI
1325z	11/06[298/35 (rpt of 10/06)] 1335z Fair		Danix	SAT
1755z	12/06[278/36 17954 80891 76168 etc] repeat of Tuesday		RNGB	SUN
1325z	17/06[299/00] 1328z Very strong		Danix	FRI
1325z	18/06[299/00] Weak		Hans	SAT
1755z	21/06[270/00] Ende1758z Strong	(3m22s)	PLondon, Hans	TUE
1325z	24/06[299/00] 1328z Very strong		Danix	FRI
1755z	26/06[270/00] Ende 1758z Strong, QRN3	(3m22s)	PLondon	SUN
1755z	28/06[270/00] 1758z Weak QRN3		Spectre	TUE
6986kHz 0940z	12/05[275/00]		RNGB	THU
0940z	16/05[275/00]		RNGB	MON
0940z	19/05[275/00]		RNGB	THU
0940z	02/06[275/00]		RNGB	THU
0940z	09/06[278/36 51284 60579 13733 77601 10770.....56892] Fair		RNGB, Spectre	THU
0940z	13/06[275/00] ENDE 0943z Very strong	(3m16s)	PLondon	MON
0940z	16/06[275/00]		RNGB	THU
0940z	20/06[275/00]		RNGB	MON
0940z	27/06[275/00] 0943z Weak QSB2		Danix	MON
0940z	30/06[275/00]		RNGB	THU

**S06 [1A]****May:**

Good example that S06 and M01b come from the same fold:

5096kHz1832z 26/05[calling 815, OM] stops after 1 min, switches over to:

M01b 5096kHz 1833z 26/05 [815 495 31 = 21231] FN THU

M01b 5761kHz 1837z 26/05 [i.p. with txt of nr 495] FN THU

**New schedule?**

4586kHz 1950z 26/05[125 005 51 10664 ... 31543 005 51 00000(s)] Strong Danix THU, who writes:

This schedule has been first heard in Wednesday, May 18 at 1950z with null message 125 00000 I heard first message on this slot next day:

4586kHz 1950z 19/05[125 001 51 82174 ... 62596 001 51 00000(s)] Fair Danix THU

Notice very slow serial, I believe S06 got new agent and those are first messages for him I think it's scheduled for Wednesdays and Thursdays at 1950z on 4586 kHz.

5865kHz1900z	25/05 No audio heard	FR	WED
6770kHz1900z	04/05[471:0]	H-FD, GD	WED
1900z	25/05[471 00000] Strong	Linas, Danix, FR	WED
1800z	26/05[471 00000] Strong	Danix	THU
6943kHz1900z	21/05[837 00000] 1904z OM Fair/Strong	Hans	SAT
6945kHz1900z	07/05[837x3 00000]	GD	SAT
6984kHz1905z	26/05[349 628 17 82545 ... 91256 00000] Rpts msg 12/05 Strong signal OM, QSB	FR, Danix	THU
7845kHz 0600z	27/05[196 235 7 45751 83455 50587 47431 46802 85070 34119 00000] Strong, QRM	FR	FRI
7982kHz1900z	05/05[349-628/17=82545]	H-FD	THU
1900z	23/05[349 628 17 82545 ... 91256 628 17 00000(f)] 1907z Very strong	Danix, Linas	MON
10178kHz 1900z	21/05[703 00000] 1904z OM Strong	Hans	SAT
14736kHz 0930z	20/05[842 179 32 42501 04550 .... 77623] 0940z Weak	Hans	FRI

**June:**

4001kHz 2100z	30/06[294 031 12 39290 ... 01050 031 12 00000(s)] 2106z Strong	Danix, Hans	THU
	294 031 12 39290 30175 22845 48119 98206 67101 30263 55438 56492 51020 90166 01050 031 12 00000		
4512kHz2024z		Courtesy Danix	
2037z Strong QSB3	Danix, Hans	MON	27/06[524 (till 2029z) 006 36 79802 ... 17844 006 36 00000(s)]
	524 006 36 79802 75677 58372 01489 70839 94903 34289 98059 24895 69815 08126 44361 70482 60263 39060 37025 52780 99616 95284 69020 53280 62968 83136 55307 08457 65029 59338 98635 09138 61311 40688 27301 85398 65615 22687 17844 006 36 00000		
	And after this message, OM said 5555!	Courtesy Danix	
2039z	30/06 [123456789 Test Count] 2040z Weak QRN3	Spectre	THU
4512kHz2023z	30/06 [524 030 12 34338 15552 .... 72161 & [524 030 12 79858 93180 .... 10791] QRT 2036z	Hans	THU
4586kHz1950z	02/06 Very weak signal. Too weak to read message	SPECTRE	THU
1948z	30/06[125 029 12 23437 ... 67126 029 12 00000(s)] 1956z Strong	Danix	THU
	125 029 12 23437 97961 13113 61122 91285 90489 81221 37429 01813 43671 56377 67126 029 12 00000		
		Courtesy Danix& Spectre	
1950z	30/06[125 029 12 23437 ..... 67126 029 12 00000] 1957z Weak QRN2	Spectre, Hans	THU
2000z	30/06 [123456789 Test Count] 2001z Weak QRN2	Spectre	THU
6770kHz 1800z	01/06[471 00000] 1803z Strong	Danix, SPECTRE	WED
1800z	08/06 [471 00000] 1804z Strong QRN2	SPECTRE	WED
1800z	15/06[471 00000] V.strong	Hans, Spectre	WED
6943kHz 1900z	04/06[837 159 159 44 44]	GD	SAT
1900z	18/06[837 159 44 99179 ... 53278 159 44 00000] 1910z Fair	Danix	SAT

6983kHz1605z	18/06[134 00000] 1609z Very strong		Danix	SAT
6984kHz1905z	02/06[349 00000] 1909z Fair		SPECTRE	THU
1905z	06/06[349 00000] End 1909z. Fair QRN3		SPECTRE	MON
1905z	09/06[349 00000] 1909z Strong QRN2		SPECTRE	THU
1905z	16/06[349 00000] 1909z Very strong	(4m01s)	Danix, Spectre	THU
1905z	30/06 [349 00000] Strong		Hans	THU
7718kHz 1930z	04/06[366 00000] 1934z Very strong QRM3 (hum) Very strong		Danix, SPECTRE	SAT
1930z	18/06[366 00000] 1934z Strong QRN2		Spectre	SAT
1930z	25/06[366 00000] 1934z Weak QRN2		Spectre	SAT
7982kHz1900z	13/06[349 00000(f)] 1904z Very strong		Danix	MON
1900z	23/06[349 00000(f)] Fair		Hans	THU
1900z	27/06[349 00000] Fair		Hans	MON
8157kHz 1600z	04/06[134 00000] 1604z Strong		Danix	SAT
9065kHz2000z	04/06[703 00000]2004z Very strong		SPECTRE	SAT
2000z	18/06[703 00000] 2004z Very strong		Danix, Spectre	SAT
10178kHz 1900z	04/06[703 00000] 1904z Very strong		Danix, GD	SAT
1900z	18/06[703 00000] 1904z Very strong		Danix	SAT
11090kHz2115z	13/06[378 00000] 2118z Strong		Danix	MON
2115z	27/06[378 00000] Fair		Hans	MON
13460kHz2015z	13/06[378:0]		H-FD	MON
2015z	27/06[378 00000] Strong (Test tone and ID at around 2000z)		Hans	MON

**S06c**  
**May:**

12170kHz1645z	23/05[11098] 1649z Weak		Hans	MON
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**June:**

4512kHz2117z	28/06 Clg '1234 63784', all x4, no intro, no end Note the 5f does not start with '11' good sig, chirp QRM		ML	TUE
10458kHz 0411z	02/06[11841] 0412z Strong		Hans	THU
16249kHz1025z	17/06 [ip 11020] 1028z Fair QRN2 QSB2		Spectre	FRI

**S06e**  
**June:**

4512kHz2030z	25/06[524 002 24 38980 ... 17849 002 24. 524 003 21 10967 ... 75514. 524 002 76 99975 ... 09503 002 76 00000. 258 36] 2106z Strong		Danix	SAT
	524 002 24 38980 53961 34542 33021 42895 11775 63554 84734 62052 01506 61810 23592 71168 64682 53211 18509 81653 36417 25108 14118 67099 03657 15275 17849 002 24  524 003 21 10967 35140 80196 27211 80393 94532 83745 37171 55038 21625 46283 67855 97783 80834 75992 23744 30091 19065 93772 07058 75514 003 21  524 002 76 99975 91012 98036 64105 62296 15408 69196 37569 73503 21836 79606 12631 11924 15017 16952 29434 06261 20278 48232 64876 80470 78945 43821 55602 82234 76726 75195 00192 65020 09532 77529 76902 27716 25803 38763 96691 75113 16695 68123 23476 24958 57288 44193 11146 19349 40643 88847 09784 19910 47686 29810 81537 60273 02114 77119 61386 75976 60440 11372 23769 20295 20980 64292 27443 80427 24806 21273 92454 77295 70026 27994 15572 09206 87951 46652 09503 002 76 00000 (between 99975 and 91012 there was short pause, between 002 and 76 there was long pause)  258 36 [very long pause then carrier off]			
	Maybe last numbers (258 36) were mistake?	Courtesy Danix		

4512kHz2023z	30/06[524 030 12 34338 ... 72161 030 12 524 033 12 79859 ... 10791 033 12 00000(s)] 2034z Strong QSB2		Danix	THU
	524 030 12 34338 15552 30742 95280 96492 18820 87051 16405 93414 65430 31305 72161 030 12 524 033 12 79859 93180 25749 28095 29584 71767 15617 26108 10536 14519 48421 10791 033 12 00000			
		Courtesy Danix		

**S06s****May:**

4373kHz 0800z	03/05[352 479 6 98740 54262 37554 29398 24532 63692] Weak	Hans	TUE
4845kHz1400z	19/05[624 913 5 33953] weak signal	FN	THU
5320kHz1400z	19/05[624 913 5 33953]	FN	THU
5430kHz0700z	17/05[374 ....] txt not intelligible, signal too weak	FN	TUE
0700z	24/05 [374 ...] txt not readable, QRM	FN	TUE
5810kHz0610z	13/05[934 801 5 24443] Strong hum on audio signal	FN	FRI
5835kHz0830z	11/05[471 285 6 35824] weak	FN	WED
0830z	25/05[471 926 5 20123]	FN	WED
6666kHz 1500z	10/05[537 b940 6 78755]	FN	TUE
6755kHz0820z	11/05[471 285 6 35824]	FN	WED
0820z	25/05[471 926 5 20123]	FN	WED
6780kHz 0715z	03/05[374 821 5 54544 36363 15514 93899 65591] Strong	Hans	TUE
0715z	10/05[374 821 5 54544 36363 15514 93899 65591] Strong	Hans	TUE
0715z	17/05[374 810 5 85253 08445 49555 56525 34799] Fair XJT-QRM3	Hans, FN	TUE
0715z	24/05[374 810 5 85253 08445 49555 56525 34799] 0720z Fair .XJT-QRM4	Hans, FN	TUE
6815kHz 1210z	11/05[481 235 6 78654]	FN	WED
7245kHz0800z	03/05 ID 418 was not heard or at 0810 on 9670	GD	TUE
0800z	10/05[418 237 5 58545 40617 79750 12469 13825] Strong	Hans	TUE
0800z	17/05[418 206 5 59855 34231 34747 04508 74543]	GD	TUE
0800z	17/05[418 206 5 59855 34231 34747 04508 74543] Weak	Hans	TUE
0800z	17/05[418 206 5 59855]	FN	TUE
7335kHz0730z	11/05[745 893 6 77547]	FN	WED
0730z	18/05[745 938 6 91545 42504 86121 61661 60808 89435]	GD	WED
0730z	25/05[745 938 938 6 6]	GD	WED
7545kHz1230z	11/05[967 214 5 19283]	FN	WED
1230z	24/05 [967 83? 5 09274 ????? .... 00000] Very weak, fading	Linax	WED
7630kHz1240z	12/05[314 ...] FN THU barely audible	FN	THU
1240z	26/05[314 875 9 24457 52455 45219 14544 18501 15809 42584 62845 99359 875 9 00000(s)] 1246z Fair	Danix	THU
7650kHz1230z	03/05[278 496 5 45321 89756 45320 08964 12120] Strong	Hans	TUE
1230z	10/05[278 496 5 45321 89756 45320 08964 12120] Fair	Hans	TUE
1230z	17/05[278 964 5 45115 02034 45596 59821 43688] Fair/Strong QSB3	Hans, FN	TUE
7744kHz 1510z	10/05[537 b940 6 78755]	FN	TUE
7765kHz 1200z	11/05[481 235 6 78654]	FN	WED
7845kHz 0600z	20/05[196 235 235 7 7 45751---3411]	GD	FRI
7889kHz1610z	09/05[176 930 5 44708 85356 99691 48595 10518] 1615z Fair	Hans, FN	MON
8220kHz1240z	11/05[967 214 5 19283]	FN	WED
8340kHz0600z	13/05[934 801 5 24443 58728 84657 65705 13769]	GD	FRI
0600z	13/05[934 801 5 24443 58728 84657 65705 13769 801 5 00000]Strong with hum	Hans, Gud, FN	FRI
0600z	20/05[934 271 271 6 6] Poor Signal	GD	FRI
0600z	27/05[934 271 271 6 6]	GD	FRI
9110kHz1910z	04/05[371]	H-FD	WED
1910z	11/05[371 485 6 98765]	FN	WED
1910z	18/05[371 952 6 09245 46862 54059 91082 55456 97481 00000] Very strong signal, QRM	FR	WED
1910z	25/05[371 952 6 09245 46862 54039 91082 55456 97481 952 6 00000(s)] Fair	(5m 24s) Danix, FR	WED
9125kHz0610z	13/05[196 230 5 72505 28556 26540 12055 18741]	GD	FRI
0610z	27/05[196 235 235 7 7]	GD	FRI
9255kHz1230z	12/05[314 ...] FN THU barely audible	FN	THU
1230z	19/05[314 875 9 24457 ... 99359 875 9 00000] Strong signal, 9 groups!	LD	THU
	314 875 9 24457 52455 45219 14544 18501 15809 42584 62845 99359 875 9 00000z		
1230z	26/05[314 875 9 24457 52455 45219 14544 18501 15809 42584 62845 99359 875 9 00000(s)] 1236z Strong	Danix	THU
9256kHz1600z	09/05[176 930 5 44708]	FN	MON
1600z	23/05[176 942 5 67859 45673 28910 90878 12578 942 5 00000(s)] 1605z Good	Danix	MON

9655kHz0940z 0940z	13/05[516 839 7 59562] 27/05[516 829 7 18297 67543 09182 67115 89771 56009 34543 00000] Strong signal QRM	FN FR	FRI FRI
9670kHz0850z 0810z	11/05[328 479 5 24350] 17/05[418 206 5 59855]	FN FN	WED TUE
10120kHz0840z 0840z	04/05[328] 11/05[328 479 5 24350]	H-FD FN	WED WED
10170kHz1900z 1900z 1900z 1900z	04/05[371 485 6 98765 45633 20918 27760 98016 34561 11/05[371 485 6 98765] 18/05[371 952 6 09245 46862 54059 91082 55456 97481 00000] Strong, distorted 25/05[...] 1905z Extremely weak	GD, H-FD FN FR (5m 24s) Danix, FR	WED WED WED WED
10230kHz1200z 1200z	09/05[831 476 5 02555 62325 63514 91285 55371] 1205z Weak 23/05[831 962 5 89235 45637 87923 23524 78901 962 5 00000(s)] 1205z Fair	Hans, FN (5m 23s) Danix	MON MON
10290kHz0930z 0930z	13/05[516 839 7 59562] 27/05[516 829 7 18297 67543 09182 67115 89771 56009 34543 00000] Strong signal, QRM	FN FR	FRI FRI
11830kHz0740z 0740z	04/05[745] 11/05[745 893 6 77547]	H-FD FN	WED WED
12155kHz1200z 1200z 1200z	05/05[425] 12/05[425 893 6 76856] 26/05[425 916 7 45410 56479 55954 62387 45543 73765 74153 916 7 00000(s)] 1205z Fair	H-FD FN Danix	THU THU THU
12165kHz1210z 1210z	09/05[831 476 5 02555 62325 63514 91285 55371] 1215z Fair/Strong 30/05[831 00000(s)] 1213z Strong	Hans, FN Danix	MON MON
12935kHz 0810z 0810z	10/05[352 479 6 98740 54262 37554 29398 24532 63692] Fair 17/05[352 409 6 56554 42540 53301 04118 05665 37210] Fair	Hans, FN Hans	TUE TUE
12952kHz0900z	12/05[167 480 5 45283]	FN	THU
13565kHz0910z	12/05[167 480 5 45283]	FN	THU
14373kHz0800z 0800z 0800z	03/05[352 479 6 98740 54262 37554 29398 24542 63692] 10/05[352 479 6 98740] weak signal 17/05[352 409 6 56554 42540 53301 04118 05665 37210]	GD FN GD	TUE TUE TUE
14535kHz1210z 1210z	12/05[425 893 6 76856] 26/05[425 916 7 45410 56479 55954 62387 45543 73765 74153 916 7 00000(s)] 1215z Fair	FN Danix	THU THU
14580kHz1000z 1000z	04/05[729] 11/05[729 451 6 43943]	H-FD FN	WED WED
15230kHz0610z 0610z 0610z	10/05[438 371 5 35084] weak signal 17/05[438 256 7 19287 36556 40981 88912 89034 67430 87879] Weak 24/05[438 256 7 19287 36556 40981 88912 89034 67430 87879 256 7 00000]	FN, Hans Hans AG	TUE TUE TUE
16020kHz 1010z 1010z 1010z	04/05[729] 11/05[729 451 6 43943] 18/05[729 810 5 55779 78543 34858 24086 56555]	H-FD FN GD	WED WED WED
16735kHz 0600z 0600z	10/05[438 971 5 65384 86148 55754 87822 72284] Weak 24/05[438 256 7 19287 36556 40981 88912 89034 67430 87879 256 7 00000]	Hans, FN AG	TUE TUE
<b>June:</b>			
5810kHz0610z	10/06[934 870 5 35584 21431 57412 86215 60558 870 5 00000] 0615z Weak QRN2 QSB2	Spectre	FRI
5835kHz 0830z 0830z	01/06[471 528 6 10298] weak signal 29/06[471 00000] 0833z Fair QRN2 QSB2	FN Spectre	WED WED
5430kHz0700z	07/06[374 819 5 06151] weak signal	FN	TUE
6666kHz 1500z	07/06[537 912 6 29245]	FN	TUE
6755kHz 0820z 0820z 0820z	01/06[471 528 6 10298] 22/06[471 .... 80443 986 5 00000] Strong 29/06[471 00000] 0824z Fair QRN2	FN Linax Spectre	WED WED WED
6780kHz0715z 0715z	07/06[374 819 5 06151] QRM dig sta 28/06[374 982 5 55228 77544 04816 56447 51269] Fair XJT-QRM3	FN Hans	TUE TUE
6815kHz1210z 1210z 1210z 1210z	06/06[481 259 6 67844 67898 34530 84332 67584 34567 259 6 00000]1216z. Fair 08/06[481 259 6 67844] 22/06[481 962 5 40283 49668 44600 55854 08644 962 5 00000] 1215z Weak QRN3 29/06[481 00000] 1213z Weak QSB2	SPECTRE FN Spectre Spectre	WED WED WED WED
7245kHz0800z 0800z	07/06[418 239 5 15656] 21/06[418 269 5 34682 17455 55122 40995 14557 269 5 00000] 0805z Fair QRN2	FN Spectre	TUE TUE

7335kHz	0730z	01/06[745 923 6 17896 56433 56789 09089 76556 34341] Strong	Hans, FN	WED
	0730z	06/06[745 923 6 17896 56433 56789 09089 76556 34341 923 6 00000]0736z Strong	SPECTRE	WED
	0730z	15/06[745 892 6 52401 63919 92699 14600 74248 48754] Weak/Fair QSB3	Hans	WED
	0730z	22/06[745 892 6 52401 63919 92699 14600 74248 48754 892 6 00000] Strong	Linaz	WED
7545kHz	1230z	08/06[967 231 5 78654]	FN	WED
	1230z	22/06[967 280 5 87655 92586 74517 29246 85144 280 5 00000] 1235z Very weak QRN3 QSB2	Spectre	WED
	1230z	29/06[967 00000] 1234z Very weak QRN3 QSB2	Spectre	WED
7630kHz	1240z	02/06[314 580 6 19339]	FN	THU
	1240z	09/06[314 580 6 19339 50559 80285 04741 88145 03245 580 6 00000] 1246z Fair QRN2	Spectre	THU
	1240z	16/06[314 267 5 55988 39595 42500 95564 28785 267 5 00000] 1245z Weak QRN2	Spectre	THU
7650kHz	1230z	07/06[278 941 5 94289]	FN	TUE
	1230z	21/06[278 509 6 73531 13264 51501 53545 65294 55455] Fair	Hans	TUE
	1230z	28/06[782 509 6 73531 13264 51501 53545 65294 55455 509 6 00000] 1236z Weak QRN2 QSB2	Spectre	TUE
7744kHz	1510z	07/06[537 912 6 29245]	FN	TUE
	1510z	21/06[537 926 8 22574 10305 71531 52581 95347 20812 78921 14574] Weak	Hans	TUE
7765kHz	1200z	08/06[481 259 6 67844]	FN	WED
	1200z	15/06[781 962 5 40283 49668 44600 55854 08644] Weak QSB2	Hans	WED
	1200z	22/06[481 962 5 40283 49668 44600 55854 08644 962 5 00000] 1205z Weak QRN3 QSB2	Spectre	WED
	1200z	29/06[481 00000] 1204z Weak QSB2	Spectre	WED
7845kHz	0600z	10/06[196 872 5 45115 75546 35875 25584 13417 872 5 00000] 0605z Fair QRN3	Spectre, GD	FRI
7889kHz	1610z	06/06[176 804 5 25535 12121 50555 85851 88015 804 5 00000]1615z. Fair QRN2	SPECTRE	MON
	1610z	13/06[176 804 5 25535 12121 50555 85851 88015 804 5 00000(s)] 1615z Weak	Danix	MON
	1610z	20/06[176 932 5 91454 55455 74665 15157 15544 932 5 00000(s)]1615z Fair	Danix, Spectre	MON
8220kHz	1240z	08/06[967 231 5 78654]	FN	WED
	1240z	22/06[967 280 5 87655 92586 74517 29246 85144 280 5 00000] 1245z Very weak QRN2 QSB2	Spectre	WED
	1240z	29/06[967 00000] 1243z Very weak QRN2 QSB2	Spectre	WED
8340kHz	0600z	10/06[934 870 5 35584 21431 57412 86215 60558] Weak	Hans, GD, Spectre	FRI
9110kHz	1910z	01/06[371 495 6 34890 98667 45356 88012 32456 39086 495 6 00000]1916z Fair	SPECTRE	WED
	1910z	08/06[371 495 6 34890 98667 45356 88012 32456 39086 495 6 00000] 1916z Fair QRN3 QSB2	SPECTRE, FN	WED
	1910z	15/06[371 905 6 49407 65988 40838 09502 12758 51691 905 6 00000] 1916z Fair QRN2	Spectre	WED
	1910z	22/06[371 905 6 49407 65988 40838 09502 12758 51691 905 6 00000] 1915z Fair QRN2 QSB2	Spectre	WED
	1910z	29/06[371 00000] 1913z Fair QRN2	Spectre	WED
9125kHz	0610z	10/06[196 872 5 45115 75546 35875 25584 13417] Weak	Hans, Spectre, FN	FRI
9255kHz	1230z	02/06[314 580 6 19339]	FN	THU
	1230z	09/06[314 580 6 19339 50559 80285 04741 88145 03245 580 6 00000] 1236z Weak QRN3	Spectre	THU
	1230z	16/06[314 267 5 55988 39595 42500 95564 28785 267 5 00000] 1235z Weak QRN2	Spectre	THU
9256kHz	1600z	06/06[176 804 5 25535 12121 50555 85851 88015 804 5 00000]1605z. Strong QRN3	SPECTRE	MON
	1600z	13/06[176 804 5 25535 12121 50555 85851 88015 804 5 00000(s)] 1605z Strong	Danix	MON
	1600z	20/06[176 932 5 91454 55455 74665 15157 15544 932 5 00000(s)]1605z Fair	Danix, Spectre	MON
	1600z	27/06[176 932 5 91454 55455 74665 15157 15544] Strong	Hans	MON
9655kHz	0940z	03/06[516 984 7 08652 45337 67842 14841 21759 13296 24486 984 7 00000] 0946z Weak S	SPECTRE	FRI
	0940z	10/06[516 984 7 08652 45334 67842 14841 21759 13296 24486 984 7 00000] 0946z Strong QRN2	Spectre, FN	FRI
	0940z	17/06[516 249 7 49180 82654 25444 55631 93441 35855 32346 249 7 00000] 0946z Fair QRN2	Spectre	FRI
9670kHz	0850z	01/06 [328 495 6 67683 54638 29364 83729 30498 01928] Fair	Hans, FN	WED
	0810z	07/06[418 239 5 15656]	FN	TUE
	0850z	08/06[328 495 6 67683 54638 29364 83729 30498 01928] Fair/Strong	Hans	WED
	0850z	15/06[328 957 6 33796 13577 74526 46647 79302 53516 957 6 00000] 0856z Fair QRN2	Spectre	WED
	0810z	21/06 [418 269 5 34682 17455 55122 40995 14557 269 5 00000] 0815z Fair QRN2	Spectre	TUE
	0810z	28/06[418 269 5 34682 17455 55122 40995 14557] Fair	Hans	TUE
	0850z	29/06[328 00000] 0853z Fair QRN3	Spectre	WED
10120kHz	0840z	01/06[328 495 6 67683 54638 29364 83729 30498 01928] Weak	Hans, FN	WED
	0840z	08/06[328 495 6 67683 54638 29364 83729 30498 01928] Fair	Hans	WED
	0840z	15/06[328 957 6 33796 13577 74526 46647 79302 53516 957 6 00000] 0846z Fair QRN2	Spectre	WED
	0840z	29/06[328 00000] 0844z Fair QRN2	Spectre	WED
10170kHz	1900z	01/06[371 495 6 34890 98667 45356 88012 32456 39086 495 6 00000]1906z Fair	SPECTRE	WED
	1900z	08/06[371 495 6 34890 98667 45356 88012 32456 39086 495 6 00000] 1906z Fair QRN2	SPECTRE, FN	WED
	1900z	15/06[371 905 6 49407 65988 40838 09502 12758 51691 905 6 00000(s)] 1905z Strong	Danix, Spectre	WED
	1900z	22/06[371 905 6 49407 65988 40838 09502 12758 51691 905 6 00000] 1905z Fair QRN2 QSB2	Spectre	WED
	1900z	29/06[371 00000] 1904z Fair QRN2	Spectre	WED
10230kHz	1200z	06/06[831 254 6 01215 55859 51948 21175 21201 42758 254 6 00000]1206z. Weak QRN3 QSB3	SPECTRE, FN	MON
	1200z	13/06[831 254 6 01215 55859 51948 21175 21201 42758] Fair	Hans, Danix	MON
	1200z	20/06[831 406 5 46559 92278 75165 57195 02661 406 5 00000(s)] 1205z Strong QSB2	Danix, Spectre	MON
	1200z	27/06[831 406 5 46559 92278 75165 57195 02261 406 5 00000(s)] 1205z Strong	Danix, Spectre	MON

10290kHz0930z	03/06[516 984 7 08652 45337 67842 14841 21759 13296 24486 984 7 00000] 0936z Weak	SPECTRE	FRI
0930z	10/06[516 984 7 08652 45334 67842 14841 21759 13296 24486 984 7 00000] 0936z Strong QRN2	Spectre	FRI
0930z	17/06[516 249 7 49180 82654 25444 55631 93441 35855 32346] Fair	Hans, Spectre	FRI
11435kHz0530z	15/06[153 489 6 33615 59514 74741 25550 43181 86851] Weak	Hans	WED
0530z	29/06 [153 00000] Fair	Hans	WED
11830kHz 0740z	01/06[745 923 6 17896]	FN	WED
0740z	06/06[745 923 6 17896 56433 56789 09089 76556 34341 923 6 00000] ]0746z Strong	SPECTRE	WED
0740z	08/06[745 923 6 17896 56433 56789 09089 76226 34341] V.weak	Hans	WED
12155kHz 1200z	02/06[425 960 7 62014]	FN	THU
12165kHz1210z	06/06[831 254 6 01215]	FN	MON
1210z	13/06[831 254 6 01215 55859 51948 21175 21201 42758 254 6 00000(s)] 1215z Strong	Danix	MON
1210z	20/06[831 406 5 46559 92278 75165 57195 02661 406 5 00000(s)] 1215z Strong	Danix, Spectre	MON
1210z	27/06[831 406 5 46559 92278 75165 57195 02261 406 5 00000(s)] 1215z Weak	Danix, Spectre	MON
12167kHz1210z	06/06[831 254 6 01215 55859 51948 21175 21201 42758 254 6 00000]1216z. Weak QRN4 QSB3	SPECTRE	MON
12650kHz0540z	29/06[153 00000] Fair	Hans	WED
12935kHz0810z	07/06[352 497 6 59426]	FN	TUE
0810z	28/06[352 871 6 20163 29076 56705 45562 52562 63207 871 6 00000] 0816z Weak QRN2 QSB2	Spectre	TUE
12952kHz 0900z	02/06[167 938 5 67035]	FN, SPECTRE	THU
0900z	09/06[167 938 5 67035 07413 86555 30413 25318 938 5 00000] 0905z Weak QRN3 QSB2	Spectre	THU
0900z	16/06[167 294 5 63814 42755 57455 69516 32150 294 5 00000] 0905z Strong QRN2 QSB2	Spectre	THU
0900z	30/06[167 00000] 0904z Fair QRN2 QSB2	Spectre	THU
13562kHz0910z	30/06[167 00000] 0913z Fair QRN2 QSB2	Spectre	THU
13565kHz 0910z	02/06[167 938 5 67035]	FN, SPECTRE	THU
0910z	09/06[167 938 5 67035 07413 86555 30413 25318 938 5 00000] 0905z Weak QRN2	Spectre	THU
0910z	16/06[167 294 5 63814 42755 57455 69516 32150 294 5 00000] 0915z Fair QRN2 QSB2	Spectre	THU
14373kHz0800z	07/06[352 497 6 59426]	FN	TUE
0800z	28/06[352 871 6 20163 29076 56705 45562 52562 63207] Weak	Hans, Spectre	TUE
14535kHz1210z	02/06[425 960 7 62014] strong hum on audio	FN	THU
14580kHz 1000z	01/06[729 483 5 71826]	FN, SPECTRE	WED
1000z	08/06[729 483 5 71826 56439 01928 78960 67854] Fair	Hans	WED
1000z	15/06[729 861 5 55943 03598 19250 54655 55574 861 5 00000] 1005z Fair QRN2	Spectre	WED
1000z	22/06[729 861 5 55943 03598 19250 54655 55574 861 5 00000] 1005z Fair QRN3 QSB2	Spectre	WED
1000z	29/06[729 00000] 1004z Fair QSB2	Spectre	WED
15230kHz0610z	14/06[438 925 6 16655]	FN	TUE
0610z	28/06[438 257 6 94991 55544 54055 35086 19618 54825] Weak	Hans, Spectre	TUE
16020kHz1010z	06/06[729 483 5 71826 56439 01928 78960 67854 483 5 00000]1015z. Fair	SPECTRE, FN	WED
1010z	15/06[729 861 5 55943 03598 19250 54655 55574 861 5 00000] 1015z Fair QRN2	Spectre	WED
1010z	22/06[729 861 5 55943 03598 19250 54655 55574 861 5 00000] 1015z Fair QRN3 QSB3	Spectre	WED
1010z	29/06[729 00000] 1013z Fair QRN2	Spectre	WED
16608kHz1438z	14/06 Missed call up weak signal 2222	GN	TUE
16735kHz0600z	14/06[438 925 6 16655]	FN	TUE
0600z	28/06[438 257 6 94991 55544 54055 35086 19618 54825 257 6 00000] 0606z Weak QRN3 QSB2	Spectre	TUE
<b><u>S11a[III]</u></b>			
<b>May/June</b>			
4909kHz1355z	12/06 [254/00] 1358z Very weak	Danix	SUN
1355z	13/06 [254/38 V85332 ... 37077] 1405z Fair/Strong QSB3 Faulty audio	Danix	MON
1355z	19/06 [254/38 85332 87684 81601 26184 32522 ... 37077] (rpt of 13/06 msg)] 1407z Very strong QSB3 Very faulty audio	Danix	SUN
5815kHz 1020z	21/05 [228/35 41277 30693 21792 30610 28691..... 45057]	Danix	SAT
1020z	28/05 [221/00] Very strong	Danix	SAT
1020z	01/06 [227/32 36485 01465 78151 34977 25427.....82650]	Danix	WED
1020z	11/06 [221/00] 1023z Very strong	Danix	SAT
1020z	18/06 [221/00] Weak	Hans	SAT
1020z	25/06 [221/00] 1023z Weak QRN3 QSB2	Spectre	SAT
8530kHz 0916z	06/05 [482/36 76977 49491 44655 58935 36901.....18173]	RNGB	FRI
0915z	10/05 [484/00] Strong	Hans	TUE
0915z	13/05 [484/00]	RNGB	FRI
0915z	17/05 [484/00]	RNGB	TUE
0915z	24/05 [484/00] Good	RNGB	TUE
0915z	27/05 [484/00] Fair	RNGB, Hans	FRI
0915z	17/06 [484/00] Weak	Hans	FRI
0915z	21/06 [485/36 V 25980 50540 .... 58578] 0926z Fair	Hans	TUE
0915z	24/06 [485/36 V 25980 50540 .... 58578] 0926z Fair/Strong	Hans	FRI

11581kHz	1020z	10/05 [426/00] Strong		Hans	TUE
	1020z	17/05 [426/00] Strong		RNGB	TUE
	1020z	24/05 [426/30 V 76970 79093 .... 19997] 1030z Fair QSB3		Hans	TUE
	1020z	27/05 [426/30 76970 79093 46139 45167 59031.....19997] Fair, QSB		RNGB	FRI
	1020z	07/06 [420/32 02076 21815 12451 30227 80170.....96972]		RNGB	TUE
	1020z	10/06 [420/32 02076 etc] repeat of Tuesday		RNGB	FRI
	1020z	21/06 [426/00] Strong		Hans, RNGB	TUE
16530kHz	1015z	09/05 [475/00] Fair		RNGB	MON
	1015z	12/05 [475/00]		RNGB	THU
	1015z	16/05 [475/00] Weak to Fair	(3m18s)	RNGB	MON
	1015z	19/05 [475/00]		RNGB	THU
	1015z	23/05 [475/00] Good		RNGB	MON
	1015z	02/06 [475/00]		RNGB	THU
	1015z	09/06 [475/00] Weak		RNGB	THU
	1015z	13/06 [475/00] V.weak		Hans	MON
	1015z	16/06 [475/00]		RNGB	THU
	1015z	20/06 [475/00] Fair		RNGB	MON

#### RNGB's May/June Log:

##### S06 May log:

Monday	2nd	19.00	7982	'349' 628 17 82545 53937 64917 94307 07595.....91256
Weds	4th	18.00	6770	'471' 00000
Saturday	7th	16.00	8157	'134' 00000
		19.35	6922	'366' 00000
Monday	9th	19.00	7982	'349' 628 17 82545 53937 64917 94307 07595.....91256
		20.15	12195	'516' 00000
		21.15	10665	'516' 00000
Weds	11th	18.05	5870	'471' 00000
Saturday	14th	16.05	6983	'134' 00000
		19.35	6922	'366' 00000
Monday	16th	19.00	7982	'349' 00000
Saturday	21st	16.00	8157	'134' 00000
		19.00	10178	'703' 00000
		19.00	6943	'837' 00000
		19.30	7718	'366' 00000
		20.00	9065	'703' 00000
		20.00	5926	'837' 00000
Tuesday	24th	20.15	12195	'516' 978 130 13904 75907 46008 92757 53031.....03195
Thursday	26th	09.30	14736	'842' 560 33 49650 67588 14459 43129
Saturday	28th	19.30	7718	'366' 00000
Monday	30th	19.05	6984	'349' 00000

##### S06c

12170kHz	1645z	23/05 [11098]	1649z Weak	Hans	MON
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##### S06s log May:

<b>Monday</b>				
2nd/9th	1200/1210	10230/12165	'831' 476 5 02555 62325 63514 91285 55371	
16th/23rd			'831' 962 5 89235 45637 87923 23524 78901	
2nd/9th	1600/1610	9256/7889	'176' 930 5 44708 85356 99691 48595 10518	
16th/23rd			'176' 942 5 67859 45673 28910 90878 12578	
<b>Tuesday</b>				
3rd/10th	0600/0610	16735/15230	'438' 971 5 65384 86148 55754 87822 72284	
17th/24th			'438' 256 7 19287 36556 40981 88912 89034 67430 87879	
3rd/10th	0700/0715	5430/6780	'374' 821 5 54544 36363 15514 93899 65591	
17th/24th			'374' 810 5 85253 08445 49555 56525 34799	
3rd/10th	0800/0810	7245/9670	'418' 237 5 58545 40617 79750 12469 13825	
17th/24th			'418' 206 5 59855 34231 34747 04508 74543	
3rd/10th	0800/0810	14373/12935	'352' 479 6 98740 54262 37554 29398 24532 63692	
17th/24th			'352' 409 6 56554 42540 53301 04118 05665 37210	
3rd/10th	1230/1240	7650/ ?	'278' 496 5 45321 89756 45320 08964 12120	
17th/24th			'278' 964 5 45115.....(Fritz)	
3rd/10th	1500/1510	6666/7744	'537' 940 6 78755 89321 55230 77031 33196 04221	
17th/24th			'537' 906 8 01270 71544 55271 17405 35939 56547 55899 36545	
<b>Wednesday</b>				
4th/11th	0530/0540	11435/12650	'153' 286 7 75643 89764 13215 43759 80943 34331 88315	
18th/25th			'153' 948 6 50841 45501 36641 97154 88165 14858	
4th/11th	0730/0740	7335/11830	'745' 893 6 77547 72548 02547 49775 84115 55290	
18th/25th			'745' 938 6 91545 42504 86121 61661 60808 89435	
4th/11th	0820/0830	6755/5835	'471' 285 6 35824.....(Fritz)	
18th/25th				
4th/11th	0840/0850	10120/9670	'328' 479 5 24350 72881 50128 16958 34566	
18th/25th			'328' 954 6 11278 27524 65086 87574 25229 35484	
4th/11th	1000/1010	14580/16020	'729' 451 5 24350 72881 50128 16958 34566	
18th/25th			'729' 810 5 55779 78543 34858 24086 56555	
4th/11th	1200/1210	7765/6815	'481' 235 6 78654.....(Fritz)	
18th/25th				
4th/11th	1230/1240	7545/8220	'967'	
18th/25th			'967' 83? 5 09274 ????? .... (Linaz)	
4th/11th	1900/1910	10170/9110	'371' 485 6 98765 45633 20918 27760 98016 34561	
18th/25th			'371' 952 6 09245 46862 54039 91082 55456 97481	

**Thursday**

5th/12th	0800/0810 (E17z)	16780/12850	'674' 290 5 23146 27745 56314 93785 63651
19th/26th			'674' 892 5 95685 18218 75354 82567 28336
5th/12th	0900/0910	12952/13565	'167' 480 5 45283 91957 54954 02550 02523
19th/26th			'167' 984 5 29034 56216 97721 61567 77970
5th/12th	1200/1210	12155/14535	'425' 893 6 76856 50119 91045 29331 97531 31696
19th/26th			'425' 916 7 45410 56479 55954 62387 45543 73765 74153
5th/12th	1230/1240	9255/7630	'314'
19th/26th			'314' 875 9 24457 52455 45219 14544 18501 15809 42584 62845 99359
5th/12th	1400/1410	5320/4845	'624'
19th/26th			'624' 913 5 33953.....(Fritz)

**Friday**

6th/13th	0600/0610	8340/5810	'934' 801 5 24443 58728 84657 65705 13759
20th/27th			
6th/13th	0600/0610	7845/9125	'196' 230 5 72505 28556 26540 12055 18741
20th/27th			'196' 235 7 45751 83455 50587 47431 46802 85070 34119
6th/13th	0930/0940	10290/9655	'516' 839 7 59562 53815 37458 54259 49232 72560 09552
20th/27th			'516' 829 7 18297 67543 09182 67115 89771 56009 34543

**Saturday**

7th	1200/1210	12460/ ?	'254' 931 6 45824 53259 55817 42469 89087 37715
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**S06 log JUNE:**

Weds	8th	18.00	6770	'471' 00000
Thursday	9th	19.05	6984	'349' 00000
Saturday	11th	19.35	6922	'366' 00000
Monday	13th	19.00	7982	'349' 00000
		20.15	13460	'378' 00000
		21.15	11090	'378' 00000
Saturday	18th	16.05	6983	'134' 00000
		19.00	10178	'703' 00000
		19.00	6943	'837' 159 44 99179 48710 89487 72506 31768.....53278
		20.00	5926	'837' 159 44 99179 48710 89487 72506 31768.....53278
		20.00	9065	'703' 00000
Monday	20th	19.00	7982	'349' 00000
Saturday	25th	16.05	6983	'134' 00000
		19.30	7718	'366' 00000
Monday	27th	19.00	7982	'349' 00000
		20.15	13460	'378' 00000
		21.15	11090	'378' 00000
Tuesday	28th	20.00	4586	'125' 019 27 ended.....46703
		20.24	4512	'524' 020 27 62296 54760 90434 95672 52477.....19685
		21.00	4009	'294' 021 27 45157 02884 56954 83044 33800 41511.....60362
		22.05	3732	'623' 023 27 48949 55304 96129 04069 37839.....94078
Weds	29th	18.00	6770	'471' 00000
		19.52	4586	'125' 024 16 34325 21116 31183 11004 15450.....59668
		20.25	4512	'524' 025 16 59831 89408 17992 62067 54078.....46384
		21.00	4007	'294' 026 16 77863 50256 95114 76542 13956.....89932
		21.33	3818	'823' 027 16 55219 69928 89452 66381 98148.....12288
		22.05	3740	'623' 028 16 02395 50004 65959 70750 65650.....33829
Thursday	30th	20.24	4512	'524' 030 12 34338 15552 30742 95280 96492.....72161
		20.30	4512	'524' 033 12 79859 93180 25749 28095 29584.....10791
		21.00	4001	'294' 031 12 39290 30175 22845 48119 98206.....01050
		22.05	3732	'623' 00000

**S06c log JUNE:**

10458kHz 0411z	02/06 [11841] 0412z Strong	Hans	THU
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**S06s log JUNE:****Monday**

6th/13th	1200/1210	10230/12165	'831' 254 6 01215 55859 51948 21175 21201 42758
20th/27th			'831' 406 5 46559 92278 75165 57195 02661
6th/13th	1600/1610	9256/7889	'176' 804 5 25535 12121 50555 85851 88015
20th/27th			'176' 932 5 91454 55455 74665 15157 15544

**Tuesday**

7th/14th	0600/0610	16735/15230	'438' 925 6 16655 99249 56792 35525 11143 13782
21st/28th			'438' 257 6 94991 55544 54055 35086 19618 54825
7th/14th	0700/0715	5430/6780	'374'
21st/28th			'374' 982 5 55228 77544 04816 56447 51269
7th/14th	0800/0810	7245/9670	'418' 239 5 15656 14797 55579 54327 35270
21st/28th			'418' 269 5 34682 17455 55122 40995 14557
7th/14th	0800/0810	14373/12935	'352' 497 6 59426 03079 12840 26167 53553 05965
21st/28th			'352' 871 6 20163 29076 56705 45562 52562 63207
7th/14th	1230/1240	7650/ ?	'278'
21st/28th			'278' 509 6 73531 13264 51501 53545 65294 55455
7th/14th	1500/1510	6666/7744	'537' 912 6 29245 28842 82264 14255 81545 74167
21st/28th			'537' 926 8 22574 10305 71531 52581 95347 20812 78921 14574

**Wednesday**

1st/8th	0530/0540	11435/12650	'153' 492 6 18054 59439 88228 28855 35631 67555
15th/22nd			'153' 489 6 33615 59514 74741 25550 43181 86851
1st/8th	0730/0740	7335/11830	'745' 923 6 17896 56433 56789 09089 76556 34341
15th/22nd			'745' 892 6 52401 63919 92699 14600 74248 48754
1st/8th	0820/0830	6755/5835	'471'
15th/22nd			'471' 986 5 groups
1st/8th	0840/0850	10120/9670	'328'
15th/22nd			'328' 957 6 33796 13577 74526 46647 79302 53516
1st/8th	1000/1010	14580/16020	'729' 483 5 71826 56439 01928 78960 67854
15th/22nd			'729' 861 5 55943 03598 19250 54655 55574
1st/8th	1200/1210	7765/6815	'481' 259 6 67844..... (Tks Fritz)
15th/22nd			'481' 962 5 40283 49668 44600 55854 08644
1st/8th	1230/1240	7545/8220	'967' 231 5 78654.....(Tks Fritz)
15th/22nd			'967' 280 5 87655 92586 74517 29246 85144
1st/8th	1900/1910	10170/9110	'371' 495 6 34890.....(Tks Fritz)
15th/22nd			'371' 905 6 49407 65988 40838 09502 12758 51691

**Thursday**

2nd/9th	0800/0810 (E17z)	16780/12850	'674' 982 5 77241 94557 01555 28408 73655
16th/23rd			'674' 293 5 55485 55694 43555 88503 57444
2nd/9th	0900/0910	12952/13565	'167' 938 5 67035 07413 86555 30413 25318
16th/23rd			'167' 294 5 63814 42755 57455 69516 32150
2nd/9th	1200/1210	12155/14535	'425' 960 7 62014 41773 91535 59586 55946 28295 84605
16th/23rd			'425' 863 7 76329 31299 77532 49425 74408 82555 24178
2nd/9th	1230/1240	9255/7630	'314' No reports
16th/23rd			'314'
2nd/9th	1400/1410	5320/4845	'624' No reports
16th/23rd			'624'

**Friday**

3rd/10th	0600/0610	8340/5810	'934' 870 5 35584 21431 57412 86215 60558
17th/24th			'934' 816 5 58583 40650 41957 78496 54505
3rd/10th	0600/0610	7845/9125	'196' 872 5 45115 75546 35875 25584 13417
17th/24th			'196' 274 5 60407 24364 47586 14849 60406
3rd/10th	0930/0940	10290/9655	'516' 984 7 08652 45334 67842 14841 21759 13296 24486
17th/24th			'516' 249 7 49180 82654 25444 55631 93441 35855 32346

**Saturday**

4th	1200/1210	12460/ ?	'254'
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**S21 [XIV]****May:**

4973kHz	1742z	03/05[973-760/31=70528] 4973 bad modulation	H-FD	TUE
	1741z	10/05[973 760 31 70528 19662 .... 79725] 1752z Fair //5373	Hans	TUE
	1740z	12/05[973 760 31 70528 19662 .... 79725] 1752z Fair //5373(Fair)	Hans	THU
	1742z	31/05[973 760 31 70528 ... 79725 760 31 000] Strong //5373	Danix	TUE
	1742z	30/0 [973 933 33 47723 20934 .... 87533] Strong w/low audio //5373	Hans	THU
5373kHz	1741z	10/05[973 760 31 70528 19662 .... 79725] 1752z Fair //4973	Hans	TUE
	1740z	12/05[973 760 31 70528 19662 .... 79725] 1752z Fair //4973(Fair)	Hans	THU
	1742z	26/05[973 760 31 70528 ... 79725 760 31 000] 1752z Strong	Danix	THU
	1742z	31/05[973 760 31 70528 ... 79725 760 31 000] Fair //4973	Danix	TUE

**June:**

4973kHz	1742z	02/06[973 (as of 31/05)] 1751z Strong //5373kHz	Danix	THU
	1742z	07/06[973 933 33 47723 ... 87533 933 33 000] 1754z Strong //5373kHz	Danix	TUE
	1742z	14/06[973... (too weak to copy)] 1754z Very weak QSB3 //5373kHz	Danix	TUE
	1742z	21/06[973 933 33 47723 20934 .... 87533] 1754z Strong w/low audio //5373	Hans	TUE
	1742z	28/06[973 933 33 47723 ..... 87533 933 33 000] 1754z Weak QRN3 QSB2	Spectre	TUE
5373kHz	1742z	02/06[973 (as of 31/05)] 1751z Very strong //4973kHz	Danix	THU
	1742z	07/06[973 933 33 47723 ... 87533 933 33 000] 1754z Strong //4973kHz	Danix	TUE
	1742z	14/06[973 33 47723 20934 ... 87533 933 33 000] weak	LINAS, Danix	TUE
	1742z	21/06[973 933 33 47723 20934 .... 87533] 1754z Strong with much lower audio //4973	Hans	TUE
	1742z	23/06[973 933 33 = 47723 20934 .... 87533] Strong QSB2	Hans	THU
	1742z	23/06[973 933 33 47723 ..... 87533 933 33 000] 1754z Weak QSB3	Spectre	THU
		973 933 33 47723 20934 02736 91860 66631 69391 29818 49761 47320 61777 25282 88585 43539 80016 69292 45860 39457 32969 01737 16914 90776 79582 48115 10578 58792 07470 26908 31809 69830 77084 73858 93598 87533 933 33 000 <i>Courtesy Spectre</i>		
	1742z	30/06 [973 933 33 47723 20934 .... 87533] Strong w/low audio //4973	Hans	THU

**S28**

4625kHz	1410z	15/06[MDZHB MDZhB 90 171 ALANDAS 08 47 11 50 (R2)]	LINAS	TUE
	0054z	25/06 [No buzzer, carrier only] Fair QRN2	Spectre	SAT

**V02a [XVIII]****May:**

5117kHz 0410z	02/05[] strong	gil	MON
0403z	09/05[] strong simulcast with 6768	gil	MON
5417kHz 0207z	13/05[] weak	gil	FRI
0200z	20/05 Very weak sig. Audio u/r., only readable were '0,2, and atención'	dj	FRI
0230z	27/05[i/p] fair	gil	FRI
0800z	27/05[A27181 45282 17082] fair	gil	FRI
5800kHz 0703z	08/05[A24??] strong	gil	SUN
0706z	08/05[] strong	gil	SUN
5882kHz 0700z	27/05[A27181 45282 17082] fair gil FRI		
5883kHz 0700z	01/05[A37162 30441 83351] strong	gil, PLdn	SUN
0700z	02/05[A78222 50511 04132] strong	gil	MON
0700z	03/05[A43452 76661 20571] strong	gil GD	TUE
0700z	05/05[A21121 58632 47271] strong	gil GD	THU
0700z	09/05[A53332 823] strong (stopped midway in 2nd header then a few seconds of SK01 and then new headers)	gil GD	MON
0700z	09/05[A31382 47321 10112] strong	gil	MON
0800z	09/05[A31382 47321 10112] strong expected 5898	gil	MON
0700z	10/05[A64421 44121 48742] strong expected 5883	gil	TUE
0710z	10/05[i/p] strong gil TUE switched from 5898		
0700z	12/05[A61011 68211 83661] strong	gil	THU
0700z	13/05[A08482 80071 80781]	GD	FRI
0700z	14/05[A08482 80051 80781] Strong	gil	SAT
0700z	15/05[A22151 52072 85582] Strong	gil	SUN
0706z	15/05[A???? 65201 ?????] Strong	gil	SUN
0700z	17/05[A71882 01601 84322] Strong	gil GD	TUE
0700z	21/05[A92052 73781 46871] strong	gil	SAT
0700z	19/05[A27472 53412 08842]	GD, MalcF	THU
0700z	20/05[A77172 04362 55871]	GD, MalcF	FRI
0700z	23/05[A00472 71112 75641] strong	gil	MON
0700z	24/05[A64561 48332 64531] strong	gil	TUE
0700z	26/05[A41461 71351 08452] (stopped at 0714z back at 0716z) strong	gil GD	THU
0700z	27/05[A27171 47282 07622]	GD	FRI
0700z	29/05[A87042 34572 83351] strong	gil	SUN
0700z	30/05[A68382 36152 25601]strong	gil	MON
0701z	31/05[A47281 80531 63321]strong	gil	TUE
0809z	31/05[i/p] strong switched from sk01	gil	TUE
5898kHz 0800z	01/05[A37162 30441 83351] strong	gil	SUN
0800z	02/05[A78222 50511 04132] strong	gil	MON
0800z	03/05[A43452 76661 20571] strong	gil	TUE
0802z	05/05[A21121] strong	gil	THU
0800z	12/05[A61011 68211 83661] strong	gil	THU
0800z	14/05[A08482 80051 80781] Strong	gil	SAT
0800z	15/05[A22151 52072 85582] Strong	gil	SUN
0000z	17/05[A71882 01601 84322] Strong	gil	TUE
0800z	24/05[A64561 48332 64531] strong	gil	TUE
0800z	26/05[A41461 71351 08452]strong	gil	THU
6768kHz0400z	02/05 ..... Caught late	dj	MON
0100z	07/05[A47172 63121 87571] Poor readability	dj, RR	SAT
0400z	09/05[A 73082 83682 43552] strong	gil	MON
0100z	21/05[A66761 18812 48881] strong	gil dj	SAT
0112z	28/05[] weak	gil	SAT
0200z	28/05[A45342 04842 02741] weak	gil	SAT
6855kHz0300z	09/05[A73082 83682 43552]	dj gil	MON
7553kHz2000z	10/05 I/P Too Distorted to copy, weak	SC	TUE
9040kHz0900z	18/05[A89482 32722 26162] Strong	gil dj	WED
0900z	25/05[A06041 05812 68712] Good sig	dj gil	WED
9240kHz1000z	04/05 Carrier up at 1000z, no message till about 1004z YL/SS very strong & clear.	RR	WED
1000z	11/05 Attencion into 5 figs, Very strong signal.	RR	WED
1000z	18/05 SS YL "Attencion" once into 5f groups, Strong	RR	WED
1000z	25/05[A06041 05812 68712 ]strong	gil	WED
12178kHz1900z	10/05[53222 35522 00022] Strong, Vy distorted	SC	TUE
12180kHz1900z	19/05 ..... Very weak sig. QRM5	dj gil	TUE
13380kHz2000z	17/05 Unreadable audio	dj gil SC	TUE
2000z	19/05[A37352 83231 18442] STRONG, new voice	SC, dj	THU
2010z	26/05[i/p] fair	gil	THU

2008z	31/05[i/p] fair switched from M08a	gil	TUE
<b>June:</b>			
5417kHz0200z	03/06 Caught late. Audio unreadable, as usual.	dj	FRI
0220z	10/06 - i/p, Fair in LSB mode with distorted audio.	Hans	FRI
5883kHz0700z	02/06[A52862 15381 00022 LG 62246]	DanAr gil	THU
0718z	06/06[i/p] fair	gil GD	MON
0718z	07/06[i/p] fair	gil	TUE
0800z	10/06[A80651 2014 10681] fair	gil GD	FRI
0700z	11/06[A68352 00761 08742 LG 31336]	DanAr	SAT
0700z	14/06[A11732 12412 32782 LG 05353]	DanAr, GD gil	TUE
0700z	16/06[A17811 11471 58641] 0741z Fair BC QRM2	ADB, DanAr	THU
0701z	17/06[A74351 12141 13541] Fair	gil	FRI
0700z	19/06[A51271 30262 17231] Fair	gil	SUN
0700z	20/06[A07011 21261 41651 LG 56133]	DanAr gil	MON
0700z	28/06[A05321 54321 01521 LG 64861]	DanAr	TUE
0700z	30/06[A58661 32801 36532 LG43565] 0741z Strong via G.TunersKY	Danix	THU
5898kHz 0800z	07/06[A36572 38531 70741] Fair	gil	TUE
0800z	17/06[A74351 12141 13541] Fair	gil	FRI
0800z	20/06[A07011 21261 41651] Strong	gil	MON
6768kHz 0401z	06/06[i/p] (TX problem unable to copy headers) fair	gil dj	MON
0400z	13/06[A86281 53571 51271] strong	gil	MON
0400z	27/06[A27041 68321 27742] poor audio	dj	MON
6785kHz1900z	23/06 (I/P LSB) FAIR	Sage	THU
6855kHz0300z	27/06 unreadable audio	dj	MON
7520kHz 0124z	04/06 LSB Fair signal. V02a in progress. End 0142z.	SPECTRE	SAT
7554kHz2000z	23/06 (I/P AM) WEAK QRM7 WEAK	Sage	THU
8186kHz0800z	11/06[A68352 00761 08742] Very weak sig.	dj	SAT
8340kHz 0600z	10/06 [934 870 5 35584 21431 57412 86215 60558] Weak	Hans	FRI
9040kHz 0900z	01/06[A73221 76272 23312] Good sig	dj	WED
0900z	22/06[A04871 71501 60301] Good sig	dj	WED
0900z	29/06[A48372 06442 86841]	dj	WED
9240kHz1000z	22/06[A04871 71501 60301] Fair	gil	WED
1000z	29/06 "Attencion" into 5 figure groups	RR	WED
1000z	29/06[A48372 06442 86841] Good sigs	dj	WED
12180kHz1927z	02/06[i/p] fair	gil	THU
1900z	09/06 I/P STRONG	Sage	THU
1900z	28/06[37302 12322 53732] STRONG	SC	TUE
1900z	30/06 I/P STRONG started 1906z, mid-message	SC	THU
13380kHz2000z	07/06 UN-COPYABLE.OVER MOD, STRONG	Sage	TUE
2000z	14/06 .... Nasty audio, as usual.	dj gil	TUE
2018z	16/06[i/p] vweak	gil	THU
2000z	28/06[37302 12322 53732]STRONG	SC	TUE
13382kHz2000z	30/06[A32182 31382 48182] Weak, QRN3	SC	THU

### **V07 [ IB ]**

Nothing heard from this one for sometime.....

Freq list vs month from AnonUK:

January	0600 10879	0620 12179	0640 13479 814
February	0600 13366	0620 14866	0640 16266 382
March	0600 14387	0620 16087	0640 17487 304
April	0600 14387	0620 16087	0640 17487 304
May	0600 14621	0620 16321	0640 17521 635
June	0600 14621	0620 16321	0640 17521 635
July	0600 13837	0620 14937	0640 16697 896
August	0600 13837	0620 14937	0640 16697 896
Sept	0600 13381	0620 14781	0640 16281 372
October	0600 14521	0620 15821	0640 17421 584
November	0600 12152	0620 13552	0640 14952 159
December	0600 9272	0620 10672	0640 12172 261 [Tnx AnonUK]

**V13 [0]****May:**

07/05

New message set, 3 previously unheard units, and a very short message.

9725kHz 1200z 07/05 USB V13 CCYL New Star #4. Msg set: 11-05-1.  
 9725kHz 1300z 07/05 USB V13 CCYL New Star #4. Msg set: 11-05-1.  
 Units: 19095 (35 grps), 19092 (1 grps), 12926 (42 grps), 14446 (43 grps) 16966 (45 grps)

dj SAT  
 dj SAT

14/05

New message set goes into effect.

9725kHz 1200z 14/05 USB V13 CCYL New Star #4. Msg set: 11-05-2. Good sig.  
 9725kHz 1300z 14/05 USB V13 CCYL New Star #4. Msg set: 11-05-2. Good sig.  
 Units: 12073 (48 grps), 13690 (49 grps), 14672 (48 grps), 10988 (48 grps) 16343 (40 grps)

dj SAT  
 dj SAT

21/05

9725kHz 1200z 21/05 Flutes into YL Mandarin #s poor copy

RR SAT

22/05

New message set.

9725kHz1200z 22/05 USB V13 CCYL New Star #4. Msg set: 11-05-3. Good sig.  
 9725kHz1300z 22/05 USB V13 CCYL New Star #4. Msg set: 11-05-3. Good sig.  
 Units: 15161 (48 grps), 12188 (40 grps), 14283 (18 grps), 16403 (45 grps) 17909 (42 grps)

dj SUN  
 dj SUN

Unit 14283 was passed an indicated group count of 18, which equates to 98 groups and was then passed the same 49-group message twice.

28/05

9725kHz 1300z 28/05 USB V13 CCYL New Star #4. Msg set: 11-05-4. Weak.  
 Units: 19386 (44 grps), 12328 (45 grps), 13401 (42 grps), 10387 (40 grps) 14861(48 grps)

dj SAT

**June:**

04/06

New message set

9725kHz1200z 04/06 USB V13 CCYL New Star #4. Msg set: 11-06-1. QRM - SW bcst.  
 9725kHz1300z 04/06 USB V13 CCYL New Star #4. Msg set: 11-06-1. QRM - SW bcst.  
 Units: 12396 (48 grps), 13546 (42 grps), 14957 (40 grps), 10729 (44 grps) 16769 (46 grps)

dj SAT  
 dj SAT

11/06

New Message set

9725kHz1200z 11/06 USB V13 CCYL New Star #4. Msg set: 11-06-2. Weak.  
 9725kHz1300z 11/06 USB V13 CCYL New Star #4. Msg set: 11-06-2. Weak.  
 Units: 12926 (41 grps), 13690 (41 grps), 13841 (46 grps), 14736 (49 grps) 16343 (46 grps)

dj SAT  
 dj SAT

Units 13841 and 14736 have not been heard of before.

18/06

New message set.

9725kHz1200z 18/06 USB V13 CCYL New Star #4. Msg set: 11-06-3. Good sig.  
 9725kHz1300z 18/06 USB V13 CCYL New Star #4. Msg set: 11-06-3.  
 Units: 12073 (47 grps), 14446 (47 grps), 14672 (43 grps), 10988 (45 grps) 16966 (46 grps)

dj SAT  
 dj SAT

19/06

9725kHz1200z 19/06 USB CCYL New Star #4. Msg set: 11-06-3.  
 9505kHz1300z 19/06 USB CCYL New Star #4. Msg set: 11-06-3. Very weak sig. Covered by BC station.

dj SUN  
 dj SUN

27/06

New message set as of 25 Jun 11

9725kHz1200z 27/06 USB V13 CCYL New Star #4. Msg set: 11-06-4. Weak.  
 9725kHz1300z 27/06 USB V13 CCYL New Star #4. Msg set: 11-06-4. Weak.  
 Units: 12959 (45 grps), 13966 (46 grps), 14871 (44 grps), 10492 (45 grps) 16415(43 grps)

dj MON  
 dj MON

28/06

9725kHz 0600z 28/06 USB V13 CCYL New Star #4. Msg set: 11-06-4. Very weak.  
 9725kHz 1300z 28/06 USB V13 CCYL New Star #4. Msg set: 11-06-4.

dj TUE  
 dj TUE

Units: 12959 (45 grps), 13966 (46 grps), 14871 (44 grps), 10492 (45 grps) 16415 (43 grps)  
 [It's unusual for me to hear them at all on 0600z. They weren't heard here at 1200z.]

### **V30 [previously VTN]**

V30, previously VTN has been pretty steady this past month, near daily transmissions, as normal 3 identical messages a day starting at about 1600. At the beginning of the month the message was a 30 group message read by a female voice. The last of these YL/5f/Vietnamese/30 group messages was noted on May 10, 2011. No message was received May 11, 2011, and starting May 12, 2011, a new content message was sent, again three identical messages each day starting at about 1600. The new message was sent by a male voice, in Vietnamese, and consisted of 50 groups, each of 5 figures.

Receptions from my location in the Mojave Desert, California, USA:

-May/01/11, 10255 kHz USB, VTN, YL/5f/30 grps, 1559:33 UTC msg 1, 1606:59 UTC msg 2, 1615:18 msg 3, all msg's strong QRM from suspected Chinese OTHR  
-May /02/2011, 10255 kHz USB, VTN, YL/5f/30 grps, 1559:32 UTC msg 1, 1606:58 UTC msg 2, 1615:18 msg 3  
-May /03/2011, no recording  
-May /04/2011, 10255 kHz USB, VTN, YL/5f/30 grps, 1559:30 UTC msg 1, 1606:56 UTC msg 2, 1615:16 msg 3  
-May /05/2011, 10255 kHz USB, VTN, YL/5f/30 grps, 1559:30 UTC msg 1, 1606:57 UTC msg 2, 1615:16 msg 3  
-May /06/2011, No messages received  
-May /07/2011, 10255 kHz USB, VTN, YL/5f/30 grps, 1559:31 UTC msg 1, 1606:55 UTC msg 2, 1615:16 msg 3  
-May /08/2011, no recording  
-May /09/2011, 10255 kHz USB, VTN, YL/5f/30 grps, 1559:28 UTC msg 1, 1606:54 UTC msg 2, 1615:14 msg 3  
-May /10/2011, 10255 kHz USB, VTN, YL/5f/30 grps, 1559:25 UTC msg 1, 1606:51 UTC msg 2, 1615:11 msg 3  
-May /11/2011, No message received  
-May /12/2011, 10255 kHz USB, VTN, OM/5f/50 grps, 1559:26 UTC msg 1, 1604:00 UTC msg 2, 1608:35 msg 3  
-May /13/2011, No message received  
-May /14/2011, No message received  
-May /15/2011, 10255 kHz USB, VTN, OM/5f/50 grps, 1559:24 UTC msg 1, 1603:58 UTC msg 2, 1608:33 msg 3  
-May /16/2011, 10255 kHz USB, VTN, OM/5f/50 grps, 1559:21 UTC msg 1, 1603:57 UTC msg 2, 1608:31 msg 3  
-May /17/2011, 10255 kHz USB, VTN, OM/5f/50 grps, 1559:22 UTC msg 1, 1603:56 UTC msg 2, 1608:31 msg 3

Recordings from May 18, 2011, to May 27, 2011, corrupted. VTN transmitted most days but exact days and start times lost when recordings damaged. All transmissions noted in real time were OM/5f/50 grps.

-May /28/2011, 10255 kHz USB, VTN, OM/5f/50 grps, 1559:12 UTC msg 1, 1603:45 UTC msg 2, 1608:22 msg 3  
-May /29/2011, 10255 kHz USB, VTN, OM/5f/50 grps, 1559:11 UTC msg 1, 1603:44 UTC msg 2, 1608:21 msg 3  
-May /30/2011, 10255 kHz USB, VTN, OM/5f/50 grps, 1559:11 UTC msg 1, 1603:43 UTC msg 2, 1608:20 msg 3  
-May /31/2011, 10255 kHz USB, VTN, OM/5f/50 grps, 1559:10 UTC msg 1, 1603:43 UTC msg 2, 1608:20 msg 3

Thanks T

10255kHz1559z 09/05[Fair strength]

### **POLYTONES**

#### **XPA2**

**May:**

#### **Sun/Mon/Fri**

6921kHz0420z	02/05		BR	MON
0420z	09/05[09593 00094 51856 76610]Strong	[Apparent Mon only, poss one freq only]	(3m22s) PLdn	MON
0420z	15/05[05182 00085 25562 76607]Very strong		(3m15s) PLdn	SUN
9371kHz0400z	27/05[07315 00141 01172 44475] Strong		(3m59s) Hans	FRI
8114kHz0410z	27/05[07315 00141 01172 44475] Strong		(3m59s) Hans	FRI
6921kHz0420z	27/05[07315 00141 01172 44475] Strong		(3m59s) Hans, PLdn	FRI

#### **Sun/Tue**

16099kHz1500z	22/05[04326 00149 20316 65646]		RNGB	SUN
16099kHz1500z	29/05[01608 00128 23043 63356] weak signals		RNGB	SUN
14557kHz1510z	29/05[01608 00128 23043 63356] weak signals		RNGB	SUN

**Sun/Fri**

8092kHz0110z	08/05[02174 00107 06592 06340]Very strong	(3m33s)	PLdn	SUN
7543kHz0120z	08/05[02174 00107 06592 06340]Very strong	(3m33s)	PLdn	SUN
8092kHz 0110z	13/05[02702 00142 04066 26522] Very strong	(3m59s)	PLdn	FRI
7543kHz 0120z	13/05[02702 00142 04066 26522] Very strong	(3m59s)	PLdn	FRI
8092kHz0110z	20/05[04180 00104 56743 02664] Very strong	(3m30s)	PLdn	FRI
7543kHz0120z	20/05[04180 00104 56743 02664] Very strong with background	(3m30s)	PLdn	FRI
8092kHz0110z	26/05[02675 00100 78983 52445] Strong	(3m35s)	PLdn	THU
7543kHz0120z	20/05[02675 00100 78983 52445] Strong	(3m35s)	PLdn	THU

**Sun/Mon/Tue 1800z**

14873kHz1800z	03/05[01691 00146 50622 35366]Very strong	(4m03s)	PLdn	TUE
14362kHz1810z	03/05[01691 00146 50622 35366]Very strong	(4m03s)	PLdn	TUE
13544kHz1820z	03/05[01691 00146 50622 35366]Very strong	(4m03s)	PLdn	TUE
14873kHz1800z	10/05[04815 00093 95299 67274] Very strong	(3m22s)	PLdn	TUE
14362kHz1810z	10/05[04815 00093 95299 67274] Very strong	(3m22s)	PLdn	TUE
13544kHz1820z	10/05[04815 00093 95299 67274] Very strong	(3m22s)	PLdn	TUE
14872kHz1800z	16/05[09282 00132 93762 16322] Very strong	(3m52s)	PLdn	MON
14362kHz1810z	16/05[09282 00132 93762 16322] Very strong	(3m52s)	PLdn	MON
13544kHz1820z	16/05[09282 00132 93762 16322] Very strong	(3m52s)	PLdn	MON
14873kHz1800z	23/05[05741 00106 79051 17617] Strong	(3m33s)	Hans, PLdn	MON
14362kHz1810z	23/05[05741 00106 79051 17617] Strong	(3m33s)	Hans, PLdn	MON
13544kHz1820z	23/05[05741 00106 79051 17617] Strong	(3m33s)	Hans, PLdn	MON
14873kHz1800z	29/05[01608 00128 23043 63356]	(3m48s)	PLdn	SUN

**Tue 1900z**

13544kHz1920z	10/05[04815 00093 95299 67274] Fair --- suggests 1900z repeat of above schedule	(3m22s)	PLdn	TUE
14873kHz1900z	17/05[06564 00131 47106 63474] Strong & noisy	(3m53s)	PLdn	TUE
14362kHz1910z	17/05[06564 00131 47106 63474] Fair & noisy	(3m53s)	PLdn	TUE
13544kHz1920z	17/05[06564 00131 47106 63474] Fair & noisy	(3m53s)	PLdn	TUE

**Tue 2020z**

13538kHz2020z	17/05[00613 00091 52390 13751] Fair	(3m20s)	PLdn	TUE
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**Tue/Thu**

10261kHz1930z	03/05[04478 00001 00000 10140]		RNGB, H-FD	TUE
9261kHz1950z	03/05[04478 00001 00000 10140]		RNGB, H-FD	TUE
7961kHz2010z	03/05[04478 00001 00000 10140]		RNGB, H-FD	TUE
10261kHz1930z	05/05[01274 00001 00000 10140] Very strong	(2m11s)	PLdn	THU
9261kHz1950z	05/05[01274 00001 00000 10140] Very strong	(2m11s)	PLdn	THU
7961kHz2010z	05/05[01274 00001 00000 10140] Very strong	(2m11s)	PLdn	THU
10261kHz1930z	10/05[01274 00001 00000 10140] Very strong	(2m11s)	PLdn	TUE
9261kHz1950z	10/05[01274 00001 00000 10140] Very strong	(2m11s)	PLdn	TUE
7961kHz2010z	10/05[01274 00001 00000 10140] Very strong	(2m11s)	PLdn	TUE
10261kHz1930z	12/05[01716 00001 00000 10140] JVery strong	(2m11s)	PLdn	THU
9261kHz1950z	12/05[01716 00001 00000 10140] Very strong	(2m11s)	PLdn	THU
7961kHz2010z	12/05[01716 00001 00000 10140] JVery strong	(2m11s)	PLdn	THU
10261kHz1930z	17/05[01236 00001 00000 10140]Very strong	(2m11s)	PLdn	TUE
9261kHz 1950z	17/05[01236 00001 00000 10140]Very strong	(2m11s)	PLdn	TUE
7961kHz 2010z	17/05[01236 00001 00000 10140]Strong	(2m11s)	PLdn	TUE
10261kHz1930z	19/05[01236 00001 00000 10140]Very strong	(2m11s)	PLdn	THU
9261kHz1950z	19/05[01236 00001 00000 10140]Very strong	(2m11s)	PLdn	THU
7961kHz2010z	19/05[01236 00001 00000 10140]Very strong	(2m11s)	PLdn	THU
10261kHz1930z	24/05[07856 00001 00000 10140]Strong	(2m11s)	PLdn	TUE
9261kHz 1950z	24/05[07856 00001 00000 10140]Strong	(2m11s)	PLdn	TUE
7961kHz 2010z	24/05[07856 00001 00000 10140]Very strong	(2m11s)	PLdn	TUE
10261kHz1930z	26/05[07856 00001 00000 10140] Very strong	(2m11s)	PLdn	THU
9261kHz1950z	26/05[07856 00001 00000 10140] Very strong	(2m11s)	PLdn	THU
7961kHz2010z	26/05[07856 00001 00000 10140] Very strong	(2m11s)	PLdn	THU
10261kHz1930z	31/05[03851 00001 00000 10140] Strong	(2m11s)	PLdn	TUE
9261kHz 1950z	31/05[03851 00001 00000 10140] Strong	(2m11s)	PLdn	TUE
7961kHz 2010z	31/05[03851 00001 00000 10140] Strong	(2m11s)	PLdn	TUE

**Tue/Wed/Thu**

Intercepts from Daniel, Argentina.

Thought to be the tertiary frequency of the 2100z schedule claimed to be sent from Cuba [secondary freq] on 13380kHz 2110z because Radio Habana heard on that freq. Freq now know to be off freq -1kHz].

A repeat sending known to exist one hour later, tertiary freq 11036kHz 2220z from Hans, Norway.

12154kHz2123z	05/05			DanAr	THU
12154kHz2123z	11/05			DanAr	WED
12154kHz2120z	18/05[08423 00119 24404 54020]		(3m47s)	DanAr	WED
12154kHz2120z	24/05[07974 00093 90305 06645]		(3m21s)	DanAr	TUE
13381kHz2110z	31/05[02435 00146 98804 31533] Very strong		(4m04)	PLdn	TUE
12154kHz2120z	31/05[02435 00146 98804 31533] Strong	Tertiary freq 13381kHz Sched	(4m04)	PLdn	TUE
11036kHz2220z	31/05[02435 00146 98804 31533] Very strong	Rpt Tertiary freq 2200z Sched	(4m04)	PLdn	TUE

**Fri/Sat**

17462kHz1900z	27/05[00689 00085 39809 11313] Very strong		(3m16s)	RNGB	FRI
16115kHz1920z	27/05[00689 00085 39809 11313] Very strong		(3m16s)	RNGB	FRI
14828kHz1940z	27/05[00689 00085 39809 11313] Very strong		(3m16s)	RNGB, PLdn	FRI
14828kHz1940z	28/05[00689 00085 39809 11313] Fair, QRM3		(3m16s)	PLdn	SAT

**June:****Sun/Mon/Tue/Wed/Thu [0300/0400z Linked schedules]**

10221kHz0300z	02/06[05475 00148 31381 26471] Strong			Hans	THU
9196kHz0310z	02/06[05475 00148 31381 26471] Strong			Hans	THU
7764kHz0320z	02/06[05475 00148 31381 26471] Strong			Hans	THU
10221kHz0300z	08/06[08656 00101 99456 13053] Fair to strong		(3m33s)	PLdn	WED
9196kHz 0310z	08/06[08656 00101 99456 13053] Fair		(3m33s)	PLdn	WED
7764kHz 0320z	08/06[08656 00101 99456 13053] Very weak		(3m33s)	PLdn	WED
10221kHz0300z	14/06[05102 00106 20999 01704]Strong		(3m33s)	PLdn	TUE
9196kHz 0310z	14/06[05102 00106 20999 01704]Strong		(3m33s)	PLdn	TUE
7794kHz 0320z	14/06[05102 00106 20999 01704]Weak		(3m33s)	PLdn	TUE
10221kHz 0300z	20/06 [01318 00128 41332 13354] Strong, QSB2/3		(3m50s)	PLdn	MON
9196kHz 0310z	20/06 NRH Op error			PLdn	MON
7764kHz 0320z	20/06 NRH			PLdn	MON
10221kHz0300z	26/06[04011 00103 95280 64420] Fair, QRN3		(3m29s)	PLdn	SUN
9196kHz 0310z	26/06[04011 00103 95280 64420] Fair		(3m29s)	PLdn	SUN
7764kHz0320z	26/06[04011 00103 95280 64420] Fair		(3m29s)	PLdn	SUN
10168kHz0400z	02/06[05475 00148 31381 26471] Strong			Hans	THU
nnnnnkHz0410z	02/06[ - MISSED -]				
9113kHz0420z	02/06[05475 00148 31381 26471] Strong			PLdn, Hans	THU
10618kHz0400z	08/06[08656 00101 99456 13053] Fair		(3m33s)	PLdn	WED
9924kHz 0410z	08/06[08656 00101 99456 13053] Fair		(3m33s)	PLdn	WED
9113kHz 0420z	08/06[08656 00101 99456 13053] Strong		(3m33s)	PLdn	WED
10618kHz0400z	14/06[05102 00106 20999 01704]Strong		(3m33s)	PLdn	TUE
9924kHz 0410z	14/06[05102 00106 20999 01704]Very weak		(3m33s)	PLdn	TUE
9113kHz 0420z	14/06[05102 00106 20999 01704]Strong		(3m33s)	PLdn	TUE
10618kHz 0400z	20/06[01318 00128 41332 13354] Very strong		(3m50s)	PLdn	MON
9924kHz 0410z	20/06 NRH			PLdn	MON
9113kHz 0420z	20/06 NRH			PLdn	MON
10618kHz0400z	26/06[04011 00103 95280 64420] Fair, QRN3		(3m29s)	PLdn	SUN
9924kHz 0410z	26/06[04011 00103 95280 64420] Fair		(3m29s)	PLdn	SUN
9113kHz 0420z	26/06[04011 00103 95280 64420] Fair		(3m29s)	PLdn	SUN

**Tue**

14364kHz1920z	15/06[01484 00124 10069 66663]Strong		(3m46s)	PLdn	TUE
15834kHz1900z	27/06[02238 00090 18155 67140]		(3m20s)	Spectre	TUE
14874kHz1910z	27/06[02238 00090 18155 67140]			Danix	TUE
14354kHz1920z	27/06[02238 00090 18155 67140]		(3m20s)	MalcF	TUE

## Tue/Thu

10734kHz1930z	02/06[03851 00001 00000 10140]Very strong	(2m11s)	PLdn, Hans, H-FD	THU
10134kHz1950z	02/06[03851 00001 00000 10140]Very strong	(2m11s)	PLdn, Hans, H-FD	THU
9134kHz 2010z	02/06[03851 00001 00000 10140]Very strong	(2m11s)	PLdn, Hans, H-FD	THU
10734kHz1930z	07/06[03851 00001 00000 10140]Very strong	(2m11s)	PLdn	TUE
10134kHz1950z	07/06[03851 00001 00000 10140]Very strong	(2m11s)	PLdn	TUE
9134kHz2010z	07/06[03851 00001 00000 10140]Very strong	(2m11s)	PLdn	TUE
10734kHz1930z	09/06[07745 00001 00000 10140]Very strong	(2m11s)	FN, PLdn,Danix	THU
10134kHz1950z	09/06[07745 00001 00000 10140]Very strong	(2m11s)	FN, PLdn,Danix	THU
9134kHz2010z	09/06[07745 00001 00000 10140]Very strong	(2m11s)	FN, PLdn,Danix	THU
10734kHz1930z	14/06[07745 00001 00000 10140]Very strong	(2m11s)	PLdn, Danix	TUE
10134kHz1950z	14/06[07745 00001 00000 10140]Very strong	(2m11s)	PLdn	TUE
9134kHz2010z	14/06[07745 00001 00000 10140]Very strong	(2m11s)	PLdn	TUE
10734kHz1930z	16/06[01192 00001 00000 10140]Strong	(2m11s)	PLdn	THU
10134kHz1950z	16/06[01192 00001 00000 10140]Strong	(2m11s)	PLdn	THU
914kHz 2010z	16/06[01192 00001 00000 10140]Strong	(2m11s)	PLdn	THU
10734kHz1930z	21/06[01182 00001 00000 10140]Very strong	(2m11s)	PLdn	TUE
10134kHz1950z	21/06[01182 00001 00000 10140]Very strong	(2m11s)	PLdn	TUE
9134kHz 2010z	21/06[01182 00001 00000 10140]Very strong	(2m11s)	PLdn	TUE
10734kHz1930z	23/06[01182 00001 00000 10140] Strong	(2m11s)	PLdn	THU
10134kHz1950z	23/06[01182 00001 00000 10140]Very strong	(2m11s)	PLdn	THU
9134kHz2010z	23/06[01182 00001 00000 10140]Very strong	(2m11s)	PLdn	THU
10734kHz1930z	28/06[01182 00001 00000 10140] Very strong, QRM2	(2m11s)	PLdn	TUE
10134kHz1950z	28/06[01182 00001 00000 10140]Very strong	(2m11s)	PLdn	TUE
9134kHz 2010z	28/06[01182 00001 00000 10140]Very strong	(2m11s)	PLdn	TUE
10734kHz1930z	30/06[06516 00001 00000 10140] Very strong	(2m11s)	PLdn	THU
10134kHz1950z	30/06[06516 00001 00000 10140] Very strong	(2m11s)	PLdn	THU
9134kHz 2010z	30/06[06516 00001 00000 10140] Very strong	(2m11s)	PLdn	THU

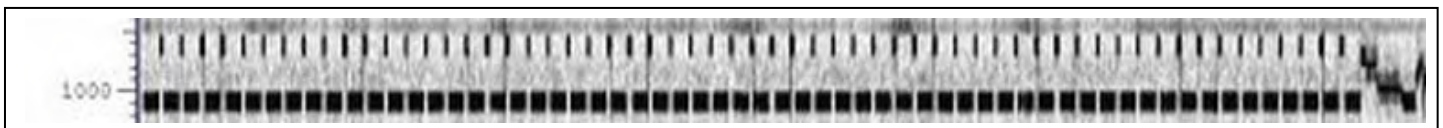
## Wed/Thu

13468kHz2200z	23/06[03239 00102 52981 71273]	(3m28s)	BR	THU
12212kHz2210z	23/06[03239 00102 52981 71273]	(3m28s)	BR	THU
11435kHz2220z	23/06[03239 00102 52981 71273]	(3m28s)	BR	THU
13468kHz2200z	29/06[07137 00092 51448 52412]Very strong	(3m21s)	PLdn	WED
12212kHz2210z	29/06[07137 00092 51448 52412]Very strong	(3m21s)	PLdn	WED
11353kHz2220z	29/06[07137 00092 51448 52412]Very strong	(3m21s)	BR	WED
12212kHz2310z	29/06[07137 00092 51448 52412]Very strong		Hans	WED

## XPA2 Analysis

XPA2 was first intercepted by RNGB on 03/05/2006 and regularly monitored until 02/06/2006 by RNGB and PLdn for a greater understanding of its workings.

To date we are not aware of a bespoke decoder available to us; one member has managed to configure HOKA to translate the tones in a facility provided for that but he reports it is difficult to do.



Above image shows tuning signal, synch tones, separator and start of first group. Note space tones as 980Hz

The tuning is thought to be correct when the tuning signal low freq [space] is set to rest at around 900Hz. Using the value of numerals 2 and 6 – found in the seven tone synch tones [6262626], the 0 from the first and second groups and the repeat from the second character of group 2 [-15Hz from zero value] the rest of the tone values can be easily derived. There is variation caused by the vagaries of the receiver used

Transmitter location: Past RDF work has been done on the schedules showing a general direction of transmission south of Moscow.

## Schedules

Whilst there must be many others only one instance of XPA2 using the 20 minute delay between sendings has ever been found.

What appears to be the norm with XPA2 is the 10 minute delay. This particular schedule style appears to be linked with two others and will send the same message.

1600z	1700z	1800z
1610z	1710z	1810z
1620z	1720z	1820z

The message duration is also shorter than the well known XPA; in part because there is no ID and message count as sent nine times ,as in XPA, nor the block synch tones every 64 groups.

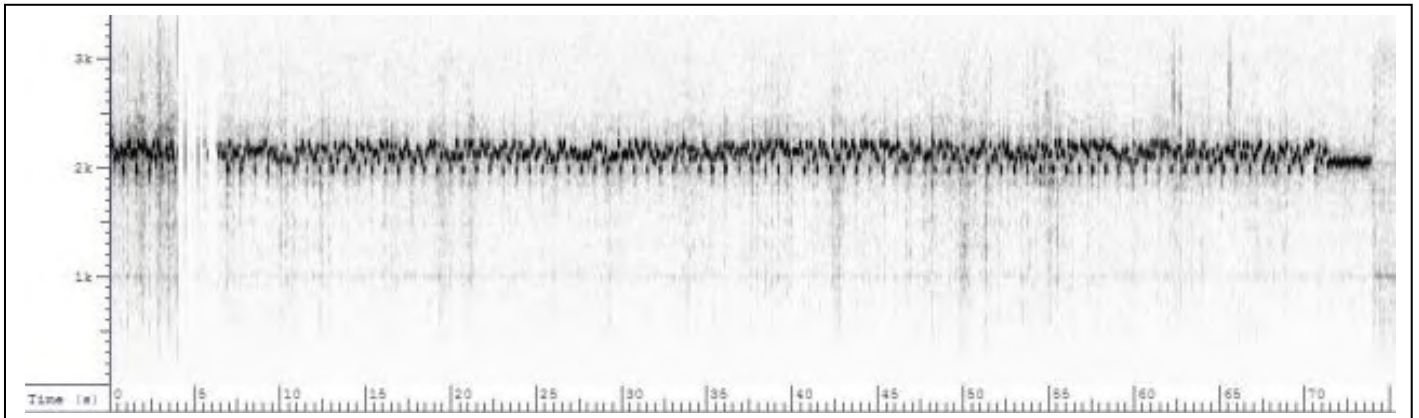
### Recent Occurances

Reading the polytone section of this newsletter one can see there have been a number of schedules suddenly apparent. The reason for this occurrence is unknown but one can see that for June the magnitude of XPA2 sendings has once again diminished.

This type of sudden increase in sending, seen before and documented within past newsletters leads us to believe the content is more likely to be of a diplomatic nature rather than clandestine. That is not to say that Clandestine schedules do not exist.

During May 2011 one schedule was operating that was being watched by E2k's man in Argentina; this was the frequency 12154kHz sent at 2120z on Tue/Wed/Thu and which came to notice on 5<sup>th</sup> May. This transmission was later RDF'd from London to produce a bearing south of Moscow. The soundfiles were sent to E2k where they were reduced to numerical values. No other work was done to find the rest of the schedule although the sendings were copied in Europe too.

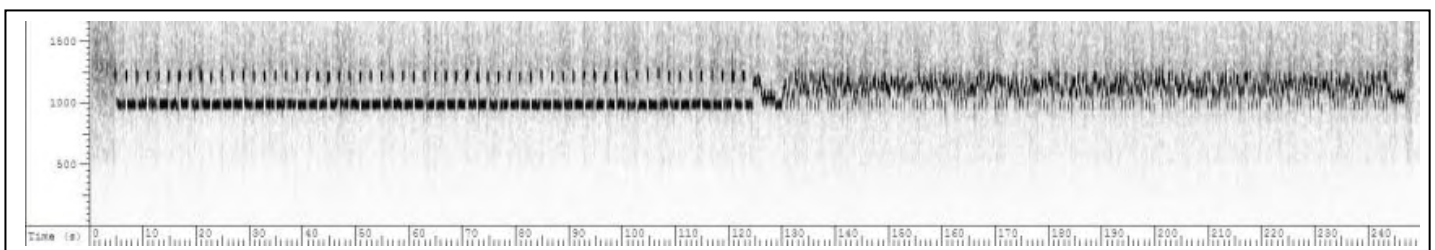
On 24<sup>th</sup> May an American monitor announced that he had intercepted XPA2 at 2110z on 13380kHz, that Radio Habana, Cuba was audible on that frequency and that the strength was such the transmission could only come from Cuba.



Sonogram of soundfile [13380kHz 2110z 24/05] used to convert last group [aberration at 5s caused by faulty lead] **Note the 2kHz space tone value**

However, the message transmitted on that freq, and presented as a soundfile by the intercepting monitor, was read by an E2k monitor in East London to produce the final group as: 06645, also remarking the tones were higher than he was used to

Totally unaware of events surrounding the 13380kHz 2110z 24/05 signal our man in Argentina routinely intercepted 12154kHz 2120z 24/05 and sent his sound file for analysis.

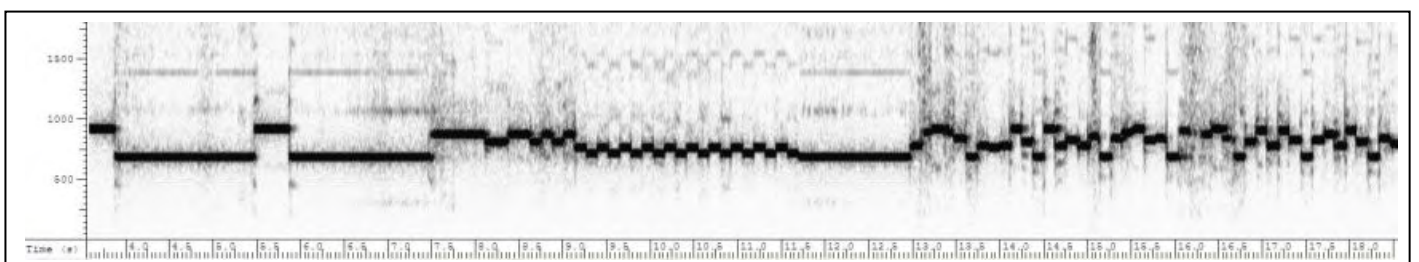


Sonogram of 12154kHz 2120z 24/05 [Last group compares with that of 13380kHz 2110z 24/05] **Note the ~ 900Hz space tone**

The immediate analysis produced: 07974 00093 90305 LG06645. The last group being the same as that sent on the 13380kHz ten minutes earlier.

It was beginning to look as though the schedule previously monitored from Argentina was beginning to take shape. However at 2200z E2k's man in Norway, Hans, announced he was receiving a very strong XPA2 signal on 11036kHz at 2200z at the same time as the American monitor announced his find.

The American monitor posted a file allowing this sonogram of the message [and its subsequent analysis] to appear here:



Sonogram of 11036.3kHz 2220z 24/05 **Note space tones 830Hz**

The message, as derived in Norway from own intercept and the American monitors recording was a repeat of that sent on 13380kHz 2110z and 12154kHz 2120z , the secondary and tertiary frequencies of one schedule, 11036kHz 2220z being the tertiary frequency of the next schedule linked to the previous.

ENIGMA2000 monitors had intercepted the earlier schedule as:

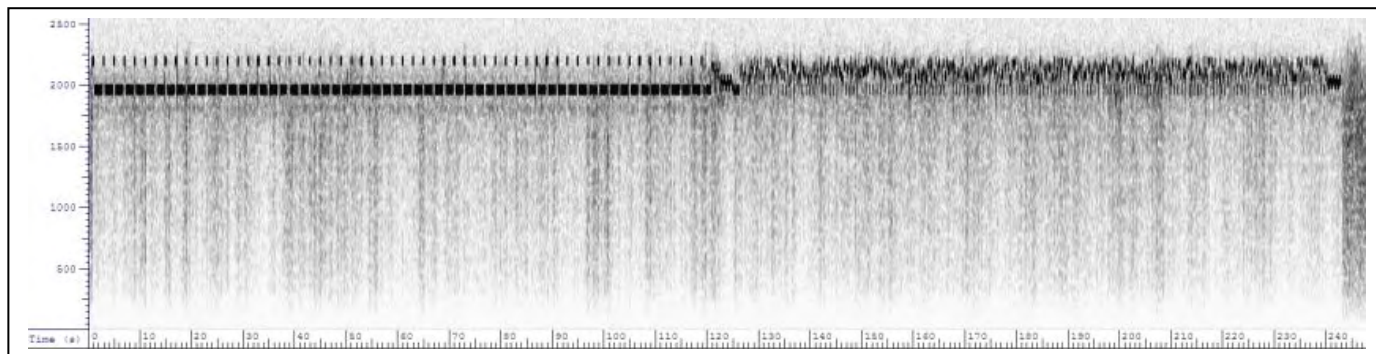
12154kHz2123z	05/05	THU
12154kHz2123z	11/05	WED
12154kHz2120z	18/05[08423 00119 24404 54020]	WED
12154kHz2120z	24/05[07974 00093 90305 06645]	TUE
12154kHz2120z	31/05[02435 00146 98804 31533]	TUE
11036kHz2220z	24/05[07974 00093 90305 06645]	TUE
11036kHz2220z	31/05[02435 00146 98804 31533]	TUE

And the initial freq as:

13381kHz2110z	31/05[02435 00146 98804 31533]	TUE
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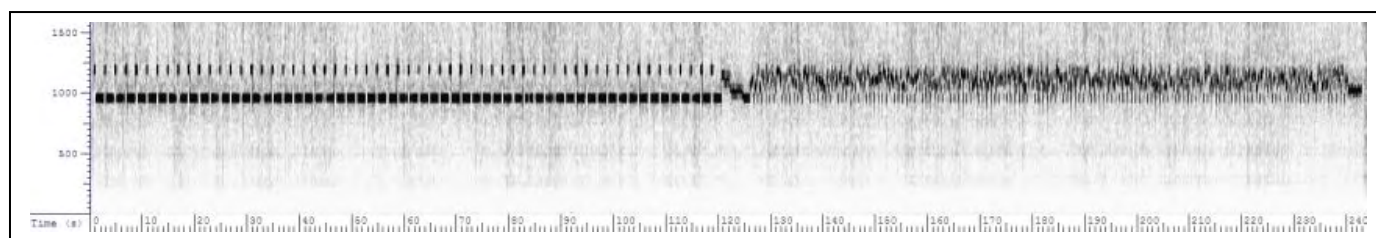
A further and more definitive, RDF was taken from Central Europe and again produced a plot south of Moscow.

Using two Rx320 receivers, one tuned to 13380kHz, the other to 13381kHz simultaneous, but automatic, intercepts of the transmission were made from two London sites.



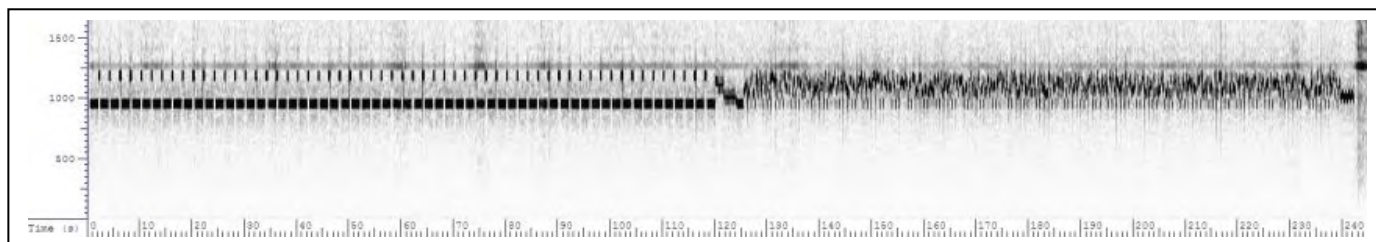
13380kHz 2110z 31/05 illustrates the effect of being mistuned by -1kHz

In comparison:



13381kHz 2110z 31/05 illustrates the effect of being correctly tuned

To compare 11036 with 11036.3kHz [See sonogram 11036.3kHz 2220z 24/05]:



11036kHz 2220z 31/05 Note space tone 900Hz

[Dark horizontal line caused by PLT QRM]

The question as to whether the original transmission tuned in on the Cuban M08a/V02a/ Radio Habana frequency cannot be answered easily.

Faced with the information of RDF plots, the fact that Operators in Argentina, America, Norway, Switzerland and England intercepted the station with ease on two occasions doesn't answer the reasons why it was not available on other dates.

By far the most successful was Argentina and it could be the signal was destined via a polar route meaning that some of us were affected with no signal.

In discussion it was felt the frequency of 13380kHz [1kHz too low], the logging of M08a and hearing Radio Habana as a background may have contributed to a suggestion it was transmitted from Cuba and that is without mentioning the peculiar propagational effects in the mid to upper HF ranges observed by others before, during and after these transmissions were active.

However, like most things number station related one just doesn't really know, does one?

# XPA2 Russian Intelligence MFSK nn search

IMMEDIATE PAST

HISTORICAL

CURRENT(June)

XPA2 Sun Thu Fri	0100	
	0110	8092
	0120	7543

XPA2 Daily [Poss not Sat]	0200	6967
	0210	5836
	0220	5077

XPA2 Sun Mon Tue Wed Thu Fri	0300	10221
	0310	9196
	0320	7764

XPA2 Sun Mon Tue Wed Thu Fri	0400	10618
	0410	9924
	0420	9113

XPA2 Sun Tue	1500	16099
	1510	14557
	1520	

XPA2 Sun Mon Tue	1800	14873
	1810	13373
	1820	12206

XPA2 Thu Fri Sat	1900	15834
	1910	14874
	1920	14364

XPA2 Tue Thu	1930	10734
	1950	10134
	2010	9134

XPA2 'Cuban' Tue Wed Thu	2100	
	2110	13381
	2120	12154

XPA2 'Cuban' Tue Wed Thu	2200	13468
	2210	12212
	2220	11435

XPA2	1700	
	1710	
	1720	

XPA2	2000	
	2010	
	2020	

These tables illustrate the complexity of the search for XPA2 Russian Intelligence polytone transmissions.

Thanks to all those who participate.

## NOISE Station

### XSL

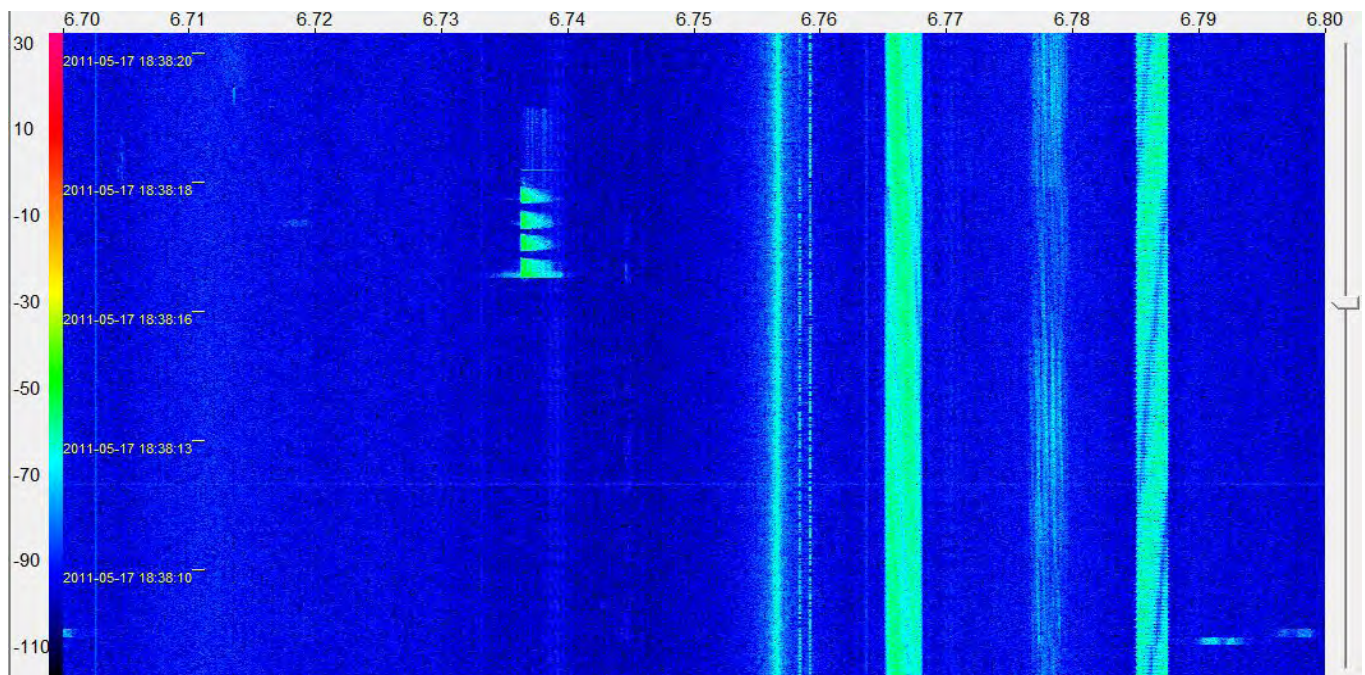
6417kHz	1929z	04/06	USB Very weak. Japanese Slot Machine in progress.	SPECTRE	SAT
8313kHz	1942z	04/06	USB Very weak. Japanese Slot Machine in progress.	SPECTRE	SAT
8588kHz	1944z	04/06	USB Very weak. Japanese Slot Machine in progress.	SPECTRE	SAT
8703.5kHz	1945z	04/06	USB Very weak. Japanese Slot Machine in progress.	SPECTRE	SAT

## Digital, Incursions and Unexplained Signals

**Welcome to the newsletters newest desk report.** The editors have given me a fairly wide brief but my aim is that this column should look at digital signals in the HF band that \*may\* be related to espionage, diplomatic or special forces communications. It isn't my intention to look at conventional military or utility HF digital data (if you are interested in those subjects I can highly recommend Ary's excellent UDXF mailing list) and neither do I intend to cover the X06, XPA or SK01 types which are already well covered by other desks in this group.

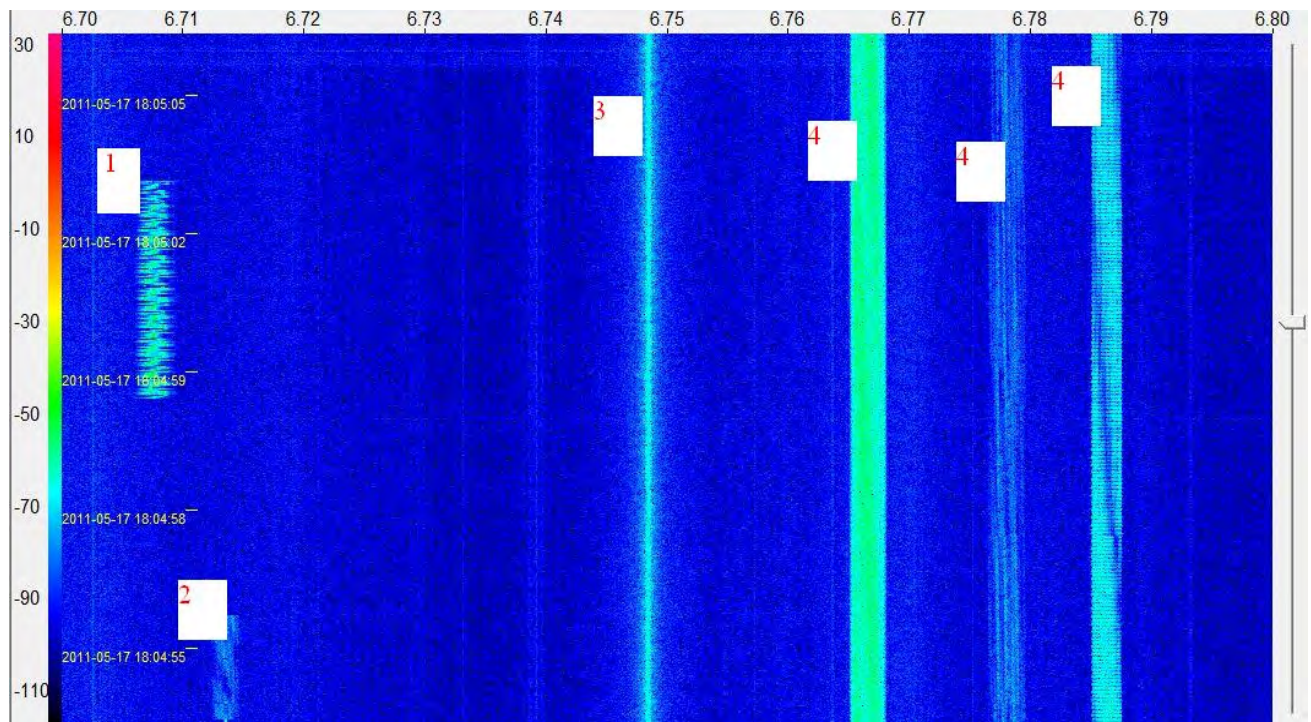
Firstly a little background on myself. The last time I was really into HF data monitoring was back in the mid to late 1980's when equipped with one of the first cheap synthesized HF portable sets and a Commodore 64 home computer I scoured the HF band for interesting signals. Back then there were lots of RTTY news agencies and meteo stations constantly pumping out 5 digit numbers that were coded weather information. What really caught my eye though were the few PTT stations still operating then sending telegrams to all corners of the world. Since although I maintained an interest in E2K type station HF voice I was more interested in the more sophisticated VHF and UHF data modes. Some of you may know my work in that field as I have produced decoders for MPT1327 trunking, taxi mobile data terminals and most recently the Digital Mobile Radio (DMR) standard. When I was asked to take on this new desk I quickly immersed myself back in the HF digital data world joining several mailing lists. I soon discovered that HF data had moved out of the 1960's and although there are still plenty of RTTY stations transmitting there are more STANAG 4285 and ALE transmissions. I also decided to upgrade my HF listening equipment ready for the new challenge replacing the Lowe HF-125 that spent many a happy hour monitoring E10 with the SDR-14 software radio which I previously only used for monitoring wide band VHF and UHF data. I must admit I wish I had made this change years ago as I am very impressed with the results.

The most useful feature has to be a way of "seeing" sections of HF spectrum on your PC's screen with something called a waterfall display an example of which is shown below ..

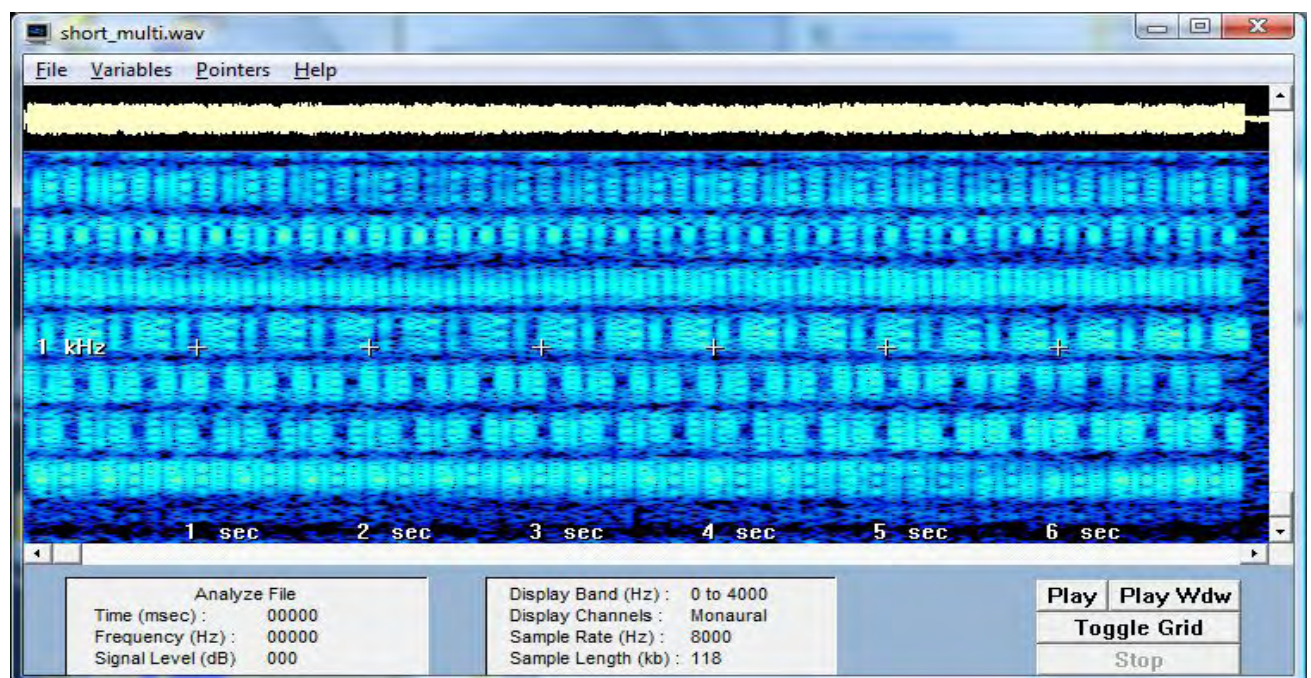


If you haven't seen one of these displays before the X axis is showing the frequency (in this case from 6.7 MHz to 6.8 MHz from left to right) and time in the Y axis (in this case from 18:30 and 10 seconds at the bottom of the display to 18:30 and 20 seconds at the top of the display). In addition the colour of the display shows the strength of the signal. So not only do you "see" spectrum in a similar way to an old fashioned spectrum analyser but you also get to see what has happened for the last 10 seconds in that part of the spectrum also. Now different software radios allow you to digitise different amounts of radio spectrum. My SDR-14 is getting on a bit now and can only handle 190 KHz of spectrum while the more modern ones can handle up to 5 MHz of spectrum.

Not only do you "see" radio spectrum with a waterfall display but within a day or two you start to recognise different types of radio signal from the display as each has a different visual signature. For instance the previous illustration of a waterfall display shows a brief SSB transmission on a frequency around 6.738 MHz. I hadn't been using the waterfall display for long before I realised another advantage it has which is that it allows me to see brief (and for me at the time mysterious) data transmissions such as the ones shown in the example below:

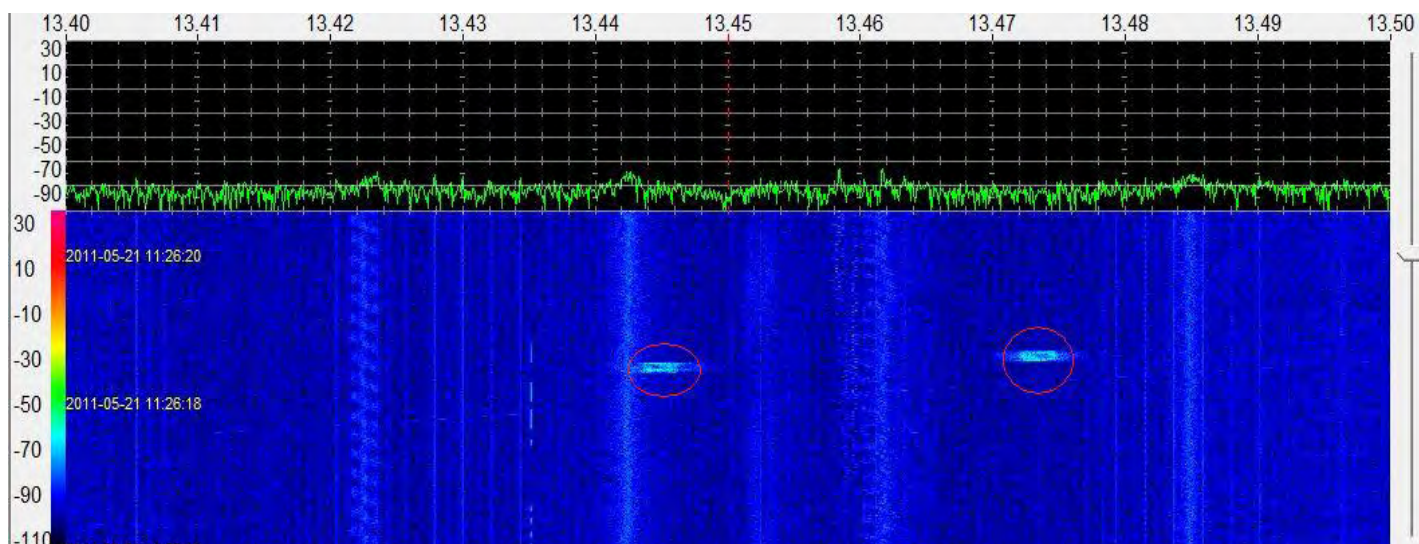


In the above example I have numbered the 4 types of transmission you can see. Now 3 is sadly nothing more than QRM from my neighbours giant Plasma TV while the three transmissions labelled 4 are STANAG 4285 data transmissions. If you haven't come across this data mode before it is a NATO HF data transmission standard that resembles the old fashioned RTTY but with higher baud rates and modern error correction coding. This mode can be decoded but tends to be encrypted and thus not very interesting. Most of the STANAG 4285 transmissions I have come across (and there are an awful lot of them) tend to belong to either the British or the French military. The type 1 transmissions were more interesting to me though. They lasted only a few seconds and appeared on several frequencies at unpredictable intervals. Looking at their signature on the waterfall display I initially wondered if I was seeing Russian CROWD36 broadcasts. To capture one I used another fantastic feature of the SDR-14 software which allows you to record up to 190 KHz of radio spectrum and save it to your hard drive for later analysis and playback. The files created are huge (several GB per hour) but it is a great way of finding and then analysing brief transmissions. Using that feature I was able to record a Type 1 transmission and looked at the audio using the Spectrogram program finding it looked like this ..

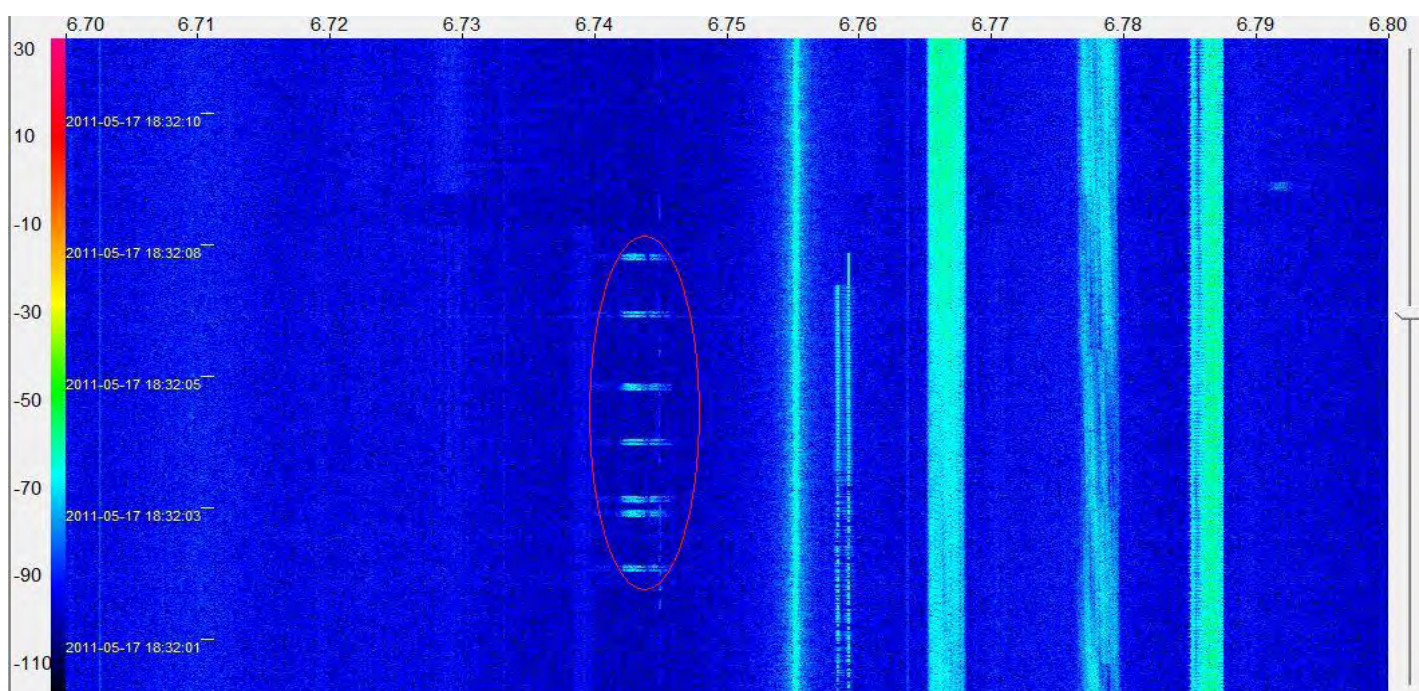


From the screenshot above you can see the signal is made up of 8 bands of frequencies. However its general look suggests 8 level FSK (Frequency Shift Keying) rather than 8 tone MFSK (Multi Frequency Shift Keying). At this point I was stumped and decided to ask the experts on the UDXF mailing list what I was seeing. The answer came back soon enough that I was looking at MIL-STD 188-141B 2G ALE (Automatic Link Establishment) which is pretty common and most likely sent by the US air force. The shorter and higher speed Type 2 transmissions turned out to be the far more common MIL-STD 188-141B App.C 3G ALE burst which is used by hundreds of different users around the world.

The waterfall display also enabled me to see some more interesting brief frequency hopping transmissions a couple of which can be seen below ..



As you can see these transmissions are very brief (I have put red circles around them) and sound like a clicking noise if you happen to hear one. I have come across them in the past usually when I was waiting for an E10 transmission but just presumed they were QRM from the boiler or fridge freezer. Initially on seeing them I did still wonder if they were some kind of local QRM but soon found they tended to be numerous in the military sections of the HF band while avoiding the amateur bands. Oddly intelligent behaviour for local QRM I'm sure you will agree ! A clue to the source of these brief transmissions came when I noticed that sometimes they appeared in bursts of 7 or 8 transmissions as can be seen below ..



While looking at Leif Dehio's excellent website listing HF data transmissions ..

<http://signals.taunus.de/>

I found mention of the Rascal Panther-H frequency hopping radio. It appears that at the start of overs between these radios there is always a group of eight short transmissions on the same frequency. No doubt this will contain authentication and encryption setup information. Given my location in the UK and the British military's usage of Rascal Panther sets I'm pretty sure this is what I am seeing.

*In the next NL we will look more closely at a HF data mode of interest to E2K readers we shall also look at how this mode could be decoded.*

## More Recording of Number Stations

Spectre writes:

It was very interesting reading about how you record Number Stations on the move and I have also found a way to record Numbers Stations while I am on trips away. Since The Spectre also likes to take holidays too.

Although this is not auto recording, this method does allow me to record while I am away from home.



I recently purchased an LG S310 mobile phone. [See left]

It is a basic low cost phone, that has some very nice features. The best feature is it has FM radio built into the phone, and you don't need to plug in the headphones to get to hear the radio. Which is good, because I usually lose the headphones.

The phone allows you to record the FM radio transmissions, which it records directly to a 128KBPS MP3 file.

I did spend a little extra and got a 4GB Trans flash memory card, to store all of the recordings. The phone has a charger lead, that also doubles as a USB cable, so it is very easy to transfer the recordings back into the computer at a later date.

I also purchased a Tesco IFSS10 FM transmitter [see right] which I then plug into my Eton G3 shortwave radio. All I need to do, is turn on the FM transmitter and tune the FM receiver on my mobile phone to hear shortwave radio.

I then need to press a button on the phone to start and stop recording.

After recording I can playback, rename and delete files as I wish.

The FM transmitter has a good range, so I can walk around 2 or even 3 rooms and still hear the shortwave radio with the mobile phone in my hand.

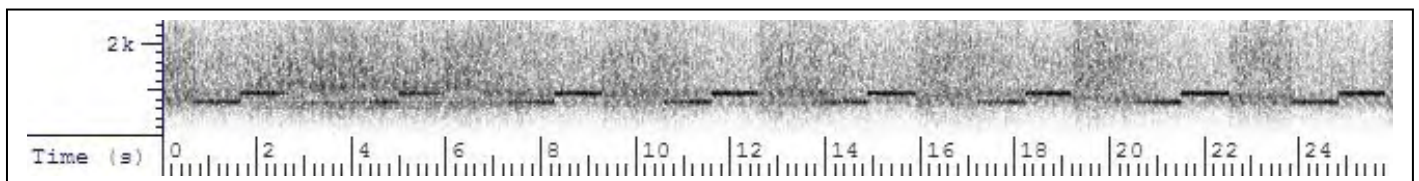
I find the whole idea works very well, and I get good results too depending on shortwave reception. I liked it better than the Olympus dictation machine I purchased to record shortwave, since I have to always replace the batteries and the microphone connection is not very good at all and I can't transfer the files back to the computer, as I would have to re-record them again.

*Thanks Spectre, very ingenious and interesting. I have used my own 'Tesco special' for recording items of interest from my Logik IR100 internet radio.*

*However, Spectre wrote again sending some excellent logs to us as well as this little snippet which is very interesting and has a direct bearing on what Spectre wrote:*

I did manage to catch some number action too, with my novel method of monitoring and recording. I actually got some rather nice recordings, thankfully to good reception around the area. I did catch some interesting transmissions too one being the S06c as in my logs to you, the second I thought it might be a possible X06 type transmission. The 2 tones were much longer in duration. The interesting part is, it was received minutes before an E07 transmission, on the same frequency. It had a separate carrier signal, which was switched off before the carrier for E07 was switched on. The 2 tones were about 1 second in length, the first high tone was around about 1000Hz and the lower tone was at 820Hz. The transmission lasted just a few minutes.

Here is a sonogram of that recording:



Unid 13468kHz 1645z 19/06 [High tone 1000Hz, Low tone 820Hz] 1647z Fair QSB2 Spectre SUN

I didn't place it in my logs, because I was unsure what this transmission was.

*Thanks Spectre, I have no idea about this transmission although I have seen similar traces on my SDR at home; so, a request:*

***If anyone has any idea please tell us at ENIGMA 2000. Thanks***

## Gizza Job.....

### Counter Terrorism & Extremism Liaison Officers

#### **Job of the week**

Employer Metropolitan Police  
Region Rest Of World  
Category Police  
Salary  
Website  
Summary

Counter Terrorism & Extremism Liaison Officers

Secondment opportunities

The Metropolitan Police Service works in close collaboration with a variety of partners around the world to tackle terrorism and extremism. We are now offering the following secondment opportunities:

Substantive Sergeant to Chief Inspector Rank – Germany  
Based in Berlin, with additional country responsibility for Austria, the Czech Republic, Hungary, Poland, Slovakia, Switzerland and Ukraine. Fluent German required.

Substantive Sergeant to Chief Inspector Rank – Turkey  
Based in Ankara, with additional country responsibility for Azerbaijan and Georgia.

Substantive Inspector to Superintendent Rank – Indonesia  
Based in Jakarta, with additional country responsibility for Australia, Malaysia, Philippines, Singapore and Thailand.

Substantive Inspector to Superintendent Rank – Ethiopia  
Based in Addis Ababa, with additional African regional country responsibility.

Working with other CT specialists, law enforcement agencies, security and intelligence organisations, you'll initiate and expedite a range of discreet enquiries both from your hosts and UK colleagues, including International Letters of Request. You'll also deal with your host country on a strategic level.

You must have proven experience in CT investigations, intelligence and protective security. Effective liaison and negotiation skills, a dynamic approach and the ability to work alone or as part of a small team will be essential. With access to the most senior police officers and UK Embassy staff, you'll be an excellent communicator with a genuine respect for race and diversity.

Candidates will have to successfully complete the government's Security Vetting Procedures to Developed Vetting level. Posts will be reviewed on a yearly basis.

*Looks alright that one – probably has a corporate Credit Card too..... yummy. In my hands my use of that Credit Card would make some of our MPs expenses claims look fairly mundane!!!*

*Don't fancy the Addis Ababa one much – too near aQIM territory and no end of Mother Theresa Dollars would ever buy you out of trouble there.*

The Times and The Sunday Times (Times Newspapers Limited.)

Wednesday, March 30, 2011, 07:00 AM

#### **The spy who came in from the shops**

**Carol Midgley**

Right, ladyfolk — stop embroidering your hankies for a moment and pay attention. Which of these women [image not included] do you think is a real-life SECRET AGENT?!

Let me guess what you're thinking. It can't be Woman A because she's clearly just been on a shopping spree at Whistles and is off home to plump some cushions?

It can't be Woman B because her hair is absolutely nothing like Judi Dench's in Quantum of Solace?

So it's got to be Woman C because she's wearing a spy-style tweed suit, sensible, easy slip-off court shoes and is obviously carrying a briefcase full of exploding lipsticks?

Wrong — you have just failed your first test. Because they're all secret agents, hence the pixelated faces.

And this is the latest recruitment advert for MI5, designed to show that you — yes even you, you shopaholic little airhead — could become one too. There was a time when the British Security Service recruited Oxbridge graduates with a subtle tap on the elbow.

Changing tack ever so slightly, MI5 has placed this advert in Stylist magazine where this week's "most desired items" include a pair of colour-blocked candlesticks and a candy-stripe dog doorstep. Not that we're knocking the new, inclusive MI5. We just wonder whether featuring a woman laden with beribboned carrier bags might be seen as, how can we put this — ah, yes — patronising? Apparently the recruiting drive specifically targets women because the violence in the TV series Spooks has deterred females from applying.

"An MI5 surveillance officer is nothing like the dramatic roles we see on TV," says the ad reassuringly, "but it is far from a repetitive or predictable job." Cynics might say that if someone can't distinguish between reality and a TV show they're hardly suitable types to be tracking down al-Qaeda, but no matter. For some of us it's just thrilling to know that spying and open-toed sandals are no longer mutually exclusive. Carol Midgley

*See the actual advertisement at the end of this newsletter*

## Intelligence Officers



Here we go: Analysing information. Spotting connections. Making decisions that really matter. This is what MI5's Intelligence Officers do every day. Working together, we help safeguard the security of the nation. Challenging and vitally important investigative work demands strong communication, analytical and organizational skills – not to mention a good deal of patience and attention to detail. If you enjoy solving problems, becoming an Intelligence Officer is one of the most rewarding and interesting career paths you could choose. To apply you must be over 18 and a British citizen. Discretion is vital. You should not discuss your application, other than with your partner or a close family member.

*This advert shown in negative because it was on a blue background.*

*What is missing from the advert is this little gem which can be seen online: 'Candidates should have or be expecting at least a 2:1 degree or have substantial relevant permanent work experience to apply'*

*There's a preceding piece too that reads along the lines of, "Having a wide range of skills will allow you to do a greater variety of work during your career..." If you're 23-ish and waiting for your Uni results what experience in life do you have other than drinking the golden nectar all the hours outside academic study, not washing/changing clothes for a week and getting three square meals out of a small can of baked beans? Something very fishy here- probably all the bankers have pissed off back into banking since the bonus payments are unaffected.*

*Wonder what the Benefits they state are? Being able to get your Mother-in-Law placed on the Terror watch list when she flies out for her yearly treat on Costa del Crime to ensure she'll never bother you or your Father-in-Law whom, when not suppressed by her, is a damnably good drinking partner?*

*Mind you, another 'good bottle man' and former MI5 employee Michael Bettany, imprisoned in 1984 for offering his services to the Russians was released 9 years early in 1998 with a new identity, reportedly marrying some bint who he'd met somewhere or the other.*

### Careers at MI5

According to the listing on the website you are invited to look at, they are:

- \* Intelligence Officers
- \* IT Infrastructure Support Specialist
- \* Project Managers
- \* Business Analysts
- \* Solution Architects
- \* Intelligence Analysts (Data Analysis)
- \* IT Security Exploitation Officers
- \* Computer and Network Forensic Specialist

Likely to be coming soon:

- \* Foreign Language Analysts
- \* Vehicle Technicians
- \* Carpenters/Multi-Traders
- \* Security Guards

Usual demands presumably – button up/2.1/not over 25?/ driving licence/  
Morse Code 40wpm/multi lingual. The ability to read and write would also be helpful.

[Yearly assessment and have you noticed how HR personnel start off with stupid Q's that just get worse?]:

'How's your career progressing?'  
'Career? I thought it was a job.'  
'Where do you see yourself in five years.'  
'In that chair, doing your job.'  
'That's not going to happen...'  
'According to the buzz going around you're leaving May next year'  
'Please be serious.'  
'I am being serious and I've just helped you avoid the sack with a little up front knowledge.'. [It always works well to bugger the annual assessment]  
Ad from 'E'



## Harry Houghton and Ethel 'Buntv' Gee



The older members will recall these individuals as 2/5ths of the 'Portland Spy Ring.'

They were sentenced to 15 years in March 1961 after removing files from the Underwater Warfare Establishment in Portland, Dorset which they turned over to Gordon Lonsdale [aka Konon Molody] for conversion to microdots and thence to Helen and Peter Kroger for forward transmission to Russia.

<http://news.google.co.uk/newspapers?id=xrpIAAAAIABAJ&sjid=iwENAAAIAIBAJ&pg=4366,1933932&dq=ethel+gee&hl=en>

Both were released 12<sup>th</sup> May, 1970, made their way back to Portland and married.



I often wondered what happened to these people and I was surprised to learn that Ethel 'Buntv' Gee passed away in 1984, aged just 70, whilst Harry Houghton, a former naval Master at Arms, passed away in 1985 aged 79.

A film, '**Ring of Spies**' made in 1964 faithfully reproduced their story in a 90 minute screenplay with Bernard Lee as Houghton, Margaret Tyzack as Buntv Gee, David Kossoff portraying Peter Kroger, Nancy Nevinston as Helen Kroger and that great American actor William Sylvester playing Gordon Lonsdale. Sadly, the actress Margaret Tyzack was noted as having passed away on 28<sup>th</sup> June 2011, aged 79, after a short illness.

This film occasionally surfaces on Channel 4. I did record it once but the recording is now aged – *anyone else with a copy, who wishes to copy over please contact me.*

### GCHQ man: Powerline networks do interfere with radio

Spook not a bearded radio ham, but is moustachioed

By Bill Ray

Posted in Wireless, 17th May 2011 12:02 GMT

[http://www.theregister.co.uk/2011/05/17/gchq\\_plt/](http://www.theregister.co.uk/2011/05/17/gchq_plt/)

A document prepared by the spectrum manager of secret UK listening agency GCHQ, though disavowed by the organisation, has drawn more attention to the interference kicked out by powerline networking kit.

The letter was prepared by Nick Negus, of government-spy outfit GCHQ, and suggests that powerline networking kit is already interfering with GCHQ's clandestine listening operations. But, after being leaked to the radio-ham community in March, the letter was officially renounced by the organisation as never being an official document and containing various inaccuracies.

The letter was prepared in May, leaked in March, and the pdf is now available on the Ban PLT web site. At first glance it appears quite damning, stating that GCHQ is "already measuring an increase in the HF noise floor in the vicinity of our HF receiving stations, with wide variations between day time and night time levels", though it goes on to state that seasonal and meteorological factors also impact signal strengths.

If power line networking is causing headaches for our spies then that's a serious issue, and PLT kit certainly operates right in the bands used by the Numbers Stations.

Numbers Stations are mysterious radio broadcasts that have been around since the 1950s. They transmit what appear to be random numbers, spoken aloud, and are assumed to be broadcast instructions for operating spies. The stations are plainly important to the UK intelligence services in their own right, and there are other uses of long-range HF that GCHQ needs to listen in on: HF is still commonly used in naval communications, for instance, even if it no longer carries much international phone traffic.

So it would appear that it's not just the bearded-radio-ham community which objects to PLT, except that Nick Negus is a fully-paid up member of that community. He doesn't have a beard, just a moustache, but he is a keen radio amateur, and Chair of the Gloucestershire Repeater Group, as well as working for GCHQ.

That doesn't invalidate his opinion, as expressed in the letter, but in distancing itself from that opinion GCHQ has stated that PLT kit isn't impacting its operations. It is possible that GCHQ is lying, one should expect a certain amount of deception from one's spies, but it's more likely the organisation places its listening stations well away from anywhere people might be using power line kit.

The subject of PLT interference will get into the houses of Parliament again on Wednesday as Mark Lancaster, MP for Milton Keynes North, has raised it as an adjournment debate (a 30-minute conversation) following a request from one of his (radio ham) constituents.

Which is another way that the ham community is fighting hard to raise the profile of interference generated by PLT kit, while the regulator (Ofcom) still denies there is any interference and points out that it couldn't do anything even if there was.

Most end users of radio, just trying to get their fix of Chris Evans in the morning, will just buy a bigger aerial, or complain that DAB isn't as good as FM used to be, never knowing that it's their home networking kit which is causing the problems: unless the hams keep telling them.

[http://www.theregister.co.uk/2011/05/17/gchq\\_plt/](http://www.theregister.co.uk/2011/05/17/gchq_plt/)

### USAF eyes A-10 for communications jamming role

By Stephen Trimble

<http://www.flightglobal.com/articles/2011/05/09/356425/usaf-eyes-a-10-for-communications-jamming-role.html>

Four contractors will compete for a \$200 million US Air Force programme to develop and produce an electronic attack (EA) pod that will be installed on unmanned aircraft systems and manned aircraft including potentially the Fairchild Republic A-10.

The pod is the first unclassified investment by the air force in EA technology since the cancellation of the Boeing B-52 standoff jamming system in 2005.

After an attempt to revive a scaled-down version of the radar jammer failed, the air force in 2009 launched a technically less ambitious EA pod focused on attacking the communication and network systems used by insurgents. Such a pod would be used to jam improvised explosive devices (IEDs) or low-band communications signals, including mobile phones.

The EA pod would be installed first on any of 24 Block 5 versions of the General Atomics Aeronautical Systems MQ-9 Reaper UAS, which are upgraded with more power compared to Block 1 aircraft, the air force revealed in acquisition documents released in early May.

The pod also will be considered for carriage on other platforms including the A-10 and Lockheed Martin C-130, the documents show. The C-130 is the platform for the air force's primary communication jamming system - the Compass Call fleet.

Arming the A-10 with an electronic attack capability would be a first for the close air support and ground attack fighter, and would likely be used in counter-IED roles.

The USAF has designed the EA pod programme to develop an operational system as quickly as possible. The technology maturity phase began last November. At least three companies - BAE Systems, ITT and Raytheon - received small contracts to start designing technologies required for a flyable pod.

In July, the air force plans to award follow-on technology development contracts to up to four companies leading to an engineering and manufacturing development phase in 2013.

<http://www.flightglobal.com/articles/2011/05/09/356425/usaf-eyes-a-10-for-communications-jamming-role.html>

### **Did Russian mafia kill the body-in-a-bag spy?**

**MI6 man found dead in holdall in London, was developing secret technology to track gangsters' laundered cash**

By Abul Taher and Robert Verkaik

Last updated at 10:05 PM on 25th June 2011

<http://www.dailymail.co.uk/news/article-2008187/Did-Russian-mafia-kill-body-bag-spy-MI6-man-Gareth-Williams-dead-holdall-London-developing-secret-technology-track-gangsters-laundered-cash.html>

The MI6 agent found dead in a holdall at his London flat was working on secret technology to target Russian criminal gangs who launder stolen money through Britain.

The revelation adds weight to claims that Gareth Williams was killed because of his secret work and raises the possibility that the Russian mafia has targeted British spies.

Mr Williams was found locked inside a large North Face holdall in the bath at his top-floor flat in Pimlico, Central London, on August 23 last year. Gareth Williams, murdered spy, in a family picture

It was initially suggested that the 31-year-old died accidentally at the hands of a mystery bondage sex partner he may have met on London's gay scene.

But now security sources say Williams, who was on secondment to MI6 from the Government's eavesdropping centre GCHQ, was working on equipment that tracked the flow of money from Russia to Europe.

The technology enabled MI6 agents to follow the money trails from bank accounts in Russia to criminal European gangs via internet and wire transfers, said the source.

'He was involved in a very sensitive project with the highest security clearance. He was not an agent doing surveillance, but was very much part of the team, working on the technology side, devising stuff like software,' said the source.

He added: 'A knock-on effect of this technology would be that a number of criminal groups in Russia would be disrupted.

'Some of these powerful criminal networks have links with, and employ, former KGB agents who can track down people like Williams.' Gareth Williams' body is removed from the house in Alderney Street, Pimlico, SW1 as police and forensic officers look on

Crime scene: Gareth Williams' body is removed from the house in Alderney Street, Pimlico, SW1 as police and forensic officers look on

Last year, The Mail on Sunday revealed that Mr Williams, a keen cyclist from Anglesey, North Wales, was involved in another 'secretive' project, developing devices that can steal data from mobile phones and laptops using wireless technology.

A close friend also revealed that Williams was training to take on a new identity when he died.

Tory MP and security expert Patrick Mercer said last night: 'The revelation that Gareth Williams was involved in investigating money- laundering throughout Eastern Europe throws new light on to his death.

'I am sure the police would want to investigate these facts as thoroughly as they have done the details of his private life.'

Neither GCHQ nor the Metropolitan police would discuss the new information.

The suggestion that Mr Williams died when a sex game got out of hand was raised when investigators found he enjoyed going to drag cabaret shows, had £15,000 worth of unworn women's designer clothing in a wardrobe at his Alderney Street home, and had visited bondage websites.

But his family reject claims that their fitness-fanatic son was gay and have been angered at the way the police allowed his private life to dominate their inquiry.

The inquest into Mr Williams' death – which sparked several outlandish conspiracy theories – will resume in September, when as many as 40 spies who have been questioned by police could give evidence anonymously.

A battery of post-mortem tests have so far failed to determine how he died and detectives say it would have been impossible for him to lock himself inside the bag.

No evidence of drugs, alcohol or poisons has been found but police said anyone zipped inside the bag would have suffocated within 30 minutes.

Coroner Paul Knapman adjourned an inquest in February while Scotland Yard detectives await the results of a fresh round of forensic tests.

Detective Chief Inspector Jackie Sebire admitted the likelihood of tracing a Mediterranean-looking couple seen at Mr Williams's home weeks before his death is diminishing.

Since the dismantling of the Soviet Union, Russian mafia gangs have infiltrated all parts of the Russian state and its economy.

They now control vast business and property interests outside Russia which are used to launder their fortunes, often made from state corruption.

The growing threat to the West posed by East European criminal gangs was confirmed last week when a major Ukrainian hacking ring was disrupted.

The 16-strong gang had funnelled £45 million from Western banks into accounts in Cyprus and Latvia, using a computer virus called Conficker.

One British source said: 'Much of the Russian government at various levels, national and regional, operates like a kleptocracy, with bureaucrats visibly on the take.

'Obviously we are worried if this money is pouring into London, and then into buying property or other assets such as companies or investments.

'The fact is that London remains the financial centre of choice for most Russians.'

London and the surrounding area has one of the largest Russian populations of any city outside the former USSR, with up to 400,000 Russians living in the South East.

The capital has been nicknamed Moscow-on-Thames and Londongrad because of its population of wealthy emigres, including respected tycoons close to strongman premier Vladimir Putin, such as Chelsea owner Roman Abramovich, as well as some of the Kremlin's most outspoken enemies, such as the billionaire Boris Berezovsky.

Comments (6)

Here's what readers have had to say so far. Why not add your thoughts below, or debate this issue live on our message boards.

The comments below have been moderated in advance.

The fact that the so called "project" was clear by the highest level and obviously top secret suggest that it was important to the nation, so how has this newspaper come across the information so easily. And therefore if a cheap newspaper can find this out about two "secretive projects" from this source then how hard can it be for the Mafia to acquire it and may be the source is the leak who betrayed the secrets to them and cost a talented mans life?

- Altechs, Shropshire, 25/6/2011 23:53

This seems rather plausible to me.

- Tom Norton, Eccleshall, UK, 25/6/2011 23:37

I was always horrified at the manner in which certain elements tried to blacken this man's character. Very easy to attack a person's reputation when they are dead. I do hope his family will get answers one day.

- Clare, London, 25/6/2011 23:26

'devising stuff like software,' said the source. Very technical source.

- Tim, London, 25/6/2011 23:06

Foreigners,criminal gangs and immigrants just come and go as they please.Where has our security gone.

- Alfred, Herts, 25/6/2011 22:53

Now that sounds infinitely more plausible. But then again, who was it who outed the idiotic rumours that he was involved in gay sex games? The female clothes were planted there no doubt, but it is up to the media not to make things worse by creating outlandish theories about how poor Gareth might have been gay. Also of importance - how on earth do Russians know the contact details of British intelligence members?

- Jeff, London, 25/6/2011 22:40

<http://www.dailymail.co.uk/news/article-2008187/Did-Russian-mafia-kill-body-bag-spy-MI6-man-Gareth-Williams-dead-holdall-London-developing-secret-technology-track-gangsters-laundered-cash.html>

### **Russian officer guilty of betraying spy ring in US**

By VLADIMIR ISACHENKOV, Associated Press Vladimir Isachenkov, Associated Press – Mon Jun 27, 4:17 pm ET

[http://old.news.yahoo.com/s/ap/20110627/ap\\_on\\_re\\_eu/eu\\_russia\\_us\\_spies](http://old.news.yahoo.com/s/ap/20110627/ap_on_re_eu/eu_russia_us_spies)

MOSCOW – The cover of the highly placed U.S. mole in the Russian intelligence service was blown.

Col. Alexander Poteyev had betrayed his ring of 10 sleeper spies — including Anna Chapman, the red-haired agent with the lingerie-model looks — and the FBI was about to nab them. Now he was at risk of being arrested by Russian authorities.

Poteyev's plight last summer was so precarious that he had to rush from a meeting in his office for a train station to flee the country. He later texted his wife by cellphone that he was "leaving not for some time, but forever."

The details of Poteyev's escape and farewell message to his wife were included in a summary of evidence read in the Moscow District Military Court by a judge who convicted him in absentia Monday of high treason and desertion, and sentenced him to 25 years in prison. The 59-year-old colonel also was stripped of his rank and state medals.

Chapman, one of the 10 agents deported from the U.S. in July 2010, testified at the closed trial that only Poteyev could have provided the information that led to their arrests, Russian news agencies reported, citing a summary of the evidence read by the judge as he issued his ruling.

Chapman testified that she was caught after an undercover U.S. agent contacted her using a code that only Poteyev and her personal handler knew, the reports said. She said she immediately felt that something was wrong and called her handler in Moscow, who confirmed her suspicions. Chapman and the others were arrested not long after that, on June 27, 2010 — a year ago Monday.

The agents were deported in exchange for four suspected Western agents who had been imprisoned in Russia. It was the biggest spy swap since the Cold War.

The court said Poteyev apparently got word that the agents were being rounded up in the U.S. and had to hurry out of Russia, the Interfax news agency reported. It said Poteyev fled to Belarus, crossed the border into Ukraine and then moved west to Germany and, finally, on to the United States using a passport in a different name.

Poteyev's grown son and daughter reportedly have been living in the United States for years.

The daily newspaper Moskovsky Komsomolets said Poteyev's wife accompanied him to a Moscow train station where he took the Belarus-bound train for what he said was a business trip.

The next day, she got the farewell phone text message, which read: "Mary, try to take this calmly. I'm leaving not for some time, but forever. I didn't want to, but I had to. I will start my life from scratch and will try to help the children."

On that day, Poteyev's agency also began searching for him when he failed to show up at work, the paper said.

To prepare his exit, the colonel had previously told his bosses that he had a mistress in Odessa, Ukraine, who had just given birth to a child and he needed to see her urgently, Moskovsky Komsomolets said.

Once in Belarus, he got a passport in another name and a train ticket for western Ukraine, it said.

His court-appointed lawyer, Andrei Kuchеров, said Poteyev's wife believes he is innocent and wants to join him in the U.S.

Mikhail Lyubimov, a veteran Soviet spy, described the court's ruling against Poteyev as "symbolic."

"He must be rubbing his hands together and laughing at that together with his family somewhere in the U.S.," Lyubimov said, according to Interfax.

The court said Poteyev had overseen the Russian sleeper agents in the U.S. as deputy head of the "S" department of Russia's Foreign Intelligence Service.

In addition to Chapman, other agents also confirmed that only he had access to the sensitive information that allowed the U.S. authorities to apprehend them, the RIA-Novosti news agency said.

The court said Poteyev had begun working for U.S. intelligence around 1999-2000 — betraying the agents, their means of communication and financial information. It said Poteyev had sought to hamper the agents' work by forcing them to meet in places that were unsafe and providing them with inferior equipment.

The CIA may have recruited Poteyev in the 1990s when he did two stints at Russian diplomatic missions in the United States, the newspaper Izvestia reported.

Poteyev was a veteran of the Soviet occupation of Afghanistan, where he served with an elite KGB commando team code-named "Zenith" in the 1980s.

The Russian spies were welcomed as heroes when they returned home, and in October President Dmitry Medvedev bestowed them with the nation's highest awards.

Prime Minister Vladimir Putin, a 16-year veteran of the KGB, sang patriotic songs with the spies to celebrate their return. Putin warned in December that traitors come to a bad end and "whatever equivalent of 30 pieces of silver they get, it will get stuck in their throats."

Unlike other members of the spy ring who have stayed out of the limelight, Chapman has basked in the attention. She has stripped down to lingerie for a photo shoot by the Russian edition of Maxim under the caption "For Your Eyes Only," become the new celebrity face of a Moscow bank, joined the leadership of the youth wing of the main pro-Kremlin political party, and hosted a TV program.

[http://old.news.yahoo.com/s/ap/20110627/ap\\_on\\_re\\_eu/eu\\_russia\\_us\\_spies](http://old.news.yahoo.com/s/ap/20110627/ap_on_re_eu/eu_russia_us_spies)

Two splendid pieces have been sent to ENIGMA 2000 for inclusion in this issue of the Newsletter.

To give both pieces the credit they deserve and so they don't suffer the vagaries of fitting into the draft copy and subsequent updates [we pride ourselves on being up to date as we publish] it was thought best to include them in between our news section and chart section.

Sadly, as the reader will have noticed, there is no PoSW special this time.

I received a letter from Peter apologising profusely for the fact that his PC had entered an unexpected 'conversion mode;' not quite the blue screen of death, but almost.

Peter did take time to mention his most notable observations as the Thursday and Monday 1900/1905z S06 which sent a full message of 17 x 5f groups throughout May.

He also mentions the Monday 2015 and 2115z S06 which also sent a full message but of 130 x 5f groups on 23<sup>rd</sup> May and repeated the following day.

Peter also noted what I have also found; that the 0700 and 0800z V02a Spanish YL transmissions have become very weak and difficult to copy as we have moved into summer.

Peter mentions Windows Vista Home Premium as the reason for his PC's demise; I have heard this before and heard it likened to that other computing white elephant Windows Millenium.

Whilst I mention Peter's letter to Paul I received another interesting email from a long term member who mentioned our membership; that we acquire members who ask for help, post a couple of times and just sit and lurk.

That member, who has offered advice to more than one of these members, will be pleased to learn that we do indeed review our members – especially those who think they are being clever by posting certain messages into group and who suddenly find, after a year or so they are unable to gain access. A moderator is responsible for reviewing lists against postings for this purpose.

Anyway, enough banter, now onto the excellent pieces written by our members:

## **X06 Developments**

It may seem that X06 reporting has been limited in the past few years but this is far from the reality.

The X06 Team has been working in the background in an attempt to learn more of this series of signals.

The popularly held belief is that X06 or Mazielka is a selcall system which is used to alert stations of a forthcoming message to be sent in Crowd36 format and that the receiving station should be ready to receive a transmission

This seems an unwieldy and arcane method of communication when contemplating modern technology. However without any solid proof, it seems that we must accept this explanation for the time being until or unless a more logical alternative is found.

The reception of X06 has always been difficult because of the seemingly random pattern of transmissions in terms of both time and frequency. It was always thought that there was some kind of pattern to transmissions but a firm schedule has never been identified. A wish to pursue this possibility led to the following outline.

### **Objective:**

The objective was to establish whether or not scheduled transmissions existed and if so to establish the basis and produce a forward schedule.

### **Methods and parameters:**

The start-point was to examine the X06 database consisting of log entries going back to 2001 and which consisted of data sets where only a complete data set was available – date, start time, frequency and tone sequence. As a matter of record and comparison the database comprises of:

- 1738 log entries
- 98 unique tone sets from a maximum possible of 720
- 360+ unique frequencies

Year	Logs
2001	4
2002	1
2003	0
2004	4
2005	27
2006	170
2007	222
2008	405
2009	225
2010	387
2011 (to 17/6/11)	305

**Fig 1- Log entries since 2001**

There was already some indication that transmissions were based on a week-day pattern as follows:

First	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Second	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Third	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Fourth	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Fifth	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

**Fig 2 - Outline of Patterns**

Data was tabulated into these patterns and any signals with repeat day, frequency, tone sequence and time within a 2 hour slot, were marked as possible schedules. A sample Pattern sheet is shown in Fig 3 (Note that the sample only shows part of the Excel page). The page, in this instance, shows the day selected (First Tuesday), the Tone Sequences which have occurred on that day and the frequencies and times of transmissions.

A Logging Week was organised between 21<sup>st</sup> and 28<sup>th</sup> March 2011 and was further extended until 4<sup>th</sup> April 2011. Fourteen contributors were drawn from the X06 team, plus members from Enigma2000, UDXF and Spooks groups and were located in UK, Norway, United States, Australia, Ireland, Germany and Argentina. Contributors sent in logs to the X06 Team and these were carefully logged and matched with the Patterns. These logs were invaluable in this analysis process and thanks are due to the 14 contributors who actually took the time to help.

Frequency in black - Predicted Frequency in red - One match Frequency in blue - Two matches Frequency in green - Three matches										Main data Base		Frequency lists		Analysis Sheets		HF Sigint site		Email Group		Transmission Patterns										
										First							Second							Third						
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
Tone sequence	00:00 to 01:00	01:00 to 02:00	02:00 to 03:00	03:00 to 04:00	04:00 to 05:00	05:00 to 06:00	06:00 to 07:00	07:00 to 08:00	08:00 to 09:00	09:00 to 10:00	10:00 to 11:00	11:00 to 12:01	12:01 to 13:00	13:00 to 14:00	14:00 to 15:00	15:00 to 16:00	16:00 to 17:00	17:00 to 18:00	18:00 to 19:00	19:00 to 20:00										
123456												13872																		
125354												14970																		
111313															8300															
154253									12149 13401	12149 13401																				
154832													4765													6958 9145				
155234												14871 16025		16025 14970	14871	14871	14871	14871												
154832							10193 13506																11411 13506							
155324			6960								7411																			
111313																														
155423									9450 11462 12157	9450					8300															
213546												11438 12168	10283																	

Fig 3 Sample Pattern Sheet

## **Results:**

Once the historical data had been entered there was a clear indication that schedules of sorts were in existence but that they did not cover all X06 transmissions.

During the Logging Weeks between 21<sup>st</sup> March and 4<sup>th</sup> April we recorded 58 logs of which 19 matched our potential schedules and between 5<sup>th</sup> April and 17<sup>th</sup> June a further 153 logs were recorded of which 87 matched potential schedules.

Thus we have several different sets of data:

1. 61 Tone sequences have been repeated recently to an apparent schedule
2. 22 Tone sequences exhibited random patterns
3. 13 Tone sequences with only 3 loggings or less

Note: In Fig 3 there are two entries under tone sequence 156234 at 15-16 hrs and 16-17 hrs. The entry in Red denotes a first match to the possible schedules and the entry in Blue denotes two matches to the possible schedules. However the same frequency is seen used in four time slots – is this lax operator technique or does this have some other significance? A further factor could be time changes in the sender's country.

It should be noted that the Logging Week matches only indicate 1, 2 or at the most 3 instances where tones, frequency, day and time have matched in each tone sequence – It will take several months of logging to confirm a full regular schedule in each case.

Also as logging records increase, particularly when we can record "Not heard", accuracy will improve.

Patterns for each "Network" or tone sequence based on current logs are:

	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	Total
Monday	2	2	1	1	0	6
Tuesday	2	3	2	1	0	8
Wednesday	5	4	3	3	2	17
Thursday	2	5	3	2	0	12
Friday	7	4	4	1	0	16
Saturday	0	0	1	0	0	1
Sunday	0	1	0	0	0	1
Total	18	19	14	8	2	61

## **Conclusions:**

We can now say that there are schedules which can help us improve our knowledge of this series of signals and these will make logging a lot easier. Unfortunately there is still a degree of uncertainty in the signals in that operators do not seem to strictly observe time slots as, for example, in the XPA series, and there seems also to be a secondary or back-up frequency which is sometimes used without any apparent pattern. It may be that "primary" and "secondary" frequencies have some relevance to time slots, but without more in depth logging this feature could not be fully identified.

Clearly some of the Tone Sequences shown on the Patterns page are redundant.

Another factor which should be considered is that of sender and receiver. It seems that the X06 transmissions do not all emanate from the same source and the "Alert" series which we suggested some months ago maybe an indication of "sender" and "receiver"

The only way we can improve our knowledge of X06 is to recruit more support in terms of loggers. Since January this year we have received 305 logs from 15 loggers but 76% of the logs were made by 3 loggers! We need help and would welcome any interested parties to the X06TEAM

If you would like to join us logging X06 and receive full details of the X06 schedules and other supporting data please mail Jochen or Peter at:

[Jochen.Schupper@gmx.de](mailto:Jochen.Schupper@gmx.de)

or

[peter@bmsona.co.uk](mailto:peter@bmsona.co.uk)

Any comments on this article would be welcomed by the X06 Team.

[Tnx Peter]

## **M89 Update**

My first logging of M89 was on 07 June 2011 at 2156z on 7602 as follows: V DKG6 DE 3A7D. I was hooked. From this point on, I decided to concentrate on M89 transmissions. One of the key reasons for this decision was my access to GlobalTuners and specifically to the receiver located in Hong Kong. So with easy access to a remote receiver capable of capturing M89 transmissions, this seemed like a good way of increasing our knowledge of these seldom heard and little known transmissions.

My first priority was to find out as much information as I could about M89. After looking at every issue of the E2K and Number and Oddities Newsletters, I had a huge list of frequencies and callsigns. A detailed write-up on M89 transmissions by Ary Boender in October 2003 also provided some additional useful insight. My research also revealed that these stations were believed to be Chinese military and possibly related to naval communications.

As a result of my monitoring of M89 transmissions over the past year, I've put together this brief update which I hope will stimulate greater interest in M89 and hopefully provide readers with new knowledge. My main focus in this article will be on current information.

### **M89 History**

M89 first appeared in early 2000, mostly from loggings by Igor Buhtiyarov located in Chita Russia, as well as from a number of Japanese monitors. In November 2003, the M89 designator was allocated to the Chinese L9CC Family by E2K and described as follows:

M89 - Chinese Mil, 4f. - No fixed skeds/freqs. Mainly between 3 - 9 meg  
Best known group is the L9CC family including L9CC, CP17, LA5S, NH8T, MW3D, 2SLC, BFR7, 4XML etc  
Sample format: V CP17 CP17 CP17 DE L9CC L9CC

Other information found in my research:

- Usually two or three parallel frequencies are used.
- Extensive direction finding activities have pinpointed the transmitter sites near the Guangzhou, Qingdao and the Dalian/Lushan areas
  - NH8T is located near 124.27E / 41.25N
  - 4XML is located near 107.00E / 3836N
- These areas strengthen the impression that the navy is involved:
  - Qingdao is the HQ of China's North Sea Fleet,
  - Lushan is another major base of the North Sea Fleet,
  - Dalian is one of the largest training facilities of the navy,
  - Guangzhou is one of the largest bases of the South Sea Fleet.
- L9CC, NH8T, 2SLC seem to originate from the Dalian/Lushan area;
- 4XML from Qingdao and
- L4FC from Guangzhou.

The following map from the Internet depicts the location of Chinese Naval Headquarters.



While searching for additional information related to M89 on the Internet, I came across the website of the International Telecommunications Union (ITU) and a set of files related to monitoring that the ITU undertakes on the HF bands. To my surprise, there were a large number of loggings of M89 stations by the ITU's monitoring station located in Japan, which **confirms** that all of these stations are in fact located in China. This confirmation is based on the fact that the ITU Japanese monitoring station in Tokyo is equipped with Direction Finding equipment.

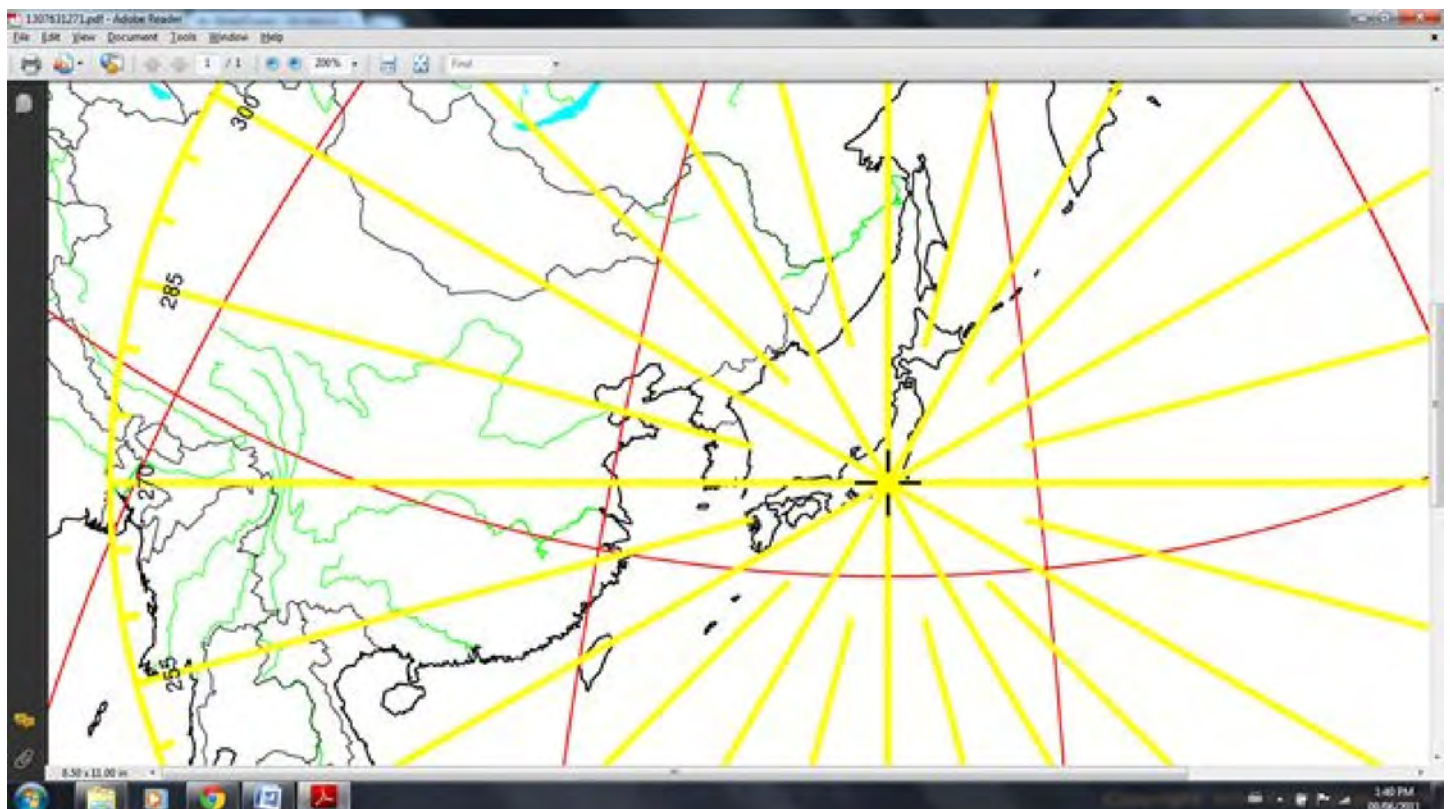
While monitoring these M89 transmissions, the Tokyo monitoring station either took a line bearing or was able to obtain a fix on the station being monitored.

The fix provides a very good approximation of where a transmitter is located.

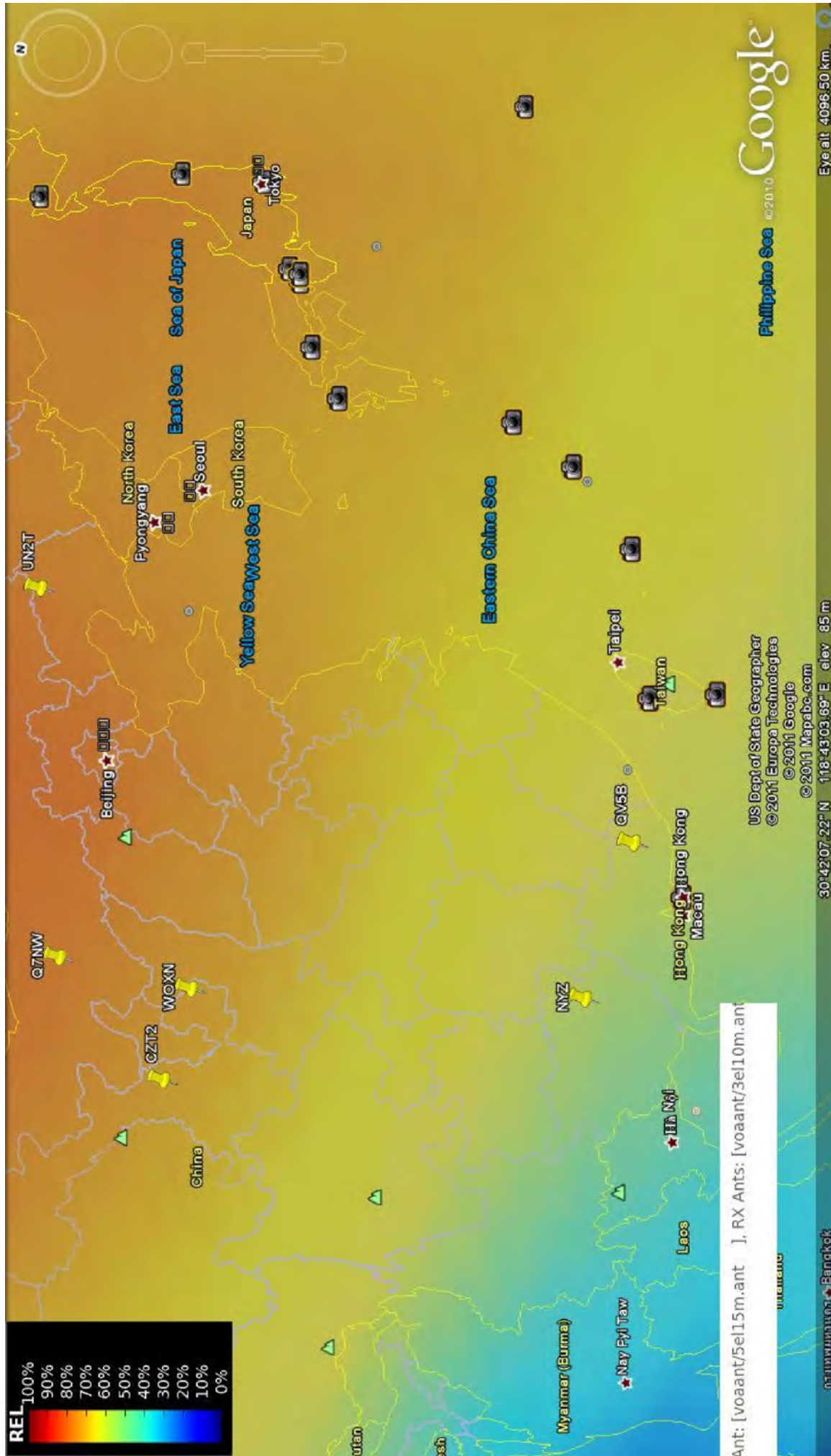
The ITU files searched covered the period 21 May 2010 until 03 June 201, and only M89 stations currently being heard were searched for with the following results:

<b>Callsign</b>	<b>Bearing (From Tokyo)</b>	<b>Fix (Average)</b>	<b>Nr. Of Bearings</b>	<b>Nr. Of Fixes</b>
UN2T	300	122 E 55 42 N 5	24	20
3A7D	300	87 E 14 44 N 26	14	12
Q7NW	290	116 E 10 40 N 10	12	12
WOXN	280	108 E 15 35 N 58	41	36
CZT2	280	104 E 25 36 N 18	3	1
NYZ	254	110 E 20 24 N 19	4	1
QV5B	250	115 E 39 23 N 36	25	19
YA6X	Not Monitored by ITU			
JR5U	Not Monitored by ITU			

The map below provides readers with the bearing from the ITU Tokyo monitoring station into China between 250 and 300 degrees.



My next step was to take the fix obtained by the ITU Monitoring station in Tokyo for each current M89 station and plot them on Google Earth. Each M89 station is identified by a Yellow Pin as seen on the map overleaf



When looking at the map and the plots, we can see that the M89 stations being heard are not located near the various Chinese Naval Headquarters. What does this mean? I really don't know.

If we look at the two previously located stations, NH8T was located near where UN2T is presently located, while 4XML was located near where CZT2 and WOXN are now transmitting from. The stations with the most bearings and fixes are in fact the stations that are the most active and also happen to be located close to both Tokyo and Hong Kong.

It had previously been mentioned that NYZ was thought to be a M89 variant and Igor had even suggested that the signal might not originate from China but from one of the SE Asian countries. Although there is only one fix for NYZ, indications are that it is also located in China. More follow-up is required on this station as it is only active for 5 minutes each hour between H+20 to H+25.

### **Current M89 Station Schedules**

Here is the current schedule for M89 (June 2011):

VVV Q2M (x3) DE NYZ (x2) on 4860, 6840, 10640 kHz (Only active between H+20 to H+25)

V QPZM (x3) DE WOXN (x2) on 3327 //4523 (N), 5310 //7833 (D) – Also 7568, 7570, 10643 kHz

V 7NPE (x3) DE QV5B (x2) on 4225 //5500 (Night), 7582 //8110 (Day) kHz

V DKG6 (x3) DE 3A7D (x2) on 7598 and 7602 kHz

V GKVZ (x3) DE Q7NW (x2) on 3297, 5278 kHz

V JA3L (x3) DE UN2T (X2) on 4532 kHz (N/H since May when Chinese Robot Lady moved to 4530)

V H2FL (x3) DE DRV8 (x2) on 6773, 8040 kHz

V MB3R (x3) DE YA6X (x2) on 4368, 5488, 5682 kHz

V 9VUP (x3) DE JR5U (x2) on 4592 kHz

V RXP7 (x3) DE CZT2 (x2) on 10475 //11432 kHz

## Switching between daytime and night time frequencies

During my monitoring, I've noticed that M89 stations switched from day to night time frequencies. So far I've been able to determine the following schedules:

- QV5B (4225 //5500)(night) switches to daytime frequencies at 0000z (Plus or minus) (7582 //8110) or (7833 //10643)
- WOXX (3327 //4523) (night) switches to day time frequencies at 1100z (Plus or minus) (7833 //10643)
- NYZ 48600 //6840 (Night) and 6840 //10640 (Day)

I have been unable to determine when the switch to daytime frequencies takes place, but I'm guessing that the switch probably takes place during the 1100/1200z timeframe.

## M89 Messages

To be honest, monitoring M89 is very boring. You have to listen to hours upon hours of the same round-slip being sent over and over again. But for those who persevere, an occasional message can be heard. As a result of my monitoring, I've put together a list of times during which I've heard a message from M89 stations. It should be noted that I don't monitor during the period 0200- 1000 since I'm sleeping.

Here is the list thus far:

Time	Frequency	Callsign
0000	7833	WOXX
0025	7602	3A7D
0040	8110 //7582	QV5B
1200	5500	QV5B
1300	5500	QV5B
1330	4523	WOXX
1338	4532	UN2T
1500	4532	UN2T
1710	4532 / 4523	UN2T / WOXX
1900	4532	UN2T
1930	4532	UN2T
2111	4225 //5500	QV5B
2210	5500	QV5B

When I started getting messages, it just happened that they all seemed to be sent during odd hours, but later on I did get messages being sent on the even hours, although these are less frequent. Even with the times listed above, the general rule is that messages are sent at any time. In other words, there is no schedule. Messages are normally sent by hand and repeated three times.

## **M89 Traffic**

A lot more work and analysis is required in regards to the various messages being sent. For those who might be interested in doing further analysis, here is a complete breakdown of the messages that I have copied while monitoring M89.

### **M89 Traffic – Type 1 – UGT COMM Message**

UGT COMM BT 069/6008/6707/03/30/0430/714/A/14/13 AR (29 Mar 11 1901z) (UN2T – 4532)  
UGT COMM BT 069/655/6707/03/31/0130/773/14/13 AR (30 Mar 11 1700z) (UN2T – 4532)  
UGT COMM BT 654/5638/5868/04/01/0325/812/A/19/10 AR (31 Mar 11 1853z) (UN2T – 4532)  
UGT COMM BT 654/5448/5868/04/04/2210/813/B/81/10 AR (04 Apr 11 1343z) (UN2T – 4532)  
UGT COMM BT 654/5548/5868/04/07/2210/817/B/85/10 AR (07 Apr 11 1342z) (UN2T – 4532)  
UGT COMM BT 654/5325/5868/04/08/0310/888/A/84/10 AR (07 Apr 11 1841z) (UN2T – 4532)  
UGT COMM BT 654/5588/5868/04/09/0150/817/B/80/10 AR (08 Apr 11 1720z) (UN2T – 4532)

### **M89 Traffic – Type 1A – UGT COMM Message – Variation 1 – Short Version**

UGT COMM BT 5371/2030/Z17/3893 AR (05 Apr 11 1200z) (QV5B 5500)  
UCT COMM BT 5401/0650/Z14/3893 AR (05 Apr 11 2210Z (QV5B 5500)  
UGT COMM BT 0685/2140/G38/6920 AR AR (15 Mar 11 1317z) (QV5B – 5500)  
UGT COMM BT 5177/0910/G27/3893 AR 30 Apr 11 0040z) (QV5B 8110)  
UGT COMM BT 1588/0900/6/4329 AR (01 May 11 2359) (QV5B 8110 // 7582)  
UGT COMM BT 1649/2110/Z96/8738 AR (02 May 11 1239) (QV5B 8110 // 5500)  
UGT COMM BT 1924/0910 FM COMM BT 1924/0910/56/8731 AR (03 May 11) QV5B 8110/7582)  
UGT COMM BT 1808/2100/Z95/8738 AR (03 May 11 1230z) (QV5B 5500/4225)  
UGT COMM BT 8731/0155/58/8738 AR (x2) (15 May 11 1725z) (QV5B 5500/4225)  
UGT COMM BT 1675/0140/Z96/8738 AR (x3) (16 May 11 1706z) (QV5B 5500/4225)  
UGT COMM BT 3399/0540/Z67/9289 AR (x3) (3 Jun 11 2111z) (QV5B 5500/4225)

## **M89 Traffic – Type 2 – 4 Figure code using cut numbers - AU34567DNT**

CQ 06/65446917680T MSG NR 3234 CK 97 33 T329 T32T RMKS 67T7 TM. 544 6917 68T7 BT (25 Mar 11 1945z) (UN2T – 4532)

CQ ... NR 4207 CK 95 33 0309 0435 RMKS 86808 5324 5508 ..39 5438 BT (08 Apr 11 1935z– UN2T – 4532))

RMKS 2916 .00 4348/4386 BT COMM/2345/L.. A6/ (25 Apr 11 - (UN2T – 4532)

(Sending 4 figure cut number message – mostly U/R) (4 Mar 11 – 1509z) (UN2T 4532)

(Sending 4 figure cut number message – mostly U/R) (20 Apr 11 – 1751z) (UN2T 4532)

(4 figure cut number message – hand sent) (22 Mar 11 1338z) (WOXN 4523)

(4 figure cut number message) (30 Mar 11 1709z) (WOXN 4523)

(In progress) RMKS 6926000612/2326/0607/0816/0857/0366/0858/0636 BT BT (21 Mar 11 1800z) (QV5B – 4225)

VVV HR 7GGA (x3)

7GNR 02/CCK CK 25 37 05030430 RMKS 8738O1829/1103/1294/8698/1371/8731/1328/8436 (x 2)

7GNR BT (X3)

NT54 745U **45NA** U734 4U7T 446N 74NA 446N 4674 7U6N

T5NA 454U 746N 4460 4U7N N4UN **45NA 45NA** N4UA **45NA**

7545 N446 7434 7N4N 477N AR AR (02 May 2032z) (QV5B – 5500/4225)

VVV CQ GA R QTC HR CQ GA HR CQ GA

MSG NR 04/CCK CK 25 37 0510 0450 RMKS 8738

001694/1641/1836/8438/1675/1869/1330/1187 (x3) (2045Z)

BT

6506 6AD6 3336 UTDN A6T6 U436 AD.. DNR6 .35U 34.5

NADN 7DD.. 7NUD AD3D 54.T DN7D M5ID N5D. 4ANN 3U4D

N7U7 76AD N36T .N4D .T34 AR (x2) SK (09 May 11 2040z) (QV5B 4225)

HR SVC GA NR 076 2015 RMSK 5470 TO 6243 AR/5474 BT

COMM/2100/LZ2906/5470/6233 AR (x2) (Hand sent)

HR SVC GA NR 19 2045 RMKS (Returned to round slip for a minute then started message again)

HR SVC GA NR 19 2045 RMKS 5470 TO 5438 6928 6018 5468 BT SVC QRW5430

69206010 QRL16 2130 XP5478 AR (x2) (Hand sent) (Return to round slip at 1254z) (19 May 11) (WOXN 4523/5310)

It's hoped that readers have enjoyed this update of M89 transmissions and that this will generate more interest and hopefully more loggings of M89.

JPL



## Q: WHO'S THE SECRET AGENT?

A: All of them. All sorts of women work for MI5. Could you?

W

ho do you picture when you think of an agent in the Security Service? James Bond? Austin Power?

Fictional spies in Spooks? Or someone a bit more like you?

Many women are dissatisfied with their careers, or desperate to break free of the nine-to-five routine, but feel stuck. Mainly because they don't know what else they could do. Yet many of them possess the skills that make them an ideal candidate for MI5 - such as the ability to handle the demands of working in a highly sensitive environment, a good level of physical fitness and stamina and stellar communication skills - but it wouldn't occur to them to apply.

An MI5 surveillance officer is nothing like the dramatic roles we see on TV, but it's far from a

repetitive or predictable job. And contrary to what most people believe, you don't need experience. On-the-job training involves practical exercises such as driving, map reading and navigational skills.

Working in MI5 is a rewarding career and as an MI5 surveillance officer you'd be part of a team committed to protecting the UK. Not to mention the competitive salary and benefits package that comes with the role.

If you're looking for a career change, or want a job with varied shifts that gets perfectly with your lifestyle, then a new role as an agent for the Security Service could be the best move you ever made.

To find out more about working for MI5 and current opportunities visit [MI5.gov.uk/careers](http://MI5.gov.uk/careers)

### WHAT DO YOU KNOW ABOUT A CAREER WITH MI5?

*The truth about life as an MI5 surveillance officer is a far cry from popular public misconceptions*

#### YOU DO

- Have an exciting, active and fulfilling job
- Travel around the UK
- Use high tech gadgets and equipment
- Have to drive
- Need to keep your job a secret

#### YOU DON'T

- Have powers of arrest
- Sit behind a desk all day
- Carry weapons
- Have to be able to speak a foreign language
- Put your life at risk



SECURITY SERVICE  
MI5

# Chart Section Index

1. Logging Abbreviations Explained
2. European Number Systems (as revised)
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5. M12 May and June 2011
6. Family 1a History and July 2011 predictions
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### Logging Abbreviations explained.

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

E07 10436kHz 1740z 07/06[414 1 563 102 92632 ... 09526 0 0 0 0 0 0] 1753z Fair QRM2 QSB2 PLdn SUN

Station: E07 [Traits of stations in ENIGMA Control List]

Freq: kHz [As above 10436kHz]

Time: z [Always 24hour clock, 'z' states GMT/UTC]

Date: day/month [As above 7<sup>th</sup> June]

Msg detail: Varies with station

ID taken from 100kHz fig in freqs: 414 [freqs used in this schedule were 13468, 12141 and 10436kHz]

Msg count 1

Dk [decode key]: 563

Gc [group count]: 102

First group of msg: 92632

Text between grps: ...

Last group: 09526 [where more than one group is stated the use of LG ahead group indicates 'Last Group.']

Ending: 0 0 0 0 0 0

Time msg ends: 1753z

Received signal strength assessment: Fair

Noise QRM2

Fading to signal QSB2

Monitor: PLdn

Day heard: SUN

Unknown: unk

Repeat: R [which can be expanded to mean]:

Repeated : 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.

Other details about stations can be found in the ENIGMA Control List available from Group files or sent when you joined.

## European Number Systems

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

<sup>^</sup> 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 poss hrd 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

## 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	khamisa	sitta	saba	tamanya	tissa
	٠	١	٢	٣	٤	٥	٦	٧	٨	٩

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

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

Notes: \* Nula heard as nul

<sup>^</sup> Jeden heard as yedinar

‘ Tri heard as ‘she’

~ Osoom often heard as bosoom or vosoom.

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...
					x	x	0030		E06	01A	9061 759	7981 759
					x	x	0230		E06	01A	7844 759	6953 759
	x		x				0340/0400/0420		M12	01B	8173/ 9173/10173 111	7584/ 8184/ 9184 511
x		x					0400/0420/0440		M12	01B	8156/ 9256/10356 123	7643/ 9143/ 619 search
	x		x				0410/0430/0450		M12	01B	9992/11013/12184 901	8158/ 9324/10403 134
			x				0430/0450/0510		E07A	01B	7437/ 8137/ 9137 411	7437/ 8137/ 9137 411
x							0450		E11	03	10800 416/00	10800 416/00
x							0500/0520/0540		M12	01B	7627/ 9127/10327 613	7560/ 9060/ 501 search
			x	x			0500/0600		E06	01A	14580 679	210, search
		x					0530/0540		S06S	01A	11435,12650 153	11435,12650 153
	x						0600/0610		S06S	01A	16735/15230 438	16735/15230 438
				x			0600/0610		S06S	01A	8340/ 5810 934	8340/ 5810 934
				x			0600/0610		S06S	01A	7845/ 9125 196	7845/ 9125 196
			x	x			0600/0700		E06	01A	16090 679	15890 210
	x		x				0645		E11	03	13424 517/00	13424 517/00
						x	0700		M01	14	6780 025	6780 025
	x						0700/0710 (15)		S06S	01A	5430/ 6780 374	5430/ 6780 374
	x		x				0700/0720/0740		E07	01B	8127/ 9327/ 131, search	6941/ 8041/ 9241 902
	x			x			0710		E11	03	14753 633/00	14753 633/00
		x					0730/0740		S06S	01A	7335/11830 745	7335/11830 745
			x				0800		E17Z	01A	16780/12850/ 674	16780/12850/ 674
x							0800		G06	01A	6948 215	6948 215
	x						0800/0810		S06S	01A	14373/12935 352	14373/12935 352
	x	x					0800/0810		S06S	01A	7245/ 9670 418	7245/ 9670 418
x			x				0820		E11	03	ex 5737 438/00, search	ex 5737 438/00, search
		x					0820/0830		S06S	01A	6755/ 5835 471	6755/ 5835 471
x			x				0830		E11	03	12924 649/00	12924 649/00
			x				0840/0850		S06S	01A	10120/ 9670 328	10120/ 9670 328
x		x					0900		E11	03	13427 534/00	13427 534/00
			x		x		0900		E11	03	4909 248/00	4909 248/00
			x				0900/0910		S06S	01A	12952/13565 167	12952/13565 167
	x			x			0915		S11A	03	8530 484/00	8530 484/00

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...
		x					0930		E11	03	10210 270/00	10210 270/00
				x			0930/0940		S06S	01A	10290/ 9655 516	10290/ 9655 516
x			x				0940		G11	03	6986 275/00	6986 275/00
		x					1000/1010		S06S	01A	14580/16020 729	14580/16020 729
x			x				1015		S11A	03	16530 475/00	16530 475/00
	x			x			1020		S11A	03	11581 426/00	11581 426/00
		x			x		1020		S11A	03	5815 221/00	5815 221/00
	x	x					1045		E11	03	9610 469/00	9610 469/00
x						x	1050		E11	03	3815 127/00	3815 127/00
	x	x	x				1115		M03	03	7837 272/00 (Tue) & 650/00 (Wed/Thu	7837 272/00 (Tue) & 650/00 (Wed/Thu
	x				x		1135/1140		M03	03	6524 786/00	6524 786/00
		x					1200		G06	01A	439, search	439, search
x							1200/1210		S06S	01A	10230/12165 831	10230/12165 831
		x					1200/1210		S06S	01A	7765/ 6815 481	7765/ 6815 481
			x				1200/1210		S06S	01A	12155/14535 425	12155/14535 425
	x						1230/1240		S06S	01A	7650/ 278 search	7650/ 278 search
		x					1230/1240		S06S	01A	7545/ 8220 967	7545/ 8220 967
			x				1230/1240		S06S	01A	9255/ 7630 314	9255/ 7630 314
	x					x	1240		E11	03	6252 349/00	6252 349/00
		x					1300		G06	01A	439, search	439, search
x							1300/1320/1340		M12	01B	13972/13472/11472 944	14964/13972/12164 991
			x			x	1320		M03	03	7837 437/00	7837 437/00
				x	x		1325		G11	03	5815 299/00	5815 299/00
x						x	1355		S11A	03	4909 254/00	4909 254/00
	x						1400/1420/1440		XPA	01B	11567/10867/ 9967	10967/ 9967/ 9267
			x				1400/1410		S06S	01A	5320/ 4845 624, search	5320/ 4845 624, search
		x			x		1445		E11	03	4909 267/00	4909 267/00
					x		1500		M01	14	6434 025	6434 025
	x						1500/1510		S06S	01A	6666/ 7744 537	6666/ 7744 537
			x				1505		M01B	14	5958 159	5958 159
				x			1515		M01B	14	5810 158	5810 158

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...
x						x	1540		E11	03	16335 228/00	16335 228/00
					x		1600 (1605)		S06	01A	8157/ 6983 134	8157/ 6983 134
x							1600/1610		S06S	01A	9256/ 7889 176	9256/ 7889 176
x							1700		G06	01A	5427 892	5427 892
		x				x	1700/1720/1740		E07	01B	13468/11454/10126 441	13388/12088/10504 305
		x					1700/1720/1740		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
	x		x				1702		M45	14	5074, 5474 074	5074, 5474 074
			x				1730		E11	03	8088 416/00	8088 416/00
	x		x				1730/1750/1810		XPA	01B	10943/10243/ 9243	12107/10787/ 9387
	x		x				1742		S21	14	4973, 5373 973	4973, 5373 973
	x				x		1755		G11	03	5815 270/00	5815 270/00
x							1800		G06	01A	4958 439	4958 439
	x		x				1800		M01	14	5280 025	5280 025
		x					1800 (1805)		S06	01A	6770/ 5865 471	6770/ 5865 471
x							1800/1820/1840		M12	01B	9176/ 7931/ 6904 257	9176/ 7931/ 6904 257
			x				1800/1820/1840		M12	01B	10343/ 9264/ 8116 124	10343/ 9264/ 8116 124
x							1810		M01B	14	5125, 5735 364	5125, 5735 364
	x						1820		M14	01A	6856 163	6856 163
			x				1830	2/4	G06	01A	6887 842	6887 842
			x				1832		M01B	14	5095, 5760 815	5095, 5760 815
x			x				1900 (1905)		S06	01A	7982/ 6984 349	7982/ 6984 349
		x					1900/1910		S06S	01A	10170/ 9110 371	10170/ 9110 371
x		x					1900/1920/1940		E07	01B	14812/13412/11512 845	14378/13458/10958 349
			x	x			1900/1920/1940		M12	01B	<del>13582/12082/10382 503</del>	<del>13582/12082/10382 503</del>
x							1900/1920/1940		M12	01B	9176/ 7931/ 6904 257	9176/ 7931/ 6904 257
				x	x		1900/2000	1/3	M14	01A	9060/ 8180 724, search	9060/ 8180 724, search
				x			1902		M01B	14	5075, 5465 336	5075, 5465 815
x							1915		M01B	14	5150, 5475 858	5150, 5475 858
		x					1920	2/4	M14	01A	5932 417	5932 417
				x			1930	2/4	G06	01A	5943 218	5943 218
					x		1930 (1935)		S06	01A	7718/ 6922 366	7718/ 6922 366
			x				1942		M01B	14	5065, 5805 936	5065, 5805 936

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...
				x		x	2000		G11	03	3815 262/00	3815 262/00
	x		x				2000		M01	14	4905 025	4905 025
		x					2000/2020/2040		E07A	01A	8173/ 7473/ 5773 147	8173/ 7473/ 5773 147
				x			2010		M01B	14	4895, 5340 467	4895, 5340 467
			x				2010/2030/2050		E07	01B	11539/10547/ 553, search	10752/ 9147/ 7637 716
x							2015/2115	2/4	S06	01A	12210/10425 346,search	10380/ 8115 723,search
			x				2030		E06	01A	5948 724	5948 724
		x					2100/2120/2140		M12	01B	9379/ 7979/ 398, search	8123/ 6923/ 198, search
		x					2100/2120/2140		M12	01B	13582/12082/10382 503	<del></del>
				x			2130		E06	01A	5731 315	5731 315

## M01b frequency schedule

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
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## Monday

[illegible]

## Thursday

[illegible]



Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Sun 1	Not	Monit	-ored						
Mon 2	0500	7611**	0520	9111**	0540	10511**	615	424	55
	1300	14372^	1320	13472^	1340	11472	344	899	193
	1700	9176^	1720	7931	1740	6904	257	2364	76
	1800	9176	1820	7931	1840	6904	257	1869	47
	1900	9176	1920	7931	1940	6904	257	2241	80
Tue 3	0340	8173	0405*	9173	0433*	10173	111	638	289
	2100	10114	2120	8114	2140	5914	514	767	157
Wed 4	1500	14492^	1520	13392^	1540	12126^	344	899	193
	1700	8047^	1720	6802	1740	5788	463	2432	39
	1830	12217	1850	10617	1910	9317	263	514	129
	2100	9241	2120	7541	2140	---	258	0 0 0	
Thu 5	0340	8173	0405*	9173^	0431*	10173	111	638	289
	1700	9176^	1720	7931	1740	6904	257	4796	76
	1700	10343^	1720	9264	1740	8116	124	2996	70
	1800	10343	1820	9264	1840	8116	124	9512	44
	1900	9176	1920	7931	1940	6904	257	9343	67
Fri 6	0600	10814	0620	12114	0640	13414	514	767	157
Sat 7	1310	13926	1330	12126	1350	---	919	0 0 0	

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Sun 8	1830	12217	1850	10617	1910	9317	263	514	129
Mon 9	0500	7611**	0520	9111**	0540	10511**	615	424	55
	1300	14372^	1320	13472^	1340	11472	344	715	167
	1700	9176^	1720	7931	1740	6904	257	6669	80
	1800	9176	1820	7931	1840	6904	257	6500	54
	1900	9176	1920	7931	1940	6904	257	2343	69
Tue 10	0340	8173	0405*	9173	0433*	10173	111	883	297
	2100	10114	2120	8114	2140	5914	514	173	87
Wed 11	1500	14492^	1520	13392^	1540	12126^	344	715	167
	1700	8047^	1720	6802	1740	5788	463	3611	65
	1830	12217	1850	10617	1910	9317	263	329	81
	2100	9241	2120	7541	2140	6841	258	692	83
Thu 12	0340	8173	0405*	9173^	0431*	10173	111	883	297
	1700	9176^	1720	7931	1740	6904	257	9050	53
	1700	10343^	1720	9264	1740	8116	124	7051	71
	1800	10343	1820	9264	1840	8116	124	6509	87
Fri 13	0600	10814	0620	12114	0640	13414	514	173	87
Sat 14	Not	Monit	-ored						

Highlighted cell indicates new or changed loggings  
--- Indicates no 3<sup>rd</sup> transmission sent as message 0 0 0

\* Time of transmissions offset due to length of message

^ Weak reception      NH Not Heard      NF Not Found

\*\* ID 615 Msgs transmitted in MCW

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Sun 15	1830	12217	1850	10617	1910	9317	263	329	81
Mon 16	0430	6857	0450	7557	0510	---	850	0 0 0	
	0500	7611**	0520	9111**	0540	---	615	0 0 0	
	1300	14372^	1320	13472^	1340	11472	344	298	229
	1700	9176^	1720	7931	1740	6904	257	7726	72
	1800	9176	1820	7931	1840	6904	257	3942	40
	1900	9176	1920	7931	1940	6904	257	1404	96
Tue 17	0340	8173	0400	9173	0420	10173	111	392	243
	2100	10114	2120	8114	2140	5914	514	840	129
Wed 18	1500	14492	1520	13392^	1540	12126	344	298	229
	1700	8047^	1720	6802	1740	5788	463	9272	88
	1830	12217	1850	10617	1910	9317	263	3302	195
	2100	9241	2120	7541	2140	---	258	0 0 0	
Thu 19	0340	8173	0400	9173^	0420	10173	111	392	243
	0630	7984	0650	9184	0710	---	911	0 0 0	
	1700	9176^	1720	7931	1740	6904	257	6188	74
	1700	10343^	1720	9264	1740	8116	124	4608	77
	1800	10343	1820	9264	1840	8116	124	5353	84
	1900	9176^	1920	7931	1940	6904	257	2654	51
Fri 20	0600	10814	0620	12114	0640	13414	514	840	129
	1600	10343	1620	9264	1640	8116	124	9857	89
Sat 21	1310	13926	1330	12126	1350	---	919	0 0 0	

Highlighted cell indicates new or changed loggings

---- Indicates no 3<sup>rd</sup> transmission sent as message 0 0 0

^ Weak reception            NH    Not Heard            NF    Not Found

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Sun 22	1830	12217	1850	10617	1910	9317	263	3302	195
Mon 23	0430	6857	0450	7557	0510	---	850	0 0 0	
	0500	7611**	0520	9111**	0540	---	615	0 0 0	
	1300	14372	1320	13472	1340	11472	344	683	235
	1600	12162	1620	11566	1640	10711	546	7584	73
	1700	9176^	1720	7931	1740	6904	257	4219	79
	1800	9176	1820	7931	1840	6904	257	8736	59
	1900	9176	1920	7931	1940	6904	257	1352	44
Tue 24	0340	8173	0405*	9173	0429*	10173	111	582	273
	2100	10114	2120	8114	2140	5914	514	235	105
Wed 25	1500	14492	1520	13392^	1540	12126	344	683	235
	1700	8047^	1720	6802	1740	5788	463	9816	74
	1830	12217	1850	10617	1910	9317	263	867	55
	2100	9241	2120	7541	2140	---	258	0 0 0	
Thu 26	0340	8173	0405*	9173^	0428*	10173	111	582	273
	0630	7984	0650	9184	0710	---	911	0 0 0	
	1700	9176	1720	7931	1740	6904	257	3484	85
	1700	10343	1720	9264	1740	8116	124	1700	70
	1800	10343	1820	9264	1840	8116	124	8699	87
	1900	9176^	1920	7931	1940	6904	257	6000	62
Fri 27	0600	10814	0620	12114	0640	13414	514	235	105
	1600	10343	1620	9264	1640	8116	124	6034	76
Sat 28	1310	13926	1330	12126	1350	---	919	0 0 0	

Thanks to GD for finding the ID 911 sched 0630z on Thu & to Jan for finding the ID 546 sched 1600z on Mon. Good work!

\*    Time of transmissions offset due to length of message

\*\*    ID 615 Msgs transmitted in MCW

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Wed 1	1500	14964	1520	13972	12164	555	64
	1700	8047^	1720	6802	5788	463	43
	1830	11435	1850	10598	1910	938	59
	2100	9986	2120	9086	---	903	
Thu 2	0340	8173	0400	9173	10173	111	195
	0630	7984^	0650	9184	---	911	
	1700	9176^	1720	7931	6904	257	99
	1700	10343	1720	9264^	8116	124	78
	1800	10343	1820	9264	8116	124	50
	1900	9176	1920	7931	6904	257	42
Fri 3	0600	10814	0620	12114	13414	614	131
	1600	10343	1620	9264	8116^	124	81
Sat 4	1310	13873	1330	13373	---	834	
Sun 5	1830		1850	9243	1910	828	
Mon 6	0430	6857	0450	7557	---	850	
	0500	7838**	0520	9238**	10738**	827	84
	1300	14524	1320	13524	11524	555	155
	1600	12162^	1620	11566	10711	546	83
	1700	9176^	1720	7931	6904	257	72
	1800	9176^	1820	7931	6904	257	59
	1900	9176	1920	7931	6904	257	93
Tue 7	0340	8173	0400	9173	10173	111	89
	1830	10343	1850	9264	8116	124	69
	2100	10114	2120	8114	5914	614	159

Highlighted cell indicates new or changed loggings

--- Indicates no 3<sup>rd</sup> transmission sent as message 0 0 0

^ Weak reception      NH Not Heard      NF Not Found

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Wed 8	1500	14964	1520	13972	12164	555	155
	1700	8047^	1720	6802	5788	463	75
	1830	11435	1850	10598	1910	938	54
	2100	9986	2120	9086	---	903	
Thu 9	0340	8173	0400	9173	10173	111	89
	1700	9176^	1720	7931^	6904^	257	??
	1700	10343	1720	9264^	8116	124	70
	1800	10343	1820	9264	8116	124	95
	1900	9176	1920	7931	6904	257	66
Fri 10	0600	10814^	0620	12114	13414	614	159
	1600	10343	1620	9264	8116^	124	90
Sat 11	1310	13873^	1330	13373^	---	834	
Sun 12	1830	10843	1850	9243	7843	828	145
Mon 13	0430	6857	0450	7557	---	850	
	0500	7838**	0520	9238**	10738**	827	84
	1300	14524	1320	13524	11524	555	113
	1600	12162	1620	11566	10711	546	79
	1700	9176^	1720	7931	6904	257	80
	1800	9176^	1820	7931	6904	257	49
	1900	9176^	1920	7931	6904	257	50
Tue 14	0340	8173	0400	9173	10173	111	147
	1830	10343	1850	9264	8116	124	58
	2100	10114	2120	8114	5914	614	109

\* Time of transmissions offset due to length of message

\*\* ID 827 Msgs transmitted in MCW

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Wed 15	1500	14964	1520	13972	12164	555	113
	1700	8047	1720	6802	5788	463	65
	1830	11435	1850	10598	9327	938	70
	2100	9986	2120	9086	---	903	
Thu 16	0340	8173	0400	9173	10173	111	147
	0630	7984^	0650	9184	---	911	
	1700	9176^	1720	7931	6904	257	63
	1700	10343	1720	9264^	8116	124	75
	1800	10343	1820	9264	8116	124	74
	1900	9176	1920	7931	6904	257	45
Fri 17	0600	10814	0620	12114	13414	614	109
	1600	10343	1620	9264	8116	124	71
Sat 18	1310	13873	1330	13373	---	834	
Sun 19	1830	10843	1850	9243	7843	828	157
Mon 20	0430	6857	0450	7557	---	850	
	0500	7838**	0520	9238**	---	827	
	1300	14524	1320	13524	11524	555	175
	1600	12162	1620	11566	10711	546	94
	1700	9176	1720	7931	6904	257	71
	1800	9176	1820	7931	6904	257	40
	1900	9176	1920	7931	6904	257	61
Tue 21	0340	8173	0400	9173	10173	111	117
	1830	10343	1850	9264	8116	124	68

Highlighted cell indicates new or changed loggings

---- Indicates no 3<sup>rd</sup> transmission sent as message 0 0 0

^ Weak reception                      NH Not Heard                      NF Not Found

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Wed 22	1500	14964	1520	13972	1540	12164	555	545	175
	1700	8047^	1720	6802	1740	5788	463	2121	87
	1830	11435	1850	10598	1910	9327	938	6964	57
	2100	9986	2120	9086	2140	---	903	0 0 0	
Thu 23	0340	8173	0400	9173	0420	10173	111	786	117
	0630	7984^	0650	9184	0710	---	911	0 0 0	
	1700	9176	1720	7931	1740	6904	257	2808	79
	1700	10343	1720	9264^	1740	8116	124	1552	79
	1800	10343^	1820	9264	1840	8116	124	6952	65
	1900	9176^	1920	7931	1940	6904	257	4037	51
Fri 24	1600	10343	1620	9264	1640	8116^	124	8880	89
Sat 25	1310	13873^	1330	13373^	1350	---	834	0 0 0	
Sun 26	1830	10843	1850	9243	1910	7843	828	261	45
Mon 27	0430	6857	0450	7557	0510	---	850	0 0 0	
	0500	7838**	0520	9238**	0540	---	827	0 0 0	
	1300	14524	1320	13524	1340	11524	555	125	129
	1600	12162	1620	11566	1640	10711	546	1032	80
	1700	9176^	1720	7931	1740	6904	257	9862	75
	1800	9176^	1820	7931	1840	6904	257	1393	56
	1900	9176^	1920	7931	1940	6904	257	194	58
Tue 28	0340	8173	0400	9173	0420	10173	111	167	261
	1830	10343	1850	9264	1910	8116	124	3537	59

\* Time of transmissions offset due to length of message

\*\* ID 827 Msgs transmitted in MCW

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Cont...									
Sun 29 May	1830	12217	1850	10617	1910	9317	263	867	55
Mon 30 May	0430	6857	0450	7557	0510	---	850	000	
	0500	7611**	0520	9111**	0540	---	615	000	
	1300	14372	1320	13472	1340	11472	344	372	64
	1600	12162	1620	11566	1640	10711	546	???	??
	1700	9176^	1720	7931	1740	6904	257	6403	74
	1800	9176	1820	7931	1840	6904	257	4280	55
	1900	9176	1920	7931	1940	6904	257	3553	71
Tue 31 May	0340	8173	0405*	9173	0429*	10173	111	543	195
	2100	10114	2120	8114	2140	5914	514	936	131

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Cont...									
Wed 29 June	1500	14964	1520	13972	1540	12164	555	125	129
	1700	8047	1720	6802	1740	5788	463	Note 1	
	1830	11435	1850	10598	1910	9327	938	8210	66
	2100	9986	2120	9086	2140	---	903	0 0 0	
	2110	16269	2130	14669	2150	---	263	0 0 0	
Thu 30 June	0340	8173	0400	9173	0420	10173	111	167	261
	0630	7984^	0650	9184	0710	---	911	0 0 0	
	1700	9176^	1720	7931	1740	6904	257	1355	58
	1700	10343	1720	9264^	1740	8116	124	5512	73
	1800	10343	1820	9264	1840	8116	124	164	61
	1900	9176	1920	7931	1940	6904	257	9800	67

Thanks to Gary (GN) for finding the ID 263 sched on Wed 2110z

Highlighted cell indicates new or changed loggings  
--- Indicates no 3<sup>rd</sup> transmission sent as message 0 0 0  
^ Weak reception      NH   Not Heard      NF   Not Found

Note 1

Severe technical problems noted on this sched.  
On 8047kHz only a brief call-up was heard at 1707z lasting 10 secs.  
On 6802kHz at 1720z the msg was transmitted with no call-up.  
On 5788kHz at 1740z the ending 000 000 was sent followed by a single call-up at 1744z

\*\*\* ID 615 Msgs transmitted in MCW

Family 1A History and July predictions - 28th June 2011

Station Day	time (utc)	2011 April	2011 May	2011 June	2011 July	ID Apr	ID May	ID June	ID July	week
G06 mon	08.00	6774	6948	6948	6948	215	215	215	215	every
G06 mon	17.00	4457	5427	5427	5427	439	439	439	439	1 & 2
G06 mon	18.00	4864	4958	4958	4958	439	439	439	439	1 & 2
S06 mon	19.00/05	5784/5127	7982/6984	7982/6984	7982/6984	349	349	349	349	every
S06 mon	20.15	10430	12195	13460		121	516	378		2 & 4
S06 mon	21.15	8130	10665	11090		121	516	378		2 & 4
M14 tues	07.00	8120	NH			362				2
M14 tues	08.00	7395	NH			362				2
S06 tues	18.00	5890				286				1 & 2
M14 tues	18.20	5947	6856	6856	6856	346	163	163	163	2 & 4
G06 wed	12.00	5864				439	439	439	439	1 & 2
G06 wed	13.00		6834 ?			439	439	439	439	1 & 2
S06 wed	18.00/05	5735/5070	6770/5865	6770/5865	6770/5865	471	471	471	471	every
M14 wed	19.20	5463	5932	5932	5932	537	417	417	417	2 & 4
E06 wed	19.20	4523	NH	NH		829	829	829	829	2
S06 wed	19.30/05					366	366	366	366	Sat R
S06 wed	20.00/05					134	134	134	134	Sat R
E06 wed	20.20			4516	4516			829	829	2
E06 thur	05.00	13530	14460	14710	14580	951	460	328	679	every
E06 thur	06.00	14910	16170	16240	16090	951	460	328	679	every
S06 thur	09.30	16311	14736			842	842	842	842	every
E06 thur	13.00			13408				826		4
E06 thur	14.00			11554				826		4
G06 thur	18.30	5934	6887	6887	6887	579	842	842	842	2 & 4
S06 thur	19.00/05	5784/5127	7982/6984	7982/6984	7982/6984	349	349	349	349	every
E06 thur	20.30	5186	5948	5948	5948	891	724	724	724	1 & 3
G06 fri	19.30	5442	5943	5943	5943	947	218	218	218	2 & 4
E06 fri	21.30	5197	5731	5731	5731	634	315	315	315	1 & 3
E06 sat	00.30	6918	8099	8142	9061	759	759	759	759	every
E06 sat	01.30	5133	6949	7608	7844	759	759	759	759	every
M14 sat	09.00	5561?				171				every
S06 sat	16.00/05	8162/7612	8157/6983	8157/6983	8157/6983	134	134	134	134	every
S06 sat	19.00	6791	10178	10178	10178	703	703	703	703	1 & 3
S06 sat	19.00		6943	6943	6943		837	837	837	1 & 3
S06 sat	19.30/35	5787/4628	7718/6922	7718/6922	7718/6922	366	366	366	366	every
S06 sat	20.00		5926	5926	5926		837	837	837	1 & 3
S06 sat	20.00	5848	9065	9065	9065	703	703	703	703	1 & 3
E06 sun	11.20	7409	8083	8083	8083	829	829	829	829	2
E06 sun	12.20	6793	7363	7363	7363	829	829	829	829	2

NH = Not heard

R = repeat if there is a message on Saturday

## E07 Regular Schedules

## Monday

[illegible]

## Tuesday

[illegible]

## Wednesday

[illegible]

## 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. 6774 5836 4893 = 788

*Revised 3<sup>rd</sup> November 2010*

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...	Jul kHz, ID, ...	Aug kHz, ID, ...	General Remarks
x							0450		E11	03	10800 416/00	10800 416/00	10800 416/00	10800 416/00	since 02/10, last log 06/11
x		x					0645		E11	03	13424 517/00	13424 517/00	13424 517/00	13424 517/00	since 07/09, last log 06/11
x			x				0710		E11	03	14753 633/00	14753 633/00	14753 633/00	14753 633/00	since 02/11, last log 06/11
x		x					0820		E11	03	ex 5737 438/00, search	ex 5737 438/00, search	ex 5737 438/00, search	ex 5737 438/00, search	since 10/09, last log 04/11
x			x				0830		E11	03	12924 649/00	12924 649/00	12924 649/00	12924 649/00	since 01/10, last log 06/11
x	x						0900		E11	03	13427 534/00	13427 534/00	13427 534/00	13427 534/00	since 10/09, last log 06/11
		x		x			0900		E11	03	4909 248/00	4909 248/00	4909 248/00	4909 248/00	since 02/10, last log 06/11
	x			x			0915		S11A	03	8530 484/00	8530 484/00	8530 484/00	8530 484/00	since 01/10, last log 06/11
	x						0930		E11	03	10210 270/00	10210 270/00	10210 270/00	10210 270/00	since 02/10, last log 06/11
x			x				0940		G11	03	6986 275/00	6986 275/00	6986 275/00	6986 275/00	since 01/10, last log 06/11
x			x				1015		S11A	03	16530 475/00	16530 475/00	16530 475/00	16530 475/00	since 04/10, last log 06/11
	x			x			1020		S11A	03	11581 426/00	11581 426/00	11581 426/00	11581 426/00	since 02/10, last log 06/11
	x			x			1020		S11A	03	5815 221/00	5815 221/00	5815 221/00	5815 221/00	since 01/09, last log 06/11
	x	x					1045		E11	03	9610 469/00	9610 469/00	9610 469/00	9610 469/00	since 03/10, last log 05/11
x					x		1050		E11	03	3815 127/00	3815 127/00	3815 127/00	3815 127/00	since 01/10, last log 06/11
	x	x	x				1115		M03	03	7837 272/00 (Tue) & 650/00 (Wed/Thu	7837 272/00 (Tue) & 650/00 (Wed/Thu	7837 272/00 (Tue) & 650/00 (Wed/Thu	7837 272/00 (Tue) & 650/00 (Wed/Thu	since 10/09, last log 05/11
	x				x		1135/1140		M03	03	6524 786/00	6524 786/00	6524 786/00	6524 786/00	since 02/10, last log 06/11
x					x		1240		E11	03	6252 349/00	6252 349/00	6252 349/00	6252 349/00	since 08/09, last log 06/11
			x		x		1320		M03	03	7837 437/00	7837 437/00	7837 437/00	7837 437/00	since 02/11, last log 06/11
			x	x			1325		G11	03	5815 299/00	5815 299/00	5815 299/00	5815 299/00	since 03/10, last log 06/11
x					x		1355		S11A	03	4909 254/00	4909 254/00	4909 254/00	4909 254/00	since 01/11, last log 06/11
	x				x		1445		E11	03	4909 267/00	4909 267/00	4909 267/00	4909 267/00	since 01/10, last log 06/11
x					x		1540		E11	03	16335 228/00	16335 228/00	16335 228/00	16335 228/00	since 03/11, last log 05/11
			x				1730		E11	03	8088 416/00	8088 416/00	8088 416/00	8088 416/00	since 03/10, last log 06/11
	x				x		1755		G11	03	5815 270/00	5815 270/00	5815 270/00	5815 270/00	since 02/10, last log 06/11
				x	x		2000		G11	03	3815 262/00	3815 262/00	3815 262/00	3815 262/00	since 01/11, last log 06/11

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...	Jul kHz, ID, ...	Aug kHz, ID, ...	General Remarks
x							0800		G06	01A	6948 215	6948 215	6948 215	6948 215	since 07/10, <b>last log 06/11</b>
	x						1200		G06	01A	439, search	439, search	439, search	439, search	since 01/11, <b>last log 04/11</b> yearly changing id
	x						1300		G06	01A	439, search	439, search	439, search	439, search	since 04/09, last log 01/11 yearly changing id
x							1700		G06	01A	<b>5427</b> <b>892</b>	<b>5427</b> <b>892</b>	<b>5427</b> <b>892</b>	<b>5427</b> <b>892</b>	since 04/10, <b>last log 06/11</b> yearly changing id
x							1800		G06	01A	<b>4958</b> <b>439</b>	<b>4958</b> <b>439</b>	<b>4958</b> <b>439</b>	<b>4958</b> <b>439</b>	since 05/09, <b>last log 06/11</b> yearly changing id
			x				1830	2/4	G06	01A	6887 842	6887 842	6887 842	6887 842	since 05/01, <b>last log 05/11</b>
				x			1930	2/4	G06	01A	5943 218	5943 218	5943 218	5943 218	since 04/01, <b>last log 05/11</b> rpt of Thu 1830Z

## S06s schedule - amended 7th May 2011

Day	time (utc)	jan feb nov dec	mar apr sep oct	may jun jul aug	ID	
mon	12.00	8420	9145	10230	831	1 hour later Nov to March
mon	12.10	10635	11460	12165	831	
mon	16.00	7436	8040	9256	176	
mon	16.10	6668	6830	7889	176	
tue	06.00		14080	16735	438	
tue	06.10		12355	15230	438	
tue	07.00	5250	5760	5430	374	
tue	07.15	6320	6930	6780	374	
tue	08.00	5810	7320	7245	418	
tue	08.10	7440	9840	9670	418	
tue	08.00	10265	11635	14373	352	
tue	08.10	9135	10420	12935	352	
tue	12.30	5810	4 mhz?	7650	278	
tue	12.40	6770	5805		278	
tue	15.00	5070	6464	6666	537	
tue	15.10	6337	7242	7744	537	
wed	05.30	9435	10835	11435	153	
wed	05.40	11075	12170	12650	153	
wed	07.30	7335	7335	7335	745	1 hour later Nov to April
wed	07.40	11830	11830	11830	745	
wed	08.20	6880	7605	6755	471	
wed	08.30	7840	9255	5835	471	
wed	08.40	9260	9480	10120	328	
wed	08.50	11415	11040	9670	328	
wed	10.00	12365	13365	14580	729	
wed	10.10	14280	14505	16020	729	
wed	12.00	7030	7120	7765	481	
wed	12.10	6305	6415	6815	481	
wed	12.30	4580	7620	7545	967	
wed	12.40	6420	8105	8220	967	
wed	19.00	8530	9220	10170	371	
wed	19.10	7520	8270	9110	371	
thu E17z	08.00	11170	14260	16780	674	
thu E17z	08.10	9820	12930	12850	674	
thu	09.00	12952	12952	12952	167	
thu	09.10	13565	13565	13565	167	
thu	12.00	10580/12155	12560	12155	425	
thu	12.10	9950/10920	13065	14535	425	
thu	12.30	7865	8650	9255	314	
thu	12.40	5310	7385	7630	314	
thu	14.00	5320	5320	5320	624	
thu	14.10	4845	4845	4845	624	
fri	06.00	5460	6340	8340	934	
fri	06.10	7070	5470	5810	934	
fri	06.00	7150	7795	7845	196	1 hour later Oct to March
fri	06.10	8215	8695	9125	196	
fri	09.30	11780	12140	10290	516	
fri	09.40	12570	13515	9655	516	
sat	12.00	?	10350	12460	254	Only week 1
sat	12.10	8260	?		254	

Current Cuban Skeds Heard From 0000-0700 UTC  
This covers 1900-0200 local EDT in the USA  
(May-June 2011)

SUN	0000	0100	0200	0300	0400	0500	0600	0700
							9063(SK)0642	5883(P)
						5898(P)	5800(S)	

MON	0000	0100	0200	0300	0400	0500	0600	0700
				4174(?)	4035(?)	13380(SK)	11435(SK)	5883(P)
				6855(P)	6768(S)	12180(SK)(?)	11532(SK)(?)	
					5117()			
						5898(P)	5800(S)	

TUE	0000	0100	0200	0300	0400	0500	0600	0700
					6768()	12120(SK)	9124(SK)0600	5883(P)
					5117()	13380(SK)	9063(SK)0630	
						8009(P)(?)	8009(S)(?)	

						5898(P)	5800(S)	
--	--	--	--	--	--	---------	---------	--

WED	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)
--	--	--	--	--	--	------------	------------	---------

THUR	0000	0100	0200	0300	0400	0500	0600	0700
						13380(SK)		5883(P)
						12120(SK)		

				8009(P)	8009(S)			
		9620()		10445(P)	11565(S)	5898(P)	5800(S)	

FRI	0000	0100	0200	0300	0400	0500	0600	0700
		4028(P)	5417(S)			12120(SK)	11435(SK)	5883(P)
						13380(SK)	11532(SK)	
						5898(P)	5800(S)	

								9153(P)
--	--	--	--	--	--	--	--	---------

SAT	0000	0100	0200	0300	0400	0500	0600	0700
		4028(P)	5417(S)	6855()			11435(SK)	5883(P)
		5135(S)					11532(SK)	
		6768()				5898(P)	5800(S)	

New possible skeds found:

SK01	SUN	0642z	9063m	DJ	
			(Probably earlier)		
V02a	MON	0400z	5117m	GIL	
SK01	TUE	0600z	9124z		Jon-FL
SK01	TUE	0630z	9063m	Jon-FL	
M08a	THU	0200z	9620m	rtsanch	
M08a	THU	0300z	8009m	DJ	
M08a	THU	0400z	8009m	DJ	

Thanks

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

SUN	0800	0900	1000	1100	1200	1300	1400	1500
	5898(S)							
		10432(P)	9112(S)	4478()				

MON	0800	0900	1000	1100	1200	1300	1400	1500
	5898(S)							
	8186(SK)	9063(SK)						
						8096(P)(?)	8096(S)(?)	
						12116(P)	12134(S)	

TUE	0800	0900	1000	1100	1200	1300	1400	1500
	5898(S)		8186(SK)1000					
	8180(SK)	8180(SK)	7890(SK)1030					
		5947(SK)0900(?)						
		5930(SK)0930(?)						

WED	0800	0900	1000	1100	1200	1300	1400	1500
	5800(SK)	9040(P)	9240(S)					
	8186(SK)	9063(SK)						
	9063(S)	9153()				10714(P)	10857(S)	

THUR	0800	0900	1000	1100	1200	1300	1400	1500
	5898(S)		8186(SK)1000					
	8180(SK)	8180(SK)	7890(SK)1030					
		5947(SK)0900(?)						
		5930(SK)0930(?)				12116(P)	12134(S)	

FRI	0800	0900	1000	1100	1200	1300	1400	1500
	5898(S)							
						8096(P)(?)	8096(S)(?)	
						12214(P)	13374(S)	

SAT	0800	0900	1000	1100	1200	1300	1400	1500
	5898(S)	9040(P)	9240(S)					
	8186(SK)	9063(SK)						
		5947(SK)0900(?)						
		5930(SK)0930(?)						
				4478()				

New skeds found:

M08a                      SUN                      1100z                      4478z                      DJ  
M08a                      WED                      0900z                      9153z                      DJ

Thanks

**Current Cuban Skeds Heard From 1600-2300 UTC**  
**This covers 1100-1800 local EDT in the USA**  
**(May-June 2010)**

SUN	1600	1700	1800	1900	2000	2100	2200	2300

MON	1600	1700	1800	1900	2000	2100	2200	2300
	6768(SK)(?)							
				6785(P)	7554(S)		7519(P)	8009(S)
			8097(P)	8097(S)				

TUE	1600	1700	1800	1900	2000	2100	2200	2300
	6768(SK)(?)			12180(P)	13380(S)			
				6785(P)	7554(S)		7526(P)	8135(S)

WED	1600	1700	1800	1900	2000	2100	2200	2300
	6768(SK)(?)							
					12180()			
				6785(P)	7554(S)		7519(P)	8009(S)
			8097(P)	8097(S)		6932(P)	6854(S)	

THUR	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)	

FRI	1600	1700	1800	1900	2000	2100	2200	2300
	6768(SK)(?)							
				6785(P)	7554(S)		7519(P)	8135(S)
			8097(P)	8097(S)				

SAT	1600	1700	1800	1900	2000	2100	2200	2300
			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.

**New skeds noted:**

M08a

WED

2000z

12180m

Kd4kym

--Updated June 30, 2011--

**Cuban Desk Contributors:**

Barry\_BS3 (Tennessee, USA)

Jon-FL (Florida, USA)

West1us (Florida, USA)

Rich Ray

rtsanch

“dj” westli1 (California, USA)

MS (Michigan, USA)

Kd4kym (South Carolina, USA)

gilbertovernamas

**XPA Polytones**

**May2011**

XPA b [MFSK-20 Russian Intelligence Multitone System] 10 bd

1.0440z 9287kHz 2. 0500z 10487kHz 0520z 11487kHz  
ID244 Mode: USB [Tue/Thu]

**ID/msg/serial no/gc/dk/end grp**

03Tue	244 2 06848 00223 68679 73267 00000 00000 00986 00309 71167 72465	[7m57s]
05Thu	244 2 00605 00213 29227 37645 00000 00000 06848 00223 68679 73267	[6m57s]
10Tue	244 2 00242 00263 12733 26412 00000 00000 00605 00213 29227 37645	[7m 23s]
12Thu	244 2 00593 00279 77896 nnnnn 00000 00000 00242 00263 12733 26412	[8m04s]
17Tue	244 2 00935 00165 23757 00022 00000 00000 00593 00279 77896 74365	[7m05s]
19Thu	244 1 00775 00185 14013 03664	[4m19s]
24Tue	244 2 08317 00315 03067 60503 00000 00000 00775 00185 14013 03664	[7m35s]
26Thu	244 2 08317 00315 03067 60503	[5m39s]
31Tue	244 1 00345 00249 96773 72615	[4m57s]

**XPA b: Early Morning Schedule**

Continuing with a majority of two message format sendings strength was excellent from initial sending to the last.

XPA d [MFSK-20 Russian Intelligence Multitone System] 10 bd

1. 1400z: 11567kHz 2. 1420z: 10867kHz 3. 1440z: 9967kHz  
ID589 Mode: USB [Sun/Tue]

**ID/msg/serial no/gc/dk/end grp**

01Sun	589 000 09573 00001 00000 10140	[2m26s]
03Tue	589 000 09051 00001 00000 10140	[2m26s]
08Sun	589 000 09651 00001 00000 10140	[2m26s]
10Tue	589 000 09651 00001 00000 10140	[2m26s]
15Sun	589 1 00571 00119 20168 16037	[3m35s]
17Tue	589 1 00571 00119 20168 16037	[3m35s]
22Sun	589 000 09573 00001 00000 10140	[2m26s]
24Tue	589 000 09651 00001 00000 10140	[2m26s]
29Sun	589 000 09573 00001 00000 10140	[2m26s]
31Tue	589 000 09651 00001 00000 10140	[2m26s]

**XPA d: 1400z Afternoon schedule**

Just two messages sent in this schedule with poor strengths across the schedule.

XPA e [MFSK-20 Russian Intelligence Multitone System] 10 bd  
**[Schedule A]**

1. 1730z 10438kHz 2. 1750z: 9938kHz 3. 1810z: 9138kHz  
ID491 Mode: USB [Tue/Thu]

**ID/msg/serial no/gc/dk/end grp**

03Tue	491 1 00760 00125 50493 20024	[3m42s]
05Thu	491 1 00760 00125 50493 20024	[3m42s]
10Tue	491 1 00689 00231 33263 23055	[4m48s]
12Thu	491 1 00689 00231 33263 23055	[4m48s]
17Tue	491 1 00170 00247 15949 46345	[4m54s]
19Thu	491 1 00170 00247 15949 46345	[4m54s]
24Tue	491 1 00341 00179 98315 11345	[4m14s]
26Thu	491 1 00341 00179 98315 11345	[4m14s]
31Tue	491 1 00879 00199 79584 22614	[4m28s]

**XPA e: 1730z Evening schedule**

Whilst messages easily picked at the strengths for tis schedule were very variable, from strong to fair[in the main] and weak.

June 2011

XPA b [MFSK-20 Russian Intelligence Multitone System] 10 bd

1.0440z 10173kHz 2. 0500z 11073kHz 0520z 12173kHz  
ID101 Mode: USB [Tue/Thu]

**ID/msg/serial no/gc/dk/end grp**

02Thu	101 1 00908 00197 56337 05511	[4m28s]
07Tue	101 1 00900 00239 25687 34326	[4m53s]
09Thu	101 2 00857 00097 93286 47426 00000 00000 00900 00239 25687 34326	[5m56s]
14Tue	101 1 00857 00097 93286 47426	[2m41s]
16Thu	101 1 05792 00203 31655 22230	[4m32s]
21Tue	101 2 00438 00165 33669 75757 00000 00000 05792 00203 31655 22230	[6m16s]
23Thu	101 1 00438 00165 33669 75757	[4m07s]
28Tue	101 1 02904 00201 71527 05013	[4m30s]
30Thu	101 1 02904 00201 71527 05013	[4m30s]

XPA b: Early Morning Schedule

Strong signals across the entire schedule,

XPA [MFSK-20 Russian Intelligence Multitone System] 10 bd

1. 1400z: 12167kHz 2. 1420z: 11067kHz 3. 1440z: 10267kHz  
ID102 Mode: USB [Sun/Tue]

**ID/msg/serial no/gc/dk/end grp**

05Sun	102 1 00470 00071 15724 61221	[3m12s]
07Tue	102 1 00470 00071 15724 61221	[3m12s]
12Sun	102 000 09653 00001 00000 10140	[2m26s]
14Tue	102 000 03579 00001 00000 10140	[2m26s]
19Sun	102 1 02987 00107 11467 03754	[3m30s]
21Tue	102 1 02987 00107 11467 03754	[3m30s]
26Sun	102 000 09653 00001 00000 10140	[2m26s]
28Tue	102 000 08465 00001 00000 10140 <sup>A</sup>	[2m26s]

<sup>A</sup> Unsure of numerals due to very poor condx.

XPA d: 1400z Afternoon schedule

Variable strengths with some QRM and QSB mostly seen.

XPA [MFSK-20 Russian Intelligence Multitone System] 10 bd

1730z 10438kHz 2. 1750z: 9938kHz 3. 1810z: 9138kHz  
ID491 Mode: USB [Tue/Thu]

**ID/msg/serial no/gc/dk/end grp**

02Thu	491 1 00879 00199 79584 22614	[4m28s]
07Tue	491 1 00958 00220 25536 71113	[3m46s]
09Thu	491 1 00958 00220 25536 71113	[3m46s]
14Tue	491 1 00544 00161 71206 57632 <sup>B</sup>	[4m05s]
16Thu	491 1 00544 00161 71206 57632	[4m05s]
21Tue	491 1 00471 00179 54089 41017	[4m16s]
23Thu	491 1 00471 00179 54089 41017	[4m16s]
28Tue	491 1 00174 00219 21065 35674	[4m38s]
30Thu	491 1 00174 00219 21065 35674	[4m38s]

<sup>B</sup> Unsure of numerals due to very poor condx.

XPA e: 1730z Evening schedule

Received strengths were variable from very poor to poor, very weak to weak, particularly on 9938kHz 1750z, with two occasions when sigs were barely detectable.

**Operation Jallaa:** 0

**‘E’** Thanks for input

<http://groups.yahoo.com/group/enigma2000>

<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/>

<http://www.eyespymag.com>

2011											
January						February					
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th
						1			1	2	3
2	3	4	5	6	7	8	6	7	8	9	10
9	10	11	12	13	14	15	13	14	15	16	17
16	17	18	19	20	21	22	20	21	22	23	24
23	24	25	26	27	28	29	27	28			
30	31										
April						May					
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th
						1	1	2	3	4	5
3	4	5	6	7	8	9	8	9	10	11	12
10	11	12	13	14	15	16	15	16	17	18	19
17	18	19	20	21	22	23	22	23	24	25	26
24	25	26	27	28	29	30	29	30	31		
July						August					
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th
						1	1	2	3	4	5
3	4	5	6	7	8	9	7	8	9	10	11
10	11	12	13	14	15	16	14	15	16	17	18
17	18	19	20	21	22	23	21	22	23	24	25
24	25	26	27	28	29	30	28	29	30	31	
31											
October						November					
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th
						1			1	2	3
2	3	4	5	6	7	8	6	7	8	9	10
9	10	11	12	13	14	15	13	14	15	16	17
16	17	18	19	20	21	22	20	21	22	23	24
23	24	25	26	27	28	29	27	28	29	30	
30	31										
March						June					
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th
						1			1	2	3
6	7	8	9	10	11	12	5	6	7	8	9
13	14	15	16	17	18	19	12	13	14	15	16
20	21	22	23	24	25	26	19	20	21	22	23
27	28	29	30	31			26	27	28	29	30
September						December					
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th
						1			1	2	3
4	5	6	7	8	9	10	4	5	6	7	8
11	12	13	14	15	16	17	11	12	13	14	15
18	19	20	21	22	23	24	18	19	20	21	22
25	26	27	28	29	30		25	26	27	28	29