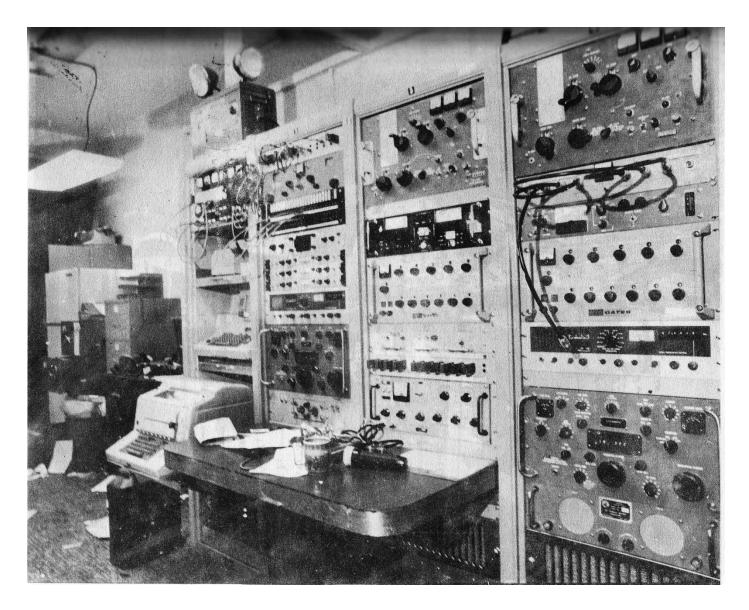
# ENIGMA 2000 NEWSLETTER



http://www.enigma2000.org.uk





Communication room, US Embassy, Iran November 1979

ISSUE 82 May 2014

http://www.enigma2000.org.uk

As older members will be aware there have been the usual trappings of the Cold War as the situation in Ukraine hots up. Apart from the usual military posturing with exercises, movements of men and materiel and the various threats between nations the public have been treated to ad hoc news casts putting the Russians in a bad light. The international radio stations, sadly not Radio Moscow via SW with its 240kW transmissions and lots of the Volga Boatmen being played but streams from the internet is also heard to take a gentle poke at either side.

One interesting news cast on 23rd April covered the interception of a Russian Bear. Adequately covered in the Evening Standard Newspaper it read:

RAF scrambles Typhoon aircraft after Russian planes fly too close to UK airspace

Ryan Hooper

24 April 2014

http://www.standard.co.uk/news/uk/raf-scrambles-typhoon-aircraft-after-russian-planes-fly-too-close-to-uk-airspace-9279532.html

British military aircraft were scrambled to investigate Russian planes which flew close to UK airspace, it has been revealed.

Ministry of Defence officials said Typhoon aircraft were dispatched from Scottish base RAF Leuchars after the Russian presence was detected.

A defence spokesman said: "Typhoon quick reaction alert aircraft were launched today from RAF Leuchars to determine the identity of unknown aircraft that approached the Nato air policing area north of Scotland and could not be identified by other means.

"The aircraft were subsequently identified as Russian military aircraft. The Russian military aircraft remained in international airspace at all times as they are perfectly entitled to do so.

"Russian military flights have never entered UK sovereign airspace without authorisation."

Similar incidents happened eight times during 2013, an MoD spokesman said.

Yesterday's operation comes after the MoD sanctioned a naval vessel to intercept a Russian ship as it came close to UK waters last week.

A defence spokesman confirmed that as part of separate and routine activity, HMS Dragon, the Royal Navy's fleet-ready escort, sailed from Portsmouth on Good Friday to meet up with a Russian ship, the Vice Admiral Kulakov, which is transiting past the UK.

The spokesman said: "In what is a well established and standard response, the powerful Royal Navy Type 45 destroyer met its Russian counterpart and is now keeping an eye on its transit south."

Defence Secretary Philip Hammond said the operations should not raise alarm.

He said: "Recent events have increased awareness of Russian military activity, but we have always routinely intercepted, identified and escorted Russian air and naval assets that transit international airspace and waters within the UK's 'area of interest'.

"The Royal Navy and Royal Air Force will remain alert and ready to intercept any non-Nato forces in the area."

http://www.standard.co.uk/news/uk/raf-scrambles-typhoon-aircraft-after-russian-planes-fly-too-close-to-uk-airspace-9279532.html

The aircraft were Tupolev 95s and the interception differed only from those of the Cold War when English Electric Lightning's flew instead of the Typhoon. [See <a href="http://www.dailymail.co.uk/news/article-2611419/RAF-Typhoon-scrambled-two-Russian-planes-stray-UK-airspace-today.html">http://www.dailymail.co.uk/news/article-2611419/RAF-Typhoon-scrambled-two-Russian-planes-stray-UK-airspace-today.html</a> ]

However, none of this is new, but from the radio monitors view other things are occurring; many have commented on the increase of 'MainSail' and 'EAM' messages from the US whilst the increase in Russian military transmissions has also been noted. Radio posturing! From ENIGMA2000 interest there's also the variant number stations that seem to be appearing, usually around 10250kHz to no particular schedule and feasibly testing.

We have seen these variants from March: M912b, M912c, E907b, S906g. The use of the 9 indicates the stations are under evaluation before consideration of their viability.

Then we have DP01 of which a full description will follow. It is not new, first discovered in 2008, and pops up from time to time.

The brief descriptions of the variants considered to have something common with the Ukraine appears on our website; for readers' convenience we state them here:

M912b - Assigned 13 Mar 2014 (Station under investigation)

Temporary holding ID for Morse variant of M12.

First heard Wed 05 Mar & confirmed Wed 12 Mar on 10250kHz at 1928z.

Morse equivalent of E907b heard operating on the same freq.

Format as M12 with additional 3 fig grp in call-up e.g. 223 223 223 1 656

M912c - Assigned 14 Mar 2014 (Station under investigation)

Temporary holding ID for Morse variant of M12.

First heard Thu 13 Mar on 10250kHz at 2043z.

Format as M12 but uses single figure call-up e.g. 1 (R2m)

E907b - Assigned 06 Mar 2014 (Station under investigation)

Temporary holding ID for voice variant belonging to Family I.

First heard Wed 05 Mar on 10250kHz. Possibly related to Russia / Ukraine confllict.

Format as E07 with additional 3 fig grp in call-up e.g. 123 123 123 1 334

Voice similar - but not the same as E06. Msg uses single 5 fig grps. Ends 000 000

S906g - Assigned 02 Apr 2014 (Station under investigation)

Temporary holding ID for voice variant of S06.

First heard Sun 02 Mar on 11073kHz.

Format as S06 with additional 5 fig grp in header e.g. 352 352 352 63524 719 40

Uses S06 voice.

DP01 follows, then M912b/c

## DP01 Digital Pseudo-polytone: Russian Intelligence n x PSK hybrid

This 'new' signal reported over the 9/10/11<sup>th</sup> April 2014 goes back to 2008 and first noticed by Lief D. This fact was noted, along with an accurate description in Digital, Incursions and Unexplained Signals in En70 on Page 62. That section has been repeated again given its relevance and the circumstances it appears under.

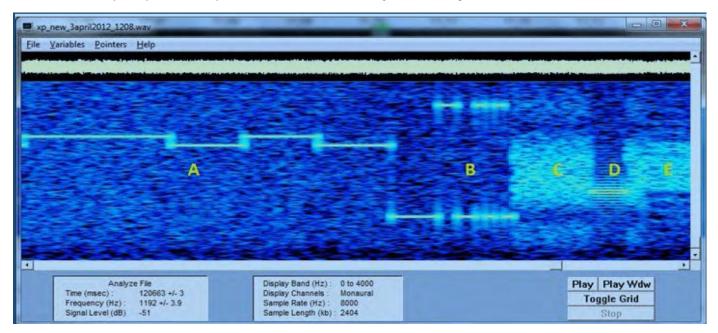
#### From En70; P62

This month has brought with it an interesting data signal which was monitored and logged by a number of E2K members. The signal was first spotted by RNGB on April 3rd and appeared to be sent every 5 minutes starting perhaps at 1100 (no logs were sent to the group for this station any earlier than that) and continuing until at least 1800 daily using 36 frequencies.

There were however some changes or mistakes in its operating procedure. For instance on the first day it was spotted and an alert went out to the group I found the station using 14735 kHz (USB mode) sending a transmission every 10 minutes.

Group member Spectre monitored on 10th April and saw a number of odd transmissions where the synchronization sequence was transmitted but no data, where the data transmission appeared to end early or where what appeared to be an incorrect frequency was used (19348 kHz rather than the expected 19438 kHz).

Then almost as suddenly as they had started they ended with the last transmission being noted on 10th April 2012.



The signals themselves were some of the most technically complex I have come across with each transmission containing several different modulation methods. Each transmission would begin with just over 120 seconds of alternating 1900 Hz and 1800 Hz tones presumably for synchronization and making this station appear to be variant of the XP transmissions monitored by the group (labelled A in the diagram above).

There then followed a brief burst of FSK (frequency shift keying) which I have labelled B followed by a burst of BPSK (Binary Phase Shift Keying) sending data at 500 baud (labelled C), next very short burst of BPSK sending data at 31.25 baud followed by the main body of the data for the next 24 seconds. This main body of data appears to have been sent contained in a varying number of carriers each of which used PSK (Phase Shift Keying).

The transmission would then end with a repeat of the same bust of FSK which started it.

Leif D the group's data expert soon became involved and informed us that the signal is classified by his website as a Russian Intelligence n x PSK hybrid. It was first spotted in 2008 and has appeared in connection with XP type signals.

The question is of course what was the purpose of these signals and there was some speculation that they were a replacement for one of the Family 1B transmissions. It seems to me that possible reasons include ..

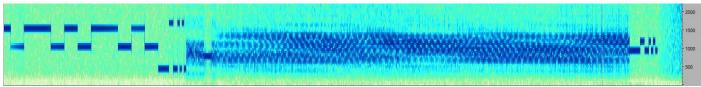
- 1) This was a test. Embassies or agents have been issued with decoder hardware and software but before it comes into general use a field test was needed. If this is the case and the test was a success expect to see more of this mode in the coming months.
- 2) The signal was there to support a short term operation or training exercise (either espionage related or Special Forces). Once this was over the transmission ceased.
- 3) This transmission type was being tested by one of the Russian armed forces. Its regular schedule is similar to the regular transmissions sent by other known broadcasts by the various different Russian armed forces.

So now we need to wait and see what happens. If one of our regular transmissions of interest vanishes and this transmission reappears with a regular schedule then this was just a test. If on the other hand we see this signal reappear from time to time for a week or so then we are seeing an exercise or special operation."

In conversation with Ian he again mentioned the reason that may surround the appearance of the mode as "The Russians seem to pull it out of storage once a year and give it a blast which is what I suspect we are seeing here. When we see a regular schedule for this mode as we do with XPA,XPA2,FSK200/500 and FSK200/1000 then I would worry about it but until then its just another HF oddity.

In my original offering I gave an explanation as to why the new ID: "Initially polytone systems came to notice late 1995, early 1996. Those catalogued within the ENIGMA Control List [ECL] are XP, XPH, XPM and the current XPA and XPA2.

Also included in the ECL is XPL whose tones appear to be harmonically generated. Whilst the tone pairs have been identified the station is not understood, has only been observed three times and may be the product of OTHR. For this reason XPL has no part in the understanding of DP01, its waveforms being radically different.



Sample measurements made from this signal from BR

The two minute lead in consists of a pulse train of two square waves of different duration lasting 2s. 1544[L]1045[S]1544[S]1045[S]

A separator character consisting of six rather than the seven tones as seen in the generic polytones leads into a short pulse train via a 445Hz space. This separator character, starting high, is formed with 1544[L] 1045[S] 1544[S] 1045[S] each separated by a 445Hz space that mirrors the duration of the mark.

This leads onto a data train, possibly containing an ident, serial number and message count followed by nine very short pulses of a 770Hz tone that leads to another data train, of varying length where it can be assumed the message proper is encoded.

The transmission ends with a long pulse train made up of three square waves to which a long tone [945Hz] leads in. The M/S is as follows 1195[L] 945[L] 1195[S] 945[S] 1195[S] 945[S].

That this has been seen with some repetition around ~10250kHz since the activities surrounding Ukraine and on the same frequencies used by M12 tests and full transmissions as well as short message XPA2 suggesting Number Station usage, although we can never be sure.

This may be an attempt to overwhelm SIGINT attempts by those not seen as friendly to Russian activities around Ukraine/Crimea whilst other communications are used elsewhere but like the question of number station usage we cannot be sure.

It's notable that it's been heard on the same dates, a year later.

Thanks to BR, IW and AB for their valid input on current DP01 transmissions, for RNGB for his input 3<sup>rd</sup> April 2012 and for Leif's invaluable input from 2008.

Paul Beaumont 12/04/2014

#### Changes to M901b / M901c Temporary Designations

M912b - Assigned 13 Mar 2014 - Redefined 20 Apr 2014 (Station under investigation)

Temporary holding ID for Morse variants of M12 on or around 10250kHz. First heard Wed 05 Mar with various variants heard since. Morse equivalent of E907b heard operating on the same freq. Formats: Various, as M12 with changes to call-ups & no known scheds.

Type 1 - Additional 3 fig grp in header (e.g. 223 223 223 1656)

Type 2 - Single fig call-up (e.g. 1 1 1)

Type 3 - 3-fig counting grps as call-up

Type 4 - Triplet group as call-up (e.g. 333 333 333 1)

#### M912c - Assigned 14 Mar 2014 - WITHDRAWN 20 April 2014

This variant has been incorporated into the M912b assignment, which has been changed to include all M12 type variants heard on or around 10250kHz

# New Format M12 Transmissions (M912b)

On Wednesday 05 March there was a lot of numbers activity logged on 10250kHz during the afternoon & evening, with transmissions being sent in various modes, but all appearing to be part of the Russian group, or Family I, as designated in the Control List.

One of these transmissions was in CW which Richard (RNGB) managed to catch in progress, ending at 1935z & from the msg and ending was identified by Richard as M12. Given the flurry of activity that day, most probably the result of the Russian / Ukraine situation, we didn't know if the station was likely to repeat, but it did reappear on Wed 12 March and we were able to log the full set of transmissions.

#### **More M12 Variants**

Following these transmissions, a series of further msgs were intercepted over the following weeks, none of which fitted into any kind of routine schedule that we could ascertain. It did show that the transmissions were not a one-off event and that the series was ongoing.

The format of the msgs, while essentially fitting the M12 pattern, were sent using unusual call-up or ID sequences, & varied not only from the standard M12 format but also from that of the first set of transmissions received.

The formats of the msgs can be broken down into four types;

- Type 1 As M12 call-up but containing an additional 3 figure group in the call-up (e.g. 223 223 223 1 656)
- **Type 2** Use of a single figure call-up. (e.g. 1 1 1) Only one example of this type has been logged using the fig 1. Could either be a single ID, or a variation of a standard call-up missing the ID, with the 1 indicating 1 msg.
- Type 3 3 fig counting groups. Uses a 3 fig counting grp as an ID, often with a further 3 fig grp in place of the decode key. (e.g. 123 123 123)
- Type 4 Triplet groups. Uses a 3 fig triplet group as call-up. Various figs heard. (e.g. 333 333 333 )

The Type 2 variant, using 1 as a call-up, was originally assigned a temporary ENIGMA identifier of M912c, but as only one example of this type has been logged, & as further variants appeared, it was decided to group all variants under the single M912b identifier.

#### Frequency Use

All the variants have been centred around the central freq of 10250kHz, as are the voice variants from the same family, E907b. Where there have been repeats of the messages, sent approximately ten minutes apart from each other, they have used one of the following three sequences;

10250kHz	10250kHz	10250kHz
10250kHz	1025 <b>6</b> kHz	10250kHz
10250kHz	10250kHz	

We did receive a log of a further Type 3 transmission on 9443 kHz but we have been unable to confirm or verify this.

#### Conclusions

It is impossible to say with any certainty why these variants, both Morse and voice, have suddenly appeared. However, we can make the reasonable assumption that the sudden activity, using variants of existing stations believed to be of Russian origin is linked to the Russian / Ukraine conflict & the operation to return Crimea to Russian control.

We are of the opinion that many of the transmissions - certainly the early ones, were setting-up & test transmissions based on the fact that some messages were incomplete or part repeated, also that the same Decode Keys - often sequential numbers, were used on various messages.

How much of the traffic sent was for test, diversionary or 'noise' purposes & how much - if any - was genuine operational traffic, we will most likely never know.

#### **Logs & Further Analysis**

#### **Type 1** Additional 3 fig grp in the call-up

The format used was the Morse equivalent to the newly designated E907b, also transmitted on the same freq on Wed 05 March. With the exception of the call-up & the odd repeating of the last 13 grps on two of the transmissions, the format is the same as a standard M12 transmission.

Transmissions were 10 minutes apart - not standard for M12, but has been used on previous occasions, both with M12 & XPA2. Note too that the timing, usually exact to the second on M12 transmissions is not timed precisely to the H+30, 40, 50 minute slots.

10250	1928z	12 Mar	223 1 656 (2007 27)	37746 223 1 656 28621 (Rpt of last 13 grps)	BR/FN/JkC/RNGB	WED
10256	1939z	12 Mar	223 1 <b>656</b> (2007 27)	3774628621 000 000	JkC	WED
10250	19527	12 Mar	223 1 656 (2007 27)	37746 223 1 656 28621 (Rpt of last 13 grps)	BR/IkC	WED

Here is the full transcript of the transmissions;

```
10250kHz 1929kHz Wed 12 Mar14
223 223 223 1 656 (R2m)
2007 27 2007 27
37746 17851 08231 76084 30876
87364 31280 44636 31178 26153
40443 28867 24107 86235 28621
17083 15620 25646 54053 78100
53700 53232 47035 66884 28750
78072 15077
                  (pause)
223 223 223 1 656 (R1m)
28621 17083 15620 25646 54053
78100 53700 53232 47035 66884
28750 78072 15077 = =
000 000
                  Courtesy BR/JkC
```

```
10256kHz 1939kHz Wed 12 Mar14

223 223 223 1 656 (R2m)

2007 27 2007 27

37746 17851 08231 76084 30876

87364 31280 44636 31178 26153

40443 28867 24107 86235 28621

17083 15620 25646 54053 78100

53700 53232 47035 66884 28750

78072 15077 = =

000 000
```

```
10250kHz 1952kHz Wed 12 Mar14
223 223 223 1 656 (R2m)
2007 27 2007 27
37746 17851 08231 76084 30876
87364 31280 44636 31178 26153
40443 28867 24107 86235 28621
17083 15620 25646 54053 78100
53700 53232 47035 66884 28750
78072 15077
                  (pause)
223 223 223 1 656 (R1m)
28621 17083 15620 25646 54053
78100 53700 53232 47035 66884
28750 \ 78072 \ 15077 = =
000 000
                  Courtesy BR/JkC
```

Thanks to FN, JkC & RNGB for their logs and observations on these transmissions - Some excellent monitoring!

### Type 2 (Previously assigned as M912c) Single fig call-up

This particular variant used a single figure call-up, in this case the fig 1, repeated with 5 secs between figs repeated for two mins. No DK or GC was sent. After a short pause 25 very fast 5f fig single grps were sent – short 0 - Ends 000 000

Was the call-up indicating that there was 1 msg – an M12 call-up sent without using the 3 fig ID?

This whole thing repeated again at 2103z, but this time a DK and GC were sent, the msg started then stopped after three grps, the call-up of 1 started again and after 2 mins the full msg was sent - this time without the DK, GC.

Oddly there seemed to be two stations on the freq, one much weaker than the other and both were sending the same traffic but not simultaneously.

```
THU
10250
         2043z
                                    1 1 1 (R2m)
                                                                08032 ....LG 33251 000 000
                                                                                                              BR
                           13 Mar
10250
                                    1 1 1 (R2m) (9297 25)
         2103z
                           13 Mar
                                                                08032 05440 26346 (Ceased)
                                                                                                              RR
                                                                                                                                 THU
10250
                                    1 1 1 (R2m)
                                                                08032.... LG 33251 000 000
                                                                                                              BR
                                                                                                                                 THU
         2106z
                           13 Mar
```

```
10250kHz 2043z Thu 13 Mar14

1 1 1 (R2m)

08032 05440 26346 11427 56540 00223 77480 83213 47731 28348 84558 23531 83211 42336 67373 68126 05613 31706 47883 05626 05862 01621 31250 25067 33251 000 000

Courtesy BR
```

```
10250kHz 2103z Thu 13 Mar14

1 1 1 (R2m)

9297 25 9297 25

08032 05440 26346.. (Ceased)
```

102501	Hz 2106z Thu 13 Mar1	4
1 1 1	(R2m)	
08032	05440 26346 11427 565	40
00223	77480 83213 47731 283	48
84558	23531 83211 42336 673	73
68126	05613 31706 47883 056	26
05862	01621 31250 25067 332	51
000 00	00	
	Courtesy B	R

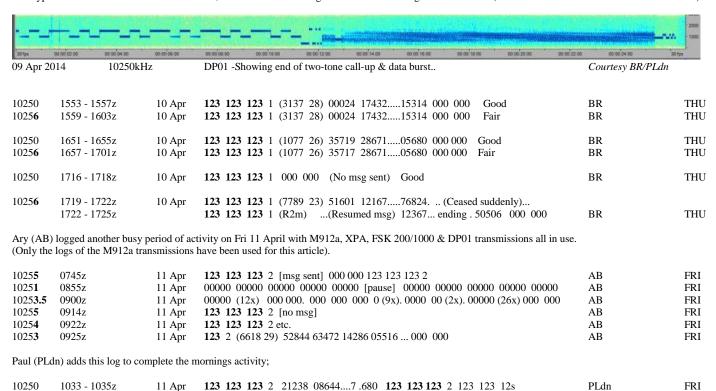
**Type 3** 3 fig counting group as ID

This has been the most used format of all the variants, & at the time of writing seems to be currently the only option in use. The use of successive number sequences in both the ID and Decode Key on the earlier msgs sent, (both speech & Morse), may well indicate that these were setting-up or test messages. Later msgs appear to use Decode Key sequences similar in construction to standard M12 transmissions, whilst still retaining the 123 call ID.

Courtesy BR

10250	1250 - 1254z	15 Mar	<b>123 123 123</b> 1 ( <b>456</b> 25) 1800534601 000 000 Strong	JkC	SAT
10250	0640z	18 Mar	<b>123 123 123</b> 1 ( <b>9876</b> 25) 6584654980 000 000	RNGB	TUE
10250	1613 (IP) - 1618z	03 Apr	<b>345 345 345</b> 1 (3 50) Fair	THU	BR
10250	1229 - 1233z 1348 - 1354z 1415 - 1419z	09 Apr 09 Apr 09 Apr	<b>123 123 123 1</b> (??? ??) Weak <b>123 123 123 1</b> (6622 50) 10682 5536137525 000 000 <b>123 123 123 1</b> (515 50) 00044 3800511021 000 000	BR BR BR	WED WED WED

This sequence of transmissions was followed by a data transmission at 1422z. A two-tone call-up was sent for two minutes, followed by 13 seconds of data. This type of transmission has been noted before, and has now been assigned an ENIGMA designation of DP01. (See elsewhere in this newsletter for full details).



Paul reports that the long zero was used at the start, but changed to the short zero partway through the msg. The last character of the final 123 was cut short.

Both Ary & Paul remarked on the difference in signal strength between some of the transmissions, the earlier transmissions being much stronger that those that followed, which would indicate a change in antenna bearing, or more likely that there were two or more stations involved it what appear to be test transmissions.

```
10250kHz 1250z 15 Mar 14

123 123 123 1 456 25 456 25

18005 61161 60719 42491 56148

76424 05814 86458 96844 83071

50322 10425 82226 49908 60414

94306 84028 29735 23219 47788

43829 39024 52892 19554 34601

000 000

Courtesy JkC
```

```
10250kHz 1651z 10 Apr 14

123 123 123 1 1077 26 1077 26

35719 28671 04644 67330 33024

86118 03822 10860 71035 63835

41511 47744 86712 65283 15127

23667 47744 86712 65283 15127

18608 54278 57773 77031 86285

05680 000 000

Courtesy BR
```

10251 1745 - 1750z 01 Apr 777 777 1 (313 50) 13126... ... 68576 000 000 Fair JkC TUE

The use of 333 as a triplet has also been reported, as has 444 for the E907b transmissions.

#### Partial Logs

10250 1525 (IP) - 1526z 17 Mar (In progress) ... 51519 000 Strong JkC MON

#### 'Russian Woodpecker' OTHR

Peter, PoSW advises us of another 'Cold War' occurrence that many reading this will have been too young to remember that of the 'Russian Woodpecker' OTHR whose pulse train wrecked just about every SW transmission that could be heard:

Very noticeable on the short wave bands is that old "Russian Woodpecker", thought to be a powerful over-the-horizon radar system to give advanced warning of an attack by inter-continental ballistic missiles, back in business after an absence of many years.

I first became aware of this in January and it is still around in April. It has been particularly strong in the afternoon and once found it can be tracked moving up in frequency in steps of a few hundred kilohertz - I have never found it moving down in frequency. It doesn't stay on one spot for long, always vanishes within thirty or forty seconds at the most when tuned in having moved up to the next frequency. I have had the opportunity to monitor it frequently over the last few weeks and the observations on the afternoon of Thursday 27-March are quite typical:-

1402 UTC, 14,625 kHz; 1404 UTC, 15,870 kHz, quite a large jump in frequency here, I suspect that the Russian Woodpecker deliberately avoids the broadcast bands as it appears to have bypassed 19 metres which is very busy at this time of day; 1407 UTC, 17,790 kHz; 1408 UTC, 18,800 kHz; 1409 UTC, 19,425 kHz; 1410 UTC, 19,810 kHz. At this point I lost track of the signal, but a few minutes later it was re-discovered on its way up again:- 1413 UTC, 16,200 kHz; 1415 UTC, 16,770 kHz....

The signal is several kHz wide, the frequencies shown roughly in the centre.

# Other Matters.

It has been pointed out over some time that very little has ever appeared in the British Media about Number Stations. Whether there's no apparent interest or the possibility of governmental intervention waving the big stick is a negative aspect to the media at large is unknown.

In the past ENIGMA2000 has been approached by a variety of persons claiming to be Journalists, the last being a French person who asked for a statement on Number Stations, was given one and then said 'so and so said this .. would you care to comment on that?' We don't do 'Dutch Auctions' and the woman was left wanting. Some members have also participated in TV productions none of which, sadly, went anywhere.

So, you can imagine the interest when BBC1 aired an appreciation, introduced by historian Ruth Goodman around 1836z on the One Show transmitted on 23<sup>rd</sup> April, 2014.

Ruth introduces the subject and is seen listening to a numbers station [which doesn't marry up with the freq of 7887kHz, an Ana Belen Montes scheduled freq] and simply askes the question. She also supplies the answer via Akin Fernandez who explained the use of a tuning signal, sadly using the now obsolete Swedish Rhapsody from his Conet Project, and then we see Ruth down a back alley somewhere brandishing a Sony 7600 and the HB-1A three band QRP Transceiver in an attempt to explain the ionosphere used for transmission and what sections of the HF spectrum Number Stations are transmitted in. [I think they went down there to receive live the afternoon E07a at 1610 and 1630z and were unlucky].

The piece was well done and much enhanced by Peter Matthews sitting in a café with two codebooks and explaining to Ruth how things work.

It was good visually and apparently accurate in the time allowed [4m37s]. The last time I saw such content was the piece by the late John Walters who interviewed the owners and founders of the original ENIGMA as well as a certain Government official who when asked about number stations coined the phrase 'They are what you suppose they are......'

The 'In Search of the Lincolnshire Poacher' presented by Simon Fanshawe wasn't a bad programme but was dated and then went from the sublime to the ridiculous and E07 was 'discovered.' Anyway, differents days, different times.

Anyone who missed the One Show offering might be able to catch it on BBC1 iPlayer; if not then ENIGMA2000 Member Dennis has done a real good job and linked to YouTube. [Thanks Dennis, excellent posting indeed]: <a href="https://www.youtube.com/watch?v=8K8t6tvc1lM">https://www.youtube.com/watch?v=8K8t6tvc1lM</a>

Thanks to Peter Matthews for representing us; his book SIGINT: The Secret History of Signals Intelligence in the World Wars is available in Hardback or electronically for Kindle use, obviously via Amazon.

On Tuesday 29<sup>th</sup> April I attended the Intelligence Writers' Book Awards where Peter's book was shortlisted; sadly Peter came joint second. Nonetheless, a splendid honour for him and for me to be invited along where I met old friends and made new acquaintances.

If I have a complaint it was the Champagne – hate the stuff, sooner have a beer! Well done Peter!

# **Voice Stations Round up**

The standard stations are performing as expected albeit with some pretty poor propagation to contend with. Stations that have appeared have been dealt with, in length prior to this short.

#### **Morse Station Roundup**

#### **Morse - Number Stations**

- M01 Despite the apparent demise of M45, regular transmissions have continued as usual from M01. We have also had some good reports on the M01a, b
- M03 This station is often neglected, perhaps because the strength of signals is often a challenge. We have turned our attention to these scheds & with the help of our Morse regulars ,both old & new, have a pretty full picture of current activity.
- M08a Our Cuban Desk has done it again & presents Part 2 with an in-depth analysis of the call-ups & msg order. We have also included the first part again, along with a comprehensive set of logs from our US correspondent.
- M12 As well as the usual regular M12 scheds, there have been a number of unusual variants which have appeared based around 10250kHz, which could be related to events unfolding between Russia & Ukraine although, as with all of the world of numbers, it is impossible to be certain.

These variants, which have also been logged for the voice & data transmissions of the Family l stations, have been given temporary ENIGMA identifiers. For the Morse stations this is M912b & full details of these & the other variants can be found featured elsewhere in the newsletter.

- M14 Transmissions continue as normal, with quite a few interceptions this time round. On 07 Apr Jim (JkC) logged a msg which he notes had been previously sent on 11 Dec 2013. The ID has been changed as has the decode key but it's definitely the same msg. Well spotted Jim!
- M23 After a quiet March M23 made a short appearance on 8030//10755kHz at the beginning of April with a '747' call, ceasing suddenly on the 10 April. As we have noted with this station although the transmissions cease, the station keeps a presence on at least one of the freqs used by sending out brief dashed hourly.

Furthermore, although the previous sched on 3659//3961kHz ceased on Jan 12, the station has still been maintaining the hourly dashes on 3659kHz, some three months after the last transmission was heard.

- M24 As with M14, we have had a good number of logs for this station this time, with a large number of msgs.
- M45 No transmissions have been heard from M45, or its voice sister station S21 since the end of October. As six months have now passed without any reports of this station it now seems more certain that it has closed & is unlikely to return.
- M97 Transmissions have been more frequent during Mar & Apr though still repeating the msg SD84 that has now been in use since August 2013.
- M901 Following the change from Morse to RTTY this odd station kept up a regular two-way sched throughout March, was last logged on Mon 31 March & has not been heard since.

#### Morse Stations - Not Number related

- M51 In the last newsletter we reported how msgs were now using 2014 year codes whereas, until quite recently 1986 dates were in use. Now we are noting an apparent increase in M51 activity, which seems to appear on an almost daily basis. Have we been missing this activity or is something else going on?
- M51a The daily Morse lessons continue as usual with 5 fig grps & plain text. Always good if you want to improve your Morse (or your French!)
- M89 The usual busy activity from this station with, once again, a number of changes to both freqs & pseudo call-signs. Jean-Paul has now added the DPxx series of calls to his log, as he is now confident that these originate from the same organisation.
- M21/22 Before leaving the Morse stations we have included brief details of a couple of old ENIGMA stations, which have long since been deleted from the Control List. Both use Morse & are heard regularly on the short wave bands.
- Beacons We have a current list of beacons & Markers heard. Interest in these still seems to be high & we have a number of different contributors. Following the regular beacons can be an excellent guide to the state of propagation.

#### Oddities

The oddities featured last time raised quite a bit of interest & prompted our friend Spectre to look more closely at the '20 minute Idler'. His findings & logs are featured here, along with a couple of other regular station logs.

# **Morse Stations**

All frequencies listed in kHz. Freqs are generally +- 1k

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 appended to this issue.

# Unidentified CW (UNID)

This one found by Jean Paul (JPL). The short zero would indicate Russian, possibly M01c

4769 0214 (IP	) - 0222z 10 Mar	(In tfc) (Remote tuner Siberia)	(Short zero)	JPL	MON
		2 35633 34184 34824 69832 0 77937 37965 21806 90415			
4210 . 27804 2341 71406 55136 0085	2 12280 48765 7367- 0 46418 31403 3301	2 45630 50678 64621 48057 4 61201 29119 47609 85569 2 35633 34184 34824 69832 0 77937 37965 21806 90415			

# **Morse - Number Stations**

 $\underline{\text{M01/2}}$  XIV MCW, hand (463 sched for Mar- Apr). Will change to M01/3 sched ID 025 for May - Aug.

#### March 2014:

5020	2000z	04 Mar	'463' 512 30 / / = =	50129	LG 29761 = =	Good, fast. Good CW. Errors grps 09 & 15	BR/HFD/JkC	TUE
	2000z	06 Mar	'463' 237 30 = =	14713	LG 05419 = =	Strong, med-fast. Excellent CW with no errors	BR	THU
	2000z	11 Mar	'463' 651 30 = =	84765	LG 11129 = =	Good, fast. Good CW. No errors	BR	TUE
	2000z	13 Mar	'463' 112 30 = =	71364	LG 01969 / /	Fair, fast. Several errors noted.	BR	THU
	2000z	20 Mar	'463' 371 30 = =	97842	LG 82196 = =	Fair, fast. Several errors noted.	BR	THU
	2000z	25 Mar	'463' 816 30 = =	22844	LG 43320 = =	Weak, fast. Numerous errors noted	BR	TUE
	2000z	27 Mar	'463' 304 30 = =	58389	LG 18486 = =	Strong, fast. Short call-up. Good CW	BR	THU
5475	1800z	04 Mar	'463' 763 30 = =	64930	LG 56046 = =	Good, fast. Good CW. Grp30 sent once only	BR/HFD	TUE
	1800z*	06 Mar	'463' 873 30 = =	99318	$\dots$ LG 09782 = =	Good, med-fast. Excellent CW with no errors	BR/JPL	THU
	1800z	11 Mar	'463' 409 30 = =	46335	LG 73371 = =	Good, fast. Numerous errors,	BR	TUE
	1800z	13 Mar	'463' 293 30 = =	56152	LG 58238 / /	Good, fast. Good CW. Error on ending GC	BR/JkC	THU
	1800z	18 Mar	'463' 711 30 = =	47360	LG 19306 = =	5FG Clearly hand keyed	DanE2k	TUE
	1800z	20 Mar	'463' 226 30 = =	81281	LG 83662 = =	Fair, fast. Excellent CW. No errors	BR	THU
	1800z	25 Mar	'463' 910 30 = =	46335	LG 73371 = =	Strong, fast. Numerous errors noted	BR	TUE
	1800z	27 Mar	'463' 707 30 = =		LG 75572 = =	Fair, fast. Short call-up Difficult copy	BR	THU
6260	1500z	01 Mar	'463' 339 30 = =	34375	LG 03899 = =	Good, fast. Good CW. No noted errors	BR	SAT
	1500z	08 Mar	'463' .21 30 = =	44857	LG 46084 = =	Fair, fast. Good CW with errors	BR	SAT
	1500z	15 Mar	'463' 409 30 = =	20117	LG 42141 = =	Fair, v.fast. Excellent CW. No errors	BR/JkC	SAT
	1500z	22 Mar	'463' 727 30 = =	22 .02	LG 94548 = =	Weak - Fair, Fast. Difficult copy	BR/HFD	SAT
6510	0700z	02 Mar	'463' 145 30 = =	47360	LG 19306 = =	Good, Med-fast. Error grp08	BR	SUN
	0700z	16 Mar	'463' 337 30 = =	46335	[grp20 87401]	Good, fast. Ceased suddenly after grp20	BR	SUN
	0700z	23 Mar	'463' 811 30 = =	38140	LG = =	Good - weak over transmission. Many errors	BR	SUN
	1500z**	29 Mar	'463' <b>929 30</b> = =	17634	LG16216 = =	Fair, fast. Excellent CW. Used Sunday freq	BR	SAT
	0700z**	30 Mar	'463' <b>929 30</b> = =	17634	LG 16216 = =	Fair, med-fast, Numerous errors noted	BR	SUN

<sup>\*</sup>Richard (RNGB) noted that the 2nd harmonic on 10950khz was very loud on this transmission.

# <u>April 2014:</u>

5020	2000z	01 Apr	'463' 687 30 = =	97415	LG 82525 = =	Strong, fast. Errors in grps 21,22,23	JkC	TUE
	2000z	03 Apr	'463' 319 30 = =	16686	LG 17983 = =	Good, fast. Grp13 4842 8 4828	BR	THU
	2000z	08 Apr	'463' 911 30 = =	78729	LG 11588 = =	Errors noted at start of msg	DanE2k	TUE
	2000z	10 Apr	'463' 239 30 = =	58389	LG 74008 = =	Fair, fast. Excellent CW	BR	THU
	2000z	15 Apr	'463' 231 30 = =	24450	LG 61191 = =	Good, med-fast. Corrected error grp28	HRT	TUE
	2000z	17 Apr	'463' 609 30 = =	03136	LG 55056 = =	Fair, fast. Excellent CW. No errors	BR	THU
	2000z	22 Apr	'463' 335 30 = =	22321	LG 54356 = =	Weak, med-fast. With errors	BR	TUE
	2000z	24 Apr	'463' 734 30 = =	77513	LG 16724 = =	Weak, med-fast. With errors	BR	THU
	2000z	29 Apr	'463' 710 30 = =	83877	LG 81274 = =	Strong, med-fast. Errors in grps 14 & 26	BR	TUE
5475	1800z	01 Apr	'463' 715 30 = =	80410	LG 11652 = =	Good, fast. Errors in grps10,23,26	BR	TUE
	1800z	03 Apr	'463' 112 30 = =	60906	$\dots$ LG 79530 = =	Good, fast. Corrected error in grp26	BR	THU
	1800z	08 Apr	'463' 810 30 = =	90106	LG 56561 = =	Good, med-fast. Error in grp20	BR	TUE
	1800z	10 Apr	'463' 197 30 = =	39493	LG 09256 = =	Fair, fast. Errors in grps 09 & 18	BR	THU
	1800z	15 Apr	'463' 312 30 = =	30346	LG 90046 = =	Good, med-fast. Error in grp27	BR	TUE
	1800z	17 Apr	'463' 502 30 = =	06656	LG 24856 = =	Good, fast. Good CW. Error in grp19	BR	THU

<sup>\*\*</sup> Sat transmission was sent on the Sun freq, (NRH on 6260kHz). Msg & DK identical for both the Sat & Sun transmissions.

	1804z 22 Apr 1800z 24 Apr 1800z 29 Apr	'463' 503 30 = =	20820LG 05617 = =	Fair, med-fast. Late start. Excellent CW Weak, med-fast. Good CW. No errors Good, med-fast. Errors in grps 08 & 19	BR BR BR	TUE THU THU
6260	1500z 05 Apr 1500z 12 Apr 1500z 19 Apr	'463' 712 30 = =	LG 19123 = =	Weak, fast. Copy difficult at times Weak, med-fast. Disjointed Very poor sig. V.weak, med-fast. Very poor copy.	BR BR/DanE2k BR	SAT SAT SAT
6510	0700z 06 Api 0700z 13 Api 0700z 20 Api	'463' 814 30 = =	41957LG 68469 = = 72276LG 22551 = = 20665LG 19685 = =	Good, med-fast. Good CW. Error in grp02	BR BR/HFD JkC	SUN SUN SUN
<u>M01a</u> (1	formerly end of mon	h TXs, now random)				
4332	0011 (IP) - 0016z	18 Mar (In prog	ress) 122 122 126688 et	c. Strong (see transcript)	JkC	TUE
4639	2254 - 2301z	05 Mar 319 420	542 319 42292 319 000 Str	ong	JkC	WED
4670	1748 - 1752z	05 Mar 416 416	5 416 42253 42253 Sign-of	not heard due to record problem. Strong	JkC	WED
4750	0334 - 0336z	21 Mar 694 694	4 694 67352 67352 (Cont'd to	0336z) (Remote tuner Russia)	JPL	FRI
5107	2123 (IP) - 2128z	04 Mar 126 126	5 126 38170 38170 (R2) 126	5 126 126 36070 36070 (R) etc. Strong	JkC	TUE
5139	2031 - 2037z	15 Mar 972 972	2 972 68007 68007 etc. Stro	ong (See transcript)	JkC	SAT

M01:	a 5	107k	Hz 2	123z (IP)	04 Mar14
(In p	rogre	ess)			
126	126	126	38170	38170	
126	126	126	38170	38170	
126	126	126	36070	36070	
126	126	126	36070	36070	
126	126	126	36070	36070	
126	126	126	36070	36070	
126	126	126	36070	36070	
126	126	126	36070	36070	
126	126	126	36070	36070	
126	126	126	36070	36070	
126	126	126	36070	36070	
126	126	126	36070	36070	
126	126	126	000		
				Court	esy JkC

M01a 4639kHz 2254z 0	)5 Mar14
319 319 319 42642 42642 319 319 319 42642 42642	(2254z)
Silent	
319 319 319 42292 42292 319 319 319 42292 42292	(2259z)
319 319 319 000	(2301z)
Courtesy	, JkC

# M01a 5139kHz 2031z 15 Mar14 972 972 972 68007 68007 (R5m) 972 972 972 69727 69727 (R2m) Courtesy JkC

M01a 4332kHz 0011z (IP) 18 Mar14

122 122 122 16688 16688 (R3m)

122 122 122 16188 16188 (R2m)

(Silent) 0016z

Courtesy JkC

# <u>M01b</u>

March 2014:					
3364//4454	2015 - 2032z	03 Mar	'771' 856 29 = 61219 01568 = 856 29 000 Fair//Fair (See transcript)	JkC	MON
3520//4585	2115 - 2126z	07 Mar	'582' 856 29 = 6121901568 = 856 29 000 Strong	JkC	FRI
3535//4590	1910 - 1930z	17 Mar	'420' 189 30 = $\dots 14722 = 189 30 000$ V weak // Strong	DanE2k/JkC/JPL	MON
		"420" r, "	189 30 BT" Nothing more heard!? Suddenly gone 1918 back on, DanielE	2Kde	
		1	oblems, stopping after the preamble, then carrier went off air. Carrier came ba no call, no preamble. Not sure if I missed the first 1.5 groups, or whether they		ith
	1910 - 1926z	24 Mar	'420' 189 30 = 65700 14722 = 189 30 000] V.weak // Fair	JkC	MON
3645//4455 4454	2015 -2032z 2015z	24 Mar 24 Mar	'771' 189 30 = 65700 14722 = 189 30 000 V.weak // Fair '771' 189 30 = 65700 14722 = 189 30 000 CODAR Chirp QRM	JkC JJ	MON MON
3715//4570	2042 - 2057z	06 Mar	'477' 856 29 = 61219 01568 = 856 29 000 Weak//Fair	HFD/JkC	THU
4585	2110z 2110 - 2126z	07 Mar 21 Mar	'458' '582' 189 30 = = 65700 11586	HFD DanE2k	FRI FRI
4941	2012z (IP)	21 Mar	189 18 = In progress MCW 5FG slow, ends " 52557 14722 = =	DanE2k	FRI
<u>April 2014:</u>					
3510//4605	1832z	03 Apr	'201' 189 30 = Weak	HFD	THU
3520//4585	2010 - 2026z 2010 - 2030z	04 Apr 18 Apr	'582' 189 30 = 65700 14722 = V.weak// Strong. (Rpt of 1902z msg) '582' 386 33 = 72460 44299 = Fair//Strong	HFD/JkC JkC	FRI FRI
3535//4590	1810 - 1825z	07 Apr	'420' 189 30 = 65700 14722 = Weak//Fair	HFD/JkC	MON

	1810 - 1826z	14 Apr	'420' 189 30 = 65700 14722 = V.weak//Fair	JkC	MON
3625//4940	1902 - 1919z	04 Apr	'153' 189 30 = 65700 14722 = V.weak//Strong	JkC	FRI
3645//4455	1915 - 1932z	07 Apr	'771' 189 30 = 65700 14722 = Weak//Fair	HFD//JkC	MON
3715//4570	1942z	03 Apr	'477' 189 30 = 65700 Weak	HFD	THU
3925//4951	1902z	04 Apr	'153' 189 30 = 65700 Weak	HFD	FRI
4454	1915 - 1933z	21 Apr	'771' 386 33 = 72460 3642344299 =	DanE2k	MON
4941	1902 - 1919z 1902 - 1920z	11 Apr 18 Apr	'153' 189 30 = Only occasionally above noise, first groups unreadable '582' 386 33 = 72460 3642344299 =	DanE2k DanE2k	FRI FRI
<u>M01c</u>					
4577 1933 (IP)	- 1937z 08 Mar	(In progre	ess) 674 11 = 5937167411 (Rptd) Strong	BR	SAT
4604 1750 (IP)	- 1812z 15 Mar	(In progre	ess) 333 68517 68517 etc. (Remote tuner Siberia)	JPL	SAT

M01c 4577kHz 1933z (IP) 08 Mar14
674 11 = 59371 08014 81659 01451 19727 32043 93358 77473 45204 32930 08010 =
111 333
674 11 = 59371 08014 81659 01451 19727 32043 93358 77473 45204 32930 08010 =
111 000
Courtesy BR

M01c 4604kHz 1750z 15 Mar14
(Each section was separated by a silent period)
(In progress) 333 68517 68512 (Cont'd - 1750 - 1751z)
333 60017 60017 (R2m)
111 (1755z)
972 972 972 333 68927 68927 (R13m)
972 972 972 333 69927 69927 (R3m)
972 972 972 333 69457 69457 (R4m)
972 972 972 0 0 0 (1812z)
Courtesy JPL

M03 III ICW, some CW

# March 2014:

5463	<b>1325 (IP) -1337z</b> 1320 - 1323z	<b>24 Mar</b> 31 Mar	<b>540/34 = 38650 90439 = 000 Strong</b> 543/00 (R3m) = = 000 Very Weak	<b>HRT</b> BR	MON MON
6977	1535 - 1552z	04 Mar	798/33 = 90812 47415 = 000 Strong	JkC	TUE
	1535 - 1552z	08 Mar	$798/33 = 90812 \dots 47415 = 000$ Strong	JkC	SAT
	1535 - 1538z	11 Mar	798/00  (R3m) = 000	BR	TUE
	1535 - 1538z	15 Mar	798/00 = 000 Strong	JkC	SAT
	1535 - 1538z	18 Mar	798/00  (R3m) = 000  Weak	DanE2k	TUE
	1535 - 1538z	22 Mar	798/00  (R3m) = 000  Good	BR	SAT
	1535 - 1538z	25 Mar	798/00  (R3m) = 000  Strong	HFD	TUE
9150	1115z	04 Mar	272/00	HFD	TUE
	1115z	16 Mar	272/35 = 46092 89059 83411etc.	RNGB	SUN
	1115 - 1118z	23 Mar	272/00  (R3m) = 000  Weak	BR	SUN
	1115 - 1118z	25 Mar	272/00  (R3m) = 000  Weak	BR/DanE2k	TUE
	1115 - 1118z	30 Mar	272/00  (R3m) = 000  Weak	BR	SUN
	1115 - 1118z	19 Mar	650/00  (R3m) = 000  Weak	BR	WED
	1115 - 1118z	26 Mar	650/00  (R3m) = 000  Fair	BR	WED
	1115 - 1118z	27 Mar	650/00  (R3m) = 000  Weak	BR	THU
	1320 - 1323z	09 Mar	437/00  (R3m) = 000	BR	SUN
	1320 - 1323z	13 Mar	437/00 = 000 Strong	HFD/JkC	THU
	1320 - 1323z	16 Mar	437/00 = 000 Weak	DanE2k	SUN
	1320 - 1323z	20 Mar	437/00 = 000 Strong	JkC	THU
	1320 - 1323z	23 Mar	437/00 = 000 Weak	BR	SUN
	1320 - 1337z	27 Mar	433/33 = 12660 3843645388 = 000 Weak	BR	THU
13911	1420z	07 Mar	879/00	HFD	FRI
	1420 - 1423z	09 Mar	879/00  (R3m) = 000	BR	SUN
	1420 - 1423z	14 Mar	879/00  (R3m) = 000	BR	FRI
	1420 - 1423z	16 Mar	879/00  (R3m) = 000	DanE2k	SUN
	1420 - 1438z	21 Mar	879/36 = 62588 13583 53420 = 000 Strong	AB/BR/JkC	FRI
	1420 - 1438z	23 Mar	879/36 = 62588 13583 53420 = 000 Strong (Rpt of Fri 21 Mar)	BR	SUN
	1420 - 1423z	30 Mar	879/00  (R3m) = 000	BR	SUN

# April 2014:

5463	1320 - 1323z	07 Apr	543/00 (R3m) = = 000	HFD	MON
	1320 - 1323z	<b>09 Apr</b>	<b>543/00 (R3m) = = 000 Weak</b>	<b>BR</b>	WED
	1320 - 1323z	14 Apr	543/00 (R3m) = = 000 Weak via Twente	BR	MON
	1320 - 1323z	16 Apr	543/00 (R3m) = = 000 Weak via Twente	BR	WED
	1320 - 1323z	20 Apr	542/38 = = 98098 7144744248 = = 000 Good	HRT	MON
	1320 - 1323z	28 Apr	543/00 (R3m) = = 000 Weak	BR	MON
6977	1535 - 1552z 1535 - 1538z 1535 - 1554z 1535 - 1554z 1535 - 1558z 1535 - 1538z 1535 - 1538z 1535 - 1538z 1535 - 1538z	01 Apr 05 Apr 08 Apr 12 Apr 19 Apr 22 Apr 26 Apr 29 Apr	798/00 = 000 Strong 798/00 (R3m) == 000 Good 790/38 == 75209 7199074976 == 000 Strong 790/38 == 75209 7199074976 == 000 Good 798/00 (R3m) == 000 Good 798/00 = 000 Fair 798/00 000 VVV's at 1526z 798/00 = 000 Fair	JkC BR BR/JkC BR BR JkC HRT/MG BR	TUE SAT TUE SAT SAT TUE SAT TUE SAT TUE
9150	1115 - 1118z 1115 - 1118z 1115 - 1118z 1115 - 1130z 1115 - 1118z 1115 - 1118z	01 Apr 08 Apr 13 Apr 15 Apr 22 Apr 29 Apr	272/00 (R3m) = = 000 Fair 272/00 (R3m) = = 000 V.weak 272/00 (R3m) = = 000 Weak 275/30 = 58029 9765284109 = = 000 Weak 272/00 (R3m) = 000 Weak 272/00 (R3m) = 000 Weak	BR BR BR AB/BR BR BR	TUE TUE SUN TUE TUE TUE
	1115 - 1118z	02 Apr	650/00 (R3m) = = 000 V.weak	BR	WED
	1115 - 1118z	03 Apr	650/00 (R3m) = = 000 V.weak	BR	THU
	1115 - 1132z	09 Apr	656/34 = = 56421 3890910257 = = 000 Fair	BR	WED
	1115 - 1132z	10 Apr	656/34 = = 56421 3890910257 = = 000 Fair	BR	THU
	1115 - 1118z	16 Apr	650/00 (R3m) = = 000 Weak	BR	WED
	1320 - 1323z	03 Apr	437/00 (R3m) = = 000 Weak	BR	THU
	1320 - 1323z	06 Apr	437/00 (R3m) = = 000 Weak	BR	SUN
	1320 - 1323z	10 Apr	437/00 (R3m) = = 000 Weak	BR	THU
	1320 - 1323z	13 Apr	437/00 (R3m) = = 000 Fair	BR	SUN
	1320 - 1339z	24 Apr	433/38 = = 80190 7968302650 = = 000 Fair	BR	THU
	1320 - 1339z	27 Apr	433/38 = 80190 7968302650 = = 000 Weak	BR	SUN
13911	1420 - 1423z 1420 - 1423z 1420 - 1423z 1420 - 1423z 1420 - 1423z 1420 - 1438z 1420 - 1438z 1420 - 1438z	04 Apr 06 Apr 11 Apr 13 Apr 18 Apr 20 Apr 25 Apr	879/00 (R3m) = = 000 Strong 879/00 (R3m) = = 000 Fair 879/00 (R3m) = = 000 Fair 879/00 (R3m) = = 000 Fair 874/35 = = 82954 1848949457 = = 000 Strong 874/35 = 82954 1848949457 = 000 Good 879/00 (R3m) = = 000 Fair	JkC BR BR BR BR BR BR	FRI SUN FRI SUN FRI SUN FRI

M03 6977kHz 1535z 04 Mar14
798/33 (R2m) = =
90812 12542 14525 20224 59210
27013 96465 29033 72173 73029
48027 83637 92635 82178 45697
92235 99692 50557 97114 17169
21498 44502 90077 45456 73573
64725 04497 83834 46473 91392
00993 60966 47415 = =
798/33 (single group repeat) = 000
Courtesy JkC

M03	13911kHz	1420z	21 Mar14
879/36	5 (R3m) = =		
62588	13583 0978	1 86863	72298
58640	38504 7618	2 02319	43515
10047	23195 6160	3 19960	51190
84330	49808 5553	0 50760	21119
88342	24782 4549	2 80796	71270
18296	66142 7311	8 89425	48031
49721	02151 4819	3 14180	62570
53420	= =		
879/36	single grou	ip repeat)	000
		Courte	esy BR/JkC

M03 5463kHz 1325z 24 Mar14

540/34 (R2m) = =

38650 05023 16744 20950 70259

73094 12720 25030 20628 97881

58152 08842 57704 49793 74867
61298 14130 63272 80893 94158

74362 42595 01354 08564 24140

89462 72340 92933 35611 87405

55276 57625 27662 90439 = =

540/34 (single group repeat) = 000

Courtesy HRT

In this edition we continue with the M08a analysis from our Cuban Desk. We featured the first part of this article in the last newsletter, but unfortunately in the publishing process the digital gremlins stripped out the red highlights in the call-up tables. Therefore we are reproducing the article in full with the highlights in bold text, which hopefully will emphasise those calls as originally intended.

#### M08a Call-up Analysis - From our Cuban Desk (Part One)

Recently we noticed that the call-ups for M08a were showing some apparent sequences that we had not previously been aware of. Several years ago the schedules changed so that during the 3 minute preamble at the beginning of the hour there were no pauses between the three call-ups so you had to wait until the first call-up was transmitted 5 times to determine the actual message order for the transmission. We now see that the first digit of the call-ups is incremented upwards from call-up 1 to 3 although there are still some rules that apply.

- 1. The number 9 is rarely if ever used in the call-ups. (This has been known for several years now.)
- 2. If the sequence of 3 digits would have reached 9 then this number is skipped and 0 or 1 is used. 78X would be 780 or 781 8X0 would be 801 or 812
- 3. 5 is often skipped
- 4. 1 and 2 are sometimes skipped (034)

Surprised at how we had missed this, we took a look back through previous newsletters and found that this change actually occurred on or around June 1st 2012! A sampling of M08a logs with duplicates from May to August 2012 is shown below. 3 digit sequences after the call-ups indicate the first digit of each call-up in order. 3 digit sequences in **bold** indicate that they follow the rules listed above.

Call-ups for May through August 2012:-

mough rugust 2012.		
05 May [50062 78421 72462] 577	02 Jul [87871 01201 76141] 807	01 Aug [40122 26232 30562] 423 Out
07 May [02302 38151 72712] 037	06 Jul [65712 41651 52481] 645	of sequence
07 May [04142 71431 01712] 070	08 Jul [73762 84402 07831] <b>780</b>	01 Aug [25112 31132 14372] 231 see
08 May [31541 84632 77251] 387	09 Jul [46701 57431 61852] <b>456</b>	below
08 May [31541 84632 77251] 387	10 Jul [04731 17152 21581] <b>012</b>	01 Aug [68251 72572 85011] <b>678</b>
09 May [46131 71821 85371] 478	10 Jul [81732 11161 23482] <b>812</b>	01 Aug [07372 11612 34031] <b>013</b>
09 May [46131 71821 85371] 478	11 Jul [58281 72821 85242] <b>578</b>	01 Aug [14372 25112 31132] <b>123</b>
11 May [28452 46631 26241] 242	16 Jul [88252 08802 12222] <b>801</b>	01 Aug [25112 31132 14372] <b>231</b> Same
12 May [32161 41642 11152] 341	19 Jul [55161 72822 68481] 576	numbers as above
13 May [74302 86421 67031] 786	19 Jul [55161 68841 72822] <b>567</b>	02 Aug [08271 22602 35031] <b>023</b>
14 May [82361 28461 25802] 822	19 Jul [????? 23362 36601] <b>?23</b>	02 Aug [08271 22602 35031] <b>023</b>
15 May [11552 11472 52582] 115	19 Jul [17711 21242 34561] <b>123</b>	03 Aug [03561 37621 47661] <b>034</b>
18 May [22722 63211 20341] 262	19 Jul [60081 73322 86641] <b>678</b>	03 Aug [03561 37621 47661] <b>034</b>
18 May [85301 13511 13611] 811	19 Jul [17711 21242 34561] <b>123</b>	03 Aug [41631 54052 66782] <b>456</b>
18 May [83522 10102 51522] 815	19 Jul [73322 86641 60081] 786 Same	03 Aug [40221 62061 75381] <b>467</b>
18 May [57641 00041 15302] 501	sequence as below probably	05 Aug [00231 01071 24302] 002
18 May [57641 00041 15302] 501	heard/reported in the wrong order.	06 Aug [12732 44462 57881] 145 still
19 May [73721 66402 11022] 761	19 Jul [60081 73322 86641] <b>678</b>	in sequence
20 May [80361 68532 42422] 864	20 Jul [87582 11821 24352] <b>812</b>	06 Aug [35772 48111 52532] <b>345</b>
21 May [44611 88001 26612] 482	20 Jul [72361 85682 08121] <b>780</b>	06 Aug [38372 42601 64031] <b>346</b>
21 May [54422 74072 14452] 571	20 Jul [63202 86531 50871] 685	06 Aug [37331 41652 54181] <b>345</b>
21 May [54422 74072 14452] 571	20 Jul [84471 15211 28532] <b>812</b>	06 Aug [38372 42601 64031] <b>346</b>
22 May [37571 57131 35012] 373	20 Jul [87582 11821 24352] <b>812</b>	07 Aug [70181 83422 06841] <b>780</b>
26 May [17532 43622 28162] 142	20 Jul [84471 15211 28532] <b>812</b>	07 Aug [70181 83422 06841] <b>780</b>
27 May [43022 26351 61121] 426	21 Jul [50332 62172 75501] <b>567</b>	07 Aug [66621 01251 ?1562 ] 60?
28 May [46580 78261 70512] 477	22 Jul [33621 54451 67782] <b>356</b>	07 Aug [26231 30662 43081] <b>234</b>
31 May [82145 51332 12336] 851	22 Jul [68572 72801 85230] <b>678</b>	08 Aug [18122 22441 35772] <b>123</b>
21 May [54422 74072 14452] 571	23 Jul [48051 62481 73121] <b>467</b>	09 Aug [40561 51301 64632] <b>456</b>
22 May [37571 57131 35012] 353	23 Jul [60322 73642 56081] 675	11 Aug [78512 50342 02072] 750
31 May [31001 57751 44422] 354	23 Jul [48051 62481 73121] <b>467</b>	12 Aug [44532 64662 77802] <b>467</b>
01 Jun [35782 46422 60752] <b>346</b>	23 Jul [22852 ????? ?????] 2??	13 Aug [63712 83751 87772] 688
01 Jun [73362 74782 80241] 778	26 Jul [24462 37781 41222] <b>234</b>	14 Aug [83451 05772 18112] <b>801</b>
01 Jun [15612 65582 15012] 161	27 Jul [62781 67890 12345] 661	16 Aug [????? 53021 66342] <b>?56</b>
01 Jun [64231 02272 32612] 603	(contains sequences 12345 67890	16 Aug [66342 53021 31271] 653 Other
02 Jun [96782 17522 21851] 912	28 Jul [45672 56322 60641] <b>456</b>	reported sequence above shows correct order.
04 Jun [45012 67642 71062] <b>467</b> 04 Jun [????? 68001 73021] <b>?67</b>	29 Jul [57452 68182 82521] <b>568</b> 30 Jul [23771 44412 57841] <b>245</b>	
04 Jun [41551 52301 65622] <b>456</b>	30 Jul [72212 80632 13061] <b>781</b>	17 Aug [12345 67890 12345] Repeated 12345 67890
04 Jun [78401 02722 15151] 701	30 Jul [28431 32752 45181] <b>234</b>	18 Aug [40711 50742 71582] <b>457</b>
04 Jun [41551 52301 65622] <b>456</b>	31 Jul [74682 87122 01441] <b>780</b>	19 Aug [38111 58152 61581] <b>356</b>
04 Jun [78401 02722 15151] 701	31 Jul [58721 72152 85471] <b>578</b>	20 Aug [45531 66261 70482] <b>467</b>
04 Jun [48302 47262 87682] 448	31 Jul [58721 72132 85471] <b>578</b>	20 Aug [47832 51261 63582] <b>456</b>
21 Jun [05152 60001 72731] 067	51 var [50/21 /2152 654/1] 5/6	20 Aug [22182 35421 47744] <b>234</b>
22 Jun [25531 38062 41381] <b>234</b>		21 Aug [00601 11431 24762] <b>012</b>
22 Jun [78641 82472 05402] <b>780</b>		21 Aug [????? 50521 63042] <b>?56</b>
22 van [/0011 021/2 03402] /00		23 Aug [41182 62722 75641] <b>467</b>
		24 Aug [50282 63521 76842] <b>567</b>
		24 Aug [15561 26301 30632] <b>123</b>
		25 Aug [73502 04232 17652] <b>701</b>
		27 Aug [67461 70201 83532] <b>678</b>
		27 Aug [62032 74361 07682] <b>670</b>
		29 Aug [56142 60461 72701] <b>567</b>
		29 Aug [87261 01582 14821] <b>801</b>
		30 Aug [08002 35751 48182] <b>034</b>

If we jump forward to a selection of call-ups from January/February 2014 we see that this rule continues and also holds true for the rare V02a transmissions.

[33831 46252 50581] <b>345</b>	[20202 42832 55261] <b>245</b>	[05301 18732 22151] <b>012</b>
[23621 46152 50471] <b>245</b>	[24332 46062 50401] <b>245</b>	[21851 35282 47621] <b>234</b>
[75021 86651 00082] <b>780</b>	[45152 58571 61811] <b>456</b>	[73121 86452 08772] <b>780</b>
[87672 01111 13322] <b>801</b>	[14062 27381 30621] <b>123</b>	[76722 80142 03471] <b>780</b>
[00352 13681 26012] <b>012</b>	[76171 80412 02731] <b>780</b>	[30422 43841 56271] <b>345</b>
[34602 46021 60352] <b>346</b>	[A 27211 38841 42372] V02 <b>234</b>	[31531 44862 57281] <b>345</b>
[85852 18181 22512] <b>812</b>	[30511 43842 57862] <b>345</b>	[62642 75061 88302] <b>678</b>
[88451 02771 15212] <b>801</b>	[25301 37632 41151] <b>234</b>	[83662 05081 18321] <b>801</b>
[00511 13842 36261] <b>013</b>	[22031 45462 58781] <b>245</b>	[50452 68781 76212] <b>567</b>
[26602 38032 42351] <b>234</b>	[22862 05112 18551]	[51471 64802 77231] <b>567</b>
[61151 74472 87811] <b>678</b>	Order of call-ups unknown but should	[82521 05852 28271] <b>802</b>
	be 05112 18551 22862 it seems	[18262 22501 35022] <b>123</b>
	[28431 32752 45181] <b>234</b>	

#### M08a Call-up Analysis - From our Cuban Desk (Part Two)

As reported in the last newsletter we had noted that the first digit of the M08a call-ups was not random but incremented by either 1 or 2 allowing us to determine the sequence of call-ups without waiting for the first call-up to be repeated 5 times and the beginning of its message as in the example below.

```
[61151 74472 87811] or [82521 05852 28271]
```

We also know that the last digit of each call-up will be a 1 or 2 and that 9 is rarely if ever used in any position in the call-ups. What we failed to notice until now that there is actually more of a pattern to these call-ups than it would first appear. First though, we need to break things down into manageable chunks. Take a call-up from before the first digit pattern was noted. [80361 68532 42422] for example ignore the last digit as it will always be 1 or 2 which leaves us with;

```
80361 68532 42422
```

Take the first digit of each number and put them in order then repeat for digits 2, 3 and 4. This leaves us with  $864\ 082\ 354\ 632$  Then count the steps between the three numbers ignoring 9 so 864 becomes 8 to 6=7 and 6 to 4 becomes 7 the result is 77. Repeat for 082 and you get  $83\ 354$  becomes 28 and 632 becomes 68 line these up and it reads as 682 line the 682 line these up and it reads as 682 line the 682 l

```
05 May [50062 78421 72462] 577 082 044 626 20 73 40 54 07 May [02302 38151 72712] 037 282 317 051 34 63 76 55 07 May [04142 71431 01712] 070 417 147 431 72 66 33 87 08 May [31541 84632 77251] 387 147 562 435 58 33 15 82 27 May [43022 26351 61121] 426 361 031 252 74 35 37 36
```

As expected from a set of random numbers the result is a set of apparently random numbers between 00 and 88

If we now move forward to a selection of call-ups from January/February 2014 something interesting emerges. As expected from the first digits of the call-ups as they are mostly in sequence the numbers 11, 12 or 21 emerge. But take a look at the results from the second through fourth digits....

```
[33831 46252 50581] 345 360 825 358 11 33 33 43
                                                                     [30511 43842 57862] 345 037 588 146 11 34 30 32
[23621 46152 50471] 245 360 614 257 21 33 43 32
                                                                     [25301 37632 41151] 234 571 361 035 11 23 34 32
[75021 86651 00082] 780 560 060 258 11 13 53 33
                                                                     [22031 45462 58781] 245 258 047 368 21 33 43 32
[87672 01111 13322] 801 713 613 712 11 32 42 31
                                                                     [28431 32752 45181] 234 825 471 358 11 33 33 23
[00352 13681 26012] 012 036 360 581 11 33 33 32
                                                                     [05301 18732 22151] 012 582 371 035 11 33 43 32
[34602 46021 60352] 346 460 603 025 12 23 33 23
                                                                     [21851 35282 47621] 234 157 826 582 11 42 34 33
[85852 18181 22512] 812 582 815 581 21 33 23 32
                                                                     [73121 86452 08772] 780 368 147 257 11 32 33 32
                                                                     [76722 80142 03471] 780 603 714 247 11 33 33 13
[88451 02771 15212] 801 825 472 571 11 33 34 23
[00511 13842 36261] 013 036 582 146 12 33 33 32
                                                                     [30422 43841 56271] 345 036 482 247 11 33 43 23
[26602 38032 42351] 234 682 603 035 11 23 33 32
                                                                     [31531 44862 57281] 345 147 582 368 11 33 33 32
[61151 74472 87811] 678 147 148 571 11 33 34 23
                                                                     [62642 75061 88302] 678 258 603 460 11 33 33 23
[20202 42832 55261] 245 025 282 036 21 23 63 33
                                                                     [83662 05081 18321] 801 358 603 682 11 23 33 32
[24332 46062 50401] 245 460 304 360 21 23 64 33
                                                                     [50452 68781 76212] 567 086 472 581 11 77 34 32
[45152 58571 61811] 456 581 158 571 11 32 43 23
                                                                     [51471 64802 77231] 567 147 482 703 11 33 43 23
[14062 27381 30621] 123 470 036 682 11 32 33 23
                                                                     [82521 05852 28271] 802 258 582 257 11 33 33 32
[76171 80412 02731] 780 602 147 713 11 32 33 32
                                                                     [18262 22501 35022] 123 825 250 602 11 33 34 32
[27211 38841 42372] 234 782 283 147 11 13 63 33 V02
```

Quite clearly there is a relationship in the numbers between call-ups that is not present in the numbers within call-ups. We tried this on some of the most recent call-ups and this pattern remains.

M08a	8096kHz	1400z	31 Mar	[62341 83021 08001] MON	680 238 300 420	21 15 60 77
M08a	8135kHz	2300z	31 Mar	[32712 45231 57562] MON	345 257 725 136	11 32 43 23
M08a	7554kHz	2000z	01 Apr	[20552 43871 55311] TUE	245 035 583 571	11 32 34 23
M08a	8135kHz	2300z	01 Apr	[20871 33212 46541] TUE	234 036 825 714	11 33 33 33
M08a	7554kHz	2000z	03 Apr	[27571 31812 44331] THU	234 714 583 713	11 33 34 32
M08a	8135kHz	2300z	04 Apr	[35011 48342 52761] FRI	345 582 037 146	11 33 34 32
M08a	8096kHz	1400z	09 Apr	[65402 88822 02251] WED	680 582 482 025	11 33 43 23

From something apparently random an interesting pattern emerges. There's always something new to learn it seems. - Cuban Desk

Many thanks to our Cuban Desk for some top class work & analysis.

#### Summary of Received M08a Transmissions;

M08a continues to put in fairly regular appearances in the three known time slots although it seems not to skip some transmissions apparently randomly. The weekend time slots have been quite busy and for whatever reason the same set of call-ups is always used in these slots.

The repeated sequence 12345 67890 has been seen on two occasions, once in an 0500z time slot. Presumably this is some sort of test transmission.

Also noted most days is a carrier on 8095kHz for approximately 1 minute between 1345 and 1400z. This may be a transmitter test prior to the 1400z transmission.

Some further information has come to light regarding number sequences in the call-ups and this is covered elsewhere.

On to the logs;

#### M08a Logs

March	201	4:
-------	-----	----

8009

2300z

07 Apr

[60342 83771 06102]

7554	2000z	07 Mar	[85062 05702 20121]		AnonUS	FRI
7551	2000z	08 Mar	[18262 22501 35022]	Note same call-ups as last Saturday and Sunday at 1400z	AnonUS	SAT
	2000z	13 Mar	[05152 16782 20222]	110te saine can ups as iast Saturday and Sanday at 14002	AnonUS	THU
	2000z	14 Mar	[18262 22501 35022]	Note same Call-ups as previous 2 weekends.	AnonUS	FRI
	2000z	18 Mar	[51061 74302 87621]	Note same can-ups as previous 2 weekends.	AnonUS	TUE
	2000z	20 Mar			AnonUS	THU
			[15161 28481 32722]	Usual wastand call yes		
	2000z	23 Mar	[18262 22501 35022]	Usual weekend call-ups.	AnonUS	SUN
	2000z	26 Mar	[03741 16161 20502]	Chan dand and a 11 and	AnonUS	WED
	2000z	29 Mar	[18262 22501 35022]	Standard weekend call-ups.	AnonUS	SAT
8009	2300z	03 Mar	[]	Found in progress.	AnonUS	MON
0007	2300z	08 Mar	[]	Found in progress, slow CW normally faster in this time slot.	AnonUS	SAT
	2300z	10 Mar	[60521 73851 86372]	Tound in progress, slow evi normany faster in this time slot.	AnonUS	MON
	2300z	29 Mar	[18262 22501 35022]	Usual weekend call-ups. Same frequency as 08 Mar	AnonUS	SAT
			[			
8095	1400z	01 Mar	[18262 22501 35022]	Found IP at 1415z. Call-ups restarted 1443z. Same call-ups as last Sunday.	AnonUS	SAT
	1400z	02 Mar	[ 22501]		AnonUS	SUN
9096	1400z	03 Mar	[46542 50861 63202]	TX stopped before call-ups ended.	AnonUS	MON
	1400z	04 Mar	[]	Up late, found in progress at 1420z	AnonUS	TUE
	1400z	08 Mar		1420 - 1500z. Working normally at the very end with 12345 67890 12	AnonUS	SAT
	1400z	14 Mar	[66722 70141 83572]		AnonUS	FRI
	1400z	16 Mar	[]	Came up with message in progress at 1402z	AnonUS	SUN
	1400z	17 Mar	[47111 50442 63761]		AnonUS	MON
	1400z	18 Mar	[]	Up briefly just after 1400z	AnonUS	TUE
	1400z	19 Mar	[05412 18841 22262]		AnonUS	WED
	1400z	21 Mar	[42771 55102 67521]		AnonUS	FRI
	1400z	22 Mar	[18262 22501 35022]	Usual weekend call-ups.	AnonUS	SAT
	1400z	24 Mar	[76561 80882 03222]		AnonUS	MON
	1400z	25 Mar	[31671 44012 56441]		AnonUS	TUE
	1400z	28 Mar	[62871 75201 88532]		AnonUS	FRI
	1400z	31 Mar	[62341 83021 08001]		AnonUS	MON
8135	2300z	04 Mar	[36412 40731 53261]		AnonUS	TUE
	2300z	05 Mar	[]	Present but obscured by another transmission.	AnonUS	WED
	2300z	06 Mar	[35481 48812 62241]		AnonUS	THU
	2300z	11 Mar	[75362 86102 00421]		AnonUS	TUE
	2300z	14 Mar	[18841 20671 34602]		AnonUS	FRI
	2300z	16 Mar	[18262 22501 35022]	Seems these call-ups are becoming common on the weekends	AnonUS	SUN
	2300z	18 Mar	[22112 35441 48861]		AnonUS	TUE
	2300z	20 Mar		Slow delivery, not normally heard in this time slot.	AnonUS	SUN
	2200	22.16		(Call-ups are the same as the "weekend" schedule See 16 Mar)		a . T
	2300z	22 Mar	[18262 22501 35022]	Usual weekend call-ups.	AnonUS	SAT
	2300z	25 Mar	[77822 81251 04571]		AnonUS	TUE
	2300z	25 Mar	[24032 37461 41782]		AnonUS	FRI
	2300z	31 Mar	[32712 45231 57562]		AnonUS	MON
April 20	114.					
April 20	<del>/17.</del>					
5855	0500z	13 Apr	[12345 67890 repeate	d]	AnonUS	SUN
7551	2000-	01 4	[20552 42971 55211]		AmonTIC	Tri III:
7554	2000z	01 Apr	[20552 43871 55311]		AnonUS	TUE
	2000z	03 Apr	[27571 31812 44331]		AnonUS	THU
	2000z	08 Apr	[48841 52361 74602]	Haralana da allana	AnonUS	TUE
	2000z	12 Apr	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SAT
	2000z	13 Apr	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SUN
	2000z	15 Apr	[60451 83882 05211]		AnonUS	TUE
	2000z	17 Apr	[67072 70301 83632]		AnonUS	THU
	2000z	22 Apr	[62542 75861 88302]		AnonUS	TUE
9009	2200-	12 4	[10060 00501 05000]	Havel weekend cell upg alow deliver-	AmonTIC	CAT
8008	2300z	12 Apr	[18262 22501 35022]	Usual weekend call-ups, slow delivery.	AnonUS AnonUS	SAT
	2300z	21 Apr	[77112 81541 04862]		AIIUIUS	MON

AnonUS

MON

8096	1400z	07 Apr	[10771 2	3202 36531]	AnonUS	MON
	1400z	08 Apr	[636317	6162 80481]	AnonUS	TUE
	1400z	09 Apr	[65402 8	8822 02251]	AnonUS	WED
	1400z	14 Apr	[83372 0	6601 18132]	AnonUS	MON
	1400z	15 Apr	[534217	6741 80172]	AnonUS	TUE
	1400z	16 Apr	[44851 5	7372 61611]	AnonUS	WED
	1400z	21 Apr	[30371 4	2602 55031]	AnonUS	MON
	1400z	22 Apr	[47102 5	1521 74852]	AnonUS	TUE
	1400z	24 Apr	[1	4]	Morse was garbled. AnonUS	THU
8129	2300z	15 Apr	[16271	]	New frequency or mistake? AnonUS	TUE
8135	2300z	01 Apr	[20871 3	3212 46541]	AnonUS	TUE
	2300z	04 Apr	[35011 4	8342 52761]	AnonUS	FRI
	2300z	08 Apr	[00082 1	3321 25742]	AnonUS	TUE
	2300z	10 Apr	[14151 2	7472 30712]	AnonUS	THU
	2300z	22 Apr	[10352 2	2681 27712]	Unusual, 2 call-ups beginning with 2. AnonUS	TUE
	2300z	24 Apr	[38662 4	2081 55322]	AnonUS	THU
Other log	gs received	l				
9000	2210_ (II	2)	07 4	г ,	0(100) M:41	MON
8009	2318z (II	,	07 Apr			MON
	0010 (IP)	) - 001/Z	20 Apr	MO8a III pi	rogress. Ends 0017z AK	SUN
8135	2259 - 23	3267	08 Apr	[00082 133	321 25742] Strong (See transcripts below) Topol	TUE
0133	2237 - 23	) 2 U L	oo Api	[00002 133	10por	IUL

 $\underline{M12}$  IB ICW, some MCW / CW, short 0. Reuses many freqs year on year.

To be read in conjunction with Brian's monthly logs available in the charts section. New ID's may be only for the month/sched shown, but not necessarily unknown, all are clearly identified on Brian's charts. The reason for their reuse, some after long periods of time, is unknown.

# March 2014:

5763/5163/4463	2200/20/40z 2200/20/40z 2200/20/40z 2200/20/40	05 Mar 12 Mar 19 Mar 26 Mar	714 000 714 1 (7384 99) 10871 49021 5534339611 714 1 (8101 111) 69813 714 000	FN/HFD FN/RNGB FN/JkC JkC	WED WED WED
5792/6992/	0530/0550/0610z	03 Mar	796 000	FN/HFD	MON
	0530/0550/0610z	10 Mar	796 000	FN	MON
	0530/0550/0610z	24 Mar	796 000	FN/JJ	MON
	0530/0550/0610z	31 Mar	796 000	FN	MON
6784/7684/	0730/0750/0810z	06 Mar	761 000	FN/HFD	THU
	0730/0750/0810z	13 Mar	761 000	FN	THU
	0730/0750/0810z	20 Mar	761 000 Strong QRM dig station 6784kHz	FN	THU
	0730/0750/0810z	27 Mar	761 000	FN	THU
8047/6802/5788	1700/20/40z	12 Mar	463 1 (8947 61) 40864	FN/HFD	WED
	1700/20/40z	19 Mar	463 1 (1864 59) 04556	FN	WED
	1700/20/40z	26 Mar	463 1 (1542 76) 21823	FN/HRT/JPL	WED
8158/9258/	0600/20/40z	08 Mar	126 000	FN	SAT
	0600/20/40z	15 Mar	126 000	FN	SAT
9176/7931/6904	1700/20/40z 1800/20/40z 1900/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1800/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1800/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1800/20/40z 1800/20/40z 1700/20/40z 1900/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1800/20/40z 1800/20/40z 1800/20/40z 1800/20/40z	03 Mar 03 Mar 03 Mar 06 Mar 10 Mar 10 Mar 13 Mar 13 Mar 17 Mar 17 Mar 20 Mar 24 Mar 24 Mar 24 Mar 27 Mar 31 Mar 31 Mar 31 Mar	257 1 (5037 72) 43504 257 1 (8081 63) 87529 257 1 (2122 118) 66079 257 1 (4956 75) 90761 257 1 (4569 78) 26134 257 1 (8654 57) 69432 257 1 (3823 110) 78226 257 1 (2944 57) 05187 257 1 (9099 42) 65394 257 1 (2913 94) 57956 257 1 (9402 85) 77685 257 1 (9402 85) 77685 257 1 (9478 47) 88176 257 1 (9478 47) 88176 257 1 (9744 117) 95614 257 1 (4501 83) 14508 257 1 (7491 60) 81017 257 1 (8762 95) 55223 257 1 (3727 43) 75689 257 1 (4506 109) 42150	FN/HFD FN/HFD FN/HFD FN/JkC FN/JkC FN	MON MON MON THU THU MON MON MON MON MON MON MON THU THU MON MON MON MON MON MON MON MON MON
				•	

10343/9264/8116	1700/20/40z	06 Mar	124 1 (2619 77) 92593	FN/HFD/JkC	THU
10343/7204/0110		06 Mar	124 1 (7380 112) 61627	FN/JkC	THU
	1800/20/40z		` ,		
	1830/1850/1910z	11 Mar	124 1 (3366 51) 32930	FN/HFD	TUE
	1700/20/40z	13 Mar	124 1 (5296 90) 31890	FN	THU
	1800/20/40z	13 Mar	124 1 (3794 115) 43904	FN	THU
	1830/20/40z	18 Mar	124 1 (4032 62) 31781 22126	DanE2k/FN	TUE
	1700/20/40z	20 Mar	124 1 (6432 95) 66832	FN	THU
	1800/20/40z	20 Mar	124 1 (5411 117) 45748	FN	THU
	1830/1850/1910z	25 Mar	124 1 (5529 51) 91642	FN	TUE
		27 Mar		FN	
	1700/20/40z		124 1 (3428 99) 58040		THU
	1800/20/40z	27 Mar	124 1 (6727 106) 52645	FN	THU
11435/10598/9327	1600/20/40z	03 Mar	938 1 (2841 106) 40853	FN/HFD	MON
	1830/1850/1910z	05 Mar	938 1	HFD	WED
	1600/20/40z	10 Mar	938 1 (7535 107) 04139	FN	MON
	1830/1850/1910z	12 Mar	938 1 (9550 68) 79839	FN	WED
10598	1620 - 1628z	17 Mar	938 1 (9613 112) 71645 Partly unreadable due to local QRM	DanE2k	MON
	1830/1850/1910z	19 Mar	938 1 (1991 60) 99224	FN	WED
	1600/20/40z	24 Mar	938 1 (2670 102) 1693009046	FN/JkC	MON
	1830/1850/1910z	26 Mar	938 1 (3718 69) 38433	FN	WED
	1600/20/40z	31 Mar	938 1 (9905 111) 84733	FN	MON
12214/10814/9214	1310/30/50z	01 Mar	282 000	BR	SAT
14417/10014/7414			282 1 (2754 191)	BR	
	1310/30/50z	06 Mar			THU
	1310/30/50z	08 Mar	282 1 (2754 191) 91375	FN/HFD	SAT
	1310/30/50z	13 Mar	282 000	FN	THU
	1310/30/50z	15 Mar	282 000	FN	SAT
	1310/30/50z	20 Mar	282 000	FN	THU
	1310/30/50z	22 Mar	282 000	FN	SAT
	1310/30/50z	27 Mar	282 1 (3864 87) 91560	FN	THU
13386/12189/11491	1600/20/40z	06 Mar	725 1 (7180 109) 17921	FN/HFD	THU
	1600/20/40z	13 Mar	725 1 (6718 108) 62640	FN	THU
	1600/20/40z	20 Mar	725 1 (6409 101) 50231	FN	THU
	1600/20/40z	27 Mar	725 1 (4510 108) 36305	FN	THU
	1000/20/402	27 Iviai	725 1 (4510 108) 30305	TIN	Inu
14769/16269/18169	1010/30/50z	02 Mar	721 000	HFD	SUN
14/02/10202/10102			721 000 721 1 (3062 57) 72436	FN	
	1010/30/50z	06 Mar			THU
	1010/30/50z	09 Mar	721 000	FN/tiNG	SUN
	1010/30/50z	13 Mar	721 000	FN	THU
	1010/30/50z	16 Mar	721 000	DanE2k/FN	SUN
	1010/30/50z	20 Mar	721 1 (6265 89) 44797	FN	THU
	1010/30/50z	23 Mar	721 1 (6265 89) 44797 Repeat of 20 Mar 1010z	FN/HRT	SUN
	1010/30/50z	27 Mar	721 000	FN	THU
	1010/30/502				CLIN
	1010/30/50z	30 Mar	721 000	FN	SUN
April 2014:	1010/30/50z	30 Mar	721 000	FN	SUN
<u>April 2014:</u>	1010/30/50z	30 Mar	721 000	FN	SUN
				FN	
April 2014: 5792/6992/	0430/0450/0510z	07 Apr	796 000	FN	MON
	0430/0450/0510z 0430/0450/0510z	07 Apr 14 Apr	796 000 796 000	FN FN/HFD	MON MON
	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z	07 Apr 14 Apr 21 Apr	796 000 796 000 796 000	FN FN/HFD FN	MON MON MON
	0430/0450/0510z 0430/0450/0510z	07 Apr 14 Apr	796 000 796 000	FN FN/HFD	MON MON
5792/6992/	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z	07 Apr 14 Apr 21 Apr 28 Apr	796 000 796 000 796 000 796 000	FN FN/HFD FN FN	MON MON MON MON
	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097	FN FN/HFD FN FN FN/HFD/JkC	MON MON MON MON
5792/6992/	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000	FN FN/HFD FN FN FN/HFD/JkC FN/JkC	MON MON MON MON WED WED
5792/6992/	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489	FN FN/HFD FN FN FN/HFD/JkC FN/JkC FN	MON MON MON MON WED WED WED
5792/6992/	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000	FN FN/HFD FN FN FN/HFD/JkC FN/JkC FN/JkC FN	MON MON MON WED WED WED WED
5792/6992/	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489	FN FN/HFD FN FN FN/HFD/JkC FN/JkC FN	MON MON MON MON WED WED WED
5792/6992/ 6793/5893/4593	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050	FN FN/HFD FN FN FN/HFD/JkC FN/JkC FN FN/JkC FN	MON MON MON WED WED WED WED WED
5792/6992/	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050 402 000	FN FN/HFD FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN/JkC FN	MON MON MON WED WED WED WED THU
5792/6992/ 6793/5893/4593	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 03 Apr 10 Apr	796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050 402 000 402 000	FN FN/HFD FN FN/HFD/JkC FN/JkC FN/JkC FN/JkC FN FN/JkC FN	MON MON MON WED WED WED WED THU
5792/6992/ 6793/5893/4593	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050 402 000	FN FN/HFD FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN/JkC FN	MON MON MON WED WED WED WED THU
5792/6992/ 6793/5893/4593	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 03 Apr 10 Apr	796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050 402 000 402 000	FN FN/HFD FN FN/HFD/JkC FN/JkC FN/JkC FN/JkC FN FN/JkC FN	MON MON MON WED WED WED WED THU
5792/6992/ 6793/5893/4593 7484/8084/	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050 402 000 402 000 402 000 402 000 402 000	FN FN/HFD FN FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN/JkC FN FN FN FN FN FN FN FN FN	MON MON MON WED WED WED WED THU THU THU
5792/6992/ 6793/5893/4593	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0630/0650/0710z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 03 Apr 10 Apr 17 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050 402 000 402 000 402 000 402 000	FN FN/HFD FN FN/HFD/JkC FN/JkC FN/JkC FN FN/JkC FN FN	MON MON MON WED WED WED WED THU THU
5792/6992/ 6793/5893/4593 7484/8084/	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050 402 000 402 000 402 000 402 000 402 000	FN FN/HFD FN FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN/JkC FN FN FN FN FN FN FN FN FN	MON MON MON WED WED WED WED THU THU THU
5792/6992/ 6793/5893/4593 7484/8084/	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 402 000 402 000 1ate start 463 1 (1904 58) 45012	FN FN/HFD FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN/JkC FN	MON MON MON WED WED WED WED THU THU THU THU
5792/6992/ 6793/5893/4593 7484/8084/	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 402 000 402 000 1ate start  463 1 (1904 58) 45012 463 1 (9570 91) 1189525131 463 1 (1855 62) 05673	FN FN/HFD FN FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN/JkC FN FN FN FN FN FN FN FN/HFD FN FN/HFD FN FN/JkC FN	MON MON MON WED WED WED WED THU THU THU THU WED WED WED
5792/6992/ 6793/5893/4593 7484/8084/	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr 23 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 late start  463 1 (1904 58) 45012 463 1 (9570 91) 1189525131 463 1 (1855 62) 05673 463 1 (9881 89) 94261 55354	FN FN/HFD FN FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN/HFD FN JkC	MON MON MON WED WED WED WED THU THU THU THU WED WED
5792/6992/ 6793/5893/4593 7484/8084/	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 402 000 402 000 1ate start  463 1 (1904 58) 45012 463 1 (9570 91) 1189525131 463 1 (1855 62) 05673	FN FN/HFD FN FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN/JkC FN FN FN FN FN FN FN FN/HFD FN FN/HFD FN FN/JkC FN	MON MON MON WED WED WED WED THU THU THU THU WED WED WED WED
5792/6992/ 6793/5893/4593 7484/8084/	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr 23 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 late start  463 1 (1904 58) 45012 463 1 (9570 91) 1189525131 463 1 (1855 62) 05673 463 1 (9881 89) 94261 55354	FN FN/HFD FN FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN/HFD FN JkC	MON MON MON WED WED WED WED THU THU THU THU WED WED WED WED
5792/6992/ 6793/5893/4593 7484/8084/ 8047/6802/5788	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 17 Apr 24 Apr 18 Apr 29 Apr 19 Apr 10	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 402 000 1ate start  463 1 (1904 58) 45012 463 1 (9570 91) 1189525131 463 1 (1855 62) 05673 463 1 (9881 89) 94261 55354 463 1 (1250 81) 18523  257 1 (9500 69) 7879980477	FN FN/HFD FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN FN FN FN FN FN FN/HFD FN	MON MON MON WED WED WED WED THU THU THU THU WED WED WED WED THU THU THU THU
5792/6992/ 6793/5893/4593 7484/8084/ 8047/6802/5788	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z 1700/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 17 Apr 24 Apr 18 Apr 19 Apr 19 Apr 10	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 402 000 late start  463 1 (1904 58) 45012 463 1 (9570 91) 1189525131 463 1 (1855 62) 05673 463 1 (9881 89) 94261 55354 463 1 (1250 81) 18523  257 1 (9500 69) 7879980477 257 1 (3351 55) 98349	FN FN/HFD FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN FN FN FN FN FN FN/HFD FN FN/JkC FN FN FN/JkC FN FN FN/JkC FN	MON MON MON WED WED WED THU THU THU WED WED WED THU THU THU THU THU THU THU THU
5792/6992/ 6793/5893/4593 7484/8084/ 8047/6802/5788	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 03 Apr 16 Apr 24 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 402 000 late start  463 1 (1904 58) 45012 463 1 (9570 91) 1189525131 463 1 (1855 62) 05673 463 1 (9881 89) 94261 55354 463 1 (1250 81) 18523  257 1 (9500 69) 7879980477 257 1 (3351 55) 98349 257 1 (4436 97) 0617646995	FN FN/HFD FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN FN FN FN FN FN FN/HFD FN FN/JkC FN FN JkC FN FN JkC FN FN FN/JkC FN FN FN/JkC FN FN/JkC FN	MON MON MON WED WED WED WED THU THU THU WED WED WED THU
5792/6992/ 6793/5893/4593 7484/8084/ 8047/6802/5788	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z 1800/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 03 Apr 16 Apr 23 Apr 30 Apr 17 Apr 24 Apr 07 Apr 07 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 late start  463 1 (1904 58) 45012 463 1 (9570 91) 1189525131 463 1 (1855 62) 05673 463 1 (9881 89) 94261 55354 463 1 (1250 81) 18523  257 1 (9500 69) 7879980477 257 1 (3351 55) 98349 257 1 (4436 97) 0617646995 257 1 (8397 60) 1963606927	FN FN/HFD FN FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN FN FN FN FN FN/HFD FN FN/JkC FN JkC FN FN/JkC FN FN/JkC FN FN/JkC FN	MON MON MON WED WED WED WED THU THU THU WED WED WED THU
5792/6992/ 6793/5893/4593 7484/8084/ 8047/6802/5788	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z 1800/20/40z 1800/20/40z 1900/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 03 Apr 17 Apr 23 Apr 30 Apr 17 Apr 27 Apr 28 Apr 30 Apr 19 Apr 10 Apr 10 Apr 10 Apr 10 Apr 11 Apr 12 Apr 10 Apr 10 Apr 10 Apr 11 Apr 12 Apr 10	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 402 000 1ate start  463 1 (1904 58) 45012 463 1 (9570 91) 1189525131 463 1 (1855 62) 05673 463 1 (9881 89) 94261 55354 463 1 (1250 81) 18523  257 1 (9500 69) 7879980477 257 1 (3351 55) 98349 257 1 (4436 97) 0617646995 257 1 (8397 60) 1963606927 257 1 (7723 108) 71148	FN FN/HFD FN FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN FN FN FN FN FN/HFD FN FN/JkC FN FN/JkC FN FN/JkC FN FN/JkC FN	MON MON MON WED WED WED WED THU THU THU WED WED WED THU THU THU THU MON MON MON
5792/6992/ 6793/5893/4593 7484/8084/ 8047/6802/5788	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z 1800/20/40z 1900/20/40z 1900/20/40z 1900/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 03 Apr 07 Apr 07 Apr 07 Apr 07 Apr 07 Apr 07 Apr 07 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 402 000 1ate start  463 1 (1904 58) 45012 463 1 (9570 91) 1189525131 463 1 (1855 62) 05673 463 1 (9881 89) 94261 55354 463 1 (1250 81) 18523  257 1 (9500 69) 7879980477 257 1 (3351 55) 98349 257 1 (4436 97) 0617646995 257 1 (8397 60) 1963606927 257 1 (7723 108) 71148 257 1 (4018 83) 65111	FN FN/HFD FN FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN FN FN FN FN FN/HFD FN FN/JkC FN	MON MON MON WED WED WED WED THU THU THU WED WED WED WED THU
5792/6992/ 6793/5893/4593 7484/8084/ 8047/6802/5788	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 03 Apr 07 Apr 07 Apr 07 Apr 07 Apr 07 Apr 10 Apr 10 Apr 10 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 late start  463 1 (1904 58) 45012 463 1 (9570 91) 1189525131 463 1 (1855 62) 05673 463 1 (9881 89) 94261 55354 463 1 (1250 81) 18523  257 1 (9500 69) 7879980477 257 1 (3351 55) 98349 257 1 (4436 97) 0617646995 257 1 (8397 60) 1963606927 257 1 (7723 108) 71148 257 1 (4018 83) 65111 257 1 (8704 66) 48378	FN FN/HFD FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN FN FN FN FN FN FN/HFD FN FN/JkC FN	MON MON MON WED WED WED WED THU THU THU WED WED WED WED THU
5792/6992/ 6793/5893/4593 7484/8084/ 8047/6802/5788	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 03 Apr 07 Apr 07 Apr 07 Apr 07 Apr 07 Apr 10 Apr 10 Apr 11 Apr 12 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 402 000 late start  463 1 (1904 58) 45012 463 1 (9570 91) 1189525131 463 1 (1855 62) 05673 463 1 (9881 89) 94261 55354 463 1 (1250 81) 18523  257 1 (9500 69) 7879980477 257 1 (3351 55) 98349 257 1 (4436 97) 0617646995 257 1 (4436 97) 0617646995 257 1 (7723 108) 71148 257 1 (4018 83) 65111 257 1 (8704 66) 48378 257 1 (8704 66) 48378 257 1 (2843 86) 3537473776	FN FN/HFD FN FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN FN FN FN FN FN/HFD FN FN/JkC FN FN FN/JkC	MON MON MON WED WED WED WED THU THU THU WED WED WED WED THU
5792/6992/ 6793/5893/4593 7484/8084/ 8047/6802/5788	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z 1900/20/40z 1700/20/40z 1900/20/40z 1700/20/40z 1700/20/40z 1900/20/40z 1700/20/40z 1900/20/40z 1700/20/40z 1800/20/40z 1700/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 10 Apr 10 Apr 11 Apr 23 Apr 30 Apr 10 Apr 10 Apr 11 Apr 23 Apr 30 Apr 10 Apr 11 Apr 24 Apr 11 Apr 27 Apr 11 Apr 28 Apr 30 Apr 11 Apr 29 Apr 11 Apr 20 Apr 11 Apr 21 Apr 21 Apr 22 Apr 30	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 402 000 late start  463 1 (1904 58) 45012 463 1 (1855 62) 05673 463 1 (9881 89) 94261 55354 463 1 (1250 81) 18523  257 1 (9500 69) 7879980477 257 1 (3351 55) 98349 257 1 (4436 97) 0617646995 257 1 (436 97) 0617646995 257 1 (4723 108) 71148 257 1 (4018 83) 65111 257 1 (8704 66) 48378 257 1 (2843 86) 3537473776 257 1 (2843 86) 3537473776 257 1 (2597 46) 4874932113	FN FN/HFD/JkC FN/JkC FN/JkC FN FN/JkC FN FN FN FN FN FN FN/HFD  FN FN/JkC	MON MON MON WED WED WED WED THU
5792/6992/ 6793/5893/4593 7484/8084/ 8047/6802/5788	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 03 Apr 07 Apr 07 Apr 07 Apr 07 Apr 07 Apr 10 Apr 10 Apr 11 Apr 12 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 402 000 late start  463 1 (1904 58) 45012 463 1 (9570 91) 1189525131 463 1 (1855 62) 05673 463 1 (9881 89) 94261 55354 463 1 (1250 81) 18523  257 1 (9500 69) 7879980477 257 1 (3351 55) 98349 257 1 (4436 97) 0617646995 257 1 (4436 97) 0617646995 257 1 (7723 108) 71148 257 1 (4018 83) 65111 257 1 (8704 66) 48378 257 1 (8704 66) 48378 257 1 (2843 86) 3537473776	FN FN/HFD FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN FN FN FN/HFD FN FN/JkC FN	MON MON MON WED WED WED WED THU THU THU WED WED WED WED THU
5792/6992/ 6793/5893/4593 7484/8084/ 8047/6802/5788	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z 1900/20/40z 1700/20/40z 1900/20/40z 1700/20/40z 1700/20/40z 1900/20/40z 1700/20/40z 1900/20/40z 1700/20/40z 1800/20/40z 1700/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 10 Apr 10 Apr 11 Apr 23 Apr 30 Apr 10 Apr 10 Apr 11 Apr 23 Apr 30 Apr 10 Apr 11 Apr 24 Apr 11 Apr 27 Apr 11 Apr 28 Apr 30 Apr 11 Apr 29 Apr 11 Apr 20 Apr 11 Apr 21 Apr 21 Apr 22 Apr 30	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 402 000 late start  463 1 (1904 58) 45012 463 1 (1855 62) 05673 463 1 (9881 89) 94261 55354 463 1 (1250 81) 18523  257 1 (9500 69) 7879980477 257 1 (3351 55) 98349 257 1 (4436 97) 0617646995 257 1 (436 97) 0617646995 257 1 (4723 108) 71148 257 1 (4018 83) 65111 257 1 (8704 66) 48378 257 1 (2843 86) 3537473776 257 1 (2843 86) 3537473776 257 1 (2597 46) 4874932113	FN FN/HFD/JkC FN/JkC FN/JkC FN FN/JkC FN FN FN FN FN FN FN/HFD  FN FN/JkC	MON MON MON WED WED WED WED THU THU THU THU THU THU THU THU THU MON MON THU MON MON
5792/6992/ 6793/5893/4593 7484/8084/ 8047/6802/5788	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z 1900/20/40z 1900/20/40z 1900/20/40z 1900/20/40z 1900/20/40z 1900/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 03 Apr 03 Apr 07 Apr 07 Apr 07 Apr 10 Apr 10 Apr 11 Apr 12 Apr 11 Apr 12 Apr 13 Apr 14 Apr 14 Apr 14 Apr 17 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 late start  463 1 (1904 58) 45012 463 1 (9570 91) 1189525131 463 1 (1855 62) 05673 463 1 (9881 89) 94261 55354 463 1 (1250 81) 18523  257 1 (9500 69) 7879980477 257 1 (3351 55) 98349 257 1 (4436 97) 0617646995 257 1 (4436 97) 0617646995 257 1 (4723 108) 71148 257 1 (4018 83) 65111 257 1 (2843 86) 3537473776 257 1 (2843 86) 3537473776 257 1 (1330 105) 1534307734 257 1 (19598 84) 87332	FN FN/HFD FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN FN FN FN/HFD FN FN/JkC FN	MON MON MON WED WED WED WED THU THU THU THU THU THU MON MON MON THU MON MON THU MON MON THU MON MON THU
5792/6992/ 6793/5893/4593 7484/8084/ 8047/6802/5788	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z 1900/20/40z 1900/20/40z 1900/20/40z 1900/20/40z 1700/20/40z 1900/20/40z 1900/20/40z 1700/20/40z 1900/20/40z 1700/20/40z 1900/20/40z 1700/20/40z 1700/20/40z 1900/20/40z 1700/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 03 Apr 07 Apr 07 Apr 07 Apr 07 Apr 10 Apr 11 Apr 12 Apr 11 Apr 12 Apr 13 Apr 14 Apr 14 Apr 14 Apr 17 Apr 17 Apr 17 Apr	796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 late start  463 1 (1904 58) 45012 463 1 (9570 91) 1189525131 463 1 (1855 62) 05673 463 1 (9881 89) 94261 55354 463 1 (1250 81) 18523  257 1 (9500 69) 7879980477 257 1 (3351 55) 98349 257 1 (4436 97) 0617646995 257 1 (7723 108) 71148 257 1 (4018 83) 65111 257 1 (4018 83) 65111 257 1 (2843 86) 3537473776 257 1 (2843 86) 3537473776 257 1 (1330 105) 1534307734 257 1 (9598 84) 87332 257 1 (9598 84) 87332 257 1 (9598 84) 87332 257 1 (9598 84) 87332 257 1 (9598 84) 87332	FN FN/HFD FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN FN FN FN FN/HFD FN FN/JkC FN	MON MON MON WED WED WED WED THU THU THU THU THU THU MON MON MON THU THU
5792/6992/ 6793/5893/4593 7484/8084/ 8047/6802/5788	0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 0430/0450/0510z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 2100/20/40z 0630/0650/0710z 0630/0650/0710z 0631/0650/0710z 1700/20/40z 1900/20/40z 1900/20/40z 1900/20/40z 1900/20/40z 1900/20/40z 1900/20/40z	07 Apr 14 Apr 21 Apr 28 Apr 09 Apr 16 Apr 23 Apr 30 Apr 10 Apr 17 Apr 24 Apr 02 Apr 09 Apr 16 Apr 23 Apr 30 Apr 03 Apr 03 Apr 07 Apr 07 Apr 07 Apr 10 Apr 10 Apr 11 Apr 12 Apr 11 Apr 12 Apr 13 Apr 14 Apr 14 Apr 14 Apr 17 Apr	796 000 796 000 796 000 796 000 785 1 (198 63) 9311805097 785 000 785 1 (1388 69) 73489 785 000 785 1 (2005 97) 17050  402 000 402 000 402 000 402 000 402 000 late start  463 1 (1904 58) 45012 463 1 (9570 91) 1189525131 463 1 (1855 62) 05673 463 1 (9881 89) 94261 55354 463 1 (1250 81) 18523  257 1 (9500 69) 7879980477 257 1 (3351 55) 98349 257 1 (4436 97) 0617646995 257 1 (4436 97) 0617646995 257 1 (4723 108) 71148 257 1 (4018 83) 65111 257 1 (2843 86) 3537473776 257 1 (2843 86) 3537473776 257 1 (1330 105) 1534307734 257 1 (19598 84) 87332	FN FN/HFD FN FN/HFD/JkC FN/JkC FN FN/JkC FN FN FN FN FN/HFD FN FN/JkC FN	MON MON MON WED WED WED WED THU THU THU THU THU THU MON MON MON THU MON MON THU MON MON THU MON MON THU

	1800/20/40z	21 Apr	257 1 (4495 53) 06417	DanE2k/FN	MON
	1900/20/40z	21 Apr	257 1 (5143 110) 94734	FN	MON
	1700/20/40z	24 Apr	257 1 (9111 92) 13481	FN	THU
	1900/20/40z	24 Apr	257 1 (4792 59) 28253	FN	THU
	1700/20/40z	28 Apr	257 1 (2260 104) 92231 QRM dig station 6904kHz	FN	MON
	1800/20/40z	28 Apr	257 1 (2288 61) 45766 QRM dig station 6904kHz	FN	MON
	1900/20/40z	28 Apr	257 1 (5816 112) 08376	FN	MON
10343/9264/8116	1830/1850/1910z	01 Apr	124 1 (8108 65) 2055092517	FN/JkC	TUE
	1700/20/40z	03 Apr	124 1 (2416 89) 4219369911	FN/JkC	THU
	1830/1850/1910	08 Apr	124 1 (6987 62) 8678755908	DanE2k/FN/JkC	TUE
	1700/20/40z	10 Apr	124 1 (8411 88) 47959	FN	THU
	1800/20/40z	10 Apr	124 1 (9691 120) 22614	FN	THU
	1830/1850/1910z	15 Apr	124 1 (446 86) 15171 8238782353	FN/HRT	TUE
	1700/20/40z	24 Apr	124 1 (5546 102) 20788	FN	THU
	1800/20/40z	24 Apr	124 1 (6318 107) 15996	FN	THU
	1830/1850/1910z	29 Apr	124 1 (445 130) 05718	FN	TUE
11435/10598/9327	1830/1850/1910z	02 Apr	938 1 (5212 60) 32692	FN	WED
	1600/20/40z	07 Apr	938 1 (8056 114) 9810867768	FN/JkC	MON
	1830/1850/1910z	09 Apr	938 1 (8028 64) 8548106845	FN/JkC	WED
	1600/20/40z	14 Apr	938 1 (4746 118) 7386747152	FN/JkC	MON
	1830/1850/1910z	16 Apr	938 1 (446 86) 15171 Repeat of 1830z 15 Apr - ID 124	FN	WED
	1700/20/40z	17 Apr	124 1 (8791 98) 26189	FN	THU
	1800/20/40z	17 Apr	124 1 (4548 119) 96621	FN	THU
	1600/20/40z	21 Apr	938 1 (3971 106) 22802 91487	DanE2k/FN	MON
	1830/1850/1910z	23 Apr	938 1 (895 86) 04480 63145	JkC	WED
	1600/20/40z	28 Apr	938 1 (7449 117) 10914	FN	MON
	1830/1850/1910z	30 Apr	938 1 (445 130) 05718 Repeat of 1830z 29 Apr - ID 124	FN	WED
11469/10469/9169	2110/30/50z	02 Apr	441 000	FN/HFD	WED
	2110/30/50z	05 Apr	441 000	FN	SAT
	2110/30/50z	09 Apr	441 1 (782 89) 90296	FN	WED
	2110/30/50z	16 Apr	441 000	FN	WED
	2110/30/50z	19 Apr	441 000	FN	SAT
	2110/30/50z	23 Apr	441 1 (7879 193) 04528	FN/JkC	WED
	2110/30/50z	30 Apr	441 1 (7879 193) 04528 Very weak signal. Repeat of 23 Apr 2110z	FN	WED
13386/12189/11491	1600/20/40z	03 Apr	725 1 (5337 103) 5930378849	FN/JkC	THU
	1600/20/40z	10 Apr	725 1 (6911 115) 18582	FN	THU
	1600/20/40z	17 Apr	725 1 (2505 110) 89365	FN	THU
	1600/20/40z	24 Apr	725 1 (1932 118) 59417	FN	THU
14468/13568/12178		05 Apr	451 1 (399 105) 33382	FN	SAT
	1310/30/50z	10 Apr	451 000 451 1 (1465 111) 20022	FN	THU
	1310/30/50z	17 Apr	451 1 (1465 111) 89088	FN EN/HED	THU
	1310/30/50z	19 Apr	451 000 451 1 (3878 141) 97123	FN/HFD	SAT
	1310/30/50z	24 Apr	451 1 (38/8 141) 9/125	FN	THU
M14 IA MCW/IC	W / MCWCC, short 0				
March 2014:					
· · · · · · · · · · · · · · · · · · ·	1007 1000		707 (410.00)	D. 10D (1770	***
5463	1925 - 1929z		12 Mar 537 (148 020) 25345 14888 25676 8943409809	RNGB/tiNG	WED
5464	1920z		26 Mar 537 (148/020) = 25345	HFD	WED
5945	1820z		11 Mar 346	HFD	TUE

5463 5464	1925 - 1929z 1920z	12 Mar 26 Mar	537 (148 020) 25345 14888 25676 8943409809 537 (148/020) = 25345	RNGB/tiNG HFD	WED WED
5945	1820z	11 Mar	346	HFD	TUE
8096	0551z (IP) Had a tricky start after the ID en	18 Mar ded. Got st	736 (428 020) 12251 14814 67323 02383 23898 uck on sending 3s then 5s. Fault corrected and message proceeded	RNGB normally	TUE
8120	0700z	11 Mar	362 00000	HFD	TUE
8193	1800 - 1804z	07 Mar	269 00000 Strong	HFD/JkC	FRI
9125	1700 - 1704z	07 Mar	269 00000 Strong	HFD/JkC	FRI
<u>April 2014:</u>					
5430 5431.5	0800z 0800z	19 Apr 19 Apr	171 Weak 171 very weak	HFD AB	SAT SAT
5464	1920 - 1928z 1920 - 1928z	09 Apr 23 Apr	537 (148 020) = 25345 09809 Strong 537 (148 020) = 25345 09809 Strong	JkC JkC	WED WED
5945	1820 - 1827z	08 Apr	346 125 020 = 51059 17105 ** Strong	JkC	TUE
5945	1820 - 1828z	22 Apr	346 192 020 = 16523 25656 Fair	JkC	TUE
8193	1800 - 1804	04 Apr	269 00000 Strong	JkC	FRI
9125	1700 - 1704z	04 Apr	269 00000 Strong	JkC	FRI

9149 1900z 07 Apr 381 702 69 = 60436... FΝ MON

\*\* Jim (JkC) comments 'Appears to be repeat of 11/12/13 1920z with different ID and DK'. You are absolutely right Jim. Here is the log 2013 for comparison.

1920z 11 Dec 748 (692 020) = 51059 23438 76167 25680 94045.....17105 WED

M14a (two message variant)

1902 (IP) - 1909z 089 567 11 = 63665 ... 39903 = 567 11 089 MON 5931 14 Apr JkC JkC MON

263 15 = 56878 ... (73285) = 263 15 00000 Strong Had problem with audio near end, so not 100% sure of LG of 2nd msg.

M14 5945kHz 1820z 08 Apr 14 346 (R3m) 125 125 020 020 = = 51059 23438 76167 25680 94045 26295 92184 44625 57552 67851 95578 17869 75794 68461 80694 32456 21369 84274 96823 17105

125 125 020 020 00000

Courtesy JkC

M14 5464kHz 1920z 09 Apr14

537 (R3m) 148 148 020 020 = = 25345 14888 25676 89434 13749

17311 13731 42424 76808 23434 95769 04724 13213 14900 98402 76767 85412 13917 14234 09809

148 148 020 020 00000

Courtesy JkC

M14a 5931kHz 1902z 14 Apr14

089 (R) 567 567 11 11 ==

63665 05912 49496 44138 50877 07678 28153 32871 29705 28801  $39903 = 567 \ 11 \ (1904z)$ 

089 (R2m) 263 15 =

56878 45358 59090 45377 56904 68969 23764 80270 31482 49118 82276 04439 63646 85 . . . (73285)

= 263 15 00000

BR/JkC

Daily

Courtesy JkC

#### **M23** O ICW

8030//10755

Transmissions were logged on 3659//3961kHz from 15 Dec 2013 - 12 Jan 2014, with a call of '787' & although there have been no further broadcasts from M23 on those freqs since, it is still sending the hourly dashes on 3659kHz - some three months after the last transmission was sent.

A further transmission was heard in April sending '747' on 8030//10755kHz. This ceased on Fri 11 Apr & although not heard since, is - like the previous transmissions still sending out the hourly dashes on 10755kHz.

10755 1800 (IP) - 1807zTUE 01 Apr '747' (R7m) Strong Ended with a single dash JkC 1755 - 1807z 02 - 03 Apr '747' (R12m) Strong No // freq found BR WED/THU

Richard (RNGB) recalled that 8030kHz had previously been paired with 10755kHz, & that is where we found it, with a strong signal.

Strong // Strong

'747' (R12m)

These hourly dashes, sent for reasons on which we can only speculate, appear to be automated and have been subject to some time creep over the weeks, resulting in their current appearance at approx H+55 mins 35 Secs.

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

04 - 10 Apr

1755 - 1807z

6836	1943z (IP)	17 Mar	(459 107) (In progress) ends: 69314 88916 = 459 107 00000	FN	MON
6837/5133	1800/1900 z	05 Mar	153 (264 93) = 42874 30629 6469590843 =	JPL/RNGB	WED
6879/5148	1840/1940z	05 Mar	(792 118) = 78749 07362 28357 42578 5158905043 =	JPL/RNGB	WED
7843	1700 - 1716z	05 Mar	683 (451 76) = 97270 35408 = Strong	JkC	WED
8158/6836	1900/1930z	03 Mar	381 (620 149) = 22966 76813 32567 2236026256 =	RNGB	MON
9140	1600 - 1616z	05 Mar	683 (451 76) = 97270 35408 = Strong (see transcript)	JkC	WED
9463	0826z (IP)	19 Mar	801 (524 36) = 77126 6810840193 (Message began at 0830z)	RNGB	WED

# M24 9140kHz / 7843kHz 1600z / 1700z 19 Feb 14

683 (R3) 451 451 76 76 = =

97270 29713 54537 01236 08316 40176 97519 78191 89614 57680 07410 01026 45876 42719 18676 49763 49724 37231 63571 15893 71676 35142 58261 61917 41046 68571 28928 79216 84170 26259 05203 54568 74756 68097 49856 24172 03236 08692 05761 16205

65650 65481 62451 46062 31403 86849 94326 40684 31030 69040 15175 17635 71679 57694 15054 91303 35021 84143 41919 59685

58418 26486 80304 14084 86384 41594 94574 14284 54853 49523

28383 07293 35189 53246 02970 35408 = =

451 451 76 76 00000

Courtesy JkC

M45/2 XIV MCW, hand (555 sched for Mar - Apr). Will change to M45/1 sched ID 074 for May - Aug

No reports - Appears to have ceased transmissions

M94 CW, MCW, partner station to V24 Virtually unheard in Europe so we rely on our American monitors

Token (T!) sends this report on M94 activity - or lack of i, as it appears M94 is currently inactive.

I have worked out a new schedule for V24. I am still calling it the "V24 / M94 Schedule", however M94 has not been seen since November of 2013, so is probably inactive.

I am almost certain there is at least one more new frequency to be found for V24, and possibly that one will carry M94. Note that the new schedule includes the newly found freq of 5290 kHz. The 2 oldest frequencies that V24 has used, 6215 and 5115 kHz, now appear to be unused. Quite the shame since 6215 has been in use for many years.

Also note that V24 has gone to more slots that are only active every other month. In the past these were a fair minority, now they appear to be about half the schedule.

http://www.pbase.com/token/image/154993851/original.jpg

T! Mojave Desert, California, USA

M97 CW, partner station to V30 10375kHz Starts 1453 - 1500z (Variable).

Due to the poor reception of this signal in both the UK and Canada, GlobalTuners receivers at Hong Kong, Mojave Desert & Sydney - as well as the Twente SDR, were used frequently to confirm the msg detail. Reception in S.E. England is still variable but becoming difficult, even on Twente the signal is now weak.

#### M87 is still sending msg SD 84, the same message it has been transmitting intermittently now since August 09 2013.

10375	1458 - 1519z	03 Mar	SD84 SN58	Good Sig Via Twente. Fair into S.E. UK	BR	MON
	1458 - 1519z	06 Mar	SD84 SN58	Fair Sig Via Twente.	BR/JkC	THU
	1458 - 1519z	07 Mar	SD84 SN58	Weak / Fair Sig Via Twente.	BR	FRI
	1458 - 1519z	18 Mar	SD84 SN58	Fair sig Via Twente.	BR	TUE
	1458 - 1519z	19 Mar	SD84 SN58	Fair sig Via Twente	BR	WED
	1458 - 1519z	20 Mar	SD84 SN58	Weak sig Via Twente	BR	THU
	1458 - 1519z	24 Mar	SD84 SN58	Weak sig Via Twente	BR	MON
	1458 - 1519z	25 Mar	SD84 SN58	Weak sig Via Twente	BR	TUE
	1458 - 1519z	26 Mar	SD84 SN58	Fair sig Via Twente	BR/JkC	WED
	1458 - 1519z	27 Mar	SD84 SN58	Fair sig Via Twente	BR	THU
	1458 - 1519z	28 Mar	SD84 SN58	Fair sig Via Twente	BR	FRI
	1458 - 1519z	31 Mar	SD84 SN58	Strong sig via GlobalTuners Hong Kong	BR	MON
	1458 - 1519z	01 Apr	SD84 SN58	Fair sig Via Twente	BR	TUE
	1457 - 1518z	03 Apr	SD84 SN58	Fair sig Via Twente	BR	THU
	1457 - 1518z	04 Apr	SD84 SN58	Weak sig Via Twente	BR	FRI
	1457 - 1518z	14 Apr	SD84 SN58	Weak sig Via Twente	BR/JkC	MON
	1457 - 1518z	15 Apr	SD84 SN58	Weak sig Via Twente	BR	TUE
	1457 - 1518z	16 Apr	SD84 SN58	Weak sig Via Twente	BR	WED
	1457 - 1518z	17 Apr	SD84 SN58	Weak sig Via Twente	BR	THU
	1457 - 1518z	18 Apr	SD84 SN58	Fair sig Via Twente	BR	FRI

 ${\underline{\bf M901}}$  Temporary Assignment - Still under investigation

This station which was first heard in Jan 2014 sending 5 fig msgs in CW has since evolved into a two-way duplex sched using mainly 50baud with a 500 Hz shift - although some RTTY encrypted & unknown data modes were also noted.

Frequencies in use were principally 16720kHz & 20112kHz, with the initial call always being made on 16720kHz, usually with a request for the remote station to QSY to 20112kHz. This sched continued regularly on Mon / Wed & Sat at 0810z throughout March, but has failed to appear since the 31 March.

A full report on this station will be included in the next newsletter.

# Morse Stations - Not Number Related

	M51	XlX
--	-----	-----

2648	2000 (IP) - 2230z +	14 Mar	NR 69 M 17 21:06:44 2014 BT (5 ltr grps) etc.	Strong	BR	FRI
5453	0500z (IP) 0320z (IP) 1324 (IP) - 2300z +	08 Mar 18 Mar 14 Apr	NR 66 M:58:23 2014 BT (5 ltr grps) etc. V NR 17 M 18 04:59:33 2014 BT (5 ltr grps) etc. NR 57 A 14 15:27:37 2014 BT (5 ltr grps) etc.	Weak but mostly readable	westt1us Elmar/westt1us BR	SAT TUE MON
6825	1730 (IP) - 2000z +	12 Apr	5 ltr grps at 25 wpm		HGH	FRI
6825//6853	2100 (IP) - 2330z +	12 Apr	NR 17 A 15 22:05:32 2014 BT etc. (5 ltr grps)		BR	SAT
8016//9213	1800 (IP) - 2100z +	02 Apr	NR 17 A 02 20:05:48 2014 BT etc. (5 ltr grps)		BR	WED

8106		1430 - 160 1930 - 223		08 Mar 11 Mar	NR 05 M		014 BT qscgv			ed suddenly 1607z ong	BR PLdn		SAT TUE
9191		1125 (IP)	- 2125z +	27 Apr	NR 24 A 2	29 15:51:16 20	014 BT (5 ltr g	rps) etc.			BR		SUN
9213		` /	- 2300z + - 2115z +	15 Mar 07 Apr 23 Apr	NR 68 A 0	7 15:43:36 20	014 BT (5 ltr g 014 BT (5 ltr g 014 BT AXFIZ	rps) etc.	Very	strong c.20wpm	BR BR PLdn		SAT MON WED
9461		1320z (IP	)	24 Apr	NR 03 A 2	24 15:21:12 20	014 BT (5 ltr g	rps) etc.			BR		THU
11616		0330z (IP	)	19 Apr	Has been o	on frequency s	since at least 21	130z 18 A	Apr		westt1u	S	SAT
13952.5		2005z (IP	)	30 Mar	5 ltr grp m	sgs					SH		SUN
<u>M51a</u> (FA	AV22)	Daily Mo	n - Fri, Sun	& some Sa	ats. See NL	72 for details							
	1230 - 13 1230 - 13 1230 - 13 1235 - 12 1230 - 13 0707 (IP)	00z 04z 56z 02z	10 Mar 11 Mar 12 Mar 13 Mar 14 Mar 20 Apr		con -Lecon -Lecon -Lecon xt ends AR	22-1/1 Codé 23-1/1 Codé 24-1/1 Codé 25-1/1 Codé CQ de FAV2	22-1/2 Clair, 23-1/2 Clair, 24-1/2 Clair, 25-1/2 Clair, 22 VA	22-1/3 ( 23-1/3 ( 24-1/3 ( 25-1/3 (	Codé, Codé, Codé,	21-1/4 Clair (420 22-1/4 Clair (600 23-1/4 Clair (720 24-1/4 Clair (840 25-1/4 Clair (960	grps/hr) grps/hr) grps/hr)	BR BR BR BR BR	MON TUE WED THU FRI SUN
6825	0815z		20 Apr	Samedi/D Samedi/D Samedi/D Samedi/D	Dimanche 2/I Dimanche 2/I Dimanche 2/I	Lecon n1/2 Vi Leçon n2/2 Vi Leçon n1/3 Vi	DLH 3881/6825 itesse 600 cod itesse 600 cla itesse 1200 cod itesse 1200 cla	de ir ode				AB	SUN

# <u>M89</u> O

This is a summary of activity from the M89 stations. To be read in conjunction with JPL's full logs which can now be found in the charts section.

Jean Paul writes; Recently, I've noticed the appearance of a number of stations using the DPnnnn (nnnn = Number). I've looked at previous similar loggings, which at the time I did not believe were part of the M89 family, and have now changed my mind. As a result, I've added previous loggings at the end of today's log.

The main station appears to be DP91, which was first heard on 27 Apr 13. As well, today has produced a number of additional frequencies and DPnnn station activity.

# Operator Chat from M89

Op. chat & traffic reported on the following freqs. (See JPL's full logs for details).

3685	4055	5115	6212	7680	8021	9311
3856	4123	5171	6213	7706	8053	
3898	4202	5177	6552	7711	8054	10616
	4270	5200	6636	7717	8063	10674
	4321	5236	6637	7750	8073	
	4367	5292	6666	7770	8074	17223
	4444	5304	6666.666	7777	8110	
	4720	5317	6688	7785	8112	
	4733	5322	6751	7788	8167	
		5334	6770	7791	8183	
		5346	6835	7811	8236	
		5445	6876	7841	8244	
		5460	6877	7860	8385	
		5546	6887	7890	8395	
		5555	6936	7894	8810	
		5555.5	6940		8888	
		5600	6970		8900	
		5667				
		5678				
		5710				
		5773				
		5,75				

# New Scheds for March / April 2014: From logs submitted from JPL

3565//4142	New freqs & call-up.	3565kHz first heard 17 Mar 4142kHz // found 23 Mar	V SXL6 (x3) DE 9QFZ (x2)
<u>3677//NRH</u>	New R/S. and frequency	3677kHz	V TY9D (x3) DE EPX2 (x2)
4131//NRH	Slight freq deviation from usua	al freq of 4132kHz	V JKDJ (x3) DE SLBC (x2)
4131//9383	New pairing of known freqs	First heard 09 Apr	V JKDJ (x3) DE SLBC (x2)

5135//NRH	Note: New R/S and frequency.	First heard 16 Apr	V 6TRW (x3) DE J9NS (x2)
5562//6571	New freqs for this round-slip	5562kHz first heard 25 Mar 6571kHz // first heard 26 Mar	V SXL6 (x3) DE 9QFZ (x2)
5801//8101//10180	Triple-freq in use	First heard 08 Apr	V DKG6 (x3) DE 3A7D (x2)
8073//NRH	New freq & call-up	First Heard 26 Mar	VV BNGC (x3) DE XSV85 (x2)
16720//NRH	New R/S for this freq. New R/S for this freq. New R/S for this freq	First heard 04 Mar First heard 21 Mar First heard 17 Apr	V 8DKB (x3) DE ODY8 (x2) V VTX7 (x3) DE TZ7B (x2) V 8PEX (x3) DE TI5F (x2)

Chart of M89 Freq & Call signs heard in Mar / Apr 2014 New Scheds shown in Bold Type From logs submitted by JPL

iait of Mos Freq &	Can signs heard in Mar / Apr 2014 New 5	CII
Freq in KHz	Call Slip	
3300//NRH	V MW3D (x3) DE 2SLC (x2)	
3565//4142	V SXL6 (x3) DE 9QFZ (x2)	
3642//NRH	V DKG6 (x3) DE 3A7D (x2)	
3642//5230	V DKG6 (x3) DE 3A7D (x2)	
3642//7602	V DKG6 (x3) DE 3A7D (x2)	
3677//NRH	V TY9D (x3) DE EPX2 (x2)	
3797//4512	V H2FL (x3) DE DRV8 (x2)	
3820//5657	V GKLO (x3) DE TYUI (x2)	
4131//NRH	V JKDJ (x3) DE SLBC (x2)	
4131//9383	V JKDJ (x3) DE SLBC (x2)	
4132//NRH	V JKDJ (x3) DE SLBC (x2)	
4225//5500	V 7NPE (x3) DE QV5B (x2)	
4512//NRH	V H2FL (x3) DE DRV8 (x2)	
4860// 6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?	,
5135//NRH	V 6TRW (x3) DE J9NS (x2)	
5177//NRH	V JKDJ (x3) DE SLBC (x2)	
5230//7602	V DKG6 (x3) DE 3A7D (x2)	
5366//8072	V GKLO (x3) DE TYUI (x2)	
5367//8072	V GKLO (x3) DE TYUI (x2)	
		_

U	iowii iii boiu 1 ype	From logs submitted by JFL
	Freq in kHz	Call Slip
	5562//NRH	V SXL6 (x3) DE 9QFZ (x2)
	5562//6571	V SXL6 (x3) DE 9QFZ (x2)
	5588//NRH	V MW3D (x3) DE 2SLC (x2)
	5657//NRH	V GKLO (x3) DE TYUI (x2)
	5801//8101//10180	V DKG6 (x3) DE 3A7D (x2)
	5801//10180	V DKG6 (x3) DE 3A7D (x2)
	6773//NRH	V H2FL (x3) DE DRV8 (x2)
	6773//8040	V H2FL (x3) DE DRV8 (x2)
	6840//NRH	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
	6840//10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
	7582//8110	V 7NPE (x3) DE QV5B (x2)
	8072//NRH	V GKLO (x3) DE TYUI (x2)
	8072//10421	V GKLO (x3) DE TYUI (x2)
	8073//NRH	VV BNGC (x3) DE XSV85 (x2)
	8101//10180	V DKG6 (x3) DE 3A7D (x2)
	8110//NRH	V 7NPE (x3) DE QV5B (x2)
	9383//NRH	V JKDJ (x3) DE SLBC (x2)
	16720//NRH	V 8DKB (x3) DE ODY8 (x2) V VTX7 (x3) DE TZ7B (x2) V 8PEX (x3) DE TI5F (x2) Courtesy JPL

# Other logs received:-

38	20	1950z	16 Mar	V GKLO GKLO de TYUI TYUI	FN	SUN
41	42	2000z	23 Mar	V SXL6 SXL6 de 9QFZ 9QFZ	FN	SUN
45	12	2020z	10 Mar	V H2FL H2FL de DRV8 DRV8	FN	SUN
55	00	2015z	30 Mar	V 7NPE 7NPE 7NPE de QV5B QV5B	FN	SUN
56	57	1950z	16 Mar	V GKLO GKLO de TYUI TYUI	FN	SUN
68	40	2020z 1922z 2120z	29 Mar 02 Apr 11 Apr	VVV Q2M Q2M Q2M de NYZ NYZ VVV Q2M Q2M Q2M de NYZ NYZ VVV Q2M Q2M Q2M DE NYZ NYZ Ended 2125z	FN FN Topol	SAT WED FRI
76	02	1956z	30 Mar	V DKG6 DKG6 de 3 A7D 3A7D	FN	SUN
167	20	0710z 1305z	16 Mar 24 Mar	V 8DKB 8DKB DE ODY8 ODY8 V VTX7 VTX7 VTX7 DE TZ7B TZ7B	BR BR	SUN MON

#### A couple of Old Friends

Before we leave the Morse stations, I thought we would briefly visit a couple of stations from the early days of the original ENIGMA group. Both of these stations were given designations, but these were later withdrawn following extensive study by the group. Some monitors are still of the opinion that the msgs sent out by the Israeli Naval station 4XZ may be intelligence related.

M21 (withdrawn)	Russian Air Defence - Plotting Station	
MZI (WILHUTAWII)	Russian Air Defence - Plotting Station	

4391 2046z 10 Mar 990046??0????? 990047??0????? etc. sent approximately every 50 seconds. BR MON 14 Mar BT 990034??08???? etc. BR FRI

Consists of figures 99, a four figure time stamp, followed by the plotting data. Plotting coordinates, when sent, replace the question marks shown in the above log. Note that the time stamp, 0046 in this example follows Moscow time - Four hours ahead of UTC.

M22 (Withdrawn) Israeli Navy - Call-sign 4XZ

4331//6607 2048z 10 Mar VVV DE 4XZ 4XZ = = (Rptd) BR MON

4XZ can be heard operating 24 hrs on the above freqs in Europe. Sends msgs in 5 ltr grps with the above round-slip repeated continuously between msgs. Used to operate on a large number of freqs, but in 2005 most of the CW traffic disappeared and was believed to have changed over to data modes.

Some CW traffic still survives, however, & apart from the two freqs listed above 4XZ has been heard recently operating on 2680kHz & 2860kHz.

The automated Morse sent out from 4XZ, which used to be of excellent quality is sounding decidedly poorly in recent months.

Marker Beacons	(MX	MXI)
----------------	-----	------

4083	1909z	20 Mar	MX	CW	Beacon	"V"	(Marker - Cont'd)	(Remote tuner Finland)	JPL	THU
4325.9	1912z	20 Mar	MX	CW	Beacon	"R"	(Marker - Cont'd)	(Remote tuner Finland)	JPL	THU
4557.7 4557.9	2040z 2202z	10 Mar 10 Mar			Beacon Beacon		Sevastopol		BR BR	MON WED
5153.8	2015z	08 Mar			Beacon		Kaliningrad		BR	SAT
5153.9 5154.4	2015z 1305z	08 Mar 21 Mar			Beacon		Sevoromorsk		BR AB	SAT FRI
6917.5	1303z 1257z	21 Mar			Beacon		Magadan St Petersburg		AB	FRI
6928	1856z	20 Mar			Beacon		C .	Remote tuner Finland)	JPL	THU
7038.7	2212z	09 Mar			Beacon		Sevastopol	remote tuner r manu,	BR	SUN
7038.8	2212z	09 Mar			Beacon		<b>F</b>		BR	SUN
7038.9	2212z	09 Mar			Beacon		Sevoromorsk		BR	SUN
7039.2	1305z	21 Mar	MXI	CW	Beacon	"F"	Vladivostok		AB	FRI
7039.3	1305z	21 Mar			Beacon		Petropavlovsk - Kamchatsk	V	AB	FRI
7039.4	1305z	21 Mar			Beacon		Magadan Kamenatsk	.9	AB	FRI
8029	0820z	22 Mar			Marker		Channel Marker (Russian A	Air Force)	AB	SAT
8495.4	1305z	21 Mar	MX	CW	Beacon	"M"	Magadan		AB	FRI
8497.8	1305z	21 Mar	MX	CW	Beacon	"L"	St Petersburg		AB	FRI
10871.9	2300z	17 Apr			Beacon		Sevoromorsk		DanAR	THU
10872	1505z	20 Mar	MXI	CW	Beacon	"C"	Moscow		BR	SAT
10872.2	1305z	21 Mar	MXI	CW	Beacon	"F"	Vladivostok		AB	FRI
10872.3	1305z	21 Mar	MXI	CW	Beacon	"K"	Petropavlovsk - Kamchatsky	y	AB	FRI
10872.4	1305z	21 Mar	MXI	CW	Beacon	"M"	Magadan		AB	FRI
13527.7	1940z	10 Mar			Beacon		Sevastopol		BR	MON
13527.9	1940z	10 Mar	MXI	CW	Beacon	S.,	Sevoromorsk		BR	MON
13258.4	1305z	21 Mar	MX	CW	Beacon	"M"	Magadan		AB	FRI
16331.7	1947z	20 Mar	MXI	CW	Beacon	"D"	Sevastopol		BR	THU
16332.0	1818z	18 Apr					& "S" WebSDR		DanE2k	FRI
		~F				_				

# **Oddities**

832	'Squeaky Wheel'						
3828	2210z	09 Mar	S32	'Squeaky Wheel' marker	USB Fair	BR	WED

### S30 'The Pip'

3756	0031z	09 Jan	S30	'Pip' marker (Night freq)	USB	BR	SUN
5448	0348z	13 Jan	S30	'Pip' Marker (Day freq)	USB (Switches 0330z?)	BR	THU

#### The 'Twenty Min Idler'

In the last newsletter we carried an article about the rediscovery by Matt G7OBR, of this old ENIGMA oddity. The article seems to have prompted quite a bit of interest & discussion on various internet watering holes & has also resulted in the following article and accompanying logs from our friend Spectre.

#### 20 Minute Idler Oddity Station An Article by Spectre

After reading the short oddity section in the Jan/Feb Enigma 2000 newsletter, I was somewhat intrigued with the mention of the 20 Minute Idler station been reactivated since August 2010. So I was interested in doing some monitoring activity regarding this station which transmits on 5305kHz during the evening hours.

From my own observations of the 20 Minute Idler, it was possible to listen to the station from 1600 UTC, probably due to shortwave propagation, and continue listening right into the very small hours of the morning. I guess this station transmits 24 hours every day, but we are only able to receive their evening transmissions here in the UK. After only just a few days of monitoring the activity of the station, I was aware that the station does not appear to stick to its supposed schedule of switch on at the top of every hour and switch off 20 minutes past the hour. On many occasions the station did not switch on its transmission until slightly past the hour, and on some other occasions it did not switch off at exactly 20 minutes past the hour either. And on other occasions the station didn't switch off its transmissions until many hours had passed, but for some reason still switched off at around 20 minutes past the hour regardless of how long they had been on air. Due to the fact of the stations very sloppy schedule, I came to the conclusion that this station is a manned operation, and it is not operated automatically. I guess what we are witnessing is someone's night shift activity, as I imagine the stations location is maybe ahead of our time zone in the UK by a few hours. So by the time I had tuned into the station at 2100 UTC it could already be 0100 AM at the stations time zone, so the radio operator is more so left to his own devices since any of his work colleagues have already gone home many hours ago. So I guess the sole radio operator has a very relaxed attitude while doing his job, an emergency call maybe a very rare event. I speculate that the radio operator has a very mundane and boring job, so on occasions he switched on the transmission, and fell asleep at his console. This would explain why the transmission was broadcast on air for several hours, and then switched off after he woke up.

Needless to say, these lengthy transmissions did not send any traffic of any kind as of yet.

So what is the purpose of these transmissions, after nearly a week of monitoring this station. I am still completely clueless to what the stations main function is supposed to be. It is obvious it is used for some sort of emergency backup system, for some kind of Military establishment. I guess they transmit the FSK in idle mode, to keep the frequency clear of any other broadcasts, and to let the recipient know the system is still functioning. But without any messages been sent as of yet, and no Morse Code call sign, or even a hint of any live speech. There is very little information to draw any conclusions to what the stations purpose is used for. The 20 Minute Idler is not as glamorous or has the thrill of the S28 buzzer, there is no hope of a flashy live speech message many radio enthusiasts crave these days. I suppose the frequency of 5305kHz is just a part of the dial nobody cares to tune into anymore, where life appears to slow down to a snail's pace. Well it certainly appears to slow down for the radio operator who has the job of sending these transmissions, that's for sure.

5305	1900 - 1920z	04 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	TUE
	2000 - 2020z	04 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	TUE
	2100 - 2120z	04 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	TUE
	2200 - <b>2235</b> z	04 Mar	[FSK Idler]	Fair		QSB3		Spectre	TUE
	2300 - 2320z	04 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	TUE
	0002 - <b>0022</b> z	05 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	WED
	0100 - 0120z	05 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	WED
	0200 - 0220z	05 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	WED
	1700 - 1720z	05 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	WED
	<b>1801</b> -1820z	05 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	WED
	1900 -1920z	05 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	WED
	2000 -2020z	05 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	WED
	2100 - <b>0021</b> z	05 Mar	[FSK Idler]	Fair	QRN3	QSB3	(Transmission continued for 3 hours 21 minutes.)	Spectre	WED
	1601 -1621z	06 Mar	[FSK Idler]	Weak	QRN3	QSB3		Spectre	THU
	1903 -1935z	06 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	THU
	2000 -2020z	06 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	THU
	2101 -2121z	06 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	THU
	2200 - <b>2221</b> z	06 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	THU
	2300 -2320z	06 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	THU
	1600 - <b>1622</b> z	07 Mar	[FSK Idler]	Weak	QRN4	QSB3		Spectre	FRI
	1657 - 1708z	07 Mar	[Ham Radio	Talk, N	No Idler]		Fair QRN3 QSB3	Spectre	FRI
	1708 - 1726z	07 Mar	[Idler Starts,	Ham's	QSY to	new free	quency] Fair QRN3 QSB3	Spectre	FRI
		(Note, did	the Idler Op	check tl	he freque	ency pric	or to switching on the transmission.)		
	2018 - 0020z	07 Mar	[FSK Idler]	Fair	QRN4	QSB3	(Another lengthy transmission lasting 4 hours.)	Spectre	FRI
	2000 - 2020z	08 Mar	[FSK Idler]	Fair	ORN3	OSB3		Spectre	SAT
	2100 - 2120z	08 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	SAT
	2205 - 2221z	08 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	SAT
	2300 - 2320z	08 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	SAT
	0000 - 0020z	09 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	SUN
	0100 - <b>0124</b> z	09 Mar	[FSK Idler]	Fair	QRN3	QSB3		Spectre	SUN
	2000 - 2020z	09 Mar	[FSK Idler]	Fair	QRN3	QSB2		Spectre	SUN
	2100 - 2120z	09 Mar	[FSK Idler]	Fair	QRN3	QSB2		Spectre	SUN
	2200 - 2220z	09 Mar	[FSK Idler]	Fair	QRN3	QSB2		Spectre	SUN
	2300 - 2320z	09 Mar	[FSK Idler]	Fair	QRN3	QSB2		Spectre	SUN
	2100 - <b>2317</b> z	10 Mar	[FSK Idler]	Fair	QRN3	QSB2		Spectre	MON
	2000 - 2020z	21 Mar	[FSK Idler]	Fair	QRN3	QSB2		Spectre	FRI
	2000 - 2020z	03 Apr	[FSK Idler]	Fair	QRN3	QSB3		Spectre	THU
	2200 - 2320z	04 Apr	[FSK Idler]	Fair	QRN3	-		Spectre	FRI
	2200 - 23202	04 Apr	[FSK Idler]	rair	QKN3	QSB3		Spectre	

Many thanks for the observations Spectre. Whilst the rediscovery of the 'idler' is of interest to ENIGMA it is not a station that is regular followed by us, although we will be monitoring it from time to time. Any reports of changes or other freqs in use would however, always be appreciated.

#### Report from ENIGMA2000's German Branch (E2Kde) and the X06 team

Report from ENIGMA2000's German Branch (E2Kde) and the X06 team

Hallo liebe Freunde und Kollegen von E2Kde und dem X06 Team (Hello dear friends and colleagues of E2Kde and the X06 team)

E2Kde, our German Branch, is now existing 10 years! Founded on March 6<sup>th</sup> 2004 after Paul's request to build it up, we could do and find out a lot of things including logging stations or confirming logs of others for E2K. We were also present in the public German media sometimes, first in the transmission "Einblicke" on Bavarian TV, sent on March 7<sup>th</sup> 2004, which you can hear on Simon Mason's site (<a href="www.simonmason.karoo.net/page472.htm">www.simonmason.karoo.net/page472.htm</a>). The youngest example is the radio play "Buzzer" by the free journalist Annette Scheld from Hamburg (2013), which won the first public price in the festival of the free radio play scene in Berlin on September 28<sup>th</sup> last year (see NL 79). On March 26<sup>th</sup> this year, a team from the French-German TV channel "ARTE" was at my work place and in my home to make a film for a transmission about cryptology and numbers stations, which will come in summer (if I know the exact date, I'll inform you as usual). As KopfE2Kde I follow the development of E2Kde and report about it in the newsletters, which I'll further do of course for the best of E2K, where I am the comoderator of since 2006.

But not only E2Kde is led by the Kopf, also the X06 team, where I also report regularly about news. So here are the next X06 logs, which are again very interesting:

X06 Mazielka (1C) logs section

```
Date Day UTC
              Freq Scale Monitor Comments
20140302 Sun 1150-1152 14377 432516 tiNG
                                                Monitored i. p., S9, R
20140303 Mon 1224-1252 18375 123456 Avare/RU
                                                XX06c
20140303 Mon 1433-1501 14875 123456 Danix/PL
                                                X06c, pure USB
20140303 Mon 1503-1510 15765 123456 JimKC/US
                                                X06c
20140303 Mon 1543-1557 15765 123456 Danix
                                                X06c, pure USB
20140304 Tue 0748-0753 18750 641523 PaulH/UK
                                                Alert 2 (both G) 1
20140304 Tue 0758-0801 20675 641523 PaulH
                                                2.2
20140304 Tue 0834-0848 17511 641523 Toto/CZ
                                                USB + carrier, R
20140304 Tue 1055
                       26600 123456 Avare
                                                X06c, USB + carrier, new freq!
20140304 Tue 1205-1206 14970 216354 Peter/UK
                                                Alert 2 (both good) 1 G
20140304 Tue 1209-1215 17470 216354 Peter
                                                2.2 M763
20140304 Tue 1455-1500 14970 216354 Avare, Danix Alert 2.1 USB + carrier, G
20140304 Tue 1508-1511 12191 216354 Avare, Danix 2.2 USB + carrier, G
20140304 Tue 1805-1903 14875 123456 Avare,
                                    LU5EMM,
                                    WebWeasel
                                                X06c
20140305 Wed 0835-0838 17470 216354 Avare
                                                M764
                      17430 214356 Peter
20140305 Wed 0950
                                                M765
20140305 Wed 1639-1640 17517 314265 JimKC
                                                Strong, G
20140305 Wed 1708
                      14970 216354 Peter
                                                Caught only 20 secs, G
20140305 Wed 1840-1842 13875 314265 WebWeasel
20140306 Thu 1233
                                                S9, M766
                       16132 352416 Avare
20140307 Fri 0930-0936 20837 645321 PaulH
                                                G
20140308 Sat 1530-1538 14970 216354 GWRaspe/UK
                                                S9, G
20140309 Sun 1810-1812 10601 145632 PaulH
                                                M767
20140310 Mon 0952-1001 20837 645321 PaulH
                                                R
20140311 Tue 1017
                       16317 612534 Gold88/LV
                                                I. p. (caught the end), M768
20140312 Wed 0723-0725 18591 435621 PaulH
                                                New freq, R
20140312 Wed 0852-0857 18245 134265 KopfE2Kde
                                                Fair, M769
20140312 Wed 1701
                       13439 1--6-- Avare, Danix X06b, full AM
                       13439 1--6-- Avare, Danix X06b, full AM
20140312 Wed 1711
20140312 Wed 1855
                       10731 314265
                                                Beginning "521634", M770(1)
20140313 Thu 1615-1619 10535 564213 PaulH
20140313 Thu 2335
                       14874
                                    LU5EMM
                                                X06b, Single tone(? - rec. in USB)
20140314 Fri 0957-1005 20605 256134 PaulH
                                                Alert 2.1 M771
20140314 Fri 1005-1012 19611 256134 PaulH
                                                2.2 Strong, M772
20140317 Mon 0749-0751 18750 641523 PaulH
                                                I. p., R
20140317 Mon 1638-1640 11438 532614 Avare, Danix M773 (followed by CROWD36 at 1640)
20140318 Tue 0833-0839 16103 231654 Nicolas/FR Alert 2.1 G (via SDR Twente)
20140318 Tue 0839-0843 19878 231654 PaulH
                                                2.2 New freq, R (followed by C36)
20140320 Thu 1241-1248 18575 352416 PaulH
                                                Alert 2.1 I. p., new freq, M774(2)
s20140320 Thu 1248-1251 19405 352416 PaulH
                                                 2.2 G(2)
20140320 Thu 1430-1432 12091 216354 Dude/UK,
                                    Danix
20140321 Fri 0924-0931 18197 645321 PaulH
                                                M775
20140323 Sun 1007-1026 19611 314265 PaulH
                                                Alert 2 (both R) 1
20140323 Sun 1026-1029 19511 314265 PaulH
                                                2.2
20140324 Mon 0829-0843 20690 156234 PaulH
20140325 Tue 1153
                       18960 621543 PaulH
                                                Alert 7 (all R) 1 Only 40 secs(3)
20140325 Tue 1153-1156 18660 621543 PaulH
20140325 Tue 1159-1202 18660 621543 PaulH
                                                7.3 Comeback
                                                M776 ("412356" from 1029-1030)
20140328 Fri 1030-1035 20605 256134 PaulH
20140328 Fri 1101-1107 19511 314265 PaulH
20140328 Fri 1115-1119 14863 615243 Peter
                                                Good, M777
20140401 Tue 0919-0923 20336 246531 PaulH
                                                G (CROWD36: 0904-0914)
20140402 Wed 0634-0640 10684 256341 PaulH
20140402 Wed 1746-1748 5300 123456 Skelpion/UK X06c, heard via Twente
20140402 Wed 2210-0252 10869
                                    LU5EMM
                                                X06b, single tone(? - rec. in USB)
                                                New freq, R
20140403 Thu 0720-0722 10405 162543 PaulH
20140403 Thu 0735-0736 16190 123456 PaulH
                                                X06c i. p.
20140403 Thu 1200-1242 18575 352416 PaulH
                                                Alert 2.1 G
```

					Monitor	Comments
20140403	Thu	1242-1245	19405	352416	PaulH	2.2 M778
20140405	Sat	1043-1048	18300	123456	Paul H	X06c - USB with suppressed carrier
20140405	Sat	1048-1049	20000	123456	PaulH	X06c with usual carrier
20140406	Sun	1549	13403	16	Avare, Danix Avare, Danix	X06b
20140406	Sun	1552	14603	16	Avare, Danix	X06b
20140407	Mon	0752-0758	18750	641523	PaulH	M779
20140409	Wed	0936-0944	20813	216354	PaulH	New freq, G
20140411	Fri	0923-0925	12161	564213	tiNG	I. p., S9, R
20140411	Fri	0929-0930	12300	111111	tiNG	X06b i. p., S9 with 1 tone rpt
						X06b i. p., S9 (comeback)
20140411	Fri	1226-1234	20813	216354	PaulH	G
20140415	Tue	0750-0753	12157	165423	Avare, Ary	M780
20140415	Tue	0913-0916	18206	246531	PaulH	M781
		1042-1055				G
20140417	Thu	1243-1250	19405	352416	PaulH	Alert 3.1 M782
20140417	Thu	1250-1252	18575	352416	PaulH	3.2 M783(4)
						3.3 New freq, G
20140417	Thu	1432-1438	18177	164253	PaulH	Alert 2.1 New freq, R
20140417	Thu	1445-1451	20334	164253	PaulH	2.2 G
20140418	Fri	0932-0942	20837	645321	PaulH	R
20140418	Fri	1006-1011	14501	361245	Avare, Danix	M784
20140418	Fri	1219-1224	20813	216354	PaulH	G
20140422	Tue	0704-0713	20300	16	Nicolas	X06b i. p.
20140422	Tue	0931	18300	16	PaulH	Short X06b (only 24 secs heard)
20140422	Tue	0931-0937	20300	16	Danix,	
					Nicolas,	
					PaulH	X06b
20140422	Tue	0937-1002	19300	16	Danix,	
					Nicolas,	
					PaulH	X06b
20140422	Tue	1002-1034	18300	16	Danix, Kopf,	,
					Nicolas,	
					PaulH	Weak X06b
20140422	Tue	1013-1020	16317	612534	Danix, Kopf,	,
					Nicolas	M785
20140424	Thu	0812	14419	521634	Alexinroma	S9, M786
20140425	Fri	0507	13510	216435	Avare, Danix	R
					PaulH	
					Avare, Danix	
20140428	Mon	0813-0816	20690	156234	PaulH	M787 (CROWD36 just prior to start)
20140428	Mon	0851-0853	10372	431625	Alex	Good, M788 Fair to good but noisy, M789
20140428	Mon	0936-0942	16117	463125	Alex	Fair to good but noisy, M789
20140430	wed	0632-0636	14875	123456	PaulH	X06c
20140430	Wed	1611	12103	56	tiNG	X06b (only last secs heard)

- 1) The first 30 secs (16:15:00-16:15:30) "521634" was there. From 1615-1617 UTC without carrier (USB suppressed).
- 2) Signal of 2.1 TX was interrupted by T600 in the middle of X06 carrier, which dropped then and came up a few secs later on 2<sup>nd</sup> freq as 2.2 TX. Coincidentally there was a 66 tone MFSK signal on 18695 kHz from 1241-1251 UTC. When this dropped, X06 (2.2) dropped a few secs later too.
- 3) CW on 11959 kHz during X06.
- 4) CROWD36 at 1254 UTC with idle for 30 secs, carrier remained till 1259.
- 5) Changed scale after around 30 secs, first one: 615243.

Much interesting stuff! Many thanks to all my contributors.

Till next time I say "Auf Wiedersehen" and "Good-bye"

Jochen Schäfer, KopfE2Kde and X06 Teamkopf

# Hybrid Mode

## HM01 Logs and Analysis March-April 2014

A large variety of changes occurred to HM01 during March/April and currently most of the RDFT transmissions are shorter than the more usual 30 second bursts. The transmissions begin on the hour and half hour and now run for almost exactly 20 minutes. The changes noted are detailed below.

Things began about as normal at the beginning of March with the same set of callups being seen over several days without the last digit incrementing. After the first week of March things began to get interesting. On the  $7^{th}$  the final digits of the callups incremented by 4 instead of the expected 1. The following day only one of the callups remained 1651 which jumped backwards from a last digit of 7 to a 2. Then on the  $11^{th}$  the callups reverted to those heard on the  $7^{th}$ . On the  $12^{th}$  a callup ending in 9 appeared which in itself is very unusual. This message was a short format 22 second TX and the first 4 of the file name were the

On the 12<sup>th</sup> a callup ending in 9 appeared which in itself is very unusual. This message was a short format 22 second TX and the first 4 of the file name were the same as the callup. **4816**9 = **4816**7835.txt. Normally the contents of such a file would be a different format from the normal 30 seconds length files but sadly this was not the case. The 15<sup>th</sup> brought all new callups but now in every case the last 4 digits of the file name were the same as the callup and all messages were shorter than 30 seconds /1000 bytes. Again the format of these files was indistinguishable from the longer files.

On the  $22^{nd}$  another deviation occurred callup 95721 appeared, unusual in that it contained a 9 and also that it was a 30 second ~1000 byte file whose name matched the callup. 95721 = 54509752.txt (last 4 digits not the first 4 as on the  $12^{th}$ )

On the 26<sup>th</sup> one of the callups incremented from a last digit of 8 to a 9 this again is unusual as 9's are seen so rarely.

On the 27th, yet another deviation from the norm occurred, callup 9572's last digit incremented from a 3 to a 0 which is not expected as the last digit of a callup. Not only that but 9572 moved from position 5 to position 1 in the sequence of callups. Also the callup in position 3 moved to position 6 and its last digit incremented to 0 also.

Then the following day the two callups that had gone to a last digit of 0 changed to a 7 and the file transmitted with 9572 changed from 54509752.txt to 57089572.txt and the one transmitted with 1464 changed from 34431464.txt to 87611464.txt.

The next unusual event was on April 1st. 4 of the last digits incremented upwards but two of them stayed the same as the previous day.

It turns out that two of the files transmitted in this period did not have names ending in .txt These were 50618284.**F1C** and 36021053.**F1G** yet another deviation from normal practice. Two more F1C files appeared on the 8<sup>th</sup> 50171528.F1C and 50138868.F1C and then another appeared on the 17<sup>th</sup> 50354464.F1C. Note that all the F1C file names begin with **50**, their format seems to be the same as the text files.

Another F1G file appeared on the 13<sup>th</sup> 36363654.F1G again note that both F1G file names begin with **36** 

The 15<sup>th</sup> brought yet another oddity on the 1600z transmission one of the 6 callups last digit did not increment with the others, however, by the 2100z transmission this callup had incremented to match the others. This behavior has been repeated several times since then.

```
Logs are as follows.
HM01 11435kHz 1600z 1/3 [83522 76105 65312 66784 17704 28278] SAT
HM01 11435kHz 1600z 2/3 [83522 76105 65312 66784 17704 28278] SUN
HM01 11435kHz 1600z 3/3 [83522 76105 65312 66784 17704 28278] MON
HM01 11435kHz 1600z 4/3 [83522 76105 65312 66784 17704 28278] TUE
HM01 11435kHz 1600z 5/3 [83522 76105 65312 66784 17704 28278] First round of transmissions out 5 seconds into RDFT for callup 65312. Second round of
callups begins 45 seconds later. WED
HM01 11435kHz 1600z 6/3 [53715 86552 83465 16513 15346 40874] All new callups 53715 86552 = 62420766.txt, 83465 = 88743281.txt, 16513 =
16517027.txt, 15346 = 66814113.txt, 40874 = 73102186.txt THU
HM01 11435kHz 1600z 7/3 [63382 86557 11874 16517 74852 40878] 3 new callups, the others' last digits have jumped by 4 since yesterday. 63382 =
48868453.txt, 11874 = 43357721.txt , 74852 = 60205385.txt
HM01 11435kHz 1600z 8/3 [54471 87011 83871 16512 48161 18821] All new callups except 1651 which was 16513 2 days ago so should be 16515 not
HM01 11435kHz 1600z 9/3 [54471 87011 83871 16512 48161 18821] Two playbacks running simultaneously with same callups.
HM01 11435kHz 1600z 11/3 [63382 86557 11874 16517 74852 40878] Return to callups seen on 7/3 Straight back into second set of callups without the usual
gap. TUE
\overline{\text{HM}}01\ 11435\text{kHz}\ 1600z\ 12/3\ [00702\ 21742\ 60212\ 82672\ 48169\ 21042]\ 00702\ = 78166376.\text{txt},\ 21742\ = 73372726,\ 60212\ = 43346287.\text{TXT},\ 82672\ = ??????
48169 = 48167835.txt, 21042 = 58285122.txt. Callup 5 unusual in that it contains a number 9 also the TX length was only 22 seconds instead of the usual ~30
seconds WED
HM01 11435kHz 1600z 13/3 [18622 21743 60213 37852 48167 21043] New callups position 1 and 4. 18622 = 27816551, 37852 = 14224506.TXT THU
HM01 11435kHz 1600z 14/3 [18622 21743 60213 37852 48167 21043] FRI
HM01 11435kHz 1600z 15/3 [76282 32042 07242 32472 02562 20882] All new callups 76282 = 26467628.txt 32042 = 08453204.TXT, 07242 =
77710724.txt, 32472 = 08263247.TXT, 02562 = 48460256.txt, 20882 = 25562088.txt. 25562088. SAT
HM01 11435kHz 1600z 16/3 [76283 32043 07243 32473 02563 20883] SUN
HM01 11435kHz 1600z 17/3
                          [76284 32044 07244 32474 02564 20884] MON
HM01 11435kHz 1600z 18/3
                           [76285 32045 07245 32475 02565 20885] TUE
HM01 11435kHz 1600z 19/3 [05001 32046 07246 10601 02566 20886] New callups position 1 and 4 05001 = 10244123.txt, 10601 = 86113625.txt WED
HM01 11435kHz 1600z 20/3 [05002 10631 07247 10602 02567 20887] New callup position 2. 10631 = 53763534.TXT THU
                           [05002 10631 07247 10602 02567 20887] Cut off part way through RDFT then quickly back into second set of callups. FRI
HM01 11435kHz 1600z 21/3
HM01 11435kHz 1600z 22/3 [05003 10632 14641 10603 95721 20888] New callups position 3 and 5 14641 = 34431464.txt, 95721 = 54509752.txt. 95721 has
a rare 9 and also file name matches the callup which is unusual in a 30 second transmission as this one was. SAT
HM01 11435kHz 1600z 23/3
                          [05004 10633 14642 10604 95722 20888] SUN
                           [05004 10633 14642 10604 95722 20888] MON
HM01 11435kHz 1600z 24/3
                           [05003 10632 14642 10603 95722 20888] TUE
HM01 11435kHz 1600z 25/3
HM01 11435kHz 1600z 26/3
                           [05004\ 10633\ 14643\ 10604\ 95723\ 20889] Final callup last digit went to 9 - unusual. WED
HM01 11435kHz 1600z 27/3 [95720 28741 10531 42404 73482 14640] 4 new callups, 2 changed position. 28741 = 26352874.txt, 10531 = 36021053.txt,
42404 = 25644240.txt, 73482 = 05347348.txt. Callup 9572 changed from 9 to 0 and moved to position 1, Callup 1464 last digit went from 3 to 0 and it moved
from position 3 to position 6.
HM01 11435kHz 1600z 28/3
                           [95727 28742 10532 42405 73483 14647] Callups incremented 1 higher from yesterday except the two ending in 0 which reverted
to 7! 9752's message changed from 54509752 to 57089572.txt. Callup 1464's message changed from 34431464.txt to 87611464.txt FRI
HM01 11435kHz 1600z 29/3 [95728 28743 10533 42406 73484 14648] SAT
HM01 11435kHz 1600z 30/3 [82841 28744 10534 42407 73485 14649] SUN
HM01 11435kHz 1600z 31/3
                          [82841 28745 10535 80541 73486 83761] MON
HM01 11435kHz 1600z 1/4 [82842 28746 10536 80541 73487 83761] 73487 = 05347348.txt Note the callups that ended 1 yesterday remained 1 while the others
incremented upwards. TUE
HM01 11435kHz 1600z 2/4
                          [82843 28747 10537 80542 73488 83762] WED
HM01 11435kHz 1600z 3/4 [82844 28748 10538 80543 15281 83763] 82844 = 50618284.F1C, 28748 = 26352874.txt, 10538 = 36021053.F1G THU
HM01 11435kHz 1600z 4/4
                          [80380 17431 43570 80544 15281 83764] FRI
HM01 11435kHz 1600z 5/4
                          [80381 17431 43571 80545 15282 83765] SAT
HM01 11435kHz 1600z 7/4
                          [80383 17433 43573 80547 15284 83767] 83767 = 18568376.txt. MON
HM01 11435kHz 1600z 8/4 [80384 17434 43574 80548 15285 88681] New callup position 6. 80384 = 25638038.txt, 17434 87381743.txt, 43574 =
78354537.txt, 80548 = 46288054.txt, 15285 = 50171528.F1C, 88681 = 50138868.F1C TUE
HM01 11435kHz 1600z 9/4 [80385 17435 43575 10321 15286 88681] New callup position 4 10321 = 60381032.txt, Callup 8868 last digit did not increment
upwards with the others.
HM01 11435kHz 1600z 10/4 [80386 17436 43576 10321 15287 88682] Callup 4 last digit did not increment upwards as the others did. THU
HM01 5855kHz 0500z 11/4 [80387 17437 43577 10322 15288 88683] FRI
HM01 5855kHz 1600z 11/4 [80387 17437 43577 10322 15288 88683] FRI
HM01 14375kHz 0500z 12/4 [14121 17438 43578 10323 00441 88684] New callup position 4. 00441 = 60720044.txt SAT
HM01 11435kHz 1600z 12/4 [14121 17438 43578 10323 00441 88684] SAT
HM01 11435kHz 0500z 13/4 [14121 17439 66401 10324 00441 88685] SUN
HM01 11435kHz 1600z 13/4 [14121 17439 66401 10324 00441 88685] SUN
HM01 10715kHz 2200z 13/4 [14122 36541 66401 10325 00442 88686] New callup position 2. 36541 = 36363654.F1G SUN
HM01 11435kHz 1600z 14/4 [14122 36541 66401 10325 00442 88686] MON
HM01 11435kHz 1600z 15/4 [14123 36541 66402 10326 00443 88687] Note callup 2 did not increment with the others. TUE
```

1800z transmission. THU HM01 11635kHz 1600z 18/4 [14126 36544 66405 10329 00446 44641] FRI

HM01 5855kHz 0500z 16/4 [14124 36542 66403 10327 00444 88688] WED HM01 11435kHz 1600z 16/4 [14124 36542 66403 10327 00444 88688] WED

HM01 11635kHz 1600z 17/4 [14125 36543 66404 10328 00445 88689] THU

HM01 16180kHz 2100z 15/4 [14124 36542 66403 10327 00444 88688] Note all callups have incremented since the 1600z TX. TUE

HM01 11635kHz 2100z 16/4 [14125 36543 66404 10328 00445 88689] Callups incremented since the 1600z transmission. WED

HM01 11635kHz 2100z 17/4 [14126 36544 66405 10329 00446 44641] THU New callup position 6 44641 = 50354464.F1C. Callups incremented since the

```
HM01 11635kHz 2100z 18/4 [14126 36544 66405 10329 00446 44641] FRI
HM01 11635kHz 2100z 19/4 [14126 36544 66405 10329 00446 44641] SAT
HM01 11635kHz 2100z 19/4 [14126 36544 66405 10329 00446 44641] SAT
HM01 11635kHz 1600z 20/4 [14126 36544 66405 10329 00446 44641] SUN
HM01 11635kHz 2100z 20/4 [14126 36544 66405 10329 00446 44641] SUN
HM01 11435kHz 1600z 21/4 [14126 36544 66405 10329 00446 44641] MON
HM01 11435kHz 1600z 21/4 [14127 36545 66406 83331 00447 44641] MON
HM01 11435kHz 1600z 22/4 [14127 36545 66406 83331 00447 44641] New callup position 4 83331 = 66638333.txt Callup 6 did not increment with the others. TUE
HM01 5855kHz 0500z 23/4 [88660 36545 66406 83331 00447 44641] New callup position 1 88660 = 84038866.TXT WED
HM01 11635kHz 1600z 23/4 [88661 36546 66407 83331 00448 44642] Callup 4 did not increment with the others. WED
HM01 11635kHz 1600z 24/4 [88662 36547 66408 83332 48721 44643] New callup position 5 48721 = 68754872.txt THU
```

# March 2014:

5186kHz2031z 06/03[891 LOS, restarted 2043z: 891 237 20 37839 ... 04594 237 20 00000(s)] PLdn, FR THU

891 237 20

5855kHz1040z 12/03 //9155kHz SH WED

5855 CUBA Numbers Station HM-01 1040-1047 Female synthesized voice in Spanish with a five digit number alternating with RDFT data transmissions with good-excellent signal good modulation // with 9155 good signal, however the audio on 9155 was about four seconds behind the audio on 5855 on Wednesday 03/12/14-Steve

9065kHz 0800z	05/03[83522 76105 65312 66784 17704 28278] 0856z Strong QRN2 QSB2 07/03[53715 86552 83465 16513 15346 40874] 0856z Fair QRN3 QSB3 10/03[54471 87011 83871 16512 48161 18821] 0856z Strong QRN2 QSB2 12/03 good signal and some fadings	Spectre	WED
0800z		Spectre	FRI
0800z		Spectre	MON
0847z		Kopf	WED
9155kHz1040z	12/03 //5855kHzevidence of propagational delay	SH	WED
9240kHz 0900z	05/03[83522 76105 65312 66784 17704 28278] 0956z Fair QRN3 QSB3 07/03[53715 86552 83465 16513 15346 40874] 0956z Fair QRN3 QSB3 10/03[54471 87011 83871 16512 48161 18821] 0956z Strong QRN2 QSB2 (Malfunction in audio at 0930z) 12/03[63382 86557 11874 16517 74852 40878] QSA3	Spectre	WED
0900z		Spectre	FRI
0900z		Spectre	MON
0900z		DanAR	WED
9330kHz 0700z	05/03[83522 76105 65312 66784 17704 28278] 0756z Fair QRN3 QSB3 07/03[53715 86552 83465 16513 15346 40874] 0756z Fair QRN3 QSB3 10/03[54471 87011 83871 16512 48161 18821] 0756z Strong QRN2 QSB2	Spectre	WED
0700z		Spectre	FRI
0700z		Spectre	MON
10715kHz2230z 2200z 2200z 2200z 2200z 2200z	02/03[83522 76105 65312 66784 17704 28278] QSA2 03/03[83522 76105 65312 66784 17704 28278] QSA3 10/03[54452 87012 83872 16513 48162 18822] 2256z Fair QRN4 QSB4 17/03[02564 20884 76284 32044 07244 32474] QSA3 21/03[05002 10631 14640 10602 95720 20887] QSA2	DanAR DanAR Spectre DanAR DanAR	SUN MON MON MON FRI
11635kHz 2100z	10/03[54452 87012 83872 16513 48162 18822] 2156z Fair QRN3 QSB3	Spectre	MON
0800z	11/03[54472 87012 83872 16513 48162 18822] 0856z Weak STANAGQRN3 QSB3	Spectre	TUE
12120kHz 0900z	06/03[22574 16511 60182 08444 51835 66611] 0956z Fair QRN3 QSB3 11/03[54472 87012 83872 16513 48162 18822] 0956z Strong QRN2 QSB2 18/03[76284 32044 07244 32474 02564 20884] (all end in 4s) Very strong	Spectre	THU
0900z		Spectre	TUE
0900z		RNGB	TUE
13435kHz0700z	11/03[54472 87012 83872 16513 48162 18822] 0756z Strong QRN2 QSB2	Spectre	TUE
16180kHz2100z	04/03[83522 76105 65312 66784 17704 28278] QSA2	DanAR	TUE
2100z	22/03[05003 10632 14641 10603 95721 20888] QSA2	DanAR	SAT
17480kHz2200z	04/03[83522 76105 65312 66784 17704 28278] QSA3	DanAR	TUE
17480kHz2203z	11/03	SH	TUE

17480 HM-01 Cuban numbers station in AM 2203-2208 with RDFT data transmissions alternating with a Female synthesized voice in Spanish with a five digit number each time and a total of six of the different numbers . Modulation ok but slight hum from transmitter on 03/11/14-steve From Westlii: I have heard, and seen other reports of two simultaneous instances on the same frequency with a slight offset timing -wise. This would seem to

suggest a single transmitter location with two feeds.

17480kHz2200z	25/03[05004 10633 14643 10604 95723 20889] QSA2	DanAR	TUE
17480kHz2200z	27/03[10531 42404 73482 14640 95720 28741] QSA3	DanAR	THU

#### April2014:

5855kHz0504z	23/04[88660 36545 66406 83331 00447 44641]????z Strong QRM1 QSB1 Callup until 0507z, then single group alternated with RDFT.	JkC	WED
9065kHz0800z	06/04[80382 17432 43572 80546 15283 83766] 0856z Strong QRN3 QSB3 11/04[80387 17437 43577 15322 15288 88683] 0856z Fair QRN3 QSB3	Spectre	SUN
0800z		Spectre	FRI
9240kHz 0900z	06/04[80382 17432 43572 80546 15283 83766] 0956z Fair QRN3 QSB3 09/04[80385 17435 43575 15320 15286 88681] 0956z Weak QRN3 QSB3 11/04[80387 17437 43577 15322 15288 88683] 0956z Fair QRN3 QSB3	Spectre	SUN
0900z		Spectre	WED
0900z		Spectre	FRI
9330kHz 0700z	06/04[80382 17432 43572 80546 15283 83766] 0756z Strong QRN3 QSB3	Spectre	SUN
10715kHz2200z 2200z 2200z 2200z 2200z 2200z 2200z 2200z	04/04[80381 17431 43571 80545 15282 83765] 2256z Fair QRN3 QSB3 06/04[80383 17433 43573 80547 15284 83767] 2256z Weak QRN4 QSB4 07/04[80384 17434 43574 80548 15285 88681] QSA3 09/04[80386 17436 43576 10321 15287 88682] QSA3 21/04[14126 36544 66405 10329 00446 44641]QSA4 23/04[88661 36546 66407 83331 00448 44642] QSA3 27/04[88660 36545 66406 83331 00447 44641] QSA2	Spectre Spectre DanAR DanAR DanAR DanAR DanAR DanAR	FRI SUN MON WED MON WED SUN
11635kHz2100z 2100z 0800z	04/04[80381 17431 43571 80545 15282 83765] 2156z Fair BCQRM4 QSB3 (HM01 Mixing With VOK) 06/04[80383 17433 43573 80547 15284 83767] 2156z Weak BCQRM4 QSB4 10/04[Voice and data] S3	Spectre Spectre M8	FRI SUN THU
13455kHz0729z	03/04[Voice and Data]	M8	THU
0710z	10/04[Voice and data] S1	M8	THU
17480kHz2200z	03/04[80380 17431 43570 80544 15281 83764] QSA2	DanAR	THU
2200z	24/04[88662 32547 66408 83332 48721 44643] QSA2	DanAR	THU

#### PoSW provides an excellent view from the British perspective:

A distinct improvement in signal strength from Senor Castro's mixed mode radio transmissions as we continue the long climb out through spring. Signals in the UK evening time are particularly stronger. The usual lapses in performance such as late starts and starting up on the wrong frequency are still observed from time to time.

1-Mar-14, Saturday:- 2200 UTC, 17,480 kHz, "83522 76105 65312 66784 17704 28278". Wide variations in signal strength, peaking S6 to S7, best signal on 17,480 for a long time.

2-Mar-14, Sunday:- 0800 UTC, 9,330 kHz, starting up on the wrong frequency, 9,065 usual for this time. "83522 76105 65312 66784 17704 28278". S9 signal with good audio. Vanished after 0803 UTC, came up on 9,065 kHz shortly afterwards.

3-Mar-14, Monday:- 0800 UTC, 9,065 kHz, "83522 76105 65312 66784 17704 28278".

Several pauses at the start of the call-up, peaking S9+ with good audio.

2200 UTC, 10,715 kHz, 5F groups same as heard at 0800 UTC, S9 signal.

4-Mar-14, Tuesday:- 0900 UTC, 12,120 kHz, "83522 76105 65312 66784 17704 28278". S9 to S9+ with good audio.

1052 UTC, 12,180 kHz, transmission in progress, last few minutes, heard 5Fs as earlier, becoming weaker all the time, from S9 down to S6 - S7 by the finish at 1057 UTC.

5-Mar-14, Wednesday:- 0700 UTC, 9,330 kHz, "83522 76105 65312 66784 17704 28278".

S9+ with excellent audio, over-riding weak BC station on the same frequency.

6-Mar-14, Thursday:- 2200 UTC, 17,480 kHz, the 5F groups have changed, "53715 86552 83465 16513 15346 40874". S7 to S8, deep QSB, data started just before 2203 UTC.

7-Mar-14, Friday:- 0700 UTC, 9,330 kHz, "53715 86552 83465 16513 15346 40874", S9 with good audio over-riding the much weaker broadcast station.

2159 and 30 seconds UTC, 10,715 kHz, and not the same 5F groups as heard at 0700z this morning; "54471 87011 83871 16512 48161 18821". S9 with rapid QSB.

8-Mar-14, Saturday:- 0742 UTC, 13,435 kHz, transmission in progress, up to S9 with rapid QSB, heard 5F groups, "54471 87011 83871 16512 48161 18821".

1000 UTC, 12,180 kHz, 5Fs as earlier, S7 with deep QSB.

9-Mar-14, Sunday:- 0759 UTC, 9,065 kHz, "54471 87011 83871 16512 48161 18821". S9 with good audio. A short pause during the call-up than for a few seconds there were two voices over laying each other.

10-Mar-14, Monday:- 2201 UTC, 10,715 kHz, plain carrier until approx one minute past the hour, 5Fs have "advanced by one" since yesterday, "54472 87012 83872 16513 48162 18822". Up to S9+ with excellent audio.

11-Mar-14, Tuesday:- 0902 UTC, 12,120 kHz, voice started two minutes past the hour, "54472 87012 83872 16513 48162 18822".

12-Mar-14, Wednesday:- 0659 UTC, 9,330 kHz, "63382 86557 11874 16517 74852 40878",

change of 5Fs. Voice stopped for a couple of seconds with Morse being heard, most likely the related M08 before reverting to the YL voice. Much weaker BC station heard underneath.

14-Mar-14, Friday:- 0800 UTC, 9,330 kHz, starting up on the wrong frequency, 5Fs have changed again, "18622 21743 60213 37852 48167 21043", S9 with excellent audio. Vanished approx 45 seconds after being tuned in and re-appeared on 9,065 kHz.

2213 UTC, 10,715 kHz, a very late start, nothing heard and no carrier on 10,715 when checked at 2200 UTC and for a few minutes afterwards. Checked again at 2213z, surprised to hear call up in progress and not the same 5F groups as heard this morning, "76281 32041 07241 32471 02561 20881". S9 with QSB, good audio.

15-Mar-14, Saturday:- 0738 UTC, 13,435 kHz, transmission in progress, peaking S9 with good audio, heard 5Fs, "76281 32041 07241 32471 02561

16-Mar-14, Sunday:- 0946 UTC, 9,240 kHz, transmission in progress, S9 with rapid QSB, heard 5Fs, "76282 32042 07242 32472 02562 20882", all "one up" on vesterday.

17-Mar-14, Monday:- 0759 UTC, 9,065 kHz, 5Fs have taken one pace forward again, "76283 32043 07243 32473 02563 20883".

18-Mar-14, Tuesday:- 0659 UTC, 13,435 kHz, "76284 32044 07244 32474 02564 20884", all up by one again. S9+ with good audio.

19-Mar-14, Wednesday:- 0759 UTC, 9,065 kHz, "76285 32045 07245 32475 02565 20885".

there was a time when you could take a break of a week or more from monitoring HM01 transmissions and upon returning find the same 5F groups in use but now they change every day. S9+ with good audio.

21-Mar-14, Friday:- 0759 UTC, 9,065 kHz, "05002 10631 07247 10602 02567 20887".

23-Mar-14, Sunday:- 0900 UTC, 9,240 kHz, "05003 10632 14641 10603 95721 20888".

Went off with carrier just after 0902 UTC, came back after about 30 seconds, audio not quite as readable.

24-Mar-14, Monday:- 0700 UTC, 9,330 kHz, "05004 10633 14642 10604 95722 20889". All up by one again! Over-riding the American broadcaster on this frequency which was stronger than usual.

26-Mar-14, Wednesday: 0758 UTC, 9,065 kHz, the 5F groups have gone down instead of up; that's new! "05002 10631 14640 10602 95720 20887". S9 with deep and rapid QSB.

27-Mar-14, Thursday:- 0859 UTC, 12,120 kHz, "05002 10631 14640 10602 95720 20887". Strong enough to over-ride the FSK/RTTY type signal which sits close to this frequency.

31-Mar-14, Monday:- 0700 UTC, 9,330 kHz, "82841 28744 10534 42407 73485 14649".

S9+ with good audio over-riding "Hell-fire and Damnation" American broadcast station.

As expected stays on UTC so with the start of summertime in the UK is now heard one hour later, 8 AM and all is well!

1-Apr-14, Tuesday:- 0659 UTC, 13,435 kHz, "82842 28746 10536 80541 73487 83761". 5Fs have changed again.

2-Apr-14, Wednesday:- 0659 UTC, 9,330 kHz, "82843 28747 10537 80542 73488 83762".

Looks like everything has gone up by one again! S9+ with very good audio. 3-Apr-13, Thursday:- 0659 UTC, 13,435 kHz, "82844 28748 10538 80543 15281 83763". S9 with good audio.

4-Apr-14, Friday:- 2200 UTC, 11 PM in the UK, 10,715 kHz, "80381 17431 43571 80545 15282 83765", peaking S9+ with excellent audio.

6-Apr-14, Sunday:- 0800 UTC, 9,065 kHz, "80382 17432 43572 80546 15283 83766", all up by one again, probably a pattern here if anyone took the time to study it.

2200 UTC, 10,715 kHz, - they've advanced by one since this morning. "80383 17433 43573 80547 15284 83767".

7-Apr-14, Monday:- 0800 UTC, 9,065 kHz, "80383 17433 43573 80547 15284 83767", up again. Over S9 with good audio.

9-Apr-14, Wednesday:- 0759 UTC, 9,065 kHz, "80385 17435 43575 10321 15286 88681". S9 with good audio.

18-Apr-14, Friday:- 0659 UTC, 10,345 kHz, "14126 36544 66405 10329 00446 44641", haven't bothered

with HM01 for over a week, 5Fs have changed completely.

0659 UTC, 9,330 kHz, 5Fs as earlier, competing with the broadcast station.

19-Apr-14, Saturday:- 0659 UTC, 13,435 kHz, "14126 36544 66405 10329 00446 44641", S7 at best, weaker than usual but with good audio.

20-Apr-14, Sunday:- 0659 UTC, 9,330 kHz, "14126 36544 66405 10329 00446 44641. The broadcaster on this frequency extra strong this morning.

21-Apr-14, Monday:- 0659 UTC, 9,330 kHz, "14126 36544 66405 10329 00446 44641", over-riding the BC station.

22-Apr-14, Tuesday:- 0659 UTC, 13,435 kHz, "14126 36544 66405 10329 00446 44641".

The 5F groups have remained the same for five days; must be something going on!

#### **VOICE STATIONS**

#### E06

We start with PoSW's logs and then onto others:

As with other members of this family, the expected seasonal changes of frequency in March.

First + Third Thursdays in the Month 2030 UTC Schedule:-

6-Mar-14:- 5,186 kHz, some problem with the call-up routine, tuned in just after 2030z to hear one 5F group followed by plain carrier until after 2032z when call "891" began, stopped and started several times, DK/GC not heard until after 2040z, "237 237 20 20". S9+ signal with good audio.

20-Mar-14:- 5,186 kHz, "891" and "237 237 20 20" again but this time with the "rasping" effect on the audio just to make life a little bit more difficult for agent 891, presumably.

3-Apr-13:- 5,186 kHz, call "891", DK/GC "237 237 20 20", same as in March - but not the same 5F groups. S9+ with good audio.

#### Friday 2130 UTC Schedule Following First + Third Thursdays:-

7-Mar-14:- 5,197 kHz, started approx 50 seconds late, call "634", went on until after 2136 UTC, DK/GC "128 128 20 20", up to S9+ with good audio. Ended shortly before 2141 UTC and there was still a carrier on 5,197 at 2206 UTC presumably E06 still heating up the ionosphere.

21-Mar-14:- 5,197 kHz, call "634", several starts and stops together with the ghastly "rasping" on the speech. A break in the flow on 5F group No. 5, only heard "16202" spoken once instead of twice.

4-Apr-14:- 5,197 kHz, call "634", DK/GC "128 128 20 20", same as heard on Fridays 7th and 21st March, and also the same 5F groups.

18-Apr-14:- 5,197 kHz, started about two minutes late, "634" and "128 128 20 20", S9 signal with good audio.

#### Second Wednesday in the Month 1915 + 2015 UTC Schedule:-

Completely forgot to search for this one in March - and only one transmission found in April!-

9-Apr-14:- 1920 UTC, 4,482 kHz, "376 376 376 00000", not found until after 1923 UTC, noisy frequency. Presumably this was the first sending since this schedule has not shifted by an hour in the springtime in past years but whatever the case, no repeat transmission found at 2020 UTC.

#### Sunday 1120 + 1220 UTC Schedule, Following the Second Wednesday in the Month:-

16-Mar-14:- 1120 UTC, 7,885 kHz first sending? Very weak signal, fairly sure I could hear the E06 OM way down in the noise but totally

1220 UTC, 6,963 kHz, second sending, much clearer, weak but readable in USB mode, "376 376 376 00000".

13-Apr-14:- 1120 UTC, 7,885 kHz, "376 376 376 00000", weak but clear in USB mode, had the "rasping" effect on the audio. Unable to find a repeat at 1220 UTC, probably on 6,963 but not making the distance at this time of the day.

Other's logs:

#### E06

# March 2014:

3744kHz2020z	12/03[376 376 376 00000 R4m] 2024z QSA5 QRM1 QRN1 QSB1		tiNG,	WED
4482kHz1920z	12/03[376 00000]1924z Strong QRM1 QSB1		JkC, tiNG, Spectre	WED
5186kHz1936z 2030z 2041z 2030z	06/03[01234 56789 Test Count] 1939z Fair QRN3 QSB3 06/03[40968 R3 891 Call With Lots Of Gaps & Malfunctions] 2037z Fair QRN3 QSB3 06/03[891 237 20 37839 04594 237 20 00000(s)] 2047z Fair QRN3 QSB3 20/03[891 237 20 37839 04594 237 20 00000(s)] Strong, usual distortions	(8m38s)	Spectre Spectre Spectre JkC, FR	THU THU THU THU
	E06 5186kHz 2030z 20/03 891 237 20 37839 35787 98273 60187 16202 95625 31691 52538 61025 22567 93796 67473 40968 16891 63781 34870 04842 60491 75974 04594			

5197kHz 2046z	07/03[634 Call With Odd Sounds] 2047z Strong QRN3 QSB2	Spectre	FRI
2131z	07/03[634 128 20 37839 04594 128 20 00000(f)] 2142z Strong QRN3 QSB2	Spectre	FRI
2133z	21/03[634 128 20 37839 04594 128 20 00000(s)] 2139z Fair QRN3 QSB3	Spectre, JkC	FRI

Courtesy JkC, Spectre

237 20 00000

37839 35787 98273 60187 16202 95625 31691 52538 61025 22567 93296 67423 40968 16891 63781 34820 04842 60491 75924 04594 128 20 00000(f) Courtesy Spectre

10151kHz1840z 05/03[634 907 51 02710......75219 907 51 00000]1853z S9+10 M8 WED

10371kHz1548z 07/03[I/P ...18372 503 112 00000]1603z Strong QRM1 QSB1 JkC FRI

Courtesy JkC

E06 10371kHz 1548z 07/03 00234 50579 90382 30571 66412 90264 08457 97600 76931 80147 46543 42627 31211 78040 72296 71881 75129 61950 93789 90934 37594 56655 11165 56718 59388 21716 75414 65187 00248 30589  $\begin{array}{c} 02733\ 16820\ 35093\ 95554\ 17867\ 27131\ 75364\ 18121\ 24917\ 74398 \\ 76386\ 69608\ 29001\ 01777\ 16706\ 31603\ 57254\ 16002\ 60346\ 50947 \end{array}$ 52566 49858 37901 88984 38517 80602 07417 69717 78945 21542 81001 56586 80575 28931 28086 12543 12155 91394 91289 23121 38524 94061 75817 87170 93078 74585 98330 04970 37038 13252 06229 18372 503 112 00000

13582kHz/11123kHz 1522z/1621z 06/03

351 709 42 91160 40095 44838 49586 06953 29106 77539 38350 12114 36922 33144 81306 13174 31716 15117 83839 02358 76155 09499 14604 40201 34218 87682 63160 62473 99568 67103 37163 84860 12726

35770 78783 03839 59169 11587 05060 17176 65602 92397 01863

709 42 00000 05/03[634 907 51 02710......75219 907 51 00000]1753z S9+10

11123kHz1621z 06/03[351 709 42 91160 ... 36539 709 42 00000]1632z Strong QRM2 QSB1 JkC THU 06/03[I/P... 26486 975 42 00000]1453z Strong QRM1 QSB1 THU 12129kHz1452z JkC.

WED

FRI

WED

M8

M8, JkC

JkC

JkC, Spectre

FRI

07/03[346 975 42 62694......26486 975 42 00000]1551z S9+40

E06 12129kHz 1440z 07/03

346 975 42 62694 95657 13195 85173 48541 46093 18260 47538 19275 45327  $\frac{40684\,09187\,32708\,17071\,02104\,69654\,23920\,76560\,92592\,29751}{09106\,19848\,72723\,04524\,20148\,32576\,98590\,43158\,39162\,13584}$ 25380 46321 87327 14949 79159 96279 62958 20610 49698 10984 57834 26486 975 42 00000 Courtesy JkC

13582kHz1522z 06/03[351 709 4291160 ... 36539 709 42 00000]1533z Strong QRM2 QSB1

16083kHz1540z 07/03[346 975 42 62694......26486 975 42 00000]1451z S9 FRI M8

FRI 17480kHz0600z  $07/03[864\ 295\ 103\ 17023\ ...\ 71597\ 295\ 103\ 00000\ ]$  Very strong, QRM FR

17023 84266 26112 63578 17726 75587 90768 72350 15110 60497  $57126\ 72402\ 53667\ 25209\ 49976\ 31493\ 64430\ 65577\ 27077\ 05698\\ 40961\ 85821\ 66532\ 45622\ 11152\ 76252\ 49176\ 76803\ 84506\ 68447$  $28176\ 16517\ 79600\ 91293\ 03023\ 12488\ 61403\ 76354\ 40107\ 14517$   $43154\ 85991\ 07065\ 14955\ 32471\ 62669\ 13076\ 18954\ 26393\ 22900$ 72311 30456 85026 44244 32714 64827 38500 18826 37292 24098 06905 71777 10125 95736 37906 68073 84265 60894 91731 56176 13718 23063 28190 21934 36687 93074 75449 51177 82292 91394 85225 24432 37913 53632 04092 92213 19378 50209 15584 04312 11165 56135 32801 91529 68815 31805 46176 23286 00739 00780

56109 89550 71597

295 103 00000 Courtesy FR

**April2014:** 

2131z

13433kHz1740z

5186kHz2030z 03/04[891 237 20 06132 ... 04884 237 20 00000]2037z S9+20 M8, FR, Spectre THU 2030z M8, Spectre THU

17/04[891 237 20 06132 ... 04884 237 20 00000]203?z S7

891 237 20 06132 75514 79681 94217 21443 31441 81797 17512 62689 33103 48930 93432 25709 93628 48683 18809 85052 49870 63962 04884 Courtesy M8, FR

5197kHz2130z 04/04[634 128 20 37839 ... 04594 128 20 00000]2138z Strong QRM2 QSB1 JkC, Spectre FRI

18/04[634 128 20 37839 ... 04594 128 20 00000]2139z Strong QRM1 QSB1 Repeat of 04/04 1900z. Up late, even though carrier had been on freq since at least 2030z

634 128 20

37839 35787 98273 60187 16202 95625 31691 52538 61025 22567 93296 67423 40968 16891 63781 34820 04842 60491 75924 04594 128 20 00000 Courtesy JkC, Spectre

19650kHz0700z 07/03[864 295 103 10023 .....295 103 00000]0721z S9 M8, FR FRI

E06a

12119kHz1443z 04/03[6812 11111 00063 681 2 346 975 42 00000]1453z Strong QRM1 QSB1 JkC TUE

975 975 42 42

62694 95657 13195 85173 48541 46093 18260 47538 19275 45327 40684 09187 32708 17071 02104 69654 23920 76560 92592 29751 09106 19848 72723 04524 20148 32576 98590 43158 39162 13584 25380 46321 87327 14949 79159 96279 62958 20610 49698 10984

57834 26486 975 975 42 42 00000

Courtesy JkC/Avare

#### E07

PoSW's logs:

Sunday + Wednesday Schedule, 1800 UTC Start, 1700 UTC in April:-

5-Mar-14, Wednesday:- 1800 UTC, 13,439 kHz, "417 417 417 000". S9+ with, unlikely as it seems, excellent audio!

1820 UTC, 12,139 kHz, second sending, also a strong signal with good modulation.

9-Mar-14, Sunday:- 1800 UTC, 13,439 kHz, and 1820 UTC, 12,139 kHz, "417 417 417 000",

both strong signals with reasonable audio but not as good as that heard on Wednesday, above.

12-Mar-14, Wednesday:- 1800 UTC, 13,439 kHz, and 1820 UTC, 12,139 kHz, "417 417 417 000", both S9+ with good audio.

16-Mar-14, Sunday:- 1800 UTC, 13,439 kHz, at last some "trade" for agent 417! "417 417 417 1", DK/GC "521 153" x 2, quite a long message, S9+ with good audio.

1820 UTC, 12,139 kHz, second sending, also strong with good audio.

1840 UTC, 10,739 kHz, third transmission, S9+ with good audio.

23-Mar-14, Sunday:- 1800 UTC, 13,439 kHz, "417 417 417 1", DK/GC "521 153" x 2 again. S9+ with very good audio.

1820 UTC, 12,139 kHz, and 1840 UTC, 10,739 kHz, repeat transmissions, both very strong signals with good modulation.

2-Apr-14, Wednesday:- has now done the expected one hour shift with the start of summertime so still starts at 6 PM in this here increasingly Dis-United Kingdom:-

1700 UTC, 14,603 kHz, "641 641 641 1", DK/GC "392 114" x 2. Peaking over S9 with good audio.

1720 UTC, 13,403 kHz, second sending, slightly weaker signal.

1740 UTC, 12,103 kHz, third sending, S9 with deep QSB.

6-Apr-14, Sunday:- 1720 UTC, 13,403 kHz, "641" and "392 114". S9+ with good audio.

Second sending here, at 1700 UTC, 6 PM British Summer Time there is a competing attraction for the Number Station anorak, namely what appears to be a recent S06 Russian OM schedule on 13,457 kHz in April.

1740 UTC, 12,103 kHz, third sending, up to S9+ with good audio.

16-Apr-14, Wednesday:- 1700 UTC, 14,603 kHz, "641 641 641 1", DK/GC "9358 118" x 2,

S9 with good audio.

1720 UTC, 13,403 kHz, second sending, and 12,103 kHz, third sending, both S9+ with good audio.

20-Apr-14, Sunday:- 1720 UTC, 13,403 kHz, "641 641 641 000", S9+ with, as unlikely as it seems, excellent audio!

Monday + Wednesday Schedule, 2000 UTC Start, 1900 UTC in April:-

3-Mar-14, Monday:- 2020 UTC, 7,873 kHz, "288 288 288 000", S9 with reasonable audio.

Second sending, frequencies in March of past years were 9,273 + 7,873 + 6,873 kHz.

5-Mar-14, Wednesday:- 2000 UTC, 9,273 kHz, "288 288 288 000", S9+ with good audio.

2020 UTC, 7,873 kHz, second sending.

19-Mar-14, Wednesday:- 2000 UTC, 9,273 kHz, "288 288 288 1", DK/GC "421 60", S9+ with reasonable audio.

2020 UTC, 7,873 kHz, second sending, weaker signal.

2040 UTC, 6,873 kHz, third sending, audio low but readable.

7-Apr-14, Monday:- 1920 UTC, 10,708 kHz, second sending, "172 172 172 17, DK/GC "920 71" x 2. S9+ with good audio.

1940 UTC, 9,208 kHz, third sending, also S9+ with good audio.

9-Apr-14, Wednesday:- 1900 UTC, 12,108 kHz, "172 172 172 000", S9+

1920 UTC, 10,708 kHz, second sending.

23-Apr-14, Wednesday:- 1900 UTC, 12,108 kHz, "172 172 172 17, DK/GC "4132 63" x 2, S9 to S9+ with good audio.

1920 UTC - plus thirty seconds, started late according to my MSF clock which is unusual for an E07 - 10,708 kHz, second sending. 1940 UTC, started on time, 9,208 kHz, third sending, S9+. Strong CW station on 9,213 kHz, M51 I think, noticeable with the receiver selectivity in wide AM.

Thursday Schedule, 2110 UTC Start, 2010 UTC in April:-

6-Mar-14:- 2110 UTC, 7,516 kHz, "584 584 584 000", low audio and interference from broadcast stations, difficult copy.

2130 UTC, 5,836 kHz, second sending, audio low but readable.

27-Mar-14:- 2110 UTC, 7,516 kHz, "584 584 584 000".

2130 UTC, 5,836 kHz, second sending on a clear frequency.

3-Apr-14:- 2010 UTC, 9,387 kHz, "358 358 358 000", inside 31 metre band, difficult copy due to strong broadcasters on both sides.

2030 UTC, 7,526 kHz, second sending, S9+, much better copy.

Onto RNGB's logs:

E07 las Massala			
E07 log March:	18:00	13439	'417' 000
Sunday 2nd Sunday 9th	18:00	13439	417 000 '417' 000
			417 000 '288' 1 421 60 4351? 63537 30723 40241
Monday 10th	20:00	9273	
W 1 1 10d	20:20	7873	'288' 1 421 60 4351? 63537 30723 40241
Wednesday 12th	20:40	6873	'288' 1 421 60 64351 63537 30723 40241
Sunday 16th	18:00	13439	'417' 1 521 153 95616 26924 02744 01875
Monday 17th	20:00	9273	'288' 1 421 60 64351 63537 30723 40241
Wednesday 19th	20:00	9273	'288' 1 421 60 64351 63537 30723 40241
Wednesday 26th	18:40	10739	'417' 1 521 153 95616 26924 02744 01875
Thursday 27th	21:30	5836	'584' 000
7071			
E07 log April:			
Wednesday 2nd	17:40	12103	'641' 1 392 114 03646 96465 84?05 41033 92981
Sunday 20th	17:00	14603	'641' 000
Wednesday 23rd	17:00	14603	'641' 1 657 105 64331 25451 75221 36757
Thursday 24th	20:10	9387	'358' 000
Sunday 27th	17:00	14603	'641' 1 657 105 64331 25451 75221 36757
Monday 28th	19:00	12108	'172'1 7859 77 40162 84481 32210 9764770552
F07 1 37 1			
E07a log March:			
Saturday 1st	09:40	13433	'114' 1 13723  2370 77 54876 24608 09900 7712954027
Wednesday 5th	21:00	5864	'815' 1 39299  4330 53 37517 99642 68239
Saturday 15th	09:00	11133	'114' 000
Wednesday 19th	21:00	5864	'815' 000
Wednesday 26th	21:00	5864	'815' 000
Friday 28th	16:10	11473	'417' 000
E07 log April:			
Wednesday 2nd	20:20	7473	'147' 000
Saturday 19th	09:00	12218	'244' 000
Saturday 26th	08:00	12218	'244' 000

Onto others' logs, with duplication

# March 2014:

5836kHz2130z 2130z 2130z	13/03[584 000] Fair audio, strong carrier 20/03[584 00] Weak and noisy 27/03[584 00] Strong	(2m13s) (2m15s) (2m13s)	PLdn PLdn, FR PLdn	THU THU THU
6873kHz2040z 2040z 2040z 2040z 2040z 2040z	10/03[288 x 3 1 481 ?0 too weak to copy]2028xz S1 12/03 Strong carrier, very poor audio ?????z 17/03[288 1 421 60 64351 75405 000 000]2048z Strong QRM2 QSB1 19/03[288 1 421 60 64351 75405 000 000]2048z Strong QRM2 QSB1 24/03[288 1 421 60 64351 75405 000 000] USB QRA2		M8 tiNG JkC JkC HRT, JJ, JkC	MON WED MON WED MON
7516kHz2110z 2110z	06/03[584 000] Strong carrier, low audio, weak noise, bleeding 27/03[584 00] Strong, BCQRM3/4	(2m13s)	FR PLdn	THU THU
7873kHz2020z 2020z 2020z 2020z 2020z 2020z	03/03[288 000] Weak 05/03[288 000] Weak, noisy and mostly unreadable 10/03[288 x 3 1 too weak to copy]2028xz S1 12/03 Strong carrier, very poor audio ?????z 17/03[288 1 421 60 64351 75405 000 000]2028z Strong QRM2 QSB1	(2m13s) (2m13s)	PLdn PLdn M8 tiNG JkC	MON WED MON WED MON

 $E07\ 9273kHz/7873kHz/6873kHz\ 2000z/2020z/2040z\ 17/03$ 

2020z	24/03[288 1 421 60 64351 75405 000 000]USB ORA1	HRT. JkC	MON
	[	,	

9273kHz2000z	03/03[288 000] Weak audio, strong carrier	(2m13s)	M8, PLdn	MON
2000z	05/03[288 000] Weak	(2m13s)	PLdn	WED
2000z	10/03[288] unable to copy due to poor signal/audio. Poor to unworkable		НЈН	MON
2000z	12/03 [288 x 3 too weak to copy]		M8, tiNG	WED
2000z	17/03[288 1 421 60 64351 75405 000 000]2008z Strong QRM2 QSB1		JkC	MON
2000z	24/03[288 1 421 60 64351 75405 000 000] USB QRA1		HRT, JkC	MON

95616 26924 02744 01875 21876 06686 53962 59785 56630 23021

10943kHz1900z

03/04[922 000 07722 00001 00000 10140] Strong

FR

(2m26s)

PLdn

THU

08977 64021 62686 72841 74641 63866 95312 74777 89536 86410 30475 93509 64208 74491 43229 10581 40503 41646 72169 94306 21802 83463 81727 38265 33781 07484 83159 57377 18820 47998 51140 18908 39439 44193 44642 09106 62193 62776 26494 28395 16864 52099 20558 68276 62219 16965 15074 17108 48397 87778 56841 38891 69487 33992 06704 93462 13770 15839 46863 95496 17088 40425 00389 73736 52101 40159 11128 70846 83608 31711 24936 20386 87760 86629 97161 51958 73536 61385 20643 41462 41594 53818 47047 19388 93506 59083 72563 10797 77574 09886 65463 53423 37872 29651 75129 59037 25720 51496 36074 01115 94425 99098 60834 80254 53193 98017 55988 78361 95064 91397 53834 11364 83809 08171 69188 67872 80459 76818 36397 23563 66022 08074 25391 37732 82634 28998 46770 00759 21905 82358 73455 37497 34973 30136 00386 25250 77557 85252 66089 66388 07008 27720 43902 Courtesy FR, HRT Long message and for a change, no fading or other usual problems. 1840z  $19/03[417\ 1\ 521\ 153\ 95616\ 26924\dots 27720\ 43902\ 000\ 000]\ 1858z\ QSA4\ QRM1\ QRN1\ QSB2$ tiNG, PLdn WED 1840z  $26/03[417\ 1\ 521\ 153\ 95616\ ...\ 43902\ 000\ 000]1858z\ USB/AM\ QSA4\ QSB$ HRT WED 30/03[417 1 392 114 03646 ... 45277 00000] 1854z QRA4 1840z HRT SUN SUN 12139kHz1820z 02/03[417 x 3 000......]1822z S8 M8 05/03[417 000] Fair and noisy WED 1820z(2m13s)PLdn 1820z 12/03[417 000] Strong (2m13s) PLdn WED 16/03[417 1 521 153 95616 ... 43902 000 000] Very strong signal, weak noise 1820z FR SUN 1820z 30/03[417 1 392 114 03646 ... 45277 00000] 1834z QRA4 QRM3 HRT SUN 13439kHz1800z M8 SUN 02/03[417 x 3 000......]1802z S9 05/03[417 000] Fair 1800z (2m13s)PI.dn WED 1800z 12/03[417 000] Very strong (2m13s) PLdn, tiNG WED 1800z 16/03[417 1 521 153 95616 ... 43902 000 000] Very strong signal, weak noise SUN FR 19/03[417 1 521 153 95616 ..... end not heard] Fair, occasional QRM4 1800z PI dn WED 1820z 26/03[417 1 521 153 95616 ... 43902 000 000]1838z USB/AM QSA5 QSB HRT WED 30/03[417 1 392 114 03646 ... 45277 00000] 1814z QRA5 1800z HRT SUN 417 1 392 114 03646 96465 84605 41033 92981 91074 35625 50678 11596 01029 55881 94175 36453 90939 25954 17734 65648 17085 29038 91887  $44339\ 27710\ 08821\ 45530\ 37079\ 55423\ 24979\ 78330\ 20532\ 69086\\ 85108\ 64218\ 94188\ 09479\ 06442\ 06367\ 22019\ 34206\ 23782\ 68381$  $98389\ 32406\ 48283\ 60673\ 54299\ 99918\ 38149\ 74781\ 95338\ 70594$   $69770\ 16152\ 42445\ 28809\ 18895\ 13022\ 40318\ 81954\ 97782\ 03028$  $\begin{array}{c} 26039\ 35738\ 22496\ 39762\ 85477\ 81794\ 41501\ 90607\ 29470\ 23507\\ 18939\ 27498\ 79582\ 66444\ 31833\ 14824\ 55553\ 57341\ 08627\ 97987 \end{array}$  $14847\ 72403\ 33220\ 62721\ 31396\ 68161\ 18683\ 37792\ 76133\ 59403$  09691 07655 13920 40702 70293 70495 57892 74081 92157 71506 75529 93171 91324 33040 08867 30065 79165 45064 88947 87685 68236 44213 35840 45277 000 000 Courtesy HRT **April2014:** 7526kHz2030z 10/04[358 000] Weak and noisy THU (2m14s)PL dn 2030z 24/04[358 000] Fair (2m14s) PLdn THU 9208kHz1940z 07/04[172 1 920 71 93634 ... 80409 000]1949z Strong QRM1 QSB1 JkC MON 1940z 14/04[172 1 180 48 73107 ... 38217 000] Weak (7m45s) PLdn MON 1940z 16/04[172 1 180 48 73107 ... 38217 000 000] Fair & noisy (7m36s) PLdn WED 1940z 21/04[172 1 4132 63 26730 ... 26335 000 000] Strong (8m58s) PLdn, M8 MON 1940z  $23/04[172 \ x \ 3 \ 1 \ 4132 \ 63 \ 26730 \ 16506..... 26335]0948z \ S9 \ AM$ WED M8, JkC 9387kHz2010z PLdn THU 10/04[358 000] Weak, BCQRM3 (2m14s)17/04[358 x 3 000......]2012z S3 B/C QRM THU 2010z M8 24/04[358 000] Weak occasional characters, BCQRM4 PLdn 20107 (2m14s)THU 10243kHz1920z 03/04[922 000 07722 00001 00000 10140] Strong (2m26s) PLdn THU 10708kHz1920z 02/04[172 000] Fair (2m13s)HRT, PLdn WED 1920z 07/04[172 1 920 71 93634 ... 80409 000]1929z Strong QRM2 QSB1 JkC, Spectre MON 1920z 09/04[172 000] Weak and noisy PLdn, HRT WED (2m13s)1920z 14/04[172 1 180 48 73107 ... 38217 000]1927z Strong QRM1 QSB1 JkC, PLdn MON 73107 42572 88411 13860 96972 86439 12724 43774 71949 84447 42269 75251 67647 54146 62431 38421 39025 15268 08692 11119 78051 80523 18916 42522 47630 85740 08182 60220 54649 53793 46837 26118 59098 40896 27474 71253 78447 71300 10875 91346 42201 85494 31902 46057 01710 95034 50222 38217 1920z  $16/04[172\ 1\ 180\ 48\ 73107\ ...\ 38217\ 000\ 000]$  Fair & noisy (7m36s) PLdn WED 1920z 21/04[172 1 4132 63 26730 ... 26335 000 000] Fair & Noisy (8m58s)PLdn, M8 MON 23/04[172 x 3 1 4132 63 26730 16506....... 26335]0928z S9 AM 1920z M8. JkC WED

12103kHz1740z 1740z 1740z 1740z 1740z 1740z 1740z	02/04[641 1 392 114 000] 17:54z QSA4 05/04[641 1 392 114 03634 45277 000 000] Very strong, QSB, QRM odd bleeding 09/04[641 x 3 1 392 114 0364645277 000 000]1753z S9 USB 13/04[641 1 9358 118 82368 12067 000 000] Very strong signal, weak noise 23/04[641 1 657 105 64331 02645 000 000] 1753z QSA4 27/04[641 x 3 1 657 105 64331000 000]1753z S9 AM		HRT FR, M8 M8, HRT FR, JkC HRT, M8 M8	WED SUN WED SUN WED SUN
12108kHz1900z 1900z	02/04[172 000] Fair 07/04[172 1 920 71 93634 80409 000]1909z Strong QRM1 QSB1	2m13s)	HRT, PLdn JkC	WED MON
	E07 12108kHz/10708kHz/9208kHz 1900z/1920z/1940z 07/04 172 1 920 71 93634 18394 68437 78281 78555 69607 63911 92397 09371 29076 89383 86101 28084 84301 95508 59865 18393 43821 79505 93649 64734 55316 87545 67098 39949 40512 71543 78626 81905 33089 60798 50401 96180 76586 56568 53559 18509 64100 73636 36435 57978 86480 13467 57139 37492 09394 48618 62639 51737 37438 88184 91160 35111 64975 06054 62737 42113 56007 21652 15126 03331 73738 71197 57475 04893 76344 59120 06690 73673 11539 80409 000 000  **Courtesy JkC**			
1900z 1900z 1900z 1900z 1900z	14/04[172 1 180 48 73107 38217 000] Fair (16/04[172 1 180 48 73107 38217 000 000] Fair (16/04[172 1 180 48 73107 38217 000 000] Fair (172 1 180 48 73107 38217 000 000]	2m13s) 7m45s) 7m36s) 8m58s)		WED MON WED MON WED
	172 1 4132 63 26730 16506 30627 68174 50715 31781 62911 00631 10033 94772 63826 39446 83141 25840 12809 29601 41719 37754 53149 74928 36550 15502 08126 77786 67478 28914 38427 95140 63715 62799 97991 34583 92603 21560 32555 85375 67294 35763 38224 04703 41623 25909 94895 40606 48098 87569 19141 55830 48468 61350 34817 80135 97564 67198 86257 87913 16958 88373 86360 36339 88307 67877 26335 000 000  Courtesy JkC			
13403kHz1720z 1720z 1720z 1720z 1720z	02/04[641 1 392 114 000] 17:34z QSA3 05/04[641 1 392 114 03634 45277 000 000] Very strong, QSB, QRM odd bleeding 09/04[641 x 3 1 392 114 0364645277 000 000]1733z S9 USB 13/04[641 1 9358 118 82368 12067 000 000] Very strong signal, weak noise		HRT FR, M8 M8, HRT FR, JkC	WED SUN WED SUN
	641 1 9358 118 82368 33317 06436 17790 33073 30081 90516 02223 66905 04039 48698 13628 36801 77146 24341 442247 38374 50700 59225 92751 86206 35167 14281 72106 08163 44690 45465 28092 35079 24862 58974 94623 69501 86332 81480 38965 68464 77385 14685 62440 78519 04590 36198 46913 31858 98282 12970 43867 04874 65380 28916 82549 03190 33920 63038 12556 20940 00606 41695 10988 80275 81731 23015 62151 56985 70178 06411 53307 74187 75667 50176 46263 36214 52301 66658 60352 93998 29516 25592 09147 53014 62196 01019 95101 04032 04944 08435 98607 39200 78071 89098 17778 39256 67264 02924 39488 52131 51275 43894 65689 86990 90123 70444 81916 37116 68015 58168 82140 71905 89655 56665 76041 76432 91740 37048 07188 64936 12067			
1720z	000 000 Courtesy FR 20/04[641 x 3 00000	]1742z	S9+40 AM	
1720z 1720z	23/04[641 1 657 105 64331 02645 000 000] 1733z QSA4 27/04[641 x 3 1 657 105 64331000 000]1733z S9+10 AM		HRT, M8 M8	WED SUN
14603kHz1700z 1700z	02/04[641 1 392 114 000] 17:14z QSA3 05/04[641 1 392 114 03634 45277 000 000] Very strong, QSB, QRM odd bleeding		HRT FR, M8	WED SUN
	641 1 392 114 03646 96465 84605 41033 92981 91074 35625 50678 11596 01029 55881 94175 36453 90939 25954 17734 65648 17085 29038 91887 44339 27710 08821 45530 37079 55423 24979 78330 20532 69086 85108 64218 94188 09479 06442 06367 22019 34206 23782 68381 93389 32406 48283 60673 54299 99918 38149 74781 95338 70594 69770 16152 42445 28809 18895 13022 40318 81954 67782 03028 26039 35738 22496 39722 85477 81794 41501 90607 29470 23507 18939 27498 79582 66444 31833 14824 55553 57341 08627 97987 14847 72403 33220 62721 31396 68161 18683 37792 36133 59403 09691 07655 13920 40702 70293 70495 57892 74081 92157 71506 75529 93171 91324 33040 08867 30065 79165 45064 88947 87685 68236 44213 35840 45277 000 000			
1700z 1700z 1700z 1700z	09/04[641 x 3 1 392 114 03646		M8, HRT FR, JkC M8 HRT, M8	WED SUN SUN WED
	641 1 657 105 64331 25451 75221 36757 73184 14967 83574 65644 27425 59999 74525 23676 90843 30470 39004 69185 20838 10934 88504 21307 07154 93386 05582 99664 89645 91461 08433 44421 81437 70660 07308 63400 77304 07388 35941 20806 27171 43396 89163 93973 12675 12804 98768 83898 90893 81773 44717 03172 46754 84681 89010 24420 47667 30777 75053 48498 75738 08277 56125 22875 55776 11321 12915 20111 00723 09291 30635 73506 73693 38140 50840 98064 76762 80157 13914 35074 08783 80841 62423 52965 50878 09983 15945 95031 78049 47727 66137 31166 18766 12265 11396 04840 33943 09305 14421 82024 87828 17235 63684 07382 81308 67412 16847 96801 02645 000  Courtesy HRT			

### <u>E07a</u> <u>March 2014:</u>

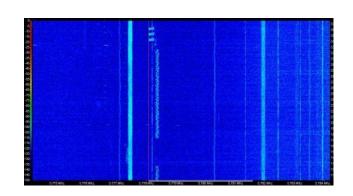
4564kHz2140z	05/03[815 1 39299 4330 53 37517 52274 000 000] Very strong	(6m53s)	Spectre	WED
	E07a 5864/5164/4564kHz 2100/2120/2140z 05/03 Transcript:			
	815 1 39299 4330 53 37517 99642 68239 01531 01986 22217 85433 85781 45671 56790 01799 78835 86715 47253 24230 65392 72611 33904 61481 76655 39614 34941 00723 43449 53632 29609 21677 99620 13452 76133 88821 38781 92686 84972 29712 69124 06369 71772 60905 02478 53808 05541 24500 15513 02729 07333 09613 24548 69045 24359 73995 10214 52274 000 000 Courtesy Spectre			
5146kHz0530z 0530z 0530z 0530z	06/03[188 1 39299 4330 53 37517 52274 000 000] Very strong 13/03[188 000] Very strong 20/03[188 000] Very strong 27/03[188 000] Very strong	(6m53s) (2m08s) (2m08s) (2m08s)	PLdn PLdn PLdn PLdn PLdn	THU THU THU THU
5164kHz2120z 2120z 2120z 2120z 2120z	05/03[815 1 39299 4330 53 37517 52274 000 000] Very strong 12/03[815 000] Very strong 19/03[815 000]2122z Strong QRM1 QSB1 26/03[815 000] Very strong	(6m53s) (2m08s) (2m08s)	PLdn, Spectre PLdn, tiNG, Spectre JkC ,tiNG, Spectre PLdn, Spectre	WED WED WED
5846kHz0550z 0550z 0550z 0550z	06/03[188 1 39299 4330 53 37517 52274 000 000] Very strong 13/03[188 000] Very strong 20/03[188 000] Very strong, BCQRM2 27/03[188 000] Very strong, BCQRM2	(6m53s) (2m08s) (2m08s) (2m08s)	PLdn, Spectre PLdn, Spectre PLdn, Spectre PLdn, Spectre	WED WED WED
5864kHz2100z 2100z 2100z 2100z	05/03[815 1 39299 4330 53 37517 52274 000 000] Very strong 12/03[815 000] Very strong 19/03[815 000]2102z Strong QRM1 QSB1 26/03[815 000] Very strong	(6m53s) (2m08s) (2m08s)	PLdn, GD PLdn, tiNG JkC PLdn	WED WED WED
6846kHz0610z	06/03[188 1 39299 4330 53 37517 52274 000 000] Very strong	(6m53s)	PLdn	THU
10173kHz1630z 1630z 1630z 1630z	07/03[413 000] Strong 14/03[413 000] Strong 21/03[413 000]1632z Strong QRM1 QSB1 28/03[413 000] Strong	(2m08s) (2m08s) (2m08s)	PLdn, Spectre FR, M8 JkC, Spectre M8, JkC	FRI FRI FRI FRI
11133kHz0900z 0900z 0900z 0900z 0900z	01/03[114 1 13723 2370 77 54876 54027 000 000] Fair 08/03[114 000] Weak 15/03[114 000] Fair 22/03[114 000] Very weak 29/03[114 000] Strong	(9m08s) (2m08s) (2m08s) (2m08s) (2m08s)	PLdn PLdn, Spectre PLdn PLdn, Spectre PLdn	SAT SAT SAT SAT SAT
11473kHz1610z 1610z 1610z 1610z	07/03[413 000] Strong 14/03[413 000] Strong 21/03[413 000]1612z Strong QRM1 QSB1 28/03[413 000] Strong	(2m08s) (2m08s) (2m08s)	Spectre, PLdn FR, PLdn JkC, Spectre M8, PLdn	FRI FRI FRI FRI
12133kHz0920z 0920z 0920z 0920z 0920z 0920z	01/03[114 1 13723 2370 77 54876 54027 000 000] Fair 08/03[114 000] Weak 15/03[114 000] Fair 22/03[114 000] Very weak 29/03[114 000] Strong	(9m08s) (2m08s) (2m08s) (2m08s) (2m08s)	PLdn PLdn, Spectre PLdn ES. PLdn, Spectre PLdn	SAT SAT SAT SAT SAT
13433kHz0940z	01/03[114 1 13723 2370 77 54876 54027 000 000] Fair	(9m08s)	ES. PLdn	SAT

### <u>April2014:</u>

Following 5773kHz 2040z 09/04 transmission data was heard. The image on the right showing its spectral image – as recorded.

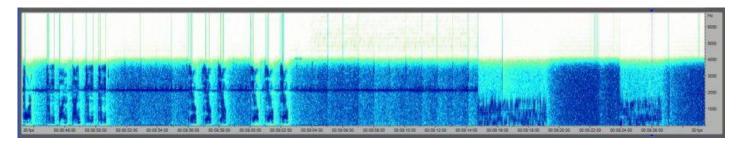
Below the logging are two sonograms, the first shewing the two transmissions, the second an expanded view of the first data train..

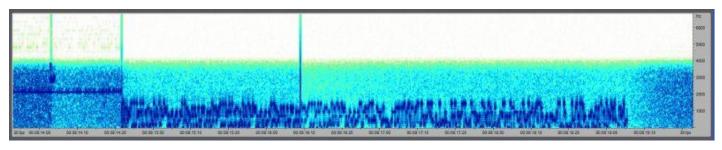
The ident for this transmission was 39299 and previously used with a different message sent on 05 and 06 March.



\*used 05/03/2014

147 1 39299 192 77 94583 35346 21623 88235 92807 96512 59390 43052 92575 85584 06891 84850 25460 80885 06865 45973 65540 32989 75173 98007 66519 81789 97667 43536 42056 79828 30493 20503 73216 65360 79743 48904 96464 74771 81749 28449 18110 41078 03193 06263 35193 98124 70407 06762 64670 62433 52394 96675 71907 65226  $\frac{83666}{96771} \, \frac{41699}{1699} \, \frac{82158}{78827} \, \frac{83978}{83978} \, \frac{04177}{17868} \, \frac{72109}{72109} \, \frac{94766}{94731} \\ \frac{24386}{1721} \, \frac{06598}{1721} \, \frac{47124}{12132} \, \frac{67731}{1221} \, \frac{12132}{12121} \, \frac{1212}{12121} \, \frac{1212}{12121$ 70397 99103 07000 09186 25568 98134 31933 Courtesy AB, 411 from ES





5773kHz2040z 16/04[147 1 62421 7325 83 36768 ... 07014 000 000] Very strong

(9m44s) Spectre, PLdn

WED

E07a 8173/7473/5773kHz 2000/2020/2040z 16/04 Transcript:

147 1 62421 7325 83

1471 62421 7325 83
36768 76626 55799 80618 97073 39295 26640 52986 35653 83487
94244 08717 90129 56706 12850 83245 65134 90981 86366 38121
91344 00139 48755 02334 60976 36343 89952 42487 05957 93872
89057 53240 79153 63436 80988 76777 44701 63679 19278 35646
58270 70945 10986 23025 79389 68873 33218 16605 13756 06413
71261 32012 05707 74032 84418 23308 21461 71368 04251 88809
40621 52291 68183 76838 82902 63933 68928 38365 52265 08619
89068 52046 87387 19233 43971 82098 24531 78829 34822 62316 52753 21654 07014 000 000

7437kHz0430z 0430z 0430z 0430z	03/04[411 000] Very strong 10/04[411 1 39299* 192 77 94583 31933 000 000] Very strong * 17/04[411 1 62421 7325 83 36768 07014 000 000] Very strong 24/04[411 000] 0432z	*used 06/03/2014	(2m08s) (9m08s) (9m44s)	PLdn ES,PLdn ES,PLdn ES	THU THU THU THU
7473kHz2020z 2020z 2020z 2020z 2020z 2020z	02/04[147 000] Very strong, BCQRM2 09/04[147 1 39299* 192 77 94583 31933 000 000] Very strong 16/04[147 1 62421 7325 83 36768 07014 000 000] Very strong 23/04[147 000] 2022z Strong QRM1 QSB1 30/04[147 000] Very strong	*used 05/03/2014	(2m08s) (9m08s) (9m44s) (2m08s)	M8, JkC, PLdn PLdn PLdn JkC PLdn	WED WED WED WED
8137kHz0450z 0450z 0450z 0450z 0450z	03/04[411 000] Very strong 10/04[411 1 39299* 192 77 94583 31933 000 000] Very strong 17/04[411 1 62421 7325 83 36768 07014 000 000] Very strong 24/04[411 000] 0452z	*used 06/03/2014	(2m08s) (9m08s) (9m44s)	PLdn ES,PLdn ES,PLdn ES	THU THU THU THU
8173kHz2000z 2000z 2000z 2000z 2000z 2000z	02/04[147 000] Very strong 09/04[147 1 39299* 192 77 94583 31933 000 000] Very strong 16/04[147 1 62421 7325 83 36768 07014 000 000] Very strong 23/04[147 000] 2002z Strong QRM1 QSB1 30/04[147 000] Very strong	*used 05/03/2014	(2m08s) (9m08s) (9m44s) (2m08s)	M8, JkC, PLdn PLdn PLdn JkC PLdn	WED WED WED WED
9137kHz0510z 0510z	10/04[411 1 39299* 192 77 94583 31933 000 000] Very strong 17/04[411 1 62421 7325 83 36768 07014 000 000] Very strong, ttyQRM2	*used 06/03/2014	(9m08s) (9m44s)	ES,PLdn ES,PLdn	THU THU

411 1 62421 7325 83 36768 76626 55799 80618 97073 39295 26640 52986 35653 83487 30108 70520 3779 80018 971/3 39293 20040 32980 35030 3848 994244 08717 90129 56706 12850 83245 65134 90981 86366 38121 91344 00139 48755 02334 60976 36343 89952 42487 05957 93872 89057 53240 79153 63436 80988 76777 44701 63679 19278 35546 58270 70945 10986 23025 79389 68873 33218 16605 13756 06413 71261 32012 05707 74032 84418 23308 21461 71368 04251 88809 40621 52291 68183 76838 82902 63933 68928 38365 52265 08619 80668 57046 87387 10233 44501 80089 47631 788970 34827 62316 89068 52046 87387 19233 43971 82098 24531 78829 34822 62316 52753 21654 07014 000 000 Courtesy ES

10274kHz1550z	11/04[102 1 67572 946 65 45872 13955 000 000] 1548z fair, USB QSA2 QRM 4 QSB2		Dan	FRI
11074kHz1530z 1530z 1530z 1530z	04/04[102 000 ] Strong 11/04[102 1 67572 946 65 45872 13955 000 000] 1538z very weak/noise USB QSA1-2 18/04[102 000] 1532z Fair 25/04[102 000 ] Very wealk and noisy	(2m08s)	PLdn, JkC Dan CP PLdn	FRI FRI FRI FRI
12174kHz1510z 1510z	04/04[102 000 ] Strong, QSB3 11/04[102 1 67572 946 65 45872 13955 000 000] 1518z fair S/N USB QSA2 QSB2  102 102 102 102 1 67572 (R) 946 65 946 65 45872 41780 23920 24431 16296 00129 93390 76257 25623 55759 33237 81492 18186 73539 78126 74008 27583 18953 91483 51467 20742 91463 89772 33516 94971 96688 75426 15367 41146 89651 53638 59578 45501 29271 68912 11827 86538 04742 84825 34327 88776 31227 98001 06895 36074 69232 70219 39277 14120 27939 63080 77318 85557 44776 04161 67247 79610 85323 08066 85310 44429 24914 85479 71312 13955 000 0000  Courtesy Dan E2kde	(2m08s)	PLdn, JkC Dan	FRI FRI
1510z 1510z	18/04[102 000]1512z Strong QRM1 QSB1 25/04[102 000 ] Very strong	(2m08s)	JkC PLdn	FRI FRI
12218kHz0800z 0800z 0800z 0800z	05/04[244/000] 0802z 12/04[244 1 67572 946 65 45872 13955 000 000] Very strong, QSB2 19/04[244 000] Strong 26/04[244 000] Strong	(8m11s) (2m08s) (2m08s)	ES PLdn PLdn PLdn	SAT SAT SAT SAT
13418kHz0820z 0820z 0820z 0820z 0820z 14418kHz0840z	05/04[244/000] 0822z 12/04[244 1 67572 946 65 45872 13955 000 000] Very strong 19/04[244 000] Strong 26/04[244 000] Weak and noisy 12/04[244 1 67572 946 65 45872 13955 000 000] Very strong	(8m11s) (2m08s) (2m08s) (8m11s)	ES PLdn PLdn PLdn PLdn	SAT SAT SAT SAT SAT

Peter's logs reinforce the findings above:

#### Wednesday Schedule, 2100 UTC Start, 2000 UTC in April:-

5-Mar-14:- 2100 UTC, 5,864 kHz, "815 815 815 1 39299", DK/GC "4330 53" x 2, very strong SSB signal. 2120 UTC, 5,164 kHz, second sending, S9+.

2140 UTC, 4,564 kHz, third sending, also S9+.

2-Apr-14:- in April we observe the expected shift of one hour UTC so still kicks off at 9 PM UK time, plus the - also expected - shift of frequencies and call for the spring and summer months;-

2000 UTC, 8,173 kHz, "147 147 147 000", S9+.

2020 UTC, 7,473 kHz, second sending, also S9+.

23-Apr-14:- 2000 UTC, 8,173 kHz, "147 147 147 000", S9+.

2020 UTC, 7,473 kHz, second sending, also S9+.

### Saturday Schedule, 0900 UTC Start, 0800 UTC in April:-

1-Mar-14:- 0900 UTC, 11,133 kHz, "114 114 114 11 13723", DK/GC "2370 77" x 2. A "full message" so all three frequencies used this morning. S6 to S7.

0920 UTC, 12,133 kHz, second sending, S7.

0940 UTC, 13,433 kHz, third sending, the strongest signal peaking S9+.

8-Mar-14:- 0900 UTC, 11,133 kHz, "114 114 114 000", a bit over two minutes and off!

29-Mar-14:- 0900 UTC, 11,133 kHz, "114 114 114 000", weak signal, S3 to S4.

0920 UTC, 12,133 kHz, second sending, stronger, S7 to S8.

5-Apr-14:- 0800 UTC, 12,218 kHz, "244 244 244 000", strong SSB signal.

0820 UTC, 13,418 kHz, second sending, also strong.

19-Apr-14:- 0800 UTC, 12,218 kHz, "244 244 244 000".

### E907b

PoSW writes:

17-Mar-14, Monday:- 1603 UTC, 14,390 kHz, surprised to find the E07 OM calling, "123 123 123 12. At 1604 UTC DK/GC "456 17" x 2, followed by seventeen 5F groups. Then called "123 123 123 1" again for about one minute followed by a pause of about 15 seconds, then "000 000" and cut carrier. No further transmissions found. Not the usual E07 behaviour. SEE ENTRY BELOW:

### March 2014:

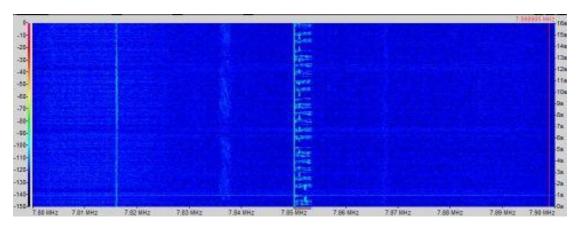
An apparent E07a variant, synthesised voice off tone E06, follows E07 structure with E07 ending AM reduced carrier [ie AM/USB but not LSB].

10250kHz1953z 05/03[456 1 123 9233 29 9233 29 42854 72637 8 break in tx[broke] restarting at 2013z

2013z 05/03[456 1 123 42854 ... 04746 000 000] DoK,RNGB WED

10250kHz2018z 10250kHz2026z	05/03[456 1 123 64886 04746 000 000] No gc 05/03[123 1 334 4726 24 86414 55706 000 000]	DoK RNGB, DoK, M8	WED WED
	123 1 334 4726 24 86414 44323 40722 21104 74662 87243 06631 11766 87256 64764 43475 48884 62783 62410 02334 01175 30507 62866 12720 68328 30652 18125 27030 55706 000 000  Courtesy DoK		
10250kHz2048z 10250kHz2054z	05/03[123 1 334 7011 26 40731 16317 81221 7822278266 000 000]2055z S9+20 05/03[123 1 334 7011 26 40731000 000]2104z S9+20	RNGB,M8 M8	WED WED
10250kHz0948z	16/03[123 1 456 17 18005 84028 000 000] USB	DE	SUN
10250kHz1040z	16/03[123 1 456 17 18005 84028 000 000] AM	DE, tiNG	SUN
	Message:		
	123 123 123 1 R2m 345 17 456 17 18005 61165 60719 42491 56148 (groups once) 76424 05814 86458 96844 83071 (groups once) 50322 10425 82226 49908 60414 (groups once) 94106 84028 (groups once) 123 123 123 1 R2m (@ 1051z) 000 000 (@ 1053z)		
10250kHz1137z	16/03[see transcript below] 1042z QSA4 QRM1 QRN1 QSB2  Message:	tiNG	SUN
	123 123 128 1 R2m 345 17 456 17 18005 61165 60719 42491 56148 (groups once) 76424 05814 86458 96844 83071 (groups once) 50322 10425 82226 49908 60414 (groups once) 94106 84028 (groups once) 123 123 123 1 R2m (@ 1141z) 000 000 (@ 1142z)		
10250kHz2200z	13/03[667 1 329 3842 29 46607 27387 000 000] 2208z Fair QRN3 QSB3	Spectre	THU
	667 1 329 3842 29 46607 46642 87251 08153 62504 47687 54847 41555 76421 53318 48242 33832 50755 37775 82484 07388 14402 61314 11220 67767 64548 23382 50041 14737 13534 68186 18501 58800 27387 000 000 Courtesy Spectre		
11480kHz 1044z 11480kHz1058z	16/03[123 1 456 17 18005 84028 000 000] AM 16/03[123 1 456 17 18005 84028 000 000] USB	DE DE	SUN SUN
11460KHZ1036Z	10/03[123 1 430 17 18003 84028 000 000] USB	DE	SUN
14390kHz1602z	17/03[123 1 456 17 18005 84028 123 1 000 000]1608z Strong QRM1 QSB1	JkC, PoSW	MON
	Repeats message sent 10250/11480kHz 16/03 123 1 456 17		
	18005 61165 60719 42411 56.48 76424 05814 86458 56844 83071 50322 10425 82226 45908 60414 94106 84028		
	123 1 000 000 Courtesy JkC		
<u>April2014:</u>			
10250kHz1728z	01/04[444 1 5712 50 26657 33274 000 000]1734z Fair QRM2 QSB1	JkC	TUE
	444 1 5712 50 26657 86142 11027 36872 22105 63373 2.060 53247 43.32046 823. 85600 53318 12212 03487076 58814 .5741 85232 00100 47125 47312 8482468 43702 31066 86061 77540 12621 45085 56415 00101 37633 14207657 26576 71000 12700 75526 24278 03827 70723 33223 17531 85107 12484 64676 31622 13566 33274 000 000 Courtesy JkC, Danix		

## E11[III]



E11 versus CHU Time signal, Tue/Wed 0315z 7850kHz

### E11 March/April log:

4909kHz	00002	08/03 [248/00] Strong signal, moderate noise	Fox	SAT
4909KHZ				
	1445z	08/03 [287/00] Medium/strong	Fox	SAT
	0900z	13/03 [248/00] Fair	RNGB	THU
	0900z	15/03 [248/00] Weak	RNGB	SAT
	1445z	19/03 [287/00] Out 1448z Weak QRM1 QSB1	JkC	WED
	1445z	29/03 [287/00] Out 1448z QSA2	Karsten, JkC	SAT
	1445z	09/04 [287/00] Out 1448z Strong QRM1 QSB1	JkC	WED
	0900z	26/04 [248/00] Weak	RNGB	SAT
	07002	20/01/[210/00] Weak	RIVOD	5711
C2041-II-	0.450-	17/02 [41,6/00] 0452 OC 42,2 OC B2	D!-1	MON
6304kHz		17/03 [416/00] 0453 QSA2-3 QSB2	Daniel	MON
	0450z	31/03 [416/00] Out 0453z	Ed Smith	MON
	0450z	14/04 [416/00] Out 0453z	Ed Smith	MON
	0450z	28/04 [416/00] Out 0453z	Ed Smith	MON
	0.002	20/01 [110/00] Out 01002	24 Jimin	1.101
7377kHz	20007	14/03 [576/00] Strong	RNGB	FRI
/3//KIIZ		, , ,		
	2000z	21/03 [576/00]	RNGB	FRI
	2000z	28/03 [576/00] Out 2003z S5	Malc	FRI
	2000z	04/04 [576/00] Out 2003z S9	Malc	FRI
	2000z	18/04 [576/00]	RNGB	FRI
	2000z	25/04 [576/00] Good	RNGB	FRI
7449kHz	1045z	04/03 [469/00]	RNGB	TUE
	1045z	05/03 [469/00] Out 1048z Strong QRM 2	CHPA	WED
	1045z	11/03 [469/00] Fair	RNGB	TUE
	1045z	02/04 [469/00] S4	Malc	WED
	1045z	22/04 [469/00]	RNGB	TUE
7850kHz		12/03 [253/00] Strong	RNGB, PLondon	WED
	0315z	19/03 [253/00] Very strong CHUQRM3 (3m22s)	PLondon	WED
	0315z	26/03 [253/00] Strong CHUQRM2 (3m22s)	PLondon, JkC	WED
	0315z	09/04 [253/00] Strong (3m22s)	PLondon	WED
	0315z	16/04 [253/00] Strong (3m22s)	PLondon	WED
	0315z	24/04 [253/00]	RNGB, PLondon	WED
	0315z	30/04 [253/00] Strong (3m22s)	PLondon	WED
		(		
8102kHz	10457	11/03 [576/00] Good	RNGB	TUE
OTOZKIIZ	1045z	18/03 [576/00]	RNGB, Malc	TUE
	1045z	15/04 [576/00] Out 1048z QSA1 USB	Ed Smith	TUE
	1045z	22/04 [576/00]	RNGB	TUE
	1045z	29/04 [576/00] Out 1048z S1	Malc	TUE
8186kHz	2005z	08/03 [369/00] Out 2008z Strong QRM1 QSB1	JkC, RNGB	SAT
	2005z	16/03 [369/00]	RNGB, Malc	SUN
	2005z	23/03 [369/00] Strong	RNGB	SUN
	2005z	29/03 [369/00]	RNGB	SAT
	2005z	20/04 [369/00]	RNGB, JkC	SUN
	2005z	26/04[369/00] Out 2008z Strong QRM1 QSB1	JkC	SAT
	2003E		JRC	5711
		Went off the air with Windows XP shutdown sound		~
	2005z	27/04 [369/00]	Malc	SUN
00001 **	0020	40/02/2000/03/3	DVCD	******
8803kHz		19/03 [270/00] Good	RNGB	WED
	0930z	20/03 [270/00]	RNGB	THU
	0930z	26/03 [270/00]	RNGB	WED
	0930z	27/03 [270/00]	Malc	THU
	0930z	09/04 [270/00] Out 0933z S1	Malc	WED
	0930z	10/04 [270/00] Out 0933z S1	Malc	THU
	0930z	23/04 [270/00] Out 0933z S1	Malc	WED
	0930z	24/04 [270/00] Out 0933z S1	Malc	THU
	37202		11IIIC	1110

9079kHz 0820z	10/03 [438/00]	RNGB	MON
0820z	13/03 [438/00] 0823z S3	Malc	THU
0820z	17/03 [438/00]	RNGB	MON
0820z	24/03 [438/00] Fair	RNGB	MON
0820z	27/03 [438/00]	Malc	THU
00202	27/03 [436/00]	Maic	Ino
9371kHz 1730z	06/03 [416/00] Good	RNGB	THU
1730z	20/03 [416/00] Strong	RNGB	THU
1730z	27/03 [416/00] Poor	Gary	THU
		•	
1730z	03/04 [416/00] Out 1733z QSA5	Karsten, Fox	THU
1730z	10/04 [416/00] Out 1733z S3	Malc	THU
1730z	17/04 [416/00] Out 1733z	Ed Smith	THU
17302	17/04 [410/00] Out 17332	Ed Sillidi	1110
9399kHz 0900z	03/03 [534/00] Fair	RNGB	MON
0900z	05/03 [534/00 R Out ] 0903z Strong QRM 1 QSB 2	CHPA	WED
0900z	10/03 [534/00]	RNGB	MON
0900z	24/03 [534/00]	RNGB	MON
0900z	26/03 [534/00]	RNGB	WED
0900z	02/04 [534/00] S3	Malc	WED
0900z	21/04 [534/00]	RNGB	MON
0900z	23/04 [534/00]	RNGB	WED
0900z	30/04 [534/00] Out 0903z	Ed Smith	WED
00601-11- 0000	21/04 [429/00] Cood	DMCD	MONT
9960kHz 0820z	21/04 [438/00] Good	RNGB	MON
0820z	24/04 [438/00] Good	RNGB	THU
0820z	28/04 [438/00] Good	RNGB	MON
10010177 1505	04/09/2009/003/0	DIVOR	G . T
10213kHz 1705z	01/03 [392/00] Good	RNGB	SAT
1705z	22/03 [392/00]	RNGB	SAT
0745z	24/03 [262/00] Strong	RNGB	MON
1705z	29/03 [392/00]	RNGB	SAT
0745z	31/03 [262/00]	RNGB	MON
0745z	21/04 [262/00] Good	RNGB	MON
0745z	28/04 [262/00] Good	RNGB	MON
07432	25/04 [202/00] Good	KNOD	WIOIN
10221kHz 0710z	04/03 [633/00]	RNGB	TUE
0710z	07/03 [633/00]	RNGB	FRI
0710z	14/03 [633/00] Very strong	Fox	FRI
	- · · ·		
0710z	18/03 [633/00]	RNGB, Ed Smith	TUE
0710z	08/04 [633/00] Out 0713z Fair QRM 3	Christer	TUE
0710z	18/04 [633/00] Weak QRM 1	Christer	FRI
		RNGB	
0710z	22/04 [633/00]		TUE
0710z	25/04 [633/00] Out 0713z	Ed Smith	FRI
0710z	29/04 [633/00] Out 0713z	Ed Smith	TUE
	the feeting and the		
106001112 09202	10/02 [640/00]	DNCD	MON
10690kHz 0830z	10/03 [649/00]	RNGB	MON
0830z	14/03 [649/00] Very strong	Fox	FRI
0830z	17/03 [649/00] Good	RNGB	MON
0830z	24/03 [649/00]	RNGB	MON
0830z	28/03 [649/00]	Christer	FRI
0830z	31/03 [649/00]	RNGB	MON
0830z	04/04 [649/00] Out 0833z S3	Malc	FRI
0830z	21/04 [649/00]	RNGB	MON
0830z	25/04 [649/00] Out 0833z S1	Malc	FRI
0830z	28/04 [649/00]	RNGB	MON
100001-11- 0645	04/02 [517/00]	DMCD	TITE
10800kHz 0645z	04/03 [517/00]	RNGB	TUE
0645z	18/03 [517/00] Fair	RNGB	TUE
0645z	20/03 [517/00]	RNGB	THU
0645z	27/03 [517/00]	Ed Smith	THU
0645z	01/04 [517/00]	RNGB	TUE
0645z	08/04 [517/00] Out 0648z Strong QRM 3 QSB 2	Christer	TUE
0645z	10/04 [517/00] Out 0748z S3	Malc, Ed Smith	THU
0645z	22/04 [517/00]	RNGB	TUE
0645z	29/04 [517/00]	RNGB	TUE
14575kHz 0745z	04/03 [335/00]	RNGB	TUE
0745z	06/03 [335/00] Out 0748z S7	Malc	THU
0745z	11/03 [335/00]	RNGB	TUE
0745z	27/03 [335/00]	RNGB	THU
0745z	01/04 [335/00]	RNGB	TUE
0745z	10/04 [335/00] Out 0748z S4	Malc	THU
0745z	29/04 [335/00] Out 0748z	Ed Smith	TUE
14972kHz 1300z	05/03 [133/00] Strong	RNGB, Malc	WED
1300z	11/03 [133/00] Strong	RNGB	TUE
12007	10 100 5100 1007 05		
1300z	18/03 [133/00] S7	Malc	TUE
1300z	18/03 [133/00] S7 19/03 [133/00] Good	Malc RNGB	TUE WED

15015177			CVD. M.	
15915kHz		05/03 [718/00] Out 1158z Strong QRM 1 QSB 3	CHPA, Malc	WED
	0545z	07/03 [348/00] Medium signal, strong noise	Fox	FRI
	1540z	10/03 [228/00] Fair to weak	Gary, Thomas	MON
	1155z	13/03 [718/00] Out 1158z S9	Malc	THU
	0545z	14/03 [348/00] Strong	Fox	FRI
	1540z	16/03 [228/00]	Gary, Malc	SUN
	1540z	17/03 [228/00]	JkC	MON
	0545z	19/03 [348/00] Medium	Fox	WED
	1540z	24/03 [228/00]	Karsten, JkC	MON
	1155z	27/03 [718/00] mYL RST54	Brixmis	THU
	1540z	31/03 [228/00] Out 1543z S9	Malc	MON
	0545z	02/04 [348/00] Very weak	RNGB	WED
	0545z	04/04 [348/00]	Fox	FRI
	1155z	09/04 [718/00] Out 1158z S9	Malc, Ed Smith	WED
	1155z	17/04 [718/00] Out 1158z	Ed Smith	THU
	1540z	20/04 [228/00]	RNGB	SUN
	1540z	21/04 [228/00] Good	RNGB	MON
	1155z	23/04 [718/00] Out 1158z S9	Malc	WED
	1155z	24/04 [718/00] Out 1158z S7	Malc	THU
	1540z	27/04 [228/00]	Malc	SUN
	0545z	30/04 [348/00] Weak	RNGB	WED
	1155z	30/04 [718/00] Out 1158z	Ed Smith	WED
	1133L	30/04 [/10/00] Out 11302	La Silitii	WLD
E11a Ma	rch/April	log:		
4909kHz		12/03 [281/35 14674 1496349277] Out 1454z Strong QRM1 QSB1	JkC	WED
	0900z	27/03 [240/33 13800 25299 06257 82423 1964043819] Weak	RNGB	THU
5194kHz	1710z	03/03 [957/30 28449 45823 42791 88822 7224056949]	RNGB, Malc	MON
	1710z	07/03 [957/30 77843 01701 35975 50867 2513383996]	RNGB, Malc	FRI
	1710z	14/03 [953/24 70676 78274 59209 08905 2820657009] Good	RNGB, Malc	FRI
	1710z	17/03 [953/30 83245 92413 13964 65781 8349068793]	JkC	MON
	1710z	21/03 [959/25 09145 32177 94528 47262 3895099576]	RNGB	FRI
	1710z	24/03 [959/30 73533 32676 06749 59303 5997751379] Good	RNGB, JkC	MON
	1710z	28/03 [957/29 97732 32722 89863 19379 5138602698] Good	RNGB	FRI
	1710z	31/03 [953/21 01699 14963 81805 69847 5630036394]	Karsten	MON
	1710z	04/04 [955/23 55846 04373] Out 1717z Strong QRM2 QSB1	JkC	FRI
	1710z	07/04 [953/21ATTENTION 1321190733]	Malc	MON
	1710z	11/04 [955/22 98720 50353 19604 18475 0256097888]	Ary	FRI
	1710z 1710z	14/04 [953/30 53040 35465 39401 79239 3716100970]	JkC	MON
	1710z 1710z			MON
		21/04 [955/29 04630 30340 59591 93470 2569974182]	RNGB, Karsten	
	1710z	25/04 [953/21 23971 76759 07084 41995 8500824858]	RNGB	FRI
	1710z	28/04 [959/23 87498 58901 88717 33756 9535990912]	RNGB	MON
70771 11	2000	07/02/574/20 70010 00002 00055 (5002 10022 - 54000] ( - 1	DAIGD	EDI
7377kHz		07/03 [574/38 79010 98002 88055 65893 1003254099] Good	RNGB	FRI
	2000z	11/04 [576/33 40555 06734 8719332065 32739 76020] Out 2009z Noisy	Daniel	FRI
7440177	1045	10/02 54/1/21 22442 (002/ 20020 04210 0/01/ 00217)	DATED AT 1	TOT THE
7449kHz	1045Z	18/03 [461/31 22442 69926 28029 84210 9681608317]	RNGB, Malc	TUE
<b>5050111</b>	0015	0.5/00.5055/00.555/05.00.6/00.00.6/00.00.00.00.00.00.00.00.00.00.00.00.00.	DUI DE LE	
7850kHz		06/03 [255/38 57195 22648 08602 04163 7674546501] Strong	RNGB, PLondon	THU
	0315z	02/04 [255/33 34218 01227 09049 60839 2997621735] Strong	RNGB, PLondon	WED
8102kHz	1045z	04/03 [574/38 79010 98002 88055 65893 1003254099] Good	RNGB	TUE
	1045z	08/04 [576/33] OUT 1055z QSA2 QRN4	Ed Smith	TUE
8186kHz	2005z	05/04 [365/37 70354 53149 32302 44093 5354781727]	Fox, JkC	WED
8803kHz	0930z	12/03 [ ???/31 69093 63487 04934 02249 0938913602] Fair	RNGB	WED
	0930z	13/03 [420/31 69093 63487 etc] Repeat of Wednesdays' message	RNGB	THU
	0905z	20/03 [121/25 58787 39263 16619 86734 5389173269] Fair	RNGB	THU
	0930z	03/04 [271/32] too weak to copy	Malc	THU
		,		-
9079kHz	08207	03/03 [434/34 26148 13071 58972 01110 3853432289] Strong	RNGB	MON
, , , , KIIL	0820z	06/03 [434/34 26148 etc] Repeat of Monday	RNGB	THU
	3320L	and the first to the free free of monday	т. ОБ	1110
9371kHz	1730-	13/03 [414/33 17170 81485 29195 50292 1417271466]	RNGB, Spectre	THU
73 / IKTIZ		·	•	
	1730z	24/04 [415/33 86442 36832 57400 39390 0693031939]	RNGB	THU
02001-11	0000-	17/02 [522/24 00241 40110 42907 20749 05974 25454] E-:-	DMCD	MON
9399kHz	0900z 0900z	17/03 [532/34 99241 40119 43807 20748 9587635454] Fair	RNGB Fox	MON WED

WED

WED

MON

TUE

WED

SAT

FRI

TUE

FRI

Manolis, Ed Smith

RNGB

RNGB

RNGB

Fox, Christer

Fox, Ed Smith

Gert

JkC

0900z

0900z

0530z

1705z

1705z

0710z

0710z

10213kHz 0745z

10221kHz 0710z

19/03 [532/34 99241...etc] Repeat of Monday

04/04 [636/38 17413 etc] Repeat of Tuesday

09/04 [533/31 15886 97534 92760 52352 68869......44268] Out 0909z QSA2

01/04 [890/10 03667 96190 90379 09884 63125.....01753] 23/04 [391/37 63504 07148 89910 61337 82247......287084] Out 1715z Strong

17/03 [267/31 38620 07599 70934 28667 93651.....20367] Good

26/04 [391/37 – ..] message broke at start. Presumed repeat of Weds

28/03 [637/37 99085 73884 87494 72032 63424.....89947] V. Strong 01/04 [636/38 17413 67173 21162 40311 93005.....19186] Fair

10690kHz 0830z	03/03 [649/33 02691 88818 59099 67348 2022058108] Strong	RNGB, Malc	MON
0830z	07/03 [649/33 02691 etc] Repeat of Monday	Fox	FRI
0830z	18/04 [644/30 24952 06755 04154 21778 3293655107]	Fox, Christer	FRI
10800kHz 0645z	13/03 [51?/38 41530 89689 49095 27962 7747599443]	RNGB	THU
0645z	17/04 [511/37 63935 57300 19523 50821 9598912529] Out 0655z	Ed Smith	THU
	[		
13375kHz 1400z	01/03 [983/10 79940 03948 72630 36668 8069107608] Very strong	RNGB, Fox	SAT
1110z	03/03 [958/30 02228 65531 15408 07657 2243743262] Good	RNGB, Malc, JkC	MON
1400z	04/03 [987/10 85416 63960 20452 70069 1287799729]	Malc, JkC	TUE
1110z	07/03 [950/30 1301415358 Attention] single repeat Out 1119z S7	Malc	FRI
1400z	08/03 [988/10 91503 21818 32242 30217 1122300780]	Fox, Male, JkC	SAT
1110z 1400z	10/03 [952/31 10169 35518 61740 59254 0236270676]	RNGB RNGB	MON TUE
1400z 1110z	11/03 [981/10 42725 49983 54148 74897 2107608147] Good 14/03 [952/31 04930 92802 63600 74377 4879182196]	Fox	FRI
1400z	15/03 [983/10 97667 40444 93433 33444 5809233871]	Malc, RNGB	SAT
1400z	18/03 [982/10 13135 30338 83630 26879 6425417478] Good	RNGB, JkC	TUE
1110z	21/03 [956/40 44531 65760 7612287690 20303 51281]	Ary	FRI
1400z	25/03 [981/10 98353 40438 08238 85501 9873992063]	JkC	TUE
1110z	28/03 [950/40 02248 36016 94068 14147 9039146257]	Ed Smith	FRI
1400z	29/03 [987/10 85692 02457 81602 29221 3251289313]	Gary, JkC, Malc	SAT
1110z	31/03 [958/40 51979 53159 14900 87790 9402214968]	Malc, Ed Smith	MON
1400z	01/04 [981/10 10095 93914 85681 39788 1939756743] Out 1405z	Ed Smith	TUE
1110z	04/04 [956/32 91247 79501 76052 58759 6543392109] Strong	RNGB	FRI
1400z	05/04 [981/10 78638 10296 14334 48482 2493199001] Out 1405z	Ed Smith	SAT
1110z	07/04 [952/31 33308 11960 69182 61913 2300296465] Out 1119z	Ed Smith	MON
1400z	08/04 [981/10 54576 90860 89036 22265 8477417256] Out 1405z Fair	JkC, Ed Smith	TUE
1110z	11/04 [954/38 63894 05954 51332 82811 1326496958]	Ary	FRI
1400z	15/04 [981/10 06255 18692 14063 64169 8817397352]	Ed Smith	TUE
1110z	18/04 [952/31 7678460942] Out 1119z S3	Malc	FRI
1400z	19/04 [985/10 33711 49473 19902 02539 5802304248] Out 1405z	Ed Smith	SAT
1400z	22/04 [981/10 03296 55368 96504 17142 7945300418] Out 1405z Strong	JkC	TUE
1110z 1400z	25/04 [952/31 07269 60554 25397 07678 4753234805] Out 1118z	Ed Smith, Malc RNGB	FRI TUE
1400z 1110z	22/04 [981/10 03296 55368 96504 17142 7945300418] 28/04 [954/32 67198 92981 32056 14015 7243634356] Out 1119z S6	Malc, Ed Smith	MON
1400z	29/04 [981/10 37720 90848 32157 81830 7586676459] Good	RNGB	TUE
14002	27/04 [761/10 37/20 70646 32137 61630 7360070437] G000	KIVOD	ICL
13455kHz 1810z	01/03 [985/10 79940 03948 72630 36668 8069107608]	RNGB, Spetcre	SAT
1810z	04/03 [986/10 67938 42145 27317 07286 2324319786]	RNGB	TUE
1810z	08/03 [985/10 87969 62787 54873 21283 9056176432]	Malc, JkC	SAT
1810z	18/03 [984/10 03517 51644 64692 28307 0936040453]	RNGB, JkC, Fox	TUE
1810z	22/03 [987/10 85601 16881 64406 48269 5183733420]	RNGB	SAT
1810z	25/03 [982/10 22770 92249 66423 56930 0204166409]	JkC	TUE
1810z	29/03 [986/10 72637 93545 31344 81516 2475496772]	Karsten	SAT
1810z	01/14 [982/10 10095 93914 85681 39788 1939756743]	Malc	TUE
1810z	05/04 [982/10 86040 31582 77395 41890 8124811086]	Fox JkC	FRI TUE
1810z 1810z	08/04 [982/10 79479 20704 73763 56085 2866004271] Out 1855z Fair 12/04 [982/10 21884 97327 77602 16096 9570699702]	Malc	SAT
1810z 1810z	15/04 [982/10] Very weak	Karsten	TUE
1810z 1810z	22/04 [982/10 69263 31091 87235 20090 1292214707] Out 1815z Strong	JkC	TUE
1810z	29/04 [98?/10 0485572548] single repeat Out 1815z Su	Malc	TUE
10102	25/61 [50.710 0 1055725 10] single repeat out 10152 55	Male	ICL
14575kHz 0745z	18/03 [332/38 90644 03819 78495 01728 7517454541] Good	RNGB	TUE
0745z	20/03 [332/38 90644etc] repeat of Tuesday	Ed Smith	THU
0745z	22/04 [332/31 87139 45603 96958 99698 7416597063]	RNGB	TUE
14972kHz 1300z	25/03 [134/34 95964 30977 82485 12889 6242392983]	JkC	TUE
1300z 1300z	25/03 [134/34 95964 etc] Repeat of Tuesday	Ed Smith	WED
13002	20/00 [107/07 70704 Cit.] Repeat of Tuesday	Eu Silliui	WED
15915kHz 1540z	03/03 [222/32 74874 57295 99442 33485 4434617098] Strong	RNGB, JkC	MON
1540z	09/03 [222/32 74874 etc] Repeat of Monday	RNGB, Spectre	FRI
1155z	19/03 [717/33 63015 00716 26054 59138 6172871812] Good	RNGB, Spectre	WED
1155z	20/03 [717/33 63015etc] Repeat of Wednesday	Ed Smith	THU
1155z	02/04 [717/37 54016 61185 47321 84311 9695982862]	Ed Smith	WED
1155z	03/04 [717/37 54016] Repeat of Weds	Malc	THU
1540z	07/04 [224/36 95627 68359 49583 20554 70752 66274] Out 1550z Fair	JkC	MON

### E11a Transcripts Courtesy Spectre:

5194kHz 1710z 14/04 [953/30 Attention 53040 ... 00970 Out] 1720z Fair CWQRM3 QSB3 Spectre MON

953/30 Attention 53040 35465 39401 79239 37161 55532 54572 13272 27158 68580 68970 98545 05104 93059 87347 25955 83742 51514 41974 04585 34830 31614 50166 09955 07811 20323 87573 88565 96851 00970 Out 7377kHz 2000z 11/04 [576/33 Attention 40555 ... 76020 Out] 2010z Fair QRN3 QSB3 Spectre FRI

576/33 Attention

40555 06734 87193 67021 95554 03815 55871 90619 33858 51343

19631 04918 79638 90737 15252 54807 50709 56833 72122 37703

47119 62011 34242 98596 85973 72268 05913 10200 01817 19950

32065 32739 76020

Out

8102kHz 1045z 08/04 [576/33 Attention 40555 ... 76020 Out] 1055z Weak QRN3 QSB3 Spectre TUE

576/33 Attention

40555 06734 87193 67021 95554 03815 55871 90619 33858 51343

19631 04918 79638 90737 15252 54807 50709 56833 72122 37703

47119 62011 34242 98596 85973 72268 05913 10200 01817 19950

32065 32739 76020

Out

10213kHz 0530z 15/04 [980/10 Attention 99530 ... 88003 Out] 0536z Fair QRN3 QSB3 Spectre TUE

980/10 Attention

99530 29857 36644 80556 81069 67044 23465 39690 52758 88003

Out

13455kHz 1810z 15/04 [982/10 Attention 03097 ... 58515 Out] 1816z Fair QRN3 QSB3 Spectre TUE

982/10 Attention

 $03097\ 08659\ 58942\ 38135\ 13163\ 59145\ 44002\ 10294\ 45479\ 58515$ 

Out

### E17z March 2014:

12930kHz0810z	27/03[QRM]		M8	THU
14260kHz0800z 0800z 0800z	06/03[674 918 5 46062 68672 92699 14600 74248] 20/03[674 831 5 56342 79846 35416 80904 32176] 27/03[674 918 5 46062 68672 92699 14600 74248]0805z S4		GD GD M8	THU THU THU
<u>April2014:</u>				
12930kHz0810z 0810z 0810z	03/04[674 913 5 85630 73264 37109 29903 89159 913 5 00000]0805z S1 QRM 10/04[674 913 5 85630 73264 37109 29903 89159 00000]0815z S1 QRM 24/04[674 820 5 42465 46683 90715 42738 80515 820 5 00000]0815z S1		M8, ES, Spectre M8 M8	THU THU THU
14260kHz0800z 0800z 0450z	03/04[674 913 5 85630 73264 37109 29903 89159 913 5 00000]0805z S3 10/04[674 913 5 85630 73264 37109 29903 89159 00000]0805z S4 QRM HAMs 17/04[411 1 62421 7325 83 36768 07014 000 000] Very strong, ttyQRM2	(9m44s)	M8, ES, Spectre M8 ES,PLdn	THU THU THU
	411 1 62421 7325 83 36768 76626 55799 80618 97073 39295 26640 52986 35653 83487 94244 08717 90129 56706 12850 83245 65134 90981 86366 38121 91344 00139 48755 02334 60976 36343 89952 42487 05957 93872 89057 53240 79153 63436 80988 76777 44701 63679 19278 35646 58270 70945 10986 23025 79389 68873 33218 16605 13756 06413 71261 32012 05707 74032 84418 23308 21461 71368 04251 88809 40621 52291 68183 76838 82902 63933 68928 38365 52265 08619 89068 52046 87387 19233 43971 82098 24531 78829 34822 62316 52753 21654 07014 000 000			
0800z	24/04[674 820 5 42465 46683 90715 42738 80515 820 5 00000]0805z S5		M8	THU

### E25

There is a "rumor" of E25 on 18420 kHz. Speculation is that it happens to be on a harmonic. Current attempts were unable to duplicate though that is not unusual requires more consistent monitoring. If it is there, it will discovered again.

E25 xmsns have fallen off drastically but that also wouldn't be unusual considering the unrest in suspected areas where E25 might operate & xmt from.

Logs of note:

UNID 9400 05/03 - Another strong indication that it is somehow related to E25 though still not definitive.

E25 6140kHz 19/03 - Brief, so very brief live OM msg.

February

E25 6140kHz 0945z 15/02 Brief music, weak, MG SAT

E25 9450 kHz 1115z 23/02 [315 1082 4470 5011 6781 3558 2225 7483 4494 1096 4470 1949] 1123z, stopped during repeat, 1119z call and message again, ended with "EOM 3", AM QSA5, MG SUN

March

E25 6140kHz 1000z 09/03 [570 4032 5042 8673 4423 5536 5897 1705 5151] 1004z, carrier i.p. at 0943z, ended "EOM 5" and winXP shutdown sound, AM weak, MG SUN

E25a 6140kHz 0916z 10/03 [575 7] 0917z, carrier till 0931z, AM QSA2, QRN, MG MON

E25 6140kHz 0947z 18/03 ///AM w/suppressed LSB. Again with the "epic movie" music. WEAK 0952z AIK TUE

E25 6140kHz 0759z 19/03 OM [901] (xmtr off then on again) OM [901 901 901] STRONG 901 0801z AIK WED

E25a 6140kHz 0745z 22/03 YL [255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 255 34 2

END OF MESSAGE END OF TRANSMISSION] /// Drifting xmtr. Carrier starts 0704z until 0836z. Msgs 1 of 2 FAIR EOM/EOT 0748z AIK SAT

 $1015\ 3240\ 7021\ 3722\ 5455\ 0871\ 1101\ 1454\ 1537\ 8693\ 2697\ 3440\ END\ OF\ MESSAGE\ END\ OF\ TRANSMISSION]\ /\!/\!/\ Drifting\ xmtr.\ Carrier\ starts\ 0704z\ until\ 0836z.\ Msgs\ 2\ of\ 2\ FAIR\ EOM/EOT\ 0836z\ AIK$ 

SAT

E25 6140kHz 0832z 24/03 [710 1015 3240 7021 3722 5455 0802 1101 1494 1537 8693 2697 3240] 0836z, carrier i.p. at 0812z, AM, MG MON

 $1015\ 3240\ 7021\ 3722\ 5455\ 0871\ 1101\ 1454\ 1537\ 8693\ 2697\ 3440\ END\ OF\ MESSAGE\ END\ OF\ TRANSMISSION]\ ///Same\ as\ 24/03.\ Drifting\ xmtr.\ FAIR\ EOM/EOT\ 0835z\ AIK\ MG\ TUE$ 

E25 6140kHz 0846z 26/03 [169 4042 7170 1764 9856 0776 9985 5169] 0849z, AM weak, MG WED

1764 9856 0776 9985 5169 END OF MESSAGE] ///Carrier starts 0846z until 0922z. Msgs 1 of 2 FAIR EOM 0748z AIK THU

1764 9856 0776 9985 5169 END OF MESSAGE] ///Carrier starts 0846z until 0922z. Msgs 2 of 2 FAIR EOM 0900z AIK THU

E25a 6140kHz 0745z 28/04 [255 39] 0748z, AM, weak, MG MON

April

E25 6140kHz 0844z 02/04 [169 5044 3560 1764 4718 3925 1356 5145] 0848z, carrier i.p., weak, QRN MG WED

E25a 6140kHz 0743z 03/04 [255 35] 0751z, carrier i.p., weak, occasionally QSA3, ended Mx3 Rx3 EOM MG THU

E25 6140kHz 0846z 03/04 [169 (as of 02/04] 0849z, carrier up 0828z, ended EOM, AM QSA2 MG THU

E25a 6140kHz 0817z 11/04 [187 32] 0818z, i.p., MG FRI

E25a 9450kHz 1216z 22/04 [830 1] 1221z, carrier 1205z, slight FSK QRM, "Inte Omri" musical intro, YL "883 0" then 830 1 repeated, 1221z Mx3 and 830 1 x10, AM QSA5 MG TUE

### 9400kHz incidents

UNID 9400kHz 1206z 05/03 ///Adjustment noises followed by tone, albeit intermittently then music. Abdel Halim Hafez: Ahwak. Music xmsn problematic and interment w/ bad audio quality. Song ends &

then repeats itself several times. Brief end tone. Though not conclusive, this exact same song & repetitive nature was first heard on E25 on several occasions over a year ago and is just another

factor in determining that this UNID is in-fact related to E25 in some manner - no obvious coded msgs have been heard to date. - STRONG 1230z AIK WED

UNID 9400kHz 1008z 07/03 ///Adjustment noises. Tone intro, bad audio. Music, Najat Al-Saghria - song unk. Brief end tone. - STRONG 1040z AIK FRI

UNID 9400kHz 1104z 19/03 ///Adjustment noises. Tone intro, bad audio. Music is some piano piece - song unk. Brief end tone. - STRONG 1117z AIK WED

UNID 9400kHz 1008z 20/03 ///Adjustment noises. Tone intro, bad audio. Music, Najat Al-Saghria - song unk. Brief end tone. Note same start time as 07/03 xmsn - STRONG 1026z AIK THU

UNID 9400kHz 1104z 20/03 ///Adjustment noises. Tone intro, bad audio. Music, Najat Al-Saghria - song unk. Brief end tone. Note same start time as 07/03 xmsn - STRONG 111z AIK FRI

UNID 9400kHz 0946z 21/03 ///Carrier only. - - 0948z AIK FRI

UNID 9400kHz 1103z 21/03 ///Adjustment noises. Tone intro, bad audio. Music intermittent, YL singing, Uhm Khultom? - song unk, usual Arabic style. No end tone. - STRONG 1115z AIK FRI

UNID 9400kHz 1128z 29/03 Oriental music with audio breaks, 1129z 1000Hz tone, audio breaks, poor audio, ORT within the minute, AM OSA5, MG SAT

UNID 9400kHz 0925z 30/03 ///Was some brief on & off xsmns and adjustment noises between 0839z-0844z. Tone intro, bad audio. Music intermittent, YL singing, Uhm Khultom? - song unk, usual

Arabic style. Brief end tone. - STRONG 0936z AIK SUN

UNID 9400kHz 0912z 05/04 Carrier up for a moment, AM QSA5, MG SAT

#### G06

Peter writes:

As with other number stations in this family there were the expected seasonal changes of frequency in March.

### Second + Third Thursdays in the Month 1830 UTC Schedule:-

13-Mar-14:- 5,934 kHz, as expected has moved to a frequency inside the 49 metre broadcast band. Strong DRM station on a close frequency, G06 not too bad with receiver in USB mode. Calling "579", DK/GC "231 231 20 20" after about a minute, voice stopped then went into "579" call-up again, then "231 231 20 20" around 1833 UTC and into 5Fs.

Ended after 1836 UTC, DKDK GCGC and "00000", the "nulls" quicker than usual.

27-Mar-14:- 5,934 kHz, "579" and "231 231 20 20", DRM on HF side very strong.

10-Apr-14:- 5,934 kHz, call "579", DK/GC "231 231 20 20", same as in March. The DRM

broadcaster appears to have moved away for the summer or is now much too weak to be a problem.

### Friday 1930 UTC Schedule Following Second + Fourth Thursdays:-

14-Mar-14:- 5,442 kHz, calling "947", call-up much more rapid than normal although voice at normal pitch so not due to tape running at the wrong speed. DK/GC "532 532 20 20".

5F groups spoken at normal speed. S9+ signal on a clear frequency.

28-Mar14:- 5,442 kHz, "947" and "532 532 20 20",very strong S9+ signal.

25-Apr-14:- 5,442 kHz, call "947" and "532 532 20 20", 5Fs as in March Peaking over an indicated S9 on a clear frequency apart from many loud static crashes, sounded like there were thunderstorms around, probably in mainland Europe.

#### First + Second Mondays in the Month 1700 + 1800 UTC Schedule:-

10-Mar-14:- 1700 UTC, 4,569 kHz, "564 564 564 00000", local interference making for difficult copy.

1800 UTC, 5,424 kHz, started approx. 25 seconds past the hour, second sending, much better signal, S9+.

7-Apr-14:- 1700 UTC, 4,569 kHz, calling "564" for a somewhat unusual "full message", weak signal and local QRM making for difficult copy. DK sounded like "123", thought the group count was "252" which would have been a very long message indeed and would have taken an age to transmit given the slow, languid delivery of this particular manifestation of the G06 YL, and the second sending showed it to be a somewhat lower number of 5Fs.

1800 UTC, 5,424 kHz, "564" and "123 123 052 052". Unusual to have a leading "zero" ahead of a two-figure group count; it was "Null" and not "Zwo" as I had misheard it in the first transmission. Much stronger signal on a clear frequency.

### First + Third Fridays in the Month 2000 + 2100 UTC Schedule, Moved by One Hour in April:-

7-Mar-14:- 2000 UTC, 9,226 kHz, "167 167 167 00000", S9+, very strong signal, carrier noted on 9,226 approx five minutes before the hour. 2100 UTC, 6,982 kHz, second sending, also S9+.

21-Mar-14:- 2000 UTC, 9,226 kHz, "167 167 167 00000", S9 with an FSK idling on a close frequency.

2100 UTC, 6,982 kHz, second sending, peaking S9+.

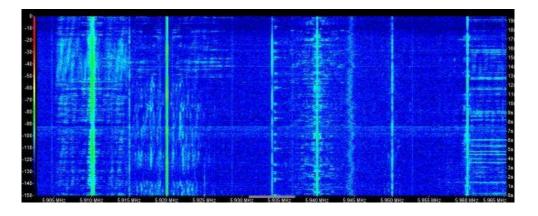
4-Apr-14:- has shifted by an hour with the changing of the clocks for summertime so is still on at 8 PM and 9 PM in the UK.

1900 UTC, 9,226 kHz, "167 167 167 00000", strong signal, idling FSK signal on a close frequency, also an "XJT" churning away which went off at 1905 UTC.

2000 UTC, 6,982 kHz, second sending, S9+ on a clear frequency.

18-Apr-14:- 1900 UTC, 9,236 kHz, 10 kHz up on last time, "167 167 167 00000", S9+ very strong signals.

2000 UTC, 6,982 kHz, second sending, peaking over S9.



#### March 2014:

4569kHz1614z	03/03[12345]1624z S2 Test Count?	M8	MON
1700z	03/03[564 x 3 00000]1704z S9	M8, JkC	MON
1700z	10/03[564 x 3 00000]1704z S6	M8, tiNG	MON
	•		
5424kHz1800z	10/03[564 x 3 00000]1804z S9+10	M8, tiNG	MON
		-7.	
5442kHz1930z	14/03 A variety of decodes here, so the below from:	Ary, HJH, JO	FRI

The call in is 479 -- the last being 479 before it becomes 474 422, thereon its just a normal G06 except for the fast delivery of zeros at the end

479479479 (R 3m54s)

475 422 532 532 20 20

06132 75514 79681 94217 21443 31441 81797 17512 62689 33103 48930 93432 25709 93628 48683 18829 85052 49870 63962 04884 ending was at 1938z with 532 532 20 20 00000(f)

Not strictly sure whether "zwo" or "null" was sent in some cases

I suspect this is just an attempt to be a bit malicious so that anyone decoding this has to work a bit harder.

The 475 422 bit are modified grps of the call-up, then it goes into its usual routine with 532 532 20 20 + msg txt 20grps(R2)+532 532 20 20

The only change being the ending which on this occasion is fast indication not a training session.

Just a bit of numeral skulduggery methinks. As RNGB pointed out the normal call is 947 ...........

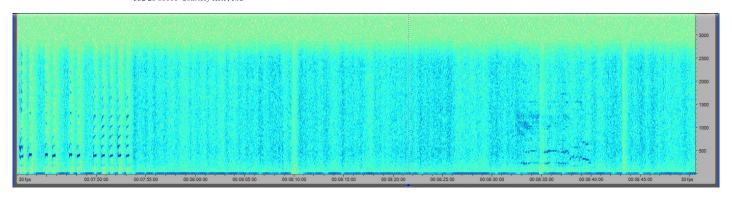
And now, some enlightenment:

5442kHz1930z 28/03[947 532 20 06132 ... 04884 532 20 00000] QSA5

HRT, JkC

FRI

947 532 20 06132 75514 79681 94217 21443 31441 81797 17512 62689 33103 48930 93432 25709 93628 48683 18809 85052 49870 63962 04884 532 20 00000 Courtesy HRT, JkC



PLdn offers, "On Friday G06 appeared five seconds late and went through the normal call up, header then sent its expected twenty groups followed by the dk and gc and '00000' sent fast, ending at 1938z, usual delivery, at good strength lasting the usual 7m45s.

However, the carrier stayed up until 1941z; during that time at 1938:30s a couple of chords off a guitar were played followed a few seconds later by a data burst. The carrier was then removed. The image above illustrates the guitar chords as detected."

5934kHz1830z 13/03[579 231 20 14259 ... 12250 231 20 00000(f)] Very strong, QRM FR, JkC THU

579 231 20
14259 1425[breaks down on repeat, restart call]
579 231 20
14259 22676 32782 32782 76723
89409 12215 77326 64070 90235
38085 59543 12319 74238 36664
12256 18841 73311 90809 12250
231 20 00000(f) Courtesy FR

1830z	27/03[579 231 20 14259 12252 231 20 00000] USB QSA4 DRMQRM	HRT	THU
6774kHz0800z	03/03[215 x 3 00000]0804z S1	M8	MON
0800z	10/03[215 x 3 00000]0804z S1	M8	MON
0800z	24/03[215 00000] USB QSA2	HRT	MON
6982kHz2100z	07/03[167 00000]2104z Strong QRM1 QSB1	JkC	FRI
9226kHz2000z	07/03[167 00000]2004z Strong QRM1 QSB1	JkC	FRI
2000z	21/03[167 00000]2004z Strong QRM1 QSB1	JkC, Ary	FRI

### April 2014:

4569kHz1700z	07/04[564 123 052 12375 78312 123 052 00000] 1718 QSA4	HRT, JkC, M8	MON
1700z	14/04[564 123 052 12375 78312 123 052 00000]1717z Fair QRM1 QSB1 Repeat of 07/04 1700z	JkC, Spectre	MON

14/04[564 123 052 12375 ... 78312 123 052 00000(f)] 1818z Fair QRN3 QSB3 5424kHz 1800z

Spectre

MON

G06 4569/5424kHz 1700/1800z 14/04 Transcript:

12375 71187 86308 32143 40103 29410 90572 21947 05006 67934 23181 88139 20743 76328 02703 09323 11643 57965 29413 15066 56011 17446 31984 89435 00654 47957 66197 42602 28597 97478 36854 84841 15509 07986 36382 36640 26956 89107 87536 46350 36091 38679 46294 78915 91947 96248 17180 05536 39748 77347 38651 78312 123 052 00000 Courtesy Spectre

5442kHz1930z 11/04[947 532 20 06132 ... 04884 532 20 00000] 1938z QSA5 HRT

FRI

06132 75514 79681 94217 21443 31441 81797 17512 62689 33103 48930 93432 25709 93628 48683 

5464kHz1800z 07/04[564 123 052 12375 ... 78312 123 052 00000] 18:18 QSA5 HRT, JkC, M8

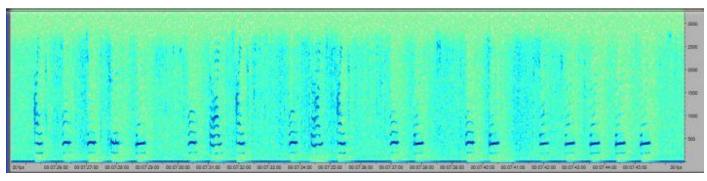
MON

123 052

12375 71187 86308 32143 40103 29410 90572 21947 05006 67934 23181 88139 20743 76328 02703 09303 11643 57965 29413 15066 56011 17446 31984 89435 00654 47957 66197 42602 28597 97478 36854 84841 15509 07986 36382 36640 26956 89107 87536 46350 36291 38679 46294 78915 91947 96248 17180 05536 39748 77347 38651 78312 123 052 00000 Courtesy HRT, JkC

14/04[564 123 052 12375 ... 78312 123 052 00000]1817z Fair QRM1 QSB1 1800z

JkC MON



 $Image \ shews \ last \ group \ 12250 \ then \ 231 \ 231 \ 20 \ 20 \ 00000 \ and \ illustrates \ fast \ ending \ 00000 \ \ [5934kHz1830z \ \ 10/04]$ 

5934kHz1830z 10/04[579 231 20 14259 ... 12250 231 23 00000(f)] 1838z Strong see image above (7m34s) HRT, PLdn, M8 THU 579 231 20 14259 22676 32782 32782 76723 89409 12215 74326 64070 90235 38085 59543 12319 74238 36664

12256 18841 73311 98089 12250 231 20 00000 Courtesy HRT

1830z 24/04[579 231 20 14259 ... 12250 231 20 00000(f)] 1838z Strong (7m34s) PLdn THU 6774kHz0800z 07/04[215 x 3 00000......]0803z S5 MON M8 0800z21/04[215 x 3 00000......]0804z S1 M8 MON 6982kHz2000z 04/04[167 x 3 00000.....]2004z S9 M8, JkC FRI 2000z 18/04[167 x 3 00000......]2004z S9+10 M8, JkC FRI 04/04[167 x 3 00000.....]1904z S9 FRI 9226kHz1900z M8, JkC 18/04[167 00000]1904z Strong QRM1 QSB1 FRI 9236kHz1900z JkC

RNGB's logs:

G06 log March:

0			
Monday 3rd	08:00	6774	'215' 00000
	17:00	4569	'564' 00000
	18:00	5424	'564' 00000
Friday 7th 20:00	9226	'167' 00	0000
·	21:00	6982	'167' 00000
Monday 10th	08:00	6774	'215' 00000
·	18:00	5424	'564' 00000

Friday 14th Monday 24th	19:30 08:00	5442 6774	'947' 532 20 06132 75514 79681 94217 2144304884 '215' 00000
G06 log April:			
Friday 18th	19:00	9236	'167' 00000
·	20:00	6982	'167' 00000
Monday 21st	08:00	6774	'215' 00000
Thursday 24th	18:30	5934	'579' 231 20 14259 22676 32782 32782 76723 8940912250

#### <u>G11</u>

Nil Reports

#### S06/S06s

Peters logs and short analysis:

Many expected seasonal frequency changes in March, and a bit more activity than usual, perhaps connected in some way with events in the Ukraine? These unexpected schedules were the only ones which appeared with a "full message" format. So starting with these:-

4-Mar-14, Tuesday:- 2242 UTC, 5,423 kHz, S06 in "full message" mode, S9 signal, just caught the end of a transmission, ........... "10569 15718 308 308 51 51 00000".

### A Sunday + Tuesday Schedule:-

18-Mar-14, Tuesday:- 1700 UTC, 9,131 kHz again, calling "480", DK/GC "193 193 42 42", S9+, ended 1712 UTC.

23-Mar-14, Sunday:- 1700 UTC, 9,131 kHz, just caught the end of the "480" call-up, at 1704 UTC, DK/GC "265 265 43 43", strong signal, last 5Fs "09380 93249 00790 29330 09572".

25-Mar-14, Tuesday:- 1700 UTC, 9,131 kHz, definitely a regular schedule here, call "480",

DK/GC "917 917 40 40", S9+ signal. On the likelihood that this would show up I had searched for a possible first sending at 1600 UTC and then looked for a possible repeat at 1800 UTC but nothing found.

30-Mar-14, Sunday:- 1700 UTC, 9,131 kHz, call "480", DK/GC "326 326 40 40", has stayed on UTC so with the change in the clocks with the start of summertime now shows up at 6 PM instead of 5 PM in this here dis-United Kingdom.

1-Apr-14, Tuesday:- no sign of this one in April, or so I thought, turns out there has been a change of frequency:- 1706 UTC, 13,457 kHz, transmission in progress found after a search when nothing observed on 9,131. Quite a shift, over four megacycles per second!

S9+, slight interference from a rapidly swept carrier which lives up here. Speech became somewhat distorted around 1709 UTC, thought it was my old Lowe receiver playing up but got the same result with another radio. Ended just before 1711 UTC with, "157 157 42 42 00000".

6-Apr-14, Sunday:- 1700 UTC, 13,457 kHz, call is still "480", DK/GC "629 629 43 43", S9 with that swept carrier for company and Ivan has fixed the distorted speech problem.

8-Apr-13, Tuesday:- 1700 UTC, 13,457 kHz, call "480", DK/GC "751 751 40 40", S9+ with the "sweeper" in attendance.

15-Apr-14, Tuesday:- 1700 UTC, 13,457 kHz, "480" and DK/GC "371 371 45 45", weaker than in the past, S7 to S8 but became stronger towards end of transmission at 1712 UTC.

20-Apr-14, Sunday:- 1700 UTC, 13,457 kHz, call "480", DK/GC "596 596 42 42". S9+, the swept carrier interference much weaker than usual. The Group Count for this one is always forty something.

22-Apr-14, Tuesday:- 1700 UTC, 13,457 kHz - and the frequency never varies! - "480" and "712 712 43 43".

27-Apr-14, Sunday:- Oh dear, no sign of this one at 1700 UTC today, did a search either side of 13,457 but nothing found. Also did a search at five minutes past the hour in case an alternative start time was being used, would have been the first time with this schedule, but again no trace. Whatever this was connected with appears to have come to an end.

### Onto the established S06 schedules:-

### Weekly Saturday 1600 or 1605 UTC Schedule:-

1-Mar-14:- 1605 UTC, 7,342 kHz, "194 194 194 00000", peaking S9+, side-band splash from a broadcast station close by.

15-Mar-14:- 1600 UTC, 8,062 kHz, "194 194 194 00000", peaking S9+.

22-Mar-14:- 1605 UTC, 7,342 kHz, "194 194 194 00000", S9 with slight BC interference.

5-Apr-14:- 1600 UTC, 8,062 kHz, "194 194 00000", peaking over S9. Has stayed on UTC with the "spring forward" of the clocks, now on at 5 PM British Summer Time.

19-Apr-14:- 1600 UTC, 8,062 kHz, "194 194 194 00000", S7 at best, weaker than usual.

### Weekly Saturday 1930 or 1935 UTC Schedule:-

1-Mar-14:- 1935 UTC, 4,614 kHz, "396 396 396 00000". S8 to S9, strong WEFAX station on the LF side, removed by using the receiver in USB

8-Mar-14:- 1935 UTC, 4,629 kHz, a slight shift of frequency onto a quieter spot, "396 396 396 00000".

15-Mar-14:- 1930 UTC, 5,787 kHz, "396 396 396 00000", S9+, very strong signal.

5-Apr-14:- 1935 UTC, 4,629 kHz, "396 396 396 00000", has stayed on UTC

19-Apr-14:- 1930 UTC, 5,787 kHz, "396 396 396 00000", S9 on a clear frequency.

### First + Third Saturdays in the Month Schedule, Call "362", 2000 + 2100 UTC in March, did a One Hour Shift in April:-

1-Mar-14:- 2000 UTC, 5,317 kHz, "362 362 362 00000", S9+ on a clear frequency.

2100 UTC, 4,534 kHz, second sending, close to a strong "XJT".

15-Mar-14:- 2000 UTC, 5,317 kHz, "362 362 362 00000", S9+.

2100 UTC, 4,534 kHz, second sending with the "XJT" and a swept carrier often noticed down here.

5-Apr-14:- 1900 UTC, 5,317 kHz, has moved by one hour so transmissions still appear at 8 PM and 9 PM in the UK. "362 362 362 00000".

2000 UTC, 4,534 kHz, second sending, still with strong "XJT" and swept carrier for company.

19-Apr-14:- 1900 UTC, 5,317 kHz, "362 362 362 00000", S9

2000 UTC, 4,534 kHz, weak signal, all the usual noise, difficult copy.

### First + Third Saturdays in the Month Schedule, Call "621", 2030 + 2130 UTC in March, did a One and a Half Hour Shift in April:-

1-Mar-14:- 2030 UTC, 6,782 kHz, "621 621 621 00000", S9+, very strong signal.
2130 UTC, 5,854 kHz, second sending, S9+, strong "XJT" churning away on the LF side, removed by using the receiver in USB mode.

15-Mar-14:- 2030 UTC, 6,782 kHz, "621 621 621 00000", S9+

2130 UTC, 5,864 kHz, 10 kHz up on last time.

And a not altogether unexpected time slip - because similar seasonal behaviour has been noted in the past - of one and a half hours in April which means that "621" shows up at the same time as "362", see above. Question; is there some country where the clocks move by one and a half hours instead of the one hour we are familiar with?

5-Apr-14:- 1900 UTC, 6,782 kHz, "621 621 621 00000", S9+.

2000 UTC, 5,834 kHz, second sending.

19-Apr-14:- 1900 UTC, 6,782 kHz, "621 621 621 00000", swamped by a strong "XJT", not observed before on this frequency.

2000 UTC, 5,864 kHz, seconding sending, peaking an indicated S9+.

### Monday + Thursday 1900 or 1905 UTC Schedule:-

3-Mar-14, Monday:- 1900 UTC, 5,784 kHz, "349 349 00000". S9+, the expected seasonal change of frequency, 1905 UTC when used should be on 5,127 kHz.

6-Mar-14, Thursday:- 1905 UTC, 5,127 kHz as expected, "349 349 349 00000".

10-Mar-14, Monday:- 1905 UTC, 5,127 kHz, "349 349 349 00000", S9+.

13-Mar-14, Thursday:- 1905 UTC, 5,127 kHz, "349 349 349 00000", peaking S9+.

17-Mar-14, Monday:- 1905 UTC, 5,127 kHz, "349 349 349 00000", S9 with QSB.

20-Mar-14, Thursday:- 1905 UTC, 5,127 kHz, "349 349 349 00000".

24-Mar-14, Monday:- 1900 UTC, 5,784 kHz, "349 349 349 00000", S9+.

31-Mar-14, Monday:- 1905 UTC, 5,127 kHz, "349 349 349 00000", S9+, with the start of British Summer Time now on one hour later in the UK,

3-Apr-14, Thursday:- 1900 UTC, 5,784 kHz, "349 349 349 00000", S9+.

10-Apr-14, Thursday:- 1905 UTC, 5,127 kHz, "349 349 349 00000".

24-Apr-14, Thursday:- 1900 UTC, 5,784 kHz, "349 349 349 00000", S9+ signal.

### Second + Fourth Mondays in the Month 1905 + 2015 UTC Schedule in March, did a One Hour Shift in April:-

10-Mar-14:- 2015 UTC, 9,140 kHz, "865 865 865 00000", S9+, very strong signal.

Second sending, missed 1915z transmission, probably on 11,030 kHz, plus or minus, since this schedule is using the same frequencies as in any given month in 2013.

24-Mar-14:- 1915 UTC, 11,030 kHz as expected, "865 865 865 00000", S9+.

2015 UTC, 9,140 kHz, second sending peaking over S9.

14-Apr-14:- Has moved by one hour so as to still show up at 7.15 PM and 8.15 PM UK time; also same frequencies and call as in April last year:-1815 UTC, 13,440 kHz, "116 116 116 00000", signal strength S6 to S7.

1915 UTC, 11,105 kHz, second sending, peaking over S9.

One solitary example of an S06c "one 5F group repeated" transmission:-5-Mar-14, Wednesday:- 1822 UTC, 9,433 kHz, S9 Russian OM calling "11220" over and over, stopped 1824UTC and cut carrier.

Onto RNGB's logs and then others' with duplication.

# <u>S06</u> <u>March 2014:</u>

RNGB's March logs

S06 March log:			
Saturday 1st	16:05	7342	'194' 00000
	19:35	4614	<b>'396' 00000</b>
	20:00	5317	'362' 00000
	20:30	6782	'621' 00000
	21:00	4534	'362' 00000
	21:30	5854	'621' 00000
Monday 3rd	19:00	5784	'349' 00000
Monday 10th	19:05	5127	'349' 00000
	19:15	11030	'865' 00000
Thursday 13th	08:40	9463	'801' 473 52 59784 72451 86879 57115 3629019169
	19:05	5127	'349' 00000
Monday 17th	19:05	5127	'349' 00000
Tuesday 18th	17:00	9131	'480' 193 42 85415 05660 12561 99127 2666091515
	17:30	7361	'480' 193 42 85415 05660 12561 99127 2666091515
Saturday 22nd	16:05	7342	'194' 00000
Monday 24th	20:15	9140	'865' 00000
Tuesday 25th	17:00	9131	'480' 917 40 18917 65670 07835 69607 1773757563
	17:30	7365	'480' 917 4018917 65670 07835 69607 1773757563
Thursday 27th	19:00	5784	'349' 00000

S06s March log:			
Mondays			
3rd/10th	0830/40	9220/8270	'371' 428 5 88610 58069 61732 74537 57440
17th/24th			'371' 869 5 96632 41412 52343 81413 11749
3rd/10th	0900/10	14580/13165	'872' 901 5 48115 24151 51802 23807 15521
17th/24th			'872' 953 6 72635 49382 78304 91726 39912 67845
3rd/10th	1200/10	9145/11460	'831' 426 5 01406 15003 24357 60583 53535
17th/24th			'831' 520 6 53355 95127 59246 90337 46785 42264
Tuesdays			
4th/11th	0600/10	14080/12355	'438' 910 5 39534 17228 15636 88620 58069
18th/25th			'438' 952 6 46923 12102 98532 74299 47301 20236
4th/11th	0700/15	5760/6930	'374' 218 5 92060 11749 70552 56936 57989
18th/25th			'374' 268 5 51194 90253 32616 89718 86512
4th/11th	0730/40	7425/11560	'427' 839 5 68734 80935 23165 78462 67321
18th/25th			'427' 831 5 89617 25757 77159 95225 84090
4th/11th	0800/10	11635/10420	'352' 408 6 56534 79812 90895 45330 00166 55210
18th/25th			'352' 980 6 64385 82707 06123 22536 88280 84116
4th/11th	1000/10	6410/7340	'893' 415 6 46062 21767 05899 26634 47665 52401
18th/25th			'893' 274 5 42997 94184 47374 74154 08531
4th/11th	1500/10	6464/7242	'537' 420 6 88620 58069 61732 74537 57440 10597
18th/25th			'537' 924 6 87800 11318 20236 51319 46560 17617
Wednesdays			
5th/12th	0820/30	7605/9255	'471' 296 5 18263 78435 27190 78323 65746
19th/26th			'471' 295 6 79302 53516 25616 56069 82963 24162
5th/12th	0830/40	11854/12140	'745' 893 6 10298 37465 78329 88154 23091 87925
19th/26th			'745' 910 6 06123 22536 88280 84116 53718 78927
5th/12th	1000/10	13365/14505	'729' 450 6 49885 44100 43904 10696 89353 85293
19th/26th			'729' 836 5 89482 54322 23114 81768 17923
5th/12th	1230/40	7620/8105	'967' No reports
19th/26th			'967' 240 5 39704 35608 14371 29464 38819
Thursdays			
6th/13th (E17z)	0800/10	14260/12930	'674' 918 5 46062 68672 92699 14600 74248
20th/27th			'674' 831 5 56342 79846 35416 80904 32176
6th/13th	0900/10	5744/6524	'624' 509 7 46647 79302 53516 25616 56069 24042 75956
20th/27th			'624' No reports
6th/13th	0900/10	12952/13565	167° 934 5 88280 84116 53718 78927 34694
20th/27th			167° 234 5 46062 21767 05899 26635 47665
6th/13th	0930/40	8650/7385	'314' 980 5 79302 53516 25616 56069 96813
20th/27th	400000	40445/4 :-:-	'314' 869 5 52537 55678 79628 94073 80552
6th/13th	1200/10	12415/14212	'425' 963 7 36197 83928 98484 34984 87800 33599 46096
20th/27th			'425' 907 6 58651 46580 42153 25644 98450 65991

Fridays 7th/14th 21st/28th 7th/14th 21st/28th 7th/14th 21st/28th 7th/14th 21st/28th 7th/14th 21st/28th Saturday 1st Sundays 2nd/9th 16th//3rd	0600/10 9078/10148 0700/10 7795/8695 0800/10 ? / 5805 0930/40 12140/13515 1200/10 0630/40 ? /20050	'934' 802 5 59203 95091 33484 41947 41204 '934' 267 5 40075 49268 55261 81283 58606 '196' 830 5 37449 95373 87131 53016 45350 '196' 203 5 90138 82551 36313 80212 40792 '278' 409 5 50128 99477 83574 48874 94031 '278' 416 5 17253 48579 09873 29384 88313 '516' 472 8 43494 37638 16070 48834 53735 61088 02440 59354 '516' 927 8 39534 17228 15636 34140 78386 60583 89617 25757  '254' 970 6 88280 84116 53718 78927 34694 20336		
16th/23rd	and the second of the second			
	gs with some duplication:	DV4 04D4		~ . —
4614kHz1935z 4534kHz2100z	01/03[396 00000] 1939z Fair Q 15/03[362 00000] Strong signal	RN3 QSB3 , very strong bleeding/interference/noise	Spectre FR	SAT SAT
4629kHz1935z	08/03[396 00000] 1939z Fair Q	RN2 QSB2	Spectre	SAT
5127kHz 1905z 1905z 1905z 1905z 1905z 1905z 1905z	06/03[349 00000] 1909z Fair Q 10/03[349 x 3 00000]1 13/03[349 00000]1909z Fair Ql 17/03[349 x 3 000]1909 20/03 [349 00000] Very strong 31/03[349 x 3 000]19	1904z S9+20 RM2 QSB1 Oz S9 signal, moderate noise	Spectre M8 JkC M8 FR M8	THU MON THU MON THU MON
5317kHz2000z	15/03[362 00000] Very strong s	signal, weak/moderate noise	FR. JkC	SAT
5784kHz1859z 1900z	03/03[349 00000] started split to 24/03[349 00000]1903z Strong		mndbs JkC	MON MON
5787kHz1930z	15/03[396 00000]1934z Strong	QRM1 QSB1	JkC	SAT
5864kHz2130z	15/03[621 00000]2134z Strong	QRM2 QSB1	JkC	SAT
6782kHz2030z	15/03[621 00000] Very strong s	signal, moderate noise	FR	SAT
7361kHz1733z 1730z		22 271 45 00000]1742zFair QRM2 QSB1 15 193 42 00000]1742z Fair QRM3 QSB1	JkC, Spectre JkC	SUN TUE
	34200 61430 26548 96964 43742 96640 58228 64164 97053 7164	0 43262 00411 46085 73746 95785 2 38222 82233 19822 36036 44229 1 44441 06586 08875 20979 70370 3 35938 53868 48569 32626 22126 Courtesy JkC, Spectre		
7473kHz1605z	08/03[194 00000] 1609z Fair B	CQRM4 QSB2	Spectre	SAT
8062kHz1600z	15/03[194 00000]1604z Strong	QRM1 QSB1	JkC	SAT
9131kHz1702z	02/03[480 271 45 26968 1442	22 271 45 00000]1712zFair QRM1 QSB1	JkC	SUN
	98984 84605 62433 92695 18405 51275 56631 32823 01662 61145	1 20337 35927 48027 34648 30416 5 48811 46057 69549 98345 46084 7 39116 81816 88102 52005 49441 3 88731 73774 73536 63766 95243		
9140kHz2015z 2015z	10/03[865 x 3 00000]2 24/03[865 00000]2019z Strong		M8 JkC	MON MON
9463kHz1718z	02/03[801 81367 356	524 00000]1723zWeak QRM3 QSB2	JkC	SUN
	S06 9463kHz 1718z 02/03 801 (Fades to nil) 67803 90084 85793 95062 66056 24255 5727- 50920 78016 11902 81367 356 24 00000	4 84816 22550 75432 06345 45572 Courtesy JkC		
10387kHz 1807z	04/03[I/P 74513 692 55 0	0000]1814zFair QRM3 QSB1	JkC	TUE
10755kHz2210z	02/03 sending numbers 975 ( I'	m not sure) 2223z and msg.	DanAr	SUN

11030kHz1915z 1915z	10/03[865 x 3 00000]1919z S4 24/03[865 00000]1919z Strong QRM1 QSB1	M8, HJH JkC	MON MON
12053kHz 1520z	04/03[I/P 67070 63147 00000]1527zStrong QRM1 QSB1	JkC	TUE
<u>April2014:</u>			
4534kHz2000z 1930z	05/04[362 00000] Strong signal, strong noise 19/04[362 00000]2004z Fair QRM3 QSB1	FR, JkC JkC	SAT SAT
5127kHz1905z 1905z	17/04[349 00000] 1909z 21/04[349 x 3 00000]1909z S9	ES, M8 M8	THU MON
5317kHz1900z	05/04[362 00000] Strong signal, moderate/strong noise	FR, JkC	SAT
5784kHz1900z 1900z 1900z 1900z	03/04[349 x 3 00000]1904z S9 07/04[349 00000] 1904z Strong QRN3 QSB2 14/04[349 00000]1904z Strong QRM1 QSB1 24/04[349 x 3 00000]2004z S9+10	M8 Spectre JkC M8	THU MON MON THU
5787kHz2000z 1930z	19/04[396 00000]1934z Strong QRM1 QSB1 26/04[396 00000]1934z Strong QRM1 QSB1	JkC JkC	SAT SAT
5864kHz 2000z 2000z	05/04[621 00000] 2004z Strong QRN2 QSB2 19/04[621 00000]2004z Strong QRM1 QSB1	Spectre JkC	SAT SAT
5890kHz1800z 1800z	01/04[286 00000]1804z Fair QRM3 QSB1 08/04[286 00000] 1804 QSA4 QRM	JkC HRT, JkC	TUE TUE
6782kHz1900z	05/04[621 00000] Very strong signal, moderate/strong noise	FR, JkC	SAT
7242kHz1510z	08/04[537 908 6 46399 39350 908 6 00000]1515z Fair QRM1 QSB1	JkC	TUE
7342kHz1605z	12/04[192 x 3 00000]1609z S5	M8	SAT
9123kHz2142z	23/04[I/P 28495 491 53 00000]2145z Strong QRM1 QSB1  S06 9123kHz 2142z 23/04  I/P  57310 44398 76174 15591 34595 60650 76660 71368 55126 45930 89647 29776 28495 491 53 00000  Courtesy JkC	JkC	WED
11105kHz1915z	14/04[116 00000]1919z Strong QRM1 QSB1	JkC	MON
11118kHz1739z 1730z	01/04[I/P 64582 157 42 00000]1742z Fair QRM3 QSB1 * 06/04[480 629 43 02603 43904 629 43 00000(f)] Very strong (12m11	JkC, PLdn s) PLdn, Spectre	TUE SUN
	480 629 43 02603 75046 63126 93200 05567 33184 27254 97132 66210 05386 26586 61794 94171 51830 16288 53845 27434 80054 52460 60498 55954 66529 57799 29559 17506 13724 12502 07085 95026 37397 66180 99221 99945 62554 78683 21360 93558 03133 92306 47712 10558 06941 43904 629 43 00000		
1730z 1730z	08/04[480 751 40 56799 84703 751 40 00000(f)] Very strong 13/04[480 296 41 68128 46795 296 41 00000(f)] Very strong (11m44	s) JkC, PLdn s) JkC,	TUE PLdn
	480 296 41 68128 53518 23246 76308 38133 29892 12160 63004 98610 77027 77900 36871 19030 84327 99556 48826 40681 18838 64157 50440 33147 78759 64791 17214 63791 24926 19009 37644 43254 57917 06973 93248 07056 26795 68612 38242 46045 16619 94601 82040 46795 296 41 00000 Courtesy JkC		
1730z 1730z 1730z	20/04[480 596 42 49563 27269 596 42 00000]1740z Strong QRM2/3 QSB1	s) JkC, PLdn JkC, PLdn s) PLdn, JkC	TUE SUN TUE
	\$\text{S06}\$ 13457kHz/11118kHz\$ 1700z/1730z\$ 22/04 480 712 43 73995 85328 87650 23576 55716 52066 01630 66200 57401 84853 00773 88198 03406 11905 45671 09335 66502 84676 22763 63948 35769 95824 79412 98651 94441 68080 27822 77305 23843 95883 08867 73626 67677 92924 75241 15470 32175 64478 75710 14096 55206 60429 73995 712 43 00000  **Courtesy JkC**		
13440kHz1815z	14/04[116 00000]1819z Strong QRM1 QSB1	JkC	MON
13457kHz1708z	01/04[I/P 64582 157 42 00000]1710z Fair QRM3 QSB1 *	JkC	TUE
	S06 13457kHz 1708z 01/04 L/P 85796 79127 01365 91883 34722 11922 39634 27120 73397 67790 68444 71952 26964 64582 157 42 00000 Courtesy JkC		

13457kHz1700z 1700z	06/04[480 629 43 02603 43904 629 43 00000(f)] Very strong 08/04[480 751 40 56799 84703 751 40 00000(f)] Very strong	(12m11s) (11m37s)	PLdn JkC, PLdn	SUN TUE
	S06 13457kHz/11118kHz 1700z/1730z 08/04 480 751 40			
	56799 23172 12538 90406 07709 11939 47843 07747 55616 13621 64722 61188 95389 50048 29275 46166 33523 55941 82452 21222 19101 18485 00621 22894 94543 02359 17202 33903 47724 14863			
	70931 67461 66089 57923 15689 38290 64137 99288 71561 84703 751 40 00000 Courtesy JkC			
1700z	13/04[480 296 41 68128 46795 296 41 00000(f)] Very strong	(11m44s)	JkC, PLdn, Spectre	SUN
1700z	15/04[480 371 45 50135 56318 371 45 00000(f)] Very strong, QRM3		JkC, PLdn	TUE
	S06 13457kHz/11118kHz 1700z/1730z 15/04 480 371 45			
	50135 80378 77662 36926 77384 32258 43795 81190 22191 26184 55053 99625 71339 69531 12708 92028 19160 26665 57696 44576 21605 59812 38872 29052 63405 35848 23128 89060 02032 01790			
	18411 66539 17503 89817 46338 63102 37871 29829 19860 90023 39302 58963 10418 29009 56318			
1700-	371 45 00000 Courtesy JkC		ILC DI 4.	CLINI
1700z	20/04[480 596 42 49563 27269 596 42 00000]1710z Strong QRM2/3 QSB1 S06 13457kHz/11118kHz 1700z/1730z 20/04		JkC, PLdn	SUN
	480 596 42 49563 01154 35760 43827 70133 41841 91351 23807 46730 26195 36508 65502 07278 88195 63001 89482 40690 02059 14403 02084			
	54905 99393 82853 77357 69779 24274 23272 32630 13025 36453 01089 48475 62523 89342 52755 47781 00930 72731 53277 31812			
	31821 27269 596 42 00000 <i>Courtesy JkC</i>			
1700z	22/04[480 712 43 73995 13963 00000(f)] Very strong	(12m16s)	PLdn, JkC	TUE
15721kHz 0402z	23/04[480 627 50 96635 97284 627 50]0412z Fair QRM1 QSB1 Delivery faster than usual. Did not hear ending 00000. Carrier stayed on air until 0417z		JkC	WED
	S06 15721kHz 0402z 23/04 480 627 50			
	96635 47047 01351 10295 98141 57909 08953 97885 99516 59529 78951 98278 58064 58118 15907 76823 88293 40070 95997 10493 30423 58209 17022 31607 37728 12283 19579 27508 43669 28368 02881 13381 94754 66901 83638 20408 60049 14006 71441 66437 53290 35804 59088 01369 28535 00411 51286 44423 35281 97284 627 50 end zeroes not heard  Courtesy JKC			
S06s <u>March 2014:</u>				
5805kHz0810z	07/03[278 409 5 50128 99477 83574 48874 94031 409 5 00000] Strong signal QRM, QSB		FR	FRI
0810z 0810z	14/03[278 409 5 50128 99477 83574 48874 94031 409 5 00000] Medium signal, strong noise 21/03[278 416 5 17253 48579 09873 29384 88313 416 5 00000] Strong signal, moderate noise		FR FR	FRI FRI
6464kHz1500z	04/03[537 too weak to copy]		M8	TUE
1500z	25/03[537 924 6 87800 11318 20236 51319 46560 17617 924 6 00000]1505z Weak QRM1 QSB2		JkC	TUE
7242kHz1510z 1510z	04/03[537 too weak to copy] 25/03[537 924 6 87800 11318 20236 51319 46560 17617 924 6 00000]1515z Fair QRM2 QSB2		M8 JkC	TUE TUE
7340kHz1010z	04/03[893 too weak to copy]		M8	TUE
1010z	18/03[893 274 5 42997 94184 47374 74154 08531 274 5 00000]1015z S1		M8	TUE WED
7504kHz0820z	05/03[471too weak to copy]0825z		M8	
7605kHz0820z 0820z	12/03[471 296 5 18263 78435 27190 78323 65746 296 5 00000]0825z S3 19/03[471 295 6 79302 53516 25616 56069 82963 24162 295 6 00000] Strong signal, moderate nois	e	M8 FR	WED WED
7620kHz1230z	19/03[967 240 5 39704 35608 14371 29464 38819 240 5 00000]1235z Very weak QRM1 QSB1		JkC	WED
7795kHz0700z 0700z	07/03[196 830 5 37449 95373 87131 53016 45350 830 5 00000] Strong signal, QRM,QSB 14/03[196 830 5 37449 95373 87131 53016 45350 830 5 00000] Medium signal, strong noise		FR FR	FRI FRI
700z	21/03[196 203 5 90138 82551 36313 80212 40792 203 5 00000] Strong signal, moderate noise		FR	FRI
8105kHz1240z	19/03[967 240 5 39704 35608 14371 29464 38819 240 5 00000]1245z Very weak QRM3 QSB1		JkC	WED
8270kHz0840z 0840z	03/03[371 428 5 88610 58069 61732 74537 57440 428 5 00000]0845z S3 10/03[371 428 5 88610 58069 61732 74537 57440 428 5 00000] Strong		M8 FR, M8	MON MON
0840z 0840z 0840z	17/03[371 428 5 88010 58007 01732 74537 57440 428 5 00000] Strong, QRM 31/03[371 too weak to copy]		FR, M8 M8	MON MON
	. 177			

FR

M8

SAT

THU

 $27/03[314\ too\ weak\ to\ copy]0935z$ 

 $01/03[254\ 970\ 6\ 88280\ 84116\ 53718\ 78927\ 34694\ 20336\ 970\ 6\ 00000]\ Very\ strong, QRM$ 

8520kHz1210z

8650kHz0930z

8695kHz0710z	07/03[196 830 5 37449 95373 87131 53016 45350 830 5 00000] Very strong signal, QRM 14/03[196 830 5 37449 95373 87131 53016 45350 830 5 00000] Strong signal, moderate noise	FR	FRI
0710z		FR	FRI
9078kHz0600z	21/03[934 267 5 40075 49268 55261 81283 58606 26705 267 5 00000] Strong signal, moderate noise	FR	FRI
9145kHz1200z	10/03[831 426 5 01406 15003 24357 60583 53535 426 5 00000]1205z S2 17/03[831 Too weak to copy] 24/03[831 520 6 53355 95127 59246 90337 46785 42264 520 6 00000] QSA3 QSB 31/03[831 x 3 00000]1204z S1	M8	MON
1200z		M8	MON
1200z		HRT	MON
1200z		M8	MON
9220kHz0830z	03/03[371 428 5 88610 58069 61732 74537 57440 428 5 00000]0835z S2 10/03[371 428 5 88610 58069 61732 74537 57440 428 5 00000] Strong 17/03[371 869 5 96632 41412 52343 81413 11749 869 5 00000]Very strong, QRM 31/03[371 too weak to copy]	M8	MON
0830z		FR, M8	MON
0830z		FR, M8	MON
0830z		M8	MON
9255kHz0830z 0830z 0830z	05/03[471too weak to copy]0835z 12/03[471 296 5 18263 78435 27190 78323 65746 296 5 00000]0835z S2 19/03[471 295 6 79302 53516 25616 56069 82963 24162 295 6 00000] Very strong signal, weak noise	M8 M8 FR	WED WED
10148kHz0610z	21/03[934 267 5 40075 49268 55261 81283 58606 26705 267 5 00000]Strong signal, weak noise	FR	FRI
10350kHz1200z	01/03[254 970 6 88280 84116 53718 78927 34694 20336 970 6 00000] Very strong	FR	SAT
10420kHz0810z	11/03[352 408 6 56534 79812 0?166 55210 408 6 00000]0815z S1	M8	TUE
11460kHz1210z	10/03[831 426 5 01406 15003 24357 60583 53535 426 5 00000]1215z S4	M8	MON
1210z	17/0 [831 520 6 53355 95127 59246 90337 46785 42264 520 6 00000]1215z S5	M8	MON
1210z	24/03[831 520 6 53355 95127 59246 90337 46785 42264 520 6 00000] QSA5	HRT	MON
1210z	31/03[831 x 3 00000]1214z S6	M8	MON
11635kHz0800z	11/03[352 too weak to copy]	M8	TUE
11854kHz0830z	05/03[745 893 6 10298 37465 78429 88154 23091 87925 893 6 00000]0835z S5 QRM 12/03[745 893 6 10298 37465 78329 88154 23091 87925 893 6 00000]0835z S9+10 19/03 [?] Bleeding too strong to hear anything	M8, Spectre	WED
0830z		M8, Spectre	WED
0830z		FR	WED
12140kHz0840z 0930z 0840z 0930z 0930z 0840z 0930z	05/03[745 893 6 10298 37465 78429 88154 23091 87925 893 6 00000]0845z S9+10 07/03[516 472 8 43494 37638 16070 48834 53735 61088 02440 59354 472 8 00000] Very strong, QRM 12/03[745 893 6 10298 37465 78329 88154 23091 87925 893 6 00000]0845z S9+10 14/03[516 472 8 43494 37638 16070 48834 53735 61088 02440 59354 472 8 00000]0935z S7 19/03[745 910 6 06123 22536 88280 84116 53718 78927 910 6 00000] Very strong signal, weak noise 28/03[516 927 8 39534 17228 15636 34140 78386 60583 89617 25757 927 8 00000]0935z S9+40	M8, Spectre FR, M8, Spectre M8, Spectre M8, FR, JO FR M8	WED FRI WED FRI WED FRI
12415kHz1200z	27/03[425 907 6 58651 46580 42153 25644 98450 65991 907 6 00000]1205z S9+20	M8	THU
12952kHz 0900z	06/03[167 934 5 88280 84116 53718 78927 34694 934 5 00000(s)] 0905z Strong QRN2 QSB2 13/03[167 934 5 88280 84116 53718 78927 34694 934 5 00000(s)] 0905z Strong QRN2 QSB2 20/03[167 234 5 46062 21767 05899 26635 47665 234 5 00000(s)] 0905z Strong QRN2 QSB2 27/03[167 234 5 46062 21767 05899 16635 47665 234 5 00000]0905z S9+20	Spectre	THU
0900z		Spectre	THU
0900z		Spectre	THU
0900z		M8	THU
13165kHz0910z	03/03[872 901 5 48115 24151 51802 23807 15521 901 5 00000]0915z S5 10/03[872 901 5 48115 24151 51802 23807 15521 901 5 00000]0905z S7 17/03[872 953 6 72635 49382 78304 91726 39912 67845 953 6 00000] Strong, QRM 31/03[872 x 3 00000]0914z S9	M8	MON
0910z		M8, FR, Spectre	MON
0910z		FR, M8	MON
0910z		M8	MON
13365kHz1000z	05/03[729 450 6 49885 44100 43904 10696 89353 85293 450 6 00000(s)] 1005z Fair QRN3 QSB3 12/03[729 450 6 49885 44100 43904 10696 89353 85293 450 6 00000(s)] 1005z Fair QRN3 QSB3 19/03[729 836 5 89482 54322 23114 81768 17923 836 5 00000(s)] 1005z Fair QRN3 QSB3 26/03[729 836 5 89482 54322 23114 81768 17923 836 5 00000(s)] 1005z Weak QRN3 QSB3	Spectre, M8, FR	WED
1000z		Spectre, M8	WED
1000z		Spectre	WED
1000z		Spectre	WED
13515kHz0940z	07/03[516 472 8 43494 37638 16070 48834 53735 61088 02440 59354 472 8 00000] Very strong, QRM 14/03[516 472 8 43494 37638 16070 48834 53735 61088 02440 59354 472 8 00000]0945z S9 28/03[516 927 8 39534 17228 15636 34140 78386 60583 89617 25757 927 8 00000]0945z S9+20	FR, M8, Spectre	FRI
0940z		M8, FR, JO	FRI
0940z		M8	FRI
13565kHz0910z	06/03[167 934 5 88280 84116 53718 78927 34694 934 5 00000(s)] 0915z Strong QRN2 QSB2 13/03[167 934 5 88280 84116 53718 78927 34694 934 5 00000(s)] 0915z Strong QRN2 QSB2 20/03[167 234 5 46062 21767 05899 26635 47665 234 5 00000(s)] 0915z Strong QRN2 QSB2 27/03[167 234 5 46062 21767 05899 26635 47665 234 5 00000(s)] 0915z Strong QRN2 QSB2	Spectre, Kopf	THU
0910z		Spectre	THU
0910z		Spectre	THU
0910z		Spectre, M8	THU
14212kHz1214z	06/03[7 groups and usual ending "00000" at 1215z  After the transmission it was very interesting: A QSO in English began as the S06s carrier was still on. One of "Please go out from this frequency" and repeated it after a short break. As he heard no reaction, he asked the of the other answered: "Well this must be a numbers station." The first one: "Oh, that's the NSA, we are observed the S06s carrier vanished and the hams talked about other things.	ther ham: "What was	
1210z	13/03[425 963 7 36197 83928 98484 34984 87800 33599 46096 963 7 00000]1215z Strong QRM1 QSB1 27/03[425 907 6 58651 46580 42153 25644 98450 65991 907 6 00000]1215z S9+20	JkC	THU
1210z		M8	THU
14505kHz1010z 1010z 1010z 1010z 1010z	05/03[729 450 6 49885 44100 43904 10696 89353 85293 450 6 00000(s)] 1015z Fair QRN3 QSB3 12/03[729 450 6 49885 44100 43904 10696 89353 85293 450 6 00000(s)] 1015z Fair QRN3 QSB3 19/03[729 836 5 89482 54322 23114 81768 17923 836 5 00000(s)] 1015z Fair QRN3 QSB3 26/03[729 836 5 89482 54322 23114 81768 17923 836 5 00000(s)] 1015z Weak QRN3 QSB3	Spectre, M8, FR Spectre, M8 Spectre Spectre	WED WED WED WED

14580kHz0900z	03/03[872 901 5 48115 24151 51802 23807 15521 901 5 00000]0905z S2	M8	MON
0900z	10/03[872 901 5 48115 24151 51802 23807 15521 901 5 00000]0905z S7	M8, FR	MON
0900z	17/03[872 953 6 72635 49382 78304 91726 39912 67845 953 6 00000] Strong signal,tty QRM	FR, M8	MON
0900z	31/03[872 x 3 00000]0904z S4	M8	MON

### April2014:

RNGB's April logs then onto others' [with some duplication]:

S06s April report:
After years of sending the same old message strings this month saw a complete change. None of the message strings appear to be repeats - ALL NEW. So maybe they've changed their code book?

ID 438 Tuesdays 0600 began sending nulls on the 22nd of the month beginning with ??????, then :-  $12170\,/\,13891\,/\,14563\,/\,15945\,/\,16485$  at 10 minute intervals.

S06 April log: Tuesday 1st Saturday 19th Sunday 20th Thurs 24th	18:00 20:00 17:00 17:30 19:00	5890 4534 13457 11118 5784	'286' 00000 '362' 00000 '480' 596 42 49563 01154 35760 43827 70133 4184127269 '480' 596 42 49563 01154 35760 43827 70133 4184127269 '349' 00000
Mondays			
7th/14th	0830/40	9220/8270	0 '371' No reports
21st/28th	0000/10	1.4500/10:	'371' 426 5 48304 33888 23754 97912 10870
7th/14th 21st/28th	0900/10	14580/131	165 '872' No reports '872' 594 6 61028 69130 27970 53514 58906 31477
7th/14th	1200/10	9145/1146	
21st/28th			<sup>6</sup> 831, 547 6 41326 46926 71387 87231 22911 48304
Tuesdays			
1st/8th	0600/10	14080/123	
15th 1st/8th	0700/15	5760/6930	'438' 906 5 20483 47292 38314 73370 76284 0 '374' 962 5 11909 44056 83104 55996 85756
15th/22nd	0700/13	3/00/0930	6 374 962 5 11909 44036 83104 33996 83736 6 374' 901 5 51028 ?9130 ????? 53514 58906 ??????????
1st/8th	0730/40	7425/1156	
15th/22nd			'427' 960 5 38281 10541 58010 29865 72431
1st/8th 15th/22nd	0800/10	11635/104	420
15tt/22ftd 1st/8th	1000/10	6410/7340	
15th/22nd			'893' No reports
1st/8th	1500/10	6464/7242	
15th/22nd			'537' 890 6 19244 10267 97384 18538 98323 47769
Wednesdays			
2nd/9th	0820/30	7605/9255	
16th/23rd 2nd/9th	0830/40	11854/12	'471' 259 6 15657 17985 62210 22309 70518 82140 140 '745' 901 6 99735 50235 01022 21697 24986 64454
16th/23rd	0030/40	11054/12	'745' 891 6 41316 46926 71387 87231 22911 49923
2nd/9th	1000/10	13365/145	
16th/23rd	1220/40	7.620/9104	'729' 431 5 86740 87573 14199 12654 39674
2nd/9th 16th/23rd	1230/40	7620/8105	5 '967' No reports '967' No reports
			707 To Opera
<b>Thursdays</b> 3rd/10th (E17z)	0800/10	14260/129	930 '674' 913 5 81630 73264 37109 29903 89159
17th/24th	0000/10	14200/12	674' 820 5 42465 46683 90715 42738 80515
3rd/10th	0900/10	5744/6524	r
17th/24th	0000/10	12052/126	'624' No reports 565 '167' 940 5 84773 55973 48638 14867 86930
3rd/10th 17th/24th	0900/10	12952/135	167 940 3 847/3 339/3 48038 14807 80930 167' 428 5 48304 33888 23754 97912 10870
3rd/10th	0930/40	8650/7385	
17th/24th			'314' No reports
3rd/10th 17th/24th	1200/10	12415/142	212
1701/2401			425 757 0 50201 10541 50010 27005 77000 45207
Fridays			
4th/11th 18th/25th	0600/10	9078/1014	48
4th/11th	0700/10	7795/8695	
18th/25th			'196' 430 5  71142 47778 57185 94933 27564
4th/11th	0800/10	? / 5805	'278' 945 5 35844 41029 95477 47714 45124
18th/25th 4th/11th	0930/40	12140/135	'278' No reports 515 '516' 902 7 88397 44932 80382 23484 36344 37771 48130
18th/25th	0730/ <del>4</del> 0	121+0/13.	516 902 7 88397 44932 80382 23484 30344 37771 48130 '516' 973 8 27970 53514 58906 31477 91127 49572 96314 52976
Saturday	1200/10	10250/05	20 (254) 202 ( 53242 70745 45212 3745 2042 2054)
5th	1200/10	10350/852	20 '254' 803 6 56342 79745 45310 67453 24316 90741

Sundays 6th/13th 20th/27th 0630/40 ? /20050

'524' No reports '524' 937 6 42465 46683 90715 42738 80515 86208

Onto others'

5760kHz0700z 0700z 0700z	01/04[374 too weak to copy] 15/04[374 901 5 61028 69130 27970 53514 58906 901 5 00000(s)] 0705z Fair QRN3 QSB3 22/04[374 901 5 61028 69130 27970 53514 58906 901 5 00000(s)] 0705z Fair QRN3 QSB3	M8 Spectre Spectre	TUE TUE TUE
6464kHz1500z 1500z 1500z	01/04[537 908 6 46399 33972 30172 94302 50111 39350 908 6 00000]1505z Weak QRM1 QSB2 08/04[537 904 6 46399 33972 30172 94302 50111 39350 904 6 00000(s)] 1505z Fair QRN3 QSB3 15/04[537 890 6 19244 10267 97384 18538 98323 47769 890 6 00000]1595z Weak QRM1 QSB1	JkC, Spectre Spectre JkC, Spectre	TUE TUE TUE
6524kHz0910z	10/04[624 too weak to copy]0915z S1	M8	THU
6930kHz0710z 0715z 0710z 0710z	01/04[374 too weak to copy] 08/04[374 962 5 11909 44056 83104 55996 85756 962 5 00000]0720z Late start S2 15/04[374 901 5 61028 69130 27970 53514 58906 901 5 00000(s)] 0715z Fair QRN3 QSB3 22/04[374 901 5 61028 69130 27970 53514 58906 901 5 00000(s)] 0715z Fair QRN3 QSB3	M8 M8 Spectre Spectre	TUE TUE TUE TUE
7242kHz1510z 1510z	01/04[537 908 6 46399 33972 30172 94302 50111 39350 908 6 00000]1515z Fair QRM2 QSB1 15/04[537 890 6 19244 10267 97384 18538 98323 47769 890 6 00000]1515z Fair QRM1 QSB1	JkC JkC	TUE TUE
7340kHz1010z	08/04[893 too weak to copy]	M8	TUE
7425kHz0730z 0730z 0730z 0730z	01/04[427 903 5 47038 21484 10618 85692 32018 903 5 00000]0735z S6 08/04[427 903 5 47038 21484 10618 85692 32018 903 5 00000]0735z S5 15/04[427 960 5 38281 10541 58010 29865 72431 960 5 00000(s)] 0735z Strong QRN2 QSB2 22/04[427 960 5 38281 10541 58010 29865 72431 960 5 00000(s)] 0735z Strong QRN2 QSB2	M8 M8 Spectre Spectre	TUE TUE TUE TUE
7605kHz0820z 0820z	02/04[471 259 6 15657 17985 62210 22309 70518 82140 259 6 00000]0825z S3 23/04[471 259 6 15657 17985 62210 22309 70518 82140 259 6 00000]0825z S1	M8 M8	WED WED
7795kHz0600z	$18/04[196\ 430\ 5\ 71142\ 47778\ 57185\ 94933\ 27564\ 430\ 5\ 00000]$ Very strong , QRM	FR	FRI
8270kHz0840z	21/04[371 too weak to copy]	M8	MON
8520kHz1210z	$05/04[254\ 803\ 6\ 56342\ 79745\ 45310\ 67453\ 24316\ 90741\ 803\ 6\ 00000]\ Medium\ signal\ QRM$	FR, Spectre	SAT
8695kHz0610z	$18/04[196\ 430\ 5\ 71142\ 47778\ 57185\ 94933\ 27564\ 430\ 5\ 00000]$ Very strong , QRM	FR	FRI
9078kHz 0600z	11/04[934] 00000 0605z QSA1 QRM4 USB	ES	FRI
9220kHz0830z	21/04[371 too weak to copy]	M8	MON
9255kHz0830z 0830z	02/04[Too weak to copy] 23/04[471 259 6 15657 17985 62210 22309 70518 82140 259 6 00000]0835z S4	M8 M8	WED WED
10350kHz1200z	$05/04[254\ 803\ 6\ 56342\ 79745\ 45310\ 67453\ 24316\ 90741\ 803\ 6\ 00000]\ Very\ strong\ signal\ QRM$	FR, Spectre	SAT
10420kHz0810z	01/04[too weak to copy]	M8	TUE
11460kHz1210z	21/04[831 547 6 41326 46926 71387 87231 22911 48304 547 6 00000]1215z S5	M8	MON
11560kHz0740z 0740z 0740z 0740z	01/04[427 903 5 47038 21484 10618 85692 32018 903 5 00000]0745z S9+10 08/04[427 903 5 47038 21484 10618 85692 32018 903 5 00000]0735z S5 15/04[427 960 5 38281 10541 58010 29865 72431 960 5 00000(s)] 0745z Strong QRN2 QSB2 22/04[427 960 5 38281 10541 58010 29865 72431 960 5 00000(s)] 0745z Strong QRN2 QSB2	M8 M8 Spectre Spectre	TUE TUE TUE TUE
11635kHz0800z	01/04[352 801 6 faded too weak to copy]	M8	TUE
11854kHz0830z 0830z 0830z	02/04[745 901 6 99735 50235 01022 21697 24986 64454 901 6 00000]0835z S6 09/04[745 901 6 99705 50236 01022 21697 24986 64454 901 6 00000 0835z USB 23/04[745 891 6 41316 46926 71387 87231 22911 49923 891 6 00000]0835z S6	M8 ES M8, JkC, ES	WED WED WED
12140kHz0840z 0930z 0840z 0930z 0930z 0930z 0840z 12355kHz0610z	02/04[745 901 6 99735 50235 01022 21697 24986 64454 901 6 00000]0845z S5 04/04[516 902 7 88397 44932 80382 23484 36344 37771 48130 902 7 00000]0935z S9+15 09/04[745 901 6 00000 0845z USB 11/04[516 902 7 88397 44932 80382 23484 36344 37771 48130 00000 0935z 18/04[516 973 8 27970 53514 58906 31477 91127 49572 96314 52976 973 8 00000] Very strong, QRM 23/04[745 891 6 41316 46926 71387 87231 22911 49923 891 6 00000]0835z S6 08/04[438 965 7 47038 21484 10613 85692 32018 12866 48638 965 7 00000] 0615z QSB3	M8 M8 ES ES FR,M8 M8, JkC, ES	WED FRI WED FRI FRI WED
0610z 0610z	15/04[438 906 5 20483 47292 38314 63370 76184 906 5 00000(s)] 0615z QSB2 22/04[438 906 5 20483 47292 38314 63370 76184 906 5 00000(s)] 0615z Fair QRN2 QSB2	ES Spectre	TUE TUE

12415kHz1200z	03/04[425 869 7 51972 38664 48339 91339 44254 48857 18958 869 7 00000]1205z S9	M8	THU
1200z	10/04[425 869 7 51972 38664 48339 91339 44254 48857 18958 869 7 00000] 1205z QRM3 [HAM] USB	ES	THU
1200z	24/04[425 937 6 38281 10541 58010 29865 99888 43289 937 6 00000]1205z S9+10	M8	THU
12002	2 % % (125 %)	1110	1110
12930kHz0900z	24/04[167 428 5 48304 33888 23754 97912 10870 428 5 00000]0905z S7	M8	THU
12/30K1120/002	24/04[107] 420 3 40304 33000 23734 777712 10070 420 3 00000[07032] 57	1410	1110
12952kHz0900z	03/04[167 940 5 84773 55973 48638 14867 86930 940 5 0000010905z S9+20	M8	THU
0900z	10/04[167 940 5 84773 55973 48638 14867 65930 040 5 00000]0905z S9+20	M8	THU
0900z	17/04[167 428 5 48304 33888 23754 97912 10870 00000] 0905z	ES	THU
0700E	17/04[107] 420.3 40304 33000 23734 777712 10070 00000] 07032	Lb	1110
13165kHz0910z	21/04[872 594 6 61028 69130 27970 53514 58906 31477 594 6 00000]0915z S9	M8	MON
13103K11207102	21/04[0/2/37+0/01020/07130/217/0/33314/30700/3147//37+0/00000]07132/37	1410	WOI
13365kHz 1000z	02/04[729 451 6 14111 29214 15289 01428 38011 27707 451 6 00000(s)] 1005z Fair ORN3 OSB3	Spectre	WED
1000z	09/04[972 451 6 14111 29214 15289 01498 38011 27707 451 6 00000 1005z USB	ES	WED
1000z 1000z	16/04[438 906 5 20483 46292 38314 63370 76184 00000] 1005z	ES. PLdn	WED
		,	
1000z	23/04[729 431 5 86740 87573 14199 12654 39674 431 5 00000]1005z S9+10	M8, ES	WED
1000z	30/04[729 00000] Strong (4m00s)	) PLdn	WED
10515177 0010		3.50	
13515kHz0940z	04/04[516 902 7 88397 44932 80382 23484 36344 37771 48130 902 7 00000]0945z S9+20	M8	FRI
0940z	11/04[516 902 7 00000] 0945z USB	ES	FRI
0940z	18/04[516 973 8 27970 53514 58906 31477 91127 49572 96314 52976 973 8 00000] Very strong, QRM	FR, M8	FRI
13565kHz1000z	02/04[729 451 6 14111 29214 15289 01428 38011 27707 451 6 00000]1005z S6	M8	WED
0910z	03/04[167 940 5 84773 55973 48638 14867 86930 940 5 00000]0915z S9+10	M8	THU
0910z	10/04[167 940 5 84773 55973 48638 14867 65930 040 5 00000]0915z S9+10	M8	THU
0910z	10/04[167 940 5 00000] 0915z USB	ES	THU
0910z	24/04[167 428 5 48304 33888 23754 97912 10870 428 5 00000]0915z S7	M8	THU
*****			
14080kHz0600z	08/04[438 965 7 47038 21484 10613 85692 32018 12866 48638 965 7 00000] 0605z	ES	TUE
0600z	15/04[438 906 5 20483 47292 38314 73370 76284 00000] 0605z USB	ES	TUE
0600z	22/04[438 906 5 20483 47292 38314 63370 76184 906 5 00000(s)] 0605z Fair QRN2 QSB2	Spectre	TUE
00002	2201[150700520105172555170557701017005500000[5]] 0005211111 Q1112 Q522	Бресис	TCL
14212kHz1210z	03/04[425 869 7 51972 38664 48339 91339 44254 48857 18958 869 7 00000]1215z S9	M8	THU
1210z	10/04[425] 869 6 00000 1215z QSA1 USB	ES	THU
1210z	24/04[425 937 6 38281 10541 58010 29865 99888 43289 937 6 00000]1205z S9+10	M8	THU
12102	24/04[423 737 0 30201 10341 30010 27003 77000 43207 737 0 00000]12032 37+10	IVIO	1110
14505kHz1010z	02/04[729 451 6 14111 29214 15289 01428 38011 27707 451 6 00000]1015z S5	M8	WED
1010z	09/04[972 451 6 00000 1015z USB	ES	WED
1010z	16/04[438 906 5 20483 46292 38314 63370 76184 00000] 1015z	ES, PLdn	WED
1010z	30/04[729 00000] Strong (4m00s	) PLdn	WED
1.45001-11.0000	21/04/072 504 6 61020 60120 27070 52514 50006 21477 504 6 0000030005 - 00	MO	MON
14580kHz0900z	21/04[872 594 6 61028 69130 27970 53514 58906 31477 594 6 00000]0905z S8	M8	MON
1010z	23/04[729 431 5 86740 87573 14199 12654 39674 431 5 00000]1015z S9+20	M8	WED
G004 ** *	11		

### S906g Variant, see ident 5fgrp

02/03[352 **63524** 719 40 46569 ... 42342 719 40 00000(f)] 2138z Fair QRN3 QSB3 11073 kHz 2130z

352 **63524** 719 40 46569 05367 59219 95979 83214 91269 89517 88400 35033 24222 50029 02034 20189 43061 50052 33925 51721 27021 30950 91852 48281 43166 72060 67586 19185 65400 54499 99701 97223 32251 18830 05626 17653 35607 77497 87614 66826 57602 68008 42342 719 40 00000 *Courtesy Spectre* 

### S11a[III]

### S11a March/April log:

4016kHz	1955z	07/03 [370/00] Also transmitted on 7377kHz (mistake?)	JkC	FRI
	1955z	12/03 [371/32 93695 91511 00552 05591 0224489120] Strong	RNGB	WED
	1955z	14/03 [371/32 93695etc] Repeat of Wednesday	RNGB	FRI
	1955z	19/03 [370/00] Strong	RNGB	WED
	1955z	21/03 [370/00] Strong	RNGB	FRI
	1955z	26/03 [370/00]	Kopf	WED
	1955z	28/03 [370/00] Konetz 1958z S9+20	Malc	FRI
	1955z	02/04 [370/00] Konetz 1958z	Malc, JkC	WED
	1955z	04/04 [370/00] Konetz 1958z S8	Malc	FRI
	1955z	18/04 [370/00]	RNGB	FRI
	1955z	23/04 [370/00]	RNGB	WED
	1955z	25/04 [370/00] Good	RNGB	FRI
5815kHz	1020z	01/03 [221/00] Very weak	RNGB, Fox	SAT
	1020z	05/03 [221/00] Weak signal, moderate/strong noise	Fox	WED
	1020z	08/03 [221/00] Konetz 1023z S1	Malc	SAT
	1020z	29/03 [221/00] Konetz 1023z S1	Malc	SAT
	1020z	23/04 [221/00] Konetz 1023z S1	Malc	WED

SUN

Spectre

Malc   FRI   O915z   11/03 [484/00]   Konetz 0918z S2   RNGB, Malc   TUE   RNGB   FRI   RNGB   FRI   RNGB   FRI   RNGB   TUE   RNGB   RNGB	7317kHz	0915z	04/03 [484/00]	RNGB	TUE
0915z   18/03 [486/34 10567 75370 48380 35220 2457642492] Fair   RNGB   TUE   0915z   25/03 [484/00]   RNGB   TUE   0915z   08/04 [484/00]   Konetz 0918z S1   RNGB   TUE   0915z   22/04 [484/00]   RNGB   TUE   0915z   25/04 [484/00]   RNGB   TUE   0915z   25/04 [484/00]   Fair   RNGB   TUE   RNGB   RNGB   TUE   RNGB   RNGB   TUE   RNGB		0915z	07/03 [484/00] Konetz 0918z S2	Malc	FRI
0915z   25/03 [484/00]   RNGB   TUE		0915z	11/03 [484/00]	RNGB, Malc	TUE
0915z   08/04   484/00   Konetz 0918z S1   Malc TUE   0915z   22/04   484/00   Fair   RNGB TUE   RNGB TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   TUE   RNGB   RNGB   TUE   RNGB   TUE   RNGB		0915z	18/03 [486/34 10567 75370 48380 35220 2457642492] Fair	RNGB	TUE
0915z   22/04 [484/00]   RNGB   FRI		0915z	25/03 [484/00]	RNGB	TUE
P960kHz   1020z   04/03 [426/00]   RNGB   TUE		0915z	08/04 [484/00] Konetz 0918z S1	Malc	TUE
9960kHz 1020z 04/03 [426/00] RNGB TUE 1020z 07/03 [426/00] Konetz 1018z S1 Malc FRI 1020z 11/03 [427/31 18890 13740 99868 43253 4643512810] RNGB TUE 1020z 14/03 [427/31 18890 etc] Repeat of Tuesday Fox FRI 1020z 18/03 [426/00] RNGB TUE 1020z 25/03 [426/00] RNGB TUE 1020z 08/04 [426/00] RNGB TUE 1020z 08/04 [426/00] Malc TUE 1020z 18/04 [426/00] Konetz 1023z S2 Malc FRI 1020z 22/04 [421/32 49479 68226 38039 82127 1370457335] RNGB TUE 1020z 25/04 [421/32 49479 etc] Repeat of Tuesday Karsten FRI 14940kHz 0715z 23/04 [382/00] Konetz 0719z Weak QRM1 QSB1 JkC WED 0715z 28/04 [387/35 11541 32910 77242 05526 9932471624] QSB RNGB WED 16112kHz 1015z 03/03 [475/00] Konetz 1018z S2 Malc MON 1015z 10/03 [475/00] RNGB MON 1015z 13/03 [475/00] RNGB MON 1015z 13/03 [475/00] RNGB MON 1015z 13/03 [475/00] RNGB MON 1015z 24/03 [477/38 18938 83885 98722 23567 2375876698] Good RNGB MON		0915z	22/04 [484/00]	RNGB	TUE
1020z		0915z	25/04 [484/00] Fair	RNGB	FRI
1020z   11/03 [427/31 18890 13740 99868 43253 4643512810]   RNGB   TUE     1020z   14/03 [427/31 18890 etc] Repeat of Tuesday   Fox   FRI     1020z   18/03 [426/00]   RNGB, Malc   TUE     1020z   25/03 [426/00]   RNGB   TUE     1020z   08/04 [426/00]   Malc   TUE     1020z   18/04 [426/00]   Malc   FRI     1020z   22/04 [421/32 49479 68226 38039 82127 1370457335]   RNGB   TUE     1020z   25/04 [421/32 49479 68226 38039 82127 1370457335]   RNGB   TUE     1020z   25/04 [421/32 49479 etc] Repeat of Tuesday   Karsten   FRI     14940kHz   0715z   23/04 [382/00] Konetz   0719z   Weak   QRM1   QSB1   QSB   RNGB   MON     0715z   28/04 [382/03] Good   RNGB   WED     16112kHz   1015z   03/03 [475/00]   Konetz   1018z   S2   Malc   MON     1015z   10/03 [475/00]   RNGB   MON     1015z   13/03 [475/00]   RNGB   THU     1015z   24/03 [477/38 18938 83885 98722 23567 2375876698] Good   RNGB   MON     RNGB   RNGB   MON     RNGB   RNGB   MON     RNGB   RNGB   MON     RNGB   THU     RNGB   MON     RNGB   RNGB   M	9960kHz	1020z	04/03 [426/00]	RNGB	TUE
1020z		1020z	07/03 [426/00] Konetz 1018z S1	Malc	FRI
1020z       18/03 [426/00]       RNGB, Malc       TUE         1020z       25/03 [426/00]       RNGB       TUE         1020z       08/04 [426/00]       Malc       TUE         1020z       18/04 [426/00] Konetz 1023z S2       Malc       FRI         1020z       22/04 [421/32 49479 68226 38039 82127 1370457335]       RNGB       TUE         1020z       25/04 [421/32 49479 etc] Repeat of Tuesday       Karsten       FRI         14940kHz 0715z       23/04 [382/00] Konetz 0719z Weak QRM1 QSB1       JkC       WED         0715z       28/04 [38?/35 11541 32910 77242 05526 9932471624] QSB       RNGB       MON         0715z       30/04 [382/00] Good       RNGB       WED         16112kHz 1015z       03/03 [475/00] Konetz 1018z S2       Malc       MON         1015z       10/03 [475/00]       RNGB       MON         1015z       13/03 [475/00]       RNGB       MON         1015z       13/03 [475/00]       RNGB       THU         1015z       24/03 [477/38 18938 83885 98722 23567 2375876698] Good       RNGB       MON		1020z	11/03 [427/31 18890 13740 99868 43253 4643512810]	RNGB	TUE
1020z       25/03 [426/00]       RNGB       TUE         1020z       08/04 [426/00]       Malc       TUE         1020z       18/04 [426/00] Konetz 1023z S2       Malc       FRI         1020z       22/04 [421/32 49479 68226 38039 82127 1370457335]       RNGB       TUE         1020z       25/04 [421/32 49479 etc] Repeat of Tuesday       Karsten       FRI         14940kHz 0715z       23/04 [382/00] Konetz 0719z Weak QRM1 QSB1       JkC       WED         0715z       28/04 [387/35 11541 32910 77242 05526 9932471624] QSB       RNGB       MON         0715z       30/04 [382/00] Good       RNGB       WED         16112kHz 1015z       03/03 [475/00] Konetz 1018z S2       Malc       MON         1015z       10/03 [475/00]       RNGB       MON         1015z       13/03 [475/00]       RNGB       MON         1015z       13/03 [475/00]       RNGB       THU         1015z       24/03 [477/38 18938 83885 98722 23567 2375876698] Good       RNGB       MON		1020z	14/03 [427/31 18890 etc] Repeat of Tuesday	Fox	FRI
1020z       08/04 [426/00]       Malc       TUE         1020z       18/04 [426/00] Konetz 1023z S2       Malc       FRI         1020z       22/04 [421/32 49479 68226 38039 82127 1370457335]       RNGB       TUE         1020z       25/04 [421/32 49479 etc] Repeat of Tuesday       Karsten       FRI         14940kHz 0715z       23/04 [382/00] Konetz 0719z Weak QRM1 QSB1       JkC       WED         0715z       28/04 [387/35 11541 32910 77242 05526 9932471624] QSB       RNGB       MON         0715z       30/04 [382/00] Good       RNGB       WED         16112kHz 1015z       03/03 [475/00] Konetz 1018z S2       Malc       MON         1015z       10/03 [475/00]       RNGB       MON         1015z       13/03 [475/00]       RNGB       MON         1015z       13/03 [475/00]       RNGB       THU         1015z       24/03 [477/38 18938 83885 98722 23567 2375876698] Good       RNGB       MON		1020z	18/03 [426/00]	RNGB, Malc	TUE
1020z       18/04 [426/00] Konetz 1023z S2       Malc       FRI         1020z       22/04 [421/32 49479 68226 38039 82127 1370457335]       RNGB       TUE         1020z       25/04 [421/32 49479 etc] Repeat of Tuesday       Karsten       FRI         14940kHz 0715z       23/04 [382/00] Konetz 0719z Weak QRM1 QSB1       JkC       WED         0715z       28/04 [387/35 11541 32910 77242 05526 9932471624] QSB       RNGB       MON         0715z       30/04 [382/00] Good       RNGB       WED         16112kHz 1015z       03/03 [475/00] Konetz 1018z S2       Malc       MON         1015z       10/03 [475/00]       RNGB       MON         1015z       13/03 [475/00]       RNGB       MON         1015z       24/03 [477/38 18938 83885 98722 23567 2375876698] Good       RNGB       MON		1020z	25/03 [426/00]	RNGB	TUE
1020z       22/04 [421/32 49479 68226 38039 82127 1370457335]       RNGB       TUE         1020z       25/04 [421/32 49479 etc] Repeat of Tuesday       Karsten       FRI         14940kHz 0715z       23/04 [382/00] Konetz 0719z Weak QRM1 QSB1       JkC       WED         0715z       28/04 [387/35 11541 32910 77242 05526 9932471624] QSB       RNGB       MON         0715z       30/04 [382/00] Good       RNGB       WED         16112kHz 1015z       03/03 [475/00] Konetz 1018z S2       Malc       MON         1015z       10/03 [475/00]       RNGB       MON         1015z       13/03 [475/00]       RNGB       THU         1015z       24/03 [477/38 18938 83885 98722 23567 2375876698] Good       RNGB       MON		1020z	08/04 [426/00]	Malc	TUE
1020z       25/04 [421/32 49479 etc] Repeat of Tuesday       Karsten       FRI         14940kHz 0715z       23/04 [382/00] Konetz 0719z Weak QRM1 QSB1       JkC       WED         0715z       28/04 [38?/35 11541 32910 77242 05526 9932471624] QSB       RNGB       MON         0715z       30/04 [382/00] Good       RNGB       WED         16112kHz 1015z       03/03 [475/00] Konetz 1018z S2       Malc       MON         1015z       10/03 [475/00]       RNGB       MON         1015z       13/03 [475/00]       RNGB       THU         1015z       24/03 [477/38 18938 83885 98722 23567 2375876698] Good       RNGB       MON		1020z	18/04 [426/00] Konetz 1023z S2	Malc	FRI
14940kHz 0715z       23/04 [382/00] Konetz 0719z Weak QRM1 QSB1       JkC       WED         0715z       28/04 [38?/35 11541 32910 77242 05526 9932471624] QSB       RNGB       MON         0715z       30/04 [382/00] Good       RNGB       WED         16112kHz 1015z       03/03 [475/00] Konetz 1018z S2       Malc       MON         1015z       10/03 [475/00]       RNGB       MON         1015z       13/03 [475/00]       RNGB       THU         1015z       24/03 [477/38 18938 83885 98722 23567 2375876698] Good       RNGB       MON		1020z	· ·	RNGB	TUE
0715z       28/04 [38?/35 11541 32910 77242 05526 9932471624] QSB       RNGB       MON         0715z       30/04 [382/00] Good       RNGB       WED         16112kHz 1015z       03/03 [475/00] Konetz 1018z S2       Malc       MON         1015z       10/03 [475/00]       RNGB       MON         1015z       13/03 [475/00]       RNGB       THU         1015z       24/03 [477/38 18938 83885 98722 23567 2375876698] Good       RNGB       MON		1020z	25/04 [421/32 49479 etc] Repeat of Tuesday	Karsten	FRI
0715z       30/04 [382/00] Good       RNGB       WED         16112kHz 1015z       03/03 [475/00] Konetz 1018z S2       Malc       MON         1015z       10/03 [475/00]       RNGB       MON         1015z       13/03 [475/00]       RNGB       THU         1015z       24/03 [477/38 18938 83885 98722 23567 2375876698] Good       RNGB       MON	14940kHz	z 0715z	23/04 [382/00] Konetz 0719z Weak QRM1 QSB1	JkC	WED
16112kHz 1015z       03/03 [475/00] Konetz 1018z S2       Malc       MON         1015z       10/03 [475/00]       RNGB       MON         1015z       13/03 [475/00]       RNGB       THU         1015z       24/03 [477/38 18938 83885 98722 23567 2375876698] Good       RNGB       MON		0715z	28/04 [38?/35 11541 32910 77242 05526 9932471624] QSB	RNGB	MON
1015z       10/03 [475/00]       RNGB       MON         1015z       13/03 [475/00]       RNGB       THU         1015z       24/03 [477/38 18938 83885 98722 23567 2375876698] Good       RNGB       MON		0715z	30/04 [382/00] Good	RNGB	WED
1015z 13/03 [475/00] RNGB THU 1015z 24/03 [477/38 18938 83885 98722 23567 2375876698] Good RNGB MON	16112kHz	z 1015z	03/03 [475/00] Konetz 1018z S2	Malc	MON
1015z 24/03 [477/38 18938 83885 98722 23567 2375876698] Good RNGB MON		1015z	10/03 [475/00]	RNGB	MON
t ,		1015z	13/03 [475/00]	RNGB	THU
1015z 31/03 [475/00] Malc MON		1015z	24/03 [477/38 18938 83885 98722 23567 2375876698] Good	RNGB	MON
		1015z	31/03 [475/00]	Malc	MON

### S21

Nil reports to date [includes M45 too].

### <u>V02a</u>

V02a continues to put in occasional appearances either in the Tuesday or Thursday slot at 2000z. These appearences seem to be generally the first or last week of the month although in April it appeared during the second week.

7554kHz 2000z0 6/0	03 [A80362 01002 16122]	MaleAnon	THU
7554kHz 2000z 10/0	Harch 2014:  4374kHz0140z 0140z 0140z 0140z 0140z 0140z 0140z 015874kHz0120z 0120z	MaleAnon	THU
<u>V07</u> <u>March 2014:</u>			
14374kHz0140z 0140z		DanAR DanAR	SUN SUN
0120z 0120z	09/03[883 883 883 1 (x5) 373 51 (x2) 45293 48392 30414 000 000]QSA 2 QRM 4 from BC 16/03[883 883 883 000 (x5)]QSA 2 23/03[883 883 883 000 (x5)]QSA 2	DanAR DanAR DanAR DanAR DanAR	SUN SUN SUN SUN SUN
18074kHz0100z 0100z	09/03[883 883 883 1 (x5) 373 51 (x2) 45293 48392 30414 000 000] QSA 3  45293 48392 99394 55430 34334 08849 35455 42043 38815 18882 98593 77375 14419 27439 43877 39328 11233 23349 35517 11175 14575 73903 33042 97084 35578 20224 59358 28081 394351 7540 87719 73558 37501 02045 57793 30723 31001 15411 90781 73372 30473 02970 72931 45212 02192 24488 13315 49221 43251 48185	DanAR DanAR	SUN SUN
0100z 0100z 0100z	16/03[883 883 883 000 (x5)] QSA 3 23/03[883 883 883 000 (x5)] QSA 3 30/03[883 883 883 1 (x5) 375 119 (x2) 70318 35415 34038 000 000] QSA 3	DanAR DanAR DanAR	SUN SUN SUN

70318 35415 18320 04882 10884 83599 81321 34233 35229 34551 22373 20831 91784 18471 74744 18378 44033 89328 82520 40359 83802 02518 35917 97393 94259 15220 77047 47298 92222 50875 56952 01747 20193 83240 31942 50508 34720 45935 45410 54131 93219 87007 13713 22045 92979 27982 87771 75989 41238 82589 59283 42332 25485 39783 99540 01798 19544 43523 32373 31195 15352 54973 55012 32351 57329 28238 22804 33059 70537 71124 09879 31702 37780 74807 31003 78200 57934 53957 59793 4521 82340 549323 47301 83044 32137 937881 29223 54589 48502 91301 82340 54923 47301 83044 32137 93881 29223 54589 48502 91301 82340 54923 47301 83044 32137 93881 29223 54589 48502 91301 52317 43519 55830 11881 28075 10147 39331 31514 35300 27093 74085 31385 45329 30880 29433 57103 87321 47042 95014 39338 99093 30225 48285 37834 50232 49948 47221 34289 34038 000 000 Courtesy DanAr

#### **April2014:**

13423kHz0320z	20/04[845 845 845 000 (x5)] QSA2	DanAR	SUN
14823kHz0300z	13/04 -very weak signal-	DanAR	SUN
0300z	20/04[845 845 845 000 (x5)] QSA1	DanAR	SUN

#### <u>V13</u>

```
8300 kHz V13 New Star #4. Tune and coded messages in Chinese 1300 3March2014 8300 kHz V13 New Star #4. Tune and coded messages in Chinese 1200 3March2014 8300 kHz V13 New Star #4. Tune and coded messages in Chinese 1300 2March2014 8300 kHz V13 New Star #4. Tune and coded messages in Chinese 1200 2March2014 8300 kHz V13 New Star #4. Tune and coded messages in Chinese 1300 28Feb2014 9522 kHz V13 New Star #4. Tune and coded messages in Chinese 0700 28Feb2014 9522 kHz V13 New Star #4. Tune and coded messages in Chinese 0800 28Feb2014 9522 kHz V13 New Star #4. Tune and coded messages in Chinese 0700 1March2014 9522 kHz V13 New Star #4. Tune and coded messages in Chinese 0800 2March2014 9522 kHz V13 New Star #4. Tune and coded messages in Chinese 0800 2March2014 9522 kHz V13 New Star #4. Tune and coded messages in Chinese 0700 7March2014 Thanks Ary
```

8300kHz1200z 11/03[Flute Intro with 4 fig groups.] 1220z Fair QRN2 QSB2 (Hong Kong DX Global Tuners) Spectre TUE

#### V21 Babbler

The Babbler continues to be heard most days at 1300z after switching to this time slot as predicted on 9/3. Along with the 6529kHz transmissions we have now added 5637kHz to our regular monitoring. The styles of these two transmissions are slightly different with the counting on 6529kHz almost always pausing on multiples of 10 and the 5637kHz transmissions are generally faster and tend to pause on other numbers.

To reiterate the logging process, the formats are as follows:

6529kHz each number shown is the highest number reached on a particular count with the implication that the counter paused every 10. If the counter paused on a different number this is noted in the text.

5637kHz the number shown is the highest number reached on a particular count. The numbers in brackets afterwards are the numbers where the pause(s) occurred. Example 32 (16 22). The counter reached 32 and paused on 16 and 22 before returning to 1. Deviations from this pattern are noted in the text.

There is another Babbler format which is heard occasionally on 5688kHz or 6625kHz. This consists of either number counts or strings of numbers read out. There is also a characteristic hum associated with the transmissions on these frequencies.

On April 9th an unusual transmission was heard on 5637kHz which seems to show that there is a link between the two formats. The transmission started as normal with the SS/OM counting but then he began to read strings of apparently random numbers. However a closer look at some of his number strings revealed something interesting. Below is a sample alongside samples of the format as heard on 5688 and 6625kHz.

As can be seen in comparison the starting string 00 is seen in two of the transmissions. All of the transmissions contain a 4 digit number. The 5688kHz and 5637kHz transmissions contain the "27" and all three of the transmission contain the 11 00 (pronounced "Onze Zero Zero") which is the part that most catches the ear along with the word "cientos" which is part of the 4 digit number.

5688kHz 14/11/2012 00 0268 964 364 11 00 27 59 00 0268 964 364 11 00 27 52

6625kHz 24/1/2013 0433 493 11 00 0 0. 0444 433 432 11 00 9 0. 0431 495 1331 11 00

5637kHz 9/4/2014 00 27 1300 51 40 49 11 00 93 00 27 1300 51 41 47 11 00 903

On to the logs. Highlights include

4/3, a transmission that lasted 50 minutes.

18/3 A child or YL's voice heard briefly in the background. The SS/OM counter kept missing numbers during his counts.

11/4 Skip counting 2s 2, 4, 6 etc on 5637kHz

19/4 Continuously counting to 20 without pause.

V21 6529kHz 1400z 1/3 [50, 30, start at 20 counting to 50, 30, start at 10 counting to 30, 70, 30, 20, 40, 50, 20, start at 10 counting to 40, 30, 50, 40 END] TX lasted 15 minutes. SAT

 $V21\ 6529 kHz\ 1400 z\ 2/3\ [50,50,30,30,40,30,30,30,30,21]\ Counting\ got\ progressively\ faster.\ Abrupt\ ending\ on\ 21.\ SUN\ Progressively\ faster.$ 

V21 6529kHz 1400z 3/3 [50, 50, 50, 40, 50, 50, 50, 20 END] TX lasted 8:30 MON

V21 5637kHz 1400z 3/3 Too weak to copy. MON

copy for 4 minutes), 30, 50, 40, 50, 40, 50, 40, 30, 50, 40, 20, 50, 40 END] TX lasted 50 minutes! TUE

V21 6529kHz 1400z 5/3 [90, 100, 80 END] TX lasted 6 minutes WED

```
V21 6529kHz 1400z 7/3 [In progress (endo on 40, 20, 20, 50, 50, 30, 40, 10, 30, 40, becomes too weak to copy] FRI
30 to 40), 29 (16 22 missing 23), Restart at 15 (26 32), start at 20 count to 30 END. Slow delivery. Numbers in ( ) are the numbers
paused on during the count. MON
V21 6529kHz 1300z 11/3 [50, 40, 50, 50, 50, 50, 50, 50, 50, 60, 50, 30, 50, 50, 40, 20, Different voice - 10, 50, 40, 50, 50, 30, 50, 50,
40, 40, 30 END] TX lasted 18 minutes.
V21 6529kHz 1300z 13/3 [40, 30, 40, 40, 30, 40, 30, 50, 60, 20, 20, 50, 10, 20 END] TX lasted 10 minutes. THU
V21 5637kHz 1300z 13/3 [42 (16, 22, 32, 42) Count to 16 resume on 30 counting to 36] Otherwise too weak to copy THU
V21 6529kHz 1300z 14/3 [50, 40 (skipping 11 to 20), 40, 10, 20, 50, 40, 40, 30, 60, 50, 20 END] TX lasted 11 minutes FRI
V21 5637kHz 1300z 14/3 [Found in progress at 1257 at 48. Counts to 99 pausing on 62, 72, 81 (repeats 81), 88, Unintelligible for 20
minutes then 17, 27 (pause on 12), 8 (pause on 2, 5), 23 (pause on 6, 14)
V21 6529kHz 1300z 15/3 [40 (says 1 twice), 30, 40, 50, 40, 40, 30, 30, 40, 40, 50, 60, 50, 30, 50, 40, 20, 20, 50, 30, 10, 40, 10 END] TX
lasted 18 minutes. SAT
V21 5637kHz 1315z 15/3 In progress but too weak to copy. SAT
V21 6529kHz 1300z 16/3 [50, 40, 60, 50, 30, 50, 50, 30. TX lasted 7 minutes. SUN V21 6529kHz 1300z 17/3 [50, 50, 50, 40, 50, 50 END] Very weak MON
V21 5637kHz 1300z 17/3 [One count pausing on 26, 39, 47, 52, 62, 66 heard too much noise from lightning for further copy] MON
V21 6529kHz 1300z 18/3 [Missed start of TX due to local interference, 30, 30, 20, 30, 24 END
V21 5637kHz 1300z 18/3 [Count to 39 (18), 42 (26), 52 (22 36), 56 (22 32 miss 31 miss 40 to 50),58 (16 22 32 skip 39-50 miss 53, 18, 52 (16
26) continues with count to 10 without stopping, 52 (26 32 42 repeats 41 and 42), 37 (22), 36 (22 26), 39 (16 36), continues back to 1
without pause 18, 26 (16), 3 minute gap, 59 (16 child or YL voice heard briefly 26 skips 39 to 49 56) continues back to 1 without pause 56
(10 13 miss 14 and 15 26 miss 39 to 50), 7, 33 (8), 32 (16 back to 1 without pause), 32 (26) 3, becomes mostly unintelligible but
continues with continuous counting to around 31 always pausing on 26] TX lasted at least 24 minutes. TUE
V21 6529kHz 1300z 20/3 [70, 50, 60, 10, 50, 30, 50, 40, 50, 50, 30, 40, 40, 40, 20, 50, 20, 30 (counts 11-20 twice), 40, 20 END] THU
V21 5637kHz 1300z 20/3 [Blowing into microphone, 5, 32 (16), 26 (16), 12, 30, 18, 2, 20 (16), 4, 26 (16), 30 (16), 30 (26), 29, 26, 32, 29,
42 (26), 30, 32, 29 (16 20 26), 32 (16 26 29), 32 (22), 32, 28 (26), Voices heard in background, 29 (16), 29 (26), 32 (26 29), 19, 20
(Different voice), 16, 20, 20, 20, 20, 20, 20, 20, 23, 23, 23, 20, 20, 18, 20, 20, 20, 20, 5 END] TX lasted 11 minutes. THU
V21 6529kHz 1350z 21/3 [40, 40. 30, 40, 40, 50, 10, 50, 30, 40 END] FRI
V21 6529kHz 1300z 24/3 [50, 50, 50, 40, 30, 30 (repeat 21-30), 50, becomes too weak to copy. Continues for at least 5 more minutes] MON
V21 5637kHz 1300z 24/3 [39 (16 22 32), 37 (16 26), 56 (16 26 43 48), 53 (16 32 45 53), becomes too weak to copy] MON
V21 6529kHz 1300z 25/3 [40, 20, 30, 10, 30, 10, 60, 50, 10, 50, 40, 40, 30, 30, 40, 50, 10 END] TX lasted 11 minutes. TUE
V21 5637kHz 1300z 25/3 Present for at least 20 minutes but too weak to copy.
V21 6529kHz 1300z 27/3 [30, 30, 30, 30, 30, 30, 10 END] TX lasted 3 minutes.
V21 5637kHz 1300z 31/3 Numerous counts in the range 29 to 33 pausing on 5 and 12 every time. Too weak for good copy. MON
V21 5637kHz 1300z 1/4 One count to 46 pausing on 16 and 26 heard followed by two counts to 10. Otherwise too weak to copy. TUE
V21 5637kHz 1300z 4/4 [52 (16 26 46), 49 (16 26 36), 10, 46 (22 32), 62 (16 26 39, 48), ?? (16 36 46), 36 END] FRI
V21 6529kHz 1300z 7/4 Present but almost constant lightning noise makes copy impossible. MON
V21 5637kHz 1300z 8/4 [36, 22, 36, 49, 36, 49, 36, 56, 46, 49, 42, 42, 22, 49, 36, 33, 46, 36,
V21 5637kHz 1300z 9/4 Begins with normal counting then switches to another format.
Normal count. 3, 17 (12 16) Then into long strings of numbers as below.
00 21 61 21 68 ?? 00 21 47 00 21 61 00 89
00 22 50 85 00 4 5
11 00 4 00 00 22 50 26 11 00
00\ 22\ 50\ 85\ 00\ 00\ 23\ 50\ 65\ 37\ 11\ 00\ 4\ 00\ 00\ 00\ 23\ 50\ 65\ 37\ 4\ 00\ 11\ 00
22 1300 87 4 14 28 1
00 25 1300 85 00 25 47 5 88 11 00 00 26 1300 00 26 1300 47 at 7:37
00 26 1300 47
00 27 1300 51 40 49 11 00 93
00 27 1300 51 41 47 11 00 903
11 1 1307 1351 4 0
27 00 27 43 5 8800 1106 24 1357 46 ???? 25 ?? 26
26 27 1351 4700 40 ?? 40 27 2500 25 71 00
00 27 ?? 11 00
17 1351 90 27 5 27
27 75 23 5 ? 06
24 5 57 400 11 00
25 5 2800 8100 11 5 06
21 45 21 4 ??
21 1300 51 11 00 57 06
24 1327 400 ??
V21 6529kHz 1300z 10/4 [50, 50, 60, 30, 60, 60, 50, 50, 50, 70, 60, 30, 10 END] TX lasted 14 minutes
30, 30, 40, 20, 20, 30, 30, 20, 30, 20, 30, 10, 10, 40, 30 END] TX lasted 37 minutes. FRI
V21 5637kHz 1300z 10/4 [Present but too weak to copy]
V21 5637kHz 1300z 11/4 [30, 22, 32 (23), 31, 28, 6, 23, 32, 42, 29, 30, 26, (Starts counting in twos, 2-4-6 etc to 28), 29, 33, 32, 22, 30, 32, 32, 32, (counting in twos to 52, count in twos to 42), 32, 32, 33, 32, (count in twos to 30, count in twos to 32, count in twos
to 32, count in twos to 24), 30, 26, 32, 10, 32, 29, 26, 30, (count in twos to 32, count in twos to 18, count in two to 32, count in two
to 44), 22, (count in twos to 38, count in twos to 18, count in twos to 38, count in twos to 42, count in twos to 40, count in twos to
34, count in twos to 28, count in twos to 38, count in twos to 36, count in twos to 40, count from 18 to 22 then from 6 to 16 in twos.
END
V21 5637kHz 1300z 12/4 [49 (26), 46 (22), 49 (26), 22, 29 (8 16), 50 (22 26 36), 52, 36, 42, 49, 36, 31, 42 END] SAT
V21 6529kHz 1330z 13/4 [50, 50, 10, 50, 50, 50, 10, 50, 30, 50, 40, 60, 50, 50 Becomes too weak to copy] TX lasted at least 13 minutes. SUN
V21 5637kHz 1320z 13/4 [Too weak for copy but one pause on 22 and another on 26 just audible] SUN
V21 6529kHz 1300z 14/4 [50, 50, 50, 50, 100, 50, 50, 10, 30 END] MON
V21 5637kHz 1300z 14/4 [Very fast counting two pauses on 26 heard but otherwise too weak to copy] MON
V21 6529kHz 1300z 15/4 Present but too weak to copy. TUE
V21 5637kHz 1300z 15/4 Present but too weak to copy. TUE
V21 6529kHz 1300z 16/4 [50, 50, 30, 30, 40, 50, 10, 40, 20, 20, 30, 40, 30, 60, 50, 40, 50, 30 END] TX lasted 13 minutes. WED
```

V21 5637kHz 1300z 16/4 Too weak to copy for 15 minutes then 24 pausing on 16 and 22, 24 pausing on 16 then starting at 21 counting to 32. Then too weak to copy agiain. WED

V21 6529kHz 1255z 17/4 Too weak to copy for first 5 minutes. 30, 50, 40, 40, 50, 40, ??, 50, 50, 40, 30, 50, 50, 30, 30, 30, unintelligible for 1 minute, 50, 40 END] THU

V21 5637kHz 1300z 17/4 [30 (24), 30, continues slow counts to 30 or less, too weak for good copy.]

too weak to copy. Note continuous counts to 20 returning to 1 each time without pause! SAT V21 6529kHz 1300z 20/4 [10, 40, 20, 40, 10 30, 30, 30, ?? talking, 40, 30, 20, 30, 30, 20, 30, 10 END] SUN

V21 5637kHz 1300z 20/4 [Barely audible but repeated counts to 20 as with yesterday were heard.] SUN

V21 6529kHz 1300z 21/4 [40, 40, 40, 40, 40, 30, 20 END] MON V21 5637kHz 1300z 21/4 [Present but too weak to copy] MON

V21 6529kHz 1300z 22/4 [60, 60, 50, 40, 50, 20, 50, 20?, 30, 30, 50 END] TX lasted 7 minutes. TUE

V21 6529kHz 1300z 23/4 [30, 50, 40, 40 too weak to copy for 1 minute, 30, 50, 50, 30 END] WED

#### <u>V24</u> **Nil Reports**

#### <u>V26</u> **Nil Reports**

### V30

### March2014:

10255kHz1557z	03/03 [So Dien: 75 So Nhom: 35, R3M] Token MON		
1557z	06/03[Signal too weak to make out callup or many numbers, R3M]	JkC, Token	THU
1557z	07/03[So Dien: 03611 So Nhom: 45, R3M] Note new callup	Token	FRI
1600z	17/03[Vietnamese Language Numbers] via Twente,SDR	Elm	MON
1557z	18/03[So Dien: 03611 So Nhom: 45, R3M]	Token	TUE
1557z	19/03[So Dien: 03611 So Nhom: 45, R3M]	Token, JkC	WED
1557z	24/04[So Dien: 03611 So Nhom: 45, R3M]	Token	MON
1557z	25/03[So Dien: 03611 So Nhom: 45, R3M]	Token	TUE
1557z	26/03[So Dien: 03611 So Nhom: 45, R3M]	Token	WED
1557z	27/03[So Dien: 03611 So Nhom: 45, R3M]	Token	THU
1557z	28/03[So Dien: 03611 So Nhom: 45, R3M]	Token	FRI
1557z	31/03[So Dien: 03611 So Nhom: 45, R3M]	Token	MON

#### **April2014:**

10255kHz1557z	03/04[So Dien: 03611 So Nhom: 45, R3M]		Token	THU
1557z	04/04[So Dien: 03611 So Nhom: 45, R3M]		Token	FRI
1557z	14/04[So Dien: 03611 So Nhom: 45, R3M]		JkC, Token	MON
1557z	15/04[So Dien: 03611 So Nhom: 45, R3M]		Token	TUE
1557z	18/04	to 1608z QSA1 QRM2 QRN3 QSB2	NGO	FRI

### CROWD-36

5367kHz2204z	06/03 [In Progress] 2215z Fair QRN4 QSB3	Spectre	THU
18276kHz0805z	18/03[CROWD36 in progress, message from 0805z to 0820z]	NDL	TUE
16167kHz0835z	18/03[CROWD36 in progress, message from 0835z to 0839z]	NDL	TUE

### **Digital, Incursions and Unexplained Signals**

Digital, Incursions and Unexplained Signals

Its been a busy couple of months for transmissions using the FSK200/1000 mode possibly due to events in the Ukraine (more on that later). Regular monitors of this mode (my thanks to Daniel , Nicolas and Peter plus others who wish to remain nameless) have found several new link ID's and the scale of this modes transmissions are starting to become clear. So lets start with a table showing all known link IDs ..

Link ID	Day	Comments			
00000	Apparently random days at random times	Special Purpose ?			
03667	Mondays & Wednesdays 16:00/10/20	Last logged February 2014 may be a special purpose transmission			
16384	Saturdays 16:00/10/20 + Sundays 08:00/10/20	Last logged July 2013			
16404/16405	Thursday + Friday 08:00/10/20				
20501	Sunday 15:30/40/50	Usually null msgs			
28676	Tuesday + Wednesday 12:00/10/20	Logged only in March 2014			
28724	Weekdays 13:00/10/20	Briefly active in May 2013			
28725	Saturday 09:00/10/20	Briefly active in May 2013			
28732	Sunday 13:00/10/20	Briefly active in May 2013			
32799	Tuesday 14:00/10/20 also on Saturdays 12:00/10/20 in March 2014	Usually null msgs			
32821	Saturday 15:00/10/20	Usually null msgs			
36882	Weekends 11:00/10/20	One msg a weekend			
36931	Saturday 11:00/10/20	Logged once in March 2014			
40988	Tuesdays 23:00/10/20	Usually null msgs			
41018	Weekdays 02:00/10/30	Daily messages it never changes frequency			
45057	Alternate Weekends 10:00/10/20 + Tuesdays 22:00/10/20	One msg a month in the weekend slot and nulls on Tuesdays transmissions			
45075	Thursday 08:00/10/20				
45114/45115	Weekends 09:00/10/20	One msg a weekend			
45136/45137	Weekdays 07:00/10/20 + 12:00/10/20 also on Sundays 16:00/10/20	Daily messages			
45141	Daily 14:00/10/20	Logged only in March 2014			
49202	Weekdays 10:00/10/20 + Wednesdays 22:00/10/20				
49237	Thursday & Friday 13:30/10/20				
53254	Wednesday 15:30/40/50	Logged only in March 2014			
53277	Wednesday 12:30/40/50				

As you can see an extensive network of stations appear to use this mode and I have a feeling we are only scratching the surface of these. We definitely need more monitors listening out, logging and reporting to the group what they find.

For the last few months this mode seems to have been stable. Group members are finding new link IDs at a steady rate, once initially spotted we find these have predictable schedules. However in February and March 2014 there was a flood of new link IDs found (marked in green in the table above) which seem to have vanished again now (April 2014). In addition one of the busier link IDs 45136/45137 (marked in light blue in the above table) suddenly switched from sending four messages a week to sending six messages a week. This all happening at the same time as the crisis in Ukraine seems to be more than a coincidence but we mustn't forget that this mode has had short lived bursts of activity from link IDs which appeared suddenly and then vanished before. In May 2013 three link IDs (marked in dark blue in the table) then were never heard from again. So this has happened before and we should take care before jumping to any conclusions.

Despite the burst of FSK200/1000 activity the traffic sent via FSK200/500 has fallen back to its usual low levels from the sudden burst of activity at the start of year which I mentioned in my last desk report. These differences in the activity levels do make me wonder if these two modes have different uses or users.

Group member Nicolas (FR) has also been busy sending Crowd36 logs to the group. On 18th March he caught this modes transmissions on 18276 KHz at 08:05 then on 16167 KHz at 08:35. I am still keen for members to send logs of this mode to the group.

As ever thanks for everyone's logs and please keep them coming.

#### **PoSW News Items**

Items of Interest in the Media:-

So what happened to Flight MH370? The disappearance of the Malaysian airliner back in early March - seems like ages ago - has generated all sorts of conspiracy theories,

In a world where everything is being monitored by spy satellites which are claimed to be able to read a car licence plate from out in space and where long range radar systems watch everything that flies no one believes it is possible for a plane of this size to vanish completely without even the slightest trace of wreckage. The likelihood, or at least the possibility, of terrorist action was suggested right from the time of the first reports of the disappearance, mainly because it emerged that two of the passengers were Iranian men travelling on false passports which had been stolen from European Union nationals some time ago. Questions were being asked how this could have possibly happened with all the measures in place to prevent this kind of thing, and that it could only have taken place with the collusion of someone in the departing airport in Malaysia. However, it has since emerged that the Iranians were probably in the process of making their way to Germany to claim asylum - and no doubt, having established legal residence in an EU country make their way to the UK where the welfare benefits system and all that goes with it would be theirs for the taking.

Other theories put forward were that the pilot was intent on committing suicide and taking the rest of the plane's occupants with him by crashing the aircraft into the sea - why then no wreckage or oil slicks? The many reports of objects floating in the sea have all upon investigation to have no connection with the incident, the world's oceans, are, it turns out full of all sorts of junk. Then there was the theory that the plane was landed somewhere and the occupants "disposed of" because it was going to be used in a "Twin Towers" kind of project at some point in the future. The existence of runways constructed during World War 2 on many small islands in the area were mentioned in connection with this but it was stated that even if a modern airliner could be landed on these relatively short runways it would never be able to take off again.

Yet another scenario doing the rounds at the moment turns on the news that there were a number of individuals on board connected with a high-tech semiconductor company

who held the patent rights on some newfangled process worth a great deal of money and that now other individuals are going to rake in the rewards

Whatever the outcome may be in the fullness of time, the *Sunday Express* of 9-March gave the facts as they were known at the start of the saga. "Terror fear for 'suicide bomber' jet' is the headline over a piece by Stuart Winter, which says, "Fears that a missing airliner carrying 239 people could have been blown up by suicide bombers travelling on stolen passports grew last night.

Two men from Austria and Italy, listed among the passengers on a Malaysia Airlines Boeing 777 were not on board, officials in both European countries said on Saturday, and the passport of at least one of them had been stolen.

The revelation came as distraught relatives were told search aircraft had spotted two oil slicks in the South China Sea shortly before night fell. A passenger manifest issued by Malaysia Airlines after its plane went missing yesterday included Christian Kozel, 30, from Austria, and Luigi Maraldi, 37, from Italy.

But a foreign ministry spokesman in Vienna said Mr Kozel was at home.

He said: 'Our embassy got the information that there was an Austrian on board. Our system came back with a note that this is a stolen passport.' The foreign ministry in Rome said no Italian was on the plane, despite Mr Maraldi's

name being on the list. A newspaper reported that his passport was stolen in Thailand last August.

The Austrian foreign ministry spokesman said: It's interesting that there were two cases on the same plane but we just know that our Austrian was not on board. Someone used a document to get on board the plane. But whoever used it, we have nothing to say about that.'

As the mystery deepened, the search for Flight MH370 across 4,000 square miles of open water continued when the aircraft disappeared from radar screens less than an hour after taking off from the Malaysian capital Kuala Lumpur en route to Beijing. There was no distress signal as the plane, cruising at 35,000 feet and manned by experienced aircrew, suddenly vanished."

Obituary:- The generation which fought and "won" the Second World War are now becoming an endangered species as almost every day brings news of the death of another person from that phase of history. I wonder if those remaining think it was worth the effort when they see how the Political Class has betrayed this country and its people. The "I" newspaper of 28-March carried in its "Life in Brief" section an obituary of one Captain Jerry Roberts, Bletchley Park Codebreaker, a man worth pausing to remember. "Captain Raymond "Jerry" Roberts was the last survivor of the four-man team at Bletchley Park that cracked the German High Command's Tunny code, the system of high-level Nazi communications encryption machines used by Hitler and Mussolini to communicate with their generals.

Roberts was one of the four members of the Testery, a unit established in 1941 and named after the man leading it, Major Ralph Tester. Tunny carried only the highest grade intelligence, messages from a handful of Hitler's generals and field marshals and despatches from the Fuhrer himself. The Germans were convinced the system was unbreakable. It used 12 encryption wheels, four times as many as the Enigma machine, which carried standard military communications. The Tunny traffic was produced by a Lorenz CZ cryptography machine which the Bletchley Park mathematicians were able to replicate without seeing.

When German signallers mistakenly sent the same message twice with the same settings, the British team was able to reverse-engineer the process and build the machines responsible for the messages. In an interview last year Roberts described the intelligence as "gold dust" because it referred to the movement of entire German armies.

The stream of intelligence proved vital at key junctures. The Russians were warned months in advance of a major German offensive, Operation Citadel. They were told how the attack would be carried out - a pincer movement - as well as the numbers involved.

Had the Germans won they would have been available for the Western Front. Other intelligence enabled the Allies to ascertain German movements when planning D-Day.

Between 1943 and 1945, Roberts and the Testery codebreakers were accessing 90 percent of the German traffic with, at a conservative estimate, around 64,000 top-line Tunny messages intercepted and decoded. Sir Harry Hinsley, a Bletchley Park veteran and official historian of British Intelligence during the second World War, has estimated that the intelligence shortened the war by at least two years.

Reminiscing years later, Roberts said he had taken delight in reading Hitler's messages, sometimes even before the intended recipient. After the war he spent two years with the War Crimes Investigation Unit then pursued a 50-year career in market research.

Roberts never forgot his past and became a tireless ambassador for the memory of those who had served their country in secret. 'It was a war where we knew comprehensively what the other side were doing', he said.

He was awarded the MBE last year and was honoured with a set of commemorative stamps which feature him receiving his MBE from the Queen. He said it was 'extraordinary to be on the same stamp as Her Majesty. Not many people have that privilege.'

Born 18 November 1920, died 25 March 2014."

The Top people's paedophile ring with security service connections; more revelations;-

For years there have been rumours about a paedophile ring operating in the UK for the delight of some of the wealthiest people in the land, from show business, politics, the aristocracy, even certain royal personages – and senior figures from the judiciary feature widely. I have heard these rumours in the past from travelling sales representatives who, because they move about the country as part of their job get to hear all sorts of interesting stuff. The whole sorry tale of the doings of the late Jimmy Savile illustrate the point quite succinctly, he had been "at it" for half a century seemingly protected by people in high places - he was linked with the Conservative Party and a close friend of Prime Minister Thatcher and a regular guest at her weekend residence at Checkers. No one is prepared to believe that Savile's activities were unknown to those in charge. Now comes a string of revelations about another famous individual, a larger than life figure in more ways than one, he was obscenely overweight to the point of gross obesity, and like old Jimmy he is now dead. The person in question is Cyril Smith, deceased, who was a Liberal Democrat Member of Parliament for a constituency in the north-west of England. The *Daily Mail* newspaper has been digging into Smith's activities over many years and have been featuring the results of their investigations over several issues of the paper. The *Mail* of 14-April carried a front page story to the effect that some of Cyril Smith's victims are considering taking legal action against the Liberal Democratic party. The article in the *Mail* says, ..... "Greater Manchester Police announced they are carrying out a new investigation into abuse at a residential school in Rochdale where Smith carried out regular attacks on boys. At least 11 other men are suspected of sexually and physically assaulting children there. Further explosive revelations in today's Mail include:

Details of how Special Branch and Lancashire police thwarted at least two inquiries into Smith by detectives from other forces.

Files of incriminating evidence were confiscated and suppressed by officers working for the Lancashire Chief Constable.

The Director of Public Prosecutions refused to prosecute Smith in 1970 despite receiving an 80-page dossier.

Child porn was found in the boot of Smith's car near Northampton, but he was released without charge 'after a phone call from London'. Lawyers for smith's victims are looking to pursue Rochdale Council as well as the Liberal Democrats. Richard Scorer, a solicitor at Slater and Gordon representing six men who claim they were molested by the MP as boys, is investigating how much senior Liberals knew. He said: 'We are examining who knew what about the MP, and that includes

the Liberal Democrat Party and Rochdale Council, and we are actively considering all possibilities in relation to these potential defendants.'......Smith was knighted on the recommendation of former Liberal leader David Steel in 1998, when rumours about his sexual activities were already rife in Westminster. At present it is not possible to strip disgraced public figures of a knighthood after their death because they cease to hold the honour when they die......Lord Steel has yet to comment on the Daily Mail's recent revelations...

Special Branch officers would watch as Smith cruised known pick-up spots looking for young rent-boys during Liberal Party conferences in Blackpool, it was claimed yesterday.

Police were also allegedly aware that he secretly took vulnerable schoolboys on holiday with him to Lytham St Annes in Lancashire so he could abuse them.

Sir Cyril Smith's family said yesterday they were 'saddened and concerned' by the claims about him."

And this is the kind of person that makes the laws which the Common People have to live by.

 $Thanks\ Peter.$ 

### Other news items

### Jerry Roberts was a Bletchley Park codebreaker who cracked Hitler's secret messages and warned of an attack on Kursk

7:01PM GMT 27 Mar 2014

http://www.telegraph.co.uk/news/obituaries/10727735/Jerry-Roberts-obituary.html

Jerry Roberts, who has died aged 93, was one of a small group of Bletchley Park codebreakers who read Hitler's messages to his generals, providing unprecedented details of the German preparations for the D-Day landings.

The German High Command's teleprinter messages, which were broken in part with the help of Colossus, the world's first large-scale electronic digital computer, also provided the German plans for the Battle of Kursk, now seen as the turning point of the war.

"I can remember myself breaking messages about Kursk," Roberts recalled. "We were able to warn the Russians that the attack was going to be launched and the fact that it was going to be a pincer movement. We had to wrap it all up and say it was from spies, that we had wonderful teams of spies, and other sources of information. We were able to warn them what army groups were going to be used, and most important, what tank units were going to be used."

Provided with the information by the British, the Red Army was able to rebuff the German attack, before launching an all-out assault that destroyed the German forces aligned against them in what led to a Soviet advance that did not stop until it reached Berlin.

Raymond Clarke Roberts (always known as Jerry) was born in Wembley on November 18 1920. His father was a pharmacist, his mother the organist in the local chapel. He was educated at Latymer Upper School, Hammersmith, before studying German and French at University College, London.

His ambition was to join the Foreign Office, but his German professor, Leonard Willoughby, who had been a leading member of the Admiralty's First World War code-breaking unit Room 40, put him forward for "work of a secret kind" which could not be discussed in advance.

Roberts found himself facing an enigmatic recruitment process at a War Office building just off Trafalgar Square during which he was asked by an anonymous major if he played chess. When he responded in the affirmative, the major asked if he could also "tackle crosswords".

Another nod of the head was sufficient to see him sent to the codebreakers' "War Station" at Bletchley Park in Buckinghamshire, where John Tiltman, the chief cryptographer, recruited him into his research section, warning him that "absolute silence must be preserved" about what happened there.

Queen Elizabeth II speaks with code breaker Captain Jerry Roberts during a visit to Bletchley Park in 2011

Roberts was initially put to work breaking the Double Playfair hand cipher used by German police troops operating on the Eastern Front. The deciphered messages revealed the early stages of what would become known as the Holocaust, with German generals seemingly vying with each other to tell Berlin about the tens of thousands of Jews their men were killing.

Churchill requested a special series of reports on the atrocities and, despite the danger that it might lead to improved German cipher security and hinder Bletchley's successes, publicly denounced the killings as "a crime without a name".

The team working on the police messages was headed by Ralph Tester; and in July 1942 Tester and his team were put to work on a new problem — the enciphered teleprinter messages being sent between Hitler and his generals. German teleprinter messages had first been intercepted in the second half of 1940, but little had been done with them until it became clear, in late 1941, that they were being used more frequently. The messages were enciphered with the Lorenz SZ40 system, which had two sets of five cipher wheels, making it even more complex than the most difficult of the Enigma ciphers, which had one set of four.

Tiltman looked at the early messages, trying to find a way into them, initially without success. In August 1941, however, a German operator sent the same message twice on the same settings, shortening some of the text in the second message to save time.

This allowed Tiltman a way in; and in an extraordinary piece of code breaking he worked out the texts of the messages, giving a stream of 4,000 plain text letters and their cipher equivalents which might help to reconstruct the operation of the Lorenz machine. For two months the research section tried without success to use Tiltman's decrypt to break the enciphered teleprinter messages, which were code-named Fish by the codebreakers. Then, in October, it was given to the young chemistry graduate Bill Tutte.

"He used to sit staring into the middle distance, twirling a pencil about in his fingers," Roberts recalled. "I used to wonder whether he was getting anything done. My goodness, he was."

In a stroke of genius, Tutte managed to find a way in, allowing the research section to reconstruct the Lorenz machine. The combined efforts of Tiltman and Tutte were described in an internal GCHQ history as "one of the outstanding successes of the war", not least because of the high standard of intelligence the Fish messages produced.

The teleprinter links ran between all the major German front line headquarters and Hitler's command posts in Berlin or at the Wolf's Lair, his forward command post for the Eastern Front at Rastenburg in East Prussia.

Tester and his team, including Roberts, by now commissioned into the Intelligence Corps, were put to work on breaking the Fish messages on a regular basis in July 1942. "The people the messages were going to and coming from would be given at the beginning of the message," Roberts recalled. "So you would have General so-and-so sending to Army HQ in Berlin."

The Testery, as it was known, began with Roberts and five others actually breaking the messages, but grew to be 118-strong, including among its numbers Peter Benenson, who later founded Amnesty International, and Roy Jenkins, who went on as a Labour politician to become Chancellor of the Exchequer and was subsequently Chancellor of the University of Oxford.

Jerry Roberts receiving his MBE from the Queen in 2013

One of its early members was Max Newman, who had been Turing's tutor at Cambridge. Newman realised that one part of the code-breaking process for the Fish ciphers could be done by the kind of machine Turing had described in their discussions.

That belief led to the creation, by the GPO telecommunications engineer Tommy Flowers, of Colossus, which greatly speeded up the breaking of the Fish ciphers ahead of the D-Day landings, when the codebreakers were able to read details of Hitler's conversations with Field Marshal Gerd von Rundstedt, the German commander in France.

"Some were signed by Hitler," Roberts said. "I can remember myself deciphering at least one message – he called himself: 'Adolf Hitler, Führer'. I suppose I should have been unhappy that I wasn't fighting the true fight. But this never bothered me. One knew that this was immensely more important than any other single contribution that you could make as a soldier, or as an officer."

After the war Roberts spent two years in Germany with the War Crimes Investigation Unit before being demobilised in 1947 and beginning a career in market research which would take him all over the world.

In 1970 he set up his own companies, working for a number of high-profile clients including British Gas, Reebok, DuPont, American Airlines, Chrysler and Holiday Inn. Roberts sold his companies in 1993 and retired. Two years later, he married Mei Li, an artist and book illustrator.

He spent his later years campaigning for greater recognition for Flowers and Tutte, which led to a BBC documentary on the latter's work breaking the Fish ciphers, and for the preservation of Bletchley Park.

He was appointed MBE in the 2013 New Years Honours "for services to the work of Bletchley Park and to code breaking".

Jerry Roberts was thrice married. He is survived by his third wife and by a daughter of his first marriage, a son and daughter of his second, and by four stepchildren.

Jerry Roberts, born November 18 1920, died March 25 2014

http://www.telegraph.co.uk/news/obituaries/10727735/Jerry-Roberts-obituary.html [Thanks my mate Dave down the pub]

From 'E' A little humour, doubtless using the art seen across the web now printed on a T shirt:



#### Police to use radio-controlled aircraft around Gatwick Airport

http://www.crawleyobserver.co.uk/news/local/police-to-use-radio-controlled-aircraft-around-gatwick-airport-1-5931516

From this month, officers are running a trial using a small unmanned aerial system (UAS) at and around the airport that will give them an eye in the sky to deal with potential incidents.

The system will be able to beam live high-quality pictures to officers on the ground, allowing them to more quickly assess locations and film incidents from above.

An officer will control the aircraft from the ground, in line of sight, using a portable console from up to 500 metres away.

The trial of the Aeryon Skyranger system is being funded by the Association of Chief Police Officers (ACPO) to test how effective it could be in policing.

Land owners close to the airport are being shown how the system works and are being asked for their permission to deploy the equipment from their land.

The officers who will be using the equipment will do so in line with the current Civil Aviation Authority (CAA) regulations.

The aircraft is expected to be used for the first time later this month.

If the trial is successful the UAS could be used during operations such as collecting evidence after collisions or major incidents and in the search for wanted or missing people as well as at the airport.

Superintendent Brian Bracher said: "The aim of the trial of the system is to make the airport and the area around it even safer by allowing us to monitor a wide area from the sky.

"It could help us collect evidence and monitor events from a distance which would help us detect crime and prosecute offenders.

"It could be used in situations where deploying patrols would put officers or the public at risk.

"At the same time, the UAS offers a cost effective alternative to a manned aircraft, is quickly deployable and can stay in the air for a longer period of time.

"This will not replace patrols but will instead give us the opportunity to monitor incidents on the ground from an extra angle."

Sussex Police and Crime Commissioner Katy Bourne said: "The benefits of using unmanned aerial systems to assist police operations has already been proven in other police force areas and I am pleased that Sussex Police is trialling this innovative, cost-effective technology.

"Using these systems can help improve the effectiveness of police patrols and, ultimately, increase public and officer safety.

"A number of other agencies are already using this system, which will also enable Sussex Police to work more efficiently and collaboratively with partners."

http://www.crawleyobserver.co.uk/news/local/police-to-use-radio-controlled-aircraft-around-gatwick-airport-1-5931516

This Obit will be of interest to a number of persons reading this with its content involving Aden and Dougie Britton G3KLF. Thanks to our newest member who passed this on.

### Nigel Groom - obituary

Nigel Groom was a spy-catcher, soldier and scent expert who faced assassination in Aden and smelt a rat in the RAF <a href="http://www.telegraph.co.uk/news/obituaries/politics-obituaries/">http://www.telegraph.co.uk/news/obituaries/politics-obituaries/</a>

Nigel Groom, who has died aged 89, was an Arabist, historian, author, soldier, spy-catcher and perfume connoisseur. These pursuits saw him fend off a tribal assassination attempt in Aden, uncover a KGB spy embedded in the RAF and explain the association between frankincense and Christ's divinity.

As a young Political Officer for the Colonial Service, Groom arrived in the British Protectorate of Aden in 1948. He was responsible for the north-eastern area, based in Bayhan, a remote emirate bordering the central Arabian Desert, and accessible only by small RAF aircraft. Two years later he took over the northern area, based in Al Dhali', regarded at the time as a difficult, ungoverned tribal part of the Protectorate, riven by unrest fuelled by the Imam of Yemen in pursuance of his claims over the whole country.

At Christmas in 1950 the British agent for the western area of the Protectorate, Basil Seager, and his wife arrived to spend the holiday in Al Dhali', unaware that a plot was afoot to assassinate both Seager and Groom (and their escort of Arab soldiers) at a Christmas Day lunch in a nearby village. However, while out for a walk with armed guards on Christmas Eve, Seager and his wife by chance met the chief assassin, a religious fanatic high on khat, and his party on their way to their assignment. The assassin stabbed Seager with his dagger, causing serious injury, and in the subsequent gunfight several of the escort and several assailants were killed. Groom signalled to Aden for a doctor, who arrived after a five-hour night-time journey over rough tracks, and for a substantial force of Aden Protectorate Levies, to leave early on Christmas morning to help counter a planned tribal uprising.

Nigel Groom commenced his second career in the early Sixties, as an officer in MI5. Posted to D (later K) Branch in 1964, he was to spend his working life in counter-espionage work. In 1965 he was the case officer for an elaborate investigation which uncovered RAF Warrant Officer Douglas Britten as a KGB spy. The evidence unearthed included one-time code pads, short-wave radio schedules, RV instructions, sketch-maps for dead letter boxes and, in a detail worthy of Ian Fleming's imagination, a document copier disguised as a cigarette case.

Groom combined the drama of his working life with a quiet, inquisitive fascination for all things Arabic, not least its various heady scents. He published three specialist studies in the field of perfume, in which he explained that "incense has had a continuous religious significance throughout the entire expanse of history".

Nigel St John Groom was born on April 26 1924, and grew up in Devon, where his father, the Reverend RW Groom, was a country rector. Educated at Haileybury and Magdalene College, Cambridge, Nigel joined the Indian Army in 1943 and served with the 3 Gurkha Rifles and, in Burma, with 2 Karen Rifles. Joining the Colonial Service after the war, he was posted to the Western Aden Protectorate.

His first duty was to oversee an operation, using RAF Lincoln bombers flown from Britain for the mission, against a Bedouin desert tribe which had rebelled against the rule of the Sharif of Bayhan. Political influence over heavily-armed tribesmen — racked by blood-feuds — was limited to messages to their leaders sent by runners. There were no roads or vehicles and travel was on horseback or camel or on foot.

The area was unmapped and virtually unexplored, and wherever Groom went he would take bearings with a pocket compass for a sketch map of the country. In his account of this period, Sheba Revealed (2002), he described the terrain as "perhaps the roughest land to administer anywhere in the British Empire".

In 1952 Groom married Lorna Littlewood, the daughter of a British official in the Burma government who had died on the trek to India out of Burma after the wartime Japanese invasion. After their spell in Al Dhali' the couple moved to the Aden Secretariat handling Protectorate affairs, where Groom worked latterly as Assistant Chief Secretary. In 1958 they left for Nairobi ("like being on leave all the time after Aden") where he worked first in the Kenya Cabinet Office and later as Defence Secretary in the East Africa High Commission. His secretariat responsibilities included the Royal East African Navy, based in Mombasa, and the running of the East African Intelligence Committee. The job came to an end with the granting of independence to the East African territories.

Groom was recruited by MI5 in 1962. After the Britten case, he joined a small team examining allegations being sponsored by the counterintelligence officer and scientist Peter Wright, and later given publicity by the journalist Chapman Pincher, that Sir Roger Hollis, the service's former Director-General, had been a Soviet mole. Groom's investigations showed that, in every one of the leads put to him by the so-called Fluency Committee investigating Hollis, that the evidence was inconclusive

Subsequently he was ordered to plan and supervise all K Branch surveillance operations against the "legal" Soviet Bloc intelligence community in London; this included the elaborate operations surrounding the defection of the Russian agent Oleg Lyalin and the expulsion, in 1971, of 107 KGB and GRU officers masquerading as Soviet diplomats. Thereafter he returned to investigating espionage leads and was to become head successively of two of the investigating sections. With a record length of continuous service in K Branch, he ended up as one of M15's most senior and experienced counter-espionage officers, with an unrivalled knowledge of the sophisticated espionage techniques employed by the USSR. Many of the major spy cases of the time passed through his hands.

Nigel Groom never lost his keen interest in the Arab world and especially in its pre-Islamic history, on which he became a noted expert. This was kindled during his early days in Bayhan, where he supported the American archaeologist Wendell Phillips in excavation projects. In 1976 he compiled an archaeological map of south-western Arabia, which was published by the Royal Geographical Society. With A Dictionary of Arabic Topography and Placenames (1983) he provided English definitions of several thousand Arabic words of topographical significance. He contributed regularly to the Bulletin of the Society for Arabian Studies and other academic journals, one special interest being the interpretation of Ptolemy's map of Arabia.

Cartoon from Nigel Groom's Frankinsense and Myrrh showing a hip-high Socotra myrrh tree

His time in Bayhan had also introduced him to the incense trade, a fascination for which infused his study Frankincense and Myrrh (1981). The volume explored the nature and location of incense trees, the harvesting and bartering of crops, and how trade routes opened up to Europe. The book attracted the interest of an Omani company preparing to launch a new perfume; Groom agreed to advise them on the historical background of the natural ingredients they wanted to use. This research led to a dictionary-style reference book, The Perfume Handbook (1992) — revised as The New Perfume Handbook (1997). He was later commissioned to write The Perfume Companion (1999), designed for a wider readership.

Nigel Groom's wife died in 2009, and he is survived by a son and a daughter.

http://www.telegraph.co.uk/news/obituaries/politics-obituaries/

### UK's cyber spy agency to endorse certified degrees for spies

Kounteya Sinha, TNN | Apr 8, 2014, 05.23 AM IST

http://timesofindia.indiatimes.com/world/uk/UKs-cyber-spy-agency-to-endorse-certified-degrees-for-spies/articleshow/33418390.cms

LONDON: Britain's cyber spy agency - the GCHQ is working on the country's first ever certified degrees for spies.

GCHQ is supposedly working on approving MSc in cyber security or spying according to the briefing note the surveillance agency has sent out to universities that offer MSc courses in cyber security.

These universities have been asked to apply for certification of their course by June 20. This means graduates will soon be able to boast about having passed a GCHQ-certified degree.

The recent boost in cyber security has seen hordes of universities in UK offering cyber security-related courses.

The new certification by GCHQ which will be renewed every five years will help students know which course will get them an entry to the GCHQ. GCHQ has said these courses will throw up suitable recruits for the agency.

The agency also recently had a national competition asking students to test their cyber security skills.

It said, "If you're interested in a potential career in cyber security, GCHQ have launched a competition on keeping information safe from cyber-attacks. The game invites participants to defend their company's intellectual property against cyber threats. Countering cyber-attacks and preserving the safety of systems has become an incredibly complex challenge in recent years, and threats to cyber security are currently on an unprecedented scale. Games like these help to encourage people to develop their cyber skills, provide young people with positive channels for their talents and demonstrate career routes into becoming a respected information security professional."

UK recently set up CERT-UK, the country's first ever national Computer Emergency Response Team, which will manage and prepare for national cyber security incidents. Cabinet office minister responsible for cyber security Francis Maude MP launched the Team. CERT-UK will take the lead in coordinating the management of national cyber security incidents and will act as the UK central contact point for international counterparts in this field.

Maude said, "This government's most important task is to protect our security and ensure Britain is a safe place to work, live and do business. That's why I'm delighted to launch the UK's Cyber Emergency Response Team. We know government cannot do everything by itself. CERT-UK shows we want closer coordination between government, business and academia to share insight and advice, as well as better cooperation with our international partners. The job of protecting our security will never be done - it will always be a work in progress. But, from today, CERT-UK means we are better prepared, better informed, better connected and ultimately more resilient."

CERT-UK has 4 main responsibilities - national cyber security incident management, support to critical national infrastructure companies to handle cyber security incidents, promoting cyber security situational awareness across industry, academia and the public sector and providing the single international point of contact for co-ordination and collaboration with other national CERTs.

http://timesofindia.indiatimes.com/world/uk/UKs-cyber-spy-agency-to-endorse-certified-degrees-for-spies/articleshow/33418390.cms

#### Constitutional Protection warns of Russian spies

The Federal Office for the Protection warns that the Russian foreign intelligence service in Berlin woos speakers and members of German politicians. The target individuals usually seem naive.

By Dirk Banse, Florian Flade, by Hinrichs and Uwe Müller

http://www.welt.de/politik/deutschland/article127121099/Verfassungsschutz-warnt-vor-russischen-Spionen.html

The government in Moscow is in political confrontation with the West on espionage. "It is hardly a secret the intelligence work in Germany is as important as for the Russian," says the president of the Federal Office for Protection of the Constitution (BFV), Hans-Georg Maassen.

According to the findings of its authority , the Russian Foreign Intelligence Service (SVR) attempts targeted to recruit lecturers and academic staff of German politicians , foundations and government departments to obtain sensitive information . " The Russian agents analyze exactly who might be useful to them," says the German counterintelligence chief Burkhard .

Disguised as normal foreign embassy staff employees of the SVR would befriend the unsuspecting target persons with a view to using them later.

" Semi-open sourcing " is the name of the constitutional protection of this form of espionage. The Authority is concerned that Russian agents in the Bundestag have intensified their efforts since the advent of new MPs. The BFV assumes that up to a third of the Russian Embassy staff has an intelligence background.

Russians pay for food and give gifts

The agents used real name as a rule. They are specifically briefed to target certain persons. The approach always the same, is made and tested to see if the target person had useful information about energy policy or versed in large business enterprises , NATO or the EU a contact .

Russian secret service ordered typewriters

Under a pretext then regular meetings are held. According to the findings of the secret service agents meet their German contacts in restaurants, bars and cafes - but not in the immediate vicinity of the Russian Embassy. Money would only indirectly be offered.

The Russian side will pay food and drinks, sometimes make gifts. German intelligence agents are astounded at the naivety of people targeted: they are usually completely surprised when they find out who they have let themselves be influenced by. Conspiratorial meetings with foreign services are punishable in the Federal Republic.

Allegations against German Russia

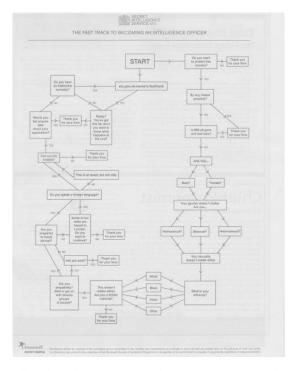
But Moscow's offensive in the days of the Crimean crisis runs apparently not only with intelligence, but also with means to stimulate propaganda Such accusations are made against the historian Alexander Rahr. "Mr. Rahr operates in Germany as a kind of agent influenced by the Kremlin," says Green MEP Werner Schulz.

He propagating the strategy of President Putin to establish Russia as a raw strategic power. Rahr. He has had numerous television appearances on ARD and ZDF promoting himself as a Russian expert, is research director of the German - Russian Forum and coordinates the Future workshop in St. Petersburg Dialogue . In response the MEP Elmar Brok stated these discussion forums "should not be undermined by people like Rahr "

http://www.welt.de/politik/deutschland/article127121099/Verfassungsschutz-warnt-vor-russischen-Spionen.html



From 'E'



An interesting flow chart advertisement sent in by a reader who must remain 'MaleAnon.'

### Interesting advert sent in by KW.

Facilities assistants; driving licence, IT skills, Forklift and scaffolding qualifications required.

Not asked for but an obvious necessity will the ability to travel in the Crimea without compass/GPS and the possession of the advanced qualification in Animal Husbandry techniques [Bactrian Camel].

And remember ..... Gob shut!

This advert was seen in the Metro; later in the day it appeared again in the Evening Standard.



### **SPECIAL MATTERS:**

### **Operation Jallaa:** 0

### **MESSAGES:**

'E' Many thanks for your input, see next time......

### **RELEVANT WEBSITES**

ENIGMA 2000 Website: <a href="http://www.enigma2000.org.uk">http://www.enigma2000.org.uk</a>

Frequency Details can be downloaded from: http://www.cvni.net/radio/

More Info on 'oddities' can be found on Brian of Sussex' excellent web pages: <a href="http://www.brogers.dsl.pipex.com/page2.html">http://www.brogers.dsl.pipex.com/page2.html</a>

Time zone information: <a href="http://www.timeanddate.com/library/abbreviations/timezones/">http://www.timeanddate.com/library/abbreviations/timezones/</a>

Encyclopedia of Espionage, Intelligence, and Security <a href="http://www.espionageinfo.com/">http://www.espionageinfo.com/</a>

## EyeSpyMag!

http://www.eyespymag.com

### 2014

		Ja	nua	ary					Fe	bru	ary					N	larc	h		
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa
		-	1	2	3	4							1							1
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28		23	24	25	26	27	28	29
														30	31					
			Apri			- 80	16			May						_	June	_		
	meen	_	_	_				-	_					100	1000	_		_		
Su	М	Tu	W	Th	F	Sa	Su	М	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa
	7	1 8	9	3	4	12		r		7	1	9	3	1 8	9	3	4	5	6	7
6	7	1000	-7	10			4	5	6		8	110	10	71		10	11	12	13	14
13	14	15 22	16 23	17	18	19	11	12	13	14	15	16 23	17	15	16	17	18	19 26	20	21
20				24	25	26	18						24	22		24	25	26	27	28
27	28	29	30				25	26	27	28	29	30	31	29	30					
						-	_													
		_	July	1					A	ugu	st					Sep	ten	be		
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5						1	2	13.00	1	2	3	4	5	6
6	7	8	9	10	11	12	3	4	5	6	7	8	9	7	8	9	10	11	12	13
13	14	15	16	17	18	19	10	11	12	13	14	15	16	14	15	16	17	18	19	20
20	21	22	23	24	25	26	17	18	19	20	21	22	23	21	22	23	24	25	26	27
27	28	29	30	31			24	25	26	27	28	29	30	28	29	30				
							31													
		O	tob	er		- 22			No	/em	ber					De	em	ber		
Su	M	Tu	W	Th	F	Sa	Su	М	Tu	w	Th	F	Sa	Su	М	Tu	W	Th	F	Sa
beter		and the same of	1	2	3	4	Motoli	Reign	in the second	- CASS	100		1		1	2	3	4	5	6
5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13
12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20
19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27
	27	28	29	30	31	2.0	23	24	25	26	27	28	29	28	29	30	31	-0	-0	4.1
26																				

 $Statements\ affecting\ the\ use\ of\ ENIGMA 2000\ material\ of\ all\ description\ and\ intellectual\ property\ of\ others:$ 

### Copyright & Fair Use Policy

 $\odot$  All items posted on our website and within our newsletter remain the property of ENIGMA 2000 and are copyright.

The above applies only to documents found on this website and not logs sent to ENIGMA 2000 for their sole use which cannot be used elsewhere.

Within the Number Monitors Group site, the following applies:

### USE OF POSTINGS, IMAGES, SOUND SAMPLES and OTHER FILES:

 $\ensuremath{\mathbb{O}}\xspace$  All items posted here remain the property of ENIGMA 2000 and are copyright.

MEMBERS' LOGS & IMAGERY POSTED HERE \*SOLELY FOR ENIGMA2000 USE\* CANNOT BE LIFTED FOR USE ELSEWHERE.

