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Optical communication A possibility with relevance to Espionage?

Read more inside

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Before we proceed an apology for the lateness of this issue – yours truly being taken ill over Christmas with problems with my dominant arm and fingers being paralysed. I must add it hasn't been much fun typing with one finger of the left hand and must thank certain members for their assistance.

IMAGE ON FIRST PAGE:

We start this issue with an excellent piece on a little known STASI communications device and his testing of such over a greater range than it was ever intended to work over. You will agree this piece, penned by Karsten is excellent. Any grammatical errors are mine.

The Stasi infrared radio Zeiss JO-4.02

The Stasi infrared transceiver Zeiss JO-4.02 is a very rare collectors item. A limited number of devices were produced in the 1980s, mainly for the East German Stasi. The JO-4.02 provided covert communication over a distance of few kilometres.

There is little information available from Internet sources. I was lucky to get a pair of these devices in spring 2014. This gave me a chance to examine the JO-4.02 in more detail and to do some communication tests to find out the capabilities of this covert infrared radio.

Technical data

modulation: A3 – amplitude modulation
 emitter: infrared LED type VQ120C

operating wavelength: 940nm (317 THz)

- output power: < 1mW

- detector: phototransistor SP211

- Cassegrain reflectors with:

aperture: 130mm
 beam width: 3.1mrad
 IR filter coating on both mirrors

- integrated finder scope

communication range: 5 km@5 km visual range (10dB SNR)

daylight operation

- supply voltage: 4.5V (integrated battery compartment for 3x AA alkaline

battery)

supply current: app. 120mA

full duplex operation

tone signal

- connector for tape recorder

- fine adjustment screws for azimuth and elevation

- standard 3/8-16 UNC thread

- size and weight: 33x26x13cm - 6kg

Description of the device

The mirrors work as Cassegrain systems. In the receiving system the parabolic primary mirror reflects the incoming light to a hyperbolic secondary mirror. The reflected light of the secondary mirror then goes to a hole in the centre of the primary mirror to the detector. In the transmitting system the optical path goes from the infrared led in the opposite direction. The choice of Cassegrain systems permits a very compact construction. As a result the JO-4.02 fits into a small inconspicuous leather bag. There are no manufacturer marks on the device, except for a serial number.

The optical beam width is $3.1 \text{mrad} = 0.18^{\circ}$ only which means that at a distance of 1km the beam diameter is 3.1 m and at a distance of 10km the beam diameter is 31 m. The device contains an integrated finder scope which has a circular recticle in the ocular for finding and making adjustments with respect to the other station. The diameter of the recticle corresponds with the beam width.



The image shows the two identical Cassegrain systems. The transmitter is located to the left and the receiver to the right. The secondary mirrors are held in place by a "spider support". On the top edge between the primary mirrors the objective lens of the integrated finder scope can be seen. There is a movable sunshade to protect the receiver from direct sun radiation.

The optics was manufactured by Zeiss Jena and are of excellent quality. The mirrors have an infrared filter coating ensuring the reflection of infrared in the main and to a lesser extent dark red light only.

All components are perfectly adjusted to each other by the manufacturer. The operator can be sure that a target which he can see in the middle of the circular recticle is also in the line of view of transmitter and receiver.



The JO-4.02 is carried in a relatively small leather bag. The bag contains the main device with the optical systems and includes a small bag for microphone and accessories (cleaning cloth, small cleaning brush and cable for external power supply).





The microphone has a volume control with an integrated on/off-switch on the left side. There is a large mode selector on the front of the microphone. The following modes can be selected:

- full duplex receive and transmission of the microphone signal
- receive only
- full duplex receive and transmission of a tape recorder signal

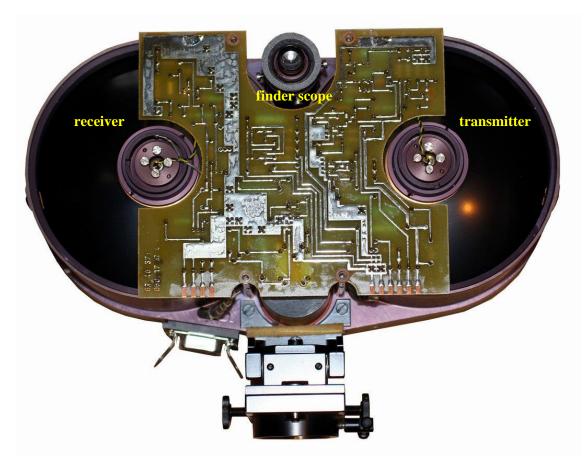




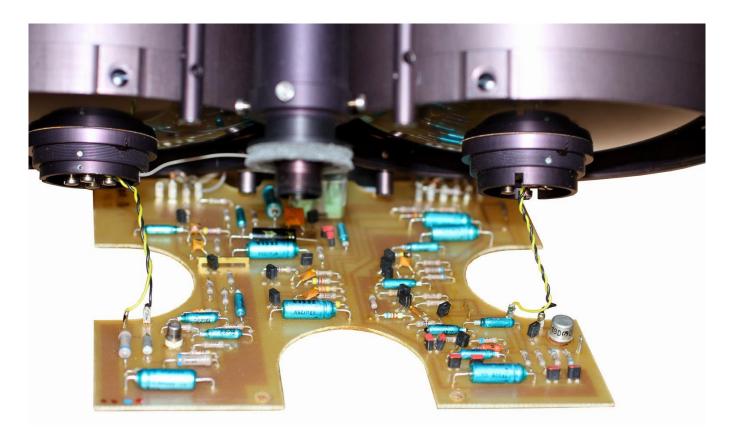
The signal tone key ("RUF" = "call") is located in the middle. Four LEDs form a level indicator for the transmitted signal. The microphone is completely filled with electronics. The schematic of the device is not available but most probably the PCBs in the microphone contain the microphone amplifier, signal tone generation and level indicator circuit.

A high impedance (1000 ohm) ear phone is attached to the microphone. A tape recorder can be connected to a 5pin DIN socket near the cables to record the received signal or to transmit pre-recorded messages. There is an additional SMA-plug which can be used for external power supply. The power supply cable ends in an E10 lightbulb socket. So it was possible to attach it to a 4.5V flashlight instead of the lamp.

A sunshade and metal cover can be easily removed. A large printed circuit board can be seen in the centre of the device. It has cutouts for the finder scope and the adjustment mechanism of receiver and transmitter path.



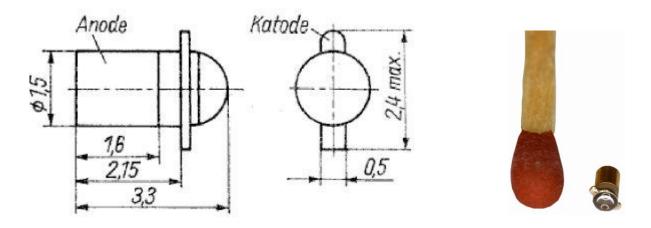
The PCB shows no manufacturer marks. The receiver parts are located on the left side. A Russian KP303 dualgate-FET is used in the first stage of the receiver. An East German SF118D transistor in a metal case acts as the driver for the infrared LED (right side, next to the yellow/black wires).



Al electronic parts except the dual gate-FET in the first receiver stage and the electrolytic capacitors (Tesla) were produced in East Germany. There is one interesting exception: a 14-pin Centronics plug was used as microphone connector. This connector was manufactured by Amphenol.

The transmitting LED VQ120 and the phototransistor SP211 are very tiny as the photo clearly shows. Both were developed for the use in punched-tape readers which required a very close spacing of the photo sensors. They are mounted in-hole and have a diameter of 1.5mm only. This small diameter helped to keep the focal length of the mirror system short to achieve the desired narrow beam width of 3.1mrad.

The LED and phototransistor look identical. There are no identifying marks on either component so one has to be careful not to mix them.



Communication tests

1^{st} test – 2km – 17th July 2014 (28°C, sunshine)

This was the initial test. The test started at 13:00 UTC. There were heavy scintillations in the air. We started with a distance of 600m and increased it in different steps up to 2km. At 600m the signals were much too strong. The receiver was heavily overdriven. The aperture of the receiver should be reduced for such short distances.

Signals were impressive over 2km with excellent signal-noise-ratio (SNR). Pointing to the target was very easy because it could be seen even with the naked eye and was excellent in the finder scope.

2nd test – 5km – 8th August 2014 (30°C, sunshine, light wind)

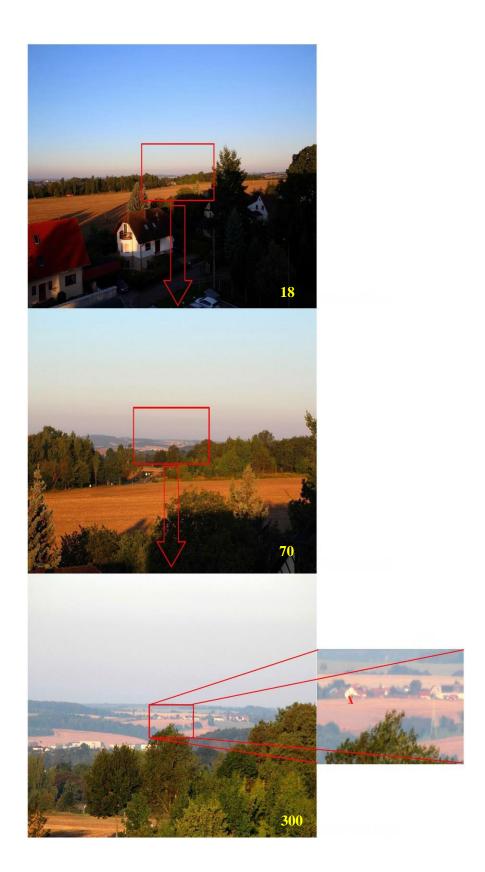
The test started 13:45 UTC. We observed extreme air scintillations. In addition there was a lot of dust in the air because some harvesters operated nearby. With 10x50 binoculars it was nearly impossible to see the persons at the other station. It was even worse in the finder scope of the JO-4.02. Finding the target was not difficult anyway because we made some photographs in the days before and used trees as referencing landmarks.

Signal strength was medium. There was much flutter on the modulation. Later we found out that a power line which was 300m away crossed the field of view. Maybe the movement of the wires caused the modulation problems.

3^{rd} test $-10\text{km} - 19^{\text{th}}$ August 2014 (19°C, sunshine, very windy)

The test started at 13:00 UTC. Visual range was 25km. The wind turned out to be a problem because one of the tripods was not strong enough to withstand the gusts. There was no chance to see the other station with binoculars. Even with a spotting scope at 50x it was very difficult because of the air scintillations.

The following series of photographs was taken with a Canon EOS-600D at different focal lengths. It was taken two days after the test in the early morning and gives an impression on the path. My location was my office in the 3rd floor of an office building.



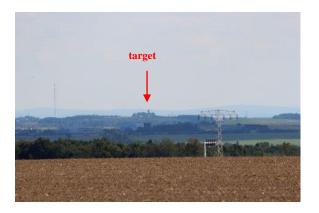
The other crew had severe problems with a harvester which passed very close several times and produced a lot of noise and dust. Sometimes they could not understand the audio due to the environmental noise.

Communication was kept up for 20 minutes without problems. The SNR app. 10dB so there was not much system reserve for larger distances on that day. The test was very successful because regardless the adverse conditions we reached the double of the nominal communication range.

The test started at 13:30 UT. The target was at the foot of an old tower. Conditions were very bad. The visual range was changed from 15 to 20km so it was sometimes impossible to see the target with the naked eye.

Even using the spotting scope with high magnification no details could be seen. The image shows the target few days before at excellent visual conditions. The mountains in the background are 80km away.

My location was close to a street. There were no remarkable landmarks except some trees. Adjusting the devices to each other took some time. We used powerful LED flashlights in the strobe mode to mark our locations.



Signal strength and SNR were low but we managed to establish communication for 15 minutes. Even during periods of drizzling rain the signal was audible.

5^{th} test $-14\text{km} - 17^{\text{th}}$ September 2013 $-(22^{\circ}\text{C, clear})$

This time we wanted to test at dawn. The visual range was 35km so conditions were very good. The signal strength was excellent with really good SNR. There seemed to be much reserve and we think that a distance of 20..25km was possible at that time.

We also tested a home build light transceiver which is based on simple and cheap electronics and uses a 8/500 photo objective for the transmitter and a 90/1250mm Maksutov telescope for the receiver. It uses a SFH4550 infrared LED (850nm) which has considerably more power than the VQ120 in the JO-4.02.

This resulted in very good signal reports.



The author operating the JO-4.02

$5^{\text{th}} \text{ test} - 14 \text{km} - 17^{\text{th}} \text{ September } 2013 - (22^{\circ}\text{C, clear})$

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Conclusions

The infrared transceiver Zeiss JO-4.02 proved to be very reliable. Even under very bad conditions (scintillations, direct sunlight, dust, drizzling rain, haze) communication was reliable. When it was possible to see the target with binoculars it was always possible to establish two way communication. The optical system is excellent and the operation of the device straightforward.

Concerning its operational parameters it represents the state of the art of the 1980s.

The manufacturer's data for the communication range is very conservative. Under good conditions this range can be considerably bettered. There are reports from another group which achieved 38km with the JO-4.02 at high altitude under perfect visual conditions.

The JO-4.02 was extensively used for covert communication between East Berlin and West Berlin. There are reports that it was also used at the border between East and West Germany.

The narrow beam width and the low transmit power made communication very secure because it was almost impossible to detect transmissions by chance.

ENIGMA2000 thanks Karsten for the chance to print his fine article here

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Julian Moss G4ILO

Some of you may have noticed that the HF propagation Chart featured on the website has disappeared from our website. Sadly, Julian Moss, G4ILO, who maintained the data & code for this feature lost his courageous battle against a brain tumour that he had been fighting since 2011.

The HF Propagation application was one of a number of programs that Julian had written & made available freely for the radio community, in the true spirit of the hobby. Julian was an excellent example of someone who represented all that was good about amateur radio, writing numerous programs for the radio community & making them freely available to all.

More information about Julian can be found in his obituary from the RSGB;

http://rsgb.org/main/blog/news/silent-keys/2014/10/28/julian-moss-g4ilo-24-october-2014/

Scale Monitor

Short annual review - the report from E2Kde and the X06 team

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

2014 is history now. It was the year of the 10th jubileum of E2Kde, the German Branch of ENIGMA2000. In March, exactly 10 years after it was founded, the production of the ARTE contribution was running in my home, which was transmitted in summer on the French-German TV channel (see EN83 and the English translation in the 'Files' section).

In this year, E2Kde delivered our main group with logs, especially by tiNG, Elmar and Karsten, sometimes also by Daniel, our "vice-Kopf" (I didn't log very much this year, but next year will come more). Also some logs of other E2K members were confirmed by E2Kde members. This is the main function of E2Kde from begin on, and we will continue this work in the best sense of E2K. 2014 we also heard about the death of Fritz Nusser in Switzerland, which is also a big lost for E2Kde, where Fritz was member of for some years, before he went back to E2K. Anyway, we look forward to the future of both E2K and E2Kde.

Also the X06 team works fine. We have members of different numbers station groups, and the co-operation is great. We are glad to have important representatives of E2K in our lines like Ian, our digi desk manager, Richard and me from the E2K staff. Ary belongs to our team too, who is also E2K member. Also we are grateful for tiNG's X06 logs, which we get through private email correspondance with me. Our team consists in members from Europe, America and Australia, so that we have a kind of X06 "broadband" logs from several parts of the world. We are still grateful for every log from E2K members, for example through emails via group.

At the end here are the X06 logs for the last 2 months as usual.

X06 Mazielka (1C) logs section

Date IITC

Date

Date	Day	UTC	Freq	Scale	Monitor	Comments
20141102	Sun	1327-1332	16115	215346	Danix/PL	R
20141107	Fri	1013-1017	9158	361245	Arv/NL	New frequency, G
20141111	Tue	0758-0801	13420	534216	Ary	M964
		1025-1029				Alert 2.1 M965
20141111	Tue	1030-1032	17520	612534	Danix	2.2 New frequency, G
20111118	Tue	0800	15989	125643	RNGB	I. p., new freq, missed end time, G
20141120	Thu	0729-0855	20720	123456	Danix, Elmar	X06c, S9+50
20141120	Thu	0749-0750	18523	325614	Danix	Weaker than X06c, new freq, R
20141120	Thu	0855-10xx	23070	123456	Danix	X06c, S9+50 (ending after 1000)
20141120	Thu	1308	19405	352416	Antonio/IT	M966
20141124	Mon	0838-0945	16485	123456	Avare/RU	Very long X06c
20141124	Mon	0945-1001	20720	123456	Avare	X06c (moved from 16485 kHz)
20141124	Mon	1457-1610	6940	123456	Danix	X06c, ending with a long tone
20141125	Tue	0814-0816	13420	534216	Danix	M967
20141125	Tue	1135	18524	325614	Peter	S9 on SDR Twente, new freq, R
20141126	Wed	0806-0824	12126	521634	Danix	R
20141126	Wed	0908-0927	13419	465132	Danix	M968
		0931				Ending after 0950, G
20141126	Wed	0949	12122	165324	Danix	30 secs - on top of CROWD36, G
		1502-1510				M969
20141202	Tue	0814	15989	125643	Danix	Only 30 secs, G
20141202	Tue	1000	15836	165423	Eric/US	New freq, G
		0834-0841				Rarer scale i. p., G
					Antonio/IT	G
		1136-1138				G
		0701-0709				M970
		0712-0715				I. p., G
20141218	Thu	1239	18575	352416		Alert 2.1 M971
20141218	Thu	1245				
					MCO	R
		1203-1214				I. p., M972
		1330				G
		1023-1032			tiNG	I. p., strong QRM, G I. p., M973
		0838-0844			RNGB	I. p., M973
		0855				M974
					Danix, Avare	
					Danix,Avare	
						Alert 2.1 M975
					Danix, Avare	
					Danix, Avare	
						Alert 2.1 G (Serdolik66 at 1621)
					Danix, Avare	
20141226	Fri	1005-1009	15828	256134	RNGB	Alert 2.1 I. p., M977
					RNGB	
		1735				G
20141229	Mon	1231	14650	215346	MCO	G
						8

```
20141231 Wed 1200-1208 18660 621543 Danix Alert 3.1 G
20141231 Wed 1220-1232 15878 621543 Danix 3.2 G
20141231 Wed 1233-1235 12167 621543 Danix 3.3 M979
20141231 Wed 1500-1504 12207 215346 Danix R
```

I wish you a happy new year and all the best. "Auf Wiedersehen" and "Good-bye"

Jochen Schäfer, KopfE2Kde, Numbers- and X06 Teamkopf

Morse Station Roundup

Morse - Number Stations

- UNID We start the logs with a couple of unidentified transmissions using a format very similar to the M01 group of stations. All we can be fairly sure of is that they are of Russian origin, & most likely military possibly connected to the ongoing situation in Ukraine.
- M01 Transmissions continue as normal, (if normal is the right word for this unpredictable station), although suffering from weak reception at times here in the UK which often makes messages difficult to copy & to identify errors sent.

We have received many good logs of the M01b transmissions again this time, although still struggling with the poor strength of these signals.

In addition we have a good report of an M01a transmission on 26 November, along with number of fine M01c intercepts that were all logged within an hour of each other on 04 November - all caught by Jim (JkC). Well done Jim!

- M03 Activity from M03 continues to be steady, although, once again many of the transmissions are very weak both in UK and Western Europe. However, all known scheds are continuing as usual.
- M08a AnonUS gives us his comprehensive round-up & analysis of the output from the Cuban numbers. Thanks to AnonUS for his hard work on this!
- M12 Changes & adjustments continue to be made following on from the small changes first reported in October. Since the daylight saving changeover the rate of change increased, with many of the regular scheds unchanged for many years, appearing one hour later, while several other schedules have changed ID, frequency or have ceased completely.

Several new schedules have been logged over the last few months - congratulations & many thanks to those monitors involved. Of particular note is a 0020/0040/0100z schedule reported by Token (T!). This is not intended for Western European ears where it is completely inaudible. Reception in the USA & via the Hong Kong online tuner is however strong.

Technical problems are still appearing on some transmissions, missing or clipped characters & even restarts being noted during the two-minute call-up sequences..

- We have received a good number of logs this time, with many reports of strong signals on many of the transmissions. In the last newsletter, we reported on several transmissions containing procedural errors in the message format, & this continues as Thomas (tiNG) notes that two messages sent on 11 & 25 November were missing the standard = separators at the start & end of the message. Since the 2nd transmission was a repeat of the previous message, it is likely that the errors contained in the first transmission went uncorrected before re-transmission.
- M23 No reports of any activity from M23 since the brief appearance of the '200' call on 15 July 2014.
- M24 Some interesting consecutive repeat sendings logged by Jim (JkC) during November by Jim (JkC), who then went on to find some even more extensive repeats over a number of frequencies during the first half of December, the first set also being logged by Spectre. Nothing matching these was heard for the remainder of December. Were these test transmissions or priority traffic?
- M94 Token reports that no transmissions have been heard from M94 now since November 2013, so it looks we have lost another CW station. The voice sister station, V24 continues to transmit messages, although these are much reduced when compared to previous activity.
- M97 Continues its irregular pattern of transmissions. Last heard over three consecutive days 08 10 October, the station went silent again until November when two three day transmissions in November were sent, with one three day & one four day noted in mid-December The message is still SD84, in use since August 2013.

Morse Stations - Not Number related

- M51a The daily Morse lessons continue as usual with 5 fig grps & plain text, always a good way to sharpen up your Morse skills, (including á & è)!
- M89 Once again there appear to be fewer changes to the call-signs & frequencies this time round with transmissions remaining steady. Jean-Paul notes some interesting use of three & four simultaneous frequency use, where night day freq sets have been combined.

Beacons & Oddities

An end of year round-up of beacons & oddities with particular interest in the following stations submitted by members:-

- 20 Min Spectre takes a closer look at the 'Twenty Minute Idler' following its rediscovery on 5305kHz. We can also report this station is also back Idler on 4301kHz.
- XSL We have a set of XSL current frequencies logged by Ary (AB) in November.
- Following a discussion a UK amateur radio forum that the 'Squeaky Wheel' was due to a malfunctioning Inskip transmitter, now resolved, it appears the group were referring to another signal, as S32 continues as usual on its known frequency.

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.

Morse - Number Stations

UNID CW

Two reports of stations using the same format - similar to M01 - but using single groups. Most likely Russian military.

UNID 1

Thomas, (tiNG) logged this station on the evening of 04 Nov.

5341 2048 (IP) - 2055z (repeated at 2145z) 04 Nov14 IP...66633 340 53 = 000 tiNG TUE

Thomas writes;

At 2048z I tuned into 5341kHz and caught a transmission of single 5f groups keyed very clean at a moderate speed. Emission was pure CW (A1A – emission designator), very clean in audio. The transmission has been in progress when tuning in. At 2050z I copied (with one ear only as there were some more things for me to do) "340 53 = 9959974924..."

According to my notes I made a few minutes before this was the repetition of the message. The transmission ended at 2055z with three very long daaah daaah daaah. At 2115z I could copy the following:

```
999 340 52 =
                                             340 53 =
                                             99599 74928 91776 21447 35871
99599 74928 91776 21447 35871
60078 90173 10801 92109 95259
                                             60078 90173 10801 92109 95259
82292 42532 22567 29120 28418
                                             82292 42532 22567 29120 28418
74220 96144 17021 31447 74334
                                             74220 96144 17021 31447 74334
94229 56541 83651 67284 74196
                                             94229 56541 83651 67284 74196
45370 23796 93617 10939 87107
                                             45370 23796 93617 10939 87107
04213 64550 66945 20319 10537
                                             04213 64550 66945 20319 10537
23360 76310 69302 01910 79633
                                             23360 76310 69302 01910 79633
83755 02099 87184 60150 39531
                                             83755 02099 87184 60150 39531
77288 55080 66633
                                             77288 55080 66633
= 34053
                                             = 34053
                                                       0 0 0
                                             (long zero daaaah daaaah daaaah)
```

Transmission ended at 2125z. Then silence for 30 seconds. Then a carrier came up for 90 seconds, ended at 2128z. After that the frequency stayed silent before the carrier came up again at 2136z until 2138z when it went off. At 2140z some F1A (emission – frequency keyed) Morse rubbish has been sent. I could not recognize any intelligible kind of letters or numbers. To me it seems the operator was playing with his keyer pad like a little kid.

At 2144z this garbage stopped and at 2145z the same message came up again:

```
999 340 53 =
99599 74928 91776 21447 35871
60078 90173 10801 92109...... etc. At around 2150z the repeat came but I had to turn off my Rx. tiNG
```

UNID 2

Monitored by Jim (JkC) on Thu 06 Nov. Similar to M01, but using single groups. Most likely Russian military.

```
7585 0626 (IP) - 1632z 06 Nov IP ... 91571 = 351 30 000 Strong Each group once JkC THU

I/P .... 66988 08091 72331
95373 46487 96282 16993 23962
90773 32892 40739 81514 91571 = 351 30 000
```

M01/1 XIV MCW, hand (197 sched for Nov - Feb). Will change to M01/2 sched ID 463 for Mar - Apr.

November 2014:

4490	2000z	04 Nov	'197' 785 30 = =	99818	LG 20992	Fair. Note extra groups sent	Spectre	TUE
	2000z	06 Nov	'197' 114 30 = =		LG 01196 = =	NRH in S.E. England. V weak via Twente	BR	THU
	2000z	13 Nov	'197. 274 30 = =	00555	LG 90034	Strong, v.fast. Errors noted in msg & format	AB/BR/HFD	THU
	2000z	18 Nov	'197' 038 30 = =	06511	LG 62534 = =	V.weak, fast. confused spacing grps14 -18	BR	TUE
	2000z	20 Nov	'197' 30 = =	58425	LG = =	Good, fast, Severe XJT QRM throughout	BR	THU
	2000z	25 Nov	'197' 268 30 = = = =	00594	LG 64522 = = =	= = Strong, fast. Good CW. Two errors noted	BR	TUE
5320	1800z	04 Nov	'197'	Extreme (QRM from digital s	station. No useful copy	BR	TUE
	1800z	06 Nov	'197' 302 30 = =	03136	LG 55056 = =	Strong, fast. Excellent CW with no errors	BR/HFD	THU
	18 04 z	11 Nov	'197' 610 30 = =	10846	LG 53207 = =	Weak, med-fast. Excellent CW	BR	TUE
	1800z	13 Nov	'197' 158 30 = =	79176	LG 37006	Strong, v.fast. Errors noted in msg & format	BR	THU
	1800z	18 Nov	'197' 707 30 = =	81729	LG 78842 = =	Good, fast. Excellent CW. No errors	BR	TUE
	1800z	20 Nov	'197' 737 30 = =		LG 40703 = =	Weak, fast. Wideband data sig QRM	BR	THU
	1800z	25 Nov	'197' 334 30 = = = =	60016	LG 11068 = = =	= Strong, fast. Numerous errors noted	BR	TUE
	1800z	27 Nov	'197' 305 30 = =	81258	LG 18306 = =	Fair, fast. Some pauses between groups	BR	THU

0.7002	5465	0700z	02 Nov	'197' 521 30 = =	54275		Good, ends 0710z	HFD/Spectre/tiNG	SUN
1500		0700z	09 Nov	'197' 707 30 = =	92196	LG 49639 = =		BR	SUN
Solid									
1500z 10 Nov 197 339 30 == 65043 LG 60744 == Fair, ends 1510z AB/HFD/Ik/C/Spectre/tiNG SAT 1500z 15 Nov 197 190 30 == 62332LG 63024 == V.weak, v.fast. Some figs sent as periods BR SAT 1500z 29 Nov 197 711 30 == 93015LG 52381 == Fair, med-fast. Excellent CW. No errors BR SAT 1500z 29 Nov 197 711 30 == 93015LG 52381 == Fair, med-fast. Excellent CW. No errors BR SAT 1500z 20 Nov 197 217 30 == 37058LG 12320 == Fair, med-fast. Excellent CW. No errors BR SAT 1500z 20 Nov 197 1813 30 == 49 .6 16 Nov 18 Nov 197 1813 30 == 49 .6 16 Nov 18 Nov 197 18 Nov 197 18 Nov 18 Nov 197 18									
1500z 08 Nov 197 901 30 == 62332 L.G 63024 == V.weak, vf.ast. Some figs sent as periods BR SAT		0700z	30 Nov	19/ 356 30 = =		LG 35125 = =	Fair, v.fast. Strong wideband digital QRM	ВК	SUN
1500z 15 Nov NRH	5810								
1500z 22 Nov									
1500z 29 Nov 197 217 30 =									
Adding 2000z 02 Dec 197 304 30 =									
A490 2000z 02 Dec 197 304 30 == 27129		1500z	29 Nov	197 217 30 = =	3/058	LG 01131 = =	Weak, v.fast. Poor copy due to data QRM	ВК	SAT
2000z	Decemb	er 2014:							
2000z	4490								
2000z									
2000z							1 01		
2000z									
2000z 23 Dec 197' 380 30 = 15582LG 68547 = Fair, slow. With QSB. Only 29 grps? BR TUE									
2000z 30 Dec '197' 785 30 == 73663LG 60530 == Weak, med-fast. Several confused grps BR TUE					•				
1800z 02 Dec 197 581 30 == 50384LG 83016 == Fair, med-fast. Good steady CW BR TUE 1800z 04 Dec 197 178 30 == 12331LG 30198 == Fair, med-fast. Good CW BR THU 1800z 09 Dec 197 807 30 //LG 90613 // Weak, slow. Poor copy BR TUE 1800z 11 Dec 197 254 30 == = 74447LG 19915 == = Fair, fast. Good CW. Grp30 sent once BR THU 1800z 18 Dec 197 733 30 == 96587LG 94523 == Fair 1800z 18 Dec 197 18 30 == 73792LG 07259 == Fair, v.fast. Poor copy at times BR/JkC THU 1800z 23 Dec 197 Very weak signal. No useful copy BR TUE 1800z 30 Dec 197 5050 30 == 07605LG 24775 = V.weak, med-fast. Several confused grps BR TUE 1800z 14 Dec 197 286 30 == 58015LG 02544 == Good, med-fast. Hesitant, but with few errors BR SUN 0700z 21 Dec 197 117 30 == 33968LG 44362 == Fair, fast. Excellent CW. Errors noted BR SUN 0700z 28 Dec 197 273 30 == 10456LG 11079 == Good, fast. Hesitant pause after grp07 BR SUN 0700z 20 Dec 197 116 30 == 66240LG 60563 == Fair, fast. Poor copy. Details via Twente BR SAT 1500z 20 Dec 197 311 30 == 27692LG 60563 == Fair, fast. Poor copy at times BR SAT 1500z 20 Dec 197 311 30 == 27692LG 60563 == Fair, fast. Poor copy at times BR SAT 1500z 27 De 197 116 30 == 21692LG 60563 == Fair, fast. Confusing sending from grp22 BR SAT 1500z 27 De 197 116 30 == 21692LG 6056 == Fair, fast. Confusing sending from grp22 BR SAT 1500z 27 De 197 116 30 == 12692LG 6056 == Fair, fast. Confusing sending from grp22 BR SAT 1500z 27 De 197 116 30 == 12692LG 6056 == Fair, fast. Confusing sending from grp22 BR SAT 1500z 27 Dec 197 311 30 == 30568LG 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000									
1800z		2000z	30 Dec	197 /85 30 = =	/3663	LG 60530 = =	Weak, med-fast. Several confused grps	ВК	TUE
1800z 19 Dec 197' 807 30 //	5320			'197' 581 30 = =					TUE
1800z									
1800z 16 Dec 197' 733 30 =									
1800z 18 Dec '197' 318 30 == 73792LG 07259 == Fair, v.fast. Poor copy at times BR/JkC THU 1800z 23 Dec '197' 5050 30 == 07605LG 24775 = V.weak, med-fast. Several confused grps BR TUE T					74447	LG 19915 = = :	= = Fair, fast. Good CW. Grp30 sent once		
1800z 23 Dec '197' Very weak signal. No useful copy BR TUE 1800z 30 Dec '197' 5050 30 = 07605LG 24775 = V.weak, med-fast. Several confused grps BR TUE TUE 197'									
1800z 30 Dec '197' 5050 30 == 07605LG 24775 = V.weak, med-fast. Several confused grps BR TUE 5465 0700z 07 Dec '197' 937 30 == 85153LG 44362 == Fair, fast. Excellent CW. Errors noted BR SUN 0700z 14 Dec '197' 286 30 == 58015LG 02544 == Good, med-fast. Hesitant, but with few errors BR SUN 0700z 21 Dec '197' 117 30 == 33968LG 54734 == Good, fast. Hesitant pause after grp07 BR SUN 0700z 28 Dec '197' 273 30 == 10456LG 11079 == Good, fast. Excellent CW. No noted errors BR SUN 0700z 13 Dec '197' 511 30 == 27692LG 60563 == Fair, fast. Poor copy. Details via Twente BR SAT 1500z 13 Dec '197' 311 30 == 96587LG 94523 == Weak JkC SAT 1500z 27 De '197' 156 30 == 12692LG .7766 == Fair, fast. Confusing sending from grp22 BR SAT 1500z 1807 (IP) - 1818z 26 Nov (In progress) 876 etc. Strong JkC WED 876 876 876 333 37430 37430 (IP) (1807z - continues) (1810z - continues) 876 876 876 876 333 35009 35009 (1814z - continues)									
5465 0700z 07 Dec '197' 937 30 == 85153LG 44362 == Fair, fast. Excellent CW. Errors noted BR SUN 0700z 14 Dec '197' 286 30 == 58015LG 02544 == Good, med-fast. Hesitant, but with few errors BR SUN 0700z 21 Dec '197' 117 30 == 33968LG 54734 == Good, fast. Hesitant pause after grp07 BR SUN 0700z 28 Dec '197' 273 30 == 10456LG 11079 == Good, fast. Excellent CW. No noted errors BR SUN 0700z 28 Dec '197' 116 30 == 66240LG 30107 == Weak, fast. Poor copy. Details via Twente BR SAT 1500z 13 Dec '197' 511 30 == 27692LG 60563 == Fair, fast. Poor copy at times BR SAT 1500z 20 Dec '197' 311 30 == 96587LG 94523 == Weak JkC SAT 1500z 27 De '197' 156 30 == 12692LG .7766 == Fair, fast. Confusing sending from grp22 BR SAT M01a (formerly end of month TXs, now random) M01a (formerly end of month TXs, now random) 4847									
0700z		1800Z	30 Dec	197 5050 30 = =	07605	LG 24775 =	v.weak, med-fast. Several confused grps	ВК	TUE
0700z 21 Dec '197' 117 30 == 33968 LG 54734 == Good, fast. Hesitant pause after grp07 BR SUN 5810 1500z 06 Dec '197' 116 30 == 66240 LG 30107 == Weak, fast. Poor copy. Details via Twente BR SAT 1500z 13 Dec '197' 511 30 == 27692 LG 60563 == Fair, fast. Poor copy. Details via Twente BR SAT 1500z 20 Dec '197' 311 30 == 96587 LG 94523 == Weak Weak JkC SAT 1500z 27 De '197' 156 30 == 12692 LG . 7766 == Fair, fast. Confusing sending from grp22 BR SAT M01a (formerly end of month TXs, now random) WED 876 876 876 833 37430 37430 (IP) (1807z - continues) 876 876 876 876 876 876 876 876 876 876 876 876 873 35009 (1810z - continues) (1810z - continues) (1814z - continues) (1814z - continues) (1814z - continues) (1814z - continues)	5465								
0700z 28 Dec '197' 273 30 == 10456 LG 11079 == Good, fast. Excellent CW. No noted errors BR SUN 5810 1500z 06 Dec '197' 116 30 == 66240 LG 30107 == Weak, fast. Poor copy. Details via Twente BR SAT 1500z 13 Dec '197' 511 30 == 27692 LG 60563 == Fair, fast. Poor copy at times BR SAT 1500z 20 Dec '197' 311 30 == 96587 LG 94523 == Weak Weak JkC SAT 1500z 27 De '197' 156 30 == 12692 LG . 7766 == Fair, fast. Confusing sending from grp22 BR SAT M01a (formerly end of month TXs, now random) WED 876 876 876 333 37430 37430 (IP) (1807z - continues) 876 876 876 876 876 333 35009 (1810z - continues) 876 876 876 876 876 333 35009 (1814z - continues)									
5810 1500z 06 Dec '197' 116 30 == 66240 LG 30107 == Weak, fast. Poor copy. Details via Twente BR SAT 1500z 13 Dec '197' 511 30 == 27692 LG 60563 == Fair, fast. Poor copy at times BR SAT 1500z 20 Dec '197' 311 30 == 96587 LG 94523 == Weak JkC SAT 1500z 27 De '197' 156 30 == 12692 LG . 7766 == Fair, fast. Confusing sending from grp22 BR SAT M01a (formerly end of month TXs, now random) 4847 1807 (IP) - 1818z 26 Nov (In progress) 876 etc. Strong JkC WED 876 876 876 833 37430 37430 (IP) (1807z - continues) 876 876 876 876 876 876 876 333 35009 35009 (1810z - continues) (1814z - continues)									
1500z 13 Dec '197' 511 30 == 27692LG 60563 == Fair, fast. Poor copy at times BR JkC SAT 1500z 20 Dec '197' 311 30 == 96587LG 94523 == Weak JkC SAT 1500z 27 De '197' 156 30 == 12692LG .7766 == Fair, fast. Confusing sending from grp22 BR SAT M01a (formerly end of month TXs, now random) 4847		0700z	28 Dec	197 2/3 30 = =	10456	LG 110/9 = =	Good, fast. Excellent CW. No noted errors	ВК	SUN
1500z 20 Dec '197' 311 30 == 96587LG 94523 == Weak JkC SAT 1500z 27 De '197' 156 30 == 12692LG . 7766 == Fair, fast. Confusing sending from grp22 BR SAT M01a (formerly end of month TXs, now random) 4847	5810								
1500z 27 De '197' 156 30 = 12692LG . 7766 = Fair, fast. Confusing sending from grp22 BR SAT M01a (formerly end of month TXs, now random) 4847									
M01a (formerly end of month TXs, now random) 4847 1807 (IP) - 1818z 26 Nov (In progress) 876 etc. Strong JkC WED 876 876 876 876 876 333 37430 37430 876 876 876 876 876 876 333 37937 37937 (1810z - continues) 876 876 876 876 876 333 35009 35009 (1814z - continues) (1814z - continues)									
4847 1807 (IP) - 1818z 26 Nov (In progress) 876 etc. Strong JkC WED 876 876 876 876 333 37430 37430 (IP) (1807z - continues) 876 876 876 876 333 37937 37937 (1810z - continues) 876 876 876 876 333 35009 35009 (1814z - continues)		1500z	27 De	'197' 156 30 = =	12692	LG . 7766 = =	Fair, fast. Confusing sending from grp22	BR	SAT
876 876 876 333 37430 37430 (IP) (1807z - continues) 876 876 876 876 333 37937 37937 (1810z - continues) 876 876 876 876 333 35009 35009 (1814z - continues)	<u>M01a</u> (1	formerly en	d of month	TXs, now random)					
876 876 876 333 37937 37937 (1810z - continues) 876 876 876 333 35009 35009 (1814z - continues)	4847		1807 (IP)) - 1818z 26 Nov	(In progres	ss) 876 etc.	Strong	JkC	WED
876 876 876 333 35009 35009 (1814z - continues)			876 876	876 333 37430 3743	0 (IP)	(1807z - continue	es)		
						(1810z - continu	es)		
876 876 876 000 (hand sent - 1818z)					9	`	*		
			876 876	876 000		(hand sent - 1818	(z)		

<u>M01b</u>

November	2014:

2405//3180	2110z	14 Nov	'610' 273/86 = 80958	HFD	FRI
2426//3205	2015 - 1953z	03 Nov	'375' 273 86 = 80958 12800 = 273 86 000 Weak//Very weak	HFD/JkC	MON
2436//3520	1910 - 1947z	03 Nov	'853' 273 86 = 80958 12800 = 273 86 000 Weak//Very weak	HFD/JkC	MON
3160	2042z	06 Nov	'382' Weak (2485kHz not heard)	HFD	THU
3197	2002z	14 Nov	'866' 273/86 = 80958 (2653kHz not heard)	HFD	FRI
3520	1910 - 1947z	17 Nov	'853' 273 86 = 80958 12800 = 273 86 000 Good	tiNG	MON
3545	1932z 1932z	06 Nov 13 Nov	'910' 36 = 70958 (2466kHz not heard) '910' 273 86 = 80958 80958 23776 23776 71873 71873	HFD AB	THU THU
December 20	<u> 114:</u>				
2405//3180	2110 - 2126z	19 Dec	'610' 567 32 = 40707 96508 = 567 32 000 Weak//Weak	JkC	FRI
2470//3545	1932 - 1948	18 Dec	'910' $567\ 32 = 40707\ \dots\ 96508 = 567\ 32\ 000\ $ Fair/Fair	JkC	THU
2485//3195	2042 - 2058z	18 Dec	'382' 567 32 = 40707 96508 = 567 32 000 Fair//Fair	JkC	THU

M01b 3520kHz 1910z 17 Nov14 853 (R4m) 273 273 86 86 = = 80958 23786 71873 01357 98997 38803 83070 63256 78937 20290 35512 21867 04882 11015 12509 65224 29079 00153 73753 02573 98552 28363 65943 32965 54592 88987 19385 60427 19516 18306 87026 99809 79535 25541 99530 75941 22062 55820 42766 81463 90643 61116 53905 76203 78189 85401 89994 11214 60246 78092 30040 10224 50828 52768 00903 73622 47231 24825 08539 08491 96850 69335 98171 86096 87578 59304 21085 85333 82443 75909 85840 00599 58718 19955 90664 79571 71281 89489 27410 60463 34657 18304 86267 01371 02323 12800 = = 273 273 86 86 000 Courtesy tiNG

M01b 2470kHz 1932z 18 Dec14

910 (R4m) 567 567 32 32 = =

40707 30857 33154 31790 46358
14235 40049 61150 87455 74154
84094 11028 43754 93241 36363
77576 26497 84056 52471 87645
65087 99994 60417 69799 41720
93476 25598 36923 80747 46813
19021 96508 = =

567 567 32 32 000 Courtesy JkC

<u>M01c</u>

Jim (JkC) managed to find this pair of M01c transmissions, first on 9411kHz then immediately followed by 9051kHz....

9411	0533 (IP) - 0538z	Auto-sent	JkC	TUE
	751 751 751 94945 94945 (continues) 751 751 751 95645 95645 (0535z) (silent - 0538z) (monitored until 0600z- nil)			
9051	0540 (IP) - 0548z	Auto-sent	JkC	TUE
	216 216 216 63667 63667 (R2) 216 216 216 66092 66092 (0541z) (continues) 000 (hand sent) (0548z) (silent)			
and the	n nearly one hour later this pair, first on 10233kHz fo	llowed by a further transmission on 9447kHz.		
10233	0626 (IP) - 0630z	Hand sent	JkC	TUE
	354 354 354 73850 73850 354 354 354 74860 74860 (0627z) (continues) (silent - 0630z) (monitored until 0645z- nil)			
9447	0636 (IP) - 0542z	Hand sent	JkC	TUE

M03 III ICW, some CW

143 143 143 86027 86027 (continues) (silent - 0642z) (monitored until 0650z- nil)

November 2014:

er 2014:				
1320 - 1338z 1320 - 1338z 1320 - 1323z 1320 - 1323z 1320 - 1323z	03 Nov 05 Nov 10 Nov 12 Nov 17 Nov	540/36 = 30466 $7707708299 = 000$ Weak $540/36 = 30466$ $7707708299 = 000$ Weak $543/00 = 000$ Fair $543/00 = 000$ Fair $543/00 = 000$ Fair $543/00 = 000$ Fair	Spectre Spectre HFD/Spectre Spectre Spectre	MON WED MON WED MON
1320 - 1323z	19 Nov	543/00 = 000 Fair	AB/Spectre	WED
1320 - 1323z 1320 - 1323z 1320 - 1323z 1320 - 1323z 1320 - 1323z 1320 - 1323z 1320 - 1323z	02 Nov 06 Nov 09 Nov 13 Nov 16 Nov 20 Nov 23 Nov	437/00 R3m = = 0 0 0 Weak/Good 437/00 = = 0 0 0 Fair 437/00 = = 0 0 0 Fair 434/34 = 14410 6040058343 = = 000 Fair 434/34 R3m = = 14410 60400 60119 58343 = = 000 Fair/Good 437/00 = 0 0 0 Fair 437/00 R3m = = 000 Good	HFD/JkC/Spectre/tiNG Spectre Spectre Spectre Spectre/tiNG Spectre tiNG	SUN THU SUN THU SUN THU SUN
1535 - 1538z 1535 - 1553z 1535 - 1553z	01 Nov 04 Nov 08 Nov 11 Nov 15 Nov 18 Nov 22 Nov 25 Nov 29 Nov	798/00 = 0 0 0 Fair 798/00 = 000 Fair 798/00 = 0 0 0 Fair 798/00 = 0 0 0 Fair 798/00 R3m = 0 0 0 Fair/Strong 798/00 R3m = 0 0 0 Fair/Strong 798/00 R3m = 000 Fair/Strong 795/38 R3m = 39473 55927 67613 61365 = 0 0 0 Strong 795/38 R3m = 39473 55927	Spectre HFD/IkC/Spectre Spectre Spectre Spectre/tiNG Spectre Spectre/tiNG BR/tiNG BR	SAT TUE SAT TUE SAT TUE SAT TUE SAT
1420 - 1423z 1420 - 1423z 1420 - 1423z 1420 - 1423 1420 - 1423z 1420 - 1423z	02 Nov 07 Nov 09 Nov 14 Nov 16 Nov 23 Nov	879/00 R3m = = 0 0 0 Strong/Fair/Good 879/00 = = 0 0 0 Fair 879/00 = = 0 0 0 Fair 879/00 = = 0 0 0 Fair 879/00 R3m = = 000 Good 879/00 R3m = = 000 Fair	HFD/JkC/Spectre/tiNG Spectre Spectre Spectre Spectre/tiNG tiNG	SUN FRI SUN FRI SUN SUN
	1320 - 1338z 1320 - 1338z 1320 - 1323z 1320 - 1323z 1355 - 1538z 1535 - 1538z 1535 - 1538z 1535 - 1538z 1535 - 1538z 1535 - 1538z 1535 - 1553z 1535 - 1553z 1420 - 1423z 1420 - 1423z 1420 - 1423z 1420 - 1423z 1420 - 1423z	1320 - 1338z	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1320 - 1338z

M03 4505kHz 1320z 05 Nov14 540/36 (R2m) = = 30466 77077 23114 59152 98569 46151 26573 44719 12067 86206 33830 37831 12050 43353 42734 28469 44934 74563 18326 01439 00276 80844 38619 48665 80609 35860 78118 90332 72791 52797 96338 57382 41192 29300 04011 08299 = = 540/36 (single group repeat) = 000 Courtesy Spectre

```
M03 4828kHz 1320z 13 Nov14

434/34 (R2m) = =

14410 60400 45219 98284 81218

74113 93654 54042 10809 97389

83753 44564 45533 08416 93564

79050 40338 31302 45663 01623

88746 27729 09174 79243 47622

81129 56232 35181 22354 93325

82192 97479 60119 58343 ==

434/34 (single group repeat) = 000

Courtesy Spectre
```

M03	5358kl	Hz 15	5350z	25 Nov	14
795/38	(R2m)	= =			
39473	55927	55426	27300	58814	
22841	20182	26101	80446	13580	
10392	48911	81242	95405	44152	
98355	63287	62977	01741	14311	
91831	57397	80160	94163	68222	
66217	87486	54014	89189	37873	
40718	26333	21055	23004	20727	
17747	67613	61365	==		
795/38	(single	e group	repeat)	= 000	
			Courte	sy	BR

December 2014:

4505	1320 - 1323z	01 Dec	543/00 = 000 Fair	Spectre	MON
	1320 - 1323z	03 Dec	543/00 = 000 Fair	Spectre	WED
	1320 - 1323z	08 Dec	543/00 (R3m) = 000 V.weak	BR	MON
	1320 - 1323z	10 Dec	543/00 (R3m) = 000 V.weak	BR	WED
	1320 - 1323z	15 Dec	543/00 = 000 Weak	AB/HFD/JkC	MON
	1320 - 1323z	17 Dec	543/00 (R3m) = 000 V.weak	BR	WED
	1320 - 1323z	22 Dec	540/33 R3m = = 27967 21510 5FGs V.weak	AB/BR	MON
	1320	24 Dec	$540/33 \text{ R3m} = 27967 \dots \text{ rest unworkable}$ Very weak	JkC	WED
4828	1320 - 1323z	07 Dec	437/00 = 000 Fair	Spectre	SUN
	1320 - 1338z	11 Dec	$438/36 = 81598 \dots 97768 = 000$ Very Weak/Fair	Spectre/JkC	THU
	1320 - 1338z	14 Dec	$438/36 = 81598 \dots 97768 = 000$ Fair	Spectre	SUN
	1320 - 1323z	18 Dec	437/00 = 000 Very Weak	JkC	THU
	1320 - 1323z	29 Dec	437/00 (R3m) = 000 Very weak (logged via Twente SRR)	BR	SUN
5358	1535 - 1538z	02 Dec	798/00 = 000 Fair	Spectre	TUE
	15351538z	06 Dec	798/00 = 0.00 Fair	Spectre	SAT
	1535 - 1553z	09 Dec	$795/38 = 83610 \dots 45453 = 000$ Fair	Spectre	TUE
	1535 - 1553z	13 Dec	$795/38 = 83610 \dots 45453 = 000$ Fair	Spectre	SAT
	1535 - 1538z	16 Dec	798/00 = 000 Strong	JkC	TUE
	1535 - 1538z	20 Dec	798/00 = 000 Fair	JkC	SAT
	1535 - 1538z	28 Dec	798/00 (R3m) = 000 Strong	BR	SAT
	1535 - 1538z	30 Dec	798/00 = 000 Strong (VVV at 1531z)	AB/JkC	TUE
13911	1420 - 1423z	12 Dec	879/00 = = 0 0 0 Fair	Spectre	FRI
	1420 - 1423z	14 Dec	879/00 = 0.00 Fair	Spectre	SUN
	1420 - 1423z	19 Dec	879/00 = 000 Fair	AB/JkC	FRI
	1420 - 1423z	21 Dec	879/00 = 000 Fair	JkC	SUN
	1420 - 1423z	29 Dec	879/00 (R3m) = 000 Good	BR	SUN
M03c (S	Stutter groups)		M03d M03e		
<u>M03c</u> (S	Stutter groups)		<u>M03d</u> <u>M03e</u>		

M08a XVIII ICW / CW, some MCW

AnonUS sends us his regular run-down on the Cuban activity from M08a.:-

M08a continued in the usual time slots and frequencies. A few errors crept in, mostly with HM01 appearing on top of the Morse transmissions in the 2300z slot.

No reports

On 08 November two of the schedules had a voice repeating "Uno" 100 times followed by a slight pause then repeated.

No reports

On 23 December fast Morse normally associated with the 2300z slot was heard at 1400z. At 2300z the same call-ups were sent with the expected fast Morse so this looks like operator error. Otherwise, noisy carriers are quite often heard with no Morse transmitted.

November 2014:

No reports

7554 20	000z 03	Nov	[44451 56781 60112]		AnonUS	MON
20	000z 04	Nov	[22421 35842 48272]		AnonUS	TUE
20	000z 06	Nov	[01482 14711 37141]		AnonUS	THU
20	000z 08	3 Nov	"Uno" R100 slight paus	e then repeat continued for at least 5 minutes. Morse 18262 heard once	AnonUS	SAT
20	000z 09	Nov	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SUN
20	000z 10	Nov	[]	Carrier only.	AnonUS	MON
20	000z 11	Nov	[73341 86671 00002]		AnonUS	TUE
20	000z 12	Nov	[88771 00511 13842]		AnonUS	WED
20	000z 14	Nov	[????? ????? ?????]	Came up in progress at 2002z no call-ups	AnonUS	FRI
20	000z 15	Nov	[35022]		AnonUS	SAT
20	000z 17	Nov Nov	[]	Came up in progress at 2002z, no call-ups	AnonUS	MON

	2000z	18 Nov	[71401 04732 17151]		AnonUS	TUE
	2000z	20 Nov	[06141 10362 23701]		AnonUS	THU
	2000z	23 Nov	[18262 22501 35022] Usual weeken	d call-ups	AnonUS	SUN
	2000z	25 Nov	[47532 51851 74282]	·	AnonUS	TUE
	2000z	27 Nov	[16541 20872 33311]		AnonUS	THU
	2000z	28 Nov	[34502 56232 60551]		AnonUS	FRI
			. ,	1 11		
	2000z	29 Nov	[18262 22501 35022] Usual weeken	•	AnonUS	SAT
	2000z	30 Nov	[22501 35022] Up late in pro	gress. Appears to be usual weekend call-ups	AnonUS	SUN
8009	2300z	10 Nov	[73412 86741 10162]		AnonUS	MON
	2300z	12 Nov	[48022 50352 65771]		AnonUS	WED
	2300z	15 Nov	[18262 22501 35022] Started with H	HM01 call-ups 67507 22746 53239 38226 52440 43688	AnonUS	SAT
		Note thes	are call-ups from 12 Nov except for ca	all 5 52440 which was 36418 on that date note that position	5 the following day	was 52441!
	2300z	17 Nov	[32681 43331 57351] HM01 also au	idible on this frequency	AnonUS	MON
	2300z	26 Nov	[67242 71571 84002]	aloo on and nequency	AnonUS	WED
0006	1.400	05.31	FEO.CE 1 0.5.20.2 0.0.5.21.3 Gr. 1	4 14 9		HED
8096	1400z	05 Nov		way through the call-ups	AnonUS	WED
	1400z	06 Nov	[02151 15482 27711]		AnonUS	THU
	1400z	07 Nov	[58012 62331 75662]		AnonUS	FRI
	1400z	08 Nov	"Uno" R100 slight pause then repeat of	continued for at least 5 minutes	AnonUS	SAT
	1400z	10 Nov	[23841 36262 40601]		AnonUS	MON
	1400z	11 Nov	[67212 70631 83012]		AnonUS	TUE
	1400z	12 Nov	[00272 23501 36032]		AnonUS	WED
	1400z	14 Nov	[61361 ?4682 07021]		AnonUS	FRI
	1400z	18 Nov	[88681 02122] Up late missed	d first call-up	AnonUS	TUE
			[13442 26762 38101]	i inst can-up.		
	1400z	21 Nov	•		AnonUS	FRI
	1400z	22 Nov	Carrier Only		AnonUS	SAT
	1400z	23 Nov	-	ator having problems but usual weekend call-ups heard	AnonUS	SUN
	1400z	24 Nov	[63151 74781 07111]		AnonUS	MON
	1400z	25 Nov	Carrier with hum but no Morse		AnonUS	TUE
	1400z	26 Nov	[48442 52861 64202]		AnonUS	WED
	1400z	27 Nov	[08822 ????2 35571] Up late, can d	leduce missing call-up as 12242, 12252, 22242 or 22252	AnonUS	THU
	1400z	28 Nov	[51811 74342 86671]	<i>B</i> , , , , , , , , , , , , , , , , ,	AnonUS	FRI
	1400z	30 Nov	[18262 22501 35022] Usual weeke	nd call-ups	AnonUS	SUN
8135	2300z	06 Nov	[10131 23452 36781]		AnonUS	THU
	2300z	07 Nov	[14452 26881 30211]		AnonUS	FRI
	2300z	11 Nov	[28462 32701 55221]		AnonUS	TUE
	2300z	14 Nov	[31832 44261 57582]		AnonUS	FRI
	2300z	16 Nov	Expected M08a but HM01 in place wi	ith call-ups 67507 and 22746 heard	AnonUS	SUN
	2300z	18 Nov	[20812 33241 46562]		AnonUS	TUE
	2300z	20 Nov	[25732 37251 41582] Simultaneous	with UM01	AnonUS	THU
				with Thylor		
	2300z	21 Nov	[51271 64501 77032]	,	AnonUS	FRI
	2300z	23 Nov	[18262 22501 35022] Usual weeken	•	AnonUS	SUN
	2300z	25 Nov		-ups 2 and 3 to usual weekend call-ups 18262 22501	AnonUS	TUE
	2300z	27 Nov	[20212 33641 46062]		AnonUS	THU
	2300z	28 Nov	Carrier only		AnonUS	FRI
	2300z	30 Nov	[18262 22501 35022] Usual weeken	d call-ups	AnonUS	SUN
Dogomb	oer 2014:					
Decemb	<u>)ei 2014.</u>					
7554	2000z	02 Dec	[16822 20251 32672]		AnonUS	TUE
	2000z	04 Dec	[58882 62311 75642]		AnonUS	THU
	2000z	06 Dec	[18262 22501 35022] Usual weeken	d call-ups	AnonUS	SAT
	2000z	07 Dec	Carrier only	1	AnonUS	SUN
	2000z	09 Dec	[78832 82261 05682]		AnonUS	TUE
	2000z	11 Dec	[02831 13561 28582]		AnonUS	THU
	2000z	16 Dec	[41801 54222 66551]		AnonUS	TUE
	2000z	18 Dec	[07501 11832 24251]		AnonUS	THU
	2000z	21 Dec	[18262 22501 35022] Usual weeken	d call-ups	AnonUS	SUN
	2000z	26 Dec	[34782 46112 50441]		AnonUS	FRI
	2000z	27 Dec	[18262 22501 35022] Usual weeken	d call-ups	AnonUS	SUN
	2000z	30 Dec	[56662 68302 71721]	•	AnonUS	TUE
8009	2300z	03 Dec	[33772 46111 50432]		AnonUS	WED
0009			-	ad call ups		
	2300z	08 Dec	[33501] Up late, miss		AnonUS	MON
	2300z	15 Dec	[71] Up early, mis	ssed most of the call-ups	AnonUS	MON
	2300z	17 Dec	Noisy carrier only		AnonUS	WED
	2300z	23 Dec	[35081 48312 52741] Same call-ups		AnonUS	TUE
		Looks lik	they put the wrong recording on earlie	er. Also TX should be on 8135z. Additionally HM01 audio	o also heard on this f	frequency
	2300z	27 Dec	[18262 22501 35022] Usual weeken	d call-ups. HM01 in the background	AnonUS	SUN
	_200L	200	County worker			2011
				14		

	2300z	29 Dec	[27452 38282 43212]	AnonUS	MON
8096	1400z	01 Dec	[80741 03262 16501]	AnonUS	MON
	1400z	02 Dec	[00872 13212 26531]	AnonUS	TUE
	1400z	03 Dec	[08052 12371 25612]	AnonUS	WED
	1400z	04 Dec	[51251 64572 77812]	AnonUS	THU
	1400z	05 Dec	[23782 36122 50441]	AnonUS	FRI
	1400z	06 Dec	Brief carrier but no Morse	AnonUS	SAT
	1400z	07 Dec	Carrier only	AnonUS	SUN
	1400z	09 Dec	[62801 84531 88551]	AnonUS	TUE
	1400z	10 Dec	[86702 00231 13552]	AnonUS	WED
	1400z	11 Dec	[84101 07532 11851]	AnonUS	THU
	1400z	15 Dec	[73401 86722 00252]	AnonUS	MON
	1400z	16 Dec	[40772 53211 65532]	AnonUS	TUE
	1400z	17 Dec	[30472 51212 64541]	AnonUS	WED
	1400z	18 Dec	[81452 Up late missed 2 call-ups	AnonUS	THU
	1400z	19 Dec	Carrier only	AnonUS	FRI
	1400z	21 Dec	[18262 22501 35022] Usual weekend call-ups	AnonUS	SUN
	1400z	22 Dec	Carrier only	AnonUS	MON
	1400z	23 Dec	[35081 48312 52741] Fast Morse usually associated with the 2300z transmissions	AnonUS	TUE
	1400z	24 Dec	Up late, no call-ups	AnonUS	WED
	1400z	25 Dec	Carrier only	AnonUS	THU
	1400z	26 Dec	[53481 66821 70242]	AnonUS	FRI
	1400z	28 Dec	[18262 22501 35022] In progress at 1400z. Still going at 1505z. TX ends at 1525z mid-mess	•	SUN
		Ends with	h what sounds like SKA but is actually the expected SK with the A(1) of the first call-up as the	recording immediately	restarted.
	1400z	29 Dec	[62011 75331 08662]	AnonUS	MON
	1400z	30 Dec	[23271 34811 47331]	AnonUS	TUE
	1400z	31 Dec	Carrier only	AnonUS	WED
8135	2300z	02 Dec	[48621 60451 73771]	AnonUS	TUE
	2300z	04 Dec	Noisy carrier only	AnonUS	THU
	2300z	05 Dec	[82662 04001 17322]	AnonUS	FRI
	2300z	07 Dec	Carrier only	AnonUS	SUN
	2300z	09 Dec	[25652 38171 42312]	AnonUS	TUE
	2300z	11 Dec	[14811 27232 30661]	AnonUS	THU
	2300z	12 Dec	[47851 51272 64512] Missing second call-up, likely 512(7 or 8)(1 or 2)	AnonUS	FRI
	2300z	16 Dec	[73682 86021 10351]	AnonUS	TUE
	2300z	18 Dec	[22802 35331 58652]	AnonUS	THU
	2300z	19 Dec	Carrier only	AnonUS	FRI
	2300z	25 Dec	[60152 73471 86711] HM01 also audible on this freq	AnonUS	THU
	2300z	30 Dec	[17812 28542 32861]	AnonUS	TUE

Call-up Analysis

Analysis of the sequence of numbers in the call-ups was performed again and the rules previously mentioned seem to hold true. Of interest due to a notebook mishap the second call-up of one transmission was lost on 12 Dec. Using the previously mentioned rules 2 possible options for the missing call-up were deduced. When the missing page turned up the prediction turned out to be correct!

Of note using the sequences was that the jump between the 3rd digits is normally 3 or 4 but at 2300z on 29 Dec it was 7. The following day all 3 transmissions had jumps of 6 between the third digits before things returned to normal. Presumably this is not due to chance. Jumps of 6 or 7 are rare and always occur between the 3rd digits

Sequences between digits in call-ups.

Example. 444515678160112 First digits 456 = 11, Second Digits 460 = 23, Third Digits, 471 = 33, Fourth Digits 581 = 32. Note: Last digit always 1 or 2 so no sequence here. Do not include 9 in the sequence as it rarely if ever appears.

		1
44451 56781 60112 11 23 33 32	13442 26762 38101 11 32 33 23	84101 07532 11851 11 33 43 32
37552 50871 63212 21 23 33 23 V02a	51271 64501 77032 11 33 34 23	02831 13561 28582 11 15 60 32
22421 35842 48272 11 33 42 23	63151 74781 07111 12 13 63 32	14811 27232 30661 11 32 34 23
72071 85302 08631 11 33 33 23	47532 51851 74282 12 33 33 23	47851 51272 64512 11 33 33 23
02151 15482 27711 11 32 33 32	05282 18621 22052 11 33 43 33	73401 86722 00252 11 33 34 23
01482 14711 37141 12 33 33 23	48442 52861 64202 11 32 43 23	40772 53211 65532 11 32 43 32
10131 23452 36781 11 33 33 23	67242 71571 84002 11 33 34 32	41801 54222 66551 11 32 33 23
58012 62331 75662 11 33 33 23	16541 20872 33311 11 33 34 33	73682 86021 10351 23 33 33 33
14452 26881 30211 11 23 43 32	20212 33641 46062 11 33 43 32	30472 51212 64541 21 13 73 33
23841 36262 40601 11 33 34 23	51811 74342 86671 21 32 43 33	07501 11832 24251 11 33 33 32
73412 86741 10162 12 33 33 32	34502 56232 60551 21 23 63 32	22802 35331 58652 12 33 42 32
67212 70631 83062 11 23 43 23	80741 03262 16501 11 33 43 23	35081 48312 52741 11 33 34 22
73341 86671 00002 11 33 33 32	00872 13212 26531 11 33 33 32	60152 73471 86711 11 33 33 23
28462 32701 55221 12 33 34 32	16822 20251 32672 11 32 34 32	53481 66821 70242 11 33 43 32
00272 23501 36032 21 33 34 23	48621 60451 73771 21 13 73 32	34782 46112 50441 11 23 33 23
88771 00511 13842 11 13 73 33	08052 12371 25612 11 33 33 23	62011 75331 08662 12 33 33 23
48022 50352 65771 11 14 34 32	33772 46111 50432 11 33 33 32	27452 38282 43212 11 14 70 32 Note 3rd digit
61361 ?4682 07021 ?? 33 33 23	51251 64572 77812 11 33 33 23	23271 34811 47331 11 13 64 32 Note 3rd digit
31832 44261 57582 11 33 33 32	58882 62311 75642 11 33 43 23	56662 68302 71721 11 22 64 32 Note 3rd digit
32681 43331 57351 11 14 69 42	23782 36122 50441 12 33 33 32	17812 28542 32861 11 13 63 32 Note 3rd digit
88681 02122 ?1 ?3 ?4 ?3	82662 04001 17322 11 23 33 32	35111 48431 51862 11 32 34 23
71401 04732 17151 21 33 33 32	62801 84531 88551 20 24 50 32	41141 54572 67801 11 33 43 32
20812 33241 46562 11 33 33 32	78832 82261 05682 11 33 34 32	
06141 10362 23701 11 33 24 23	25652 38171 42312 11 33 42 23	Courtesy AnonUS
25732 37251 41582 11 23 43 23	86702 00231 13552 11 33 43 32	
	1	L

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.

Changes & adjustments continue to be made. Schedules which for some while now had remained largely static first started to experience small changes in October. Since the daylight saving changeover the rate of change increased, with many of the regular scheds - unchanged for many years, appearing one hour later, while several other schedules have changed ID, frequency or have ceased completely.

November 2014:

Token (T!) found this unusual M12 schedule at the end of November. Firstly, it is unusual for a schedule to be logged at this time in the morning, & secondly it is an unusual set of times for the transmissions, H+20 / H+40 / H+60. Historically, we have noted schedules commencing H, H+10, H+30, H+40 but none starting at H+20, although there is no reason why this slot should not be utilised.

This is Token's account of the finding of the transmissions;

Wednesday, November 26, 2014, at 0040 I tuned into the start of an apparent M12 transmission, on 18576 kHz, ICW. Call-up was 253, at about 8 WPM, and it did not match the digits in the call-up/frequency, at least not for an XX00, XX20, XX40 schedule, but I assumed a possible error. I also assumed there had been a transmission at 0000 and 0020 UTC, but I did not notice them. So for the last several days I have been paying attention at 0000 and 0020 to try and find the other frequencies.

This morning (November 29, 2014) at 0020 UTC on 19276 kHz I ran into the same callup, 253. And this lead into the same message as was sent Wednesday morning. 0040 UTC the message was sent on 18576 kHz, as it was Wednesday. I assumed I had missed the 0000 UTC message. But note the call-up and the two frequencies. Call-up 2_5_3 and frequency 19_2_76 and 18_5_76. This might mean that another transmission was to follow, on a frequency with a 3 in the 100's digit, probably either 17376 or 16376 kHz, so I set a receiver watch on each, just in case. I have never seen M12 use XX20/XX40/XX00 before, but I very seldom hear M12 here, so I am not very familiar with its habits, maybe it would do so in this case. Most of the time I have seen it has been on XX00/XX20/XX40 or XX30/XX50/XX10 times

At 0100 neither of the selected frequencies showed activity, but I noticed a CW signal start up on 16356 kHz, 20 kHz lower than would be suggested by this family of stations habits (call-up sometimes matching third digit of frequency, reuse 10's and 1's digit) would predict. I tuned to it, and sure enough, there was M12, with the same call-up, 253, and the same message.

I might add that bearing of reception and signal conditions closely match the V07 schedule currently in use. The bearing is towards Asiatic Russia or Kamachatka for me, so I suspect either the same source as V07 or in the general area of the V07 source.

M12, ICW, ~8 WPM call-up, ~25 WPM message, ends cut zeros (000 000).

Logs:

M12 18576kHz 0040z 26/11/2014 [253 253 253 1 (R9) 731 127 (R2)] 0050z Strong T! WED

M12 19276kHz 0020z 29/11/2014 [253 253 253 1 (R9) 731 127 (R2)] 0030z Strong T! SAT M12 18576kHz 0040z 29/11/2014 [253 253 253 1 (R9) 731 127 (R2)] 0050z Strong T! SAT

M12 16356kHz 0100z 29/11/2014 [253 253 253 1 (R9) 731 127 (R2)] 0110z Strong T! SAT

Thanks Token!

Pacific M12 Schedule Version 1.0

Chart based on observations Nov 26, 2014 to Dec13, 2014.
Station transmits each Wednesday and Saturday morning, times as listed.
Transmissions are ICW, frequency listed is carrier frequency.

Time UTC	January	February	March	April	May	June	July	August	September	October	November 253	December 548
0020											19276	18576
0040										,	18576	17436
0100											16356	15826

Pacific area observed M12 schedule, Asiatic Russia or Kamchatka possible source based on HFDF and propagation modeling. Western US, Canada, Central America receive a good signal, parts of Asia also.

Propagation modeling and use of down stepping frequencies might suggest US / Canada / Central America as the target area.

				Courtesy Token	
4019	2031 - 2034z	10 Nov	832 000 (Remote tuner Siberia) (Stopped sending – carrier stayed up for a short while then went off the air –	JPL 2034z)	MON
4617/5317/	0530/0550/0610z	03 Nov	638 000 Strong/Fair	HFD/JkC	MON
5429/4629/4029	2200/20/40z 2200/20/40z 2200/20/40z	12 Nov 19 Nov 26 Nov	460 1 460 000 Strong/Strong 460 1 (5697 57) 21350 01303 000 Strong/Strong/Strong	HFD HFD/JkC JkC	WED WED WED
5884/6884/	0730/0750/0810z	20 Nov	888 000	HFD	THU
6913/5829/5072 5829/5072	2000/20/40z 2000/20/40z 2020/40z	03 Nov 06 Nov 13 Nov	658 1 (7892 76) 09051 46834 000 Strong/Strong 658 1 (2134 82) 658 1 (9765 82) 97663 11456 02621 78892 81918 000 000	JkC BR AB	MON THU THU
7637/9137/	0600/20/40z	22 Nov	612 000	HFD	SAT
8047/6802/5788	1800/20/40z 1800/20/40z 1800/20/40z	03 Nov 19 Nov 26 Nov	463 1 (3771 145) 44791 67937 000 Strong/Strong/Strong 463 1 (9696 92) 03906 46024 000 Strong/Strong/Strong 463 1 (7810 87) 32564 23485 000 Strong/Strong/Strong	HFD/JkC JkC JkC	MON WED WED
9162/8062/ 8062	1310/30/50z 1336z (IP) - 1345z	01 Nov 22 Nov	104 000 Fair/Fair (In tfc)89215 37957 000 000 (Remote tuner Siberia)	HFD/JkC JPL	SAT SAT
9176/7931/6904	1900/20/40z 1900/20/40z 1820z	03 Nov 10 Nov 13 Nov	257 1 (9628 120) 61026 01497 000 Strong/Strong/Strong 257 1 (9176 // 6904kHz) 257 1 (3071 98) 52708 15622 48417 54262 76488 000 000	HFD/JkC HFD AB	MON MON THU
10343/9264/8116	1800/20/40z 1930/1950/2010z 1900/20/40z	06 Nov 18 Nov 27 Nov	124 I 124 I 124 I	HFD HFD HFD	THU TUE THU
11435/10598/9327	1700/20/40z 1930/1950/2010z	03 Nov 26 Nov	938 1 (7371 112) 25547 63836 000 Strong/Strong/Strong 938 1 (4173 68) 18114 19373 000 Fair/Fair/Fair	JkC HFD/JkC	MON WED
	1700/20/40z 1740z	13 Nov 20 Nov	725 1 725 1 (8570 107) 45532 11658 45736 00794 98300 68353 000 000	HFD AB	THU THU
13569	1010z	21 Dec	582 000	AB	SUN
15969/17479/	1010/30/50z 1010/30/50z	02 Nov 16 Nov	941 000 941 000 Strong/Strong	HFD/tiNG tiNG	SUN SUN
18576	0040z	26 Nov	253 1 (731 127) Strong	T!	WED
19276/18576/16356	0020/0040/0100z	29 Nov	253 1 (731 127) Strong/Strong/Strong	T!	SAT

December 2014:

The early morning sched, found by Token (T!) at the end of November, continues in December with a new ID & freq set, with the Nov 0040z freq now used for the 0020 transmission. This schedule is NOT audible in the UK or via Twente, but has been monitored in the USA & Hong Kong.

 $M12\ 18576kHz\ 0020z\ 03/12/2014\ [548\ 548\ 548\ 000]\ 0022z\ Strong\ T!\ WED$

M12 17436kHz 0040z 03/12/2014 [548 548 548 000] 0042z Strong T! WED

On Sat 13 Dec Brian (BR) & Jim (JkC) met together on the Hong Kong remote tuner to monitor the sched & successfully found the 3rd freq.

4457/5157/	0530/0550/0610z 0530/0550/0610z 0530/0550/0610z	01 Dec 08 Dec 22 Dec	417 000 Fair/Fair 417 000 Fair/Fair 417 000 Strong/Strong	Spectre HFD/Spectre JkC	MON MON MON
5284/5784/	0730/0750/0810z 0730/0750/0810z	11 Dec 25 Dec	277 000 277 000 Fair/Fair	HFD Spectre	THU THU
5312/4512/4012	2200/20/40z 2200/20/40z 2200/20/40z 2200/20/40z	10 Dec 17 Dec 24 Dec 31 Dec	350 1 (4118 71) 16880 74440 000 Fair/Strong/Strong 350 000 Strong/Strong 350 1 (5336 127) 39362 69607 000 000 2250z Fair 350 000 Strong/Strong	HFD/JkC JkC Spectre JkC	WED WED WED
5784/7584/	0600/20/40z	06 Dec	751 000 Fair/Fair	Spectre	SAT
7741/6841/5784	1310/1330/1410z 1310/1330/1410z	18 Dec 20 Dec	787 1 (4429 161) 43772 36076 000 Fair/Fair/Fair Repeat of 18 Dec	JkC JkC	THU SAT
8047/6802/5788	1800/20/40z 1800/20/40z 1800/20/40z	01 Dec 03 Dec 15 Dec	463 1 (7947 146) 87694 76777 000 000 Fair/Fair/Fair 463 1 (8930 93) 68135 41892 000 000 Fair/Fair/Fair 463 1 (675 225) 10473 91956 000 Strong/Strong/Strong	Spectre Spectre JkC	MON WED MON
9176/7931/6904	1900/20/40z 1900/20/40z 1800/20/40z Problem on 1820z t	01 Dec 15 Dec 17 Dec transmissio	257 1 257 1 (3805 108) 32183 96585 000 Fair/Strong/Strong 257 1 (3253 130) 06919 79698 000 Strong/Strong/Strong n. Stopped after GR 118, briefly went back into call-up, then continued fr	HFD JkC JkC com GR 110	MON MON WED
10343/9264/8116	1900/20/40z 1800/20/40z 1900/20/40z 1930/1950/2010z 1800/20/40z 1900/20/40z 1930/1950/2020z	04 Dec 11 Dec 11 Dec 16 Dec 18 Dec 18 Dec 30 Dec	124 1 124 1 (675 225) 10473 91956 000 Fair/Fair/Fair 124 1 (6215 115) 46209 28280 000 V.Weak/ V.Weak/ V.Weak 124 1 (395 121) 82129 84636 000 Fair/Fair/Fair 124 1 (2975 142) 08974 15596 000 Fair/Fair/Fair 124 1 (9152 120) 21754 70185 000 Fair/Fair/Fair 124 1 (3485 64) 02648 52113 000 Fair/Fair/Fair	HFD JkC/RNGB JkC JkC JkC JkC JkC JkC	THU THU THU TUE THU THU THU
11435/10598/9327	1700/20/40z 1700/20/40z	01 Dec 15 Dec	938 1 (1453 117) 56999 27211 000 000 Fair/Fair/Fair 938 1 (6770 111) 41671 83102 000 Strong/Strong/Strong	AB/HFD/Spectre JkC	MON MON
12205/13559/14728	1100/20/40z	22 Dec	973 1 (4090 146) 81859 97880 000	Gert	MON
13386/12189/11491	1700/20/40z 1700/20/40z	11 Dec 18 Dec	725 1 (7689 108) 16067 56918 000 Weak/Fair/Fair 725 1 (6887 119) 15601 11050 000 Fair/Fair/Fair	AB/JkC JkC	THU THU
13569/14869/16269 14869 13569/14869/	1010/30/50z 1010/30/50z 1030z 1010/30/50z 1010/30/50z 1010/30/501	04 Dec 11 Dec 14 Dec 21 Dec 25 Dec 28 Dec	582 1 (5853 133) 90230 07270 17365 57590 62572 50309 000 000 582 000 582 000 582 000 Strong 582 1 (4833 159) 82517 54680 000 000 Fair/Fair/Fair 582 1 (4833 159) 82517 14571 93924 18774 73265 54680 000 000	AB AB/HFD/RNGB AB AB/tiNG Spectre AB	THU THU SUN SUN THU SUN
18576/17436/15826	0020/0040/0100z 0020/0040/0100z 0020/0040/0100z	03 Dec 06 Dec 13 Dec	548 000 Strong 548 000 NRH S.E. England &Twente. Good/Strong via Hong Kong 548 (567 113) Good/Strong/Strong via Hong Kong	T! BR BR/JkC	WED SAT SAT

M12 12205/13559/14728kHz 1100/1120/1140z 22 Dec14 973 973 973 1 (R2m) 4090 146 4090 146 81859 08846 19350 96370 17137 88573 13686 20080 63456 01243 88969 77203 16709 66142 41316 80981 92592 99004 33308 95690 47618 47224 83729 73723 78657 42207 68332 57934 27134 57095 $51276\ 74916\ 60689\ 43620\ 44366\ 26064\ 65560\ 93225\ 31027\ 24571$ 51839 43283 94086 03369 93783 65985 68898 58748 25933 18889 73580 93796 42142 08976 35999 39501 38625 41628 46277 41620 $25329\ 88805\ 22589\ 42360\ 84099\ 06883\ 83437\ 72534\ 83845\ 43937$ 45481 60347 71153 65302 17659 56162 21948 23385 33447 71726 21574 35317 89956 21612 57867 77471 58329 95245 07938 26802 58373 97813 08158 26414 48434 32904 27052 42211 43837 99024 $42356\ 29000\ 02772\ 32800\ 98668\ 73032\ 77146\ 28691\ 05599\ 94843$ 46905 12267 24192 04118 28045 77218 94997 09817 44005 14647 56509 60825 36832 01487 92227 49860 51415 85383 00063 02582 00399 57942 70352 14805 81833 94725 28659 12070 77680 08983 79615 18194 22560 99857 69829 97880 000 000 Courtesy Gert

Novembe	r 2014:

4636	1820 - 1828z 1820 - 1828z	11 Nov 25 Nov Carrier w	186 (275 020) 51059 2343896823 17105 275 275 020 020 00000* 186 (275 020) 51059 2343896823 17105 275 275 020 020 00000* as already on at 1744z and stayed on until 1831z. Again no = = used to separate	AB/tiNG HFD/tiNG te the message. tiNG	TUE TUE
4761 4762	1920z 1925 - 1933z	12 Nov 26 Nov	748 (621 020) = 44108 748 (621 020) = 44108 82828 621 020 00000 Strong (Repeat of 10 June 2014 msg with different ID/DK)	HFD HFD/JkC	WED WED
5432	0800z	22 Nov	171	HFD	SAT
5374	1700z	21 Nov	382 00000	AB/HFD	FRI
5560	0900 - 0908z	22 Nov	171 (823 020) 35091 4791995438 823 823 020 020 00000 Fair	tiNG	SAT
13945	1305 (IP) - 1345z	12 Nov	(In progress) Strong	HFD	WED
18041	0500 - 0514z	06 Nov	952 (808 55) = 67725 12139 Fair via remote tuner, Hong Kong	JkC	THU

^{*} tiNG reports that these transmissions omitted the = = separators at start & end of the message.

Decem	ber	201	4:

463	66	1820 - 1829z	09 Dec	186 (275 020) 51059 17105 275 020 00000 Fair	Spectre	TUE
476	51	1920 - 1913z	10 Dec	748 (621 020) 44108 82828 621 020 00000 Fair (Repeat of 10 Jun14)	JkC	WED
497	75	1800 - 1804z 1800 - 1804z	05 Dec 19 Dec	382 00000 Fair 382 00000 Strong	HFD/Spectre AB/JkC	FRI FRI
524	.0	2300 - 2309z 2300 - 2308z	07 Dec 21 Dec	376 (524 020) 93295 23051 524 020 00000 Fair 376 (524 020) 93295 23051 524 020 00000 Strong BC QRM1	Spectre JkC	SUN SUN
537	/4	1700 - 1704z 1700 - 1704z	05 Dec 19 Dec	382 00000 Fair 382 00000 Strong	Spectre JkC	FRI FRI
556	51	0900z	20 Dec	171 (Weak)	HFD	SAT
582	2.5	0000 - 0008z 0000 - 0008z	15 Dec 22 Dec	376 (524 020) 93295 23051 524 020 00000 Strong 376 (524 020) 93295 23051 524 020 00000 Strong	JkC JkC	MON MON
1804	1	0500 - 0513z	09 Dec	952 (406 55) 28567 74320 = Fair Broome (W. Aust.) remote tuner	JkC	TUE

M14 5560kHz 0900z 22 Nov 14	
171 (R4m) 823 823 020 020 = =	
35091 47919 71061 47137 49053 91535 76828 32502 58546 23102 10871 68236 75764 90152 17615 80721 38962 04169 25634 95438 = =	
823 823 020 020 00000 Courtesy tiNG	

M14 4636kHz	1820z	09 Dec 14
186 (R4m) 275	275 020	020
51059 23438 7616 26295 92184 4462 95578 17869 7579 32456 21369 8427	25 57552 94 68461	67851 80694
275 275 020 020		rtesy Spectre
	Cou	незу зресие

M14	45825kHz 0000z	15 Dec14
376 (I	R4m) 524 524 020 (020
	26704 14838 56438 87610 83817 86096	
	62701 76747 74420 10736 13238 26365	
524 52	24 020 020 00000	
	Court	tesy JkC

 ${\underline{M14a}}$ (two message variant) No reports

<u>M23</u> O ICW

No reports - Last heard on 15 July with a '200' call.

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

November 2014:

Brian (BR) & Jean-Paul (JPL) managed to catch the last minute each of two transmissions of what, was presumably a 2100 / 2130z sched on 6789 / 5126kHz....

6789	2115 (IP) - 2116z	17 Nov	(426 108)	Only last minute of transmission	monitored Good	BR	MON
		98126	20855 81951	86000 87604 73300 = = 426 42	26 108 108 00000		
5126	2144 (IP) - 2145z	17 Nov	(426 108)	(IP - Extremely strong signal)	(Remote tuner Siberia)	JPL	MON
	(Machine sent – extr	remely fast)	98126 20	845 81961 96000 87604 73300	BT BT 426 426 108 108	TTTTT (21457 - Silent	.)

^{.... &}amp; Jim (JkC) logged this interesting & unusual sequence of M24 repeats;

13945 11073	1304 (IP) - 1316z 1330 - 1346z	19 Nov 19 Nov	(I/P) 57683 = 874 91 00000 215 (874 91) = 81181 57683 = 874 91 00000	Strong Strong	JkC JkC	WED WED
12207 9946	1406 (IP) - 1416z 1430 - 1446z	19 Nov 19 Nov	(I/P) 57683 = 874 91 00000 215 (874 91) = 81181 57683 = 874 91 00000	Strong Strong	JkC JkC	WED WED
Other log	s;					
8167	1800 - 1818z	24 Nov	262 (493 110) = = 23732 31024 45948 = = 00	0000 Good	BR/RNGB	MON
9946	1430 - 1445z	26 Nov	215 (930 86) = 07340 77126 = 930 86 00000	Strong	JkC	WED

M24 11073kHz 1330z 19 Nov 14 (all groups sent twice)					
215 (R3) 874 874 91 91 = =					
81181 74906 04051 79531 66608 79669 04976 14529 17584 35090 87817 72589 02827 14423 42174 93281 53064 10737 05528 99725 37492 12953 12208 87189 25486 08163 73714 68415 32008 02392 51315 80379 70134 77022 06870 82161 59159 23035 42813 98611 61700 20276 67240 89516 48234 53930 45022 48925 12530 85391					
20893 64356 86383 19710 25451 90537 27114 36814 00009 17403 76247 78684 01223 36996 12830 09675 71447 39001 49814 92167 85755 .9570 46935 44746 11546 73137 38543 75072 41693 01909 99805 04662 87171 22717 99729 27741 57684 93785 92031 48572 57683 = =					
874 874 91 91 00000 Courtesy JkC					

M24	10423/	9946/81	167kHz	1400	/1430/1	500z	03 Dec	14	
262 (R	3) 918	8 918 7	5 75 =	=					
85088	38674	44245	88264	53965	59340	39833	81682	69441	33624
70661	07410	28549	44315	13853	41851	42295	66346	18545	78131
88485	24664	64039	60586	02934	44006	77421	16615	57476	32759
21594	40587	98254	68082	89653	09486	42675	74492	66556	34976
58511	13086	44000	81585	73558	23606	99477	05693	89305	86514
75415	94991	97038	97281	19356	13146	19829	70066	71106	79292
28834	12978	07808	37110	07355	42104	82836	93112	61083	26510
19506	28876	97980	81359	45481	= =				
918 91	8 75 75	5 0000	0				Co	urtesy S	Spectre

December 2014:

Following on from his interesting logging of M24 multiple repeats on 19 November , Jim (JkC) repeated his success on 03 December with this series of transmissions, also logged by Spectre...

10423 9946 8167	1400 - 1413z 1430 - 1443z 1500 - 1513z	03 Dec 03 Dec 03 Dec	262 (918 75) = 85088 45481 = 918 75 00000 262 (918 75) = 85088 45481 = 918 75 00000 262 (918 75) = 85088 45481 = 918 75 00000	Strong/Fair Strong Strong	JkC/Spectre JkC/Spectre JkC/Spectre	WED WED WED
& again	on 10 December					
11073	1330 - 1344z	10 Dec	262 (405 78) = 10192 61051 = 405 78 00000	Strong	JkC	WED
10423	1400 - 1414z	10 Dec	262 (405 78) = 10192 61051 = 405 78 00000	Strong	JkC	WED
9946	1430 - 1444z	10 Dec	262 (405 78) = 10192 61051 = 405 78 00000	Strong	JkC	WED
8167	1500 - 1514z	10 Dec	262 (405 78) = 10192 61051 = 405 78 00000	Strong	JkC	WED

M24a (two message variant)

No reports

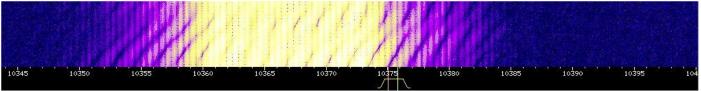
M94 CW, MCW, partner station to V24 Virtually unheard in Europe so we rely on our American monitors

Although V24 continues to send messages, albeit on a much reduced level to those previously logged, Token (T!) reports that M94 has not now been seen since November of 2013. It seems that another CW station has now ceased transmissions.

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 quite variable - though reliably usable at present.

10375 10375 10375	1500 - 1522z 1500 - 1522z 1500 - 1522z	19 Nov 20 Nov 21 Nov	SD84 SN58 SD84 SN58 SD84 SN58	Good Sig into S.E. England Good Sig into S.E. England Strong QRM UK. Strong via GTuners, Hong Kong	BR BR BR	WED THU FRI
10375 10375	1500 - 1522z 1500 - 1522z	24 Nov 25 Nov	SD84 SN58 SD84 SN58	Good Sig into S.E. England Fair Sig into S.E. England	BR BR	WED THU
10375	1500 - 1522z	26 Nov	SD84 SN58	Fair Sig into S.E. England	BR	FRI
10375	1500 - 1522z	09 Dec	SD84 SN58	Fair Sig into S.E. England	BR	TUE
10375	1500 - 1522z	10 Dec	SD84 SN58	Fair Sig into S.E. England	BR	WED
10375	1500 - 1522z	11 Dec	SD84 SN58	Strong QRM UK. Strong via GTuners, Hong Kong	BR	THU
10375	1501 - 1522z	15 Dec	SD84 SN58	Good Sig into S.E. England	BR	MON
10375	1501 - 1522z	16 Dec	SD84 SN58	Fair Sig into S.E. England	BR	TUE
10375	1501 - 1522z	17 Dec	SD84 SN58	Fair Sig into S.E. England	BR	WED
10375	1501 - 1522z	18 Dec	SD84 SN58	Fair Sig into S.E. England	BR	THU



M97 swamped under an exceptionally strong wideband signal on Fri 21 Nov. as viewed via Twente online SDR, which was also present in the UK. Occasional snatches of the CW could be heard, but msg was also monitored via GlobalTuners, Hong Kong node to confirm details. *Courtesy BR*

Morse Stations - Not Number Related

M51 XIX

5453 1910 (IP) - 2240z + 03 Nov NR 24 N 03 20:18:21 2014 BT etc. (5 ltr grps). Under RAF Volmet on 5450kHz BR MON

M51a (FAV22) Daily Mon - Fri, Sun & some Sats. See NL 72 for details

3881/6825
1230 - 1310z 08 Dec Lundi-Lecon 11-1/1 Codé 11-1/2 Clair, 11-1/3 Codé, 11-1/4 Clair (420 grps/hr) BR MON

1230 - 1310z	08 Dec	Lundi-Lecon	11-1/1 Codé	11-1/2 Clair,	11-1/3 Codé,	11-1/4 Clair (420 grps/hr)	BR	MON
1230 - 1300z	09 Dec	Mardi-Lecon	12-1/1 Codé,	12-1/2 Clair,	12-1/3 Codé,	12-1/4 Clair (600 grps/hr)	BR	TUE
1230 - 1304z	10 Dec	Mercredi-Lecon	13-1/1 Codé,	13-1/2 Clair,	13-1/3 Codé,	13-1/4 Clair (720 grps/hr)	BR	WED
1230 - 1255z	11 Dec	Jeudi-Lecon	14-1/1 Codé,	14-1/2 Clair,	14-1/3 Codé,	14-1/4 Clair (840 grps/hr)	BR	THU
1230 - 1303z	12 Dec	Vendredi-Lecon	15-1/1 Codé	15-1/2 Clair,	15-1/3 Codé,	15-1/4 Clair (960 grps/hr)	BR	FRI

<u>M89</u> O

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

Operator Chat from M89

Op. chat & traffic	reported on the	e following freqs				
3400	4092	5145	6666	7798	8055	10191
3461	4188	5197	6674	7825	8067	
3530	4243	5220	6988		8073	
3595	4247	5225			8086	
3734	4416	5247			8193	
3748	4444	5380			8888	
3758	4578	5390				
3774	4606	5555				
3779	4625	5561				
3781	4631	5562				
3878		5685				
		5700				
		5837				

New Scheds for Nov/Dec 2014: From logs submitted from JPL

 3777/4532/6793/8060
 On all four // frequencies
 First heard 05 Nov
 V M8JF (x3) DE RIS9 (x2)

 3777/6793/8060
 On three // freqs
 First heard 23 Nov
 V M8JF (x3) DE RIS9 (x2)

 8060//9131
 New frequency for this round slip.
 First heard 22 Nov
 V GKLO (x3) DE TYUI (x2)

Chart of M89 Freq & Call signs heard in Nov/Dec 2014 New Scheds shown in Bold Type

Freq in KHz	Call Slip
3300//NRH	V MW3D (x3) DE 2SLC (x2)
3642//NRH	V DKG6 (x3) DE 3A7D (x2)
3642//7602	V DKG6 (x3) DE 3A7D (x2)
3777//4532	V M8JF (x3) DE RIS9 (x2)
3820//5657	V GKLO (x3) DE TYUI (x2)
4131//NRH	V JKDJ (x3) DE SLBC (x2)
4225//NRH	V 7NPE (x3) DE QV5B (x2)
4532//NRH	V M8JF (x3) DE RIS9 (x2)
4860// 6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?
5177//NRH	V JKDJ (x3) DE SLBC (x2)
5500//NRH	V 7NPE (x3) DE QV5B (x2)
5588//NRH	V MW3D (x3) DE 2SLC (x2)

Freq in kHz	Call Slip
5657//NRH	V GKLO (x3) DE TYUI (x2)
5801//10180	V DKG6 (x3) DE 3A7D (x2)
6793//8060	V M8JF (x3) DE RIS9 (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
8060//NRH	V M8JF (x3) DE RIS9 (x2)
8072//NRH	V GKLO (x3) DE TYUI (x2)
8072//9131	V GKLO (x3) DE TYUI (x2)
8072//10421	V GKLO (x3) DE TYUI (x2)
8110//NRH	V 7NPE (x3) DE QV5B (x2)
10180//NRH	V DKG6 (x3) DE 3A7D (x2)
	Courtesy JPL

Marker Beacons (MX MXI)

3594.7	2109z	16 Dec	MX CW Beacon ""D" Sevastopol	AB	TUE
3658	2236z	29 Dec	MX CW Beacon "V"	BR	MON
4557.7	2104	16 D	MVI OW D. IIDII G 1	A.D.	TITE
4557.7	2104z	16 Dec	MXI CW Beacon "D" Sevastopol	AB BR	TUE
	2239z	29 Dec	MXI CW Beacon "D" Sevastopol	DK	MON
5153.7	2156z	09 Nov	MXI CW Beacon "D" Sevastopol	AB	SUN
3133.7	2130Z	071101	Also reported 16 Dec 2045z	AB	TUE
			Also reported to Dec 20432	AD	IOL
5153.8	1612z	28 Dec	MXI CW Beacon "D" Sevastopol	AB	SUN
5153.9	2156z	09 Nov	MXI CW Beacon "S" Sevoromorsk	AB	SUN
			Also reported 28 Dec 1612z	AB	SUN
			,		
5154.9	2045z	16 Dec	MX CW Beacon "S" Sevoromorsk	AB	TUE
6917.5	0758z	05 Nov	MX CW Beacon "L" St Petersburg (Also heard 09 Nov 2149z)	AB	WED
	1335z	16 Nov	MX CW Beacon "L" St Petersburg	BR	SUN
	2153z	04 Dec	MX CW Beacon "P" Kaliningrad (Should be "L")	AB	TUE
			Also reported on 05,16 & 28 Dec with "P" marker	AB	
7000	1932z	16 Nov	MXI CW Beacon "D" (IARU lists this as a spurious from 7038.7kHz)	BR	SUN
7020.7	1022	1637	MAN CHAIR HOW CO	D.D.	CLDI
7038.7	1933z	16 Nov	MXI CW Beacon "D" Sevastopol	BR	SUN
	1611z	28 Dec	MXI CW Beacon "D" Sevastopol	AB	SUN
7038.9	1933z	16 Nov	MXI CW Beacon "S" Sevoromorsk	BR	SUN
1036.9	1933Z 1611z	28 Dec	MXI CW Beacon "S" Sevoromorsk	AB	SUN
	10112	20 Dec	WAI CW Beacon S Sevolomoisk	AD	BUIN
8494.7	2044z	16 Dec	MX CW Beacon "D" Sevastopol	AB	TUE
017117	201.12	10 200	in on Beacon B Beautoper		102
8497.8	1802z	03 Nov	MX CW Beacon "L"	AB	MON
			Also reported 09 Nov & 28	AB	
10871.7	1608z	28 Dec	MXI CW Beacon "D" Sevastopol	AB	SUN
	1313z	31 Dec	MXI CW Beacon "D" Sevastopol	BR	WED
10871.9	1608z	28 Dec	MXI CW Beacon "S" Sevoromorsk	AB	SUN
	2243z	29 Dec	MXI CW Beacon "S" Sevoromorsk	BR	MON
					~~
10872	1608z	28 Dec	MXI CW Beacon "C" Moscow	AB	SUN
10872.2	1608z	28 Dec	MXI CW Beacon "F" Vladivostok	AB	SUN
10872.4	1608z	28 Dec	MXI CW Beacon "M" Magadan	AB	SUN
13527.7	1311z	31 Dec	MXI CW Beacon "D" Sevastopol	BR	WED
13527.7	2244z	29 Dec	MXI CW Beacon "D" Sevastopol MXI CW Beacon "C" Moscow	BR	MON
13320	22 11 2	29 DEC	MIAI CW Deacon C Muscow	DK	WON
16331.7	1307z	31 Dec	MXI CW Beacon "D" Sevastopol	BR	WED
16331.7	1309z	31 Dec	MXI CW Beacon "S" Sevoromorsk	BR	WED
16332.0	1307z	31 Dec	MXI CW Beacon "C" Moscow	BR	WED
				:==	20
20096	1305z	02 Nov	MX CW Beacon "C"	AB	SUN

Oddities

'The Twenty-Minute Idler'

'The Twenty Minute Idler' is an oddity that has been reported since the early days of the original ENIGMA group, with the earliest reported log being Jan 1998. Originally only noted on 5305kHz, it was later noted to be operating simultaneously on up to six different frequencies

The station disappeared some time in 2010z but was rediscovered again active on 5305kHz, thanks to a British radio amateur, Matt, G7OBR, in Jan 2014. Prior to its disappearance, it was the timing of the transmissions, being exactly twenty minutes long, that gave the station its original nickname. However, on its return in 2014 these transmissions were quite irregular in length & varied from hour to hour.

Since then, the station appears to have stabilised & is maintaining better timing, although there are some exceptions. Our regular contributor Spectre has been taking a close look at the stations output;-

09 Nov I have been monitoring the 20 Minute Idler station again, logging from 1500z on 09 Nov right up to 0800z on the 10 Nov. Every TX began on the hour and then ended at nineteen minutes past the hour on every occasion except one.

5305 0000z 10/11 [Idle Tone] 0119z Fair Spectre MON

Sadly only the Idle Tone was heard, which wasn't unexpected.

10 Nov I have continued monitoring the 20 minute idler for another night. All of the transmissions sent the idle tone from the top of the hour until twenty minutes past the hour with the exception of one transmission at 2301z, which continued none stop until 0020z.

5305 2301z 10/11 [Idle Tone] 0020z Fair Spectre MON

Now look at the previous night's log. It may be a little too early to say, but I can see a pattern emerging regarding these lengthy 1 hour 20 minute transmissions. It may be possible that these lengthy transmission aren't as random as previously thought.

After monitoring the station, some questions and more theories come to light. For example, over the previous 2 days of monitoring the station. I have noticed that the station cannot be heard at these time from 0800z to 1400z during the daytime, despite the 0700z transmission could still be heard at a reasonable signal strength. Transmissions on 5305kHz can be heard later in the afternoon from 1500z to 0700z.

It could be possible the station either:

- 1 Went out of radio reception range due to SW propagation.
- 2 The station ceased it's transmission activities.
- 3 The station has switched to another frequency used for the daytime.

I remember that the station used to use other frequencies, but that 5305kHz was currently the only known active frequency.

Also when the station turns off its transmission at 20 minutes past the hour, could it be possible that the station changed frequency and transmit for another 20 minutes and so forth. So it is possible the station uses three frequencies during the evening hours and another three frequencies for daytime hours. For a station which is willing to transmit right through the small hours of the evening there appears to be a lot of gaps. It's like we are looking at half of the puzzle.

Spectre

Thanks for the report Spectre. More information on 'The Twenty Minute Idler' can be found here; 'The Twenty Minute Idler'.

Latest:- 'The Twenty Minute Idler' is also now active on 4301kHz - Rediscovered in November & running parallel with 5305kHz. May have been active before, but certainly wasn't audible on that frequency when checked following the rediscovery of the 5305kHz transmissions.

20 Minute Idler 5305kHz - Logs (Courtesy Spectre)

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1500z 09/11 [Idle Tone] 1519z Fair ORN3 OSB2 Spectre SUN
1600z 09/11 [Idle Tone] 1619z Fair QRN3 QSB3 Spectre SUN
1700z 09/11 [Idle Tone] 1719z Fair QRN3 QSB3 Spectre SUN
1800z 09/11 [Idle Tone] 1819z Fair QRN3 QSB3 Spectre SUN
1900z 09/11 [Idle Tone] 1919z Fair QRN3 QSB3 Spectre SUN
2000z 09/11 [Idle Tone] 2019z Fair QRN3 QSB3 Spectre SUN
2100z 09/11 [Idle Tone] 2119z Fair QRN3 QSB3 Spectre SUN
2200z 09/11 [Idle Tone] 2219z Fair QRN4 QSB3 Spectre SUN
2300z 09/11 [Idle Tone] 2319z Fair QRN4 QSB3 Spectre SUN
0000z 10/11 [Idle Tone] 0119z Fair QRN4 QSB3 Spectre MON (1
Hour 19 Minute TX)
0200z 10/11 [Idle Tone] 0219z Fair QRN4 QSB3 Spectre MON
0300z 10/11 [Idle Tone] 0319z Fair QRN4 QSB3 Spectre MON
0400z 10/11 [Idle Tone] 0419z Fair QRN4 QSB3 Spectre MON
0500z 10/11 [Idle Tone] 0519z Fair QRN4 QSB3 Spectre MON
0600z 10/11 [Idle Tone] 0620z Weak QRN4 QSB3 Spectre MON
0700z 10/11 [Idle Tone] 0719z Weak QRN4 QSB3 Spectre MON
1500z 10/11 [Idle Tone] 1520z Weak QRN3 QSB3 Spectre MON
1600z 10/11 [Idle Tone] 1620z Fair ORN3 OSB3 Spectre MON
1700z 10/11 [Idle Tone] 1720z Fair QRN3 QSB3 Spectre MON
1800z 10/11 [Idle Tone] 1820z Fair QRN3 QSB3 Spectre MON
1900z 10/11 [Idle Tone] 1920z Fair QRN3 QSB3 Spectre MON
2000z 10/11 [Idle Tone] 2020z Fair QRN3 QSB3 Spectre MON
2100z 10/11 [Idle Tone] 2120z Fair QRN3 QSB3 Spectre MON
2203z 10/11 [Idle Tone] 2220z Fair QRN3 QSB3 Spectre MON
2300z 10/11 [Idle Tone] 0020z Fair QRN4 QSB3 Spectre MON (1
Hour 20 Minute TX)
0100z\ 11/11\ [Idle\ Tone]\ 0120z\ Fair\ QRN4\ QSB3\ Spectre\ TUE
0200z 11/11 [Idle Tone] 0220z Fair QRN4 QSB3 Spectre TUE
0300z 11/11 [Idle Tone] 0320z Fair QRN4 QSB3 Spectre TUE
0400z 11/11 [Idle Tone] 0420z Fair QRN4 QSB3 Spectre TUE
0500z 11/11 [Idle Tone] 0520z Fair QRN4 QSB3 Spectre TUE
0600z 11/11 [Idle Tone] 0620z Fair QRN4 QSB3 Spectre TUE
0700z 11/11 [Idle Tone] 0720z Fair QRN4 QSB3 Spectre TUE
1500z 11/11 [Idle Tone] 1520z Weak QRN4 QSB3 Spectre TUE
1600z 11/11 [Idle Tone] 1620z Fair QRN4 QSB3 Spectre TUE
1700z 11/11 [Idle Tone] 1720z Fair QRN4 QSB3 Spectre TUE
1800z 11/11 [Idle Tone] 1820z Fair QRN4 QSB3 Spectre TUE
1900z 11/11 [Idle Tone] 1920z Fair QRN4 QSB3 Spectre TUE
2000z 11/11 [Idle Tone] 2020z Weak QRN4 QSB3 Spectre TUE
2100z 11/11 [Idle Tone] 0122z Fair QRN4 QSB3 Spectre TUE (4
Hour 22 Minute TX)
0201z 12/11 [Idle Tone] 0221z Fair QRN4 QSB3 Spectre WED
0300z 12/11 [Idle Tone] 0320z Fair QRN3 QSB3 Spectre WED
0406z 12/11 [Idle Tone] 0421z Fair QRN4 QSB3 Spectre WED
0500z 12/11 [Idle Tone] 0521z Fair QRN4 QSB3 Spectre WED
0600z 12/11 [Idle Tone] 0621z Fair QRN4 QSB3 Spectre WED
0700z 12/11 [Idle Tone] 0720z Fair QRN4 QSB3 Spectre WED
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1500z 12/11 [Idle Tone] 1520z Fair QRN3 QSB3 Spectre WED
1600z 12/11 [Idle Tone] 1620z Fair QRN3 QSB3 Spectre WED
1700z 12/11 [Idle Tone] 1720z Fair QRN3 QSB3 Spectre WED
1800z 12/11 [Idle Tone] 1820z Fair QRN3 QSB3 Spectre WED
1900z 12/11 [Idle Tone] 1920z Fair QRN3 QSB3 Spectre WED
2001z 12/11 [Idle Tone] 2020z Weak QRN3 QSB3 Spectre WED
2100z 12/11 [Idle Tone] 2120z Fair QRN4 QSB3 Spectre WED
2158z 12/11 [Idle Tone] 2220z Fair QRN4 QSB3 Spectre WED
2300z 12/11 [Idle Tone] 2320z Fair QRN4 QSB3 Spectre WED
0000z 13/11 [Idle Tone] 0020z Fair QRN4 QSB3 Spectre THU
0100z 13/11 [Idle Tone] 0120z Fair QRN4 QSB3 Spectre THU
0206z 13/11 [Idle Tone] 0220z Fair QRN4 QSB3 Spectre THU
0300z 13/11 [Idle Tone] 0320z Fair QRN4 QSB3 Spectre THU
0400z 13/11 [Idle Tone] 0420z Fair QRN4 QSB3 Spectre THU
0500z 13/11 [Idle Tone] 0520z Fair QRN4 QSB3 Spectre THU
0600z 13/11 [Idle Tone] 0620z Fair QRN4 QSB3 Spectre THU
0700z 13/11 [Idle Tone] 0720z Fair QRN4 QSB3 Spectre THU
1500z 13/11 [Idle Tone] 1520z Fair QRN4 QSB3 Spectre THU
1600z 13/11 [Idle Tone] 1620z Fair ORN4 OSB3 Spectre THU
1700z 13/11 [Idle Tone] 1720z Fair QRN4 QSB3 Spectre THU
1800z 13/11 [Idle Tone] 1820z Fair QRN4 QSB3 Spectre THU
1900z 13/11 [Idle Tone] 1920z Fair QRN4 QSB3 Spectre THU
2000z 13/11 [Idle Tone] 2020z Fair QRN4 QSB3 Spectre THU
2100z 13/11 [Idle Tone] 2120z Fair QRN4 QSB3 Spectre THU
2200z 13/11 [Idle Tone] 2220z Fair QRN4 QSB3 Spectre THU
2300z 13/11 [Idle Tone] 2320z Fair ORN4 OSB3 Spectre THU
0000z 14/11 [Idle Tone] 0020z Fair QRN4 QSB3 Spectre FRI
0100z 14/11 [Idle Tone] 0120z Fair QRN4 QSB3 Spectre FRI
0200z 14/11 [Idle Tone] 0220z Fair QRN4 QSB3 Spectre FRI
0300z 14/11 [Idle Tone] 0320z Fair QRN4 QSB3 Spectre FRI
0400z 14/11 [Idle Tone] 0420z Fair QRN4 QSB3 Spectre FRI
0500z 14/11 [Idle Tone] 0520z Fair QRN4 QSB3 Spectre FRI
0600z 14/11 [Idle Tone] 0620z Fair QRN4 QSB3 Spectre FRI
0700z 14/11 [Idle Tone] 0720z Fair QRN4 QSB3 Spectre FRI
1500z 14/11 [Idle Tone] 1520z Fair QRN4 QSB3 Spectre FRI
1600z 14/11 [Idle Tone] 1620z Fair QRN4 QSB3 Spectre FRI
1700z 14/11 [Idle Tone] 1720z Fair QRN4 QSB3 Spectre FRI
1800z 14/11 [Idle Tone] 1820z Fair QRN4 QSB3 Spectre FRI
1900z 14/11 [Idle Tone] 1920z Fair QRN4 QSB3 Spectre FRI
2000z 14/11 [Idle Tone] 2020z Fair QRN4 QSB3 Spectre FRI
2100z 14/11 [Idle Tone] 2120z Fair QRN4 QSB3 Spectre FRI
2200z 14/11 [Idle Tone] 2232z Fair QRN4 QSB3 Spectre FRI
2312z 14/11 [Idle Tone] 0120z Fair QRN4 QSB3 Spectre FRI (2
Hour 8 Minute TX)
0200z 15/11 [Idle Tone] 0220z Fair QRN4 QSB3 Spectre SAT
0300z 15/11 [Idle Tone] 0319z Fair QRN4 QSB3 Spectre SAT
0400z 15/11 [Idle Tone] 0419z Fair QRN4 QSB3 Spectre SAT
0500z 15/11 [Idle Tone] 0520z Fair QRN4 QSB3 Spectre SAT
0600z 15/11 [Idle Tone] 0620z Fair QRN4 QSB3 Spectre SAT
0700z 15/11 [Idle Tone] 0720z Fair QRN4 QSB3 Spectre SAT
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1500z 15/11 [Idle Tone] 1520z Fair QRN3 QSB3 Spectre SAT
1600z 15/11 [Idle Tone] 1620z Fair QRN3 QSB3 Spectre SAT
1700z 15/11 [Idle Tone] 1720z Fair QRN3 QSB3 Spectre SAT
1800z 15/11 [Idle Tone] 1820z Fair QRN3 QSB3 Spectre SAT
1900z 15/11 [Idle Tone] 1920z Fair QRN3 QSB3 Spectre SAT
2000z 15/11 [Idle Tone] 2020z Fair QRN3 QSB3 Spectre SAT
2100z 15/11 [Idle Tone] 2120z Fair QRN3 QSB3 Spectre SAT
2200z 15/11 [Idle Tone] 2220z Fair QRN3 QSB3 Spectre SAT
2300z 15/11 [Idle Tone] 2320z Fair QRN3 QSB3 Spectre SAT
0000z 16/11 [Idle Tone] 0021z Fair QRN3 QSB3 Spectre SUN
0059z 16/11 [Idle Tone] 0120z Fair QRN3 QSB3 Spectre SUN
0200z 16/11 [Idle Tone] 0219z Fair QRN3 QSB3 Spectre SUN
0300z 16/11 [Idle Tone] 0319z Fair QRN3 QSB3 Spectre SUN
0400z 16/11 [Idle Tone] 0419z Fair QRN3 QSB3 Spectre SUN
0500z 16/11 [Idle Tone] 0519z Fair QRN3 QSB3 Spectre SUN
0600z 16/11 [Idle Tone] 0619z Fair QRN3 QSB3 Spectre SUN
0659z 16/11 [Idle Tone] 0719z Fair QRN3 QSB3 Spectre SUN
(Not monitored 16/11 1500z to 17/11 0700z)
1500z 17/11 [Idle Tone] 1524z Fair QRN4 QSB3 Spectre MON
1600z 17/11 [Idle Tone] 1620z Fair QRN4 QSB3 Spectre MON
1700z 17/11 [Idle Tone] 1720z Fair QRN4 QSB3 Spectre MON
1800z 17/11 [Idle Tone] 1826z Fair QRN4 QSB3 Spectre MON
1900z 17/11 [Idle Tone] 1926z Fair QRN4 QSB3 Spectre MON
2000z 17/11 [Idle Tone] 2023z Fair QRN4 QSB3 Spectre MON
2100z 17/11 [Idle Tone] 2121z Fair QRN4 QSB3 Spectre MON
2206z 17/11 [Idle Tone] 2235z Fair QRN4 QSB3 Spectre MON
2300z 17/11 [Idle Tone] 2324z Fair QRN4 QSB3 Spectre MON
0001z 18/11 [Idle Tone] 0019z Fair QRN4 QSB3 Spectre TUE
0102z 18/11 [Idle Tone] 0120z Fair QRN4 QSB3 Spectre TUE
0200z 18/11 [Idle Tone] 0220z Fair QRN4 QSB3 Spectre TUE
0259z 18/11 [Idle Tone] 0321z Fair QRN4 QSB3 Spectre TUE
0359z 18/11 [Idle Tone] 0420z Fair QRN4 QSB3 Spectre TUE
0459z 18/11 [Idle Tone] 0519z Fair QRN4 QSB3 Spectre TUE
0559z 18/11 [Idle Tone] 0619z Fair QRN4 QSB3 Spectre TUE
0659z 18/11 [Idle Tone] 0719z Fair QRN4 QSB3 Spectre TUE
(Not Monitored 18/11 1500z)
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1600z 18/11 [Idle Tone] 1620z Fair QRN4 QSB3 Spectre TUE
1700z 18/11 [Idle Tone] 1720z Fair QRN4 QSB3 Spectre TUE
1800z 18/11 [Idle Tone] 1821z Fair ORN4 OSB3 Spectre TUE
1900z 18/11 [Idle Tone] 1920z Fair QRN4 QSB3 Spectre TUE
2000z 18/11 [Idle Tone] 2020z Fair QRN4 QSB3 Spectre TUE
2100z 18/11 [Idle Tone] 2120z Fair QRN4 QSB3 Spectre TUE
2200z 18/11 [Idle Tone] 2220z Fair QRN4 QSB3 Spectre TUE
2300z 18/11 [Idle Tone] 2320z Fair QRN4 QSB3 Spectre TUE
0000z 19/11 [Idle Tone] 0020z Fair QRN4 QSB3 Spectre WED
0100z 19/11 [idle Tone] 0120z Fair QRN4 QSB3 Spectre WED
0200z 19/11 [Idle Tone] 0220z Fair QRN4 QSB3 Spectre WED
0305z 19/11 [Idle Tone] 0322z Fair QRN4 QSB3 Spectre WED
0401z 19/11 [Idle Tone] 0423z Fair QRN4 QSB3 Spectre WED
0501z 19/11 [Idle Tone] 0520z Fair QRN4 QSB3 Spectre WED
0600z 19/11 [Idle Tone] 0621z Fair QRN4 QSB3 Spectre WED
0700z 19/11 [Idle Tone] 0720z Fair QRN4 QSB3 Spectre WED
(Not Monitored 19/11 1500z To 0000z)
0000z 20/11 [Idle Tone] 0120z Fair QRN4 QSB3 Spectre THU (1
Hour 20 Minute TX)
0200z 20/11 [Idle Tone] 0220z Fair QRN4 QSB3 Spectre THU
0300z 20/11 [Idle Tone] 0322z Fair QRN4 QSB3 Spectre THU
0403z 20/11 [Idle Tone] 0420z Fair QRN4 QSB3 Spectre THU
0500z 20/11 [Idle Tone] 0520z Fair QRN4 QSB3 Spectre THU
0559z 20/11 [Idle Tone] 0619z Fair QRN4 QSB3 Spectre THU
0700z 20/11 [Idle Tone] 0725z Fair QRN4 QSB3 Spectre THU
(Not Monitored 20/11 1500z To 0000z)
0000z 21/11 [Idle Tone] 0020z Fair QRN4 QSB3 Spectre FRI
0100z 21/11 [Idle Tone] 0228z Fair QRN4 QSB3 Spectre FRI (1
Hour 28 Minute TX)
0305z 21/11 [Idle Tone] 0322z Fair QRN4 QSB3 Spectre FRI
0359z 21/11 [Idle Tone] 0420z Fair QRN4 QSB3 Spectre FRI
0500z 21/11 [Idle Tone] 0520z Fair QRN4 QSB3 Spectre FRI
0600z 21/11 [Idle Tone] 0624z Fair QRN4 QSB3 Spectre FRI
0700z 21/11 [Idle Tone] 0720z Weak QRN4 QSB3 Spectre FRI
(Not Monitored 21/11 1500z to 22/11 0000z)
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<u>XSL</u>	'Slot Ma	<u>chine'</u>				
4153	10 Nov	2231z	QPSK 1500Bd	Japanese Navy a.k.a. Slot Machine	AB	MON
4231.5	10 Nov	2231z	QPSK 1500Bd	Japanese Navy a.k.a. Slot Machine	AB	MON
5417	10 Nov	2232z	QPSK 1500Bd	Japanese Navy a.k.a. Slot Machine	AB	MON
6250	10 Nov	2234z	QPSK 1500Bd	Japanese Navy a.k.a. Slot Machine	AB	MON
6417	10 Nov	2234z	QPSK 1500Bd	Japanese Navy a.k.a. Slot Machine	AB	MON
6445	10 Nov	2236z	QPSK 1500Bd	Japanese Navy a.k.a. Slot Machine	AB	MON
8313	10 Nov	2237z	QPSK 1500Bd	Japanese Navy a.k.a. Slot Machine	AB	MON
8703.5	10 Nov	2237z	QPSK 1500Bd	Japanese Navy a.k.a. Slot Machine	AB	MON
8588	10 Nov	2237z	QPSK 1500Bd	Japanese Navy a.k.a. Slot Machine	AB	MON
<u>S28</u>	'The Buz	zer'				
4625	1526z		29 Dec	'The Buzzer' on loud & clear - as heard in Stockholm	CHPA	Mon
<u>S32</u>	'Squeaky	Wheel'				
3828	2018z		14 Dec	'Squeaky Wheel' marker USB	BR	SUN

More on the 'Squeaky Wheel'

In the Sept 2014 newsletter (EN84) we carried a discussion from the RSGB Tech Forum reporting that the 'Squeaky Wheel' signal had been identified as a malfunctioning Home Office transmitter based at Inskip (EN84 Page 5).

However, the signal we know as the 'Squeaky Wheel' is believed to operate from Russia & to be part of the same group of control stations as 'The Buzzer' & 'The Pip', all of which are known to use a channel marker & to send occasional voice messages.

Furthermore, the 'Squeaky Wheel' uses two frequencies, 3828kHz (Night) & 5473kHz (Day) & although reception in the UK can be quite poor, the night-time signal is still very much in evidence in the late evenings.

The original discussion stated that the problem was a product of the 81.01kHz signal causing a signal to appear on the 46th harmonic - which would be 3726.46kHz, some distance from the frequency that the 'Squeaky Wheel' has operated on for many years.

So what was the signal identified in the RSGB Tech Forum discussion, & does it have any connection to the 'Squeaky Wheel' or was it a different signal entirely?

S30 'The Pip'

3756 2245z 05 Dec S30 'Pip' marker (Night freq) USB BR FRI

Contributors: AB, AnonUS, BR, CHPA, Gert, HFD, JkC, JPL, RNGB, Spectre, tiNG, T! Thank you all for your logs.

Voice Stations, short round up

The stations have all behaved much we would expect although the changes of frequencies amongst E07/E07a was a surprise for December as well as the large slot for the new daily schedule in Upper Sideband.

Some additional activities around 10250kHz as we have seen.

We have received splendid logs from our members and from others who have seen fit to contact us directly either by mail, phone as well as emails. ... tnx.

VOICE LOGS:

E06 Nov/Dec log:

Second Wednesday	1920z	4527kHz	2020z	4047kHz
12/11 '376' 00000				
10/12 '376' 00000				
Sunday following second Weds	1120z	6874kHz	1220z	5776kHz
16/11 '376' 00000				

16/11 '376' 00000 14/12 '376' 00000

First/Third Thursday of month 2030z 4836kHz 06/11, 13/11, 04/12 & 18/12 321' 569 20 14259 22676 32782 32782 76723 89409 12215 74326 64070 90235 38085 59543 12319

74238 36664 12256 18841 73311 98089 12250 569 20 00000

Repeat of msg first seen on G06

Friday following First / Third Thursday 2130z 4760kHz

07/11, 21/11, 05/12 & 19/12

'472' 613 20 14259 22676 32782 32782 76723 89409 12215 74326 64070 90235 38085 59543 12319 74238 36664 12256 18841 73311 98089 12250

First /Third Thursday (repeats Friday) 0600z 19350kHz 0700z 20980kHz

06/11 & 20/11
'507' 832 109
67028 79337 00529 25736 70212 65577 36348 92569 73743 45969
94093 70685 63486 51776 14726 62595 20614 94295 56952 47959
48937 95297 18175 31521 35938 85919 97708 03005 70928 91206
88236 38103 68770 42485 06416 95272 72610 84748 98584 88021
34042 71261 82508 37366 94161 62551 11086 34157 13926 71981
68983 65947 27279 25097 38099 88111 15455 24925 92826 43878
25922 40424 11032 62982 84386 60256 11696 93619 73304 79092
55148 47385 75326 08610 66846 61886 05136 30395 70616 10728
78088 32924 42314 15538 89115 99815 19823 39735 00316 41533
30346 68729 60672 87742 20918 06220 06346 82494 03075 41312
14958 49428 47625 66107 12331 19183 90453 48479 55090
832 109 00000 JkC, RNGB

0600z 15810kHz 0700z 18455kHz 04/12

'923' 786 104

45725 78904 82269 44444 20974 17037 13910 16739 26556 95731

75667 38736 61471 89362 11271 14817 36405 57680 26077 79853

41127 01560 59604 82097 45196 85268 90580 77168 11645 23661

66693 45577 28353 57761 76244 19720 86768 67160 03877 31286

62696 92662 37577 15009 78807 67631 19134 29710 53592 81455

55239 82554 66411 23591 31423 67476 93354 81596 96007 53697

93589 91620 06267 85279 50886 64758 53983 77655 99992 37732

12586 22063 92583 21320 73054 33831 82425 44982 60787 05449

34483 21109 50606 50360 87628 77343 22100 48415 25659 30397

22483 28921 36297 99819 29160 52228 62872 85136 29195 75787

78358 54813 57847 15621

18/12

'923' 845 106

78100 77326 46746 28401 74898 50778 33503 20508 31231 32441 46777 36572 84551 86595 68101 59929 04832 04582 36580 73078 14505 23253 34886 56457 26082 31802 17166 96685 27133 15409 21017 15223 67311 09143 30739 53371 27129 60551 84043 74564 73145 24379 39405 69879 29276 37860 46244 77709 18902 50005 85134 53529 57466 03332 70212 50704 00246 91481 30978 98265 74982 41142 15689 86594 54078 91728 83514 96964 46012 71261 77650 35854 10695 91861 96576 59991 28430 13326 05648 03061 77178 48192 56203 39999 97812 06755 04386 49834 52046 05462 46852 62990 02721 87114 15565 04009 71152 26340 98860 65615 51214 18737 80964 75066 84836 77163 845 106 00000

Unscheduled

13389kHz 1230z 10423kHz1301z 1300z	24/12 10/12 24/12	'215' 934 61 65043 20420 08009 83220 89195 1154029993 59586 '215' 708 69 81217 61564 708 69 00000]1317z Strong QRM1 QSB1 '215' 934 61 65043 20420 08009 83220 89195 1154029993 59586	JkC JkC RNGB	WED THU WED
5926kHz 1703z 5931kHz 1709z	10/12 24/12	I/P LG 61564 708 69 00000 End 1717z Strong QRM1 QSB1 I/P LG 59586 934 61 00000	JkC	THU
4830kHz 1730z	10/12	'215' 708 69 81217 61564 708 69 00000 End 1747z Strong QRM1 QSB1	JkC	THU
		'215' 708 69 18456 74276 63642 60149 23281 24239 85684 56802 40309 58607 54963 67365 80381 12820 98459 13760 15951 76230 47964 46968 38583 40805 53236 04706 97974 85247 57919 86142 93215 91470 87858 73619 28104 16478 73761 32820 45965 34623 17150 28947 58474 78320 06413 70503 75157 46418 28215 04279 15057 74854 65794 19053 28521 74984 34639 39258 57583 83901 61564 708 69 00000		
1730z	24/12	'215' 934 61 65043 20420 08009 83220 89195 1154029993 59586 '215' 934 61 65043 20420 08009 83220 89195 11540 25087 24335 15069 50900 14333 45200 54586 34515 12832 91280 10250 25744 66653 14289 22421 10461 00449 88918 96785 53099 91443 51569 41673 02020 90014 71962 69931 17630 54028 93619 45038 21693 89151 04119 76141 91266 12290 21069 91706 45709 80368 04761 46472 00190	RNGB	WED
		51632 33397 41389 84139 71644 01867 61232 48079 01191 29993 59586		

Spectre, RNGB, Malc, JkC

PoSW's analysis across November and December

Moving lower in frequency in November as expected.

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

934 61 00000

6-Nov-14:- 4,836 kHz, started almost one minute before the half-hour, calling "321", DK/GC "569 569 20 20".

20-Nov-14:- 4,836 kHz, "321" and "569 569 20 20" again.

4-Dec-14:- 4,836 kHz, "321" and "569 569 20 20", as in November Peaking well over S9 with good audio

Friday 2130 UTC Schedule Following the First + Third Fridays:-

7-Nov-14:- 4,760 kHz, call "472", DK/GC "613 613 20 20". 5Fs message same as yesterday's 2030 UTC sending but with a different Decode Key, group numbers 3 and 4 both "32782". S9 signal with good audio.

5-Dec-14:- 4,760 kHz, "472" and "613 613 20 20", S9 with good audio.

Second Wednesday in the Month 1920 + 2020 UTC Schedule:-

12-Nov-14:- 1920 UTC, 4,527 kHz, this frequency used in January and February of this year, S7 to S8 carrier but very low audio, became clearer towards the end of the transmission, "376 376 00000".

2020 UTC, 4,047 kHz, second sending, no problem with audio level here.

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

16-Nov-14:- 1120 UTC, 6,874 kHz, "376 376 376 00000", weak signal but surprisingly clear copy with the receiver in USB mode.

1220 UTC, 5,776 kHz, second sending, very weak signal. Following what appears to be the standard procedure, the same frequencies as used for this schedule in January and February.

14-Dec-14:- 1120 UTC, 6,874 kHz, "376 376 376 00000", very weak signal, only just readable. Had started when tuned in a few seconds before 1120Z and stopped 1123:40s.

No sign of a transmission at 1220 UTC on 5,776 kHz, probably too weak to compete with the local RF noise level.

E07 November2014 Sunday/Wednesday

1800z	8153kHz		1820z	6853kHz	1840z	5453kHz	
02/11		184 000					Fair/Strong
05/11		184 000					Weak
09/11		184 000					Fair
16/11		184 1 282	158 34140	32088 000 000			Strong
19/11		184 1 282	158 34140	37088 000 000			Fair
23/11		184 000					Fair
Monday/V	Wednesday	7					
2000z	7724kHz		2020z	6924kHz	2040z	5824kHz	
03/11		798 1					Too weak to copy

Strong

Thursda 2110z	y 6777kHz	2130z	5449kHz	2150z	4483kHz
06/11	744 00	0			

798 1 877 51 41893 ... 04198 000 000

06/11 744 000 Very weak, VOLMETQRM3
27/11 744 000 Fair

December 2014

10/11

[unscheduled] Apparently daily

1100z	18646kHz	1120z	17464kHz	1140z	15826kHz
1200z	16139kHz	1220z	14607kHz	1240z	13951kHz
1600z	9121kHz	1620z	7967kHz	1640z	6942kHz
1700z	6949kHz	1720z	5886kHz	1740z	5091kHz

813 1 490 46 82965 92347 14423 56103 14931......65077 00545 000 000 [fm RNGB]

813 1 490 46 82965 92347 14423 56103 14931 55955 86440 54013 35919 76751 75499 19343 83749 78087 70424 47983 90748 21554 02155 09002 96263 68339 45187 16267 83026 65436 66819 47590 62694 63600 56830 54434 51130 25275 88101 24640 81088 94525 68246 52868 95191 71279 31858 55714 65077 00545 000 000 Courtesy JkC

11/12 813 1 352 43 00097 ... 53008 000 000 Strong
12/12 813 1 352 43 00097 ... 53008 000 000 Strong

E07 9121kHz/7967kHz/6942kHz/5886kHz/5091kHz 1600z/1620z/1640z/1720z/1740z 12/12

13/12 813 1 352 43 00097 ... 53008 000 000 Strong

14/12 813 1 352 43 00097... 53008 000 000 Strong to very strong

15/12 8131 678 51 40087 ... 38908 000 000 Very strong

 $E07\,9121kHz/7967kHz/6942kHz/6949kHz/5886kHz/5091kHz\,1600z/1620z/1640z/1700z/1720z/1740z\,15/12\,813\,1\,678\,51$

27

16/12	813 1 678 51 40087 38908 000 000	Strong
17/12	813 1 678 51 40087 38098 000 000	Very strong
18/12	813 1 411 48 47543 70608 000 000	Strong
71795 06866 00730 6774 50572 40272 06534 5385 00235 39083 93274 3925	4 17044 51781 54463 23660 74842 40903 9 67413 16649 35574 85792 00053 71875 7 00445 65482 78520 43348 39101 91052 5 24808 68680 15773 83841 67041 31745 2 88927 48568 60494 70608 Courtesy HRT	
19/12	813 1 411 48 47543 70608 000 000	Very strong
20/12	813 1 411 48 47543 70608 000	Strong
21/12	813 1 322 68 70458 01954 000 000	Strong
52993 72096 81998 1072 97603 89921 66361 1727 63047 38546 64533 0452 23843 33179 19403 2695 20316 85670 41527 0471	0 81133 67738 78892 69430 27353 91918 4 35663 47430 10279 22771 26802 16337 7 55227 69111 83600 98039 91012 71663 8 01837 5979 95573 36497 53128 43430 0 44019 85195 83068 86465 89186 43428 2 23822 50854 18260 32093 41730 16028 0 52557 45845 46075 01954 Courtesy JkC	
22/12	813 1 322 68 70458 01954 000 000	Strong
23/12	813 1 322 68 70458 01954 000 000	Strong
24/12	813 1 437 57 19861 32254 000 000	Very strong
78044 17142 67131 59220 09644 43648 87343 1738 14993 30031 98230 98152	88864 00027 26114 17731 38056 63771 92334 27349 59003 85014 25815 24066 30125 69377 30181 34376 30882 89881 89046 64467 60012 78322 53068 93572 57186 32496 35300 49527 48077 71322 56363 79190 32254 Courtesy JkC	
25/12	813 1 437 57 19861 32254 000 000	Weak to strong across schedule
26/12	813 1 437 57 19861 32254 000 000	Weak to very strong across schedule
27/12	831 1 940 62 39528 94550 000 000	Weak to strong across schedule
82283 43761 78857 2651 55663 16848 33491 9726 30118 01157 27961 9825 52102 59907 36244 1188	5 50679 81174 52355 77611 36584 52061 3 36156 53190 99359 99232 69635 46049 0 07555 24658 37046 82374 01405 41500 0 75574 28514 59285 10606 03407 40506 1 51901 97656 17515 41960 13335 54692 0 00718 00991 91138 36523 41649 88295 Courtesy tiNG	
28/12	813 1 940 62 39528 94550 000 000	Fair to strong
29/12	813 1 940 62 39528 94550 000 000	Strong
82283 43761 78857 26512 55663 16848 33491 97260 30118 01157 27961 98259 52102 59907 36244 1188	5 50679 81174 52355 77611 36584 52061 13 36156 53190 99359 99232 69635 46049 107555 24658 37046 82374 01405 41500 175174 28514 59285 10606 03407 40506 51901 97656 17515 41960 13335 54692 100718 00991 91138 36523 41649 88295	
30/12	813 1 518 70 39097 26605 000 000	Strong
16477 72621 59971 83710 36537 70690 01044 0145: 39674 71615 73659 3906 79578 21720 76470 6354: 40970 37677 80128 2983:	10894 50344 64233 86677 91037 33399 571621 40126 58168 63786 13007 37655 502820 30674 61663 93072 08916 73393 14879 20838 30594 43954 09934 07670 41818 16509 76618 88891 90198 06779 28410 53007 72221 83311 74842 87154 68324 92923 02143 44241 79286 26605 Courtsey JkC	

Strong

31/12

813 1 518 70 39097 ... 26605 000 000

PoSW'a E07 logs and analysis:

Continuing to use the same frequencies as in past years, still experiencing readability problems due to low audio levels. Moved by one hour with the end of British Summer Time so still shows up at the same local clock time in the UK.

Sunday + Wednesday Schedule, 1800 UTC Start:-

9-Nov-14, Sunday:- 1800 UTC, 8,153 kHz, "184 184 184 000", S9 with reasonable audio.

1820 UTC, 6,853 kHz, S9+.

16-Nov-14, Sunday:- 1800 UTC, 8,153 kHz, first sending unreadable due to a strong wide-band "buzz" extending from roughly 8,140 to 8,160 kHz, presumably over-the-horizon radar.

Able to tell E07 was "full message" because the carrier did not go off after two minutes and twenty-eight seconds.

1820 UTC, 6,853 kHz, second sending, S9 with QSB, no interference. "184 184 184 1", DK/GC "282 158" x 2.

1840 UTC, 5,453 kHz, third sending, peaking S9+, slight interference from the SSB station on 5,450, the artist formerly known as RAF VOLMET.

19-Nov-14, Wednesday:- 1800 UTC, 8,153 kHz, unreadable due to very low audio and a strong "XJT" roaring away on a close frequency, not noticed

1820 UTC, 6,853 kHz, also unreadable due to low audio.

1840 UTC, 5,453 kHz, again, largely unreadable due to low audio.

23-Nov-14, Sunday:- 1800 UTC, 8,153 kHz, "184 184 184 000", peaking over S9 with reasonable audio, much better signal than on the 19th.

1820 UTC, 6,853 kHz, second sending, also over S9.

3-Dec-14, Wednesday:- 1800 UTC, 7,464 kHz, "485 485 485 1", weak signal with low audio and what sounded like AC ripple on the carrier, unable to hear DK/GC, also side-band splash from a broadcast station on a close frequency.

1820 UTC, 5,864 kHz, second sending much better, DK/GC heard as "214 116" x 2.

1840 UTC, 4,564 kHz, third sending, S9 with deep QSB.

10-Dec-14, Wednesday:- 1800 UTC, 7,464 kHz, "485 485 485 000", low audio and broadcast station interference, difficult copy.

1820 UTC, 5,864 kHz, second sending,, also with low audio.

Monday + Wednesday Schedule, 2000 UTC Start:-

3-Nov-14, Monday:- 2000 UTC, 7,724 kHz, "798 798 798 1", DK/GC "640 37" x 2. S9 carrier, audio low but readable.

2024 UTC, 6,924 kHz, second sending in progress, weak signal with low audio, difficult copy.

2040 UTC, 5,824 kHz, third sending, weak signal and low audio, unreadable.

17-Nov-14, Monday:- 2000 UTC, 7,724 kHz, very weak signal, only just detectable, unreadable, carrier went off just before 2002 and 30s UTC which indicates a "no message"

transmission.

2020 UTC, 6,924 kHz, also very weak and unreadable.

19-Nov-14, Wednesday:- 2000 UTC, 7,724 kHz, and 2020 UTC, 6,924 kHz, both very weak again, only just detectable by using the receiver in USB mode and adjusting the tuning to produce a beat note, and that was with the ATU switched in and everything peaked as sharp as possible. Carrier went off after two and a half minutes which indicates "no message".

1-Dec-14, Monday:- 2000 UTC, 7,478 kHz, the less than impressive signals continue in December with the expected change of frequencies; very low audio plus proximity to a strong broadcast station making for a generally unreadable transmission. Able to tell it was a "full message" because the carrier was still up at 2006 UTC.

2020 UTC, 6,778 kHz, somewhat better signal, "472 472 472 1". S7 to S8 with deep QSB

one dip in signal coinciding with the spoken Decode Key, Group Count heard as "85'

2040 UTC, 5,278 kHz, "472 472 472 1", DK/GC "247 85" x 2. Peaking over S9 with reasonable audio, by far the best transmission of the three.

Thursday Schedule, 2110 UTC Start-

13-Nov-14:- 2110 UTC, 6,777 kHz, "744 744 744 000", audio low but readable.

2130 UTC, 5,449 kHz, second sending, also with low audio, suffering slightly from the SSB station on 5,450.

20-Nov-14:- 2110 UTC, 6,777 kHz, S9 carrier with deep QSB, very low audio, unreadable, carrier off just before 2112 and 30s so "no message".

27-Nov-14:- 2110 UTC, 6,777 kHz, and 2130 UTC, 5,449 kHz, both S9 with reasonable audio for a change, "744 744 700".

4-Dec-14:- 2110 UTC, 6,777 kHz, "744 744 744 000".

2130 UTC, 5,449 kHz second sending, audio level from both transmissions better than your usual E07.

December 2014 **NEW FREQUENCIES**

Sunday/Wednesday

1800z 7464kHz 1820z 5864kHz 1840z 4564kHz

17/12 485 000 Fair

21/12 485 1 235 137 70672 ... 12460 000 000 Strong, some ORM

E07 7464kHz/5864kHz/4564kHz 1800z/1820z/1840 21/12

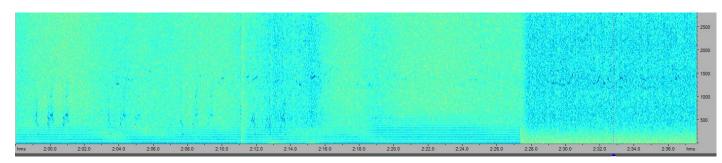
485 1 235 137

 $70672\ 45249\ 21782\ 11533\ 08462\ 90986\ 46291\ 05587\ 26960\ 91201\\ 26849\ 40903\ 78096\ 09845\ 58774\ 45910\ 54860\ 75736\ 15913\ 88204$ $\frac{25261\ 46469\ 50783\ 46052\ 14022\ 51085\ 27300\ 93240\ 84675\ 59002}{05280\ 63368\ 95455\ 22346\ 57009\ 79661\ 98916\ 62703\ 86094\ 74938}$ $09987\,76417\,39628\,84747\,92480\,53811\,26423\,31210\,73781\,62680\\51195\,77266\,81268\,87996\,98716\,55073\,05961\,75409\,54639\,47131\\98319\,37847\,64674\,54810\,89085\,95976\,98340\,10212\,27082\,73021$ 00915 45424 76273 57340 29244 55282 02894 05772 75240 75658 06278 66400 23763 52874 47738 62249 68782 72446 92578 34956 07460 96994 78429 68355 30394 58085 86057 74940 00644 87996 88066 18047 18993 48950 62387 88827 99711 70280 80505 59017 $12389\ 01239\ 32324\ 27193\ 55013\ 48182\ 01913\ 64784\ 07310\ 69821\\ 10415\ 56646\ 72361\ 88222\ 78328\ 32734\ 36579\ 38351\ 61827\ 25858$ 40535 90608 08572 32364 14344 86218 12460 000 000 Courtesy JkC

31/12 485 000 Strong

Monday/Wednesday

2000z	7478kHz	2020z	6778kHz	2040z	5278kHz	
01/12	47	72 1 247 85 14948	27896 000 000			Strong
	149 856 246 399 916 98 930 888	095 37052 92680 23026 0 219 26545 22732 09707 3 682 06185 93798 40036 3 647 34840 15948 00106 3 146 99885 12100 31729 4 271 81044 82590 09141 4		5532 64411 0866 70887 1936 23787 4348 20611 1946 53024 4817 41110		
10/12		72 1 79522 9251	7 000 000			Weak, low audio
	795 841 741 309 742	177 44809 68842 06690 2 161 47087 9037. 87534 6		649 10137 214 60178		
15/12			314387 000 000	- 110		Strong
	472 813 444 713 24	2 1 174 39 575 93015 41145 10502 0 042 22597 65759 54671 9 530 58735 91369 85550 9	8kHz 2000z/2020z/2040z 15 20099 79053 98242 26165 1: 20026 79993 37512 71125 6 81471 54308 62985 14799 5. 49470 22244 75807 75561 1- Co	8964 47277 8723 48443 5010 05590		



 $E07\ 2130z\ 04/12\ hum\ just\ noticeable\ and\ cessation\ 2m30s$

17/12	472 1 174 39 81575	. 14387 000	[2000z NRH]	Fair

Thursday 2110z	6777kHz	2130z	5449kHz	2150z	4483kHz	
04/12	744 000		Hum on freq, remove	d after spee	ech complete [See above]	Fair
11/12	744 000					Weak, just audible
18/12	744 000					Strong, low audio
25/12	744 000					Very weak noisy/Fair

2000z	5864kHz	2020z	5164kHz	2040z	4564kHz	
05/11		815 000				Very strong
12/11		815 1 13723 1105 97	7 58521 00844 000	000		Strong and noisy
		14325 68493 11709 7527 62286 21905 66952 1665 47872 19950 48833 9322 34234 25124 13344 3316 26389 19024 05398 9582 05210 44182 64405 1718 91634 55135 46500 0042 99215 21221 46370 9032	1 60622 13028 64036 26218 6 05538 93361 76176 19684 0 95780 83149 72517 91462 0 9383436 31518 83182 95542 3 64747 85337 51921 43143 7 85605 54180 36467 18706 5 18639 55487 23004 22620 2 06896 74428 54134 58881 3 26129 50257 80308 78616 3 59232 50777 008440 000 00 Courtes	96004 34056 17941 00759 13676 18410 88725 36364 64650 41228 07738 22537 85630 69885 01056 88076		
19/11		815 1 67077 6676 89	9 55146 44504 000	000		Very strong
26/11		815 000				Very strong
Thursday 0430z	y 5146kHz	0450z	5846kHz	0510z	6846kHz	
06/11		188 000				Very strong
13/11		188 1 13723 1105 97	7 58521 00844 000	000		Very strong
20/11		188 1 67077 6676 89	9 55146 44504 000	000		Very strong
27/11		188 000				Very strong
Friday 1610z	8135kHz	1630z	7538kHz	1650z	6838kHz	
07/11		158 000				Fair
14/11		158 1 69682 3947 73	3 33092 32417 000	000		Very strong
21/11		158 000				Strong
28/11		158 000				Very strong

E07a 8138/7538/6838kHz 1610/1630/1650z 14/11 Transcript:

158 1 69682 3947 73

Saturday November 2014

0900z	11553kHz	Z	0920z	12153kHz	0940z	13553kHz	
01/11		515 000					Strong, QSB2
08/11		515 000					Strong
15/11		515 1 6968	82 3947 73	33092 32417 000 0	000		Very strong
22/11		515 000					Strong
29/11		515 000					Fair, noisy

E07 a

PoSW's logs and analysis:

Saturday Schedule, 0900 UTC Start:-

1-Nov-14:- 0900 UTC, 11,553 kHz, "515 515 515 000", S7 to S8.

0920 UTC, 12,153 kHz, second sending, also S7 to S8. Same frequencies as in November last year, third sending in event of a "full message" 13,553 kHz

8-Nov-14:- 0900 UTC, 11,553 kHz, and 0920 UTC, 12,153 kHz, both strength S6 to S7, "515 515 515 000".

15-Nov-14:- 0900 UTC, 11,553 kHz, a "full message" this morning, "515 515 515 1 69682". DK/GC "3947 73" x 2. Weak signal at first but increased to S7 during the course of the transmission.

0920 UTC, 12,153 kHz, second sending, S6 to S7.

0940 UTC, 13,553 kHz, third sending on the expected frequency.

29-Nov-14:- 0900 UTC 11,553 kHz, and 0920 UTC, 12,153 kHz, both S7 to S8, "515 515 515 000".

6-Dec-14:- 0920 UTC, 12,221 kHz, "124 124 124 000", S5 to S6. Second sending, missed the 0900 UTC transmission which would probably have been on 11,121.

13-Dec-14:- 0900 UTC, 11,121 kHz, a "full message" transmission so all three frequencies will be used, "124 124 124 1 11411", DK/GC "9906 93" x 2. Wide variation in signal strengths, sometimes barely readable and sometimes up to S7.

0920 UTC, 12,221 kHz, second sending, a fairly steady S7.

0940 UTC, 13,421 kHz, third sending, peaking S9, strongest of the three transmissions.

Wednesday Schedule, 2100 UTC Start:-

12-Nov-14:- 2100 UTC, 5,864 kHz, "815 815 815 1 13723" for a "full message", DK/GC "1105 97" x 2, S9+ SSB signal, weak broadcast station on 5.865.

2120 UTC, 5,164 kHz, second sending, also S9+.

2140 UTC, 4,564 kHz, third sending.

19-Nov-14:- 2100 UTC, 5,864 kHz, "815 815 815 1 67077", DK/GC "6676 89" x 2. Strong SSB signal.

2120 UTC, 5,164 kHz, second sending, S9+.

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

3-Dec-14:- something strange this evening, a change of frequencies.

Having been aware of this schedule for several years the schedule has always used one trio of frequencies in the spring and summer months and shifting to a lower frequency trio in autumn and winter. So it was something of a surprise not to find "815" firing up on 5,864 kHz when tuned in just after 2100 UTC. Found the first sending in progress on a slightly higher frequency shortly afterwards:-

2104 kHz, 5,877 kHz, E07a SSB in progress with a "full message" thirteen kHz higher than the expected frequency. S9+ signal, ended with "000 000" 2110 UTC.

2120 UTC, 5,277 kHz, second sending, S9+ so no problem in finding, "825 825 825 1 67077", DK/GC "6676 89" x 2.

2140 UTC, 4,577 kHz, third sending, again an S9+ signal.

10-Dec-14:- 2100 UTC, 5,877 kHz, and 2120 UTC, 5,277 kHz, "825 825 825 00000".

December 2014 Wednesday

NEW FREQUENCIES

Wednesday

2100z 5877kHz 2120z 5277kHz 2140z 4577kHz

03/12 825 1 67077 6676 89 55146 ... 44504 000 000 Very strong

E07a 5877/5277/4577kHz 2100/2120/2140z 03/12 Transcript:

825 1 67077 6676 89

 10/12
 825 000
 Very strong

 17/12
 825 000
 Very strong

 24/12
 825 1 34430 9097 85 39573 ... 44805 000 000
 Very strong

Decembe Thursday		NEW FREQUENC	CIES					
0530z	5111kHz	0550z	5811kHz	0610z	6911kHz			
04/12		Missed due to chang	ge of frequency - not	tracked by a	utomatic system			
11/12		189 000				I	Fair	
18/12		189 000				•	Very strong	
25/12		189 1 34430 9097 8	5 39573 44805 00	0 000		•	Very strong	
		E07a 5111/5811/6911kHz	0530/0550/0610z 25/12 Tra	anscript:				
		189 1 34430 9097 85 39573 66502 61423 22156 73665 97907 71094 83941 13078 83778 59851 97028 38560 47042 66001 34088 69500 03371 12313 03339 25173 54874 74060 72884 08680 40506 40753 21563 05457 92026 13135 58289 84716 69921 70167 65741	22882 91825 55124 75850 43025 05869 85852 21437 49012 74666 25757 38176 76636 04166 15847 99247 19144 72311 43890 93844 05658 11204 37831 71692 28319 65593 92350 12525	42058 28562 55371 43639 72352 51451 72096 12187 12320 38194 02993 16825				
Friday 1610z	5887kHz	1630z	5387kHz	1650z	5087kHz			
05/12		830 000				I	Fair to strong	
12/12		830 1 11411 9906 9	3 67516 33370 00	0 000		S	Strong, variable	
		830 1 11411 9906 93 67516 99936 24286 11683 07323 71445 22214 31446 63758 21216 59792 79711 39931 50196 34401 04467 03810 37755 10217 20826 71132 89011 75925 64248 15109 82097 26134 04836 27575 87732 87991 52639	78412 75976 19131 64252 53539 94799 26423 00134 00563 10611 09040 23982 85622 56346 68285 54810 69785 82415 01063 24871 88174 86274 73848 25103 39552 13000 83665 93074	9 82875 08648 5 23281 23494 77487 33526 4 43774 06475 0 81198 71613 0 61647 39356 5 50456 43452 8 90617 55181				
19/12		830 000				7	Very strong	
26/12		830 000				S	Strong	
Saturday 0900z	, 11121kH:	z 0920z	12221kHz	0940z	13421kHz			
06/12		124 000				I	Fair	
13/12		124 1 11411 9906 9	3 67516 33370 00	0 000		7	Very strong	
20/12		124 000				I	Fair	
27/12		124 000				I	Fair	
E11 log Nov/Dec								
4441kHz	1445z 1445z 1445z 1445z 0900z 1445z 0900z 0900z 0900z 0900z 1445z 0900z 1445z 1445z	01/11 [287/00] Out 05/11 [287/00] 1448 08/11 [287/00] 1448 12/11 [287/00] 1448 13/11 [248/00] 0903 15/11 [287/00] Out 15/11 [248/00] 0903 20/11 [248/00] Out 03/12 [287/00] Out 06/12 [248/00] 0903 06/12 [287/00] 1448 13/12 [287/00] Out 27/12 [287/00]	sz Weak QRN4 QSB sz Weak QRN4 QSB sz Weak QRN4 QSB sz Weak QRN4 QSB 1448z QSA5 QRM1 sz Weak QRN4 QSB sz Weak QRN4 QSB 0903z S2 1448z Fair QRM1 Q sz Fair QRM3 QSB3 sz Fair QRN3 QSB3	3 3 3 3 QRN1 QSB 3 3 SB2	I		JkC Spectre Spectre Spectre Thomas Spectre Spectre Malc, Thomas JkC Spectre Spectre Karsten RNGB	SAT WED SAT WED THU SAT SAT THU SAT WED SAT SAT SAT
5082kHz	1730z 1730z 1730z 0450z 1730z 0450z	06/11 [416/00] 20/11 [416/00] 17:3: 11/12 [416/00] 08/12 [416/00] 0453 18/12 [416/00] 17:3: 22/12 [416/00] Out	Sz Fair QRN3 QSB3 3z QSA4				RNGB Karsten, Malc RNGB Spectre Karsten, Malc JkC	THU THU THU MON THU MON

5409kHz	1530z 1530z 1530z	06/11 [262/00] Out 1533z Strong QRM1 QSB1 20/11 [262/00] Out 1533z S2 18/12 [262/00] Out1533z Fair QRM1 QSB1	JkC Malc JkC	THU THU THU
5779kHz	0315z 0315z 0315z 0315z 0315z 0315z 0315z	05/11 [253/00] 12/11 [253/00] 03/12 [253/00] Out 0318z Very strong 10/12 [253/00] Out 0318z Very strong 17/12 [253/00] Out 0318z Very strong 18/12 [253/00] Out 0318z Very strong 31/12 [253/00]	RNGB, JkC RNGB PLondon PLondon PLondon PLondon Christer	WED WED WED WED THU WED
6304kHz	2000z 2000z 2000z 2000z	28/11 [576/00] 05/12 [576/00] 12/12 [576/00] QSA1 26/12 [576/00]	Gary H, RNGB Gary H Karsten RNGB	FRI FRI FRI FRI
7840kHz	0645z 0645z 0645z 0645z 0645z 0645z 0645z 0645z 0645z	04/11 [517/00] Out 0648z Very Strong QRM 3 QRN 2 QSB 2 06/11 [517/00] Out 0648z Strong QRM1 QSB1 13/11 [517/00] 02/12 [517/00] 0648z Fair QRN3 QSB3 04/12 [517/00] 0648z Fair QRN3 QSB3 09/12 [517/00] Out 0648z Fair QRM1 QSB2 11/12 [517/00] 0648z Fair QRN3 QSB3 16/12 [517/00] 0648z Fair QRN3 QSB3 16/12 [517/00] 0648z Fair QRN3 QSB3	Christer, JkC JkC RNGB Spectre Spectre JkC Spectre Spectre Spectre Ary	TUE THU THU TUE THU WED THU TUE WED
8091kHz	1045z 1045z 1045z 1045z 1045z	04/11 [469/00] 02/12 [469/00] 10/12 [469/00] Out 1048z S2 16/12 [469/00] 1048z Fair QRN3 QSB3 23/12 [469/00] Out 1048z S2	RNGB RNGB, Malc Malc Spectre Malc	TUE TUE WED TUE TUE
9443kHz	1705z 1705z 1705z 1705z 1705z 1705z 1705z 1705z 1705z 1705z 1705z	05/11 [392/00] Out 1708z S9 19/11 [392/00] Out 1708z Fair QRM1 QSB1 22/11 [392/00] Out 1708z QSA1 26/11 [392/00] 03/12 [392/00] Out 1508z Strong QRM1 QSB1 06/12 [392/00] 17/12 [392/00] Out 1708z S9 20/12 [392/00] 24/12 [392/00] Good 31/12 [392/00]	Malc JkC Karsten RNGB JkC RNGB Malc Malc RNGB Gary H	WED WED SAT WED SAT WED SAT WED SAT WED SAT WED WED
9446kHz	0830z 0900z 0900z 0830z 0900z 0830z 0830z 0900z 0830z 0900z 0830z 0900z 0830z 0900z 0830z 0900z 0830z 0900z 0830z	03/11 [649/00] 03/11 [534/00] 05/11 [534/00] 07/11 [649/00] Good 10/11 [534/00] 17/11 [649/00] 08:33z QSA5 21/11 [649/00] Out 0833z S7 24/11 [534/00] 01/12 [649/00] 01/12 [649/00] 03/12 [534/00] 03/12 [534/00] 05/12 [649/00] Out 0833z Fair QRN3 QSB3 08/12 [469/00] Out 0833z S6 08/12 [534/00] Fair 12/12 [649/00] Out 0833z S6 15/12 [649/00] Out 0833z S6 15/12 [649/00] Out 0833z S7 22/12 [534/00] Fair	RNGB RNGB RNGB RNGB RNGB Karsten Malc RNGB, Malc RNGB RNGB RNGB RNGB RNGB RNGB RNGB RNGB	MON MON WED FRI MON MON MON WED FRI MON WED FRI MON WED FRI MON WED FRI MON WED
9950kHz	0930z 0930z 0930z 0930z 0930z 0930z 0930z 0930z	20/11 [270/00] Out 0933z S4 26/11 [270/00] 27/11 [270/00] Out 0933z S4 10/12 [270/00] Out 0933z S2 11/12 [270/00] Out 0933z S5 17/12 [270/00] 24/12 [270/00] Out 0933z S3 31/12 [270/00] Out 0933z S2	Malc RNGB Malc Malc Malc RNGB, Malc Malc Malc	THU WED THU WED THU WED WED WED
10125kHz	2 0820z 0820z 0820z 0820z 0820z 0820z 0820z 0820z 0820z 0820z 0820z	06/11 [438/00] 10/11 [438/00] 24/11 [438/00] 27/11 [438/00] 01/12 [438/00] Out 0833z S7 08/12 [438/00] out 0823z S3 11/12 [438/00] 0823z Fair QRN3 QSB3 22/12 [438/00]	RNGB RNGB RNGB RNGB Malc Malc Spectre Malc	THU MON MON THU MON THU MON THU MON

	820z 820z	25/12 [438/00] 29/12 [438/00]	RNGB RNGB	THU MON
10212141- 07	745	02/11 [262/00] Ont 0749 - 50	Mala DNCD	MON
10213kHz 07	7452 745z	03/11 [262/00] Out 0748z S9 17/11 [262/00] Out 0748z S5	Malc , RNGB Malc	MON
	745z	24/11 [262/00] Out 0748z S6	Malc	MON
	745z	01/12 [262/00]	RNGB, Malc	MON
	745z	15/12 [262/00]	RNGB	MON
07	745z	22/12 [262/00]	Malc	MON
10429kHz 08	805z	12/11 [311/00]	RNGB	WED
	805z	03/12 [311/00]	RNGB	WED
	805z	07/12 [311/00] 0808z Fair QRN3 QSB3	Spectre	SUN
	805z 805z	10/12 [311/00] 14/12 [311/00]	RNGB RNGB	WED SUN
	805z	24/12 [311/00] Out 0808z S2	Malc	WED
	805z	31/12 [311/00]	RNGB	WED
10800kHz 07	7102	04/11 [633/00]	RNGB	TUE
	710z 710z	07/11 [633/00]	RNGB	FRI
	710z	18/11 [633/00]	RNGB	TUE
	710z	01/12 [633/00] 0713z Fair QRN3 QSB3	Spectre	TUE
	710z	05/12 [633/00] Weak	RNGB	FRI
	710z 710z	09/12 [633/00] Out 0713z S2 12/12 [633/00] 0713z Fair QRN3 QSB3	Malc Spectre	TUE FRI
	710z	23/12 [633/00] 0713z Fair QRN3 QSB3	Spectre	TUE
	710z	26/12 [633/00]	RNGB	FRI
07	710z	30/12 [633/00]	RNGB	TUE
11107kHz 20	005z	06/12 [363/00] 2008z Fair QRN3 QSB3	Spectre	SAT
	005z	07/12 [363/00] 2008z Fair QRN3 QSB3	Spectre	SUN
	005z	13/12 [363/00] Out 2008z Very Weak QRM1 QSB3	JkC	SAT
	005z	14/12 [363/00] Out 2008z S2	Malc	SUN
20	005z	20/12 [363/00] Out 2008z Very Weak QRM1 QSB4	JkC	SAT
12153kHz 10	045z	25/11 [576/00]	RNGB, Malc	TUE
	045z	02/12 [576/00]	RNGB	TUE
	045z	16/12 [576/00]	RNGB Mala	TUE
	045z 045z	23/12 [576/00] Out 1048z S5 30/12 [576/00]	Malc RNGB	TUE TUE
-	0.02		10.02	102
15632kHz 15		02/11 [228/00]	RNGB	SUN
		05/11 [718/00] Out1158z S3	Malc	WED SUN
	540z 540z	16/11 [228/00] 24/11 [228/00] Out	Gary H, Malc RNGB	MON
	155z	03/12 [718/00] Out1158z S9	Malc	WED
	540z	08/12 [228/00] Out 1543z S2	Malc	MON
	540z	14/12 [228/00] Out 1543z S7	Malc	SUN
	155z 540z	17/12 [718/00] Out 1158z S9 22/12 [228/00]	Malc RNGB	WED MON
	155z	24/12 [718/00] Out 1158z S4	Malc	WED
15	540z	29/12 [228/00] Out 1543z S9	Malc	MON
16112kHz 07	7/157	04/11 [335/00]	RNGB	TUE
	745z	06/11 [335/00] Out 0748z S7	Malc	THU
	745z	25/11 [335/00] Out 0748z S8	Malc	TUE
	745z	27/11 [335/00] Strong	RNGB	THU
	745z 745z	09/12 [335/00] 0748z Fair QRN3 QSB3	Spectre	TUE
	7432 745z	16/12 [335/00] 18/12 [335/00]	RNGB Ary	TUE WED
			·	
18030kHz 13		25/11 [133/00] Out 1303z S9+10	Malc	TUE
	300z 300z	03/12 [133/00] Out 1303z S9+10 09/12 [133/00]	Malc, JkC RNGB	WED TUE
	300z	17/12 [133/00] Out 1303z S8	Malc	WED
E11a log Nov	v/Dec			
Ella log No	W/Dec			
4441kHz 09		06/11 [247/31 Attention 28757 87201] Out 0910z Weak QRN4 QSB3	Spectre	THU
	900z 445z	08/11 [247/31 Attention 28757 87201] Out 0910z Weak QRN4 QSB3 19/11 [289/36 07697 70696 39547 98642 80524 72543 33852 9073962502 59077] Out 1455z Fair	Spectre JkC	SAT WED
	443z 445z	22/11 [289/36 Attention 07697 59077] Out 1456z Fair QRN4 QSB3	Spectre	SAT
	445z	17/12 [286/36 77993 28086 22934 90597 46820 82982 10360 3298702066 33426] Out 1455z Fair	JkC	WED
	445z	20/12 [286/36 77993 33426] Out 1454z Fair QRM1 QSB1 Repeat of 17/12	JkC	SAT
5082kHz 17	730z	13/11 [412/34 49319 29425 50847 81193 88385 96903 62968 9992423641 49348]	RNGB	THU
	730z	04/12 [411/30 45035 23718 08345 21176 11272 90391 26038 65989 6773602131 21124]	RNGB	THU
54001 TT 15	520	12/11 [2/2/22 7440/ 02422 22100 50011 24222 01101 470/0 705/7 0421/ 522/03 C 1	DNCP	CDT TT T
5409kHz 15	530z 530z	13/11 [262/33 74496 83422 23189 50811 34333 81181 47960 7956704316 52368] Good 11/12 [260/33 93158 59984 18894 14370 18342 47993 45827 8170970698 69088]	RNGB JkC, Malc	THU THU
5779kHz 03		27/11 [258/32 V 03685 41426 56729 90042 96958 72009 43976 3992120099 80661] Good	RNGB	THU
03	315z	24/12 [258/38 88812 81596 35146 32301 68772 19307 33297 5995313563 07062] Out 0325z Very strong	PLondon	WED

C20 41 TT				
6304KHZ	2000z	07/11 [571/35 70419 06000 76450 99532 54501 39621 75157 02370 3863366030 88608]	RNGB, Spectre	FRI
	2000z	12/12 [570/37 29903 96635 32090 55647 00410 76940 05895 20024 94330 1224349480 80459]	JkC	FRI
6923kHz	1710z	03/11 [953/30 66526 68370 98768 62435 49847 65674 09291 7470320302 58165] Out 1719z Strong	JkC, Spectre	MON
	1710z	07/11 [955/25 Attention 2069779810] Out 1717z Fair QRN3 QSB3	Spectre	FRI
			1	
	1710z	10/11 [952/30 86000 09600 12746 17567 39866 05217 7502239047 48371]	RNGB	MON
	1710z	21/11 [953/21ATTENTION 1171172933]	Malc	FRI
	1710z	24/11 [951/20ATTENTION 1240305776]	Malc	MON
	1710z	01/12 [955/30 56868 26964 81189 82202 05276 23908 35773 82862 6950106720 50939]	RNGB, Malc	MON
		·		
	1710z	08/12 [957/30 34869 24751 86634 57749 16667 31863 51954 9331713030 79635]	RNGB	MON
	1710z	12/12 [957/21 61915 92390 93291 94861 04919 64347 10502 6122667900 75158] Out 1717z Strong	JkC	FRI
	1710z	15/12 [955/30 38083 69960 55840 69248 19213 95484 83474 4430374596 29259] Out 1719z Strong	JkC	MON
	1710z	19/12 [951/20 86951 45229 16868 97243 88770 89210 26570 6522026113 42618] Out 1715z Strong	JkC	FRI
		, , , ,		
	1710z	22/12 [955/30 34078 10171 23394 85499 52536 63770 98306 4428181079 25871]	Karsten, Malc	MON
	1710z	29/12 [951/20 02006 43150 25198 56514 87841 65862 81498 5077509431 99882]	RNGB	MON
7840kHz	0645z	27/11 [51?/30 54663 02165 69199 03232 39191 08668 40455 7445864433 70929]	RNGB	THU
8091kHz	1045z	25/11 [469/35 52966 89926 90963 54758 46794 42513 46685 8040384595 12301] Fair	RNGB	TUE
	1045z	30/12 [463/37 10823 46924 86245 67481 92177 8104047931 40197] Out 1055z Weak	RNGB, Thomas	TUE
		,		
9443kHz	17057	12/11 [395/34 73359 36007 55552 76041 92672 75066 53230 7460005427 83777] Good	RNGB	WED
)++3K11Z				
	1705z	10/12 [392/32 00065 87601 76773 01671 07519 91058 09331 44629 9892103411 51253]	RNGB, Malc, JkC	WED
	1705z	13/12 [392/32 00065] Repeat of Weds	RNGB	SAT
9446kHz	0900z	17/11 [538/30 34226 56942 85384 93835 28953 91293 8118799636 98082]	RNGB	MON
/TTOKI IZ		· ·		
	0900z	19/11 [538/30 Attention 34226 98082] Out 0909z (Repeat of Monday) Fair QRN4 QSB3	Spectre	WED
	0830z	24/11 [649/38 47853 17177 30040 89356 27437 60666 87288 9950217585 15173]	RNGB	MON
	0830z	28/11 [649/38 47853etc] Repeat of Monday	Malc	FRI
	0830z	26/12 [648/35 05706 65326 42535 79484 30335 81750 64530 9619431027 55028]	RNGB	FRI
	0900z	29/12 [537/35ATTENTION 1063809602]	Malc	MON
	0900z	31/12 [537/35 1063821266 09602]	RNGB, Malc	WED
9950kHz	0930z	05/11 [276/30 64315 32982 23227 90976 52262 55644 39314 0841288782 98291] Fair	RNGB	WED
	0930z	03/12 [275/33ATTENTION 0058482370]	Malc	WED
	0930z	04/12 [275/33 00584 64859 54621 59416 99334 95810 23684 4849567318 82370]	RNGB	THU
	0930Z	04/12 [2/3/33 00364 04639 34021 39410 99334 93610 23064 464930/316 623/0]	KNOD	Inu
10125kH:	z 0820z	17/11 [439/37 Attention 7087042002] Out 0832z Fair QRN4 QSB3	Spectre	MON
	0820z	20/11 [439/37ATTENTION 7087042002]	Malc	THU
	0820z	15/12 [438/37 29376 87389 32207 36377 41161 57672 70094 61107 65490 4881428366 19712]	RNGB, Malc	MON
		•		
	0820z	18/12 [438/37 29376etc] Repeat of Monday	Malc	THU
10213kH:	z 1810z	01/11 [983/10 88464 03051 33634 36149 53622 89909 08908 39909 61999 63281]	RNGB, Spectre	SAT
	1810z	04/11 [983/10 04807 97571 82856 80588 46522 67331 89970 88259 50615 45757]	Malc	TUE
	1810z	08/11 [988/10 41000 15926 11086 55639 39170 23026 78460 92459 43232 44063]	RNGB	SAT
	0745z	10/11 [262/33 Attention 7449652368] Out 0755z Fair QRN3 QSB3	Spectre	MON
	1810z	11/11 [983/10 93451 72942 43159 81534 97974 55741 05033 95697 02695 08282]	Karsten	TUE
	1810z	02/12 [982/10 45186 81142 87171 76874 34651 88764 88860 82335 18622 58281] Out 1815z S2	Malc, JkC	TUE
	1810z	06/12 [981/10 66225 31191 79111 47017 94373 02763 74568 61215 23898 44309]	Malc	SAT
				5711
		·		MON
	0745z	08/12 [260/33ATTENTION 9315869088]	Malc	MON
	0745z 1810z	08/12 [260/33ATTENTION 9315869088] 09/12 [983/10ATTENTION 7627108495]	Malc Malc	TUE
	0745z	08/12 [260/33ATTENTION 9315869088]	Malc	
	0745z 1810z 1810z	08/12 [260/33ATTENTION 9315869088] 09/12 [983/10ATTENTION 7627108495] 16/12 [983/10 50?98 21780 41340 93309 72500 00735 8??38 04834 83899 21157] Weak	Malc Malc RNGB	TUE TUE
	0745z 1810z 1810z 1810z	08/12 [260/33ATTENTION 9315869088] 09/12 [983/10ATTENTION 7627108495] 16/12 [983/10 50?98 21780 41340 93309 72500 00735 8??38 04834 83899 21157] Weak 20/12 [985/10 59939 34931 82570 31252 25319 43599 35732 95492 11341 35101]	Malc Malc RNGB JkC	TUE TUE SAT
	0745z 1810z 1810z 1810z 1810z	08/12 [260/33ATTENTION 93158	Malc Malc RNGB JkC Malc	TUE TUE SAT TUE
	0745z 1810z 1810z 1810z	08/12 [260/33ATTENTION 9315869088] 09/12 [983/10ATTENTION 7627108495] 16/12 [983/10 50?98 21780 41340 93309 72500 00735 8??38 04834 83899 21157] Weak 20/12 [985/10 59939 34931 82570 31252 25319 43599 35732 95492 11341 35101]	Malc Malc RNGB JkC	TUE TUE SAT
	0745z 1810z 1810z 1810z 1810z 1810z	08/12 [260/33ATTENTION 93158	Malc Malc RNGB JkC Malc JkC	TUE TUE SAT TUE TUE
10429kH:	0745z 1810z 1810z 1810z 1810z 1810z 1810z z 0805z	08/12 [260/33	Malc Malc RNGB JkC Malc JkC	TUE TUE SAT TUE
10429kH:	0745z 1810z 1810z 1810z 1810z 1810z	08/12 [260/33ATTENTION 93158	Malc Malc RNGB JkC Malc JkC	TUE TUE SAT TUE TUE
10429kH:	0745z 1810z 1810z 1810z 1810z 1810z 1810z z 0805z	08/12 [260/33	Malc Malc RNGB JkC Malc JkC	TUE TUE SAT TUE TUE
	0745z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z	08/12 [260/33	Malc Malc RNGB JKC Malc JkC Spectre RNGB, Malc	TUE TUE SAT TUE TUE WED WED
10429kH: 10690kH:	0745z 1810z 1810z 1810z 1810z 1810z 1810z z 0805z 0805z z 1400z	08/12 [260/33	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC	TUE TUE SAT TUE TUE WED WED SAT
	0745z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z 2 1400z 1400z	08/12 [260/33ATTENTION 93158	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc	TUE TUE SAT TUE TUE WED WED SAT TUE
	0745z 1810z 1810z 1810z 1810z 1810z 1810z z 0805z 0805z z 1400z	08/12 [260/33	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC	TUE TUE SAT TUE TUE WED WED SAT
	0745z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z 2 1400z 1400z	08/12 [260/33ATTENTION 93158	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc	TUE TUE SAT TUE TUE WED WED SAT TUE
	0745z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z z 1400z 1400z 1400z 1400z	08/12 [260/33ATTENTION 9315869088] 09/12 [983/10ATTENTION 7627108495] 16/12 [983/10 50?98 21780 41340 93309 72500 00735 8??38 04834 83899 21157] Weak 20/12 [985/10 59939 34931 82570 31252 25319 43599 35732 95492 11341 35101] 23/12 [988/10ATTENTION 9005789022] 30/12 [984/10 75875 97990 19561 53887 34482 37197 83409 69641 48051 63791] 19/11 [373/38 Attention 9428235349] Out 0817z Fair QRN4 QSB3 17/12 [373/32 00847 43725 23813 75751 03036 34167 64974 4543278679 35924] Good 01/11 [982/10 48839 56330 74502 21921 46140 67669 03010 10184 46267 54440] Out 1405z Strong 04/11 [988/10 26983 93538 05007 06411 98477 54926 58364 30870 58619 12739] 08/11 [985/10 Attention 9591611377] Out 1406z Weak QRN4 QSB3 15/11 [981/10 40119 46841 03007 07984 09217 71666 12697 94184 23041 63336]	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc	TUE TUE SAT TUE TUE WED WED SAT TUE SAT TUE SAT SAT
	0745z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z z 1400z 1400z 1400z 1400z 1400z 1400z	08/12 [260/33ATTENTION 9315869088] 09/12 [983/10ATTENTION 7627108495] 16/12 [983/10 50?98 21780 41340 93309 72500 00735 8??38 04834 83899 21157] Weak 20/12 [985/10 59939 34931 82570 31252 25319 43599 35732 95492 11341 35101] 23/12 [988/10ATTENTION 9005789022] 30/12 [984/10 75875 97990 19561 53887 34482 37197 83409 69641 48051 63791] 19/11 [373/38 Attention 9428235349] Out 0817z Fair QRN4 QSB3 17/12 [373/32 00847 43725 23813 75751 03036 34167 64974 4543278679 35924] Good 01/11 [982/10 48839 56330 74502 21921 46140 67669 03010 10184 46267 54440] Out 1405z Strong 04/11 [988/10 26983 93538 05007 06411 98477 54926 58364 30870 58619 12739] 08/11 [985/10 Attention 9591611377] Out 1406z Weak QRN4 QSB3 15/11 [981/10 40119 46841 03007 07984 09217 71666 12697 94184 23041 63336] 22/11 [988/10 98451 79668 19256 79618 29422 07931 69356 06386 64015 24621]	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Karsten	TUE TUE SAT TUE TUE WED WED SAT TUE SAT SAT SAT
	0745z 1810z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z z 1400z 1400z 1400z 1400z 1400z 1400z 1400z	08/12 [260/33ATTENTION 9315869088] 09/12 [983/10ATTENTION 7627108495] 16/12 [983/10 50?98 21780 41340 93309 72500 00735 8??38 04834 83899 21157] Weak 20/12 [985/10 59939 34931 82570 31252 25319 43599 35732 95492 11341 35101] 23/12 [988/10ATTENTION 9005789022] 30/12 [984/10 75875 97990 19561 53887 34482 37197 83409 69641 48051 63791] 19/11 [373/38 Attention 9428235349] Out 0817z Fair QRN4 QSB3 17/12 [373/32 00847 43725 23813 75751 03036 34167 64974 4543278679 35924] Good 01/11 [982/10 48839 56330 74502 21921 46140 67669 03010 10184 46267 54440] Out 1405z Strong 04/11 [988/10 26983 93538 05007 06411 98477 54926 58364 30870 58619 12739] 08/11 [985/10 Attention 9591611377] Out 1406z Weak QRN4 QSB3 15/11 [981/10 40119 46841 03007 07984 09217 71666 12697 94184 23041 63336] 22/11 [988/10 98451 79668 19256 79618 29422 07931 69356 06386 64015 24621] 25/11 [988/10ATTENTION 3266029312] S7	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Karsten Malc	TUE TUE SAT TUE TUE WED WED SAT TUE SAT SAT SAT TUE
	0745z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z z 1400z 1400z 1400z 1400z 1400z 1400z	08/12 [260/33ATTENTION 9315869088] 09/12 [983/10ATTENTION 7627108495] 16/12 [983/10 50?98 21780 41340 93309 72500 00735 8??38 04834 83899 21157] Weak 20/12 [985/10 59939 34931 82570 31252 25319 43599 35732 95492 11341 35101] 23/12 [988/10ATTENTION 9005789022] 30/12 [984/10 75875 97990 19561 53887 34482 37197 83409 69641 48051 63791] 19/11 [373/38 Attention 9428235349] Out 0817z Fair QRN4 QSB3 17/12 [373/32 00847 43725 23813 75751 03036 34167 64974 4543278679 35924] Good 01/11 [982/10 48839 56330 74502 21921 46140 67669 03010 10184 46267 54440] Out 1405z Strong 04/11 [988/10 26983 93538 05007 06411 98477 54926 58364 30870 58619 12739] 08/11 [985/10 Attention 9591611377] Out 1406z Weak QRN4 QSB3 15/11 [981/10 40119 46841 03007 07984 09217 71666 12697 94184 23041 63336] 22/11 [988/10 98451 79668 19256 79618 29422 07931 69356 06386 64015 24621]	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Karsten	TUE TUE SAT TUE TUE WED WED SAT TUE SAT SAT SAT
	0745z 1810z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z z 1400z 1400z 1400z 1400z 1400z 1400z 1400z	08/12 [260/33ATTENTION 9315869088] 09/12 [983/10ATTENTION 7627108495] 16/12 [983/10 50?98 21780 41340 93309 72500 00735 8??38 04834 83899 21157] Weak 20/12 [985/10 59939 34931 82570 31252 25319 43599 35732 95492 11341 35101] 23/12 [988/10ATTENTION 9005789022] 30/12 [984/10 75875 97990 19561 53887 34482 37197 83409 69641 48051 63791] 19/11 [373/38 Attention 9428235349] Out 0817z Fair QRN4 QSB3 17/12 [373/32 00847 43725 23813 75751 03036 34167 64974 4543278679 35924] Good 01/11 [982/10 48839 56330 74502 21921 46140 67669 03010 10184 46267 54440] Out 1405z Strong 04/11 [988/10 26983 93538 05007 06411 98477 54926 58364 30870 58619 12739] 08/11 [985/10 Attention 9591611377] Out 1406z Weak QRN4 QSB3 15/11 [981/10 40119 46841 03007 07984 09217 71666 12697 94184 23041 63336] 22/11 [988/10 98451 79668 19256 79618 29422 07931 69356 06386 64015 24621] 25/11 [988/10ATTENTION 3266029312] S7	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Karsten Malc	TUE TUE SAT TUE TUE WED WED SAT TUE SAT SAT SAT TUE
	0745z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z 2 1400z	08/12 [260/33ATTENTION 93158	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Gary H Malc	TUE TUE SAT TUE TUE WED WED SAT TUE SAT SAT TUE TUE SAT TUE SAT
	0745z 1810z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z 2 1400z	08/12 [260/33	Malc Malc RNGB JKC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Spectre RNGB, Malc Karsten Malc Gary H Malc Karsten	TUE TUE SAT TUE TUE WED WED SAT TUE SAT SAT TUE SAT TUE SAT SAT
	0745z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z 2 1400z	08/12 [260/33ATTENTION 93158	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Karsten Malc Gary H Malc Karsten JkC	TUE TUE SAT TUE WED WED SAT TUE SAT SAT TUE SAT TUE SAT SAT SAT SAT SAT SAT
	0745z 1810z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z 2 1400z	08/12 [260/33	Malc Malc RNGB JKC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Spectre RNGB, Malc Karsten Malc Gary H Malc Karsten	TUE TUE SAT TUE TUE WED WED SAT TUE SAT SAT TUE SAT TUE SAT SAT
	0745z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z 2 1400z	08/12 [260/33ATTENTION 93158	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Karsten Malc Gary H Malc Karsten JkC	TUE TUE SAT TUE WED WED SAT TUE SAT SAT TUE SAT TUE SAT SAT SAT SAT SAT SAT
	0745z 1810z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 2 0805z 2 1400z	08/12 [260/33ATTENTION 93158	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Spectre RNGB, Malc Karsten Malc Gary H Malc Karsten JkC Karsten JkC Karsten JkC Karsten RNGB	TUE TUE SAT TUE TUE WED WED SAT TUE SAT SAT TUE SAT
	0745z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 2 0805z 2 1400z	08/12 [260/33ATTENTION 93158	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Karsten Malc Gary H Malc Karsten JkC Karsten JkC Karsten	TUE TUE SAT TUE WED WED SAT TUE SAT SAT TUE SAT SAT TUE SAT SAT TUE SAT TUE SAT TUE TUE TUE TUE TUE TUE TUE TUE TUE TU
10690kH:	0745z 1810z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 2 0805z 2 1400z	08/12 [260/33	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Karsten Malc Gary H Malc Karsten JkC Karsten JkC Karsten RNGB JkC, Malc	TUE TUE SAT TUE TUE WED WED SAT TUE SAT SAT SAT TUE SAT TUE SAT TUE SAT TUE TUE TUE TUE TUE TUE TUE TUE TUE TU
	0745z 1810z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 2 0805z 2 1400z	08/12 [260/33	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Karsten Malc Gary H Malc Karsten JkC Karsten JkC Karsten JkC Karsten Spectre RNGB JkC, Malc Spectre	TUE TUE SAT TUE TUE WED WED SAT TUE SAT SAT TUE SAT TUE SAT TUE SAT TUE SAT TUE TUE TUE TUE TUE TUE TUE
10690kH:	0745z 1810z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 2 0805z 2 1400z	08/12 [260/33	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Karsten Malc Gary H Malc Karsten JkC Karsten JkC Karsten RNGB JkC, Malc	TUE TUE SAT TUE TUE WED WED SAT TUE SAT SAT SAT TUE SAT TUE SAT TUE SAT TUE TUE TUE TUE TUE TUE TUE TUE TUE TU
10690kH:	0745z 1810z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 2 0805z 2 1400z	08/12 [260/33	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Karsten Malc Gary H Malc Karsten JkC Karsten JkC Karsten JkC Karsten Spectre RNGB JkC, Malc Spectre	TUE TUE SAT TUE TUE WED WED SAT TUE SAT SAT TUE SAT TUE SAT TUE SAT TUE SAT TUE TUE TUE TUE TUE TUE TUE
10690kH: 10800kH:	0745z 1810z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z 2 1400z	08/12 [260/33	Malc Malc RNGB JKC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Karsten Malc Gary H Malc Karsten JkC Karsten JkC Karsten RNGB JkC, Malc	TUE TUE SAT TUE TUE WED WED SAT TUE SAT SAT TUE SAT SAT TUE SAT TUE TUE TUE TUE TUE TUE
10690kH:	0745z 1810z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z 2 1400z	08/12 [260/33	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Karsten Malc Gary H Malc Karsten JkC Karsten JkC Karsten JkC Karsten Spectre RNGB JkC, Malc Spectre	TUE TUE SAT TUE TUE WED WED SAT TUE SAT SAT TUE SAT TUE SAT TUE SAT TUE SAT TUE TUE TUE TUE TUE TUE TUE
10690kH: 10800kH: 12153kH:	0745z 1810z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z 2 1400z	08/12 [260/33ATTENTION 93158	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Karsten Malc Gary H Malc Karsten JkC Karsten RNGB JkC, Malc Spectre RNGB JkC, Malc	TUE TUE SAT TUE WED WED SAT TUE SAT SAT SAT TUE SAT SAT TUE TUE TUE TUE TUE TUE TUE TUE TUE TU
10690kH: 10800kH:	0745z 1810z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z 2 1400z	08/12 [260/33ATTENTION 93158	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Karsten Malc Gary H Malc Karsten JkC Karsten RNGB JkC, Malc Spectre RNGB JkC, Malc	TUE TUE SAT TUE WED WED SAT TUE SAT SAT SAT TUE SAT SAT TUE TUE TUE TUE TUE TUE TUE TUE
10690kH: 10800kH: 12153kH:	0745z 1810z 1810z 1810z 1810z 1810z 1810z 1810z 2 0805z 0805z 2 1400z	08/12 [260/33ATTENTION 93158	Malc Malc RNGB JkC Malc JkC Spectre RNGB, Malc JkC Malc Spectre RNGB, Malc Karsten Malc Gary H Malc Karsten JkC Karsten RNGB JkC, Malc	TUE TUE SAT TUE WED WED SAT TUE SAT SAT SAT TUE SAT SAT TUE TUE TUE TUE TUE TUE TUE TUE TUE TU

14410kHz 1110z	03/11 [952/33 69182 53976 22061 13792 54422 81764 09100 7391868275 35773]	RNGB, Malc	MON
1110z	07/11 [952/38ATTENTION 7974056456]	Malc	FRI
1110z	14/11 [954/32 55944 03013 27517 68016 54447 56289 82562 3563605379 93979]	RNGB	FRI
1110z	17/11 [956/33 22594 04207 41679 88698 08384 39350 21017 09896 55813 77196]	RNGB, Karsten	MON
1110z	21/11 [952/31ATTENTION 8668220311]	Malc	FRI
1110z	24/11 [954/32ATTENTION 6942704048]	Malc	MON
1110z	28/11 [954/32ATTENTION 6782379347]	Malc	FRI
1110z	01/12 [95?/35ATTENTION 1254214607]	Malc	MON
1110z	08/12 [952/40ATTENTION 1753597746]	Malc	MON
1110z	12/12 [958/31ATTENTION 7684645026]	Malc	FRI
1110z	15/12 [954/32 83874 01513 05569 83954 05073 6676655028]	RNGB, Malc	MON
1110z	19/12 [954/32ATTENTION 0772260605]	Malc	FRI
1110z	22/12 [950/40 24696 99764 32333 84071 97200 86410 20821 4019190867 75211]	RNGB	MON
1110z	26/12 [956/32 95055 47218 50442 44324 19149 08370 08766 2760826395 73248]	RNGB	FRI
15632kHz 1540z	03/11 [225/31 98507 26657 15350 68226 09719 98263 95693 5254280580 11070]	Gary H, JkC	MON
1540z	09/11 [228/31 98507 26657 15350 68226 09719 98263 95693 52542 9820580580 11070]	Gary H	SUN
1155z	19/11 [716/32 Attention 6293278180] Out 1205z Fair QRN3 QSB3	Spectre	WED
1155z	20/11 [716/32ATTENTION 6393278180]	Malc	THU
1540z	01/12 [226/37 79281 24930 17254 83139 04672 96031 70326 85847 82200 17458 93152]	JkC, Malc	MON
1540z	07/12 [226/37ATTENTION 7928193152]	Malc	SUN
1155z	10/12 [713/30ATTENTION 6961410436]	Malc	WED
1155z	11/12 [713/30 6961410436] Repeat of Weds	Malc	THU
16112kHz 0745z	18/11 [330/30 99484 32081 92565 52568 91447 62772 68138 2524632104]	RNGB, Malc	TUE
0745z	20/11 [330/30 9948432104] repeat of Tuesday	Malc	THU
0745z	02/12 [330/35 Attention 40755 21609] Out 0756z Fair QRN3 QSB3	Spectre	TUE
0745z	04/12 [330/35 40755 57118 17060 62411 98185 10321 59067 44252 5624921609]	Malc, RNGB	THU
18030kHz 1300z	11/11 [131/36 Attention 42978 89006] Out 1312z Fair QRN3 QSB3	Spectre	TUE
1300z	12/11 [131/36 42978 65341 82993 79874 61682 57762 09936 50649 8580219611 89006]	RNGB	WED
1300z	30/12 [138/31 71661 05678 32762 24612 43959 83287 20899 0367316955 54946]	RNGB	

E17

Jim writes:

I just caught an unscheduled E17, almost certainly training, on 10240kHz. Partial recording available. Details as follows:

 $E17z\ 10240kHz\ 1533z\ 15/11[274\ 958\ 30\ 33796\ ...\ 56281\ 891\ 60\ 00000]1558z\ Strong\ QRM1\ QSB1\ JkC\ SAT$

Transcript:

```
274 (1533z)
33796 13577 74526 46647 79302 20534 11160 43494 (stops and carrier off 1536z)
38786 30485 (stops 1538z)
74 (tones) (1543z)
274 (1545z)
46062 68672 86468 38786 30485 96632 52537 53317 06675 41847
21767\ 53587\ 11834\ 81022\ 36903\ 41412\ 55676\ 09775\ 86315\ 25910
05899 50387 45847 23013 89757 52343 79628 42432 54 (stops 1553z)
274 (live YL, started with low audio, then corrected) (1555z)
23013 (pause)
89757 52343 79628 42432 54577 56281
891 891 60 60 00000 (1558z)
Carrier off (1559z)
```

Note: GR30, 25910, was repeated as 25901.

```
As far as I can tell, the complete message is:
33796 13577 74526 46647 79302 20534 11160 43494 38786 30485
46062\ 68672\ 86468\ 38786\ 30485\ 96632\ 52537\ 53317\ 06675\ 41847
21767\ 53587\ 11834\ 81022\ 36903\ 41412\ 55676\ 09775\ 86315\ 25910
05899 50387 45847 23013 89757 52343 79628 42432 54577 56281
891 30 00000
```

One thing that is slightly strange: I have been analyzing the groups used by S06s/E17z, and 46062, a common group, is only ever seen as GR1. On the restart at 1545z, this is the group restarted from, giving a total of 40 groups. As the beginning and end "DK" does not match, I am guessing that the training used two messages, the first 10 groups (of a 30 group message) for the initial failures, and a second message for the final live operator intervention.

An interesting insight into training procedures.

Followed by iING's intercept:

E17 10240,0 1555z 15.11. [Strong carrier on, some noise as someone is grabbing on the open microphone, then a female live operator came on: 274 R1m 23013 230 89757 52434 79628 42432 54577 56281 891 891 30 30 00000] 1558z QSA5 QRM1 QRN1 QSB1 tiNG SAT

http://datainer.amasha.de/utdx/L1115E07.mp3

E17z

November 2014

0800z 11170kHz 0810z 9820kHz

06/11 674 890 5 53516 25616 56069 96813 14199 890 5 00000 A very old S06s message

See below

Thurs 7 Mar 2013 09:30 8650 254 982 5 53516 25616 56069 96813 14199

Monday 10 Feb 2014 13:10 10265 831 264 5 53516 25616 56069 96813 14199

Tuesday 24 Jul 2012 07:15 6780 374 591 6 53516 25616 56079 96813 14199 42036

13/11 674 890 5 53516 25616 56069 96813 14199 890 5 00000(s)] Fair QRN4 QSB3

20/11 674 892 5 26190 46164 20137 11687 34868 892 5 00000 [0810z too weak to copy] Weak

27/11 674 892 5 26190 46164 20137 11687 34868 892 5 00000 Weak

December 2014

0800z0810z9820kHz 11170kHz 674 920 5 32929 32622 32939 31096 47473 920 5 00000(s) 04/12Fair 11/12 674 920 5 32929 32622 32939 31096 47473 920 5 00000(s) Fair 18/12 674 931 5 92145 36330 31956 40276 39393 931 5 00000(s) Fair 25/12 674 931 5 92145 36330 31956 40276 39393 931 5 00000(s) Fair

E25

November 2014

6140 kHz0944z 26/11[350 1025 4310 2131 9341 5027 9252 5451 2333 3740 6735 4158 9716 4310]
0951z carrier i.p. "Inte Omri" musical intro, YL calling "335 350 350...", carrier up till 0957z, AM QSA2 QSB2 MG WED

December 2014

9450 kHz1214z 28/12 "Inte Omri" musical intro, YL "883 0", carrier, 1219z WinXP shutdown sound and QRT, AM QSA5 MG SUN

G06

PoSW's logs leading onto others' logs:

As with other members of this number station family, a seasonal change to lower frequencies in November.

Second + Fourth Thursdays in the Month 1830 UTC Schedule:-

13-Nov-14:- 4,519 kHz, call "271", DK/GC "394 394 20 20". Same 5Fs as used for the

Friday 1930 UTC transmissions, although with a DK of "215", in October.

27-Nov-14:- 4,519 kHz, "271" and "394 394 20 20" again, S9 signal.

Friday 1930 UTC Schedule Following Second + Fourth Thursdays:-

14-Nov-14:- 4,792 kHz, call "436", DK/GC "701 701 20 20". Same 5F message which has been used many times in the past both by G06 and E06 in their respective languages and

with various Decode Keys, starts, "37839 35787 98273.....".

28-Nov-14:- 4,792 kHz, started about 40 seconds before the half-hour by by MSF controlled clock, "436" and "701 701 20 20" again, peaking well over an indicated S9.

12-Dec-14:- 4,792 kHz, "436" and "701 701 20 20", as in November. Somewhat slower than usual delivery of the 5F groups, I thought. Ended just after 1939 UTC.

First + Third Fridays in the Month 2000 + 2100 UTC Schedule:-

7-Nov-14:- 2000 UTC, 7,844 kHz, "167 167 167 00000", S6 to S7.

2100 UTC, 5,769 kHz, second sending, stronger signal, S9+. In keeping with standard practice these two frequencies were used for this schedule in January and February.

21-Nov-14:- 2000 UTC, 7,844 kHz, and 2100 UTC, 5,769 kHz, both S9+ signals, "167 167 167 00000". I have been tracking this Friday schedule since the late spring of 2013 and the only time this schedule has transmitted a "full message" was in June of that year.

5-Dec-14:- 2000 UTC, 7,844 kHz, and 2100 UTC, 5,769 kHz, "167 167 167 00000", again both transmissions S9+.

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

10-Nov-14:- 1700 UTC, 3,635 kHz, "367 367 367 00000". An indicated S7 to S8 inside the 80 metre amateur band, slight interference from weaker ham SSB signals.

1800 UTC, 4,538 kHz, second sending, good signal peaking well over S9.

8-Dec-14:- 1700 UTC, 3,635 kHz, "367 367 367 00000", strength S6. Started early, call-up was in progress when tuned in approx 25 seconds before the hour.

 $1800\,UTC,\ 4{,}538\,kHz,\ second\ sending,\ started\ six\ or\ seven\ seconds\ after\ the\ hour.$

Others' logs:

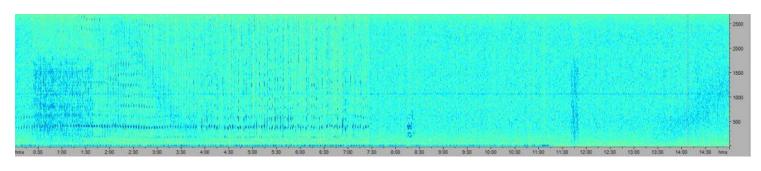
Nov	ember2014	

Monday 0800z	5463kHz			
03/11		215 00000		Weak
17/11		215 00000		Weak
24/11		215 00000		Weak
1700z	3635kHz	1800z	4538kHz	
03/11		367 00000		Weak QRN4 QSB3
10/11		367 00000		Weak QRN4 QSB3
Wednesda 1200z	ay 4557kHz			
05/11		367 00000		Weak QRN4 QSB3
12/11		367 00000		Weak QRN4 QSB3
Thursday 1300z	4024kHz			
13/11		215 00000		Weak QRN4 QSB3

1830z 4519kHz

215 00000

20/11



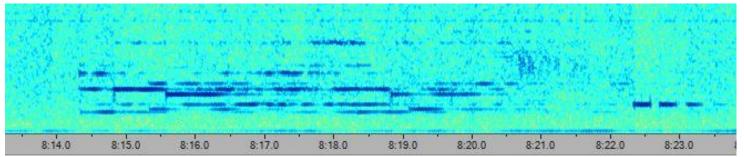
Weak QRN4 QSB3

 $4519 kHz\ 1830 z\ 13/11/2014\ This\ is\ a\ sonogram\ of\ G06,\ ending\ at\ 7m26s.\ Note\ chimes/dashes\ and\ later\ digital\ sending$

13/11 271 394 20 06132 ... 04484 394 20 Very strong

271 394 394 20 20 06132 75514 79681 94217 21443 31441 81797 17512 62689 33103 48930 93432 25709 93628 48683 18809 85052 49870 63962 04884 394 394 20 20 00000 Courtesy KH/Spectre

The above sending lasted 7m26s [ended 1837z], at 1838z a seies of chimes were heard. These lasted 8s and were thought to be a computer sound. After the cessation of the chimes four dashes were sent [275Hz tone] but at 1841z 10seconds of a digital signal were also heard.



8:14.0	8:15.0	8:16.0	8:17.0	8:18.0	8:19.0	8:20.0	8:21.0	8:22.0	8:23
			Chi	me/Dashes heard 1	838z onwards 13/11/2	2014			
27/11	271 39	4 20 06132 0					Stro	ong	
Friday									
1930z	4792kHz								
	12 5 70	4.00.05000	151501000						
14/11	436 701	1 20 37839 0	4564 /01 20 0	10000			Stre	ong	
	37839 35	787 98273 60187 16 423 40968 16891 63							
28/11	436 70	1 20 37839 0	4564 701 20 0	00000			Stro	ong	
2000z	7844kl	Hz	2100z 57	69kHz					
07/11	167 00	000					Stre	ong	
21/11	167 00	000					Stro	ong	
G06 December Monday 0800z	2014 5463kHz								
01/12	215 00	000					We	ak	
08/12	215 00	000					We	ak	
22/12	215 00	000					Stre	ong	
Monday 1700z	3635kl	Hz	1800z	4538k	хНz				
01/12	367 00	000					Stre	ong	
08/12	367 00	000					We	ak to fair	
Wednesda	ny								
1300z	4016kl	Hz							
03/12	367 00	000					Vei	y Weak QRM1	QSB4
10/12	367 00	000					Vei	y Weak	
1823z	4761kl	Hz [per RNGB]							
10/12	123 12	34 00000							

Thursday 1830z	4529kHz						
11/12 11/12	01234 test [1733z] 271 394 20 06132 04884 394 20 00000(f)	Very strong					
	271 394 394 20 20 06132 75514 79681 94217 21443 31441 81797 17512 62689 33103 48930 93432 25709 93628 48683 18809 85052 49870 63962 04884 394 394 20 20 00000						
25/12	271 394 20 06132 04884 394 20 00000	Very strong					
T							
Friday 1930z	4792kHz						
12/12	436 701 20 37839 04564 000 000	Very strong					
	436 701 701 20 20 37839 35787 98273 60187 16202 95625 31691 52538 61025 22567 93296 67423 40968 16891 63781 34820 04842 60491 75924 04594 701 701 20 20 00000 Courtesy HRT						
2000z 7844kH	z 2020z 5769kHz2 2100z	5769kHz					
05/12	167 00000	Very strong					
19/12	167 00000	Weak					
S06/S06s November/December2014 RNGB followed by PoSW							

S06 log November:

Daily Mon- Fri 0400z 15721kHz No reports

Mondays/Thursdays		1900z kHz	or	or 1905z 3838kHz		
03/11	1905z	'349' 00000	RNGB, T	Thomas		
10/11	1905z	'349' 00000 R4m 1909z	Thomas			
20/11	1905z	'349' 00000 19:09z QSA2	Karsten			
24/11	1905z	'349' 00000	RNGB			
Fridays		2000z 7971kHz	2100z	5909kH	Z	
07/11		'278' 00000				
21/11		'278' 00000 Ended 2004z S8	;	Malc	FRI	

Saturday	s 1st/2nd/3rd and 4th	1600z	6943kHz	or	1605z	5786kHz
01/11	1600z	'194' 780 36 05231	68769 96281	85610 79	0610 05837	25510 83348 76124 29282
		49525 03591 93964	48774 10669	21905 10	0914 46023	33364 16835
		10628 16146 45003	45571 58740) 43127 73	7243 55520	05018 39849
		90370 24033 00423	63642 51967	7 29475 78	36 00000)
		Repeat of 15/10 200)5z			Spectre, JkC
08/11	1605z	'194' 00000				-
15/11	1605z	'194' 00000				
22/11	1605z	'194' 00000				
Saturday 01/11	vs 1st and 3rd	2030z '621' 00000 (used	4612kHz 4026kHz)		2130z	4036kHz
15/11		'621' 00000 (used	4616kHz)			
Saturday 01/11 15/11	vs 1st and 3rd	4022kH 2 '362' 00000 '362' 00000	z 2000z		2100z	3368kHz

	t/2nd/3rd and 4th 35z 3932kHz	'396' 425 37 35480 13318 0269 73586 06278 07397 81348 103'	or 1935z 3842kHz 96 49280 93694 56197 56941 50953 10433 82894 77 25498 34748 32808 42132 14749 29 12456 89263 02575 43706 70016
15/11 19	935z 930z	19173 60260 71429 17875 0134	
22/11 19	935z	'396' 00000	
Unscheduled	I		
13/11 19	9875kHz 0830z		89 92246 37632 21152 89810 53846 30017 77182 01329 72473 49320 09515 16 34619 10285 73905 28774 63318 44006 47076 84518 26960 64047 42678 C QRN3 QSB3 Spectre THU
S06s Noveml	ber log:		
Mondays			
3rd/10th	0830/40	8057/8530	'371' 982 5 47665 94092 48521 63888 92060
17th/24th 3rd/10th	0900/10	14675/12830	'371' 906 5 33796 13577 74526 46647 79302 '872' 931 5 46062 68672 97478 39685 30485
17th/24th	0,00,10	110/0/12000	'872' 903 5 20534 11160 43494 37638 16070
3rd/10th	1200/10	8420/10635	'831' 502 6 83193 83561 74028 73822 83003 82540
17th/24th			⁶ 831, 907 5 96320 36793 53038 76342 15009
Tuesdova			
Tuesdays 4th/11th	0600/10	16145/14240	'438' No reports
18th/25th	0000/10	10113/11210	'438' 507 6 65906 66610 20336 17301 88554 82045
4th/11th	0700/15	5250/6320	'374' 980 5 30508 31399 38246 32423 34747
18th/25th			'374' 298 5 12864 14986 92499 69320 85039
4th/11th	0730/40	7410/11532	'427' 953 6 61732 74537 57440 10597 12357 47880
18th/25th	0900/10	11045/12105	'427' 8953 6 16556 44452 83405 81334 21031 15149
4th/11th 18th/25th	0800/10	11945/13195	'352' 941 6 33796 13577 74526 46647 79302 53516 '352' 490 6 27361 90603 41965 18289 23791 65920
4th/11th	1000/10	6440/5660	'893' 462 5 38013 42924 35945 32057 30805
18th/25th			'893' 472 5 32462 35968 37982 33831 37501
4th/11th	1100/10	?	'754' No reports
18th/25th	1500/10	6045/0170	'754'
4th/11th 18th/25th	1500/10	6845/9170	'537' 498 6 36434 36390 48328 32375 35837 36310 '537' 492 6 43714 35940 46508 34340 31468 38354
1001/2501			337 472 0 43714 33740 40300 34340 31400 30334
Wednesday			
5th/12th	0820/30	6778/7675	'471' 963 5 43247 32329 48080 36478 39013
19th/26th	0020/40	7025/11020	'471' 235 6 33796 13577 74526 46647 79302 53516
5th/12th 19th/26th	0830/40	7335/11830	'745' 802 6 36113 31107 37806 37137 31405 46464 '745' 961 8 88620 58069 717342 74537 57440 10597 23521 47660
5th/12th	1000/10	12365/14280	'729' 810 5 42352 38713 30699 48080 36113
19th/26th			'729' 458 6 20534 11160 43494 37638 16070 48834
5th/12th	1230/40	4580/6420	['] 967 ['] 814 5 30187 30568 32154 47965 32869
19th/26th			'967' 824 5 97211 46936 90477 08821 02044
Thursdays			
6th/13th (E	(17z) 0800/10	11170/9820	'674' 890 5 53516 25616 56069 96813 14199
20th/27th			'674' 892 5 26190 46164 20137 11687 34868
6th/13th	0900/10	5765/6315	624' 897 5 42997 94184 47374 74154 08531
20th/27th	0900/10	12952/13565	'624' 873 5 36315 31531 40505 39545 46469 '167' 402 5 20551 07532 64325 50747 56214
6th/13th 20th/27th	0900/10	12932/13303	'167' 492 5 29551 97532 64325 59747 56214 '167' 480 5 43686 41225 40696 81942 34952
6th/13th	0930/40	8812/9540	'314' 890 5 26634 14690 95590 60386 03009
20th/27th			'314' 857 6 39305 43341 94936 80987 55828 88268
6th/13th	0950/1000	12455/13130	635' 940 7 04435 46683 65453 13076 15834 21102 81436
20th/27th			'635' 921 7 85602 30229 38251 81818 81788 36784 43305
6th/13th	1200/10	12155/10920	'425' 801 6 56947 34917 76859 65103 59294 51162 '425' 839 6 69992 42717 83203 84124 35344 99298
20th/27th			1 23 037 U U7772 42111 032U3 04124 33344 <i>YY2Y</i> 8
Fridays			
7th/14th	0600/10	7125/8795	'934' 278 5 94497 15593 39460 92050 23248
21st/28th			⁽⁹³⁴⁾ 281 5 99925 44326 92970 83889 59535
7th/14th	0700/10	7150/8215	'196' 842 5 62159 85689 57708 29853 23328
21st/28th 7th/14th	0800/10	5810/6770	'196' 437 5 81853 26345 58622 00845 87408 '278' 916 5 88620 58069 61732 74537 57440
7tii/14tii 21st/28th	0000/10	3010/07/0	'278' 901 5 85?13 91225 54337 46277 47984
7th/14th	0930/40	11780/12570	'516' 403 7 83529 17326 34287 42718 53552 63011 32377
21st/28th			'516' 908 7 48405 80321 32604 38830 81271 44163 87629

SAT

Saturday			
1st	1200/10	8680/8280	'254' 819 6 17263 89173 45637 22907 23567 68891
1st	2100/10	5420/4543	'874' 318 9 82795 99434 71556 83971 03398 66805 98865 45964 29474
8th	2100/10		'874' 00000
22nd	2100/10		['] 874' 00000
Sundays			
2nd/9th	0630/40	13470/16515	'524' 983 6 35479 30050 45056 31397 33732 64535
16th/23rd			'524' 871 6 52401 63919 92699 14600 74248 48754

Unscheduled – A very unusual message as there is a repeated figure in the ID/DK and group count (2 ones and and 2 twos)

02/11 6262kHz/7010 0405/0420z

'127' 302 18

49711 63258 87613 95086 31910 65625 94603 94027 13253 95086

31910 65625 38984 52523 02630 38984 52523 02630

302 18 00000

Similarly, ID 874 appeared on Saturday evenings with messages which didn't follow normal protocol. Has now ended.

Thanks to RNGB, Spectre, Malc, JkC, Ary

S06 log December

Daily Mon- Fri	0400z	15721kHz	Z			
22/12 '480' 2	36 50 04656 179	21 236 50 00000	Ended 0411z Fair QRM1 QSB2	JkC	MON	HK Remote. See transcript
480 236 50						
04656 63924 1811	9 48479 72943 620	95 84731 20781 3	32890 65258			
73833 13490 3623	7 00055 33354 148	365 42324 28404	73939 58377			
94750 24522 2279	9 32715 05154 875	587 55780 00903 9	92559 32238			
18606 20224 5173	6 24087 73204 476	527 48988 52445 3	30075 30314			
68831 57443 5263	0 74183 59979 537	24 44441 23836 :	54093 17921			
236 50 00000						

Mondays/	Thursdays	1900z	3192kHz	or	1905z	3838kHz	
01/12	1905z	'349' 0000	00		Malc, HFI)	
04/12	1905z	'349' 0000	00		Malc		
08/12	1905z	'349' 0000	00		Malc		
15/12	1905z	'349' 0000	00		Malc		
18/12	1905z	'349' 0000	00		JkC		
20/12	1905z	'349' 0000	00 (used 38	32kHz)	JkC		
22/12	1900z	'349' 0000	00		Malc		
25/12	1905z	'349' 0000	00		RNGB		
29/12	1905z	'349' 0000	00		Malc		
		4000	-0-41 **		••••	= 0.001 * ¥	
Fridays		1900z	7971kHz		2000z	5909kHz	
05/12		'278' 0000	00		RNGB		
Saturdays	s 1st/2nd/3rd and 4th		1600z	6943kHz	or	1605z	5786kHz
06/12	1600z	'194' 0000	00		HFD		
13/12	1600z	'194' 0000	00		Spectre		
20/12	1605z	'194' 0000	00		Malc		
27/12	1600z	'194' 0000	00		RNGB, TI	nomas	

Saturdays	180/211u/31 u anu 4111	100	UZ U943KII	2 01	1003Z	STOURITZ
06/12	1600z	'194' 00000		HFD		
13/12	1600z	'194' 00000		Spectre		
20/12	1605z	'194' 00000		Malc		
27/12	1600z	'194' 00000		RNGB, TI	nomas	

Saturdays 1st and 3rd	2030z 4616	kНz	2130z	4036kHz
06/12	'621' 00000			
20/12	'621' 00000			

Saturday	s 1st and 3rd	4022kHz 2000z	2100z	3368kHz
06/12	2000z	'362' 00000	(Used 4027kHz)	
20/12	2000z	'362' 00000	(Used 4024kHz)	

Saturda	ys 1st/2nd/3rd and 4th	1930z 3169kHz	or	1935z	3842kHz
06/12	1935z	'396' 00000	Karsten	, HFD	
13/12	1935z (3834kHz)	'396' 00000	JkC		
20/12	1935z (3832kHz)	'396' 00000	Malc		

S06c

8173kHz 1503z	03/12 [I/P 11212] 1503z Fair QRM1 QSB1	JkC	WED
10163kHz 1441z	03/12 and again at 1450z with "11212" x 5 mins	Jan	WED
18452kHz 1100z	16/12 [I/P 11051] 1104z Strong QRM1 QSB1	JkC	TUE
14452kHz 1100z	23/12 '11179' x 4 mins	RNGB	TUE

S06s December log	:		
Mondays			
1st/8th	0830/40	8057/8530	'371' 250 6 45032 39366 87471 31487 40130 30905
15th/22nd			'371' 952 6 10597 23521 47660 92883 69901 15636
1st/8th	0900/10	14675/12830	'872' 416 5 43750 30431 38986 42218 46193
15th/22nd			'872' 904 5 10597 23521 47660 92883 69901
1st/8th	1200/10	8420/10635	'831' 209 5 37655 30146 34475 91326 41043
15th/22nd			'831' 940 5 96111 10544 98003 68909 45279
Tuesdays			
2nd/9th	0600/10	16145/14240	'438' 509 6 82946 74920 72849 92031 86534 85022
16th/23rd			'438' 592 6 16945 80744 86200 84706 42227 61736
2nd/9th	0700/15	5250/6320	'374' 219 5 40809 48367 33406 32785 37331
16th/23rd			'374' 916 5 48115 24151 51802 23807 15521
2nd/8th	0730/40	7410/11532	'427' 896 5 46062 53672 11834 81022 36903
16th/23rd			'427' 968 5 88620 58069 61732 74537 57440
2nd/9th	0800/10	11945/13195	'352' 478 6 88620 58069 61732 74537 57440 10545
16th/23rd			'352' 947 6 33796 13577 74527 46647 79302 53516
2nd/9th	1000/10	6440/5660	'893' 476 5 10597 23521 47560 92883 69901
16th/23rd	1100/10		'893' 457 6 46062 68672 97487 39685 30485 47660
2nd/9th	1100/10		'754' No reports
16th/23rd 2nd/9th	1500/10	6845/9170	'754' No reports '537' 824 6 31900 48366 36434 32840 48436 81480
211d/9th 16th/23rd	1500/10	0843/91/0	537 824 6 31700 46366 36434 32840 46436 81460 537 820 6 31704 91596 47308 92107 40398 85417
10th/23fd			337 620 0 31704 91390 47308 92107 40398 63417
Wednesday			
3rd/10th	0820/30	6778/7675	'471' 986 5 44520 46992 31373 39246 31773
17th/24th			'471' 253 6 46062 68672 97478 39685 30485 96632
3rd/10th	0830/40	7335/11830	'745' 809 6 49294 38064 31724 37324 39316 96930
17th/24th	1000/10	100 55 11 1000	'745' 803 6 52401 63919 92699 14600 74248 48754
3rd/10th	1000/10	12365/14280	'729' 835 6 46062 68672 97478 39685 30485 96632
17th/24th	1020/40	4500/6400	'729' 510 6 42169 35797 33873 39235 93615 84408
3rd/10th 17th/24th	1230/40	4580/6420	'967' No reports '967' 208 5 41422 44599 36384 58353 40329
1711/2411			707 208 3 41422 44399 30384 38333 40329
Thursdays			
4th/11th (E17z)	0800/10	11170/9820	674' 920 5 32929 32622 32939 31096 47473
18th/25th			674, 931 5 92145 36330 31956 40276 39393
4th/11th	0900/10	5765/6315	624' 870 5 33373 48111 44702 38067 93171
18th/25th			'624' 987 5 35543 47913 47329 95739 86599
4th/11th	0900/10	12952/13565	'167' 849 5 31542 38747 33534 36213 37680
18th/25th	0020/40	5765/6215	'167' 983 5 31694 81576 46319 81374 75416 '314' 257 6 40138 33307 37028 33193 14309 14320
4th/11th 18th/25th	0930/40	5765/6315	'314' 985 6 44745 16330 88418 30480 88650 34434
4th/11th	0950/1000	12445/13130	635' 294 7 84674 89978 80361 49906 35794 82605 46305
18th/25th	0730/1000	12443/13130	635' 489 7 33796 13577 75426 46647 79302 53516 25616
4th/11th	1200/10	8812/9540	'425' 873 6 42169 35797 33873 39235 93615 84408
18th/25th			'425' 938 6 93351 42191 30821 33725 37661 30885
Enidor			
Fridays 5th/12th	0600/10	7125/8795	'934' 860 5 44988 37970 30283 36889 84253
5tn/12tn 19th/26th	0000/10	1143/0193	'934' 860 5 44988 37970 30283 36889 84253 '934' NRH
5th/12th	0700/10	7150/8215	'196' 472 5 31399 33444 44384 99598 39459
19th/26th	0700/10	7130/0213	196 483 5 40613 77249 40678 17967 21816
5th/12th	0800/10	5810/6770	'278' 501 6 46062 68672 31312 52343 92883 69901
19th/26th			'278' 410 5 39408 33487 83456 37393 93068
5th/12th	0930/40	11780/12570	'516' 402 7 88146 57856 98835 46186 16945 80744 47374
19th/26th			'516' 204 7 49002 32571 33313 40597 91430 40489 15690
Saturday			
6th	1200/10	8680/8260	'254' NRH
6th	2100/10	5420/4543	'874' 00000
G 1			
Sundays	0620/40	12/70/17515	'524' No rements
7th/14th 21st/28th	0630/40	13470/16515	'524' No reports '524' 901 6 88620 58069 61732 73437 57440
Thanks to RNGB, S	nectre Male IbC	Δrv	32 1 701 0 00020 30007 01/32 /343/ 3/440
muino to KNOD, S	poetro, iviaic, JRC, I	<i>y</i>	

PoSW's Russian Man logs: S06 RUSSIAN MAN

November saw several expected seasonal changes of frequency, in general moving to those used in the first two months of 2014.

Weekly Saturday 1600 or 1605 UTC Schedule:-

1-Nov-14:- 1600 UTC, 6,943 kHz, calling "194" for a full message, DK/GC "780 780 36 36", has been appearing on this schedule since 11-October so the same 5F message. Or was it? On Saturdays 11-October, 18-October and 25-October and on a Wednesday repeat on 15-October the signal had been clear enough for me to hear the 5F groups clearly and I logged 5F group no. 12 as "03591". Today I logged it as "03519", i.e. the "1" and "9" transposed, as was the case with the repeat on Wednesday 5-November, see below.

6,943 kHz was used for this schedule in January and February with 5,786 the frequency for 1605 UTC.

8-Nov-14:- 1605 UTC, 5,786 kHz, the expected frequency for the "plus five minutes" start-up, "194 194 00000", so the "full message" which has been running for the last four weeks has ended.

15-Nov-14:- 1605 UTC, 5,786 kHz, "194 194 194 00000", peaking over S9, weak FSK RTTY type signal on a close frequency.

6-Dec-14:- 1600 UTC, 6,943 kHz, "194 194 194 00000", up to S9.

13-Dec-14:- 1600 UTC, 6,943 kHz, "194 194 194 00000", S9 with deep QSB.

Wednesday 2000 or 2005 UTC Repeat of Saturday "194" Schedule:-

5-Nov-14:- 2000 UTC, 3,720 kHz, "194" and "780 780 36 36", S9 signal inside the 80 metre amateur band but no interference from the legal occupiers of this part of the spectrum. Whatever the situation with regard to 5F group no. 12 may have been in October, it was definitely "03519" this evening because the signal was clear enough to be recorded

and on playback Ivan's voice, transliterated as best I can from Ruski to the English alphabet says, "Null tri pyat adean devyet".

Weekly Saturday 1930 or 1935 UTC Schedule:-

1-Nov-14:- 1935 UTC, 3,832 kHz, call "396" for a "full message", DK/GC "425 425 37 37". Looks like the same message first noted on 11-October. Weak signal, seasonal change of frequency, similar + or - a few kHz used in January and February with 3,169 kHz at 1930 UTC.

22-Nov-14:- 1935 UTC, 3,842 kHz, "396 396 396 00000", S7 to S9.

6-Dec-14:- 1935 UTC, 3,842 kHz, "396 396 396 00000", S7.

First + Third Saturdays in the Month 2000 + 2100 UTC Schedule:-

1-Nov-14:- 2000 UTC, 4,022 kHz, "362 362 362 00000", very weak signal, only just readable.

2100 UTC, 3,368 kHz, second sending, also very weak, strong "XJT" churning away on a close frequency. Seasonal change of frequencies, similar used in the first two months of 2014.

6-Dec-14:- 2000 UTC, 4,027 kHz, "362 362 362 00000", S7, much stronger than on the first Saturday in November.

2100 UTC, 3,368 kHz, second sending, also S7 or so, much stronger than when last heard.

First + Third Saturdays in the Month 2030 + 2130 UTC Schedule:-

1-Nov-14:- 2030 UTC, 4,612 kHz, "621 621 621 00000", S6 to S7 on a clear frequency.

2130 UTC, 4,026 kHz, second sending, close to a weak broadcast station. Again, a seasonal change to frequencies used in January and February.

6-Dec-14:- 2030 UTC, 4,616 kHz, "621 621 621 00000", peaking well over S9 on a clear frequency.

2130 UTC, 2130 UTC, 4,036 kHz, second sending, also S9 on a clear frequency.

Monday + Thursday 1900 UTC or 1905 UTC Schedule:-

6-Nov-14, Thursday:- 1905 UTC, 3,838 kHz, "349 349 349 00000", very weak signal. Seasonal change of frequency, 1900 UTC sending should be on 3,192 or thereabouts.

10-Nov-14, Monday:- 1905 UTC, 3,838 kHz, "349 349 349 00000".

13-Nov-14, Thursday:- 1905 UTC, 3,838 kHz, "349 349 00000", S9, best signal so far.

17-Nov-14, Monday:- 1905 UTC, 3,838 kHz, "349 349 349 00000", S7 to S8.

20-Nov-14, Thursday:- 1905 UTC, 3,838 kHz, "349 349 349 00000", weak signal down in the noise.

24-Nov-14, Monday:- 1905 UTC, 3,838 kHz, "349 349 349 00000".

27-Nov-14, Thursday:- 1905 UTC, 3,838 kHz, "349 349 349 00000".

1-Dec-14, Monday:- 1905 UTC, 3,838 kHz, "349 349 349 00000", weak signal.

8-Dec-14, Monday:- 1905 UTC, 3,838 kHz, "349 349 00000", weak signal down in local noise. So far I have only logged this one on the "five minutes past" frequency.

S11a log Nov/Dec

4828kHz	0455z	04/11 [320/00] Конец 0458z Strong QRM1 QSB1	JkC	TUE
	0455z	07/11 [320/00]	RNGB	FRI
		. ,		
	0455z	25/11 [320/00]	RNGB	TUE
	0455z	23/12 [321/00]	RNGB	TUE
5779kHz	0315z	26/11 [388/32 V 03685 41426 56729 90042 96958 7200920099 80661] Конец 0326z Very strong 10m46s	PLondon, JkC	WED
			,	
5815kHz	1955z	05/11 [378/30 43071 37430 45989 67221 60063 30386 0997142813 65819]	RNGB	WED
	1955z	19/11 [370/00]	Gary H	WED
	1955z	26/11 [370/00]	RNGB	WED
	1955z	28/11 [370/00]	Malc	FRI
	1955z	03/12 [370/00] Конец 1958z S9	Malc	WED
	1955z	10/12 [370/00]	JkC	WED
	1955z	12/12 [370/00] QSA1 Копец 1958z Strong QRM1 QSB1	JkC, Karsten	FRI
	1955z	17/12 [370/00] Копец1958z Weak BC QRM2 QSB1	JkC	WED
	1955z	26/12 [370/34 34009 23894 3235273452] Very weak	RNGB	FRI
	1955z	31/12 [370/00] Weak	RNGB	WED
	1933L	31/12 [3/0/00] Weak	KNOD	WED
6433kHz	10207	05/11 [221/00] Конец 1023z S2	Malc	WED
O-TJJKI1Z				
	1020z	15/11 [221/00]	RNGB	SAT
	1020z	22/11 [221/00] Конец 1023z S2	Malc, Thomas	SAT
	1020z	13/12 [221/00] QSA5	Karsten	SAT
	1020z	27/12 [221/00]	Thomas	SAT
	1020z			
	1020Z	31/12 [221/00]	Thomas	WED
7504kHz	00157	04/11 [484/00]	RNGB	TUE
/304K11Z				
	0915z	07/11 [484/00] Конец 0918z S5	Malc	FRI
	0915z	11/11 [484/00]	RNGB	TUE
	0915z	18/11 [487/35 47459 41115 42293 53428 00768 18346 64123 6286961538 89792]	RNGB, Malc	TUE
	0915z	25/11 [484/00]	Malc	TUE
	0915z	02/12 [484/00]	RNGB	TUE
	0915z	09/12 [484/00]	Malc	TUE
	0915z	12/12 [484/00] Конец 0918z S2	Malc	FRI
	0915z	16/12 [487/36] too weak to copy	RNGB	TUE
	0915z	23/12 [484/00]	RNGB	TUE
	0915z	26/12 [484/00]	RNGB	FRI
9610kHz		04/11 [426/34 83472 31611 93110 27620 70438 85427 13255 2840174639 86629]	RNGB	TUE
	1020z	07/11 [426/34 8357286629] Repeat of Tuesday. Конец 1030z S4	Malc	FRI
	1020z	11/11 [426/00]	RNGB	TUE
	1020z	25/11 [426/00] Конец 1023z S3	Malc	TUE
	1020z	02/12 [426/00]	RNGB	TUE
	1020z	09/12 [426/00]	RNGB	TUE
	1020z	12/12 [426/00] Конец 1023z S4	Malc	FRI
	1020z	16/12 [426/00]	RNGB	TUE
	1020z		Malc	FRI
		19/12 [426/00] Конец 1023z S5		
	1020z	23/12 [420/33 18987 76191 94010 78420 40319 67027 03815 1856584635 73560]	RNGB	TUE
	1020z	30/12 [426/00]	Malc	TUE
12530kHz		17/11 [475/00] Конец 10:18z QSA3 QRM4	Karsten, Malc	MON
	1015z	20/11 [475/00] Конец 1018z S9	Malc	THU
	1015z	24/11 [478/35 00420 63802 57965 01691 37795 15775 90584 4365194179 19597]	RNGB, Malc	MON
	1015z	01/12 [475/00] Конец 1015z S3	Malc	MON
	1015z	04/12 [475/00] Конец 1018z S4	Malc	THU
	1015z	15/12 [479/36] too weak to copy msg	Malc	MON
	1015z	22/12 [475/00]	Malc	MON
	1015z	25/12 [475/00]	Thomas	THU
	1013L	Edit E [110/00]	111011103	1110
19099kHz	. 0715z	12/11 [382/00] Fair	RNGB	WED
1,0,7,1112	0715z	01/12 [382/00] Конец 0718z S2	Malc	MON
	0715z	31/12 [382/00]	RNGB	WED

E11 0315z schedule Weds/Thurs unexpectedly change to S11a on the 26th with ID 388 and 32 groups. The following day repeat Was E11a with ID 258 sending the same 32 group message. Operator error?

NOTE: Due to the many variations in the reported endings of S11a I have now written it correctly in Cyrillic. The pronunciation in English is Konyetz

V02a

Novemeber/December 2014

V02a continued with its occasional appearences with the following.

7554kHz 2000z 04/11 [37552 50871 63212] TUE

V07 November2014 Sunday

0100z	18074kHz	0120z	15874kHz	0140z	14374kHz	
02/11	883 88	33 883 000				Fair
16/11	883 88	33 883 000				Weak
23/11	883 88	33 883 000				Fair with hum
30/11	883 88	33 883 1 234	53 39432 952982	24327 000 000		Strong
	49120 7: 84333 7: 50200 2: 87883 9: 03819 8: 79140 1: 23577 7: 53513 0: 31129 3: 73083 2:	5298 20034 07444 5538 23005 5393 5934 75814 5438° 3185 47518 8158° 3337 33484 3198° 8053 51734 0418° 8035 57398 8399 1551 81502 1234° 3187 41115 1349° 2048 73091 1332° 5498 33110 8931 1923 47052 18049° 5352 24327 000 0	0 31234 13 1891 8 19043 8 30484 8 32983 8 81024 8 83349 7 90303 5 53383 0 03549 3 31031			

December 2014

Sunday 0100z	16037kHz		0120z	14637kHz	0140z	12137kHz	
07/12		661 000					Weak
14/12		661 1 847	59 57507	74992 23794 000	000		Weak
21/12		661 000					Strong with strong hum
28/12		661 1 428	71 48133 .	07783 000 000			Weak
		81314 38503 51101 97190 1 23323 81198 335383 23250 00455 47928 555391 45473 252247 38157 08181 39801 84241 37322 90919 70302 943122 07211 58711 85472	79135 43433 8 73037 19429 0 50339 53337 2 99015 73257 0 37129 3535 1 71744 53331 3 39070 51910 0 48238 37073 7 19259 93507 8 55314 15070 7 70502 12334 9 05087 11427 8 47388 77153 1 995538 12945 0 10 Courtesy Do	4739 4247 4730 2832 8813 0149 8004 3373 3377 9399 4713 3978			

V21

November/December 2014

V21 continued to be active on the expected frequencies of 5637kHz and 6529kHz. However the almost nightly transmissions on 5637kHz appeared to cease around 20/12. Perhaps they have switched to another as yet undiscovered frequency.

Items of note during the November/December period are detailed below. Some new behaviors were seen on both frequencies.

As expected on November 3rd the 6529kHz transmissions switched to 1400z to keep them on the same local time when Daylight Savings Time commenced.

On 7/11 at 0035z he repeated a lot of his numbers after each pause. The same occurred on 12/11 at 0230z.

On 15/11 on 5637kHz at 0230z he counted above 49 which is very unusual for this frequency.

on 15/11 on 6529kHz he counted to 150 and 180 on two of his counts, again higher than 100 on this frequency is very unusual.

On 15/11 on 5637kHz at 2300z after the usual multiple counts to 32, a new voice came on and counted to 99 then counted backwards from 99 to 79.

On 27/11 on 5637kHz at 2315 unusual counts up to 100 also counts very fast and repeats 42 four times.

On 28/11 on 5637kHz at 2240z Some repeats of numbers and also skipped some numbers. Repeated 42 four times (see previous day).

On 1/12 on 6529kHz he skipped the count of 31 to 40. This became a regular occurence during December!

On 5/12 on 5637kHz at 0245z new behavior for this Babbler as he counts to different numbers each time rather than counting to the same numbera almost every time. This behavior is seen to continue on subsequent days.

On 7/12 on 5637kHz at 0245z, a loud bell is heard to ring 5 times in the background.

On 17/12 on 6529kHz he counts to 110. Counts above 100 are rarities.

On 25/12 on 6529kHz the skipping of counts 31-40 continues until a new voice starts counting at which point the counts contain all numbers.

On to the logs

V21 5637kHz 1130z 1/11 [31 32, 32, 32, 32 (skips 16), 22, 32, 21 END] SAT

V21 6529kHz 1300z 1/11 [40, 50, 30, 30, 50, 30, 10, 20, 40, 60, 40, 50, 50, 30, 30, 30 END

V21 5637kHz 0045z 3/11 [32, 32, 32, 21, 22, 36, 16, 49, 36, 16, 36, 26, 36, 36, 49 (repeats 42), 10, 10, 36, 13, 22, 49 (repeat 42), 46, 10, 36 (repeat 32), 10, 32, 42, 42 (repeat 22), 49 (repeat 22), 36, 22, 29, 31 (repeat 22), 42, 31, 26 END] MON

V21 6529kHz 1400z 3/11 [40, too weak to copy for 6 minutes, 30, 30, 20, 30, 30, 50, becomes too weak to copy] MON

V21 6529kHz 1400z 4/11 [50, 50, 30 END] TUE

V21 6529kHz 1400z 5/11 [30, 30, 20] END

V21 5637kHz 0045z 6/11 [31, 31, 31, 8, 31, 31, 31, 29, 28, 21, 6, 31, 31, 31, 22, 31, 31, 21, 26, 32, 31, 21, 31, 31, 31, 5 END] THU

V21 5637kHz 0035z 7/11 [49,33 (repeat 26), 16, 26 (repeat 21 23) 15, 49 (repeat 20, 21, 32, 42, 46), 21, 36, 49 (repeat 42), 23, (repeat 22), 7, 5, 16, 11, 36, (repeat 22 32), 2, 25, 3, 23, 31, 26, 22, 6, 23, 23, 20, 20, 26, 25, 14, 19, 29, 28, 24, 28, 25 ENR] FRI

V21 5637kHz 0245z 7/11 [25, (repeat 22 twice more), 44, 49, 46, 22, 49, 26, 46, 49, 16, 39 END] FRI

V21 6529kHz 1400z 7/11 [20, 50, 50, 20, 20, 40, 60, 50 END]

V21 6529kHz 1400z 8/11 [Too weak to copy at start, 50, 50, 50, 40, 100, 100, 100, 50, 100, 100, 100 END]

V21 6529kHz 1400z 9/11 [30, 30, ?? 30, 30, 30, 30, 30, 30 END]

V21 5637kHz 0030z 10/11 [25 END]

V21 6529kHz 1400z 10/11 [40, 40, 40, 40, 30, 30 END]

V21 6529kHz 1400z 10/11 [40, 40, 40, 40, 30, 30 END]

V21 5637kHz 0300z 11/11 [31, 21, 31, 21, 21, 25, 31, 21, 31, 25, 22, 31, 21, 16 END]

V21 6529kHz 1400z 11/11 [40, 30, 30, 30, 40 END]

V21 5637kHz 0230z 12/11 [6, 49 (counts 1 twice, 31-32 twice, skips 36, counts 42 twice), 16, 16 (counts 16 twice) END]

V21 5637kHz 0330z 12/11 [23 23 36 9....24 5 27 29 24 65 329 26......continues with similar for 45 minutes.] WED

 $V21\ 6529kHz\ 1400z\ 12/11\ [30,50,??,50,30,50,40,10,20,50,40,30,40,10,50,20,40,30,30,40,50,30,??,40,30,30\ END]\ \ WED$

V21 6529kHz 1400z 13/11 [30, 40, 40, 40, 30, 50, 60, 100, 50, 10, 30, 30 END]

V21 6529kHz 1400z 14/11 [20, 20, 40, 20, 30, 40, 30, 60, 40, 40, 40, 60 END]

V21 5637kHz 0000z 15/11 [32, 22, 23, 23, 32, 23, 32, 32, 26, 20 END]

 $V21\ 5637kHz\ 0245z\ 15/11\ [100,\ 100,\ 36]\ \ Unusual\ to\ hear\ him\ count\ above\ 49\ on\ this\ frequency.$

V21 6529kHz 1400z 15/11 [30, 70, 30, ??, ??, 50, 20, 50, 30, 50, 150, 60, 180, 40, ??, ??, 30, 40, 50, 50, 10 END] Very unusual, counts to 150 and 180.

V21 6529kHz 1400z 16/11 [40, 50, 30, 30, 20 becomes too weak to copy] SUN

V21 6529kHz 1400z 17/11 [Audible but too much lightning noise to copy] MON

V21 5637kHz 2345z 17/11 [Recording] [Very fast delivery with strings such as 00 25 140 233 140 233 11 00 144 21 165 144 69 53 40 ?60 468 44 36 185 99 44 35 168 427 19 63 25 164 128 45 20 19....Continues with similar for 70 minutes.] MON

V21 6529kHz 1400z 18/11 [50, 50, 50, becomes too weak to copy] TUE

V21 6529kHz 1400z 19/11 [Approximately 12 minute TX but too weak to copy except one count from 30 to 40 heard] WED

V21 5637kHz 2345z 20/11 [120 228 23......24 24 280 428 42......???? 369......11 00 ?? 31 11 00 ?46 369.......43.....00 27 11 196 27 11 196 222 4....continue with similar for 30 minutes, very fast, hard to copy.] THU

V21 5637kHz 2315z 21/11 [11 8 5 25.......28 263 326 14 27 14......22 452 369 43 23 363 437 15 24 462 461 15 25 463 463 15........continues for 20 minutes finishing with 30 35 52 367 35] Found in progress at 2315z FRI

V21 5637kHz 2345z 21/11 [32, 32, 32, 23 END] FRI

V21 5637kHz 2345z 23/11 [33 33 115 1368 45 29 29 125 ??? 95 97 225......continues with similar for 20 minutes. Fast delivery, very hard to copy.] SUN

V21 5637kHz 0130z 27/11 [36 36 164 428 29 20 24 124 427 30 21 124 427 30......37 194 499 29 35 35....30 30 30 25 25 124 267 ?24 263 32......continues with similar for approximately 1 hour.] THU

V21 5637kHz 2315z 27/11 [100, 93, 63, 42, 23, 62, 43, 62, 40, 100, 16, 63, 53, 43, 53, 16, 50, 43, 16, 33, 33, 23, 16, 30, 33, 22, 53 (suddenly goes very fast and counts 42 four times), 63, 43, 29 END] THU

V21 5637kHz 2240z 28/11 [43, 16, 49, 32, 26, 49, 49, 10, 42, 49 (repeat 42 four times), 10, 43, 49, 42, 46, 49, 49 (skips 15 to 42), 49, 22, 33, 2END] FRI

V21 6529kHz 1400z 30/11 [Present but too weak to copy] SUN

V21 6529kHz 1415z 1/12 [50, 60, becomes too weak to copy but next count skips 31-40

V21 5637kHz 0300z 2/12 [29, 59, 16 END] TUE

V21 6529kHz 1415z 2/12 [60, 40,50 50, 50, too much noise for next 3 minutes, 50, 30 becomes too weak to copy.] TUE

V21 6529kHz 1400z 3/12 [10, 50, 100, 100, 100, 100, 100, 100, 60 END] WED

V21 5637kHz 1230z 4/12 [32, 32, 32, 32, 32, 29, 32, 32, 13, 32, 3, 32, 32, 32, 22, 22, 32, 22, 32, 22 (skips 17) END] THU

V21 6529kHz 1355z 4/12 [60 (skips 31-14 and says50 instead of 60, 60, 60 (skips 31-40), 60 (skips 31-40), ??, 60, 60 (skips 31-40),60 (skips 31-40), 10, 10, 60, 40, 60, 40 END] found in progress. THU

V21 5637kHz 0245z 5/12 [50, 55, 35, starts at 7 counts to 60, 60, 70, 43, 53, 27, 60, 68, 43, 35, 60, 20, 60, 60, 25, 50, 48 or 49? Actually counts 44, 45, 46, 47, 48, 45, 40, 21, 50, 50, 35, 60, 50, 40, 39, 6 END] Unusual sequence of numbers for this Babbler. FRI

V21 6529kHz 1355z 6/12 [60, 60 (skips 31-40), 60 (skips 31-40), 60 (skips 31-40), at least 50 on this count skipping 31-40 END] found in progress. SAT

V21 5637kHz 0245z 7/12 [45, 80, 53, 100 (skips 60-69), 85 (loud bell rings 5 times in the background), 100, 46, 50, 100, 30, 85, 74, 50, 45 END] SUN

V21 5637kHz 1245z 7/12 [25, 105, 75, 100, ??, 23, 12, 70, 45, ??, 100, ??, 95, 99, 99, 60, 51 END] SUN

V21 5637kHz 1310z 7/12 [25 208 364 8.....25 208 365 69 63....23 128 423 ?? 23......24 263 139 09 22 208 136 09.........00 28 338 316 00 28 316 00 28....24 169 136 11......27 8 169 61......21 819 192 11.....26 69.....24 262 50 49 12....continues with similar, TX lasts approximately 6 minutes.] SUN

V21 5637kHz 0230z 8/12 [32, 32, 16, 32, 12, 32, 32, 32, 32, 22, 32, 32, 18 END] MON

V21 6529kHz 1355z 8/12 [100, 100, 100, 100, 50, 50 END] MON

 $V21\ 6529 kHz\ 1355 z\ 9/12\ [50, 50, 50, 50, 50, 50, 30, 60, ??, 50, 40\ END]\ Found\ in\ progress.\ TUE$

 $V21\ 5637kHz\ 0000z\ 10/12\ [36,\ 23,\ 29,\ 5,\ 53,\ 59,\ 42,\ 22,\ 1,\ 10,\ 10,\ 22,\ 22,\ 36,\ 46,\ into\ string\ 20\ 20\ 00\ 00\ 21\ 21\ 182\ 143\ 11\ 00\ 61\ 00\ then\ back\ to\ counting,\ 16,\ 1,\ 10\ END]\ WED$

V21 5637kHz 0230z 10/12 [32, 32, 32, 19, 22, 32, 26, 32, 22, 32, 29, 32, 32, 26, 32, 32, 26, 32, 29, 26, 32, 32, 32, 9, 32, 14 END] WED

V21 6529kHz 1355z 10/12 In progress, no copy. WED

V21 5637kHz 0245z 11/12 [100, 55, 55, 100, becomes very weak but goes into strings of numbers such as 00 27 00 37 241 121 121 121 60 00 5...continues for 2.5 hours.] THU

V21 5637kHz 1350z 11/12 [41, 65, 50, 71, 40, 25, 65, 60, goes into strings of numbers but too weak to copy] THU

V21 6529kHz 1400z 11/12 [180, 50, 50, 50 END] THU

- V21 5637kHz 2130z 11/12 [32, 32, 32, 32, 32, 32, 32, 23 END] THU
- V21 6529kHz 1400z 16/12 [60, 50, 100, 60, 60, 100, 100 END]
- V21 6529kHz 1355z 17/12 [70, 60, 110 90, 40, 50, 100, 30, 100, 60, 40 END] Found in progress, unusual count above 100.
- V21 6529kHz 1400z 18/12 [30, 30, 60 (skips 31-40), 30, 30, 60 (skips 31-40), 30 END]
- V21 5637kHz 1100z 19/12 [32, 22, 26, 32, 32, 32, 22, 22, 32, 32, 21, 29, 22, 6 END]
- V21 6529kHz 1400z 19/12 [60 (skips 31-40), ??,??, 60 (skips 31-40), 60 (skips 31-40), 50 (skips 31-40) END]
- V21 5637kHz 0730z 20/12 [33 (repeats 22 three times and 32 twice), 49 (repeats 22 and 32), 10 END] SAT
- V21 6529kHz 1400z 20/12 [60 (skips 31-40), 60 (s
- V21 6529kHz 1400z 21/12 [30, 60 (skips 31-40), 60 (skips 31-40), 60 (skips 31-40), 60 (skips 31-40), 20, starts at 11 counting to 60 skipping 31-40, 60 (skips 31-40), 60 (ski
- V21 6529kHz 1400z 25/12 [70, 60 (skips 31-40), , 60 (skips 31-40),
- V21 6529kHz 1400z 26/12 [40, 50, 20, 60 (skips 31-40), 60 (skips 3
- V21 6529kHz 1400z 27/12 [60 (skips 31-40), 20 END] SAT
- V21 6529kHz 1400z 28/12 [60, 50, 40, 30, 60, 50, 40, 30, 50, 50, 50, 50, 50, 60, 60, 10 END] SUN
- V21 6529kHz 1400z 29/12 [50, 50, 50, 50, 50, 50, 100, 50, 50, 50, 30, 27 END] MON
- V21 6529kHz 1355z 30/12 Found in progress. Very weak, one count to 50 heard. TUE
- V21 6529kHz 1400z 31/12 [50, 60, 50 becomes too weak to copy] WED

Token sends the latest 'schedule' with notes, which can also be found at:

http://www.tokenradio.net/Radio/SharedFiles/NumbersTfer/V24 M94_latest_sched.JPG

V24 Schedule, late 2014.

V24 Schedule Version 9.0

Day	1200	1230	1300	1330	1400	1430	1500	1530	1600	1630
1	8 9		ģ ģ		1	3		Ø 8		1
2			10 10					10 10		
3										
4			, S	503(50.65)		House !		Same and		
3	<u> </u>		0	5715		6310		5290 +		
6				6215		6310		5290 *		
7			Q 0,			12	27/28/97	(i)		
8			9				4900 ?	17 19	-	
9										
10			U 0.				4900 !	U 0		
11			3 3				4900 !	[N		
12										
13			0.					J		
14			S S							
15				5715		6310				
16			ji ji	6215		6310				
17			S S	Same Control		0.5200455		2 2		
18							4900			
19			5 3		8		4900	(i)		
20			W 8				4900 ?			
21								5290 *#		
22			6 3			3		5290 *#		
23			6 8					Meyer-men		
24										
25			6 3	5715	9	13 1		6 11		8
26 27			8 8	6215		3		8		
27										
28			6 3		3	2		6 8		
29			8 8					8		
30										
31			7 5			5		4900 ?		

- * Alternate months, odd months only (July, September, November, etc)
- ? Possible error, but more than one occurrence
- ! Seen only one time, but two days in a row and proper message

Very little change from Version 8.0 to Version 9.0 of this schedule.

Active frequencies now appear to be 4900, 5290, 5715, 6215, and 6310 kHz.

M94 not seen since November 2013, M94 dropped from title.

Note the 1330 UTC cycles, one day on 5715 kHz and the next on 6215 kHz. Initially believed to be an error this has now repeated for several months. The same message is sent both days.

Note the return of an alternate month schedule at 1530 UTC on day 5 and 6 of the month.

Start times have become more "loose", with errors of ± 10 minutes noted. Typically the music starts before the scheduled start time.

Polytones

XPA c November2014 Wednesday/Saturday

0700z	11409kHz	0720z	13509kHz	0740z	14609kHz	
01/11	456 1	06985 00213	79934 37634			Very strong
05/11	456 0	000 07001 0000	01 00000 10140			Very strong
08/11	456 0	000 07645 0000	01 00000 10140			Very strong
12/11	456 1	02454 00191	44222 31475			Very strong
15/11	456 1	02454 00191	44222 31475			Very strong
19/11	456 0	000 09641 0000	01 00000 10140			Very strong
22/11	456 0	000 04069 0000	01 00000 10140			Very strong
26/11	456 1	01762 00177	84882 40121			Very strong
29/11	456 1	01762 00177	84882 40121			Very strong

^{*#} Typically only transmits one of these two days

December 2014 Wednesday/Saturday

0700z	7756kHz	0720z	9056kHz	0740z	10656kHz	
03/12		706 000 06212 00001	00000 10140			Very strong
06/12		706 000 02839 00001	00000 10140			Strong
10/12		706 1 06323 00231 2	7595 44303			Very strong
13/12		706 1 06323 00231 2	7595 44303			Very strong
17/12		706 000 06211 00001	00000 10140			Very strong
20/12		706 000 04874 00001	00000 10140			Weak
24/12		706 1 05589 00215 4	0320 23572			Fair
27/12		706 1 05589 00215 4	0320 23572			Weak to very strong
31/12		706 000 04196 00001	00000 10140			Weak

XPA e November2014 Tuesday/Thursday

1900z	8123kHz	1920z	7523kHz	1940z	6823kHz	
04/11		158 000 09321 00001	00000 10140		[1920/1940z poor]	Fair
06/11		158 000 09120 00001	00000 10140		[1920/1940z poor]	Fair,Co-channel QRM3
11/11		158 1 03885 00241 66	5096 77110		[1920/1940z weak & noisy]	Fair, digitalQRM2
13/11		158 000 02088 00001	00000 10140	Unsure of figs	[1920/1940z weak & noisy]	Fair, digiQRM3
18/11		158 000 08894 00001	00000 10140			Fair
20/11		Null Message				Too weak to process
25/11		Too weak to process a	across the sched	lule.	[Duration: 5m19s]	Very weak, QSB to nil
27/11		158 1 04043 00281 50	911 56903		[Duration: 5m19s]	Weak, QRM3 QSB3

December 2014 Tuesday/Thursday

1900z	8164kHz	1920z	7364kHz	1940z	5864kHz	
02/12	138	3 000 05024 00001	1 00000 10140		[1940z NRH, BC Stn]	Very weak
04/12	138	3 000 Available	on 1900 weak/QSB to	nil, 1920/1	940z unuseable due to BCQRM.	Weak
09/12	138	3 1 Msg 4m09	9s on 1900 weak/QSB	to nil, 1920)/1940z unuseable due to BCQRM.	Weak
11/12	NR	tH across the sche	dule			
16/12	138	3 000 06208 00001	1 00000 10140			Very weak, QSB3
18/12	NR	tH across the sche	dule			
23/12	NR	tH across the sche	dule			
25/12	138	3 000 02447 00001	1 00000 10140	[1920/194	40z occluded by BC QRM3-5]	Weak, noisy
30/12	Too	o weak for process	sing			

XPA2 m November2014 Sunday/Tuesday

1300z	18238kHz	1320z	16238kHz	1340z	14438kHz	
02/11	04347	00001 00000	10140			Very strong
04/11	09674	00001 00000	10140			Very strong
09/11	06685	00141 74322	22512			Very strong
11/11	06685	00141 74322	22512			Very strong
16/11	07560	00061 27597	75145			Very strong
18/11	07560	00061 27597	75145			Very strong
23/11	04582	00001 00000	10140			Very strong
25/11	03206	00001 00000	10140			Very strong
30/11	04625	00001 00000	10140			Very strong
Decemb	2014					
	er2014 Tuesday					
		1320z	13538kHz	1340z	12138kHz	
Sunday/	Tuesday 14538kHz	1320z 00001 00000		1340z	12138kHz	Very strong
Sunday/ 1300z	Tuesday 14538kHz 06347		10140	1340z	12138kHz	Very strong Very strong, QSB3, 1340z Weak
Sunday/ 1300z 02/11	Tuesday 14538kHz 06347 05080	00001 00000	10140 55544	1340z	12138kHz	
Sunday/ 1300z 02/11 07/12	Tuesday 14538kHz 06347 05080 02945	00001 00000 00067 15742	10140 55544 10140	1340z	12138kHz	Very strong, QSB3, 1340z Weak
Sunday/ 1300z 02/11 07/12 09/12	Tuesday 14538kHz 06347 05080 02945 01515	00001 00000 00067 15742 00001 00000	10140 55544 10140 10140	1340z	12138kHz	Very strong, QSB3, 1340z Weak Very strong
Sunday/ 1300z 02/11 07/12 09/12 14/12	Tuesday 14538kHz 06347 05080 02945 01515 06762	00001 00000 00067 15742 00001 00000 00001 00000	10140 55544 10140 10140 10140	1340z	12138kHz	Very strong, QSB3, 1340z Weak Very strong Very strong
Sunday/ 1300z 02/11 07/12 09/12 14/12 16/12	Tuesday 14538kHz 06347 05080 02945 01515 06762 01189	00001 00000 00067 15742 00001 00000 00001 00000 00001 00000	10140 55544 10140 10140 10140 26600	1340z	12138kHz	Very strong, QSB3, 1340z Weak Very strong Very strong Very strong

XPA2 p November2014 Monday/Wednesday

0800z	16073kHz	0820z	14973kHz	0840z	14373kHz	
03/11	04613 000	001 00000 1	0140			Very strong
05/11	03708 000	001 00000 1	0140			Very strong
10/11	07825 00	171 64145 5	7331			Very strong
12/11	03024 000	001 00000 1	0140			Very strong
17/11	09413 002	231 24760 6	3317			Very strong
19/11	09413 002	231 24760 6	3317			Very strong
24/11	05507 002	207 85853 2	1727			Very strong
26/11	08142 000	001 00000 1	0140			Very strong

December 2014 Monday/Wednesday

0800z	15861kHz 0820z	14761kHz	0840z	13561kHz	
01/12	01321 00001 00000	10140	[0840z ob	viated by local noise]	Very strong
03/12	07179 00001 00000	10140	[0840z ob	viated by local noise]	Very strong
08/12	06331 00213 05867	61516	[0840z ob	viated by local noise]	Very strong
10/12	06331 00213 05867	61516	[0840z ob	viated by local noise]	Very strong
15/12	03353 00227 90470	53350	[0840z ob	viated by local noise]	Very strong
17/12	04715 00001 00000	10140	[0840z ob	viated by local noise]	Very strong
22/12	01477 00001 00000	10140	[0840z ob	viated by local noise]	Very strong
24/12	04230 00001 00000	10140			Very strong
29/12	05695 00181 16069	53504			Very strong
31/12	04492 00001 00000	10140			Very strong

XPA2 r November2014 Friday/Saturday

1400z	17462kHz	1420z	16114kHz	1440z	14828kHz	
01/11	08862	00001 00000	10140			Very strong
07/11	03188	00001 00000	10140			Very strong
08/11	05943	00001 00000	10140			Very strong
14/11	00764	00047 94534	50456			Very strong
15/11	00764	00047 94534	50456			Very strong
21/11	05207	00001 00000	10140			Very strong
22/11	02009	00001 00000	10140			Very strong
28/11	04214	00161 79497	50412			Very strong
29/11	04214	00161 79497	50412			Very strong

December 2014 Friday/Saturday

1400z	15967kHz	1420z	13884kHz	1440z	12217kHz	
05/12	08652 (00001 00000	10140			Very strong
07/12	05080 (00067 15742	55544			Very strong, QSB3, 1340z Weak
12/12	01947 (00085 22015	01650			Very strong
13/12	01947 (00085 22015	01650			Very strong
19/12	02293 (00001 00000	10140			Strong
20/12	08065 (00001 00000	10140			Very strong
26/12	00563 (00077 66068	36564			Very strong
27/12	09941 (00001 00000	10140			Very strong

HM01

Analysis and Logs from out Cuban Desk [US]:

HM01 continued with the same format as previously reported for the majority of November/December.

Of most note on 19/11 callup 4 and file changed at 2100z and thereafter to 89860 = 20558986.TXT. This is notable because the callup contained a 9 (unusual) ended in a 0 instead of a 1 (Unusual). Also note the first 4 digits of the file name 2055 (the new file was transmitted from 2100z so possibly a time stamp?)

Another callup with a 9 appeared on 24/12, namely 34191 = 07853419.TXT.

A possible minor format change was noted on 24/12. New callups (ending in 1) would keep the 1 suffix for a second day but on 24/12 this was not the case as the last digit changed to 2 on the next day. The same thing was seen with a new callup on 25/12, however, things reverted to normal after this date.

Four files with names not ending in .TXT were transmitted. These being. 50441761.F1C on 2/11, 50426148.F1C on 23/11, 36882577.F1G on 7/12 and 36578826.F1G on 19/12. These followed the usual format (F1C file names begin 50 and F1G file names begin 36)

Logs as follows

 $HM01\ 11435kHz\ 1600z\ 2/11\ [07761\ 21561\ 75722\ 77847\ 17611\ 43049]\ \ New\ callups\ positions\ 1,\ 2\ and\ 5\ \ 07761\ =\ 74540776.TXT,\ 21561\ =\ 55132156.TXT,\ 75722\ =\ 18257572.TXT,\ 17611\ =\ 50441761.F1C\ \ SUN$

HM01 11435kHz 1600z 3/11 [07761 21561 75723 77848 17612 12311] New callup position 6, 12311 = 51251231.TXT MON

HM01 11435kHz 1600z 4/11 [07762 21562 75724 77849 17613 12311] TUE

HM01 5855kHz 0500z 5/11 [02317 66366 53230 01606 50279 72827] WED

HM01 9330kHz 0700z 5/11 [02317 ---- ----] Much stronger signal than usual WED

HM01 9065kHz 0800z 5/11 [02317 ----- -----] Much stronger signal than usual WED

HM01 9240kHz 0900z 5/11 [02317 ---- ---- Much stronger signal than usual WED

HM01 9155kHz 1000z 5/11 [02317 ---- ---- Much stronger signal than usual WED

HM01 5855kHz 0500z 5/11 [02317 ----- -----]

HM01 11435kHz 1600z 5/11 [02318 66367 53231 01607 36411 43681] All new callups since 1600z yesterday. 02318 = 51200231.TXT 66367 = 18656636.TXT, 53231 = 00555323.TXT, 01607 = 32130160.TXT, 36411 = 62403641.TXT, 43681 = 36684368.TXT. WED

 $HM01\ 11435kHz\ 1600z\ 6/11\ [67501\ 66368\ 53232\ 01608\ 36411\ 43681]\ New\ callup\ position\ 1,\ 67501\ =\ 11706750.TXT\ THU$

HM01 11435kHz 1600z 7/11 [67502 22741 53234 38221 36413 43683] Last digits skipped +2. New callups positions 2 and 4 22741 = 36642274.TXT 38221 = 70503822.TXT FRI

HM01 11435kHz 1600z 8/11 [67503 22742 53235 38222 36414 43684] SAT

HM01 11435kHz 1600z 9/11 [67504 22743 53236 38223 36415 43685] SUN

HM01 11435kHz 1600z 10/11 [67505 22744 53237 38224 36416 43686] MON

HM01 11435kHz 1600z 11/11 [67506 22745 53238 38225 36417 43687] TUE

HM01 11435kHz 1600z 12/11 [67507 22746 53239 38226 36418 43688] WED

 $HM01\ 11435kHz\ 1600z\ 13/11\ [67508\ 22747\ 80781\ 38227\ 52441\ 86781]$ New callups positions 3, 5 and 6. 80781=27848078.TXT, 52441=25455244.TXT, 86781=26368678.TXT. THU

HM01 11435kHz 1600z 14/11 [67509 22748 80781 87411 52442 86781] New callup position 4 87411 = 11878741.TXT

HM01 11435kHz 1600z 15/11 [60751 22749 80782 87411 52443 86782] New callup position 1, 60751 = 25156075.TXT SAT

 $HM01\ 11435 kHz\ 1600z\ 16/11\ [60751\ 71601\ 80783\ 87412\ 52444\ 86783]\ New\ callup\ position\ 2,\\ 71601=00627160.TXT\ SUN\ New\ Position\ 2,\\ 71601=00627160.TXT\ Position\ 2,\\ 71601=006271$

HM01 11435kHz 1600z 17/11 [60752 71601 80784 87413 52445 86784] MON

HM01 11435kHz 1600z 18/11 [60753 71602 80785 87414 52446 86785] TUE

 $HM01\ 11435kHz\ 1600z\ \ 19/11\ \ [60754\ 71603\ 80786\ 87415\ 52447\ 86786]\ \ WED$

 $HM01\ 11635kHz\ 1800z\ \ 19/11\ \ [60754\ 71603\ 80786\ 87415\ 52447\ 86786]\ \ WED$

HM01 11635kHz 2100z 19/11 [60754 71603 80786 89860 52447 86786] Note callup 4 has changed since the 1600/1800Z transmissions. 89860 = 20558986.TXT. WED

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HM01 8008kHz 2300z 19/11 [60754 71603 80786 89860 52447 86786] In LSB mode, expected HM01 in this time slot. WED
HM01 11435kHz 1600z 20/11 [60755 71604 80787 89861 52448 86787] THU
HM01 11435kHz 1600z 21/11 [60756 71605 80788 89862 05561 86788] New callup position 5, 05561 = 14530556.TXT. FRI
HM01\ 11435kHz\ 1600z\ 22/11\ [60757\ 71606\ 80789\ 89863\ 05561\ 06601] New callup position 6, 06602=41370660.TXT.\ SAT
HM01 11435kHz 1600z 23/11 [60758 71607 61481 89864 05562 06601] New callup position 3, 61481 = 50426148.F1C. SUN
HM01 11435kHz 1600z 24/11 [22151 71608 61481 89865 05563 06602] New callup position 1, 22151 = 64612215.TXT. MON
HM01 11435kHz 1600z 25/11 [22151 71609 61482 89866 05564 06603] New callup position 2 00101 = 43170010.TXT. TUE
HM01 11435kHz 1600z 26/11 [22152 00101 61483 89867 05565 06604] WED
HM01 11435kHz 1600z 27/11 [22153 00101 61484 89868 05566 06605] THU
HM01 11435kHz 1600z 28/11 [22154 00102 61485 89869 05567 06606] FRI
HM01 11435kHz 1600z 29/11 [22155 00103 61486 21481 05568 06607] New callup position 4, 21481 = 01262148.TXT. SAT
HM01 11435kHz 1600z 30/11 [22156 00104 61487 21481 05569 06608] SUN
HM01 11435kHz 1600z 1/12 [22157 00105 61488 21482 87421 54881] New callups positions 5 and 6, 87421 = 43878742.TXT, 54881 = 03625488.TXT MON
HM01 11435kHz 1600z 2/12 [67351 00106 10531 21483 87421 54881] New callups positions 1 and 3, 67351 = 26356735.TXT, 10531 = 28081053.TXT TUE
HM01 11435kHz 1600z 3/12 [67351 00107 10531 21484 87422 54882] WED
HM01 11435kHz 1600z 4/12 [67352 00108 10532 21485 87423 54883] THU
HM01 11435kHz 1600z 5/12 [67353 44441 10533 21486 87424 54884] New callup position 2, 44441 = 41024444.TXT. FRI
HM01 11435kHz 1600z 6/12 [67354 44441 10534 21487 87425 54885] SAT
HM01 11435kHz 1600z 7/12 [67355 44442 10535 25771 87426 54886] New callup position 4, 25771 = 36882577.F1G. SUN
HM01 11435kHz 1600z 8/12 [67356 44443 10536 25771 87427 54887]
HM01 11435kHz 1600z 9/12 [67357 44444 10537 25772 24251 54888] New callup position 5, 24251 = 72352425.TXT. TUE
HM01 11435kHz 1600z 10/12 [73821 44445 04861 25773 24251 54889] New callups positions 1 and 3 73821 = 47237382.TXT, 04861 = 42170486.TXT.
HM01 11435kHz 1600z 11/12 [73821 44446 04861 25774 24252 50581] New callup position 6, 50581 = 01185058.TXT. THU
HM01 11435kHz 1600z 12/12 [73822 44447 04862 25775 24253 50581] FRI
HM01 11435kHz 1600z 13/12 [73823 44448 04863 25776 24254 50582] SAT
HM01 11435kHz 1600z 14/12 [73824 44449 04864 25776 24255 50583] SUN
HM01 11435kHz 1600z 15/12 [73825 21261 04865 25778 24256 50584] New callup position 2, 21261 = 48502126.TXT. MON
HM01 11435kHz 1600z 16/12 [73826 21261 04866 61101 24257 50585] New callup position 4, 61101 = 77636110.TXT. TUE
HM01 11435kHz 1600z 17/12 [73827 21262 04867 61101 01221 50586] New callup position 5, 01221 = 71060122.TXT. WED
HM01 11435kHz 1600z 18/12 [33371 21263 04868 61102 01221 50587] New callup position 1 33371 = 80603337.TXT. THU
HM01 11435kHz 1600z 19/12 [33371 21264 88261 61103 01222 65121] New callups positions 3 and 6 88261 = 36578826.F1G, 65121 = 14716512.TXT FRI
HM01 11435kHz 1600z 21/12 [33373 21266 88262 61105 01224 65122] SUN
HM01 11435kHz 1600z 22/12 [33374 21267 88263 61106 01225 65123] MON
HM01 11435kHz 1600z 23/12 [33375 33541 88264 61107 01226 65124] New callup position 2 33541 = 84243354.TXT. TUE
HM01 11435kHz 1600z 24/12 [33376 33542 88265 34191 01227 65125] New callup position 4 34191 = 07853419.TXT, also callup contains a rare 9. Callup 2
didn't remain with last digit as 1 for a second day. WED
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HM01 11435kHz 1600z 25/12 [33377 33543 88266 34192 01228 65126] Callup 4 did not remain with last digit 1 for a second day. Looks like this might be a

slight format change.

HM01 11435kHz 1600z 26/12 [33378 33544 88267 34193 22121 65127] New callup position 5, 22121 = 85242212.TXT. FRI

HM01 11435kHz 1600z 27/12 [66451 33545 88268 34194 22121 03341] New callups position 1 and 6. 66451 = 00026645.TXT 03341 = 15480334.TXT. SAT

HM01 11435kHz 1600z 28/12 [66451 33546 88269 34195 22122 03341] SUN

HM01 11435kHz 1600z 29/12 [66452 33547 10111 34196 22123 03342] New callup position 3. 10111 = 07351011.TXT. MON

HM01 11435kHz 1600z 30/12 [66453 33548 10111 63251 22124 03343] TUE

HM01 11435kHz 1600z 31/12 [66454 33549 10112 63252 22125 03344] WED

PoSW's analysis and logs of this hybrid station as received in Great Britain:

Reasonable signals in the UK morning, not quite as strong compared to the summer months. Still the occasional mistake in starting up on the wrong frequency and in a few instances logged on unexpected frequencies. Quite often will appear to have already started if tuned in two or three minutes before the hour with the call-up in progress and then going into data mode before pausing just before the hour and then going into the call-up routine proper. Usually comes with a variation of signal strength up and down by a few 'S' points, not too surprising considering the distance the signal is travelling.

Transmission stops twenty minutes past the hour or thereabouts with the call-up routine starting up again on the half hour. Ten minutes in which to partake of a couple of shots of Havana Club rum, perhaps, or smoke about one third of a Romeo y Julieta cigar.

Latest:- Noted in the last days of November, 12,180 kHz has replaced 11,635 at 1000 UTC on days of the week when this frequency is used, presumably because Radio China International in English starts up on this frequency at 1000Z. On one occasion both frequencies were noted running in parallel, as shown in the chart towards the end of E2k Newsletter 85, although this now appears to have stopped.

1-Nov-14, Saturday:- 0830 UTC, 11,635 kHz, "17347 64306 75721 77845 76039 43047".

Starting up on the half-hour following the break, S9 with good audio.

0900 UTC, 11,462 kHz, 5Fs as earlier, very strong signal, an indicated S9+.

1000 UTC, 11,635 kHz, 5Fs as earlier, over-riding a weaker broadcast station, Radio China International in American English.

3-Nov-14, Monday:- 0811 UTC, 9,065 kHz, transmission in progress, peaking over S9 with good audio. Heard 5F groups, "07761 21561 75722 77847 17611 43049".

0900 UTC, 9,240 kHz, "07761 21561 75722 77847 17611 43049", S7 to S8.

2230 UTC, 10,715 kHz, managing to over-ride local noise interference which is quite fierce

in this part of the spectrum for some reason, presumably from local digital TVs. "07761 21561 75723 77848 17612 12311", so not totally the same as earlier in the day. Data at 2133 and 15 seconds UTC.

4-Nov-14, Tuesday:- 0800 UTC, 11,635 kHz, "07761 21561 75753 77848 17612 12311", peaking well over S9 with excellent audio. 0900 UTC, 11,462 kHz, 5Fs as earlier, S7 to S8.

5-Nov-14, Wednesday:- 0730 UTC, 9,330 kHz, new 5Fs, "02317 66366 53230 01606 50279 72827". S9 with deep QSB. 0800 UTC, 9,065 kHz, 5Fs as earlier, peaking over S9.

6-Nov-14, Thursday:- 0800 UTC, 11,635 kHz, "02318 66367 53231 01607 36411 43681", S6 to S7

0900 UTC, 11,462 kHz, 5Fs as earlier, up to S9 with deep fading.

7-Nov-14, Friday:- 0900 UTC, 9,240 kHz, "67501 66368 53232 01608 36411 43681", S5 to S6.

9-Nov-14, Sunday:- 0930 UTC, 9,240 kHz, starting up again, "67503 22742 53235 38222 36414 43684". S7 to S8 with the usual QSB.

10-Nov-14, Monday:- 2200 UTC, 10,715 kHz, "67505 22744 53237 38224 36416 43686", strong enough to over-ride local RF hash interference. Data started at 2203 and 10 seconds UTC.

11-Nov-14, Tuesday:- 0800 UTC, a catalogue of errors this morning, was on 13,435 kHz the frequency which would have been used for the previous hour's transmission, 11,635 being the norm for 0800Z on a Tuesday. Weak signal, just able to confirm as HM01. Still on 13,435 when checked again at 0810 UTC, but had vanished when checked at 0816.

However had not moved to the expected 11,635 but was found on 11,670 kHz with an S9 signal. Stopped approx 0821 UTC, call-up started again at 0830, "67505 22744 53237 38224 36416 43686". Went off air with carrier at 0831 UTC, was found on the correct frequency 11,635 kHz continuing the call-up with an S9 signal, into data after 0833 UTC.

12-Nov-14, Wednesday:- 0800 UTC, 9,065 kHz, "67506 22745 53238 38225 36417 43687".

Peaking over S9 with deep QSB.

0930 UTC, 9,240 kHz, calling up after the "half-time break", 5Fs as earlier, S9 signal.

13-Nov-14, Thursday:- 0800 UTC, 11,635 kHz, "67507 22746 53239 38226 52440 43688". 0930 UTC.

16-Nov-14, Sunday:- 0930 UTC after the break, 9,240 kHz, "60751 22749 80782 87411 52443 86782", S6 at best with deep rapid QSB.

17-Nov-14, Monday:- 0900 UTC, 9,240 kHz, "60751 71601 80783 87412 52444 86783".

S9 with the usual variations and a strong "XJT" roaring away on the LF side removed by selecting USB mode on the receiver.

1000 UTC, 9,165 kHz, would have expected 9,155 at this time. S7 to S8, 5F groups as earlier. Strong FSK type signal of some kind came up during call-up for a couple of minutes and when this stopped HM01 had vanished. Found it on 9,155 kHz at 1006 UTC.

 $18-Nov-14,\ Tuesday:-\ 0800\ UTC,\ 11,635\ kHz,\ "60752\ 71601\ 80784\ 87413\ 52445\ 86784",\ S6\ to\ S7\ at\ best.$

0900 UTC, 11,462 kHz, 5Fs as earlier, S5 to S6.

2200 UTC, 17,480 kHz, 10 PM in the increasingly dis-United Kingdom, weak signal, generally unreadable, just able to confirm the voice as the Señorita from Havana.

19-Nov-14, Wednesday:- 0800 UTC 9,065 kHz, "60753 71602 80785 87414 52446 86785". Peaking S9, weaker FSK/RTTY type signal on same

0900 UTC, 9,240 kHz, 5Fs as earlier, the "XJT" is still there.

1000 UTC, 9,155 kHz, weak signal, 5Fs as earlier.

23-Nov-14, Sunday:- 0930 UTC, 9,240 kHz, "60757 71606 80789 89063 05561 06601", after the half-time break, peaking over S9.

1000 UTC, 9,155 kHz, 5Fs as earlier, S9 with the usual QSB.

24-Nov-14, Monday:- 0800 UTC, 9,065 kHz, "60758 71607 61481 89864 05562 06601". S9 signal.

0900 UTC, 9,240 kHz, peaking well over S9. No sign of the "XJT" which caused problems to 9,240 last week.

2200 UTC, 10,715 kHz, "22151 71608 61481 89865 05563 06602", S9 with deep fading, over-riding local interference when the signal at its strongest.

25-Nov-14, Tuesday:- 0800 UTC, 11,635 kHz, very weak signal, unable to confirm as HM01.

0900 UTC, 11,462 kHz, no weak signal here, peaking well over S9, "22151 71608 61481 89865 05563 06602".

1000 UTC, 12,180 kHz, surprised to find HM01 on this frequency, 11,635 has been used on several days of the weak for some time. 12,180 was used in the early days of HM01, perhaps being used again because of China Radio International starting up on 11,635 at 1000 UTC. Weak signal, 5Fs as

26-Nov-14, Wednesday:- 0830 UTC, 9,065 kHz, starting up after the break, "22151 71609 61482 89866 05564 06603, well over S9 with good audio.

27-Nov-14, Thursday:- 0800 UTC, 11,635 kHz, "22152 00101 61823 89867 05565 06604", signal strength S7.

28-Nov-14, Friday: 0900 UTC, 9,240 kHz, "22153 00101 61484 89868 05566 06605", peaking S9.

1030 UTC, 9,155 kHz, starting up again after the break, 5Fs as earlier, weak signal.

29-Nov-14, Saturday:- 0930 UTC, 11,462 kHz, "22154 00102 61485 89868 05567 06606".

1000 UTC, 11,635 kHz, starting up, just about detectable under a much stronger Radio China International broadcast. Noticed on the half hour that 12,180 kHz was also active:-

1030 UTC, 12,180 kHz, starting up after the break, 5Fs as earlier, also still on 11,635 kHz, running in parallel - unusual for HM01.

30-Nov-14, Sunday:- 1000 UTC, 9,155 kHz, "22155 00103 61486 21481 05568 06607", strength S6 to S7.

1-Dec-14, Monday:- 0930 UTC, 9,240 kHz, "22156 00104 61487 21481 05569 06608". Peaking S9.

3-Dec-14, Wednesday:- 0800 UTC, 9,330 kHz, starting up on the wrong frequency, "67351 00106 10531 21483 87421 54881". Vanished just before 0801 UTC, came up on the correct frequency, 9,065 kHz, after 0802 UTC.

0900 UTC, starting up on 9,065 kHz again, call-up had begun when tuned in 15 seconds before the hour, 5Fs as earlier, into data at 0902 and 50s UTC, was still on 9,065 at 0910 UTC.

2200 UTC, 10,715 kHz, "67351 00107 10531 21484 87422 54882". S9, over-riding local interference.

4-Dec-14, Thursday:- 0800 UTC, 11,635 kHz, very weak signal, way down in the noise and unreadable. Was much stronger when checked again just before 0850 UTC, heard 5F group

"54882" - which was the very last one and the end of the transmission. Carrier went off shortly afterwards. 0900 UTC, started about 30s before the hour, 11,462 kHz, "67351 00107 10531 21484 87422 54882", S7 to S8.

1000 UTC, 12,180 kHz, weak signal, 5Fs as earlier, nothing heard on 11,635 - just RCI.

5-Dec-14, Friday:- 0900 UTC, started about half a minute before the hour, 9,240 kHz, "67352 00108 10532 21485 87423 54883", peaking S8. 1000 UTC, 9,155 kHz, again starting well before the hour, 5Fs as earlier, S9 with deep QSB.

7-Dec-14, Sunday:- 0930 UTC, minus 35 seconds approx, 9,240 kHz, "67354 44441 10534 21487 87425 54885", S9 with deep and rapid QSB.

9-Dec-14, Tuesday:- 1000 UTC, 12,180 kHz, appeared to be relaying a broadcast station with OM voice and music until approx one minute past the hour when the usual HM01 YL call-up routine started, "67356 44443 10536 25771 87427 54887". Weak signal, had improved S6 to S7 when checked again just after the second call-up after the half-hour.

10-Dec-14, Wednesday: 0800 UTC, start-up time is getting earlier, about 38 to 40 seconds before the hour this morning, 9,065 kHz. "67357 44444 10537 25772 24251 54888". S5 to S6, a weak FSK/RTTY type signal underneath. 0900 UTC, 9,240 kHz, also started early, 5Fs as at 0800 UTC, S7 to S8.

12-Dec-14, Friday:- 0930 UTC, minus about 40 seconds, 9,240 kHz, starting up after the break with, "73821 44446 04861 25774 24252 50581". 1000 UTC, starting up on 9,240 kHz again, 5Fs as earlier, was on the correct frequency 9,155 kHz when checked again towards the end of the transmission at 1044 UTC.

Others' logs:

November 2014

10715kHz2200z	10/11[67505 22744 53237 38224 36416 43686] QSA2	DanAR	MON
2200z	12/11[22746 53239 38226 52440 43688 67507] QSA3	DanAR	WED
2200z	14/11[22748 80781 87411 52442 86781 67509] QSA3	DanAR	FRI
2200z	16/11[71601 80783 87412 52444 86783 60751] QSA4	DanAR	SUN
2200z	19/11[71603 80786 89860 52447 86786 60754] QSA3	DanAR	WED
2200z	21/11[71605 80788 89862 05561 86788 60756] QSA3	DanAR	FRI
2200z	24/11[71608 61481 89865 05563 06602 22151] QSA3	DanAR	MON
2200z	26/11[00101 61483 89867 05565 06604 22152] QSA3	DanAR	WED
2230z	28/11[00102 61485 89869 05567 06606 22154] QSA3	DanAR	FRI
2230z	30/11[00104 61487 21481 05569 06608 22156] QSA3	DanAR	SUN
11462kHz0800z	01/11[Voice and Data]0810z S7	M8	SAT

17480kHz2200z	04/11[02317 66366 53230 01606 50279 72827] QSA4	DanAR	TUE
2200z	13/11[22747 80781 38227 52441 86781 67508] QSA4	DanAR	THU
2200z	18/11[71602 80785 87414 52446 86785 60753] QSA4	DanAR	TUE
2200z	20/11[71604 80787 89861 52448 86787 60755] QSA4	DanAR	THU
2200z	22/11[71606 80789 89863 05561 06601 60757] QSA4	DanAR	SAT
2200z	25/11[71609 61482 89866 05564 06603 22151] QSA4 + Hum	DanAR	TUE
2230z	27/11[00101 61484 89868 05566 06605 22153] OSA4. Only carrier until 22:30z	DanAR	THU

December 2014

http://www.nytimes.com/2014/12/18/world/americas/us-cuba-relations.html?emc=edit_na_2014/12/18/nlid=61653669&_r=0

This snippet outlines changes in the US/Cuba attitude. What the effect, if any, on HM01 or the remaining M08a/V02a transmissions can be can only be patiently awaited:

"WASHINGTON — President Obama on Wednesday ordered the restoration of full diplomatic relations with Cuba and the opening of an embassy in Havana for the first time in more than a half-century as he vowed to "cut loose the shackles of the past" and sweep aside one of the last vestiges of the Cold War. The surprise announcement came at the end of 18 months of secret talks that produced a prisoner swap negotiated with the help of Pope Francis and concluded by a telephone call between Mr. Obama and President Raúl Castro. The historic deal broke an enduring stalemate between two countries divided by just 90 miles of water but oceans of mistrust and hostility dating from the days of Theodore Roosevelt's charge up San Juan Hill and the nuclear brinkmanship of the Cuban missile crisis.

The entire article needs to be read for an indepth understanding.

It is also interesting that an un-named person who spied for the US – and gave a damning report that led to the capture and prosecution of Ana Belen Montes and possibly the Myers has been exchanged. All these had been spying for Cuba for years.

10715kHz2200z 2200z	08/12[44443 10536 25771 87427 54887 67356] QSA3 17/12 NRH; note newspiece above?	DanAR	MON
11435kHz1600z	22/12 S9 (on WEBSDR) See 11530kHz for decodes		
11530kHz1700z	22/12 S9 (on WEBSDR)		
voice > RDFT encry	pted file (decoded with DIGTRX)		
33374 > 80603337. 21267 > 48502126. 88263 > 36578826. 61106 > 77636110. 01225 > 71060122. 65123 > 14716512.	ΓΧΤ 430 bytes F1G 969 bytes ΓΧΤ 961 bytes ΓΧΤ 798 bytes		
11635kHz2130z	01/12[00105 61488 21482 87421 54881 22157] QSA2	DanAR	MON
16180kHz2115z 2140z	09/12[44444 10537 25772 24251 54888 67357] QSA2 11/12[44446 04861 25774 24252 50581 13821] QSA3	DanAR DanAR	TUE THU
17480kHz2230z 2200z 2230z 2210z	02/12[00106 10531 21483 87421 54881 67351] QSA3 04/12[00108 10532 21485 87423 54883 67352] QSA2 13/12[44448 04863 25776 24254 50582 73823] QSA3 16/12[21261 04866 61101 24257 50585 73826] QSA2	DanAR DanAR DanAR DanAR	TUE THU SAT TUE
Crowd 36			
8106kHz 1548z 11/	11 [In Progress] 1700z Fair QRN4 QSB3	Spectre	TUE

(Note, this Crowd 36 transmission was caught in progress, this data mode appeared to be in idle mode for most of the time with some short bursts of data. The transmission was still active after 1700z, making this Crowd 36 transmission the longest I have ever witnessed.)

Digital, Incursions and Unexplained Signals

I am sometimes asked why I think FSK200/1000 is a mode which should be covered in the E2K NL and logged on the mailing list, surely people say it is just another of the 100s of mysterious digital modes which can be found on HF and its probably just another military or embassy data link. My main arguments why this mode should matter to E2K members are as follows.

- 1) It has schedules. Just like E06, E07 and the like FSK200/1000 has regular schedules on frequencies which in its case change monthly. Just like the voice number stations some of these schedules are long running (since at least 2012), others exist just a week or so while a small number appear to be random one offs.
- 2) It appears to be a one way transmission which is sent blind (i.e the sender doesn't know if the recipient has received the message or not). Some schedules send the same message for over a month. Again just like the voice and CW numbers stations.

Next I thought I would look in detail at each of the FSK200/1000 link IDs and speculate a little on them. So without further ado I bring you the FSK200/1000 cast of players ..

<u>00000</u>

This usually called a special. It identifies with a 'type' of 07104 (unlike the usual 07145). It rarely has schedules and when they do exist they never last longer than a week. It can occur on any day of the day at any time. Initially thought to be for training E2K members have reported it seems more common when something is happening in the world. However we may just be seeing patterns where there are none.

02858

A member of the 00000 family. It has a 'type' of 7104 and appears at random or in short lived schedules. Only logged during September 2014 so may have had a specific purpose.

02881

Another member of the 00000 family. It has a 'type' of 7104 and has been logged just the once in May 2014.

03667

The newest member of the 00000 family. It has a 'type' of 7104 and appears at random or in short lived schedules. Logged in December 2014 but not as common as 00000.

16384

A weekends only station last logged in July 2013. It appears to be no more.

16404/16405

Scheduled transmissions at 08:00/10/20 (summer) and 09:00/10/20 winter. Logged on Wednesdays, Thursdays and Fridays. Last logged on Christmas Eve 2014 so still active. This station may transmit every weekday but more research is needed.

20492

A real oddity this one since its schedule transmits at odd times which are 10:15/25/35 on Wednesdays.Last heard on Christmas Eve 2014 so still active.

20501

A long running schedule which transmits on Sunday afternoon at 15:30/40/50. Most messages are nulls but if a message is sent then it is repeated at the same times and same frequencies on Monday, Tuesday, Wednesday and Thursday of the following week. The occasions messages are sent don't seem to correlate to any real world events but more research is needed.

24584

A rarely logged link. Active on Monday evenings at 21:00/10/20. Last logged in December 2014 so still active.

28676

Logged only once at 12:10 on a Wednesday in March 2014.

28680/28681

Logged on Saturdays at 20:00/10/20 and Fridays at the same time during November 2014. Not known if still active.

28724/28725/28732

This trio of idents appeared in May 2013 transmitting on weekdays and weekends before vanishing. Obviously they had some special purpose but what?

<u>32799</u>

This ident was first logged in March 2014 sending null messages on weekends and weekdays. It last appeared in April 2014 and hasn't been logged since.

32821

A long running Saturday at 15:00/10/20 schedule which usually sends nulls. However it can also appear on Saturdays at 15:30/40/50 and sometimes on Sundays at these times also. In addition it has been logged on Saturdays at 21:00/10/20 also 21:30/40/50. Possibly these are regular repeats of the 15:xx transmissions.

36882

Another long running schedule which transmits on Saturdays and Sundays at 11:00/10/20. It can be heard in Europe but also Australia and East Coast USA so it is unknown where it is aimed. It used to send long messages every weekend but over the last few months the messages have go shorter and shorter. Now null messages are frequently sent.

36930/36931

A short lived group of idents which appeared in March 2014 on Sundays at 11:00/10/20 but then vanished from the air. It may have been linked with the Ukraine crisis.

40988

Transmits on Tuesdays at 23:00/10/20 and Fridays at 06:00/10/20. Last heard in December 2014 so still active.

<u>41018</u>

A real oddity schedule this one. It transmits every weekday at 02:00/10/30 but the frequencies used never change. Heard in Argentina and USA but it isn't a strong signal so isn't aimed at them.

<u>45057</u>

A long running schedule which is a very strong signal in Western Europe (I don't need an antenna to hear it). Transmits on alternate weekends at 09:00/10/20 sending just one message a month. Also Tuesdays at 22:00/10/20 sending nulls. No other schedule sends messages repeated in this way.

45075

Transmits on Wednesdays and Thursdays at 08:00/10/20. Last logged in September 2014 and believed still to be active.

45079

 $Active \ on \ Monday \ mornings \ at \ 05:00/10/20 \ or \ 06:00/10/20 \ depending \ on \ the \ time \ of \ year. \ Last \ logged \ in \ November \ 2014 \ most \ likely \ still \ active.$

45114/45115

Another long running weekend schedule. It used to transmit every weekend but in the latter half of 2014 dropped this to alternate weekends.

45136/45137

A long running weekdays only schedule transmitting at 07:00/10/20 then repeating the same message at 12:00/10/20. Initially it never transmitted on a Friday which plus the fact this schedule sends a different message daily made me wonder if it was linked to the situation in Syria. However now there are transmissions on Fridays (although usually just nulls) and traffic seems to have declined slightly.

45141

A short lived schedule operating on weekends and weekdays heard only during March 2014.

49202

First logged in December 2013 and last heard in April 2014 this schedule transmitted on weekdays at 10:00/10/20 and Wednesdays 22:00/10/20. Not sure if still active.

49237

Logged sending nulls on Thursdays and Fridays at 13:30/40/50. Last heard in September 2014 and am not sure of its current status.

<u>53254</u>

Another short lived schedule from March 2014. This one was logged on Wednesdays at 15:30/40/50.

53277

Again I'm not sure of this ones status last logged in July 2014 on Wednesdays at 12:30/40/50.

As you can see there are a large number of link IDs whose status is unknown. We really need more listeners to monitor the FSK200/1000 stations and report their logs to the group. All you need is a standard HF receiver (many of this modes schedules are good signals so you don't need a huge antenna) and 'Rivet' a free decoder which should work on any MS Windows, Linux or Apple PC. This can be downloaded from its new home here ..

http://www.apul64.dsl.pipex.com/enigma2000/rivet/index.html

I would like to thank all the people who have sent me data logs during 2014 as without you none of this would have been possible. In addition I would like to wish all of my readers and very happy 2015.

Ian (Digi Desk)

Thanks to all those who have contributed logs and other pieces:

BR, JkC, PoSW, RNGB, Spectre, M8, BRIXMIS, JO, MoK, Ary, DoK, Karsten, IW, Christer, HGH, E, tiNG, DanAR X06 team, MaleAnon.

Apologies to anyone missed.

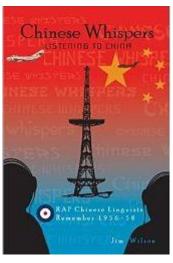
Book Review

If you have an interest in espionage/Cold War/Radio Intercepts then this book should be of much interest [it's a very good read]:

Chinese Whispers: Listening to China: RAF Chinese Linguists remember 1956-58, Jim Wilson

Available both as a 'book' or a Kindle ebook the description reads, "It sounds like an adventure straight out of an Ian Fleming novel: lads still wet-behind-the-ears taught Chinese and then stationed in Hong Kong in the late fifties, spying on communications from beyond the bamboo curtain. It was indeed a life-changing experience, as the group recalls more than 60 years later."

This book is about National Servicemen who opted to learn Chinese, become RAF linguists and in Hong Kong practised their trade in what was known as Little Sai Wan. After being handed over to GCHQ where is functioned as a Composit Signals station it ceased to exist before Britain handed HK back to the Chinese at midnight on July 1, 1997. The last Governor of HK being Chris Patten.



Review:

An excellent piece of work indeed. I have long been interested in the workings within Little Sai Wan and Batty's Belvedere and luckily had an insight via another rather personal route.

However, this piece more than adequately describes the path to LSW in the form of the RAF No2 Chinese Linguists' Course and is written from the compiled memories of those who learnt and practised their skills whilst performing their now, long gone National Service.

For me, the style of Jim Wilson writing ensured I was an intimate bystander observing activities before and during the learning practise, the almost sparse entertainment in spare time and the creation of SPLIMB in 1957 with its activities almost to this day.

The detail of travel between RAF Stations and eventually to Hong Kong splendidly recounted down to the issue of tropical wear and the necessary vaccinations.

No real detail of the intercepts processed by the Lingys in LSW but the mention of the AR88 which I have used and the Marconi 1475 which I now wait in vain to use was enough to put me in the Set Room, doubtless with Ferrograph reel to reel Recorders turning routinely less the intercepted spoken word is lost. I could almost smell the tainted heat from the valves [tubes] as I read that short description.

Anyone who expects this book to describe the official activities of the persons in this book whilst employed at LSW will be disappointed; this book is very much about the personalities who undertook language education a la RAF, traveled to foreign parts in clapped out aircraft and made the very best of what they had.

It is an excellent read and firmly recommended for those with an interest in Signals Interception and in those who, for want of a better word, became Spies.

The book in its hard copy format can be ordered by telephone, calling Mr Lance Slater on +44 (0)1628 484323



From 'E' taken from an unknown source: There's something decidedly CCCP about that protective helmet comrade!

PoSW'sItems of Interest in the Media:-

Latest news from GCHQ and a "gissajob" opportunity:- from the Breitbart London on-line news-site on 7-December comes a story written by Donna Rachel Edwards with the headline, "British spy agency to snoop on office e-mails in an attempt to root out double agents" and says, "The spy agency Government Communications Headquarters (GCHQ) is investing in techniques that will allow it to spy on peoples' office e-mails in attempt to uncover fifth columnists. It is hoping that through the use of language analysis it will be better able to catch double agent turncoats such as Kim Philby and Guy Burgess who displayed anomalous behaviour before being unmasked as Soviet agents.

GCHQ is sponsoring a PhD post at the University of Lancaster which will last three and a half years at a cost of £22,000 a year. The Times has reported that, in its advert for the post, the university said: 'The research....will investigate the use of natural language processing to detect the early indicators of an insider threat within an organisation's unstructured internal data.

Or in other words, the researcher will study e-mails for signs of employees who may have become disaffected. Paul Taylor, professor of psychology at Lancaster University said: Instead of ending their e-mail with "see ya" they might suddenly offer you "kind regards". Instead of talking about "us" they might refer to themselves more. These changes are important and could hint at a disgruntled employee about to go rogue.'

The university has indicated that it will use the latest data analysis techniques to process data contained e-mails as an indicator of possible rogue behaviour. The successful applicant for the PhD post will need to pass GCHQ security checks.

GCHQ currently sponsors upwards of 30 PhDs in cyber security. It has refused to comment on whether or not the techniques developed will be used on its own staff, but the secret services are known to be haunted by the memory of the Cambridge Five spy ring, which included Philby, Burgess and Donald Maclean, all of whom were employed within the secret services whilst feeding information to Moscow in the early half of the 20th century."

More Bears in the air:- the incidence of large Russian four-engine turboprop aircraft, NATO reporting code "Bear", flying close to United Kingdom airspace continues apace. The Times newspaper of 31-October carried a short item with the headline, "NATO reports rise in military jets over Europe which says, "NATO has reported a spike in Russian military flights in European airspace after RAF fighters were scrambled to intercept a pair of Russian long-range bombers over the North Sea.

Typhoon jets from RAF Lossiemouth tracked the two TU-95 Bear H bombers through the UK 'flight information region' as NATO radars picked up a series of Russian formations engaged in 'significant military manoeuvres' ranging from the Black Sea to the Atlantic Ocean.

These sizeable Russian flights represent an unusual level of activity over European airspace, a statement on the NATO website said. The bomber and tanker aircraft from Russia did not file flight plans or maintain radio contact with civilian air traffic control authorities and they were not using onboard transponders. This poses a potential risk to civil aviation as civilian air traffic control cannot detect these aircraft or ensure there is no interference with civilian air traffic.

The flight coincided with similar incidents over the Black Sea in which Russian military formations were intercepted by Turkish fighters.

Jens Stoltenberg, secretary-general of NATO, said the alliance remained 'vigilant and ready to respond' to any further Russian moves. 'We need to keep our forces ready, therefore we are investing in high readiness, new capabilities,' he said.

The article in the Times showed a photograph of Tu-95, taken from a position slightly higher and above the clouds. A sense of "We have all been here before" about this; in fact it was like deja vu all over again!

This sort of thing was going on thirty years ago; it so happened that at about the same time as this news item appeared I was sorting through a large stack of aviation hobbyist magazines among which was a copy of Aircraft Illustrated from December 1984 - so three decades ago exactly since I am writing this in December 2014. The main item in this magazine is an informative article entitled, "To intercept a Bear", written and illustrated with photographs by Denis J Calvert of Inter-Air Press. The article of four pages describes the writers time spent with the Quick Reaction Alert squadron at RAF Leuchars in Scotland in which the he was fortunate enough to be able to ride in the rear seat of an RAF Phantom fighter taking part in the interception of a Soviet – era "Bear". The full colour centre spread of the magazine shows an impressive photograph of a "Bear" flanked by two RAF fighters with the caption, "A Phantom FG1 of 'Treble One' and a Lightning of No 11 squadron flank a Soviet 'Bear-E' over the North Sea.

French government to honour former Second World War spy:- the I newspaper's "Page 3 Profile" column of 24 November carried an item about a lady of senior years photographed with a row of medals on her jacket topped by a winged parachute insignia, Phyllis Latour Doyle. The article reads, "Is discretion the better part of valour? For a spy it's paramount, as Phyllis Latour Doyle knows. The former British agent is to receive France's highest honour for helping to liberate the country from the Nazis in the Second World War. Mrs Doyle, 93, will be presented with the Legion d'honneur 70 years after she parachuted behind enemy lines.

The reluctant heroine, now living in New Zealand, has shunned the limelight and did not even tell her four children about her wartime exploits until 15 years ago. 'My eldest son found out by reading something on the internet,' she said.

Mrs Doyle joined the RAF to train as a mechanic in 1941 but upon discovering she spoke fluent French, the Secret Service signed her up. Aged 23 she dropped into Normandy on 1 May 1944, assumed the identity of a 14-year-old French girl and cycled around the area, passing information through coded messages. The French government wants to highlight Mrs Doyle's remarkable achievements."

Point to ponder:- "Those who would give up essential liberty to purchase a little temporary safety deserve neither liberty nor safety." - Benjamin Franklin.

Gizza Job

These two excellent on line vacancies as seen by Spectre on the MI5 website are interesting and show that our Security services have their fingers on the pulse.

It is interesting to note that E2k has access to speakers of both these languages as well as Cantonese.

There are other languages we can access too including Far Eastern and other European languages.

The way things are going in this country we'll all be speaking anything Eastern European as a second language soon ever tried Serbo-Croat with a Nigerian accent? The mind boggles.

Thanks for posting Spectre.





Spectre's News Articles

Foreign Policy 04/11/2014

Is China Swarming With Foreign Spies?

The Communist Party is finally getting serious about ferretting out Western spooks. But a new counterespionage law, passed on Nov. 1, may be just a finger in the

Sometime in 2011, Gen. Jin Yinan gave what he thought was a closed-door briefing at a corporate conference in China, where he spoke about the dangers of espionage. In September of that year, what appeared to be the official video of his remarks turned up briefly on the Chinese video sharing site tudou.com, before being taken down. Jin gave tantalizing details of eight recent cases in which senior Chinese officials had allegedly spied for foreign governments, several of which had never previously been made public. The highest-ranking official was Kang Rixin, a member of the elite Chinese Communist Party (CCP) leadership body, the Central Committee, and head of China National Nuclear Corporation, which oversees China's nuclear programs. The official version held that Kang was sentenced to life in prison in November 2010 for bribe-taking. But Jin said the real sentence was espionage:

Kang had sold nuclear secrets to an undisclosed foreign nation, in a case that made the top leadership "extremely nervous."

Concerns about foreign espionage in China seem only to have grown. On Nov. 1 of this year, Xi signed a Counterespionage Law, replacing the 1993 National Security Law. The biggest change appears to be a greater emphasis on rooting out both foreign spies and their Chinese collaborators. When Chinese Communist Party (CCP) Secretary Xi Jinping and President Barack Obama meet in Beijing on Nov. 11 and 12, cyberspying will almost certainly be part of their discussion. But the new law suggests that it's the potential of human spies to wreak havoc that has China really worried.

It's difficult to build an open-source picture of foreign espionage operations in China: as in Kang's case, the Chinese authorities appear to hide espionage cases behind other crimes, to save themselves embarrassment. It's likely that many arrests and trials simply never come to public attention.

But outside observers can assume two things: First, much of the foreign spying against China is related to deciphering the country's military capabilities and strategic intentions. This may seem rather obvious, but it's in contrast to China's spying abroad, much of which appears aimed at stealing industrial and commercial secrets.

Second, it may seem that China would be a tough place for a foreign spy to operate, but you can bet that the United States and its allies have dozens of assets in place. Anyone who has lived and worked in China's surveillance-saturated cities could be forgiven for wondering how on Earth a foreign spy could function there. But function they do. China appears to be infested with spies, and it knows it. In early August, a graduate student in aerospace engineering surnamed Chang in the northeastern city of Harbin was reportedly arrested for selling sensitive information to a foreign intelligence agency -- he allegedly spied for two years, for which he received more than \$32,000. He appears to have been recruited online, and to have conveyed his product the same way. As is often the case, the reports don't identify the foreign agency involved. Perhaps the Chinese authorities don't even know from where his handlers hailed.

Occasionally, a story breaks that is sufficiently detailed and well sourced to give a real flavor of what's going on. In May, the Communist Party newspaper People's Daily reported the story of a man surnamed Li who, while living and working in an unnamed seaside city in the wealthy southern province of Guangdong, struck up acquaintance over the Internet with a user calling himself Feige, which means "Flying Brother." Feige reportedly paid Li over several years to gather and forward military publications from libraries and online bookstores, to glean information from chatrooms used by military enthusiasts, and to take photographs of military installations. Feige was working for a foreign intelligence agency, said the paper, without specifying which one. Li ended up with a 10-year prison sentence, which seems lenient, and could suggest that the snippets of information and the military journals marked "neibu" or "internal" that he supplied were relatively low-level material

But Feige's Internet trail led investigators to no fewer than 40 other suspected spies across the country, suggesting 1) that the operative was part of an effort to take advantage of the explosion of connectivity in China, and 2) the difficulty for Beijing of ensuring that sensitive information does not leak onto public servers. As the analyst Peter Mattis points out, the digital Chinese state is now a very leaky place, and the majority of publicly reported state secrets cases have an online component to them.

The cyber and signals intelligence elements of U.S. collection efforts take advantage of this leakiness on a grander scale. Edward Snowden's 2013 revelations of the National Security Agency's penetration of China, particularly of the telecommunications behemoth Huawei, are well documented: According to materials viewed by the New York Times, the NSA penetrated Huawei's network and stole source codes for its products, in the hope that this would enhance the NSA's signals intelligence capabilities. In an activity that really annoys the Chinese military, U.S. spy planes and spy ships routinely loiter off the Chinese coast, sucking up electronic signals, which a spokesman for China's Ministry of National Defense Yang Yujun called in August "large-scale, high-frequency, close-proximity surveillance."

But despite all this activity, China watchers here in Washington say that the holy grail of political intelligence collection -- an understanding of the intentions and vulnerabilities of the CCP -- remains frustratingly elusive. Little emerges from U.S. intelligence agencies on the inner workings of the CCP, one Washington consumer of intelligence on China told me. "We still don't really understand the mechanics of how Xi Jinping became general secretary," he said, referring to the intra-party drama that lifted Xi to the country's top position in November 2012. For an indication of the way U.S. intelligence views the task of collecting intelligence from China, take a look at the recently issued 2014 National Intelligence Strategy of the United States. China is the first country mentioned in the document, and "remains opaque in its strategic intentions and is of concern due to its military modernization." In other words, spying on China is difficult and necessary.

Occasionally, though, signs suggest the CCP has been penetrated at a senior level in a way that might provide the kind of insight Washington seeks. In mid-2012, Reuters reported that an aide to Vice Minister Lu Zhongwei of the Ministry of State Security, the agency responsible for much foreign intelligence collection and counterintelligence, had been arrested for spying for the CIA. Since then, little else has emerged: no official version of events, no news of a conviction or a sentence. The Hong Kong press spat out florid reports that the alleged agent had been recruited in true "honey-trap" style by a beautiful seductress. All of this makes for great copy, but none of it appears to have been confirmed.

A half-seen human drama such as this tantalizes the journalist and the writer. What kinds of people serve, and then betray, the Chinese state? In my 2014 novel, Night Heron, an angry Chinese aerospace engineer sells classified documents to Britain's Secret Intelligence Service. In imagining his motives, I thought of the corruption and arbitrariness permeating the Chinese justice system and the broader party state, and the resentment that might breed. It seemed plausible to me that, despite the Leninist legacy of state secrecy, Beijing might be a place where potential agents abound, even among the military and CCP elites.

Certainly, General Jin's leaked video testimony would seem to support such a notion. He describes how an Air Force attaché in Tokyo, Wang Qingjian, planted listening devices in the Chinese Embassy on behalf of Japanese intelligence. Another Air Force officer, Jia Shiqing, angry at being passed over for promotion, loaded memory sticks with information, stuck them up his own rectum and smuggled them out to Hong Kong to hand to a foreign intelligence agency, Jin said. It's the human spy -- the Chinese citizen who turns on his own country, negating every national narrative of unity and patriotism -- that the Party finds most threatening and demoralizing.

Jin confirmed that Li Bin, no less a figure than the former Chinese ambassador to South Korea, was charged with corruption, but was actually deemed guilty of passing state secrets to Seoul. "What country has an ambassador who spies?" the general asked plaintively. "We do."

Haaretz.com 05/11/2014 (This is a non espionage related article, but it is clear The Russians are still using old Cold War tactics.)

Russia test-fires intercontinental missile from submerged submarine in Barents Sea

Test comes after Russia informed the United States on Tuesday that it will boycott the 2016 Nuclear Security Summit.

Russia test-fired a Sineva intercontinental missile from a submerged submarine in the Barents Sea on Wednesday as part of a check on the reliability of the navy's strategic forces, the Defense Ministry said.

The liquid-fueled missile, which can carry nuclear warheads, was fired from the Tula submarine to the Kura Test Range in the far eastern region of Kamchatka, RIA news agency quoted the ministry as saying. It gave no other details.

The Sineva, which has a range of about 12,000 km (7,500 miles), entered service in 2007 and is part of efforts to prevent the weakening of Russia's nuclear deterrent.

President Vladimir Putin has underlined the importance of the nuclear deterrent during the standoff with the West over the crisis in Ukraine, and Russia has held several military exercises during the crisis that have alarmed Western powers.

Russia informed the United States on Tuesday that it will boycott the 2016 Nuclear Security Summit, diplomats told The Associated Press on Tuesday, potentially stripping the meeting of one of its key participants and hurting efforts initiated by President Barack Obama to reduce the threat of nuclear terrorism.

Officials already had told the AP on Monday that Moscow was absent from last week's initial summit planning session in Washington but had left it unclear whether Russia planned to attend the summit itself.

BBC News 08/11/2014

The time when spy agencies officially didn't exist

This week the new heads of intelligence agencies MI6 and GCHQ took up their posts. Once shrouded in mystery, the spy chiefs are now public figures.

The appointments of Alex Younger and Robert Hannigan were announced with brief biographies and photographs, yet it was not that long ago that the public knew nothing of their roles or the organisations they led. As chief of MI6, Younger is known as "C", the codename of the first chief Sir Mansfield Cummings.

This is now common knowledge. But in 1923 the novelist Compton Mackenzie was prosecuted, among other things, for revealing the letter and to whom it referred. Such was the secrecy that when the judge asked when Cummings had died, the prosecution barrister, the attorney general and "K", the then-head of MI5 did not know. The only person in the room who did know was Mackenzie.

It shows how secretive the service was in its early days, that simply mentioning the name of a dead chief led to a court case, says Christopher Andrews, the writer of MI5's official history.

Cummings was the first chief of what was then the Secret Service Bureau in 1909. As far as the public was concerned it did not exist, the writer of MI6's official history Prof Keith Jeffery says. It was a time many people working in intelligence "look back to fondly". The eccentric chief would wear disguises to see if colleagues would recognise him, kept photographs of those which had worked well, used sword sticks and invisible ink. "He loved and was very engaged with the technology of it all," Jeffery says. Rumours circulated that he would stab his wooden leg with a letter opener in interviews to see if potential employees flinched.

In 1992 Dame Stella Rimington was the first chief of MI5 to be officially named. "Her neighbours discovered what she did and her children found out for the first time," Andrews says. But MI5 only released her name. Official pictures of her were only released after a paparazzo got a "very blurry picture of her out shopping", Andrews says.

But even if the heads of the intelligence services have been revealed, Ben Macintyre, the historian and author of A Spy Among Friends, says the "humble worker bees" and their work have not. If anything, it is more secretive. "Up until recently even reporting the colour of the carpet in MI6 was a breach of the Official Secrets Act."

007 would have been an officer, not an agent. Officers are employees, whereas an agent is a secret source used to gather information. "There is not a single case of SIS ever disclosing the identity of agents even after something like 100 years," says the intelligence historian Nigel West. Keith Jeffery, when researching his history of MI6, spoke to active officers about whether they would be happy for their identity to be revealed 60 years or so down the line. "Some were happy to be part of the history of it," he says. "But because it is technically living a lie, some really did not want their families to find out."

MI5 was recognised in law in 1989. "There shall continue to be a Secret Intelligence Service," were the words that officially confirmed that MI6 and GCHQ existed, in the 1994 Intelligence Services Act. The government was more relaxed about MI5, says Christopher Andrews. But MI6 was a more difficult proposition. It is "un-embarrassing to admit to an organisation which caught spies. But it was embarrassing to admit that you had spies of your own".

It was an open secret that all three of the intelligence agencies existed - MI5 had been mentioned in parliament in 1952 - but the government reluctantly first acknowledged MI6 in 1986. Peter Wright, a former senior member of MI5, published a memoir, Spycatcher, in Australia and the British government tried to bring an injunction against him for breaching the Official Secrets Act.

Spycatcher: The Candid Autobiography of a Senior Intelligence Officer was a bestselling 1987 book co-written by former MI5 officer Peter Wright, and journalist Paul Greengrass (later a successful film director)

Wright claimed he had been assigned to unmask a Soviet spy in MI5, whom he claimed was a former director general, Roger Hollis; the book also describes British intelligence operations, such as a plot against a former prime minister, Harold Wilson

Published first in Australia, it gained notoriety due to a long and unsuccessful attempt by the British government to ban it; the attendant publicity helped Spycatcher become an international bestseller.

The Cabinet Secretary Sir Robert Armstrong flew out to appear as a witness. Although upon landing he was so "riled" by the press attention that he "lashed out with his briefcase at photographers and pushed one of them against a wall", the Times reported.

In the dock he was asked the awkward question: "Does MI6, Britain's secret intelligence service, exist?" He declined to comment. The Times reported that "MI6 is the one area of intelligence work which still requires, in government eyes, the glazed-look approach". Although he refused to acknowledge MI6 then, the government was eventually forced to release a summary of memos between sections of MI6. This confirmed the service's existence.

But as well as knowing they exist and who runs them, we now know the headquarters of the agencies. All three of the services are based in recognisable headquarters - the MI6 building has featured in Bond films since Goldeneye in 1995, the GCHQ "doughnut" is regularly seen on news bulletins, and MI5's Thames House, like MI6, is a stop on a James Bond boat trip for tourists.

"If you're going to get a taxi to Albert Embankment they think you are a spy," Jeffery says. But West says these public locations are not part of them wanting to have more of a public face. "If they could find a big enough anonymous building in London they would move tomorrow." MI6's old headquarters, an unmarked concrete tower called Century House, "started making people ill and the only building being built at that time which could house them was the Lego-looking building on Vauxhall". They were forced into view, he says.

In the past they were a little more proactive at hiding their location - 54 Broadway, which MI6 occupied from 1926 to 1964, was marked with a brass plaque describing it as the "Minimax Fire Extinguisher Company". But this disguise did not work for long. In his book on British spying, Michael Smith recounts how after it became known MI6 was looking to move building, the landlord started doing viewings. Unfortunately one was a Russian trade delegation and staff were forced to rush around ripping maps off the walls.

"They know they have to have a public face now. These are huge government organs and we want to know who is running them," MacIntyre says.

Daily Mail 09/11/2014

Don't have sex with beautiful young women, MoD warns senior officials before postings to Russia and China

Russian security services 'may use honey traps to blackmail personnel' British officials warned to avoid sexual encounters in leaked report Tactic was used extensively and effectively during the Cold War

Top military officials have been warned not to have sex with attractive women in Russia or China in case they are spies, it has been reported.

A leaked document says agents of the FSB, Russia's intelligence service and successor to the Soviet-era KGB, could attempt to lure British officials into bed and then blackmail them.

The document, the Ministry of Defence Manual of Security, warns senior officers that the FSB, could gain valuable intelligence by exploiting 'knowledge of marital infidelity or sexual activity the target may wish to hide'

The KGB used 'honey traps' like this extensively during the Cold War, using both men and women to target those they believed to have valuable information.

The Communist East German security services targeted young men to seduce middle-aged West German secretaries working for senior officials.

So convincing were these young men that one woman who was told her lover had been a spy that she refused to believe it, stating: 'He did really love me.'

One senior military official told the Sunday Times how a very attractive blonde woman in her early 30s approached him in a St Petersburg hotel and began chatting about how she loved vintage British sports cars - the man's hobby.

She flirted with him and he suddenly became suspicious and left suddenly.

He said: I think i said something very awkward like "sorry, it's my bedtime" and scarpered. I put it down as a close shave.'

A Ministry of Defence spokesperson refused to comment on the report.

In 2010 Russian Katia Zatuliveter was accused of being a Kremlin spy after it emerged she had had an affair with Commons Defence Committee MP Mike Hancock.

She denied the claim and later won an appeal against deportation from the UK.

The scandal came after a ring of 10 Russian spies were rounded up and deported from the US.

One of the spies, Anna Chapman, had lived and worked in London before marrying and gaining a British passport.

In 2009 an American diplomat in Moscow was embroiled in a sex scandal after footage apparently showing him with a prostitute was released on the internet.

The married envoy, a second secretary, was named as Kyle Hatcher by two Russian newspapers which reported unconfirmed claims that he was a CIA undercover agent.

Russian newspapers were apparently tipped off about the footage, suggesting that the FSB was behind it.

The U.S. Embassy in Moscow complained to the Russian Foreign Ministry about the tape and the State Department said the video was a fabricated montage that includes some real footage of Mr Hatcher, a married diplomatic liaison to Russian religious and human rights groups.

Meanwhile, Britain's spy chiefs have launched a recruitment drive for Russian-speaking agents amid mounting tensions with the Kremlin.

MI5, responsible for protecting the UK against terror attacks and other security threats, has placed an advert on its website calling for Russian language specialists to apply.

The drive comes amid warnings of a new Cold War between Russia and the West as tensions continue to rise over the military stand-off in Ukraine.

Up to 50 Russian spies are said to be operating in Britain, with ex-MI5 boss Jonathan Evans claiming there has been 'no decrease in the number of undeclared Russian intelligence officers in the UK' since the end of the Cold War.

The new recruitment campaign is being run jointly with Government's eavesdropping centre GCHQ, which gathers intelligence for the Government and Armed Forces by tapping phones and monitoring the internet.

Now an interesting piece from our man in the Baltics:

Russia's Military Will Get Bigger and Better in 2015 By Matthew Bodner

Dec. 08 2014 20:05 Last edited 20:05

http://www.themoscowtimes.com/business/article/russia-s-military-will-get-bigger-and-better-in-2015/512753.html

Despite a looming recession, Russia will increase military spending by 30 percent next year to a record post-Soviet high of 3.3 trillion rubles (\$62 billion), cash that will be used to buy more aircraft, submarines, missiles and weapons for an ascendent armed forces.

The increase, which takes Russia's spending on defense to 4.2 percent of gross domestic product, comes amid an ongoing crisis in Ukraine that has seen a return to Cold War-style rhetoric and the reinsertion of military posturing into international politics.

Amid the muscle-flexing, the Russian military has had a good year. The Defense Ministry showed during the annexation of Crimea from Ukraine in March that it had successfully reformed its armed forces since the 2008 war with Georgia, when the Russian army looked disorganized and poorly equipped.

With a 20 trillion ruble (\$375 billion) rearmament drive that aspires to replenish 70 percent of the armed forces with modern equipment by the end of the decade in full swing, 2015 looks to be a year of breakneck growth in Russia's military capacity.

Despite that, Moscow still lags behind the world's biggest players: The U.S. Congress last week approved a defense budget for next year of \$584 billion. China's defense spending will reach \$159.6 billion next year, according to Britain-based defense consultancy IHS Jane's.

Russia's grand rearmament began in 2011. Since then, the military's modernization has progressed by 16 percent, according to news agency RIA Novosti. The target by the end of next year is 30 percent.

A complete picture of Russia's 2015 rearmament plans is hard to pin down — a product of military secrecy and industrial uncertainty, according to defense expert Ruslan Pukhov, director of the Center for the Analysis of Strategies and Technologies, a Moscow-based think tank.

The Moscow Times looked through Russian media reports announcing plans and contracts for some idea of what to expect.

Russia will continue to strengthen its ground forces in 2015. Although the troops seen in Crimea earlier this year were unmistakably better trained and equipped than they were six years ago in Georgia, they represented an elite contingent of the Russian army.

The task now is to continue purchasing and upgrading equipment, and training soldiers. According to media reports, the Russian military has 4,000 exercises of various types and sizes planned for next year — 1,000 more than in 2014.

Several new armored vehicles are expected to be unveiled during Victory Day celebrations on May 9, including new tanks, infantry fighting vehicles, and armored personnel carriers, officials have said.

Deputy Prime Minister Dmitry Rogozin said earlier this year that Russia's new Armata main battle tank would be among the innovations shown at the parade, though land forces head Colonel General Oleg Salyukov was quoted by the RIA Novosti news agency in October as saying the vehicles wouldn't be ready until the end of next year.

Featuring heavy armor, a fully digital control system, and even the ability to be controlled remotely, according to the TASS news agency, the Armata tank has been billed by its maker as superior to all analogues in Russia and abroad.

According to Salvukov, the tank will be tested by the military next year and go into serial production in 2016 if the army embraces it.

A separate branch of the Russian military — the Strategic Rocket Forces — is also due for some upgrades next year, with deployment beginning of new Yars missiles.

Yars missiles are reported to be an answer to U.S. plans to deploy missile shields in Eastern Europe. Intended to replace the Topol-M missiles currently deployed in the Russian military, the Yars are reported to have 10 independently targeting nuclear warheads, making them harder to halt.

By 2020, Rogozin has promised that every missile in Russia's arsenal will be replaced with a new one. Navy

One of the big winners this year was the Russian navy, in particular the Black Sea Fleet. Liberated from restrictions placed on deployment by a leasing agreement with Kiev before Moscow annexed Crimea, where the Black Sea Fleet is based, Russia has been investing heavily in its forces there.

By the end of 2015, the Black Sea Fleet will receive a new Admiral Grigorovich-class frigate, two new super-silent improved Kilo-class diesel-electric submarines, and a handful of small Project 21631 missile corvettes.

By 2016, six new Grigorovich-class frigates and six improved Kilo-class submarines will take positions in the Black Sea Fleet. In 2015, the fleet is expected to receive a handful of small Buyan-class missile corvettes, according to RIA.

Moscow has been beefing up its presence in the Black Sea in response to what it sees as higher NATO presence in the area. As Russia's major warm-water port, Sevastopol is also an important strategic launching pad for Russian naval expansion into the Mediterranean Sea.

Replacements for the Kilo-class submarines will start making their way into the water in next year as well. According to TASS, the second of the new Project 677 Lada-class submarines, named the Kronstadt, will be launched by the end of next year.

The Lada class is a next-generation diesel-electric submarine, but some reports suggest they may be getting air-independent propulsion systems, which will make them even quieter and more effective than their stealthy Kilo-class predecessors.

Meanwhile, the Northern Fleet has begun to receive new nuclear powered submarines of the Borei and Yasen classes, with more on the way next year. By 2020, the Russian navy is expected to have at least eight of each new nuclear submarine class in service in the Northern and Pacific fleets.

Russia's new nuclear submarines are perhaps the most powerful of its new military hardware. The Borei-class submarines are replacing Russia's aging Soviet-era nuclear missile fleet, boosting the power of Russia's nuclear forces significantly, while the Yasen-class hunter-killer submarines are raising Russia's ability to hunt enemy submarines and surface ships.

Air Force

The Russian air force has been busy harassing NATO's eastern members this year, and plane-spotters in the West will likely have good chances of seeing stray MiGs, Sukhois and even giant Tupolev bombers next year.

The air force's press service told RIA last week that the state defense order for 2015 includes 150 new airplanes and helicopters.

These new units include bulk orders of Su-30 multirole fighters, MiG-29s, Su-34s and Su-35s. These are Russia's front-line aircraft, serving as bombers and dogfighting planes.

Beyond combat aircraft, the air force is looking to receive several large An-148 transport planes and Yak-130 training aircraft. Training is a big overall focus, with 30 virtual simulators on order to outfit new training centers for Russian pilots.

Also, according to the air force, we can expect to see more Ka-52, Mi-28, Mi-8 and related combat and transport helicopters, which will enable Russia to better support its modernized ground forces.

But these are all old designs. One of the more interesting developments to keep an eye out for in 2015 will be related to Russia's next-generation Sukhoi T-50 (also known as the PAK FA), which is still in testing.

The T-50 is being built for both the Russian air force and foreign military customers, and is billed as an answer to the U.S. F-22 Raptor stealth fighter.

As for ground infrastructure for the air force, the defense order is reported to include new radar systems and deployment of the new S-400 anti-aircraft missile systems. The S-400 is billed as one of the world's best air-defense systems, with the ability to engage up to 36 targets with 72 missiles simultaneously. It is particularly targeted at countering the U.S. F-35 fighters and is said to have the ability to intercept ballistic missiles.

http://www.themoscowtimes.com/business/article/russia-s-military-will-get-bigger-and-better-in-2015/512753.html [Splendid pic of T90 tank in article]

WWW.Unian.Info 24/11/2014

Russian submarine spotted near Latvian waters

Latvian border forces spotted a Russian submarine fifty kilometers from the maritime border of Latvia on November 22, the National Armed Forces of Latvia has said in a posting on its Twitter page.

"On November 22, the border forces of Latvia identified a submarine of the Russian Navy's Kilo class in the exclusive economic zone of Latvia, at a distance of 27 nautical miles (or 50 kilometers) from Latvia's territorial waters," the armed forces said in a posting made on Sunday.

NATO has observed greatly increased activity by Russian warships and military aircraft in the Baltic region in recent months. Last month, Latvia reported a Russian Kashtan class submarine support ship just 18 nautical miles (or 33 kilometers) from its territorial waters. That was just week after Sweden launched a large operation, the biggest in the country since the end of the Cold War, to locate a "foreign submarine" it said had been spotted in its territorial waters.

Latvia has in recent days been hosting military exercises with U.S. troops as part of Operation Atlantic Resolve, a U.S. Department of Defense program to support the militaries of NATO member states in Eastern Europe threatened by Russia's ongoing aggression against Ukraine.

The Independent 04/12/2014

(This article is not related to Enigma 2000's interest's, but I am sure many Enigma 2000 members who have taken photographs in the past for the newsletter will understand.)

Photographers snap over use of Section 44 by police officers

The heavy-handed use of anti-terror laws is making innocent people feel like criminals, complain civil liberties groups.

Politicians, civil liberties groups and police bodies yesterday added their voices to fears that police officers are abusing anti-terror legislation to stop and question photographers taking pictures of famous landmarks.

Yesterday, The Independent highlighted the concern that police forces across the country are misusing the Section 44 legislation granted to them under the Terrorism Act, which allows them to stop anyone they want in a pre-designated area, without the need for suspicions of an offence having been committed.

But photographers have complained that they are regularly stopped while taking pictures and are treated like terrorists on reconnaissance missions. This is despite the act giving officers no power to seize cameras or demand the deletion of photographs.

The Metropolitan Police use Section 44 legislation far more than any other police force in England and Wales. In the first quarter of this financial year the Met, along with British Transport Police, were responsible for 96 per cent of the Section 44 stop-and-searches in the country.

Jenny Jones, a Green Party member of the Metropolitan Police Authority, Scotland Yard's governing body, said police officers stopping innocent people, as Section 44 allows them to do, was "unacceptable" and "illegal".

"This is an area where the Met is going to have to change its tactics," she said. "It is unacceptable to use a law like this illegally, which is what I think they are doing. It is something that the MPA's civil liberties panel is going to look at. It is a law that seems to hamper photographers, journalists, tourists and trainspotters. Anyone who carries a camera, basically."

Earlier this year, the Metropolitan Police commissioner, Sir Paul Stephenson, said the force would cut back on its use of Section 44, except around sites which are obvious terror targets, such as the Houses of Parliament.

But Ms Jones said the force needs to train its officers more thoroughly in the application of the law. "Some officers think they have the right to seize cameras. It is unbelievable and amounts to an abuse of power," she said.

Shami Chakrabarti, the director of civil liberties group, Liberty, called on the Government to reassess the law. "Section 44 stops are not based on reasonable suspicion and we know less than 1 per cent result in arrest.

"Hassling photographers and preventing them from carrying out perfectly ordinary assignments helps nobody, but blame must rest squarely with Parliament. It is time for this blunt and overly broad power to be tightened," she said.

Baroness Neville-Jones, the Conservatives' shadow security minister, said: "Inappropriate and ever wider use of these powers is one of the surest ways to lose public support in the fight against terrorism. Their use is declining, but not fast enough. These statistics also show that normal criminal legislation is much more effective."

Chris Huhne, the Liberal Democrats' home affairs spokesman, said: "Terrorism powers are clearly being abused when they are routinely applied to photographers, tourists and trainspotters. Police officers need more information and training to stop these inappropriate and excessive Section 44 searches."

Photographers continue to criticise the use of the power. In today's Independent, Stuart Franklin, a celebrated British photographer, reveals that he was stopped and searched by police officers in north London while on an assignment earlier this year.

Jeff Moore, chairman of the British Press Photographers' Association (BPPA), said: "The main problem we face is that Section 44 is an extremely poor piece of legislation that creates an enormous amount of confusion, both among the public and among the police officers that use it."

Mr Moore said police have ignored the BPPA's requests over the past four years to have photographers talk to newly qualified police constables during their media training. He said: "We're not trying to fight the police, we're trying to work with them."

Section 44: Special powers for the police

- * The Terrorism Act 2000 came in to force on 19 February 2001, "in response to the changing threat from international terrorism". It replaced temporary legislation that had been brought in to address the Troubles in Northern Ireland.
- * Section 44 grants police officers wide-ranging powers to stop and search and is one of the Act's more controversial provisions. Under it, police are entitled to stop and search any pedestrian or vehicle in a certain area, as well as anything carried by them or their passengers, provided prior authorisation has been given. Officers can do this without having any suspicion that an offence is being committed.
- * Such an authorisation is given only if the person giving it "considers it expedient" for the prevention of terrorism a rather open-ended clause.
- * Authorisations are granted for "areas", for up to 28 days. Once one has been given for an area, any police officer can conduct their searches there for as long as it lasts.

The Daily Mail 07/12/2014

GCHQ to snoop through office emails: Anti-spy agency will monitor disgruntled employees in danger of threatening UK security by going rogue

Anti-spy agency has turned attention to 'insider' threats within companies Will monitor disgruntled employees who could undermine UK security Unusual tone in emails could now be interpreted as a sign you are a spy

Britain's anti-spy agency is to snoop through office emails in a bid to preempt disgruntled employees threatening the nation's security by going rogue.

The Government Communications Headquarters (GCHQ) has turned its attention to 'insider' threats within companies - meaning staff gossip and gripes could now be checked for hidden agendas.

The shocking revelation means unusual language or uncharacteristic tones adopted in emails to colleagues could be interpreted as sign that the sender is undermining the UK's security.

Threat to nation: Britain's anti-spy agency is to snoop through office emails in a bid to preempt disgruntled employees threatening the nation's security by going rogue

GCHQ, the British intelligence organisation which unmasks spies, is sponsoring research at Lancaster University using 'behavioural analysis' to identify rogue employees, The Sunday Times reports.

The university is currently advertising the three and a half year PhD post financed by GCHQ - and paying £22,000 a year.

The university said: 'The research will investigate the use of techniques from the field of natural language processing to detect the early indicators of an insider threat within an organisation's unstructured internal data.'

This means that the person they hire will study email correspondences among employees who have become disgruntled and who may have an axe to grind.

Paul Taylor, professor of psychology at the university, said: 'Instead of ending their email with 'see ya!' they might suddenly offer you 'kind regards'.

'These changes are important and could hint at a disgruntled employee about to go rogue.'

The university say they will be using advanced techniques to predict anomalous behavior among staff.

Paul Taylor, professor of psychology at Lancaster University, said changes in the tone of emails 'could hint at a disgruntled employee about to go rogue'

The aim is to prevent a recurrence of spies such as Guy Burgess and Kim Philby - who were insiders whose behaviour became noticeably out of character.

The revelation comes shortly after a judgement which ruled that GCHQ's mass surveillance programmes were found to be lawful - despite protests from privacy campaigners.

Human rights groups Liberty, Privacy International and Amnesty brought a legal challenge against GCHQ following disclosures made by American NSA (National Security Agency) whistleblower Edward Snowden about mass surveillance programmes known as Prism and Tempora.

They argued that GCHQ's methods breached article 8 of the European Convention on Human Rights (ECHR), the right to privacy, as well as article 10, which protects freedom of expression.

In a written judgment, a panel of IPT judges said: 'We have been able to satisfy ourselves that as of today there is no contravention of articles 8 and 10 by reference to those systems.

'We have left open for further argument the question as to whether prior hereto there has been a breach.'

Amnesty immediately said it would appeal the decision at the European Court of Human Rights - there is no domestic right of appeal.

Amnesty UK's legal advisor, Rachel Logan, said: 'The Government's entire defence has amounted to 'trust us' and now the tribunal has said the same.

'Since we only know about the scale of such surveillance thanks to Snowden, and given that 'national security' has been recklessly bandied around, 'trust us' isn't enough.

The Government Communications Headquarters (GCHQ) has turned its attention to 'insider' threats within companies - meaning staff gossip and gripes could now be checked for hidden agendas

'We will now appeal to Strasbourg, who might not be as inclined to put their trust in the UK Government given what we know so far.'

James Welch, legal director for Liberty, which also intends to appeal to the ECHR, said: 'So a secretive court thinks that secret safeguards shown to it in secret are an adequate protection of our privacy.

'The IPT cannot grasp why so many of us are deeply troubled about GCHQ's Tempora operation - a seemingly unfettered power to rifle through our online communications.'

The Diplomat 07/12/2014

Russian Intelligence in Kyrgyzstan, Cold War Redux

The activities of Russia's FSB in Central Asia - and Ukraine - share much in common with an earlier time.

The crisis in Ukraine has highlighted the work of Russia's FSB, or Federal Security Service, in Moscow's so-called sphere of influence. It is a widely shared perception that the blueprint the Kremlin uses for the active presence of its intelligence service in the former republics is based on know-how from the Soviet era, when KGB cadres were essential to keeping communist rule intact.

KGB tactics were employed by the Politburo in Afghanistan, for instance, where Soviet advisers monitored factional splits in an attempt to manage Afghan communist party affairs. While the Soviet Union is no more, Russia's approach to its backyard today bears many of the hallmarks of that earlier Cold War era.

The Kremlin's strategy in the mountainous republic of Kyrgyzstan is a very good example. Back in the mid 2000s, Russian satellite states Georgia and Ukraine experienced political turbulence that were dubbed "color revolutions." The Kyrgyz Republic had its own uprising, which overthrew what had been a typical ex-Soviet regime. These events helped to shape Russia's policy of engaging with its former territories to preserve the Kremlin's influence.

The Russian leadership's particular interest in Kyrgyzstan has been tied to NATO's use of the Manas Air Base to supply its operations in Afghanistan. The Kremlin's coercive actions in Kyrgyzstan led to a second uprising in the country that was later named the "April revolution" of 2010. Western observers believe that the Russian security services were complicit in the overthrow of the regime in Bishkek four years ago. That year, 2010 was a disastrous one for the Kyrgyz Republic, with severe ethnic conflict between Kyrgyz and Uzbeks occurring in June, in the country's southern provinces.

In the fall of 2010, the Kremlin set up a Russian FSB surveillance team presence on the ground in South Kyrgyzstan. Moscow's official pretext was concern about the growing drug trafficking dilemma. But Kyrgyzstan's neighbor in the Ferghana Valley, Uzbekistan was critical of Russia's interference in Central Asia from the start, suspecting that the Kremlin would use the regional divide for its own geopolitical agenda. The Uzbek government had been clear about its fears in 2009, a year prior to the devastating ethnic strife in South Kyrgyzstan.

Uzbekistan has still failed to normalize relations with its neighbors Kyrgyzstan and Tajikistan. Many regional observers meanwhile remain skeptical of the Ferghana Valley's conflict-prone interstate relations, which at times produce skirmishes and small-scale military confrontations on the borders. In the meantime, Moscow has been skillfully managing its relations with these republics, steadily transforming Kyrgyzstan into a client state.

Russia's actions in Kyrgyzstan are not dissimilar to its strategy in Ukraine. The propaganda campaign managed by Russian intelligence and directed at the Ukrainian government has been a regular occurrence in other post-Soviet states. The Kremlin leveraged its influence to remove the Kyrgyz regime in April 2010 and then later targeted uncooperative Kyrgyz political figures. In one case, the leader of the Ata-Meken (Fatherland) party was vilified by Russia's state-run NTV channel, after a hidden camera captured him in a tryst. In 2011, Russian intelligence was involved in falsely accusing another Kyrgyz opposition figure and leader of the southern Ata-Zhurt (Homeland) party, Kamchy Tashiyev, of running a drug trafficking organization in the country. Two years later, the same Moscow-based news source published a news report claiming that the Russian government had granted political asylum to the Tashiyev family after the Kyrgyz politician fell out with local authorities in Bishkek. The Russian embassy in Kyrgyzstan denied the claim, but Tashiyev has this year backed Russia's annexation of Crimea and Vladimir Putin's policy in Ukraine.

So involved has Russia been in Kyrgyz political affairs, that Kazakhstan and Uzbekistan now recoil at cooperating with Kyrgyzstan. In autocratic Central Asia, personal relations among the rulers is nearly always the best way to achieve win-win outcomes. Three carbon resource-rich states, Turkmenistan, Kazakhstan and Uzbekistan, have been somewhat successful in coordinating their regional policies over a broad range of issues, particularly toward Afghanistan and water disputes. Notably, Turkmenistan and Uzbekistan are suspicious of the Kremlin's regional approach. By contrast, Kyrgyzstan is moving into the embrace of Vladimir Putin, for instance agreeing to join Eurasian Economic Union project.

Ultimately, the Kyrgyz leadership's missteps in choosing its friends has worsened its important relationship with Uzbekistan. As a result, Uzbek authorities cut a vital gas supply line to South Kyrgyzstan, complicating the border delimitation process in the Ferghana Valley triangle.

The Instigator News 07/12/2014

US Drones May Stick to Routines to Shield From Cyberattacks

Pentagon-sponsored engineers have developed a system to shield unmanned aerial vehicles from cyber-attacks. It sounds the alert if a drone starts doing something that it is not supposed to do.

Called System-Aware Secure Sentinel, the new system detects "illogical behavior" compared to how the aircraft normally operates.

"Detections can serve to initiate automated recovery actions and alert operators of the attack," said Barry Horowitz, a systems and information engineer at the University of Virginia in Charlottesville, in a statement.

Apparently, the system is meant to prevent embarrassing situations like the loss of a US spy drone in December 2011 to Iran. A CIA RQ-170 Sentinel drone was brought down after what the Iranians claimed to have been a hacker attack as it was flying in the country's airspace.

The Iranians said they used a technique called "spoofing" where they sent the drone the wrong coordinates and tricked it into believing it was landing at its home base in Afghanistan when in fact it was landing on Iranian territory.

A handout picture released by the office of Iran's Supreme Leader Ayatollah Ali Khamenei on May 11, 2014 shows him (C-L) sitting next to the captured US RQ-170 sentinel high-altitude reconnaissance that crashed in Iran. (AFP Photo/Iranian Leader's Website)

Various threats were simulated by the researchers during five days of in-flight tests, including cyber-attacks launched from the ground, interference with supply chains and attacks from military insiders.

The attacks focused on four different areas, GPS data, location data, information about imagery, on-board surveillance and control of payloads and took place over five days. In each scenario the system was able to detect cyber-attacks, the team said.

"The inflight testing gauged the effectiveness of the countermeasure technology in hardening the unmanned system's cyber agility and resiliency under attack conditions," the researchers said.

The technology was developed with funds from the US Department of Defense. The project involved collaboration between the Georgia Institute of Technology and the University of Virginia.

SPECIAL MATTERS

Operation Jallaa: *Possibility around 15th January 2015*



MESSAGES:

E Thanks your last, ok on stamps and *no compo* needed, tnx

RELEVANT WEBSITES

ENIGMA 2000 Website: http://www.enigma2000.org.uk

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: http://www.brogers.dsl.pipex.com/page2.html

Time zone information: http://www.timeanddate.com/library/abbreviations/timezones/

Encyclopedia of Espionage, Intelligence, and Security http://www.espionageinfo.com/

EyeSpyMag!

http://www.eyespymag.com

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