ENIGMA 2000 NEWSLETTER



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'Der Brocken' STASI Intercept Station

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 $\underline{https://www.geschichtsspuren.de/artikel/fmelo-eloka-sigint/45-objekt-urian-horchposten-brocken.html}$

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We start this newsletter with a few short extracts from Jack Barskys book Under Deep Cover. [Courtesy Edd Smith] which gives a timely confirmation of what Number Stations are about.

Jack Barsky is in fact Albrecht Dittrich, an East German who a few years after winning the prestigious Karl Marx scholarship, was recruited from university by the KGB and finally ended up living in New York. After working as a delivery rider and obtaining various qualifications, he got a job as a Computer Coder at Met life, an insurance company. These are are a few short extracts from his book.

Note: The only reference he ever makes to radio hardware is a "Pocket Blaupunkt shortwave radio".

The training covered the following subjects:

- a) Shortwave and morse code. A The Morse code training was focused strictly on receiving. After I mastered the ten single digits And the alphabet at a slow speed, we concentrated on building up my receiving speed. I eventually topped out at a respectable 100 digits per minute. I was also instructed on the types of commercially available radios and how to use them to receive shortwave transmissions from my handlers in the KGB during my time in the west.
- b) Cryptography. All transmissions I received via shortwave radio were encrypted, and I was taught to encrypt every specific piece of information (names, addresses, phone numbers, etc.) contained in my secret messages to the KGB headquarters. The algorithm they taught me involved a double encryption. First all letters were translated into digits, which were then randomized by adding or subtracting another set of digits derived by by a separate algorithm. The fact that the only KGB document I ever signed with my full real name was a promise never to disclose any information about these algorithms speaks to the value the KGB attached to their code. According to my instructor, the code was unbreakable and good for about two hundred uses.
- c) Secret Writing. The practice of secret writing, or the use of the invisible ink, is as old as the written word. What changed over the years was the technology. The chemicals I used were almost impossible to detect. The process of creating a secret message started with writing a letter to a fictitious friend. This was called open text*. That sheet of paper was then placed on a plate of clean glass, or a mirror, and covered with a sheet of special contact paper and another sheet of regular paper. The secret message was written on the top sheet, using a #2 pencil and a light hand to avoid leaving any visible impressions on the bottom sheet. The letter containing the open text, which now also included the secret message, was sent via regular mail to a foreign address (the addresses I used were in West Berlin, Colombia, and Austria), where a trusted middleman would hand the letter over to a resident KGB agent, who in turn would forward it via diplomatic pouch to headquarters, where the writing would be developed in the lab. The entire process of getting a message to Moscow took two to three weeks.
- d) Photography. As an avid amateur photographer, I didn't need to be told how to use a camera or develop black-and-white film. I did, however, receive training in the use of a microscope to create a microdot a negative no larger than a square millimetre that can easily be hidden under a postage stamp or glued into the inside of an envelope.

A great deal of training was given to the area of field operations, which included surveillance detection, clandestine meetings, and dead-drop operations.

The second algorithm I had used had during the past four years had outlived its usefulness and had to be replaced. There was no time to memorize a new algorithm, so instead I received a small notepad (called a one-time pad) with 100 sheets containing groups of five digits for use in the encryption process. Those digits were made visible by developing the sheet of paper with an iodine solution applied carefully with a cotton swab.

By 1987, the regular Thursday night shortwave transmission had become more of a nuisance than anything else – especially when I went to the trouble of decrypting a message only to find a birthday greeting or some proclamation about some Soviet holiday.

In early December 1988, the clock finally ran out for me. As I translated a shortwave radiogram from digits to letters, the message began to sound more and more ominous.

PREPARE FOR URGENT DEPARTURE. WE HAVE REASON TO BELIEVE YOU COVER IS BLOWN. YOU ARE IN SEVERE DANGER. LISTEN ON THIS FREQUENCY EVERY DAY TO RECIEVE FURTHER INSTRUCTIONS. CONFIRM RECIPT OF THIS MESSAGE WITH A SIGNAL AT REGULAR SIGNAL LOCATION. THIS IS AN ORDER.

Thanks Edd

Number Station news

The Thursday E07 schedule, starting at 2010 UTC, sent a "full message" format transmission on 6-April, unusual enough to be remarked upon as most loggings from this one have been of the "no message" variant for some time. This consisted of 68 5F groups and followed the E07 routine of being transmitted on three frequencies spaced by twenty minutes. The same message appeared again on the following Thursday, the 13th, but it was back to "no message" on the 20th.

The Sunday E07, 1800 UTC start, came up with a two-message transmission on 12-March, the first consisting of 62 5Fs and the second with 84. The

The Sunday E07, 1800 UTC start, came up with a two-message transmission on 12-March, the first consisting of 62 5Fs and the second with 84. The audio level from these A.M. E07 schedules remains low in relation to the carrier strength which makes for difficult copy much of the time.

The Thursday and Friday evenings, UK time, E06 and G06 schedules are still sending the same message of 52 groups which has been the case since the autumn of last year.

Not Number Station stuff but possibly of interest; the German Weather Service shows up on 6,180 kHz in the 49 metre broadcast band with a transmission of about 30 minutes of detailed weather information in the German language, usually a good signal at 1200 UTC, also heard at 0600 and 2000 UTC. This station had been heard on a lower frequency, 5,905, for a large part of 2016 and back then appeared to be using the transmission mode favoured by number stations, i.e. AM with the lower side-band suppressed - selecting USB and tuning for zero-beat with the carrier produced good audio but silence when switched to LSB, but using this procedure now produces audio in both USB and LSB modes so now seems to be using standard AM.

Continuing on a meteorological theme, the Russian language SSB station in Rostov with the fast-talking YL giving airfield information for various locations for just five minutes at a time, at H + 25 minutes and H + 55 minutes on 11,297 kHz is still being well received in the UK daytime.

The slow CW beacon just above 10,237 kHz sending "JO62SK common and precious 5W dipole" is still on, heard as a weak signal in the daylight hours in the last days of April, but a related signal close to 6,398 with a similar message but with "52W" seems to have gone although that might be due to unfavourable propagation, it was heard several times in early March with a good signal. [Thanks PoSW]

More S06 Intruder stuff:

The latest IARUMS intruder watch list (http://www.iarums-r1.org/iarums/news2017/news1703.pdf) shows something interesting on the bottom of page 2:

14212 kHz – Ukraine secret service numbers station

A female voice spelled figures in Russian language on 14212 kHz on A3E (AM) on March 30th at 1211 UTC.

The emission came from the "SZRU = Foreign Intelligence Service of Ukraine" in Rivne.

This is the Thursday S06s 12.10z transmission.

Interesting they note a location of the transmission.

Searched on googlemaps but could not find any antennas.

Thanks Gert

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

We start the Morse section with four unidentified Morse transmissions logged by André (F5JBR)

UNID 1

André reports that this one seems pretty interesting & asks if anyone has any information or ideas on this one.

The first message was garbled by a USB signal. Jean-Paul reports that this appears to be Chinese Air Defence tracking network.

3214.8	1342z	07 Mar Unknown Morse - Possibly Chinese Via SDR Japan F5JBR	TUE
		NR $0414\ 20\ 03\ 07\ 2225\ 001\ 1301 = = 37100\ 33031\ 60987\ 36043\ 43275\ 84726\ \dots\ /\ \dots$	
		NR 0415 20 03 07 2227 001 1301 = = 37100 34021 60987 26043 41275 03826 04827 35926 54821 72349 R59436 04825 27436 48217 59436 04276 35428 72609 14326 47530 K	
		NR 0413 20 03 07 2230 001 1301 = 37100 35021 60987 26503 41275 84826 04837 35926 54821 72349 R59436 04825 27436 48217 59436 04376 35428 83609 14326 47530 K K	
	R	RPT NR 0413 20 03 07 2230 001 1301 = 37100 35021 60987 26503 41275 84826 04837 35926 54821 72349 R59436 04825 27436 48217 59436 04376 35428 83609 14326 47530 K K	

UNID 2

Originally thought to be possibly Chinese in origin, recent thoughts are that this may be a North Korean network. André notes that the transmission times of the messages corresponds to local time in Pyongyang (i.e. + 08H30).

Ary (AB) also believes the station could be North Korean & adds the following information;

- The North Korean numbers station M82 also used the term ABV
- The timestamps fit N. Korea
- N. Korea still uses old Soviet air defence tracking systems although these are being replaced now by newer systems according to several sources. ABV means "I repeat" and is used by M41 –Russian Air Defence. Except for M82 and M41 no other stations are known to use this term.

The format of M42 also has similarities to the current net was a bit different from the current net but not much. What is interesting is that the new net sometimes sends MARU, MATR and MATC and at other times QRU, QTR, QTC.

Any further information on this network would also be most welcomed.

3741.2	1522z	10 Apr Unknown - Possibly North Korean - Army?	F5JBR	MON
		GA9 de M4D QRU QRU QTC QTC = = VVV GA9 de M4D 8870 R4736 R6436 R8138 R8030 K K ABV ABV = = 8870 R4736 R6436 R8138 R CMG = 2345 R310 R05 R85 R09 R760 R11 R02 R01 K ABV ABV 2345 R310 R05 R85 R09 R760		
3147.3	1545z	GA9 DE GA1 QSA ? K	F5JBR	MON
3889.2	1558z	CQ CQ DE CGC QTC 1002 R6623 R8580 R946 R2 R242 K K	F5JBR	MON
3361.7	1811 - 1814z	11 Apr Unknown – Possibly North Korean – Army?	F5JBR	TUE
		CAO DE 1137 OBU OTC. 0474 D7207 D0707 D0400 D7024 D7070 V ADV		

GA9 DE H2Z QRU QTC = 0474 R7306 R9706 R0408 R6834 R7879 K ABV = 0474 R7306 R9706 R0408 R6834 R7879 K K K

	1814 - 18	20z	GA9 DE H2Z QRU QTC = 0474 R7306 R9706 R0408 R6834 R7879 K ABV = 0474 R7306 R9706 R0408 R6834 R7879 K K K CMG QTC 0245 R R08 R05 R05 R75 R04 R11 R04 ABV								
2211.4	1020 10	2.4	CQ GA9 QSA? GA	9 DE P9M	I QSA 2 K	PCH 0622 P7700 P6005 P0400 P1442 VV CMC CMC					
3311.4	1829 - 18	34Z	VVV GA9 (x2) DE M4D (x2) QRU WG WG MATCH = = 0633 R7799 R6805 R0408 R1443 KK CMG CMG = = 0300 R3115 R08 R05 R70 R03 R760 R11 R00 R01 R05 K								
			0300 R3115 R08 R0	05 R70 R0	3 R760 R11 R00	7799 R6805 R0408 R144) R01 R05 K GA9 DE M4D QSA 4 QSA		==			
UNID 3											
3197	1747z	11 Apr	Unknown CW				(Via SDR Japan)	F5JBR	TUE		
			VVV LV (x2) STN (x VVV LV (x2) STN (x VVV LV (x2) STN (x	(3) DE 510	1 (x2) 85331 (x3)						
			= = QTC NR 1014 20	= QTC NR 1014 20 04 12 0200 002 5101 =							
						04895 28354 47185 29145 18425 70147					
			VVV (Message repeat	/VV (Message repeated 3 times) SK SK							
UNID 4											
3398,5	1730 - 17	37z	15 Apr Unknown	CW			(Via SDR Japan)	F5JBR	SAT		
			TRN DE 9OL QSA 3	QRU ? QT	C K TRN GA						
			TRN DE 9OL NR 16 12734 30981 49265 (Repeat Message 2 T	37209 310	069 42501 12469	= = 23762 75060 15782 =					
		(1731z)	TRN R QSL NR 16 = TRN QTC NR NR 16 90188 58681 20614 . (Repeat Message 2 Ti 9OL RR QSL NR 16	14 10 04 1 /= mes)		==					
M01/2 X	XIV MCW	, hand (463	sched for Mar- Apr).	Will chang	ge to M01/3 sched	ID 025 for May - Aug.					
March 20	<u> 17:</u>										
5020	2000z 2000z 2000z 2000z 2000z 2000z 2000z 2000z 2000z	02 Mar 07 Mar 14 Mar 16 Mar 21 Mar 23 Mar 28 Mar 30 Mar	'463' 432 30 = = '463' 483 30 = = '463' 223 30 = = '463' 873 30 = = '463' 467 30 = = '463' 224 30 = =		LG 45625 = = LG 34171 = = LG 95560 = = LG 57551 = = LG 63074 = =	V. Weak, fast. Very poor Fair. Steady delivery wi Fair, med-fast. Many err Weak, fast. Copy difficul Weak, fast. Difficult cop Fair, slow. Excellent steat = Strong, fast. Error no	th usual errors noted ors - some corrected lt at times y ady Morse	BR BR CB/HFD BR/CB BR CB BR CB	THU TUE TUE THU TUE THU TUE THU		
5475	1800z 1800z 1800z 1800z 1800z 1800z 1800z 1800z	02 Mar 07 Mar 14 Mar 16 Mar 21 Mar 23 Mar 28 Mar 30 Mar	'463' 875 30 = = '463' 234 40 = = '463' 122 30 = = NRH '463' 089 30 = = '463' 123 30 = = '463' 758 30 = = =	18886 1802z ceas 51849 57587	LG 38708 = = sed transmission. C LG 41254 = = LG 33099 = = LG 39335 = =	Weak, V.fast. Many erro Weak, fast. Several error Continuous note then nothin Fair, steady delivery. Cor Fair, fast. Started well th Strong, slow. Several notes = Good, fast. Numerous	es noted ing further. rected errors noted en became chaotic ted errors	BR BR/HFD CB CB BR CB BR/CB	THU TUE TUE THU TUE THU TUE THU		
6260	1500z 1500z 1500z	04 Mar 11 Mar 18 Mar	'463' 121 30 = = '463' 174 30 = = '463' 910 30 = =	71823 48269 90486		Weak, med-fast. BC pira Many errors/stops/starts. Ends 1509z		BR/E.SMITH/HFD E.SMITH E.SMITH	SAT SAT SAT		
6510	0700z 0700z 0700z 0700z	05 Mar 12 Mar 19 Mar 26 Mar	'463' 123 30 = = '463' 456 30 = = '463' 703 30 = = '463' 584 30 = =	13371 23230 89272 19124	LG 187 .1 = =LG 53146 = =	Weak, med-fast. No noted Weak, fast. No noted erro Weak, fast/ Poor copy. Fair, fast. Several errors	ors Errors noted	BR/ F5JBR BR BR BR	SUN SUN SUN SUN		
<u>April 201</u>	<u>7:</u>										
5020	2000z 2000z 2000z 2005z 2000z 2000z 2000z 2000z	04 Apr 11 Apr 13 Apr 18 Apr 20 Apr 25 Apr 27 Apr	'463' 437 30 = = '463' 723 30 = = '463' 723 30 = = '463' 505 30 = = '463' 425 30 = = '463' 319 30 = = = =	72417 89910 41608 96461	LG 01001 = = LG 90525 = = LG 19620 = = = LG 69417 = = LG 18848 = =	Weak, fast. Many grps/rp Strong, slow. Some error Strong, fast. Excellent M = Good, fast. Two error Strong. Excellent, stead: Strong, fast. Grp25 cut sl = Strong, fast. Errors n	rs noted forse. Errors noted fors noted in msg by CW. Errors noted fort & into grp26	BR/CB BR/CB CB/E.SMITH BR CB/E.SMITH CB BR/CB	TUE TUE THU TUE THU TUE THU		

5475	1800z 04 Ap 1800z 06 Ap 1800z 11 Ap 1800z 13 Ap 1800z 18 Ap 1800z 20 Ap 1800z 25 Ap 1800z 27 Ap	r '463' 573 r '463' 911 r '463' 128 r '463' 404 r '463' 868 r '463' 129	330 = = 330 = = 330 = = 430 = = = = 330 = 930 = =	01834 56473 57045 34699 51501 41068	LG 14827 = =LG 11996 = =LG 63015 = =LG 37587 =LG 84912 = =LG 46471 = =	Weak, med-fa Good, slow. S Fair/Weak, fast = = Good, fast V.Weak, Fast. Fair, fast. Err	st. Good M Several erro st. Exceller t. Several of Good Mo ors noted	ors noted at Morse. Errors noted	BR CB/E.SMITH BR/CB	TUE THU TUE THU TUE THU TUE THU TUE
6260	1500z 01 Ap 1500z 08 Ap 1500z 15 Ap 1500z 22 Ap 1500z 29 Ap	r '463' 105 r '463' 921 r '463' 228	30 = = 30 = = 330	34197 99241 18233	LG 53889 = = LG 39530 = = LG 12508 = =	Fair, fast. Goo Weak/Fair, fas == Errors in f Ends 1509z	st. Noisy – format note	d. MCW	CB/chpa/E.SMITH AB/E.SMITH BR BR/E.SMITH CB/E.SMITH*	SAT SAT SAT SAT SAT
6510	0659z 02 Ap 0700z 09 Ap 0659z 16 Ap 07 06 z 23 Ap 0700z 30 Ap	r '463' 289 r '463' 732 r '463' 112	2 30 = = 2 30 = = 2 30 = =	34449 98136 29931	LG 30012 = = LG 91959 = = LG 41539 = =	Weak/Fair, fas Ends 0708z	st. Exceller	y Morse, with errors nt Morse – No errors all. Errors noted	BR/CB BR E.SMITH BR AB/CB	SUN SUN SUN SUN
M01a (1	From Feb 2016 M01	a has been red	efined to co	ver all M01	variants - except	ing M01b)				
9129	0542z	01 Mar	498 (x3)	524 82 (x2)				F5JBR	WED
3973	0632z				4 6 111 333 = 4 68842 56552	61299 32722 5	51821 969:	58 36067 27356 573	F5JBR 56 = 536 10	WED
3352	1842z		342 (x3)	428 83 (2)					F5JBR	WED
4923	1253z	02 Mar	849 (x3)	840 03 (x2) 849 (x3) 786	73 (x2)			F5JBR	THU
3774	1911z		697 (x3)	483 59 (x2) 333 483 51	333 040 04 6	597 333 36	111 000	F5JBR	THU
4976	1239 (IP) - 12462	z 15 Mar						oland SDR ICW 63219 87465 32019	E.SMITH 000	WED
3257 3369	1647z 1708 - 1726z	28 Mar	156 (x3) 156 (x3) 156 (x3)	111 16 (x2) 110 72 (x2) 115 98 (x2) 111 040 01 333 114 07 1 (x2)	050				F5JBR F5JBR	TUE TUE
3187	1740 - 1744z		425 (x3) 333 04 333 07 111 000	644 40 (x2)					F5JBR	TUE
3824	1850z		168 (x3)	914 47 (x2)					F5JBR	TUE
April 20	<u>17:</u>									
5165	0631 (IP) - 06342	2 29 Mar	07492 67	052 61254 747 81188 147 7785x		4297 3511x 46 9144 21788 x6		19x23	E.SMITH	WED
	0637 - 0644z		716 333	13933 4393	3 111 000					
5080	0535z (IP)	30 Mar	111 000						E.SMITH	THU
	0754 - 0800z		562 6215 821 1892 333 1826	0 18920 18	3920					
<u>M01b</u>										
March 2	<u> 2017:</u>									
3535	1915 ((IP) - 1927z	20 Mar	713	33 = 03498 801	34 65724 000	Weak// 2	KJT on 4590kHz	BR	MON
3510	1932z		20 Mar	'201'	QRM	I from Amateur	radio	NRH 4605kHz	HFD	MON
3520//45	585 2110z		10 Mar	'582' 713	33 = 03498		3520kHz	stronger //4585kHz	HFD	FRI

3535//4590	1910z	06 Mar	'420' 713 33 = 03498		HFD	MON
3625//4940	2002 - 2020z 2000z	03 Mar 10 Mar	'153' 713 33 = 03498 80134 65724 000 '153' 713 33 = 03498	Fair//V.weak MC	CW BR HFD	FRI FRI
3645//4455	2015 - 2033z 2015z 2015 - 2033z	06 Mar 13 Mar 20 Mar	'771' 713 33 = 03498 80134 65724 000 '771' 713 33 = 03498 '771' 713 33 = 03498 80134 65724 000	Strong/Strong MC Good//Fair MC	HFD	MON MON MON
3715//4570	2042 - 2058z	16 Mar	'477' 713 33 = 03498 80134 65724 000	Fair//Fair MC	CW BR	THU
4591	1816z (IP) - 1827z	27 Mar	[From grp04]38310 65724 = =	713 33 0 0 0 Strong	СВ	MON
<u>April 2017:</u>						
3510//4605	1832 - 1850z 1832 - 1850z 1832 - 1850z	13 Apr 20 Apr 27 Apr	'201' 521 35 = 49675 77332 05387 000 '201' 521 35 = 49675 77332 05387 000 '201' 521 35 = 49675 77332 05387 000	(Silec Poland SDR) MC Fair//Strong MC Good//Fair MC	CW BR/E.SMITH/HFD	THU THU THU
3520//4585	2010z	14 Apr	'582' 521 35 = 49765	Weak	HFD	FRI
3535//4590	1810z	03 Apr	'420' 521 35 =	Weak	HFD	MON
3625//4940	1902z	14 Apr	'153' 521 35 = 49675		HFD	FRI
3645//4455	1915z 1915 - 1934z	03 Apr 17 Apr	'771' 521 35 = 49675 '771' 521 35 = 49675 77332 05387 000	Weak Strong//Fair MC	HFD CW BR	MON MON
3715	1940 - 1959z	20 Apr	'477' 521 35 = 49675 77332 05387 000	(4570kHz NRH) MC	CW E.SMITH	THU
3715//4570	1942z 1942 - 2000z 1942 - 1959z	06 Apr 13 Apr 27 Apr	'477' 521/35 = 49675 '477' 521 35 = 49675 77332 05387 000 477' 521 35 = 49675 77332 05387 000	Weak (Silec Poland SDR) MC String//Fair MC		THU THU THU
4590	1810 - 1828z	24 Apr	'420' 521 35 = 49675 77332 05387 000	Strong	СВ	MON

M01b 3625//4440kHz 2002z 03 Mar17	
153 (R4m) 713 713 33 33 ==	
03498 80134 75656 38310 63072 02583 37208 35171 75837 63855 17073 20031 81811 80335 73540 80468 26770 89824 76146 30247 33924 55297 80475 90715 75000 51111 38863 09588 08615 83011 30018 90117 65724 = =	
713 713 33 33 000 Courtesy BR	

M01b	3510/	//446051	kHz 1	1832z	13Apr	17			
201 (R4	4m) 5	521 521	35 3	5 = =					
49675 75844 63266 32131	38175 69816	50806	84474 66337	28169 58625	88991 45172	34401	84171	58285	08917
521 52	1 35	35 000)			Co	ourtesy	E.SMIT	TH .

M08a XVIII ICW / CW, some MCW

Our M8a report - As usual by courtesy of Our Man in America - AnonUS.

M08a has continued to be present over the past two months but has been very intermittent with only 11 messages being recorded over the course of two months. One of these included the usual weekend call-ups but oddly this was transmitted on a Thursday morning.

HM01 was audible on the background on several occasions.

Notably the transmitter is almost always turned on & is noticeable due to a characteristic hum, in fact almost all expected schedules over the past two months had the hum present it was just that the Morse was absent. What is unknown is whether this is just a scaling back of operations, (Note that HM01 had long periods where the call-ups didn't increment over the same period). One thought that came to mind is that the Cubans are having computer problems at the moment either with generating the numbers or playing them back.

If we look at the dates when there were transmissions we see 16-17 March, 21 March, 4-5 April & 27-28 April. Of note here is that 17 March & 5 April are dates when HM01 numbers started incrementing again after periods stuck in the same place. This may lend some weight to the problem being with the generation of the numbers.

March 2017:

8096	1400z 1400z 1400z	16 Mar 17 Mar 21 Mar	[18262 22501 35022] [72102 85532] [52141 64572]	1	AnonUS AnonUS AnonUS	THU FRI TUE
8135	2300z 2300z 2300z	16 Mar 17 Mar 28 Mar	[24322 37651 42671]	Came up in progress mixing with HM01 Up at 2255z with HM01 udible in the background	AnonUS AnonUS AnonUS	THU FRI TUE

April 2017:

7554	2000z	04 Apr	[67761 71182 84421] HM01 audible in the background	AnonUS	TUE
	2000z	12 Apr	No Morse but HM01 audible in the background	AnonUS	WED
	2000z	16 Apr	No Morse but HM01 audible in the background	AnonUS	SUN
	2000z	27 Apr	[56241 60562 73801]	AnonUS	THU
8009	2300z	05 Apr	No Morse but HM01 audible	AnonUS	WED
8096	1400z	05 Apr	[15471 28802 32232]	AnonUS	WED
	1400z	27 Apr	[33481 55122 68551]	AnonUS	THU
	1400z	28 Apr	[23712 36132 50461]	AnonUS	FRI
8135 (8130)	2300z 2300z 2300z	04 Apr 06 Apr 18 Apr	[02262 15582] HM01 audible in the background No Morse but HM01 audible Just the hum present, note frequency was 8130kHz, 8135 expected	AnonUS AnonUS AnonUS	TUE THU TUE

Call-up Number Sequence Analysis

Analysis of call-up spacings. (Spacing between the 1st, 2nd, 3rd and 4th digits of the call-ups). Example 43561 66881 78322 21 32 34 23

As with previous observations the M08a call-ups follow a pattern between the three numbers. (See Issue 81 - Mar 2014 for full details)

Analysis of spacings between numbers in the call-ups shows that there is some relationship between the call-ups other than the first digits.

```
24322 37651 42671 11 34 30 32 example 1<sup>st</sup> position 234 = 11 Second position 472 = 34, Third position 366 = 30, Fourth position 257 = 32 67761 71182 84421 11 33 33 32 15471 28802 32232 11 33 43 23 33481 55122 68551 21 23 64 33 56241 60562 73801 11 33 33 23 23712 36132 50461 12 33 33 23
```

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

New ID's may be only for the month/sched shown, but not necessarily unknown. The reason for their reuse, some after long periods of time, is unknown.

Two Message Transmissions

We have two instances of two message transmissions from M12 in March, followed by another two in April. At one time two message transmissions would appear on an irregular basis - but were fairly uncommon. In recent years, however, they had disappeared entirely. When they did appear one of the messages would be new while the other was always a repeat of that from that IDs previous transmission. It was thought the reason that these messages were repeated, perhaps, was because the original message had not been received or acknowledged.

These latest transmissions, however, do not fit this pattern & appear to consist of two unique new messages. To add to the puzzle, the same two messages were sent on both the 1800z, ID 357 schedule & the 1900z, ID 463 schedule.

9176/7931/6904	1800/20/40z	01 Mar	257 2 (846 54) 257 2 (974 63)	05600 12996 42723 77455
8047/6802/5788	1900/20/40z	01 Mar	463 2 (846 54) 463 2 (974 63)	05600 12996 42723 77455
9176/7931/6904	1800/20/40z	15 Mar	257 2 (567 62) 257 2 (713 71)	86131 72800 81903 40103
8047 6802/5788	1900/20/40z	15 Mar	463 2 (567 62) 463 2 (713 71)	86131 72800 81903 40103
9176/7931/6904	1800/20/40z	19 Apr	257 2 (499 78) 257 2 (754 144)	18036 36800 04795 77105
8047/6802/5788	1900/20/40z	19 Apr	463 2 (499 78) 463 2 (754 144)	18036 36800 04795 77105
9176/7931/6904	1800/20/40z	26 Apr	257 2 (917 89) 257 2 (564 95)	20223 37326 09857 60300
8047 6802/5788	1900/20/40z	26 Apr	463 2 (917 89) 463 2 (564 95)	20223 37326 09857 60300

Asiatic M12 Scheds (See EN97 for Token's Asiatic Schedule)

 $12203/10693/9293 \quad 0500/20/40z \qquad 13 \; \mathrm{Apr} \quad 262 \; 1 \; (432 \; 57) \qquad 51091 \; 87766... \; 99993 \; 99378 \; \; 000 \; 000 \; \; (SDR \; Japan) \qquad AB/F5JBR \qquad \qquad THU$

European M12 Logs

March 2017:	New scheds in bold	type		
5763/5163/4463	2200/20/40z	01 Mar	714 1 (3161 113) 55642 33641 41956 11123 000 000 AB/HFD	WED
	2200/20/40z	08 Mar	714 000 BR	WED
	2200/20/40z 2200/20/40z	15 Mar 22 Mar	714 1 (8303 93) 17290 41218 BR 714 000 BR	WED WED
	2200/20/102	22 11141	ZI OOO	WED
8047/6802/5788	1900/20/40z	01 Mar	463 2 (846 54) 05600 12996 (2-msg transmission) BR	WED
	1900/20/40z	08 Mar	463 2 (974 63) 42723 77455 BR 463 1 (2958 147) 09666 00672 BR	WED WED
	1900/20/40z	15 Mar	463 2 (567 62) 86131 72800 (2-msg transmission) BR	WED
			463 2 (713 71) 81903 40103 BR	WED
	1900/20/40z	22 Mar	463 1 (9787 137) 37673 97046 BR	WED
8158/9258/10658	0600/20/40z	04 Mar	126 1 (3161 113) 55642 33641 41956 11123 000 000 AB/E.SMITH/HFD	SAT
	0600/20/40z	11 Mar	126 000 E.SMITH	SAT
	0600/20/40z 0600/20/40z	18 Mar 25 Mar	126 1 (8303 93) 17290 41218 81454 94035 000 000 AB/E.SMITH/ F5JBR 126 000 AB/E.SMITH	SAT SAT
	0000/20/402	23 Mai	AB/E.SMITH	SAI
9176/7931/6904	1800/20/40z	01 Mar	257 2 (846 54) 05600 12996 (2-msg transmission) BR	WED
	19000/20/40~	00 Man	257 2 (974 63) 42723 77455 257 1 (5142 132) 89421 77419 BR	WED
	18000/20/40z 1700/20/40z	08 Mar 15 Mar	257 1 (9040 108) 79133 17566 BR/HFD	WED WED
	1800/20/40z	15 Mar	257 2 (567 62) 86131 72800 (2-msg transmission) BR	WED
	1700/20/40	22.14	257 2 (713 71) 81903 40103 BR	WED
	1700/20/40z 1800/20/40z	22 Mar 22 Mar	257 1 (1696 103) 54323 62767 BR 257 1 (8161 149) 41858 50303 BR	WED WED
	1000/20/102	22 11111		22
9060	0910z (IP)	06 Mar	687 2 Dual message! HD	MON
9176/7931/6904	1700/20/40z	12 Apr	257 1 F5JBR	WED
9317	0700z	14 Mar	135 1 (2429 80) 08837 82602 88419 000 000 (Irregular Xmission) AB	TUE
11576	0903z (IP)	02 Mar	In Progress 72062 91103 82763 000 000 (No repeat found) E.SMITH	THU
12214/10814/9214 1310/30/5	1310/30/50z 50z 04 Mar	02 Mar	282 1 (4678 95) 69614 05925 39472 23561 000 000 AB/E.SMITH/HFD 78 95) 69614 05925 39472 23561 000 000 E.SMITH SAT	THU
1310/30/2	1310/30/50z	09 Mar	282 000 E.SMITH	THU
	1310/30/50z	11 Mar	282 000 Brixmis/E.SMITH	SAT
	1310/30/50z	16 Mar	282 1 (3660 81) 81307 78908 71559 90690 000 000 E.SMITH	THU
	1310/30/50z 1310/30/50z	18 Mar 23 Mar	282 1 (3660 81) 81307 78908 71559 90690 000 000 E.SMITH 282 000 E.SMITH	SAT THU
	1310/30/50z	30 Mar	282 1 (1017 73) 13904 97074 85000 45025 000 000 E.SMITH	THU
13386/12189/11491	1300/20/40z	09 Mar	725 1 (915 71) 59190 56591 15066 98823 000 000 E.SMITH	THU
14769/16269/18169		02 Mar	[Transmission problem. Indecipherable on both freqs] E.SMITH 721 1 (7244 71) 29650 34490 85268 000 000 Strong Brixmis/HFD	THU
16269	1030z 1010/30/50z	05 Mar 09 Mar	721 1 (7244 71) 29650 34490 85268 000 000 Strong Brixmis/HFD 721 000 E.SMITH	SUN THU
	1010/30/50z	16 Mar	721 1 (9043 103) 25254 80037 97385 38904 000 000 E.SMITH	THU
	1010/30/50z	23 Mar	721 000 Weak E.SMITH	THU
	1010/30/50z	30 Mar	721 1 (3515 91) 41705 5654608294 98946 000 000 Good E.SMITH	THU
16276/14876/13376	1400/20/40z	01 Mar	283 000 E.SMITH	WED
	1400/20/40z	06 Mar	283 1 (6475 79) 89408 74375 BR	MON
	1400/20/40z	08 Mar	283 1 (6475 79) 89408 74375 69714 95151 000 000 AB	WED
	1400/20/40z 1400/20/40z	13Mar 15 Mar	283 000 BR 283 000 Brixmis/E.SMITH	MON WED
	1400/20/40z	20 Mar	283 1 (2914 103) 85498 55090 00859 13612 000 000 Gert	MON
	1400/20/40z	22 Mar	283 1 (2914 103) Weak E.SMITH	WED
	1400/20/40z	27 Mar	283 000 Fair (tiNG log from Denmark) tiDK	MON
<u>April 2017:</u>	1400/20/40z	29 Mar	283 000 E.SMITH	WED
April 2017.				
6793/5893/4593	2100/20/40z	12 Apr	785 000 HFD	WED
	2100/20/40z	19 Apr	785 1 (494 91) 94541 75431 13283 47539 000 000 AB	WED
8047/6802/5788	2100/20/40z 1900/20/40z	26 Apr 05 Apr	785 000 BR 463 I (1620 131) 29473 09392 BR	WED WED
	1900/20/40z	12 Apr	463 1 (1324 130) 72561 64113 BR/HFD	WED
	1900/20/40z	19 Apr	463 2 (499 78) 18036 36800 (2-Msg transmission) BR	WED
	1900/20/40z	26 Apr	463 2 (754 144) 04795 77105 BR 463 2 (917 89) 20223 37326 (2-msg transmission) BR	WED WED
	1700/20/40Z	20 Api	463 2 (564 95) 09857 60300 (2-msg transmission) BR	WED
8176/9376/10476	0500/20/40z	01 Apr	134 000 E.SMITH/HFD	SAT
	0500/20/40z	08 Apr	134 1 (4739 127) 45648 63513 70145 43108 000 000 AB/E.SMITH	SAT
	0500/20/40z 0500/20/40z	15 Apr 22 Apr	134 000 E.SMITH 134 1 (7494 91) 94541 75431 13283 47539 000 000 AB/E.SMITH	SAT SAT
	0500/20/40z	29 Apr	134 000 E.SMITH	SAT
		-		

0176/7021/6004	1700/20/40	05.4	057.1 (7505.100)	20202 55772		D.D.	XX III D
9176/7931/6904	1700/20/40z	05 Apr	257 1 (7595 108)			BR	WED
	1800/20/40z	05 Apr	257 1 (7511 147)			BR	WED
	1700/20/40z	12 Apr	257 1 (3418 103)			BR	WED
	1800/20/40z	12 Apr	257 1 (3836 136)			BR	WED
9176	1700z	17 Apr	257 1 (9385 101)		(Remote tuner New Zealand)	JPL	MON
/7931/6904	1720/40z	17 Apr		07556 17903	(Via SDR Japan)	F5JBR	MON
	1700/20/40z	19 Apr	257 1 (4528 106)			BR	WED
	1800/20/40z	19 Apr	257 2 (499 78)	18036 36800	(2-msg transmission)	BR	WED
			257 2 (754 144)	04795 77105		BR	WED
	1700/20/40z	24 Apr	257 1 (4917 100)	44841 90321		BR	MON
	1700/20/40z	26 Apr	257 1 (4878 105)	13495 61614		BR	WED
	1800/20/40z	26 Apr	257 2 (917 89)	20223 37326	(2-msg transmission)	BR	WED
			257 2 (564 95)	09857 60300		BR	WED
11469/10469/9169	2100/30/50z	12 Apr	441 1			HFD	WED
	2110/30/50z	15 Apr	441 1 (2277 99)	51941 48179 40527	89574 000 000 Fair	E.SMITH	SAT
	2110/30/50z	19 Apr	441 000			BR	WED
	2110/30/50z	26 Apr	441 1 (2280 75)	47135 07475		BR	WED
14468/13568/12178	1310/30/50z	01 Apr	451 1 (1017 73)	13904 97074 85000	45025 000 000	E.SMITH/HFD	SAT
1310/30/50z	06 Apr 451 000				ESMITH	THU	
	1310/30/50z	08 Apr	451 000 Weak			E.SMITH/tiNG	SAT
	1310/30/50z	13 Apr	451 1 (8839 61)	35735 69572 37889 °	77439 000 000	E.SMITH	THU
	1310/30/50z	15 Apr	451 1 (8839 61)	35735 69572 37889 °	77439 000 000	E.SMITH	SAT
	1310/30/50z	20 Apr	451 000		(Via SDR Italy)	E.SMITH	THU
	1310/30/50z	22 Apr	451 000			E.SMITH	SAT
	1310/30/50z	27 Apr	451 1 (3294 83)	29939 6265145039	38825 000 000	E.SMITH	THU
	1310/30/50z	29 Apr	451 1 (3294 83)	29939 6265145039	38825 000 000	E.SMITH	SAT
18524/17424/15824	1400z	05 Apr	548 000		(Via SDR Italy)		WED
	1400/20/40z	10 Apr	548 1 (9984 103)			BR	MON
1400/20/40z	12 Apr 548 1 (998	84 103) 14	1602 72221 3602	20 66910 000 000 (Via N	Nakhabino) AB	WED	
	1400/20/40z	19 Apr	548 000 Fair		(Via SDR Moscow)	E.SMITH	WED
	1400/20/40z	24 Apr	548 1 (6491 87)	40704 01383 68567	66443 000 000 (SDR Moscow)	E.SMITH	MON

M12	16276/14876/13376kHz	1400/1420/1440z	08 Mar 2017

283 283 283 1 (R2m) 6475 79 6475 79

89408 74375 31908 37021 88090 39887 77948 01372 96347 21039 16642 38441 43115 88832 41514 64530 70379 64159 60002 00967 29150 63600 80035 74299 50189 20852 37336 33210 29758 23304 00112 05444 84047 51308 34064 03806 18165 62413 24949 55977 67328 76485 91578 49750 50166 38423 41102 55261 59443 51906 24367 08362 83533 23160 54849 76341 53601 17525 32732 18280 66525 48380 24140 73079 68270 39194 11596 75787 99030 24067 62779 68771 54458 02011 05143 26368 36270 69714 95151 000 000

Courtesy AB

M12 12214/10814/9214kHz 1310/1330/1350z 16 Mar 2017 282 282 282 1 (R2m) 3660 81 3660 81 81307 78908 18223 48475 11219 05260 02321 73567 68200 50063 92708 70881 51133 96361 59300 85250 25383 58087 03690 41641 95040 26989 65397 19301 84403 51599 82494 74413 51358 96662 29949 17277 99135 95557 61177 44217 43080 08993 06256 58086 65231 01689 00199 97718 24954 02976 52261 63224 43579 26137 13305 27054 01115 67645 84322 22417 74832 83637 20247 74877 98167 41024 56983 75498 69288 98417 86615 08216 21425 27326 60571 55266 03759 69046 82006 80795 20307 41082 04397 71559 90690 000 000 **Courtesy E.SMITH*

M14 IA MCW / ICW Short 0

Edd, (E.SMITH) caught what appears to be an M14 test transmission early on 30 March sending the call 801 continuously for over an hour on 9463kHz. Ary (AB) reports that 9463kHz is a known frequency for this call & also a GRU test frequency.

9463	0832z (IP)	30 Mar	801 (Repeated continuously for at least an hour)	CW	E.SMITH	THU
March 20	<u>017:</u>					
4635	1600z	21 Mar	273 00000		HFD	TUE
5240	2300z 0800z	05 Mar 25 Mar	376 (518 86) = 32498 53900 57286 61220 518 518 86 86 00000 171 (490 91) = 52378 90126 62841 32465 490 91 00000	CW CW	AB AB	SUN SAT
5340	0759 - 0817z 0800z	11 Mar 18 Mar	171 00000 (184 59) 13253 26472 84502 00000 [Note 1] 171 (184 59) = 13253 26472 12311 84502 184 59 00000	MCW ICW	E.SMITH AB/E.SMITH	SAT SAT
5430	0800z	04 Mar	171 (518 86) = 32498 53900 57286 61220 518 518 86 86 00000	CW	AB/E.SMITH	SAT
5463	1920z	29 Mar	537 (518 86) = 32498		HFD	WED
5560	0900z 0859 - 0917z 0900z 0900z	04 Mar 11 Mar 18 Mar 25 Mar	171 (518 86) = 32498 53900 57286 61220 518 518 86 86 00000 171 00000 (184 59) 13253 26472 84502 00000 [Note 1] 171 (184 59) = 13253 26472 12311 84502 184 59 00000 171 (490 91) = 52378 90126 62841 32465 490 91 00000 [Note 2]	CW MCW ICW CW	AB/E.SMITH E.SMITH AB/E.SMITH AB	SAT SAT SAT SAT
5825	0000z	06 Mar	376 (518 86) = 32498 53900 57286 61220 518 518 86 86 00000	CW	AB	MON
5941	1820z	14 Mar	346 (518 86) = 32498	MCW	HFD	TUE

6827	0600z	26 Mar	382 00000		HFD	SUN
6990	0659z	26 Mar	382 00000		HFD	SUN
8096	0601z (IP)	21 Mar	89456 89340 124 89 00000	ICW	E.SMITH	TUE
8167	1012 (IP) - 1020z	02 Mar	058 (624 31) = 16927 74613 49343 84154 00000	ICW	E.SMITH	THU
9463	1033 (IP) - 1040z	02 Mar	058 (624 31) = 16927 74613 49343 84154 00000	ICW	E.SMITH	THU
10212	1230 - 1239z	20 Mar	058 (974 31) = 75569 20761 75909 89968 00000	ICW	E.SMITH	MON
10423	1138 (IP) - 1139z	20 Mar	06058 76176 90956 22431 75909 89968 = 974 31 00000	ICW	E.SMITH	MON
17458	0930 - 0934z	11 Mar	617 00000	ICW	E.SMITH	FRI
		[Note 1]	Both Transmissions started as a null, were briefly cut off then restarted and con	tinued with	n DK/GG/Msg B	E.SMITH
		[Note 2]	0826z - Sends several test groups & at 0829 Sends test groups: 07246 56327	55972 981:	50 11568 93858	AB
April 20	<u>17:</u>					
5430	0800z 0800z 0800z	08 Apr 15 Apr 22 Apr	171 (490 91) = 52378 90126 62841 32465 00000 (Strong in Russia) 171 (184 59) = 13253 26472 12311 84502 00000 (Via Silec Poland) 171 (184 59) = 13253 26472 12311 84502 00000 (Via Silec Poland)	MCW MCW MCW	AB/E.SMITH E.SMITH E.SMITH	SAT SAT SAT
5440	0800z	29 Apr	171 (025 30) = 34253 75648 75624 70689 00000 (Via Russian/Poland	d SDR)	AB/E.SMITH	SAT
5477	1800 - 1804z	07 Apr	382 000 Strong		HFD/tiNG	FRI
5560	0906 (IP) - 0916z 0900z 0900z 0900z	01 Apr 08 Apr 15 Apr 22 Apr	In progress 12311 84502 184 59 00000 (Via Silec, Poland SDR) 171 (490 91) = 52378 90126 62841 32465 00000 (Strong in Russia) 171 (184 59) = 13253 26472 12311 84502 00000 (Via Silec, Poland) 171 (184 59) = 13253 26472 12311 84502 00000 (Silec) [Note 3]	MCW MCW MCW	E.SMITH AB/E.SMITH E.SMITH S E.SMITH	SAT. SAT SAT SAT
5570	0900z	29 Apr	171 (025 30) = 34253 75648 75624 70689 00000 (Via Russian SDR)		AB	SAT
5944	1700 - 1703z	07 Apr	382 000 Strong		HFD/tiNG	FRI
17458	0930 - 0934z 0930 - 0934z	10 Apr 25 Apr	617 00000 Weak 617 00000 (Via SDR Moscow)	ICW ICW	E.SMITH E.SMITH	MON TUE
18041 0500z 0500z	0500z 12 Apr 14 Apr	952 (784	952 (718 50) = 28379 26566 78180 90642 00000 (Strong in Japan) 60) = 52611 4855814251 10708 00000 CW 60) = 93577 6924263649 37033 00000	CW AB AB	AB WED FRI	WED
		D.T				13 4 1/27 1

[Note 3] Equipment/Trainee Operator error with one minute thirty seconds of the number nine at the group count. E.SMITH

$M14 \quad 10212kHz \quad 1230z \quad 20 \; Mar \; 2017$

058 (R4m) 974 974 31 31 ==

75569 20761 41960 07584 75942 54528 34269 06309 54612 68705 87339 72714 42594 41793 85735 64943 82233 18682 94811 89240 77092 53890 45624 68235 52108 06058 76176 90956 22431 75909 89968 =

974 974 31 31 00000

Courtesy E.SMITH

M14 18041kHz 0500z 05 Apr 2013

952 (R4m) 718 718 50 50 ==

 $28379\ 26566\ 04021\ 29283\ 97520\ 33223\ 33728\ 18428\ 38767\ 79469$ $77058\ 55630\ 27813\ 41326\ 76785\ 43106\ 92504\ 16877\ 92643\ 01090$ $16807\ 14890\ 88166\ 20762\ 99172\ 15400\ 77385\ 16487\ 07496\ 13218$ $86075\ 50808\ 97824\ 80269\ 07243\ 30631\ 89045\ 07732\ 55540\ 98042$ $10699\ 13889\ 50291\ 64184\ 66134\ 28646\ 81817\ 59644\ 78180\ 90642$

718 718 50 50 00000

Courtesy AB

M23 O ICW

5417 1835z 01 Mar 279 (R9m) Possibly M23 AB WED

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

No Logs

M76 Schedule on 3280kHz (Changes to 3820kHz or 3294kHz over the year). A detailed analysis can be found in ENIGMA Newsletter 93 - May2016.

Difficult to receive with a good signal into the UK most of the time, monitors rely on various SDRs for logs of this station.

No Logs

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.

Morse Stations - Not Number Related

M51 XIX

3881//6825 Usual unscheduled & random continuous transmissions heard throughout January & February, often ceasing just before, or commencing

shortly after the daily M51a transmissions. These seem to be almost continuously transmitted on these two frequencies now.

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

3881//6825

23								
1130 - 1216z	10 Apr	Lundi-Leçon	11-1/1 Codé	11-1/2 Clair,	11-1/3 Codé,	11-1/4 Clair (420 grps/hr)	BR	MON
1130 - 1203z	11 Apr	Mardi-Leçon	12-1/1 Codé	12-1/2 Clair,	12-1/3 Codé,	12-1/4 Clair (600 grps/hr)	BR	TUE
1130 - 1207z	12 Apr	Mercredi- Leçon	13-1/1 Codé,	13-1/2 Clair,	13-1/3 Codé,	13-1/4 Clair (720 grps/hr)	BR	WED

M89 O

This is a summary of activity from the M89 stations.

Operator Chat from M89

Op. chat & traffic reported on the following freqs. (All in kHz).

3171 3212 3330 3333 3356 3397 3691 3696 3758 3839	4051 4102 4141 4244 4307 4326 4387 4392 4433 4444 4609 4616 4639 4710 4781 4834 4840 4842 4883 4913	5018 5126 5148 5165 5241 5255 5451 5454 5461 5555 5566 5616 5656 5678 5688 5725 5840 5843 5892 5923	6245 6454 6773 6779 6782 6797 6802	7123 7704 7759 7819	8038 8076 8475 8477 8848	9139 9260 9339	10149 10415 10681
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New Scheds for Mar/Apr 2017:

From logs submitted from JPL & F5JBR

3850//4620	New frequencies for this Round	Slip	First hear	d 26 Mar // 09 Apr	Q2M (x3) de NYZ (x2) VVV
4060//NRH	New Round Slip for this frequen	ncy	First hear	d 05 Mar	GJHS (x3) de 5GFD (x2) V
4609//NRH	Change to previously used Rour & changed back again to 19 Ma		First heard First heard		V TR2Q (x3) DE 5TUH (x2) V FIK3 (x3) DE H4JH (x2)
4834//NRH	New frequency for this Round S	Slip	First hear	d 06 Apr	V Z4RQ (x3) DE 3WRX (x2)
4847//NRH New Round Slip for New Round Slip for Changed to previous	this network	k First heard 10 Apr First heard 11 Apr First heard 16 Apr	First hear	d 03 Apr – 09 Apr V BTGU (x3) DE G 6TGU (x3) de GR4V V Z4RQ (x3) DE 3V	V (x2) V
6053//10178	New Round Slip for this frequen	ncy	First hear	d 08 Mar	V FIK3 (x3) DE H4JH (x2)
6069//NRH	New frequency for this Round S	Slip	First hear	d 01 Mar	V FIK3 (x3) DE H4JH (x2)
7980//NRH	New Round Slip		First hear	d 15 Apr	HPQV (x3) de RPLC (x2) VVV
8360 //6840//10640	New frequency for this Round S	Slip	First hear	d 31 Mar	VVV (x3) Q2M (x3) DE NYZ (x2) QSA ? K
10178//NRH	Change to previously used Roun	nd Slip	First hear	d 20 Mar	V TR2Q (x3) DE 5TUH (x2)
10253//NRH	New Round Slip for this networ	k	First hear	d 04 Apr – 09 Apr	V Z4RQ DE 3WRX

New Round Slip for this networkFirst heard 11 AprV BTGU (x3) DE GR4W (x2)New Round Slip for this networkFirst heard 12 AprV 6TGU (x3) DE GR4W (x2)Changed to previously used Round SlipFirst heard 16 AprV Z4RQ (x3) DE 3WRX (x2)

H4JH is no longer active & it appears has changed frequencies & is using call sign 3WRX

Chart of M89 Freq & Call signs heard in Mar/Apr 2017 New Scheds shown in Bold Type

Freq in KHz	Call Slip
3642//NRH 3642//7602	V DKG6 (x3) DE 3A7D (x2) V DKG6 (x3) DE 3A7D (x2)
3777//4532	V M8JF (x3) DE RIS9 (x2)
3850//4620	Q2M(x3) de $NYZ(x2)$ VVV
4060//NRH	GJHS (x3) de 5GFD (x2) V
4131//NRH	V JKDJ (x3) DE SLBC (x2)
4532//6793	V M8JF (x3) DE RIS9 (x2)
4609//NRH 4609//NRH	V FIK3 (x3) DE H4JH (x2) V TR2Q (x3) DE 5TUH (x2)
4720//NRH 4720//5150 4834//NRH 4847//NRH	VVV WNF (x3) DE FXM (x2) VVV WNF (x3) DE FXM (x2) V Z4RQ (x3) DE 3WRX (x2) V Z4RQ (x3) DE 3WRX (x2) V BTGU (x3) DE GR4W (x2) V 6TGU (x3) DE GR4W (x2)
4860// 6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?
5081//NRH	VV WKY9 (x3) DE DOG5 (x2) V
5801//10180	V DKG6 (x3) DE 3A7D (x2)

Freq in kHz	<u>Call Slip</u>
6053//10178	V FIK3 (x3) DE H4JH (x2)
6069//NRH	V FIK3 (x3) DE H4JH (x2)
6793//8060	V M8JF (x3) DE RIS9 (x2)
6840//NRH	VVV (x3) O2M (x3) DE NYZ (x2) (R5) OSA ? K
6840//10640	VVV (x3) Q2M (x3) DE N1Z (x2) (R3) Q5A ? K VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
0840//10040	V V V (X3) Q2M (X3) DE N 12 (X2) (K3) Q3A ! K
7602//NRH	V DKG6 (x3) DE 3A7D (x2)
7980//NRH	HPQV (x3) de RPLC (x2) VVV
8060//NRH	V M8JF (x3) DE RIS9 (x2)
0000//141411	V MOST (AS) DE RISS (AZ)
8350//NRH	V WNF (x3) DE FXM (x2)
8360//6840//10640	VVV (x3) Q2M (x3) DE NYZ (x2) QSA ? K
10178//NRH	V FIK3 (x3) DE 54V5 (x2)
10178//NRH	V TR2O (x3) DE 5TUH (x2)
10170//11222	, 1112 (110) 22 0 1 0 11 (112)
10180//NRH	V DKG6 (x3) DE 3A7D (x2)
10253//NRH	V Z4RQ (x3) DE 3WRX (x2)
	V BTGU (x3) DE GR4W (x2)
	V 6TGU (x3) DE GR4W (x2)
10640//NRH	VVV (+2) O2M (+2) DE NV7 (+2) (D5) OCA 2 V
10040//INKII	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
	Courtesy JPL & F5JBR
	, and the second

From logs submitted from JPL & F5JBR

M89 5566kHz 1221 (IP) - 1230z 15 Mar 2017

6UNN A554 5A7U 75TA (IP – Cont'd – Machine sent – 1221z) III BT TTAN 5774 NNNU 73UA (Cont'd – 1222z) III BT 34UN T5U6 4744 (Cont'd – 1226z) III BT 6D3N AR (1230z - Silent)

M89 4883kHz 1123 (IP) - 1130z 28 Mar 2017

8ZFS 8ZFS K K (IP – Handsent – 1123z) R RPT 49W

R R

FFF NR FF NR 4259/EX 1924 RMKS CQ BT

ABC4/EF.2/K. 79 AR

FFF NR 4259/EX 1924 RMKS CQ BT

ABC4/EF12/YZ79 AR

VV H7ZI K K (Other stations N/H on this frequency)

H7ZS K K (1126z)

R RPT 1W 1W BT BT ABC4 ABCR AR AR K (1126z)

R VV

8ZFS 8ZFS K

NR VV

HY6X HY6X K K (1127z)

R R RPT KP KP KP KP (1128z - Silent)

SK SK SK SK (1130z)

Courtesy JPL

M89 3696kHz 1452 - 1549z 25 March 2016

Net on 3696kHz Outstations on 3556kHz

R QSL 2255 K HR WK NR 212 K

R VA

I6IW de 5PJS K and R GA K

And (on 3556 kHz) MESSAGE in Progress

5PJS REPEAT GROUPS and R QSL 2310 K and VA

I6IW REPEAT GROUPS and R VA (F5JBR – From SDR:JAPAN) 3263,0 1535z 25/03/17 Unknown CW 1535z

CQ DE WCO QSA ? K

WCO De 7GN QSA 4 ? K

7GN DE WCO QSA 5 ÉÉ 4884 4884 R93548 K

7GN R ÉÉ 69046 K

1538z

XO4 de WCO QSA? K

WCO De XOV QSA 4 ? K

WCO De XOV QSA 4 ? K

XOV de WCO QSA 3 ÉÉ 5841 R80358 K

VVV RPT

XOV DE WCO QSA 3 ÉÉ 5841 R80358 K

1547z

7GN DE XOV QTC QTC = 384 R030888 R096414 R000 ABV == 384 R030888 R096414 R000 K

Courtesy F5JBR

TE2Y Network

TE2Y Network												
3132	Net statio	on: 3132 kF	Hz - Outstations: 3366 kHz									
	1708z 1700z	11 Apr 13 Apr	Calls from TE2Y to various stations D2HR calling all outstations	(Via SDR Japan) (Via SDR Japan)	F5JBR F5JBR	TUE THU						
3376	Net statio 1702 - 1738z	on: 3376 kH 10 Apr	Iz - Outstations on 3056 kHz Calls from TE2Y to various stations	(Via SDR Japan)	F5JBR	MON						
So looks like both th	ne control station and o	outstation fr	equencies change daily. They probably also have day tim	e and night time frequencies. JP	L							
M95 Morse Logs	(Bold type indicate	s new loggi	ing)									
3210	1452 - 1540z	10 Apr	Calls XJ6O de MGA7 / EZQL de DF3U & Op. cl	nat (Via SDR Japan)	F5JBR	MON						
3344	6LMI DE MG5D											
	1558 - 1616z	12 Mar	NR 109 / CCK CK 91 67 03 13 0000 RMKS 5885 6995	5 = 753D 64NU	F5JBR	SUN						
3788	1432 - 1451z	14 Mar	/CCK CK 91 67 0314 2230 RMKS 5885 TO 6214 BT	(Remote tuner Japan)	JPL	TUE						
4123	PHWS DE WUIL											
	1532 - 1627z	14 Mar			F5JBR F5JBR	TUE TUE						
4178	NR 6789 CK 35 54 03 14 2325 RMKS 3239 TO 3093 K I3LO With Exercise traffic 1910 - 1942z 13 Mar MSG NR NR 3864 CK 200 46 03 14 0300 RMKS CQ = A74T AT5D Message number differs from current XSV70 and XSV85 message numbers											
	1910 - 1942z	13 Mar	MSG NR NR 3864 CK 200 46 03 14 0300 RMKS CQ	= A74T AT5D	F5JBR	MON						
4243//NRH	1910 - 1942z 13 Mar MSG NR NR 3864 CK 200 46 03 14 0300 RMKS CQ = A74T AT5D											
	1142 (IP) - 1204z	16 Mar	NR 060 CK 13 35 0316 1546 BT	(Remote tuner New Zealand)	JPL JPL JPL	THU THU THU						
4243//9054	Message number differs from current XSV70 and XSV85 message numbers. All logged via Remote tuner New Zealand unless stated.											
	2346z (IP)	14 Mar	In Progress - Mostly Unreadable	Stations (Via SDR Japan) F5J	JPL	TUE						
	1142 (IP) - 1159z	15 Mar	NR 073 CK 17 35 0315 1524 BT NR 057 CK 17 35 0315 1545 BT	·	JPL	WED WED						
			NR 30 CK 106 35 0315 1615 BT		JPL	WED						
	1141 (IP) - 1212z	17 Mar	NR 077 18 35 0317 1441 BT NR 34 141 35 03A7 1610 BT			FRI FRI						
			NR 063 19 35 0317 1623 BT		JPL	FRI						
	1141 (IP) - 1210z	21 Mar	NR 085 CK 35 35 0321 1433 BT			TUE						
			NR 42 CK 120 35 0321 1610 BT NR 075 CK 17 35 0321 1629 BT			TUE TUE						
	2347 (IP) - 2359z	21 Mar	NR 086 20 35 0322 0630 BT	(Remote tuner Hong Kong)	JPL	TUE						
	1140 (ID) 1150	22.14	NR 43 63 35 0322 0710 BT			TUE						
	1140 (IP) - 1158z	22 Mar	NR 087 CK 19 35 0322 1515 BT NR 078 CK 19 35 0322 1632 BT			WED WED						
			NR 44 CK 105 35 0322 1645 BT		JPL	WED						
	1143 (IP) - 1158z	28 Mar	NR 099 CK 20 35 0328 1530 BT		JPL	TUE						
			NR 56 CK 107 35 0328 1615 BT			TUE						
	1142 (IP) - 1212z	29 Mar	NR 096 CK 19 35 0328 1640 BT NR 001 CK 20 35 0329 1450 BT			TUE WED						
	11.12 (11) 12.12.2	2) 11111	NR 099 CK 36 35 0329 1559 BT		JPL	WED						
			NR 58 CK 135 35 0329 1640 BT		JPL	WED						
	1139 (IP) - 1218z	04 Apr	NR 013 CK 25 35 0404 1445 BT		JPL	TUE						
			NR 08 CK 175 35 0404 1615 BT		JPL	TUE						
	1140 (IP) - 1155z	05 Apr	NR 018 CK 15 35 0404 1626 BT NR 015 CK 20 35 0405 1516 BT			TUE WED						
	11.0 (H) 1133L	00 / ipi	NR 013 CK 20 33 0403 1310 BT NR 021 CK 19 35 0405 1619 BT		JPL	WED						
			NR 10 CK 127 35 0405 1655 BT		JPL	WED						
	1140 (IP) - 1209z	06 Apr	NR 017 CK 20 35 0406 1416 BT		JPL	THU						
			NR 12 CK 122 35 0406 1615 BT			THU						
	1217 (IP) - 1222z	07 Apr	NR 024 CK 17 35 0406 1652 BT NR 027 CK 22 0407 1625 BT			THU FRI						
	1145 (IP) - 1220z	10 Apr	NR 025 33 35 0410 1420 BT		JPL	MON						
		•	NR 20 CK 198 35 0410 1608 BT		JPL	MON						
			NID 026 CIV 21 25 0410 1615 DT		IDI	MONT						

JPL

JPL

JPL

JPL

JPL

JPL

JPL

JPL

MON

SAT

SUN

SUN

SUN

MON

MON

MON

NR 036 CK 21 35 0410 1615 BT

NR 30 CK 145 35 0415 1635 BT

NR 037 CK 20 35 0416 1517 BT

NR 054 CK 18 35 0416 1630 BT

NR 32 CK 181 35 0416 1633 BT

NR 039 CK 42 35 0417 1455 BT

NR 34 CK 169 35 0417 1545 BT

NR 057 CK 23 35 0417 1650 BT

0913 - 0919z

1142 - 1210z

1142 (IP) - 1203z

15 Apr

16 Apr

17 Apr

	1129 - 1200z	24 Apr	NR 053 CK 25 35 0424 1426 BT NR 48 CK 139 35 0424 1550 BT NR 078 CK 22 35 0424 1646 BT			JPL JPL JPL	MON MON MON
4364//8073	Call Sign XSV85		All logged	via Remot	e tuner New Zealand unless state	ed.	
	1134 - 1141z 1132 - 1139z 1132 - 1224z	15 Mar 17 Mar 21 Mar	NR 0244 CK 192 35 0315 1543 BT NR 0250 CK 175 35 0317 1522 BT NR 0258 CK 114 35 0321 1644 BT			JPL JPL JPL	WED FRI TUE
	0001 - 0029z 1130 - 1140z 1139 - 1143z	22 Mar 22 Mar 28 Mar	NR 0260 CK 112 35 0322 0700 BT NR 0261 CK 219 35 0322 1611 BT NR 0282 CK 27 35 03U8 1542 BT NR 0283 CK 215 35 0328 1623 BT		(Remote tuner Hong Kong) (Remote tuner Hong Kong) (Remote tuner Hong Kong)	JPL JPL JPL JPL	WED WED TUE TUE
	1131 - 1140z	29 Mar	NR 0285 CK 181 35 0329 1545 BT			JPL	WED
	1131 - 1138z 1130 - 1139z	04 Apr 05 Apr	NR 0309 CK 165 35 0404 1548 BT NR 0310 CK 175 35 0405 1534 BT			JPL JPL	TUE WED
	1138 - 1140z	06 Apr	NR 0312 CK 178 35 0406 1525 BT			JPL JPL	THU
	1130 - 1140z 1129 - 1142z	16 Apr 17 Apr	NR 0332 CK .94 35 0416 1613 BT NR 0335 CK 269 35 0417 1551 BT			JPL JPL	SUN MON
	1130 - 1241z	22 Apr	NR 0351 CK 241 35 0422 1542 BT			JPL	SAT
5165	1130 - 1138z 1234 (IP) - 1245z	24 Apr 15 Mar	NR 0355 CK 232 35 0424 1554 BT NR 89/CCK CK 59 86 0315 2033 RMKS 7G	3	(Remote tuner New Zealand)	JPL JPL	MON WED
			NR 89/CCK CK 59 86 0315 2033 RMKS 51				
5632	1031z	08 Mar	Calls to various call signs from I3LO	(Remote t	uner New Zealand)	JPL	WED
5725	V B8JH (x3) DE V7 1330z	'HY (x2) 20 Mar	NR 80/CCK CK 28 81 0320 2330 RMKS 31		uner New Zealand) 479 7.72 9798 BT BT	JPL	MON
5942 0730z	A29 calling CQ with 16 Apr NR 32/C0		39 04 16 1600 RMKS 5594 TO 9661 9334 025	55 1433 99	40 = F5JBR SUN		
7553	Call sign XSV70						
	1320 - 1341z	23 Apr	NR 20 CK 42 49 0423 1700 NR 338 CK 83 35 0423 1518 NR 339 CK 184 35 0423 1518	(Remote t	uner New Zealand)	JPL JPL JPL	SUN SUN SUN
	0922 (IP) - 0956z	25 Apr		(Remote t	uner New Zealand)	JPL JPL JPL	TUE TUE TUE
	1324 (IP) - 1346z	30 Apr		(Remote t	uner New Zealand)	JPL	SUN
7553//9153	Call sign XSV70						
	0938 (IP) - 1003z NR 307 CK 138 35 (0951 – 1100z	13 Apr 0413 0718 17 Apr	NR 309 CK 182 35 0413 1512 NR 319 CK 160 35 0417 0713		(Remote tuner New Zealand) JPL THU (Remote tuner New Zealand)	JPL JPL	THU MON
	0956 - 1004z	18 Apr	NR 322 CK 145 35 0418 0659		(Remote tuner New Zealand)	JPL	TUE
6689	ADF2						
	1011 - 1023z	09 Mar	MSG NR 143/CCK CK 55 49 0309 1800 RM	MKS CQ	(Remote tuner New Zealand	JPL	THU
7980	1257z	15 Apr	HPQV (x3) de RPLC (x2) VVV		(Via SDR Japan)	F5JBR	SAT
8073	CW call-up is V BN	GC (x3) DE	voice USB, then to digital 4+4 mode LSB, fin E XSV85 (x2) All logged via Remote tuner Ho				
	1130 - 1140z 1139 (IP) - 1142z	09 Mar 16 Mar	NR 0227 CK 197 35 0309 1610 BT NR 0U48 CK A79 35 0316 1606 BT		(Remote tuner New Zealand)	JPL JPL	THU THU
8600	XSV Tianjin F						
	0655z	30 Mar	XSV NR 071 CK 051 28 1510 BT XSV NR 070 CK 083 28 . 055 BT XSV NR 067 CK 031 27 1103 BT XSV NR 050 CK 0 .4 21 10 .9 BT XSV NR 049 CK 024 21 . 006 BT		(Remote tuner Japan)	JPL JPL JPL JPL JPL	THU THU THU THU THU
	0809z	27 Apr	XSV NR 026 CK 034 12 1429 BT		(Remote tuner New Zealand)	JPL	THU
8925	Msgs in 5-ltr code w 1230 (IP) - 1329z	vith header 07 Apr	NR 03369 NR 03369 CK 62 BT		(Remote tuner New Zealand)	JPL	FRI
			NR 03769 NR 03769 CK 62 BT NR 03969 NR 03969 CK 62 BT NR 04060 NR 04060 CK 62 BT NR 04160 NR 04160 CK 62 BT NR 04260 NR 04260 CK 62 BT NR 04360 NR 04360 CK 62 BT			JPL JPL JPL JPL JPL JPL	FRI FRI FRI FRI FRI FRI
	1713 (IP) - 1748z	07 Apr	NR 07763 CK 62 BT NR 07863 CK 62 BT		(Remote tuner New Zealand)	JPL JPL	FRI FRI

					NR 07963 CK NR 0796 NR 080643 CK 62 BT 1 NR 08164 NR 08164 C	?			JPL JPL JPL	FRI FRI FRI
8990		1028 (IP)	- 1132z	06 Apr	IEC IEC BT BT 3655	RMKS RMKS RMKS	(Remote tuner New 2	Zealand)	JPL	THU
9054		Call sign (See also		All logged 4kHz listing	d via Remote tuner New 2	Zealand unless stated				
0905 - 0917z	z	14 Apr		CK 14 35 14	1537 BT 14 1640 BT			JPL JPL	FRI FRI	
1142 (IP) - 1	222z	22 Apr	NR 049 C NR 44 CF	CK 20 35 04 K 150 35 04	122 1509 BT 122 1627 BT 122 1601 BT			JPL JPL JPL	SAT SAT SAT	
10210		1530 (IP)	- 1605z	11 Apr	NR 009/CCK CK 75 50	0411 2330 RMKS 2529 TO 2	524 K (Remote New)	Zealand)	JPL	TUE
12856		XSG	Shanghai	Radio						
0	712 (IP)	- 0716z	27 Apr		166 CK 41/37 26 1618 B 165 CK 65/61 26 1613 B		(Remote tuner New 2	Zealand)	JPL JPL	THU THU
0.	705 (IP)	- 0723z	28 Apr	XSG NR XSG NR XSG NR	175 CK 60/54 27 2208 B 174 CK 50/49 27 1948 B 173 CK 70/55 27 1614 B 172 CK 85/79 27 1517 B	T T T	(Remote tuner New 2	Zealand)	JPL JPL JPL JPL	FRI FRI FRI FRI

M95 4243//9054kHz 1141z 17 Mar 2017

Into Chinese digital 4+4 QPSK 75/3000 - LSB - 1142z

Switched to CW - 1147z

V VVV (1148z)

VVV HR 7G TO YR PSE CY (1149z)

NR 077 18 35 0317 1441 BT

5TD UTT TA7 3U6 3A4 (Cont'd - 1149z)

AR (1150Z)

NR 077 18 35 0317 1441 BT

5TD UTT TA7 3U6 3A4 353 36T 4TN U7U N4A 444 3DA TTU TT3 773 435 3DU 4D4 AR

A HR 7G GA

NR 34 141 35 03A7 1610 BT

UTU TA7 3U6 3A4 TTU 773 353 U4T 35A 4TN (Cont'd –

1152z)

AR (1159z)

MSG AGN

NR 34 141 35 0317 1610 BT

UTU TA7 3U6 3A4 TTU 773 (Cont'd repeat message -

AR (1206z)

A HR 7G

NR 063 19 35 08 EEEE

NR 063 19 35 0317 1623 BT

UT5 TA7 3U6 3A4 TTA TTU TT3 773 353 N3D

35U 36U 4AD 34A N3D 4KT 445 4D4 3DA AR (1208z)

MSG AGN

NR 063 19 35 0317 1623 BT

UT5 TA7 (Repeats message - 1209z)

AR

HR UP SB WK AR (1209z)

(Switched to voice - USB - Female. Now V26 Sked)

Courtesy JPL

M95 3210kHz 1453z 10 Apr 2017

XJ6O de MGA7 QSA 3 QSA ? K

XJ6O de MGA7 OK MSG GA XJ6O de MGA7 R RPT 18 K

XJ6O de MGA7 R QSL 2300 K

1504z

XJ6O de MGA7 HR WK NR 37 K

XJ6O de MGA7 R PSE CY R PSE CY

XJ6O de MGA7 MSG NR0410/CCK CK 19 67 04 10 2300

RMKS 5676 TO AU34 =

U345 6503 A56A 656D 73UD 4A73 A07D ... / ...

1513z

XJ6O de MGA7 R CY HW K

XJ6O de MGA7 R QSL? K

1519z

EZQL de DF3U K

EZQL de DF3U QSA 3 QSA ? K 1525z

EZQL de DF3U R HR MSG GA K

1528z

EZQL de DF3U NR 0419/CCK CK19 87 04 10 2327

RMKS 1234 TO 467D = 3D45

U80A 46A0 543A ... / ...

1534z

EZQL de DF3U R QSL? K

EZQL de DF3U R OK MSG GA K

1540z

EZQL de DF3U R RPT 19 K

EZQL de DF3U

(E.T. at 1540z)

Courtesy F5JBR

Marker Beacons (MX MXI)

Ary, AB notes that after a long silence beacon A has been reactivated

4150 1608z 2016z 5154 5154.1	1953z 1840z 1840z	13 Apr 20 Apr	MX CV MX CV 03 Mar	V Beac V Beac MXI	on "V" CW Beacon	"C"	Moscow	marker from Khiva, Uzbekistan (Via Silec, SDR Poland) (Reactivated)	(Via Silec, PL) E.SMITH AB E.SMITH AB AB	THU THU	SAT THU THU
5156.9	1840z		02 Mar	MX	CW Beacon	" L"	St Petersburg		AB		THU

5466	11 Apr MX CW Marker "V" 13 Apr MX CW Marker "V"	AB/Danix AB	TUE THU
7508.7 1840z 7509.1 1840z	02 Mar MXI CW Beacon "D" Sevastopol 02 Mar MXI CW Beacon "A" Astrakhan	AB AB	THU THU
8029 0440z	29 Mar MX CW Marker "W" Channel Marker (Russian Air Force)	BR	WED
8495.4 1813z	17 Apr MX CW Beacon "M" Magadan //9116.8kHz (Via SDR Japan)	F5JBR	MON
8821 0900z 1000z 1030z	19 Apr MX CW Beacon "S" 19 Apr MX CW Beacon "S" 19 Apr MX CW Beacon "S" (Abruptly cut off)	E.SMITH E.SMITH E.SMITH	WED WED
9116.8 1813z	17 Apr MX CW Beacon "M" Magadan //8495.4kHz (Via SDR Japan)	F5JBR	MON
9363 1230z 1030z	16 Mar MX CW Beacon "S" Transmits every now and then, on and half past the hour 24 Mar MX CW Beacon "S" 4 mins every hour / H + 30, whenever transmitting	E.SMITH E.SMITH	THU FRI
9442 1005z	09 Mar MX CW Marker "P" Channel Marker	E.SMITH	THU

Oddities

New Marker Appears – 3012kHz (Night) 6360kHz (Day)

On Monday, 17 April Thomas, (tiNG), reported a new marker appearing on 6360kHz USB. He thinks that the regular triple-tone sound would suggest a connection with the Monolith-network.

Thomas noted that the marker on 6360kHz stopped at 1800z and a 2 kHz tone came up for a few seconds. Then a faint voice appeared counting from 1 to 10 in Russian. There was more said by that YL but it faded very deep he couldn't understand it. The YL disappeared and the marker was still off at 1806z.

Daniel, (Danix), states that this marker had appeared in the week before or so. It currently uses 6360kHz during the day & 3012kHz at night. Danix adds that the first voice message was heard on Sunday 16 April at 1748 UTC on 3012 kHz: ОХВАТ-98 04523 БЕСКРОВНЫЙ 1092 2195 ПРИЁМ

6360	1055z 1018z 0429z		17 Apr 18 Apr 19 Apr 20 Apr	Marker Marker Marker NRH	Triple Tone	(Via Silec, Poland S. (Via Silec, Poland S. (Via Silec, Poland S.	DR)	tiNG E.SMITH E.SMITH E.SMITH		MON TUE WED THU
4524kHz	<u>Marker</u>									
4524	1438z		13 Apr	Marker	Dash channel marker		USB	AB		THU
5292kHz	Marker									
5292	1442z		13 Apr	Channel M	Marker 'D'		USB	AB		THU
<u>S28</u>	'The Buz	zer'								
4625	1304z 1918z 1441z		01 Mar 31 Mar 13 Apr	S28 S28 S28	'The Buzzer' Marker 'The Buzzer' Marker 'The Buzzer' Marker	Good Good	USB USB USB	chpa chpa AB		WED FRI THU
<u>S30</u>	'The Pip'									
3756 1603z	1920z	13 Apr	31 Mar S30	S30 'Pip' Char	'Pip' Channel Marker (Night freq) nnel Marker USB	USB	Good AB	chpa	THU	FRI
5448	1440z		13 Apr	S30	'Pip' Channel Marker (Day freq)	USB		AB		THU
<u>S32</u>	'Squeaky	Wheel'								
3828	1921z	· · · · · · · · · · · · · · · · · · ·	31 Mar	S32	marker USB		Good	chpa		FRI
1602z		13 Apr	S32	'Squeaky	Wheel' Channel Marker (Night freq)		AB	•	THU	
5473	1440z		13 Apr	S32	'Squeaky Wheel' Channel Marker (Day fre	q)	USB	AB		THU
The Air 1	<u>Horn</u>									
4020	1948z 1144z		25 Mar 28 Mar	NRH		(Via Silec, Poland SI (Via Silec Poland SI	OR)	E.SMITH E.SMITH		SAT TUE
1438z	1646z	13 Apr	01 Apr Channel 1	[Signallin narker	g]	USB	USB AB	chpa	THU	SAT

Contributors: AB, AnonUS, BR, Brixmis, CB, chpa, E.SMITH, F5JBR, Gert, HFD, JPL, tiDK / tiNG Thank you all for your logs.

Voice stations

E06

E06 Mar/April log:

First/Third Thursday (repeats Friday) 0600z 16230kHz 0700z 19325kHz

02/03 & '864' 275 103 64964 28192 89292 34695 61495 21054 04547 65185 82629 57919 83803 30957 33033 88259 80164 01191 52040 50919 73667 80163
16/03 56428 81704 77979 84417 44993 30046 92481 46976 38393 51943 35716 28299 52676 71354 21113 38666 29934 27243 60932 01670
74534 48442 09383 13513 68342 23551 80818 77789 63390 58031 03991 20450 75434 35701 98254 14617 26808 2680882699 69964

12049 09875 54116 66330 84708 99503 94760 36248 88786 97316 95827 26106 83243 08238 07596 90591 33002 89289 52165 00138 64906 23097 59729 66034 12045 33288 14318 12912 94902 83973 19960 53266 12755 30500 23183 43730 43765 13653 52801 27770

77201 14516 62928 275 103 00000

0500z 15645kHz 0600z 17470kHz

06/04 & '951' 842 106 69408 34184 91092 17084 71834 19592 43017 94315 01456 14462 11258 05248 06240 96308 46734 96954 51924 38123 10966 34821 20/04 29378 88962 97745 05362 33948 14395 54128 14923 27703 51499 74175 52146 20533 58102 63891 06400 31032 60940 00784 59350

 $13106\ 32439\ 36501\ 91858\ 59230\ 50784\ 15960\ 73413\ 16323\ 22994\ 11426\ 26249\ 75134\ 75653\ 94965\ 81381\ 19125\ 43024\ 97717\ 68703$ $43739\ 07193\ 29423\ 08368\ 82040\ 69574\ 56633\ 95618\ 97621\ 61219\ 63063\ 56265\ 30741\ 13256\ 40499\ 94996\ 08622\ 56118\ 83714\ 63704$ $55845\ 13268\ 87829\ 42026\ 65776\ 02494\ 71544\ 47268\ 18973\ 71669\ 74694\ 55923\ 59492\ 24066\ 03554\ 23949\ 65053\ 12903\ 22335\ 38012$

71980 09821 14317 14864 40874 76970 842 106 00000

First/Third Thursday of month 2030z 5186kHz

No reports

Friday following First & Third Thursday 2130z 5197kHz

03/03 & '634' 149 52 12265 10965 47839 38654 84677 93453 72217 84393 04673 97564 01824 75643 84221 95647 92112 94543 76577 43435 47322 84232 17/03 95674 87344 57438 45763 49325 57438 92190 96785 21244 05674 01765 76354 83645 21234 97564 82133 07564 83234 75312 71211

05674 65374 67321 94884 23483 82521 41212 57333 85331 53234 05124 95732 149 52 00000] used 5183kHz

21/04 '634 634 634' 00000 Stops, then at 2133 UTC:

'634' 149 52 12265 10965 47839 38654 84677 93453 72217 84393 04673 97564..... 05124 95732 149 52 00000] Same old message

Unscheduled:-

15/03 1240z **16303 kHz**:

 $^{657}, 138, 47, 01542, 52186, 12520, 05619, 32687, 48159, 28694, 72957, 86386, 68029, 83131, 82152, 65264, 98040, 26843, 08212, 138, 47, 00000, 128424, 12842, 12842, 128424, 128424, 128424, 128424, 128424, 128424, 128424, 128424, 128424, 128424, 128424, 128424, 128424, 12$

(Way weaker than F06) Danix

15/03 1340/1440z **16083/12119 kHz**:

'346' 197 42 44373 08948 63062 96802 37169 65390 72571 54190 32865 61385 26034 53892 43156 98734 71062 68565 60895 90803 04586 61364 51016 14076 90879 20805 49960 67928 37869 82543 28039 29482 01269 35203 20929 79089 90754 75185 04267 83432 68784 71813

36489 80953 Danix

15/03 1430/1530z **12202/8022 kHz**

158' 637 52 63293 38015 50549 86208 18635 35709 28132 01712 90616 53056 95860 74863 79457 98787 80647 06494 18034 72869 23956 73791 61346 47419 67491 63280 62425 04841 89302 16415 86562 94570 87907 06714 93146 58787 87684 73572 38543 49601 51491 65453

09209 79676 25276 18506 30580 23693 17646 17302 12580 85264 74837 56109 Danix

15/03 1748z **13377 kHz** i.p.

 $.....06085\ 60364\ 65346\ 53414\ 65472\ 61783\ 90707\ 73068\ 13146\ 71538\ 97241\ 46269\ 51089\ 27340\ 86782\ 29610\ 67667\ 890\ 45\ 00000$

4ry

15/04 1100z **17437kHz** Fair Via KiwiSDR Greece Danix SAT

 $^{6}832, 759\ 60\ 10749\ 89081\ 91903\ 40530\ 77816\ 73696\ 56196\ 63673\ 15964\ 30177\ 79902\ 82228\ 22304\ 55236\ 51987\ 95364\ 45139\ 74735\ 39281\ 89850$ $92411\ 87264\ 79425\ 42949\ 60291\ 05753\ 45244\ 73212\ 63049\ 79208\ 18642\ 25711\ 83657\ 39742\ 72861\ 55023\ 88800\ 82824\ 40157\ 20359$

33433 10755 91530 12881 23602 80566 19139 20359 47857 62563 71487 61484 26769 72938 73380 33020 39567 96201 49833 83660 Daniel

E06 2017-04-16, 1100/1200 UTC, 17437/15626 kHz: '832' 759 60 (Repeat of 2017-04-15 - Replaced F06 for this week only

PoSW's offering:

First + Third Thursdays in the Month 2030 UTC - Minus a Minute or Two - Schedule:-

16-Mar-17:- 2029 UTC, just before, 5,186 kHz, call "891", DK/GC the ever popular "149 149 52 52". Over S9, ended 2041:35 UTC, computer related "musical event" heard just before 2046 UTC.

6-Apr-17:- 2030 UTC, 5,186 kHz, tuned in after checking the E07 on 7,526, call "891", DK/GC "149 149 52 52", S9 signal.

20-Apr-17:- 2030 UTC, 5,188 kHz I made it, again tuned in after monitoring the E07 on 7,526, "891" and "149 149 52 52", a strong noise-maker of some kind roaring away on the HF side, not the usual "XJT".

Friday 2130 UTC - Usually Well Before _- Following First + Third Thursdays:-

3-Mar-17:- 2128 UTC, approx, 5,183 kHz, call "634", DK/GC "149 149 52 52", over S9.

17-Mar-17:- 2128:40s UTC, 5,187 kHz, "634" and "149 149 52 52" again.

7-Apr-17:- 2129 UTC, just before, 5,197 kHz, "634" and "149 149 52 52".

A Saturday E06:-

15-Apr-17:- 1203 UTC, 15,626 kHz, calling "832" must have started at 1200z, DK/GC "759 759 60 60", over S9 when first tuned in, slightly weaker by the end at 1214:25s UTC.

New schedule or a "one off"? No repeat found at 1300z so perhaps may have been the second sending of a transmission at 1100z on another frequency. Was not near a radio on the Sunday to see if it was repeated on the following day.

<u>E07</u>

Logs from PoSW:

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

1-Mar-17, Wednesday:- 1800 UTC, 13,439 kHz, "417 417 417 000", over S9 with better than usual audio.

1820 UTC, 12,139 kHz, second sending, noisy frequency inside the 25 metre broadcast band, same frequencies as in the month of March for the past several years, third frequency in event of a "full message" should be 10,739 kHz.

8-Mar-17, Wednesday:- 1800 UTC, 13,439 kHz, "417 417 417 1", full message, difficult copy due to deep QSB and low audio.

1820 UTC, 12,139 kHz, second sending, also difficult to hear.

 $1840\,UTC,\ 10,\!739\,kHz,\ much\ better\ copy\ with\ the\ third\ sending,\ DK/GC\ "422\ 84"\ x\ 2.$

12-Mar-17, Sunday:- 1800 UTC, 13,439 kHz, "417 417 417 2" - a two-message transmission,

weak signal and low audio making for difficult copy.

1820 UTC, 12,139 kHz, also weak with low audio.

1840 UTC, 10,739 kHz, much better copy here, over S9 with reasonable audio, first DK/GC

"543 62" x 2, "417" call again before 1849Z followed by second DK/GC "422 84", this second the same as heard on Wednesday the 8th.

15-Mar-17, Wednesday:- 1800 UTC, 13,439 kHz, "417 417 417 1", DK/GC "543 62" x 2, over S9 with better than usual audio.

1820 UTC, 12,139 kHz, second sending, heterodyne from the carrier of a broadcast station on 12,140.

1840 UTC, 10,739 kHz, third sending, S8 with QSB.

2-Apr-17, Sunday:- 1700 UTC, 14,603 kHz, "641 641 641 1" for a full message, DK/GC "866 83" x 3, S9, audio low but readable.

1720 UTC, 13,403 kHz, second sending, over S9.

1740 UTC, 12,103 kHz, third sending, also indicating over S9.

5-Apr-17, Wednesday:- 1700 UTC, 14,603 kHz, and 1720 UTC, 13,403 kHz, both S8 to S9,

"641 641 641 000".

12-Apr-17, Wednesday:- 1700 UTC, 14,603 kHz, weak signal, difficult copy, carrier went off just before 1702:30s UTC which suggests "no message".

1720 UTC, 13,403 kHz, second sending, much better signal, over S9 with good audio, "641 641 641 000".

23-Apr-17, Sunday:- 1700 UTC, 14,603 kHz, "641 641 641 000", S6, audio low.

1720 UTC, 13,403 kHz, much stronger, over S9 with good audio.

Monday + Wednesday SSB Schedule, 2000 UTC Start in March, 1900 UTC in April:-13-Mar-17, Monday:- 2000 UTC, 10,651 kHz, "616 616 616 1", DK/GC "428 14" x 2, short and sweet, ended just before 2004Z.

This schedule not found in this month until today, somewhat higher in frequency than some of us expected! This same message of fourteen 5F groups also appeared on the last occasion this schedule was heard in February, Monday the 27th, on much lower frequencies, of course. S9 SSB signal.

2020 UTC, 9,151 kHz, second sending, S9+.

2040 UTC, 7,651 kHz, third sending, also S9+.

15-Mar-17, Wednesday:- 2000 UTC, 10,651 kHz, "616" and "428 14" again, much weaker signal than when heard on the 13th.

2020 UTC, 9,151 kHz, second sending, much stronger, S9.

2040 UTC, 7,651 kHz, third sending, S9+, strongest transmission of the three.

20-Mar-17, Monday:- 2000 UTC, 10,651 kHz, "616 616 616 000", S9.

2020 UTC, 9,151 kHz, second sending, weaker, indicating around S7.

22-Mar-17, Wednesday:- 2000 UTC, 10,651 kHz, very weak signal, could just make out the "000" of a "no message" transmission.

2020 UTC, 9,151 kHz, weak, could just copy, "616 616 616 000".

27-Mar-17, Monday:- 2000 UTC, 10,651 kHz, the clocks moved forward by one hour for British Summer Time yesterday; E7, as expected, remains on UTC for the few days left in March but expected to move to 1900 UTC in April so as to appear at the same local time as in the winter months. "616 616 616 000", S7, certainly stronger than on the 22nd.

2020 UTC, 9,151 kHz, second sending with a weaker signal.

Again, this schedule proved elusive in April, not found until the second week of the month:-

12-Apr-17, Wednesday:- 1920 UTC, 14,419 kHz, "842 842 842 000", weak signal, indicating S3 to S4 at best, found about 30 seconds in, 1900 UTC transmission likely to be on 15,819 kHz.

17-Apr-17, Monday:- 1900 UTC, 15,819 kHz - well, there we are, then, "842 842 842 000", weak signal, S4.

1920 UTC, 14,419 kHz, second sending, much stronger, S9 to S9+.

19-Apr-17, Wednesday:- 1900 UTC, 15,819 kHz, "842 842 842 000", S5.

1920 UTC, 14,419 kHz, second sending, S7 to S8.

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

9-Mar-17:- 2110 UTC, 7,516 kHz, S7 to S8 carrier, audio very low, could just about hear a trio of "zero" of the "no message" routine which this schedule has been transmitting for some time, confirmed when the carrier went QRT at around 2112:30s UTC. 2130 UTC, 5,836 kHz, over S9 with slightly better audio, "584 584 584 000".

16-Mar-17:- 2110 UTC, 7,516 kHz, carrier over S9 but audio weak and distorted, went off 2112:30s UTC,

2130 UTC, 5,836 kHz, audio low but readable, "584 584 584 000".

23-Mar-17:- 2110 UTC, 7,516 kHz, "584 584 584 000", peaking S9 with reasonable audio for a change.

2130 UTC, 5,836 kHz, S9 carrier but audio low.

30-Mar-17:- 2110 UTC, 10.10 PM now BST has started, 7,516 kHz, "584 584 584 000", audio low.

2130 UTC, 5,836 kHz, over S9, better audio than the first sending.

Expected to move to 2010 UTC start in April.

6-Apr-17:- Something unusual this evening; this schedule sent a "full message". For perhaps several years the majority of transmissions from this Thursday E07 have been of the two-minute "no message" format.

2010 UTC, 9,387 kHz:- low audio together with an S9 plus many dB broadcast station on 9,390 - Radio Thailand in the German language - making for difficult copy. Noted that the E07 carrier did not go off after two and a half minutes or so which would indicate "no message". The Bangkok broadcaster went off at around 2015z enabling E07 to be heard reasonably clearly in "full message" mode; suddenly vanished after 2019Z, came back a couple of minutes later calling "358 358 358 1" then back into 5F groups. Ended with the usual "000 000" around 2123:40s UTC. 2030 UTC, 7,526 kHz, second sending, DK/GC "984 68" x 2, a much better transmission, peaking S9 with reasonable audio.

2050 UTC, 5,884 kHz, third sending, over S9 at first but rapidly became a much weaker signal.

13-Apr17:- 2010 UTC, 9,387 kHz, unreadable due to Thailand on 9,390, full message format again, E07 5F groups heard when the broadcast station went off after identifying in English at around 2014 UTC.

2030 UTC, 7,526 kHz, "358 358 358 1", deep QSB, faded right down as the DK/GC was being sent.

2050 UTC, 5,884 kHz, third sending much better copy, S9 with reasonable audio, DK/GC "984 68", same as on the 6th.

20-Apr-17:- 2010 UTC, 9,387 kHz, unreadable as before due to the very strong BC station and low audio of E07. Carrier went off around 2112:30s, looks like a return to the "no message" format.

2030 UTC, 7,526 kHz, "358 358 358 000" confirmed, peaking S9, audio low but readable.

27-Apr-17:- 2010 UTC, 9,387 kHz, "358 358 358 000", somewhat better copy than usual,

especially with the receiver in LSB mode to reduce the effect of the broadcast station on the HF side.

2030 UTC, 7,526 kHz, second sending, over S9 with reasonable audio.

Weekend SSB Schedule, 0700 UTC Start in March, 0600 UTC in April:-

The earlier and earlier sunrise as we progress through spring inspires to look for number station activity at seven of a morning:-Saturday Schedule, 0700 UTC Start:-

11-Mar-17:- 0700 UTC, 10,112 kHz, "111 111 111 1" for a full message, DK/GC "118 16" x 2, short transmission, all done just after 0704 UTC. S7 signal.

0720 UTC, 11,112 kHz, second sending, peaking S9.

0740 UTC, 12,112 kHz, third sending, S9+, strongest sending of the three.

18-Mar-17:- 0700 UTC, 10,112 kHz, "111 111 111 000", S8.

0720 UTC, 11,112 kHz, second sending, S7.

25-Mar-17:- 0700 UTC, 10,112 kHz, and 0720 UTC, 11,112 kHz, both S7, "111 111 111 000".

As expected, moved by one hour in April so as to start at 0700 BST:-

1-Apr-17:- 0604 UTC, 9,064 kHz, "full message" in progress, S6 signal.

0620 UTC, 10,264 kHz, "024 024 024 1", DK/GC "289 49" x 2.

0640 UTC, 11,464 kHz, third sending, over S9, strongest transmission of the three.

8-Apr-17:- 0600 UTC, 9,064 kHz, and 0620 UTC, 10,264 kHz, both over S9, "024 024 024 000".

15-Apr-17:- 0600 UTC, 9,064 kHz, "024 024 024 1", DK/GC "310 18" x 2, another short message ending at 0604:20s UTC.

0620 UTC, 10,264 kHz, second sending.

0640 UTC, 11,464 kHz, third sending, all three transmissions indicating S9 or over this morning.

22-Apr-17:- 0600 UTC, 9,064 kHz, and 0620 UTC, 10,264 kHz, both over S9, "024 024 024 000".

Sunday Schedule, 0700 Start, 0600 UTC in April:-

12-Mar-17:- 0700 UTC, 10,112 kHz, "111 111 111 1", DK/GC "118 16" x 2, same as heard

yesterday, signal strength S7 to S9.

0720 UTC, 11,112 kHz, second sending, S8. 0740 UTC, 12,112 kHz, very strong signal, S9+.

19-Mar-17:- 0700 UTC, 10,112 kHz, "111 111 111 000", S9, this is inside the 30 metre amateur band, a strong EA3 CW station calling CQ on a close frequency.

0720 UTC, 11,112 kHz, second sending peaking S9.

2-Apr-17:- 0600 UTC, 9,064 kHz, "024 024 024 1", DK/GC "289 49", same as heard yesterday, indicating S6 at best.

0620 UTC, 10,264 kHz, second sending, S7.

0640 UTC, 11,464 kHz, third sending, strongest of the three, over S9.

16-Apr-17:- 0600 UTC, 9,064 kHz, "024 024 024 1", DK/GC "310 18" x 2, same as yesterday; this Sunday 0600z schedule seems to always be a repeat of the previous day's

routine, unusual behaviour for E07.

0620 UTC, 10,264 kHz, and 0640 UTC, 11,464 kHz, repeats, all good signals, S9 or over.

23-Apr-17:- 0600 UTC, 9,064 kHz, "024 024 024 000", some problem with the audio, appeared to be two E07 voices running over the top of each other, thought it was some kind of effect caused by multi-path propagation for a brief moment, some problem with the storage medium used perhaps, whatever the case the double-voice stopped at 0601:40s and continued as normal. 0620 UTC, 10,264 kHz, second sending, no problems here.

Onto others logs with repetition:

Sunday/Wednesday

March 2017

1800z	13439kH	z 1820z	12139kHz	1840z	10739kHz	
01/03		417 000				Fair
05/03		NRH				
12/03		417 2 542 62 62749 .	70394 417 2 422 82	31906 4	40460 000 000 [1800z NRH, 1820z Unwork	able, QRN, QSB4/5] Fair, QSB2
15/03		417 1 1417 543 62 6	2749 70394 000 00)	[1840z Weak]	Very strong
19/03		417 2 543 62 62749 . 417 2 422 84 31906 .				Strong QSB3/4
77252 99686 90701 76473 40913 81632 64922 30438	7 08720 68805 7 5 88145 67209 5 3 30683 95409 1 2 19160 32917 6 3 23765 84106 0 3 35243 82432 2	8893 41143 95433 36626 292 0644 27284 13871 20235 450 7708 78150 36696 45728 026 4637 22108 53006 12262 183 88519 87434 65145 38995 949 77703 78812 83045 74773 797	091 18291 660 69587 357 14637 930 15544			
39396 84370 46345 69573 52351 70915 59687 13340 79784 09170 88841 75514 17329 22039	03778 14448 4 039322 69932 7 8 89160 78201 8 6 64458 27624 7 0 69862 91733 5 0 54183 64157 6 1 10405 05695 4	12892 26437 33025 21831 191 6979 04240 91367 45512 818 17944 99568 33460 51779 374 19342 74263 17400 67787 134 19009 77614 55232 37248 622 19701 03573 86441 18012 744 19583 98307 01695 65548 056 0767 61629 21566 86549 364	845 68032 495 31394 487 37585 233 79670 489 72253 672 07411			
22/03		NRH, poor condx				

April 2017

417 1 866 83 36440 ... 69807 000 000

29/03

1700z	14603kHz	1720z	13403kHz	1740z	12103kHz	
02/04	641 1 86	6 83 36440	69807 000 000			Very strong
05/04	641 000				[1700z weak]	Fair audio, strong carrier
09/04	641 000					Weak
12/04	641 000				[1700z Weak audio]	Strong
16/04	641 000					Strong
19/04	641 000					Very strong
23/04	641 000					1700z weak, 1720z Very strong
26/04	641 000				[1700z Weak audio]	Strong
30/04	641 000					Fair

Very strong

Sunday/Saturday [USB]

March 2017

0700z	10112kHz	0720z	11112kHz	0740z	12112kHz	
04/03	111 1 50	05 54 54002	88502 000 000		[0700z/0720z Unworkable]	Weak
05/03	111 1 50	05 54 54002	88502 000 000		[0720z/0740z weak]	Very strong
95015 2595 56108 2861 63511 3814 39533 6824	2 41195 23028 17169 19775 4 00127 92013 98165 10302 3 31988 32584 99686 04999 1 29906 27589 36759 28026 6 00759 09560 90108 76167 3 01975 88502	2 14674 38392 46 9 04973 24891 113 5 80234 60604 683	158 96863 221 31017 294 13407			

11/03		111 1 118	16 22522	10951 000 000				Strong
12/03		111 1 118	16 22522	10951 000 000				Strong
111 1 118 16 22522 79236 5 10092 37328 (61309 07240 (10951 000 000	07660 60461 1	19502 17259						
18/03		111 000						Strong
19/03		111 000						Strong
25/03		111 000					[0720z NRH]	Fair
26/03		111 000					[0720z Very weak]	Fair
<u>April 2017</u>	,							
0600z	9064kHz		0620z	10264kHz	0640z	11464kHz	:	
01/04		024 1 289	49 72698 .	40553 000 000				Strong, QSB3
02/04		024 1 289	49 72698 .	40553 000 000			[0620zWeak]	Strong
08/04		024 000		[0600z mi	issed]			Very strong
09/04		024 000						Very strong
15/04		024 1 310	18 65928	82529 000 000				Strong
024 1 310 18 65928 90935 3 46640 40846 7 39790 49856 4 38194 22564 8 000 000	72308 26844 5 12583 73496 5	52071 58963						
16/04		024 1 310	18 65928	82529 000 000				Strong
22/04		024 000						Strong
23/04		024 000						Very strong
29/04		024 000						Strong
30/04		024 000						Strong
Monday/V	Vednesday	<u>Y</u>						
March 201	17							
2000z	10651kHz	Z	2020z	9151kHz	2040z	7651kHz		
06/03		616 000					[2000z NRH]	Weak
08/03		616 1 428	14 90048	. 06572 34433 000 000	O		[2000z NRH, 2020z Unworkable]	Weak
616 1 428 14 90048 40005 3 85692 65058 6 67909 68747 0 000 000	59724 68557 5	50304						
13/03		616 1 428	14 90048 .	06572 34433 000 00	00			Very strong
15/03		616 1 428	14 90048 .	06572 34433 000 00	00			Very strong
20/03		616 000						Fair, noisy
22/03		616 000						Weak
29/03		616 000						Very strong
April 2017	,							
1900z	15819kHz	Z	1920z	14419kHz	1940z	nnnn		
12/04		842 000						Fair

[1900z Fair]

Very strong

17/04

842 000

19/04	842 000						Strong			
24/04	842 000						Weak/Fair			
26/04	842 000						Strong			
Tuesday	y/Frida <u>y</u>									
March 2017										
1100z	19110kHz?	1120z	17410kHz	1140z	15910kHz					

1100z 19110kHz? 1120z 17410kHz 1140z 15910kHz

17/03 149 000

21/03 149 1 1745 129 08118 ... 94072 000 000 Weak

149 1 1745 129
08118 65754 23897 49439 04512 25653 01913 76771 64167 56084
60136 41182 49201 94129 84900 61036 22354 34050 65937 98787
57897 96043 59396 45388 50816 99688 74456 71775 93478 57146
44880 49707 82649 85721 15373 65007 68874 93156 33810 87302
14058 24631 67782 90093 19937 61455 74486 11183 13174 65836
99400 77386 14840 28889 36171 52559 72115 36473 86099 30624
88278 77926 28343 39465 45027 36343 30861 33845 99746 78595
88165 81294 14781 92477 33792 37418 45435 55859 20187 90150
39621 41208 31228 68279 95473 98575 97138 54047 22669 56488
17771 42316 70280 67878 89977 86445 19900 66822 10741 40245
61721 75551 44104 67836 94750 62440 01541 17895 89465 54566
61570 03104 70987 96904 98049 51870 14506 04327 30615 89475
92983 89140 97919 29596 88714 30810 64285 54907 94072
000 000

Courtesy Edd and Ary

28/03 149 000 Fair

April 2017

1100z	20574kHz	1120z	19074kHz	1140z	17474kHz	
11/04	'000' on	ly audible				
14/04	504 000)				
18/04	504 1 86	61 117 6183	9 01683 000 000		[100z NRH]	Weak
20/04	504 1 86	61 117 6183	9 01683 000 000		[1100/1120z unworkable]	Weak
21/04	504 1 86	61 117 6183	9 01683 000 000		[1100/1120z unworkable]	Weak
25/04	504 000)				Weak
28/04	NRH, p	oor condx				

Thursday

March 2017

2010z	7516kHz	2030	z	5836kHz	2050z	4497kHz
03/03		NRH				
09/03		584 000				Weak audio, strong carrier
16/03		Audio not heard	l, stror	ng carrier only		
30/03		584 000				Weak, strong carrier

April 2017

2010z	9387kHz	2030z	7526kHz	2050z	5884kHz	
06/04		358 1 984 68 09579 .	30321 000 000			Fair with high QRM
13/04		358 1 984 68 09579 .	30321 000 000		[2010z BCQRM5]	Fair
20/04		358 000			[2010z BCQRM5]	Weak
27/04		358 000			[2010z BCQRM4]	Very strong

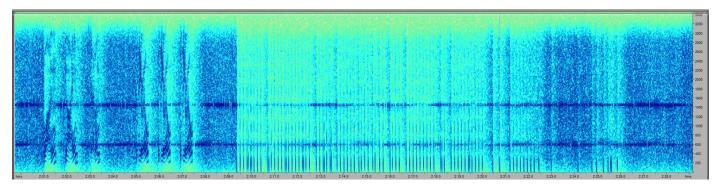
<u>E07a</u>

Wednesday

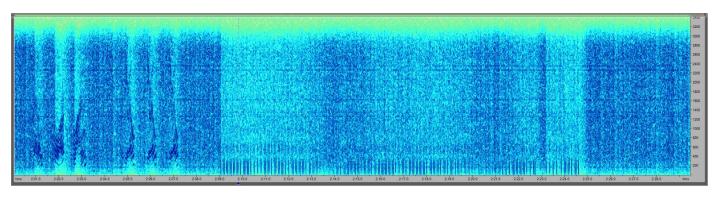
March 2017

2100z	5877kHz	2120z	5277kHz	2120z	4577kHz	
01/03		825 000				Very strong
08/03		825 000				Strong, noisy, QSB3/4
15/03		825 1 17370 7046 5	5 09098 68458	000 000		Very strong
22/03		825 1 17370 7046 5	5 09098 68458	000 000	Poor Condx	2100/2120z Strong, 2140z Very strong
29/03		825 000				Very strong

E07 a Transmissions on 5th and 6th April 2017 ended 2m08s after commencing as usual but followed by a 'clicking' signal. Notably these clicks seem to vary in their position.



Clicks seen at end of 2000z 05/04 null transmission [Compare position of clicks with next sample]

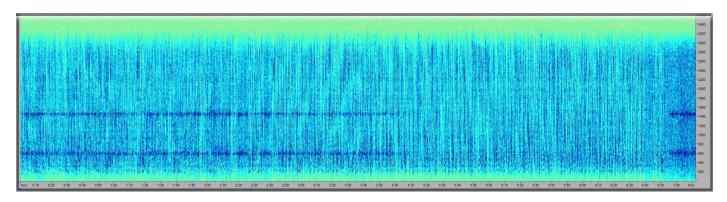


Clicks seen at end of 0430z 06/04 null transmission [Compare position of clicks with previous sample]

Wednesday

April 2017

2000z	8144kHz	2020z	6944kHz	2040z	5744kHz	
05/04	197 000)			[Clicking at end of transmission ~15 to 17s]	Very strong, ttyQRM2
12/04	197 000)			[2000z ttyQRM2]	Strong
19/04	197 000)				Very strong
26/07	197 1 3	3420 928 49	82616 80775 000	000 000	[2000z ttyQRM2, 2020z PulseQRM2]	Very strong



 $26/07\ TTYQRM$ seen on $2000z\ E07\ a$

Thursday

March 2017

0530z	6922kHz	0550z	8122kHz	0610z	9322kHz	
01/03		913 000				Very strong
09/03		913 000				Weak, noisy, QSB3/4
16/03		913 1 17370 7046 5	5 09098 6845	8 000 000		Very strong, QSB2/3
23/03		913 1 17370 7046 5	5 09098 6845	8 000 000	Poor Condx	0530z Unworkable, 0550z Fair, QRN3, QSB3/4 0610z Weak QRN2, QSB2/3
30/03		913 000				Very strong

April 2017

0430z	6788kHz	0450z	7488kHz	0510z	8188kHz	
06/04	741 000)			[Clicking at end of transmission ~15 to 17s]	Very strong
13/04	741 000)				Strong
20/04	741 000)				Very strong
26/07	741 1 33	3420 928 49	82616 80775 0	00 000		Very strong

<u>Friday</u>

March 2017

1610z	11473kHz	1630z	10173kHz	1650z	9373kHz	
03/03	413 000					Fair
10/03	413 000					Fair
17/03	413 000					Fair
24/03	413 000					Weak

April 2017

1510z	12174kHz	1530z	11074kHz	1550z	10274kHz	
14/04	102 000				[1530z Very weak]	Fair
21/04	102 000					Weak
28/04	102 000					Fair

Saturday

March 2017

0900z	11133kHz	0920z	12133kHz	0940z	13433kHz	
04/03	114 000					Strong
11/03	114 000					Weak
18/03	114 000					Weak
25/03	NRH, po	or condx				

April 2017

0800z	12218kHz	0820z	13418kHz	0840z	14418kHz	
01/04	244 000					Fair, QSB2/3
08/04	244 000			[0820z tty	QRM3]	Weak
15/04	244 000					Strong
22/04	244 000					Weak, QSB4
29/04	244 000					Strong

PoSW's take on E07a

<u>Wednesday Schedule, 2100 UTC Start in March, 2000 UTC in April:-</u> 1-Mar-17:- 2100 UTC, 5,877 kHz, "825 825 825 000", S9+, very strong SSB signal.

2120 UTC, 5,277 kHz, second sending, slightly weaker.

8-Mar-17:- 2100 UTC, 5,877 kHz, "825 825 825 000".

15-Mar-17:- 2100 UTC, 5,877 kHz, a "full message" tonight, "825 825 825 1 17370", DK/GC "7046 55" x 2, S9+.

2020 UTC, 5,277 kHz, second sending, also S9+.

2140 UTC, 4,577 kHz, third sending, over S9.

22-Mar-17:- 2100 UTC, 5,877 kHz, "825 17370" and "7046 55", same as last time.

2120 UTC, 5,277 kHz, second sending.

2140 UTC, 4,577 kHz, third sending, S9+, strongest sending of the three.

5-Apr-17:- 2000 UTC, 8,144 kHz, "197 197 197 000", S9+, weaker FSK-RTTY wide-shift signal on a close frequency.

2020 UTC, 6,944 kHz, second sending, over S9.

19-Apr-17:- 2000 UTC, 8,144 kHz, "197 197 197 000", S9+.

2020 UTC, 6,944 kHz, second sending, also S9+ this evening.

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

4-Mar-17:- 0900 UTC, 11,133 kHz, "114 114 114 000", S5 signal. 0920 UTC, 12,133 kHz, second sending, stronger, peaking S9.

11-Mar-17:- 0900 UTC, 11,133 kHz, "114 114 114 000", weak signal. 0920 UTC, 12,133 kHz, second sending, S7.

18-Mar-17:- 0900 UTC, 11,133 kHz, and 0920 UTC, 12,133 kHz, both S7 to S8, "114 114 114 000".

25-Mar-17:- 0900 UTC, 11,133 kHz, and 0920 UTC, 12,133 kHz, "114 114 114 000".

1-Apr-17:- 0800 UTC, 12,218 kHz, "244 244 244 000", S7 to S8.

0820 UTC, 13,418 kHz, second sending, slightly weaker signal.

15-Apr-17:- 0820 UTC, 13,418 kHz, "244 244 244 000".

22-Apr-17:- 0800 UTC, 12,218 kHz, and 0820 UTC, 13,418 kHz, "244 244 244 000".

E11 log Mar/April

5844kHz	1730z	01/03 [405/00] Out 1733z S7	Malc	WED
	1730z	04/03 [402/00] Out 1733z S9+10	Malc	SAT
	1730z		Malc	WED
		15/03 [400/00] Out 1733z S9+10		
	1730z	18/03 [404/00] Out 1733z S7	Malc	SAT
	1730z	22/03 [400/00] Out 1733z S9	Malc	WED
	1730z	29/03 [402/00] Out 1733z S9+10	Malc	WED
	1730z	01/04 [403/00] Good	RNGB	SAT
	1730z	05/04 [403/00] Out 1733z S8	Malc	WED
	1730z		Malc	SAT
		08/04 [406/00] Out 1733z S8		
	1730z	12/04 [406/00] Out 1733z S9	Malc	WED
	1730z	15/04 [400/00] Out 1733z S9	Malc	SAT
	1730z	26/04 [409/00] Out 1733z S7	Malc	WED
6304kHz	0450z	20/03 [411/00]	Ary	MON
6397kHz	16057	05/03 [230/00]	Brixmis	SUN
OSTATIL	1605z		Malc	SUN
		12/03 [233/00] Out 1608z S3		
	1605z	14/03 [230/00] Out 1608z S5	Malc	TUE
	1605z	28/03 [235/00] Out 1608z S9	Malc	TUE
	1605z	02/04 [231/00] Out 1608z S9	Malc	SUN
	1605z	04/04 [238/00] Out 1608z S7	Malc	TUE
	1605z	09/04 [235/00]	Thomas	SUN
	1605z	11/04 [236/00] Out 1608z S6	Malc	TUE
	1605z	16/04 [233/00] Out 1608z S7	Malc	SUN
	1605z	25/04 [230/00] Out 1628z S4	Malc	TUE
6804kHz	0820z	27/03 [436/00] Good	RNGB	MON
000-K112	0820z		Malc	THU
		30/03 [434/00] Out 0823z S2		
	0820z	10/04 [432/00] Out 0823z S4	Malc	MON
	0820z	13/04 [430/00] Then 16896 33250 63368 17098 48291 22993 31440 11993 52353 0824z		
		TX Ends then at 0826z 42781 82142 TX Ends 0826.5z (Very stranger)	ge!) Malc, Ary	THU
	0820z	17/04 [436/00] Good	RNGB	MON
	0820z	20/04 [432/00]	Ary	THU
			-	
	0820z	24/04 [438/00] Out 0823z S2	Malc	MON
	0820z	27/04 [438/00] Out 0823z	Ed Smith	THU
6807kHz	0930z	06/04 [275/00] Out 0933z	Ed Smith	THU
	0930z	13/04 [279/00] Out 0933z S4	Malc	THU
	0930z	19/04 [273/00] Out 0933z S3	Malc	WED
	0930z	20/04 [279/00]	Ary	THU
7317kHz	0530z	02/03 [647/00] Out 0533z QRM4 Broadcast station	Ed Smith	THU
/31/KHZ				
	0530z	09/03 [649/00] Out 0533z KiwiSDR Ukraine.	Ed Smith	THU
	0530z	13/04 [646/00]	Ary	THU
	0530z	27/04 [644/00]	Ary, Ed Smith	THU
7377kHz	2000z	17/03 [571/00] Out 005z S5 QRM	Malc	FRI
	2000z	24/03 [571/00] Out 2003z S6 QRM	Malc	FRI
	2000z	31/03 [576/00]	Gary H	FRI
	2000z	07/04 [579/00] Out 2003z QSA4 QRM1 QRN1 QSB2	Thomas	FRI
	2000z	20/04 [573/00] Out 2003z S57	Malc	FRI
	20002	20/04 [3/3/00] Out 20032 37	Maic	TKI
7727kHz	1205z	19/04 [460/00]	Ary	WED
7840kHz		03/03 [306/00] Out 1003z	Ed Smith	FRI
	1000z	07/03 [305/00] 1003z	Ed Smith	TUE
	1000z	10/03 [302/00]	Ary	FRI
	1000z	17/03 [302/00] Out 1003z S2	Malc, Ed Smith	FRI
	1000z			
		21/03 [300/00] Out 1003z S3	Malc	TUE
	1000z	04/04 [300/00] Weak	RNGB	TUE
	1000z	07/04 [309/00] Out 1003z S2	Malc, Ed Smith	FRI
	1000z	11/04 [302/00] Out 1003z QSA5 QRM1 QRN1 QSB1	Thomas, Ed Smith	TUE
	1000z	14/04 [309/00]	Ary Thomas	FRI
	1000z	25/04 [309/00] Out 1003z	Ed Smith, Malc	TUE
	1000z	28/04 [300/00] Out 1003z S3	Malc	FRI
7850kHz	0315z	30/03 [253/00] Out 0318z	Ed Smith	THU
	0315z	05/04 [258/00] Out 0318z	Ed Smith	WED
	0315z	26/04 [250/00] Out 0318z	Ed Smith	WED

8102kHz	1045z	14/03 [574/00] Out 1048z	Ed Smith	TUE
	1045z	21/03 [573/00] Out 1048z S5	Malc	TUE
	1045z	04/04 [577/00] Out 1048z S4	Malc	TUE
	1045z	11/04 [575/00] Out 1048z QSA4 QRM1 QRN1 QSB2	Thomas, Ed Smith	TUE
	1045z	18/04 573/00]	RNGB	TUE
8186kHz	2000z	05/03 [363/00]	Brixmis	SUN
010011112	2005z	18/03 [363/00] Out 2008z S9	Malc	SAT
	2005z	01/04 [363/00] Out 2008z S7	Malc	SAT
	2005z	02/04 [363/00] Out 2008z S5	Malc	SUN
	2005z	15/04 [364/00] Out 2008z S5 QRM	Malc	SAT
	2005z	16/04 [360/00] Out 2008z S9+10	Malc	SUN
	2005z	22/04 [364/00] Out 2008z S7	Malc	SAT
	2005z	23/04 [365/00] Out 2008z S7	Malc	SUN
8530kHz	1910z	31/03 [613/00]	Christer	FRI
	1910z	02/04 [618/00] Good	RNGB	SUN
	1910z	16/04 [611/00] Good	RNGB	SUN
	1910z	21/04 [617/00] Out 1913z S3	Malc, Thomas	FRI
	1910z	23/04 [613/00] Out 1913z S4	Malc	SUN
	1910z	30/04 [618/00] Out 1913z S9	Malc	SUN
8803kHz	0930z	01/03 [273/00] Out 0933z S6	Malc	WED
	0930z	02/03 [279/00] Out 0933z S8	Malc	THU
	0930z	15/03 [276/00]	Ary, Malc	WED
	0930z	16/03 [276/00] Out 0933z S3	Malc	THU
	0930Z	10/03 [2/0/00] Out 09332 33	Wate	Ino
9371kHz	1730z	16/03 [414/00] Out 1733z S8	Malc	THU
	1730z	30/03 [410/37 8552450627] Out 1740z S6	Malc	THU
9399kHz	0900z	01/03 [534/00]	Gert, Malc	WED
	0900z	06/03 [535/00] Out 0903z S3	Malc	MON
	0900z	08/03 [537/00] Out 0903z	Ed Smith	WED
	0900z	13/03 [536/00] Out 0903z S2	Malc	MON
	0900z	15/03 [537/00]	Ary, Malc	WED
	0900z	29/03 [530/00] Out 0903z S6	Malc, Ed Smith	WED
	0900z	10/04 [538/00] Out 0903z S3	Malc	MON
	0900z	12/04 [535/00] Out 0903z S6	Malc	WED
	0900z	17/04 [534/00] Out 0903z S4	Malc	MON
	0900z	19/04 [536/00] Out 0933z S4	Malc, RNGB	WED
	0900z	24/04 [532/00] Out 0903z S2	Malc	MON
	0900z	26/04 [537/00] Out 0903z S5	Malc, Ed Smith	WED
9443kHz	1205z	01/03 [461/00] Out 1208z S3	Malc	WED
,	1205z	14/03 [465/00] Out 1208z	Ed Smith	TUE
	1205z	22/03 [465/00] Out 1208z S3	Malc	WED
	1205z	05/04 [463/00] Out 1208z S2	Malc	WED
	1205z	11/04 [462/00] Out 1208z QSA5 QRM2 QRN1 QSB1	Thomas	TUE
	1205z	12/04 [463/00] Out 1208z S2	Malc	WED
00.621.11	0710	07/02/522/03/0	FIG. 14	TOTAL TO
9963kHz		07/03 [632/00] Out 0713z	Ed Smith	TUE
	0710z	14/03 [635/00] Out 0713z	Ed Smith	TUE
	0710z	21/03 [637/00] Out 0713z S3	Malc	TUE
	0710z	04/04 [632/00] Good	RNGB	TUE
	0710z	07/04 [630/00] Out 0713z S5	Malc	FRI
	0710z	11/04 [636/00] out 0713z S7	Malc	TUE
	0710z			
		14/04 [635/00]	Ary Molo Ed Smith	FRI
	0710z	28/04 [631/00] Out 0713z S3	Malc, Ed Smith	FRI
10125kHz	z 0820z	13/03 [438/00] Out 0823z S5	Malc	MON
101201111	0820z	16/03 [432/00] Out 0823z S7	Malc	THU
		• •		
10213kHz		01/03 [396/00]	Gert	TUE
	1700z	04/03 [391/00] Out 1703z S3	Malc	SAT
	0745z	06/03 [266/00]	Ary, Brixmis, Malc	MON
	1705z	15/03 [392/00] Out 1708z S6	Malc	WED
	1705z	18/03 [392/00] Out 1708z S9	Malc, Ed Smith	SAT
	0745z	20/03 [260/00] Out 0748z S7	Malc	MON
	1705z	29/03 [395/00] Out 1708z S9	Malc	WED
	1705z	01/04 [390/00] Out 1708z S9+10	Malc	SAT
	0745z	03/04 [261/00] Out 0748z S8	Malc	MON
	1705z	05/04 [395/00] Out 1708z S9	Malc	WED
	- , JJL	[2/2/20] 2222/0000/		,,,,,,,,

1705z	08/04 [392/00] Out 1708z S9	Malc	SAT
0745z	10/04 [268/00] Out 0748z S8	Malc	MON
1705z	12/04 [393/00] Good	RNGB	WED
1705z	15/04 [390/00] Out 1708z S9	Malc	SAT
0745z	17/04 [268/00] Out 0748z S7	Malc	MON
1705z	19/04 [399/00] Out 1708z S9+10	Malc	WED
1705z		Malc	
	22/04 [394/00] Out 1708z S2		SAT
0745z	24/04 [261/00] Out 0748z S3	Malc	MON
10302kHz 1300z	02/03 [581/00] Out 1533z S3	Malc	THU
1300z	04/03 [585/00] Out 1303z S6	Malc	SAT
1300z	11/03 [587/00] Out 1303z S2	Malc	SAT
1300z	16/03 [589/00] Out 1303z S3	Malc	THU
1300z	18/03 [585/00] Out 1303z S4	Malc, Ed Smith	SAT
1300z	30/03 [583/00] Out 1303z S9	Malc	THU
1300z	01/04 [583/00] Out 1303z S4	Malc	SAT
1300z	06/04 [588/00] Out 1303z S6	Malc, Ed Smith	THU
1300z	08/04 [585/00] Out 1303z	Ed Smith	SAT
1300z	13/04 [587/00] Out 1303z S5	Malc	THU
1300z	27/04 [581/00] Out 1303z S3	Malc	THU
1300z	29/04 [588/00] Out 1303z	Ed Smith	SAT
10330kHz 1530z	02/03 [267/00] Out 1533z S9	Malc	THU
1530z	30/03 [261/00] Out 1533z S9	Malc	THU
1530z	06/04 [266/00]	Gary H, Thomas	THU
1530z	13/04 [260/00]	Gary H, Malc	THU
1530z	27/04 [266/00] Out 1533z S6	Malc	THU
10448kHz 1625z	01/03 [975/00] Out 1628z S5	Malc	WED
1625z	05/03 [977/00]	Brixmis	SAT
1625z	08/03 [977/00]	Gary H	WED
1625z	12/03 [972/00] Out 1628z S6	Malc	SUN
1605z	29/03 [970/00] Out 1608z S7	Malc	WED
1625z	05/04 [971/00] Out 1628z S7	Malc	WED
1625z	09/04 [972/00]	Thomas	SUN
1625z		Malc	
	12/04 [970/00] Out 1628z S6		WED
1625z	16/04 [972/00] Out 1628z QSA2 QRM1 QRN1 QSB2	Thomas	SUN
1625z	19/04 [976/00] Out 1628z S7	Malc	WED
10620kHz 1925z	04/04 [523/00] Out 1928z S3 (websdr.ewi.utwente.nl)	Malc	TUE
1925z	06/04 [527/00] Out 1928z S7	Malc	THU
1925z	11/04 [527/00] Out 1928z S2	Malc	TUE
1925z	18/04 [523/00] Out 1928z S6	Malc	TUE
1925z	20/04 [527/00] Out 1928z S2	Malc, Ed Smith	THU
10800kHz 0645z	02/03 [511/00] Out 0648z	Ed Smith	THU
0645z	07/03 [517/00] Out 0648z	Ed Smith	TUE
1540z	08/03 [561/00]		WED
1340z 0645z	09/03 [512/00]	Ary Ed Smith	THU
0645z	14/03 [511/00] Out 0648z	Ed Smith	TUE
0645z	16/03 [514/00] Out 0648z S2	Malc	THU
0645z	28/03 [511/00] Out 0648z S2	Malc, RNGB	TUE
0645z	30/03 [514/00] Out 0648z S3	Malc	THU
0645z	11/04 [512/00] Out 0648z S4	Malc	TUE
0645z	13/04 [510/00]	Ary	THU
0645z	18/04 [517/00] Out 0648z S4	Malc	TUE
0645z	20/04 [512/00] Weak	RNGB	THU
0645z	25/04 [515/00] Out 0648z S3	Malc	TUE
	the first terms of the first ter		
11450kHz 0805z	01/03 [315/00] Out 0808z S7	Malc	WED
0805z	05/03 [311/00] Out 0808z	Malc	SUN
0805z	08/03 [314/00]	Ed Smith	WED
0805z	12/03 [314/00] Out 0808z S2	Malc	SUN
0805z	22/03 [315/00] Out 0808z S2	Malc	WED
0805z	29/03 [312/00] Out 06082 S2 29/03 [312/00] Out 0808z S3	Malc, Ed Smith	WED
0805z	05/04 [310/00]	RNGB	WED
0805z	09/04 [312/00]	RNGB	SUN
0805z	12/04 [315/00] Out 0808z S5	Malc	WED
0805z	16/04 [314/00] Out 0808z S5	Malc	SUN

12202kHz	0600z	03/04 [180/00] Out 0603z S2	Malc	MON
	0600z	07/04 [185/00] Out 0603z	Ed Smith, Malc	FRI
	0600z	17/04 [183/00] Weak	RNGB	MON
13046kHz	1245-	07/02 [015/00]	Brixmis, Ed Smith	TUE
		07/03 [915/00]		
	1345z	11/03 [917/00]	Malc	SAT
	1345z	21/03 [915/00] Out 1348z S2	Malc	TUE
	1345z	28/03 [911/00] Out 1348z S9	Malc	TUE
	1345z	01/04 [919/00] Out 1348z S2	Malc	SAT
	1345z	04/04 [910/00] Out 1348z S5	Malc	TUE
	1345z	08/04 [915/00] Out 1348z QSA2	Ed Smith	SAT
	1345z	11/04 [910/00]	Gary H	TUE
	1345z	29/04 [918/00] Out 1345z	Ed Smith	SAT
13470kHz	17457	02/04 [249/00] Out 1748z S4	Malc	SUN
	1745z	03/04 [245/00] Out 1748z S2	Malc, RNGB	MON
	1745z	10/04 [249/00] Out 1748z S2	Malc	MON
	1745z	24/04 [240/00] Out 1748z S2	Malc	MON
	1745z	30/04 [244/00] Out 1748z S2	Malc	SUN
	17 102	20.0.[2.100]	Traile .	5011
10070111	1650	10/03/501/501/501/50	36.1	EDI
13873kHz		10/03 [921/00] Out 1653z S2	Malc	FRI
	1650z	31/03 [924/00] Out 1653z S2	Malc	FRI
	1650z	02/04 [922/00] Out 1653z S4 QRM	Malc	SUN
	1650z	14/04 [921/00] Out 1653z QSA3 QRM1 QRN1 QSB1	Thomas	FRI
			Malc	
	1650z	20/04 [924/00] Out 1653z S4	Maic	FRI
14575kHz	0745z	07/03 [331/00] Out 0748z	Ed Smith	TUE
	0745z	21/03 [333/00]	RNGB	TUE
	0745z	28/03 [338/00]	Brixmis	TUE
	0745z	30/03 [335/00]	RNGB	THU
	0745z	13/04 [333/00]	Ary	THU
	0745z	18/04 [337/00]	RNGB	TUE
14769kHz	07107	23/03 [495/00] Out 0713z KiwiSDR Italy	Ed Smith	THU
		•		
	0710z	13/04 [496/00]	Ary	THU
	0710z	15/04 [495/00] Out 0713z S2	Malc	SAT
	0710z	20/04 [491/00]	Ary	THU
			,	
150151-11-	0520-	09/02 12/40/001	A T. J. C ; d.	WED
15915kHz		08/03 [340/00]	Ary, Ed Smith	
	0530z	10/03 [344/00]	Ary	FRI
20286kHz	1225z	03/03 [522/00] Out 1228z	Ed Smith	FRI
	1225z	20/03 [527/00] Fair remote tuner Grenoble	RNGB	MON
	1225z	10/04 [528/00] Out 1228z S3	Malc	MON
	1225z	28/04 [522/00] Out 1228z KiwiSDR Austria.	Ed Smith	FRI
E11a log N	Mar/April			
50 / /1-TT_	1720~	08/03 [402/35 83436 01573 25499 79709 86949 95223 7313423257 14386]	Aerz	WED
5844kHz		,	Ary	WED
	1730z	11/03 [402/35 83436etc] Repeat of Wednesday	Malc	SAT
	1730z	19/04 [408/40 2770468421] Out 1741z S9	Malc	WED
	1730z	22/04 [408/40 27704etc.] Repeat of Wednesday	Malc	SAT
6397kHz	16052	21/02 [229/22 15594 65651] Out 1614a S0	Malc	TUE
		21/03 [238/32 15584		
	1605z	18/04 [236/32 2878798884] Out 1614z S7	Malc	TUE
	1605z	23/04 [236/32 28787etc] Repeat of Tuesday, S8	Malc	SUN
6804kHz	0820z	03/04 [431/32 2394836045] Out 0823z S4	Malc	MON
	0820z	06/04 [431/32 23948 67612 16782 64580 22793 77145 2665985136 36045] Repeat of Monday		THU
	00202	00/04 [431/32 23948 0/012 10/02 04300 22/93 //143 2003903130 30043] Repeat of Moliday	KNOD, Ed Sillidi	1110
6807kHz	0930z	26/04 [273/35 44779 73524 73702 04364 00337 04357 8491249309 08091] Out 0940z S3	Malc	WED
7317kHz	0530z	23/03 [646/35 16411 43516 11394 21659 53181 59960 23927 0181694478 94781] Out 0540z	Ed Smith	THU
	0530z	06/04 [641/35 96189 56117 12114 86273 78418 07707 41695 45008 29194 06161] Out 0540z		THU
	0330Z	00/04 [041/33 90109 30117 12114 002/3 70418 07/07 41093 43008 29194 00101] Out 03402	Eu Sillui	Inu
7377kHz	2000z	28/04 [579/35 06234 34316 86058 40466 85600 78858 82811 2216207643 88530]	Gary H	FRI
7727kHz	1205z	25/04 [465/31 10266 48718 15400 50185 52893 86219 2431707245 99863]	Ary, Malc	TUE
, , 2 , KIL			•	
	1205z	26/04 [465/31 10266etc] Repeat of Tuesday	Malc	WED
7840kHz	1000z	28/03 [300/28 92300 26885 96811 57622 83590 24281 92916 4913816117 43875] Out 1008z	Ed Smith, Malc	TUE
	1000z	31/03 [300/28 92300etc] Repeat of Tuesday	RNGB	FRI

	1000z 1000z	18/04 [305/25 04083 62361 40271 44071 16823 00788 580591572782182] Out 1008z S2 21/04 [305/25 04083etc] repeat of Tuesday	RNGB Malc	TUE FRI
7850kHz	0315z	09/03 [255/30 76992 80894 98416 29823 6494862293 79235] Out 0324z KiwiSDR Austria.	Ed Smith	THU
8102kHz	1045z 1045z	07/03 [579/31 69089 19880 92460 52056 21009 13062 5345963984 26073] Out 1054z 25/04 [579/35 0623488530] Out 1054z S2	Ed Smith, Brixmis Malc	TUE TUE
8186kHz	0930z	07/03 I.P. [53068 75902 63163 38343 77503 85594 75693 67014 64702 65523] Out 0931z	Ed Smith	MON
	2005z	11/03 [368/37 0505485909] Out 2015z S9-S2	Malc	SAT
	2005z	12/03 [368/37etc] repeat of Saturday	Malc	SUN
	2005z	08/04 [367/33 4157668406] Out 2014z S9	Malc	SAT
	2005z	09/04 [367/33 41576etc] Repeat of Saturday	Malc	SUN
8530kHz	1910z	07/04 [613/38 2067195911] Out 1920z S9	Malc	FRI
8803kHz	0930z	08/03 [275/39 00681 05611 06798 73479 13884 98503 40580 43915 76328] Out 0940z	Ed Smith	WED
9200kHz	0806z	30/04 [313/34 4212265949] Out 0815z S3	Malc	SUN
9399kHz	0900z	20/03 [538/38 3755736767] Out 0910z S4	Malc	MON
	0900z	22/03 [538/38 37557 57984 62195 63160 83568 24919 1136567506 26767] Out 0910z S3	RNGB, Malc	WED
	0900z	03/04 [530/37 0194501621] Out 0910z S2	Malc	MON
	0900z	05/04 [530/37 01945etc] Repeat of Monday	Malc	WED
9443kHz	12057	28/03 [466/40 92384 85974 89227 28266 90644 4590837810 32805] Out 1216z Good	RNGB, Malc	TUE
)	1205z	29/03 [466/40 92384etc] Repeat of Tuesday	Malc	WED
9963kHz	07107	28/03 [632/38 59851 22429 70189 00724 52346 56024 2461283939 18518] Out 0720z	Ary, Malc	TUE
	0710z	31/03 [632/38 59851etc] Repeat of Tuesday	Malc	FRI
	0710z	18/04 [636/34 69190 37902 16466 73114 19257 30901 61520 1295110129 54391]	RNGB	TUE
	0710z	21/04 [636/34 69190etc] Repeat of Tuesday	RNGB	FRI
10125kHz	08207	06/03 [436/36 93143 36577 78798 49830 29660 31431 1406294268 64478]	Ary, Brixmis, Malc	MON
101201111	0820z	09/03 [436/36 93143etc] Repeat of Monday	Ary	THU
10213kHz	1705z	08/03 [390/38 97998 68925 36928 16836 11091 20081 8807700926 06404]	Ary	WED
	1705z	11/03 [390/38 97998etc] Repeat of Wednesday	Malc	SAT
	0745z	13/03 [269/39 8860988207] Out 0748z S5	Malc	MON
	0745z	17/04 268/35 14011 28334 31768 93380 17194 7625386874 06583] Only 33 groups sent!	Ary	MON
	1705z	26/04 [392/37 2738676711] Out 1715z S9	Malc	WED
10302kHz	1300z	23/03 [589/35 98890 85459 34036 44715 98832 74726 3757351810 57019] Out 1310z S9	RNGB, Malc	THU
	1300z	20/04 [588/37 8000735107] Out 1310z S3	Malc	THU
	1300z	22/04 [588/37 80007 40240 93991 47488 15646 23613 8078103770 35107] Out 1310z	Ed Smith	SAT
10330kHz	1530z	16/03 [269/39 8860988207] Out 1540z S9	Malc	THU
	1530z	20/04 [268/35 5671514663] Out 1540z S4	Malc	THU
10448kHz	1625z	15/03 [975/33 0391056367] Out 1635z S4	Malc	WED
	1625z	26/04 [978/35 8442034409] Out 1635z S4	Malc	WED
10620kHz	10257	30/03 [521/36 2720018826] Out 1935z S2	Malc	THU
10020K11Z	1925z	25/04 [522/34 0785267814] Out 1934z S8	Malc	TUE
10800kHz	06457	23/03 [510/35 4393494577] Out 0655z S2	Malc	THU
	0645z	04/04 [512/40 55792 54215 84719 23159 03224 28991 0416177361 09446] Out 0656z	Ed Smith	TUE
	0645z	06/04 [512/40 55792etc] Repeat of Tuesday	Malc	THU
11450kHz	08057	15/03 [319/32 95342 38373 52736 27536 54060 65732 7636957177 00813]	Ary, Malc	WED
	0805z	19/03 [319/32 05342etc] Repeat of Wednesday	Malc	SUN
12202kHz	0600z	20/03 [183/38 35563 00385 87898 02476 95049 91341 7233061599 59282]	Ary	MON
12530kHz	08207	11/04 [131/34 98289 46065 41453 18502 38070 24375 28594 1404913239 80139	RNGB	TUE
12330KHZ	0820z	12/04 [131/34 98289etc] Repeat of Tuesday	RNGB	WED
13046kHz		18/03 [914/35 10566 87630 29380 00225 0263496180]	Brixmis	SAT
	1345z	18/04 [912/39 2096587961] Out 1356z S3	Malc	TUE
13470kHz	1745z	17/04 [248/31 0619589858] Out 1754z S2 QRM	Malc	MON

13873kHz 1650z	09/04 [924/39 61596	635934] Out 1700z S4 QRM	Malc		SUN
14575kHz 0745z 0745z	•	1 93312 10178 40947 89083 70249 6119950584 93329] 0 77011 98101 63530 09964etc] Very weak	Ary RNGB		TUE TUE
14769kHz 0710z	08/04 [497/32 11476	614185] Out 0719z S5	Malc		SAT
15915kHz 0545z	15/03 [340/31 45462	2 56964 77708 56131 88867 52852 0376562648 61083]	Ary		WED
20286kHz 1225z	17/03 [522/00] Wea 07/04 [520/30 21034	k Remote French Alps 4 09044 96741 67884 2223603443 05982] Out 1235z KiwiSDR Austria.	RNGB Ed Smith		FRI FRI
E17z					
Thursday					
March 2017					
0800z 14260k	Hz 0810z	12930kHz			
02/03	NRH				
09/03	674 230 5 34031 334	430 37536 34106 29698 230 5 00000		Weak	
16/03	674 831 5 83605 374	436 33134 35868 38013 831 5 00000		Weak	
30/03	674 00000			Weak	
April 2017					
0800z 14260k	Hz 0810z	12930kHz			
06/04	674 980 5 88620 586	069 61732 47537 54470 980 5 00000			
13/04	674 980 5 88620 586	069 61732 47537 54470 980 5 00000			
20/04	674 908 5 28548 590	014 32424 75078 97520 908 5 00000			
27/04	674 902 5 28584 59	014 32424 75078 97520 902 5 00000		Weak	
E25					
E25 March 2107					
	5/03 0927z AM			E.SMITH	MON
March 2107 6140kHz 0918z 06 111 MESSAGE! 9975 7250 2001 58 REBEAT!. 9975 7250 2001 58	5/03 0927z AM 808 9279 5930 8756 376 808 9279 5930 8756 376 GE. END OF TRANSM	64 5952 7250		E.SMITH	MON
March 2107 6140kHz 0918z 06 111 MESSAGE! 9975 7250 2001 58 REBEAT!. 9975 7250 2001 58 END OF MESSAGE! 2002 1020 7190 72 8288 8120 2195 28 REBEAT! 2002 1020 7190 72 8288 8120 2195 28	808 9279 5930 8756 376 808 9279 5930 8756 376	64 5952 7250 ISSION. 63 0422 6720 07 4226 7190 63 0422 6720 07 4226 7190		E.SMITH	MON
March 2107 6140kHz 0918z 06 111 MESSAGE! 9975 7250 2001 58 REBEAT!. 9975 7250 2001 58 END OF MESSAGE! 2002 1020 7190 72 8288 8120 2195 28 REBEAT! 2002 1020 7190 72 8288 8120 2195 28 END OF MESSAG Courtesy Edd 6140kHz 1107z 08 169 MESSAGE! 4044 7931 4564 26 REBEAT! 4044 7931 4564 26	808 9279 5930 8756 376 808 9279 5930 8756 376 GE. END OF TRANSM. 254 1929 2596 1892 196 888 8388 8707 2928 710 254 1929 2596 1892 196 888 8388 8707 2928 710 GE. END OF TRANSM.	54 5952 7250 ISSION. 53 0422 6720 07 4226 7190 53 0422 6720 07 4226 7190 ISSION		E.SMITH	MON
March 2107 6140kHz 0918z 06 111 MESSAGE! 9975 7250 2001 58 REBEAT!. 9975 7250 2001 58 END OF MESSAGE! 2002 1020 7190 72 8288 8120 2195 28 REBEAT! 2002 1020 7190 72 8288 8120 2195 28 END OF MESSAGE Courtesy Edd 6140kHz 1107z 08 169 MESSAGE! 4044 7931 4564 26 REBEAT! 4044 7931 4564 26 END OF MESSAGE	808 9279 5930 8756 376 808 9279 5930 8756 376 8E. END OF TRANSM. 254 1929 2596 1892 196 888 8388 8707 2928 710 254 1929 2596 1892 196 888 8388 8707 2928 710 GE. END OF TRANSM. 8/03 682 2756 6436 8145 682 2756 6436 8145 GE. END OF TRANSM. 8/03 [Enta Omri Intro – 2	54 5952 7250 ISSION. 53 0422 6720 07 4226 7190 53 0422 6720 07 4226 7190 ISSION			
March 2107 6140kHz 0918z 06 111 MESSAGE! 9975 7250 2001 58 REBEAT!. 9975 7250 2001 58 END OF MESSAGE! 2002 1020 7190 72 8288 8120 2195 28 REBEAT! 2002 1020 7190 72 8288 8120 2195 28 END OF MESSAG Courtesy Edd 6140kHz 1107z 08 169 MESSAGE! 4044 7931 4564 26 REBEAT! 4044 7931 4564 26 REBEAT! 4044 7931 4564 26 END OF MESSAG 6140kHz 1242z 08 Missed Rest of me: 6140kHz 0843z 09	808 9279 5930 8756 376 808 9279 5930 8756 376 8E. END OF TRANSM. 254 1929 2596 1892 196 888 8388 8707 2928 710 254 1929 2596 1892 196 888 8388 8707 2928 710 GE. END OF TRANSM. 8/03 682 2756 6436 8145 682 2756 6436 8145 GE. END OF TRANSM. 8/03 [Enta Omri Intro – 2	54 5952 7250 ISSION. 53 0422 6720 07 4226 7190 53 0422 6720 07 4226 7190 ISSION		E.SMITH	WED
March 2107 6140kHz 0918z 06 111 MESSAGE! 9975 7250 2001 58 REBEAT!. 9975 7250 2001 58 END OF MESSAGE! 2002 1020 7190 72 8288 8120 2195 28 REBEAT! 2002 1020 7190 72 8288 8120 2195 28 END OF MESSAG Courtesy Edd 6140kHz 1107z 08 169 MESSAGE! 4044 7931 4564 26 REBEAT! 4044 7931 4564 26 END OF MESSAG 6140kHz 1242z 08 Missed Rest of me: 6140kHz 0843z 09 4044 7931 4564 26 REBEAT! 4044 7931 4564 26 REBEAT!	808 9279 5930 8756 376 808 9279 5930 8756 376 GE. END OF TRANSM 254 1929 2596 1892 196 888 8388 8707 2928 710 254 1929 2596 1892 196 888 8388 8707 2928 710 GE. END OF TRANSM 6703 682 2756 6436 8145 GE. END OF TRANSM 6703 [Enta Omri Intro – 2 888 8389.	ISSION. ISSION. ISSION. ISSION. ISSION. ISSION] 1113z AM 250] Abruptly cut off.1243z* AM		E.SMITH	WED

April 2017

6140kHz 0819z 11/04 [111] 0820z AM E.SMITH TUE. Ariel, Israel SDR.

6140kHz 0900z 11/04 [111 MESSAGE! 1213 1310 1011 0143 0105 5534 5842 9542 3662 6762 1310 REBEAT 1213 1310 1011 0143 0105 5534 5842 9542 3662 6762 1310 END OF MESSAGE. END OF TRANSMISSION] 0904z AM E.SMITH TUE. Ariel, Israel SDR.

6140kHz 0915z 11/04 [950 MESSAGE! 1001 7543 6410 8367 9259 6143 9682 2936 9561 6410 REBEAT 1001 7543 6410 8367 9259 6143 9682 2936 9561 6410 END OF MESSAGE. END OF TRANSMISSION] 0919z Windows shut off sound. AM E.SMITH TUE. Ariel, Israel SDR.

6140kHz 0945z 12/04 [350 MESSAGE! 6273 6530 1001 2350 5460 6551 0703 1209 9876 6530 REBEAT 6273 6530 1001 2350 5460 6551 0703 1209 9876 6530 END OF MESSAGE. END OF TRANSMISSION] 0949z AM E.SMITH WED. Ariel, Israel SDR.

G06

We start with PoSW's analytical logs:

Second + Fourth Thursdays in the Month, 1830 UTC - minus a minute or two - Schedule:-

23-Mar-17:- 1828:30s UTC, 5,921 kHz, expected the frequency for March to be 5,934 but there was a very strong broadcast station on 5,935 which would have made copy of G06 extremely difficult; perhaps this had been noticed by G06's handlers. S9 carrier noted on 5,921 just after 1800Z, confirmed as warming up for G06 when there was a minute or twos worth of "111 111 111 00000". Looked as if G06 had chosen a clear frequency but at around 1820Z a strong broadcaster fired up on 5,925, close enough for the side-band splash to be a slight nuisance – but no more than that. Call "579", DK/GC "149 149 52 52".

13-Apr-17:- 1829:15s UTC, 5,934 kHz - no sign of the broadcast station on 5,935, seasonal move to somewhere else, no doubt, "579" and "149 149 52 52", well over S9.

27-Apr-17:- 1830 UTC, just after, a late start, 5,934 kHz, "579" and "149 149 52 52", as always. Over S9 on a clear frequency. There was a massive S9 plus many decibels carrier

on 5,935 kHz when tuned in at around 1825 UTC, presumably a broadcast station which had every right to be there doing a TX test, but this obligingly went off just before the half hour; if it had stayed on it would have made copy of G06 difficult. Ended with the usual "149 149 5252 00000" around 1843 UTC, the "ding-dang-dong" computer sound heard about 30 seconds afterwards followed by hum on the carrier until someone pulled the big switch just after 1854 UTC.

Friday 1930 UTC, again usually starts well before, Schedule Following Second + Fourth Thursdays in the Month:-

10-Mar-17:- 1929 and 20s UTC, approx, 5,442 kHz, call "947", DK/GC "149 149 52 52",

no change in the message, same 5Fs have been used by G06 and E06 for several months,

Ended 1942 UTC, as always with both the German and English versions when the group count is spoken at the end of the transmission there is no gap between the two readings so the finishing routine is heard as, "149 149 5252 00000".

24-Mar-17:- 1930 and 30s UTC - started a bit late for a change!, 5,442 kHz, "947" and "149 149 52 52", over S9.

14-Apr-17:- 1929 UTC, 5,442 kHz. A very strong "XJT" has taken up residence on this frequency in April, the G06 YL heard underneath with some difficulty, "947" and "149 149 52 52".

28-Apr-17:- 1930:15s UTC, another late start, slightly, 5,446 kHz, has moved a little bit HF presumably to get clear of the "XJT" churning away on 5,442, still there pushing the 'S' meter hard over. Still close enough to be a problem with the receiver in wide AM mode, but completely removed in USB. "947" and "149 149 52 52", over S9.

First + Second Mondays in the Month 1700 + 1800 UTC - minus one or more minutes - Schedule:-

6-Mar-17:- 1700 UTC, 4,784 kHz, found in progress just after the hour, calling "691" for a full message, DK/GC "241 241 125 125", 1759:30s UTC, 5,460 kHz, second sending, S9 signal with the usual slow delivery.

13-Mar-17:- 1659 UTC, 4,784 kHz, "691" and "241 241 125 125" again, S7 competing with local RF interference from consumer electronics. 1758:40s UTC, 5,460 kHz, second sending, over S9.

3-Apr-17:- 1700 UTC, 4,784 kHz, in progress when tuned in a few seconds before the hour,

"691 691 691 00000", weak signal down in local QRM.

1759 UTC, 5,460 kHz, second sending, much better copy, S9 with QSB.

Other's logs

Monday

0758z

March 2017

6810kHz

06/03	329 00000	Weak
20/03	329 00000	Weak

1700z 4784kHz 1800z 5460kHz

06/03 691 241 125 06046 ... 75302 241 125 00000

[691] 241 125

06046 35697 17891 74634 48808 89926 90877 29617 15635 42283 04692 38597 05041 32635 11358 48123 16371 84356 24748 44665 61551 39669 12365 16446 01972 81900 06594 25335 42795 96196

61531 39069 12073 16446 0172 81900 0394 23532 4273 96139 66694 01087 11985 97689 04420 35472 04409 03189 48717 92804 58765 39428 64042 56920 19507 37600 35808 28464 96825 02924 95860 11279 43712 10470 46741 41742 23814 46172 93857 95674 51481 01751 27955 45773 51384 31728 13587 89018 78776 18020

32007 33247 12080 73916 59946 19267 89941 95205 95037 31535 14405 44819 30852 29037 01803 08768 01382 42707 99220 11563

 $14638\ 31424\ 47239\ 35680\ 77361\ 14300\ 73684\ 26666\ 89885\ 89588\\ 18574\ 90915\ 48834\ 47539\ 41422\ 82371\ 81305\ 99201\ 17478\ 25054$

 $42232\ 25784\ 53767\ 63166\ 69610\ 07182\ 82831\ 88377\ 99315\ 16141\\ 31665\ 01710\ 42927\ 85605\ 75302$

241 125 00000 Courtesy Ary

13/03 691 241 125 06046 ... 75302 241 125 00000 Strong

April 2017

0759z 6810kHz

329 00000 03/04 Weak

17/04 329 00000 Weak

4784kHz 5460kHz 1659z 1759z

691 00000 Weak [1659z] 03/04 03/04 692 00000 Strong [1759z]

691 00000 Weak 03/04

Wednesday

March 2017

1200z 5755kHz 1300z 4967kHz

08/03 691 241 125 06046 ... 75302 241 125 00000

691 241 125 06046 35697 17891 74634 48808 89926 90877 29617 15635 42283 $04692\ 38597\ 05041\ 32635\ 11358\ 48123\ 16371\ 84356\ 24748\ 44665$ $61551\ 39669\ 12365\ 16446\ 01972\ 81900\ 06594\ 25335\ 42795\ 96196$ $\begin{array}{c} 06694\ 01087\ 11985\ 97689\ 04420\ 35472\ 04409\ 03189\ 48717\ 92804\\ 58765\ 39428\ 64042\ 56920\ 19507\ 37600\ 35808\ 28464\ 96825\ 02924 \end{array}$ 95860 11279 43712 10470 46741 41742 23814 46172 93857 95674 51481 01751 27955 45773 51384 31728 13587 89018 78776 18020 32007 33247 12080 73916 59946 19267 89941 95205 95037 31535 14405 44819 30852 29037 01803 08768 01382 42707 99220 11563 14638 31424 47239 35680 77361 14300 73684 26666 89885 89588

18574 90915 48834 47539 41422 82371 81305 99201 17478 25054 42232 25784 53767 63166 69610 07182 82831 88377 99315 16141

31665 01710 42927 85605 75302 241 125 00000

Courtesy Ary

G06. 5755kHz 1145z 15/03 I.P. [111 00000] 1147z USB E.SMITH WED Silec, Poland SDR.

Stop/Start Testing before Message.

Carrier up 1237z. Stop/Start Testing before Message [4967kHz]

Message Repeat of 1200z 08/03.

15/03 691 241 125 06046 ... 75302 00000

April 2017

1159z 5755kHz 1259z 4967kHz

05/04 691 000000 [1259z NRH] Weak 12/04 691 00000 [1258z NRH] Weak

Thursday

March 2017

1259z 4958kHz

23/02 329 00000

1830z 5934kHz

23/03 579 149 52 12265 ... 95732 149 52 00000

27/04 579 149 52 12265 ... 95732 14905200000 Last grps no separation, windows sound 22s after end of message Strong

579 149 52

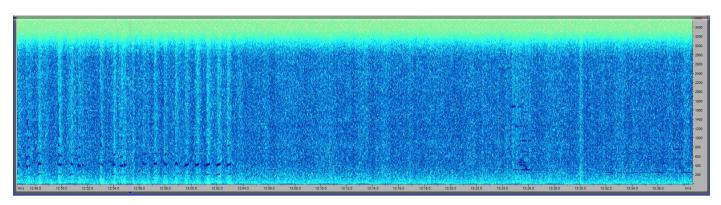
379 149 32 12265 10965 47839 38654 84677 93453 72217 84393 04673 97564 01824 75643 84221 95647 92112 94543 76577 43435 47322 84232 95674 87344 57438 45763 49325 57438 92190 96785 21244 05674 07165 76354 83645 21234 97564 82133 07564 83234 75312 71211 05674 65374 67321 94884 23483 82521 41212 57333 85331 53234

05124 95732

149 149525200000 (no pause between last numbers, ending with winXP sound)

Courtesy Gert

See spectral plot below:



Note last numerals run in together and Windows sound as heard on 27/04 bt Gert and PLdn

Friday

10307

March 2017

5//2kHz

1930Z	5442KHZ		
10/03		947 149 52 12265 95732 149 52 00000	Very strong
24/03		947 149 52 1226595732 149 52 00000	Strong
April 2017	7		
14/04		947 149 52 12265 95730 149 52 00000	Weak
28/04		947 149 52 12265 95732 149 52 00000	Very strong

S06 and S06s

Daily Mon- Fri

S06 log March 2017

0400z

Tuesdays	1000/1030z	9463/7353khz	1230/1300z	9377/8077kHz	
14/03	'480' 126 40 34415 80223 ·	55958 41217 65183 29850	11428 29156 590	73 50456 13597 38965 53	912 84941 38489 09759 70477 07936 70893 69464
	49623 44813	70855 95057 73628 13974	60178 05871 957	713 54413 29604 26043 90	0696 91313 23879 33264 70090 05259 79739 54765
	000001 1011z		Tks	Ed Smith	

No reports

28/03 '480' 912 43 07833 86229 49643 26658 00630 24239 66754 71222 25406 68514 42102 13665 14101 86553 84810 03156 37918 79230 59749 32740 72604 93390 46472 76509 47464 91755 34140 31170 87099 87476 74804 95315 14409 02521 99044 77254 23497 29008 09380 93249

00790 29330 09572 00000] 1012z Tks Ed Smith

15721kHz

Thursdays (Repeats following day) 0830z 19415kHz 0930z 16268kHz

23/03 '842' 195 36 48527 16580 79885 84784 42003 70925 50807 57145 01436 00670 84596 62292 62375 52387 33254 30814 05671 44841 38215 83046

 $73789\ 69359\ 26021\ 76182\ 50141\ 05164\ 78698\ 24924\ 06063\ 73078\ 96035\ 81602\ 45174\ 76042\ 91936\ 86707\ 195\ 36\ 00000$

30/03 '842' 570 36 ?? too weak to copy

Fridays (1st & 3rd) 2000z 9237khz 2100z 6774kHz (frequencies may vary slightly)

17/03 '514' 00000

Saturdays (1st/3rd) 2000z 4538kHz 2100z 3894kHz (frequencies may vary slightly)

18/03 '913' 00000

S06c

07/03 7823kHz 1016z calling '11625' ended 1019z Ed Smith TUE 22/03 8171kHz 0950z calling '11625' ended 1000z Ed Smith WED

Note: this ID last heard during August and December 2010. (nice catch Ed)

Unscheduled

14/03 1500/1600z 14913/10387 kHz

'387' 251 47

 $29701\ 39029\ 23956\ 05124\ 97417\ 57839\ 40297\ 30439\ 68767\ 73216\ 08596\ 72651\ 61284\ 08173\ 54194\ 14286\ 45918\ 65973\ 38638\ 87849$ $65195\ 45370\ 51925\ 14281\ 65423\ 46742\ 23096\ 41546\ 64805\ 94304\ 36561\ 90314\ 58097\ 62356\ 71323\ 94387\ 25201\ 03437\ 73979\ 80857$

05321 35762 98646 31528 48451 09682 35323

15/03 1425z 12176 kHz

'583' 127 53

 $33083\ 58825\ 86245\ 73780\ 56165\ 79485\ 40354\ 51819\ 34835\ 28045\ 82785\ 48135\ 41079\ 83865\ 31979\ 96847\ 51617\ 47151\ 06028\ 95343\ 86032\ 36537\ 97892\ 68737\ 39859\ 23563\ 45269\ 08345\ 13531\ 51639\ 54130\ 48014\ 21086\ 94372\ 40537\ 29473\ 53187\ 30715\ 47065\ 68971$

 $42347\ 12393\ 53218\ 57509\ 87261\ 04348\ 70409\ 50791\ 27427\ 50818\ 76537\ 55634\ 12867$

15/03 **1515/1615z 12053/7887** kHz

'409' 681 52

 $17032\ 84047\ 35191\ 17482\ 21837\ 98683\ 31261\ 36261\ 60628\ 38728\ 41627\ 54969\ 84959\ 89614\ 82721\ 24186\ 76069\ 18539\ 76305\ 05108$ $10898\ 32654\ 27438\ 31759\ 83678\ 42165\ 90468\ 43595\ 53530\ 13741\ 56921\ 45192\ 71424\ 01345\ 24281\ 80453\ 67927\ 59080\ 12402\ 34989$ $93737\ 71279\ 76525\ 08253\ 08368\ 36987\ 45857\ 15391\ 06370\ 92704\ 97865\ 35627$

S06s March log:

ID 352 was heard sending nulls on 10855/11160kHz at 0830/0840 on FRIDAY 31st. Part of a 6 x 10 minute time slot test? It was not heard the following Friday and neither on the first Tuesday in April at 0800/0810z (normal schedule).

Monday			
6th/13th	0830/0840z	9220/8270	'371' 950 6 40909 39394 35083 42571 32785 37331
20th/27th			'371' 290 5 90406 36113 31107 37806 37137
6th/13th	0900/0910z	14580/13165	'872' 450 6 41332 86067 25487 44036 36806 37188
20th/27th			'872' 930 5 32862 46732 38068 42747 34680
6th/13th	1200/1210z	9145/11460	'831' 250 6 35401 34072 83030 32030 24005 36870
20th/27th			'831' 925 6 34490 40456 88731 87386 31101 37931
Tuesday			
7th/14th	0600/0610z	15855/16485	'438' No reports
21st/28th			'438' 520 6 44365 43025 39283 33578 47568 39971
7th/14th	0700/0715z	5760/6930	'374' 850 6 38367 33406 42366 37868 37250 39967
21st			'374' 285 6 32391 38632 35044 41354 31663 41731
28th			'374' 00000
7th/14th	0730/0740z	7425/11560	'427' 983 5 36184 36194 37650 43773 46793
21st/28th			'427' 981 5 07931 98755 84636 45752 64655
7th/14th	0800/0810z	11635/10420	'352' 481 6 35342 32537 42983 35751 35375 57176
21st/28th			'352' 801 6 58202 44206 29464 25473 02883 33445
7th/14th	1000/1010z	6410/7340	'893' 541 6 43337 89152 46544 36478 31315 36184
21st/28th			'893' 451 6 69425 38167 05424 76458 59421 21677
7th/14th	1100/1110z	6190/7230	'754' 983 6 32679 93099 36570 39628 40224 41899
21st/28th			'754' 290 6 15542 26059 49385 12444 38625 89531
7th/14th	1500/1510	6464/7242	'537' 982 6 83404 43347 36198 30083 84583 30085
21st/28th			'537' 821 6 98058 55693 07628 61154 97511 48642
Wednesday			
1st/8th	0820/0830z	8630/9255	'471' 905 6 38034 39477 36367 27444 22200 54762
15th/22nd			'471' 230 5 37184 36129 33983 32211 85246
1st/8th	0830/0840z	11530/12140	'745' 913 6 34888 33661 27167 27671 42391 30642
15th/22nd			'745' 230 6 36880 33582 44060 33600 47061 46308
1st/8th	0830/0840z	9082/9952	'464' 823 5 34031 33430 37536 34096 39698
15th/22nd			'464' 231 5 38352 37367 36143 40529 30535
1st/8th	1000/1010z	13365/14505	'729' 863 5 47755 42352 34458 46934 35790

Thursday			
2nd/9th (E17z)	0800/0810z	14260/12930	'674' No reports
16th/23rd			674, 831 5 83605 37436 33134 31868 38013
2nd/9th	0930/0940z	9081/10514	'314' 859 6 38034 39477 33367 37555 33300 35454
16th/23rd			'314' 580 6 46062 68672 97478 39685 30485 96632
2nd/9th	1200/1210z	12415/14212	'425' 836 7 82333 36958 39423 48076 33739 33384 33898
16th/23rd			'425' 861 7 33796 13577 74526 46647 79302 53516 25616
Friday			
31st	0830/0840z	10855/11160	'352' 00000
3rd/10th	0900/0910z	5744/6524	624' 501 7 33136 36133 47101 33046 40432 33224 95986
17th/24th			624' 915 7 99141 31869 96065 61652 61535 20397 74554
3rd/10th	0930/0940z	12140/13515	'516' 294 7 31900 38466 36534 32840 48436 81480 30762
17th/24th			'516' 273 8 10996 38892 06674 12532 75901 74405 73547 61732
Saturday			
4th	0800/0810z	10350/8520	'254' 837 6 49294 38064 31724 37324 39316 46660
401	0800/08102	10550/8520	234 837 0 49294 38004 31724 37324 39310 40000
Sunday			
5th	0630/0640		'524' No reports

S06 log April 2017

Daily Mon- Fri 0400z 15721kHz No reports

(Repeats following day)

Tuesdays	1000/1030z	9463/7353khz	1230/1300z	12129/10846kHz	
04/04					9442 67819 76785 19672 16034 48159 48597 1883 76448 05336 74694 70217 45945 94752
11/04		99 29559 17506 13724			1830 16588 53845 27434 80054 52460 60498 2554 78683 21360 93558 03133 92306 47712

19078kHz

0930z

16318kHz

20/04 '842' 971 40 68885 49844 67893 04796 49568 34613 90210 67242 08591 26091 41433 52592 81830 26200 18849 60644 10048 22601 55071 01013 49106 08558 61117 27306 34594 74776 29364 70610 43022 84156 51039 45740 16793 65386 27965 28670 45128 86329 83215 28599 971 40 00000

27/04 '842' 305 41 38690 74414 30329 74227 29630 82614 34444 88409 58726 69693 31237 46452 54752 56145 81349 17444 67627 88916 81215 67034 17956 07812 88817 54933 28289 20585 92891 49703 40820 10155 42782 46766 51195 22397 81123 00578 13117 07934 46544 06899 93444 305 41 00000

Fridays 07/04 21/04	(1st & 3rd) '514' 00000 '514' 00000	1900z	9237khz	2000z	6774kHz	(frequencies may vary slightly)
Saturday 01/04 15/04	'913' 00000 '913' 00000	1900z	4538kHz	2000z	3894kHz	(frequencies may vary slightly)
S06c 08/04 18/04 18/04 19/04 19/04 26/04	1103z (IP) 1005z 1015z 0950z 1005z 1133z (IP)	9933kHz 6123/8171kHz 7823kHz 6123/8171kHz 6123/8171kHz 6981kHz	'11212' ended 1104 '11625' ended 1009 '11625' ended 1019 '11625' ended 0954 '11625' ended 1009 '11021' ended 1134	z z z z	SAT TUE TUE WED WED WED	Ed Smith Ed Smith Ed Smith Ed Smith Ed Smith Ed Smith

0830z

Note: Tuesday 25/04 I observed two S06c Freq carriers up at 0932z - 6920/8171kHz I.P. They were both switched off at 0940z and during that time no Message was sent.

S06s

ID 471 was found sending nulls on the second Tuesday of the month. 0820z not found; 0830z **67870kHz**; 0840z **7025kHz**; 0850z not found; 0900z **8060kHz** and 0910z **9140kHz**. It was absent the following day when expected per schedule. Repeated the first message the following week back on schedule. Presume it will send a null on the 4th week?

ID 624 testing on Weds 19th on 6855kHz at 0930z and on 6935kHz at 0940z with null sendings.

Probably also at 0900/10/20 and 0950z on other frequencies. Sent message as scheduled on the Friday of same week. Thanks to Ed Smith

April log: Monday			
3rd/10th	0830/0840z	9220/8270	'371' 458 6 95051 13808 71909 83981 24035 48115
17th/24th	0030/0040Z)220/02/0	'371' 852 6 37947 39747 31323 31829 47694 45680
3rd/10th	0900/0910z	14580/13165	'872' 491 5 88569 89617 25757 77159 95225
17th/24th	0,00,0,102	11300/13103	'872' 453 6 32392 81731 32313 36382 34917 36823
3rd/10th	1200/1210z	9145/11460	'831' 257 6 21676 53672 11834 81022 36903 41412
17th/24th	1200/12102	7143/11400	'831' 256 7 46062 68672 97478 39685 30485 66932 76321
1711/21111			031 230 / 10002 000/2 // 1/0 3/003 30 103 00/32 / 0321
Tuesday			
4th/11th	0600/0610z	15855/16485	'438' 209 5 26634 14690 95590 60386 03009
18th/25th			·438' 279 5 88620 58069 61732 74537 57440
4th/11th	0700/0715z	5760/6930	'374' 925 6 26634 14690 95590 60386 03009 81413
18th/25th			'374' 826 5 11171 64385 82707 06124 88290
4th/11th	0730/0740z	7425/11560	'427' 906 5 95041 10544 98003 68909 45279
18th/25th			'427' 861 5 40614 77249 40678 17977 42998
11th/18th	0800/0810z	11635/10420	'352' 961 7 34072 83030 32030 34002 36870 39553 35530
25th			'352' 864 7 88146 57865 98835 46186 16945 80744 86200
4th/11th	1000/1010z	6410/7340	'893' 245 6 92060 11749 70552 56936 57989 88569
18th/25th			'893' 406 5 39534 17228 15636 47891 23247
4th/11th	1100/1110z	6190/7230	[,] 754, 920 6 30485 96632 52537 53317 06675 41736
18th/25th			[,] 754, 293 6 88620 58069 61732 74537 57440 10597
4th/11th	1500/1510	6464/7242	'537' 284 6 13808 71908 83981 24035 48115 61165
18th/25th			'537' 418 6 33796 13577 74527 47746 89302 69901
Wednesday			
5th/19th	0820/0830z	8630/9255	'471' 560 8 52401 63919 92699 14600 74248 48754 65125 41879
26th			'471' 00000
5th/12th	0830/0840z	11530/12140	'745' 216 8 39783 35468 35208 35868 49131 45326 30468 39686
19th/26th			⁴ 745 ² 238 6 15009 34140 78386 91497 82963 24162
5th/12th	0830/0840z	9082/9952	'464' 952 7 46062 68672 97478 39685 30485 96632 52537
19th/26th			'464' 879 5 17228 15636 47891 23247 17099
5th/12th	1000/1010z	13365/14505	[,] 729 [,] 416 5 39382 45739 49645 32975 45356
19th/26th			'729' 861 5 24036 48115 24151 51802 23807
Th			
Thursday 6th/13th(E17z)	0800/0810z	14260/12930	'674' 980 5 88620 58069 61732 47537 54470
20th/27th	0800/0810Z	14200/12930	674 988 5 28548 59014 32424 75078 97520
6th/13th	0930/0940z	9081/10514	'314' 587 6 62916 42017 62813 83442 41035 63027
20th/27th	0730/07402	7001/10314	'314' 927 5 24047 58195 66626 48646 32937
6th/13th	1200/1210z	12415/14212	'425' 963 7 92016 52416 73968 12183 62914 03514 52418
20th/27th	1200/12102	12413/14212	425' 938 6 47773 55580 95628 02465 48955 05317
2011/2711			423 730 0 47773 33300 73020 02403 40733 03317
Friday			
7th/14th	0900/0910z	5744/6524	'624' 801 5 17099 94961 35826 65906 77233
21st/28th			'624' 910 5 43785 67625 55500 61642 91505
7th/14th	0930/0940z	12140/13515	'516' 423 7 14600 74248 48754 65125 41879 84648 42036
21st/28th			'516' 493 7 28548 59014 32424 75078 97520
G			
Saturday	0000/0010	10250/0520	(254) 000 (2((2414(00 05500 (020(005(0 00(15
1st	0800/0810z	10350/8520	'254' 980 6 26634 14690 95590 60386 88569 89617
Sunday			
2nd/9th	0630/0640		'524' No reports
2110/ / UI	0000/0040		32 i 1to reports

PoSW's S06/S06s log:

First + Third Saturdays in the Month 2000 + 2100 UTC S06 Schedule:-

4-Mar-17:- 2000 UTC, 4,538 kHz, "913 913 913 00000", over S9.

2100 UTC, 3,894 kHz, second sending, slightly weaker signal.

Seasonal change of frequencies from 4,012 + 3,398 kHz used in the first two months of this year.

This schedule moved by one hour in April so as to still appear at 8 PM and 9 PM in the UK after the start of British Summer Time.

15-Apr-17:- 1900 UTC, 4,538 kHz, "913 913 913 00000", over S9.

2000 UTC, 3,894 kHz, second sending, also over S9.

First + Third Fridays in the Month 2000 + 2100 UTC S06 Schedule:-

3-Mar-17:- 2100 UTC, 6,774 kHz, must be the second sending although nothing found at 2000, "514 514 514 00000", indicating S7 with QSB. Was warming up on 6,774 about fifteen minutes earlier, carrier noted which was very strong, S9+, then audio tone; suddenly became much weaker shortly after being tuned in as though something had been switched, either a great reduction in power or to an antenna beaming in a different direction. Single spoken "514" heard then carrier off until 2100Z.

17-Mar-17:- 2002 UTC, 9,237 kHz, the first sending found about two minutes in, "514 514 514 00000", S7.

2100 UTC, 6,774 kHz, second sending, peaking S9.

This schedule moved by one hour in April, still on at 8 PM and 9 PM now that British Summer Time has started: 7-Apr-17:- 1900 UTC, 9,237 kHz, over S9 with QSB, "514 514 514 00000".

2000 UTC, 6,774 kHz, second sending, S9, weaker FSK signal on a close frequency.

S06s, YL Voice:-

Some of the stronger S06s signals, all in the UK daytime, stays on UTC with the start of

British Summer Time so shows up one hour later than in the winter months:-

Monday 0830 + 0840 UTC Schedule, Call "371":-

20 Mar-17:- 0830 UTC, 9,220 kHz, DK/GC "290 290 5 5", S8 signal, "90406 36113 31107

37806 37137

0840 UTC, 8,270 kHz, second sending, peaking S9.

27-Mar-17:- 0830 UTC, 9,220 kHz, "290 290 5 5" and 5Fs as on the 20th, S6.

0840 UTC, 8,270 kHz, second sending, stronger signal, S8.

3-Apr-17:- 0830 UTC, 9,220 kHz, weak signal, sank into the noise, largely unreadable.

0840 UTC, 8,270 kHz, much better signal, peaking S8 to S9, DK/GC "458 458 6 6", "95051 13808 71909 83981 24035 48115".

10-Apr-17:- 0830 UTC, 9,220 kHz, "458 458 6 6" and 5Fs as on the 10th.

0840 UTC, 8,270 kHz, second sending.

Tuesday 0730 + 0740 UTC Schedule, Call "427":

7-Mar-17:- 0730 UTC, 7,425 kHz, DK/GC "983 983 5 5", "36184 36194 37650 43773 46793", S9 signal.

0740 UTC, 11,560 kHz, second sending, S9+, very strong signal.

14-Mar-17:- 0731 UTC, started about one minute late, 7,425 kHz, DK/GC "983 983 5 5" and same 5Fs as last time, over S9 this morning.

0741 UTC, 11,560 kHz, second sending, also started late, S9+.

4-Apr-17:- 0730 UTC, 7,425 kHz, DK/GC "906 906 5 5", "95041 10544 98003 68909 45279", S9 signal over-riding a weaker BC station.

0740 UTC, 11,560 kHz, second sending, S9+.

18-Apr-17:- 0730 UTC, 7,425 kHz, DK/GC "861 861 5 5", "40614 77249 40678 17977 42998", over S9.

0740 UTC, 11,560 kHz, second sending, S9+

25-Apr-17:- 0730 UTC, 7,425 kHz, "861 861 5 5" and 5Fs as on the 18th, S8 signal.

0740 UTC, 11,560 kHz, S9+.

Tuesday 0800 + 0810 UTC Schedule, Call "352":

7-Mar-17:- 0800 UTC, 11,635 kHz, DK/GC "481 481 6 6", "35342 32537 42983 35751 35375 57176", strength S5 at best.

0810 UTC, 10,420 kHz, second sending, weak signal down in the noise.

Wednesday 0830 + 0840 UTC Schedule, Call "745":

8-Mar-17:-0830 UTC, 11,530 kHz, DK/GC "913 913 6 6", "34888 33661 27167 27671 42391 30642", S9+, was heard warming up with audio tone at 0825 UTC.

0840 UTC, 12,140 kHz, second sending, also S9+.

5-Apr-17:- 0830 UTC, 11,530 kHz, DK/GC "216 216 8 8", "39783 35468 35208 35868 49131 45326 30478 39686", a group count of eight 5Fs not too commonplace with S06s,

S7 to S8.

0840 UTC, 12,140 kHz, second sending, stronger signal, S9.

Wednesday 1000 + 1010 UTC Schedule, Call "729":-

8-Mar-17:- 1000 UTC, 13,365 kHz, DK/GC "863 863 5 5", "47755 42352 34458 34458 46934 35790", over S9 with QSB.

1010 UTC, 14,505 kHz, second sending, much weaker signal, S5 at best.

15-Mar-17:- 1000 UTC, 13,365 kHz, DK/GC "803 803 5 5", "37363 31429 33642 36687 32805", S9.

1010 UTC, 14,505 kHz, second sending, S6.

29-Mar-17:- 1000 UTC, 13,365 kHz, "729 729 729 00000", the last days of the month "no message" routine, S7 to S8.

1009 UTC, just after, early start seems to be standard procedure for the second sending of a "no message", 14,505 kHz, unusually this was a stronger signal than the first transmission, over S9.

5-Apr-17:- 1000 UTC, 13,365 kHz, DK/GC "416 416 5 5", "39382 45739 49645 32975 45356", over S9. 1010 UTC, 14,505 kHz, second sending, S9 signal, weaker FSK/RTTY type signal on close frequency.

<u>Friday 0930 + 0940 UTC Schedule, Call "516":-</u> 3-Mar-17:- 0930 UTC, 12,140 kHz, DK/GC "294 294 7 7", "31900 38466 36534 32840 48436 81480 30762", S9 signal. 0940 UTC, 13,515 kHz, second sending, much weaker signal, interference from the rapidly swept carrier which lives here.

10-Mar-17:- 0930 UTC, 12,140 kHz, "294 294 7 7" and 5Fs as last Friday, S9+, very strong signal.

0940 UTC, 13,515 kHz, second sending, over S9, much stronger than last Friday, the sweeping carrier also strong.

17-Mar-17:- 0930 UTC, 12,140 kHz, DK/GC "273 273 8 8", "10996 38892 06674 12532 75901 74405 73547 61732", S9+. 0940 UTC, 13,515 kHz, also S9+.

24-Mar-17:- 0930 UTC, 12,140 kHz, "273 273 8 8" and 5Fs as on the 17th, over S9.

0940 UTC, 13,515 kHz, second sending, much weaker signal with the sweeper in attendance.

31-Mar-17:- 0930 UTC, 12,140 kHz, "516 516 516 00000", the end of the month "no message" routine, S9 with QSB.

0939 UTC, 13,515 kHz, second sending, S5 at best with the swept carrier interference.

7-Apr-17:- 0930 UTC, 12,140 kHz, DK/GC "423 423 7 7", "14600 74248 48754 65125 41879 84648 42036", over S9. 0940 UTC, 13,515 kHz, second sending, also indicating well over S9.

14-Apr-17:- 0930 UTC, 12,140 kHz, "423 423 7 7" and 5Fs as on the 7th. Only about a "5"

on the S-meter.

0940 UTC, 13,515 kHz, second sending, weak signal suffering interference from the swept carrier.

First Saturday in the Month 0800 + 0810 UTC Schedule, Call "254":-

4-Mar-17:- 0800 UTC, 10,350 kHz, DK/GC "837 837 6 6", "49294 38064 31724 37324 39316 46660", missed second sending, En99 says 8,520 kHz.

1-Apr-17:- 0800 UTC, 10,350 kHz, weak signal, DK/GC "980 980 6 6", sank into the noise and became unreadable. 0810 UTC, 8,520 kHz, second sending, stronger signal, very strong "XJT" on the LF side removed by using the receiver in USB mode, 5Fs "26634" 14690 95590 60386 88569 89617".

S07[?] UNID, Heard once possible pirate/spoof

07/03 I.P. [687 1 5436 21 00098 97269 66394 58400 63787 42059 06646 43467 83822 54763 92606 01284 44470 15225 73816 75105 48520 37932 84971 10284 07385 000 000] 0904z USB E.SMITH TUE [OM voice]

https://www.dropbox.com/s/v1h100o7v7vet1m/websdr_recording_start_2017-03-07T09_00_52Z_9060.0kHz.wav?dl=0

9060kHz 0900z 07/03 I.P. [687 1 5436 21 00098 97269 10284 07385 000 000] 0904z USB E.SMITH TUE9060kHz 0945z 07/03 I.P. [687 1 5436 21 00098 97269 10284 07385 000 000] 0949z USB E.SMITH TUE

S11a log Mar/April

4016kHz	1955z	01/03 [372/00] Konyetz 1958z S9	Malc	WED
	1955z	08/03 [370/00] Konyetz 1958z S8	Malc	WED
	1955z	10/03 [372/00] Konyetz 1958z S9	Malc	FRI
	1955z	17/03 [376/00] Konyetz 1958z S7	Malc	FRI
	1955z	22/03 [370/00] Konyetz 1958z S7	Malc	WED
	1955z	24/03 [379/00] Konyetz 1958z S7	Malc	FRI
	1955z	29/03 [378/30 3907153334] 2005z S9	Malc	WED
	1955z	05/04 [379/00] Strong	RNGB	WED
	1955z	07/04 [376/00]	Thomas	FRI
	1955z	12/04 [377/00] Konyetz 1958z S9	Malc	WED
	1955z	19/04 [377/00] Strong	RNGB	WED
	1955z	21/04 [379/00] Konyetz 1958z S9+10	Malc	FRI
	1955z	26/04 [373/32 5488063395] Konyetz 2006z S9	Malc	WED
5358kHz	04557	03/03 [325/00] КОНЕЦ 0458z KiwiSDR Ukraine.	Ed Smith	FRI
JJJOKIIZ	0455z	14/03 [322/00] КОНЕЦ 0458z	Ed Smith	TUE
	0455z	21/03 [320/00] KOHELI 0458z	Ed Smith	TUE
	0455z	24/03 [326/00] KOHELI 0458z	Ed Smith	FRI
	0455z	28/03 [320/36 39156 96780 87995 04058 23940 46608 02218 49726] KOHELI 0507z	Ed Smith	TUE
	0455z	04/04 [322/00] КОНЕЦ 0458z	Ed Smith	TUE
	0455z	11/04 [327/39 79126 00267 97762 84344 82988 94650 6180362125 31326] KOHELI 0507z	Ed Smith, Thomas	TUE
	0455z	25/04 [322/00] KOHELI 0458z	Ed Smith	TUE
	UTJJL	BOTO I [SBB OO] ROTTER OFFOE	La Simui	IUL

7317kHz	0015-	03/03 [485/00]	Malc	FRI
/31/KHZ	0915z	10/03 [484/00] Konyetz 0918z S2	Malc	FRI
	0915z	14/03 [485/39 3090447031] Konyetz 0927z S2	Malc	TUE
	0915z	17/03 [485/39 30904 32658 59964 72606 26612 04991 6729674932 47031]	RNGB	FRI
	0915z	21/03 [480/00] Fair	RNGB	TUE
	0915z	24/03 [482/00] Konyetz 0918z S3	Malc	FRI
	0915z	·		TUE
	0915z	28/03 [485/00] 31/03 [486/00] Konyetz 0918z S2	Ary Malc	FRI
	0915z	04/04 [486/00] KOHEU 0918z	Ed Smith	TUE
	0915z	07/04 [487/00]	RNGB	FRI
	0915z	11/04 [487/33 0891291406] Konyetz 0926z S3	Malc	TUE
	0915z	14/04 [487/33 08912 62572 87080 83263 74082 12443 6586720062 91406]		FRI
	0915z	18/04 [481/00]	Ary RNGB	TUE
	0915z	20/04 [484/00] Konyetz 0918z S3	Malc	FRI
	0915z	- · ·		TUE
	0915z	25/04 [482/00] KOHEU 0918z	Ed Smith, Malc	
	09152	28/04 [480/00] Konyetz 0918z S2	Malc	FRI
9960kHz	1020z	03/03 [427/00] Konyetz 1023z S7	Malc	FRI
	1020z	07/03 [425/33 38590 91993 78433 55964 82853 21514 7740724037 33915] КОНЕЦ 0931z	Ed Smith	TUE
	1020z	10/03 [425/33 38590etc] Repeat of Tuesday	Ary	FRI
	1020z	14/03 [427/00] Konyetz 1023z S3	Malc	TUE
	1020z	17/03 [422/00] Konyetz 1023z S3	Malc, Ed Smith	FRI
	1020z	21/03 [426/00]	RNGB	TUE
	1020z	24/03 [422/00] Konyetz 1023z S2	Malc	FRI
	1020z	28/03 [429/00] Konyetz 1023z S5	Malc	TUE
	1020z	31/03 [425/00] Konyetz 1023z S3	Malc	FRI
	1020z	04/04 [420/00] КОНЕЦ 0918z	Ed Smith	TUE
	1020z	07/04 [429/00]	Thomas	FRI
	1020z	11/04 [427/40 4232806176] Konyetz 1032z S4	Malc	TUE
	1020z	14/04 [427/40 42328 27364 67544 60034 16207 22288 1054071437 06176]	Ary	FRI
	1020z	20/04 [420/00] Konyetz 1023z S3	Malc	FRI
	1020z	25/04 [424/00] KOHEIL 1023z	Ed Smith, Malc	TUE
	1020z	28/04 [425/00] Konyetz 1023z S3 QRM	Malc	FRI
10800kHz	2 1540z	01/03 [569/32 5203173106] Konyetz 1550z S7	Malc	WED
	1540z	11/03 [564/00] Konyetz 1543z S4	Malc	SAT
	1540z	15/03 [569/00]	Malc	WED
	1540z	25/03 [563/00] Konyetz 1543z S4	Malc	SAT
	1540z	29/00 [565/00] Konyetz 1543z S4	Malc	WED
	1540z	05/04 [561/00] Konyetz 1543z S6	Malc	WED
	1540z	12/04 [563/00] Konyetz 1543z S6	Malc	WED
	1540z	15/04 [563/00] Konyetz 1543z S7	Malc	SAT
	1540z	19/04 [566/00] Konyetz1543z S4	Malc	WED
	1540z	26/04 [467/35 8659680548]	Malc	WED
1 < 1 1 01 77	1015	00/02 [4880/27 070] 4 051 4 170 50 0252 (84752 05280 1740)		
16112kHz		09/03 [4778/36 96014 95164 16959 82526 74653 95279 1619000996 48479]	Ary	THU
	1015z	13/03 [479/00] Konyetz 1023z S2	Malc	MON
	1015z	30/03 [476/00]	RNGB	THU
	1015z	03/04 [478/31 7564315136] S4	Malc	MON
	1015z	06/04 [478/31 7564315136] Konyetz 1205z S3	Malc	THU
18405kHz	2 0715z	06/03 [381/00]	HFD	MON
	0715z	05/04 [387/00] Weak	RNGB, Malc	WED
	0715z	10/04 [382/00] Fair – HK remote	RNGB	MON
	0715z	24/04 [385/35 9655172206] 0726z S6 QSB3	Malc	MON
	J. 152	[111011

<u>V07</u>

Sunday

March 2017

0100z	18074kHz	0120z	15874kHz	0140z	14374kHz
05/03	883 1	353 61 05702	53018 000 00	00	
883 1 353 6	51				
05702 0095	52 62622 83334 30187				
74222 2870	00 16889 18059 617?0				
66018 6520	02 40742 17607 47373				
88787 9226	59 23729 27182 15939				
43115 3940	7 83579 92246 35353				
38593 4940	9 66226 58110 53386				
87056 7717	7 66008 34102 98542				
93426 3117	2 99091 63332 68803				
93206 6937	8 27043 00631 44698				
59093 0017	6 29706 10706 81832				
33163 3348	35 77493 03210 99778				
61592 0734	7 44833 04908 51979				
53018					
000 000	Courtesy DanAr				40

12/03 883 000 Very weak

19/03 Weak, unworkable

April 2017

F							
0300z	14823kH	z 0320z	13423kHz	0340z	11523kHz		
02/04		845 1 ??? ?? ?????				Very weak, unworka	able
09/04		845 000				Weak	
16/04		845 1 546 71 83016 65715 (000 000			Weak	
23/04		845 000				Weak	
30/04		Weak, unworkable					
<u>V13</u>							
9276kH 9276kH		10/03 AM New Star Broadcasti	•			AB AB	FRI
		10/03 AM New Star Broadcasti					FRI
	Hz0508z Hz0617z	13/04 AM New Star Broadcasti 13/04 AM New Star Broadcasti				AB AB	THU THU
<u>V26</u>							
		03/17[(From M95 sked - USB - C				JPL	THU
		03/17[(From M95 sked - USB - C 03/17[(From M95 sked - USB - C				JPL JPL	TUE WED
4243kH	z1158z 28/	03/17[(From M95 sked - USB - C	hinese - Female - // 9054) (1	Remote tuner New	v Zealand)]	JPL	TUE
4243kH	z1212z 29/	03[(From M95 sked - USB - Chin	ese - Female - // 9054) (Ren	note tuner New Ze	ealand)]	JPL	WED
		04/17[(From M95 sked - USB - C 04/17[(From M95 sked - USB - C	, ,		7 -	JPL JPL	TUE THU
4243kH	z1222z 07/	04/17[(From M95 sked - USB - C	hinese - Female - // 9054) (1	Remote tuner New	v Zealand)]	JPL	FRI
		04/17[(From M95 sked - USB - C 04/17[(From M95 sked - USB - C				JPL JPL	MON MON
		04/17[(From M95 sked - USB - C				JPL	SAT
4243kH	z1200z 24/	04/17[(From M95 sked - USB - C	Thinese - Female - // 9054) (1	Remote tuner New	v Zealand)]	JPL	MON
4364kH	z0029z 22/	03/17[(From M95 sked - USB - C	Chinese - Female - // 8073) (1	Remote tuner Hon	ng Kong)]	JPL	WED
8073kH	z0029z 22/0	03/17[(From M95 sked - USB - C	Chinese - Female - // 4364) (l	Remote tuner Hon	g Kong)]	JPL	WED
8073kH	z1150z 06/	04/17[(IP - USB - Chinese - Male	- // 4243 N/H) (Remote tun	er New Zealand)]		JPL	THU
9054kH	z1204z 16/	03/17[(From M95 sked - USB - C	Chinese - Female - // 4243) (I	Remote tuner New	v Zealand)]	JPL	THU
		03/17[(From M95 sked - USB - C				JPL	TUE WED
		03/17[(From M95 sked - USB - C 03/17[(From M95 sked - USB - C	, ,		C 2/2	JPL JPL	TUE
9054kH	z1212z 29/	03[(From M95 sked - USB - Chin	lese - Female - // 4243) (Ren	note tuner New Ze	ealand)]	JPL	WED
9054kH	z1218z 04/	04/17[(From M95 sked - USB - C	Chinese - Female - // 4243) (1	Remote tuner New	v Zealand)]	JPL	TUE
		04/17[(From M95 sked - USB - C	/ \		7-	JPL	THU
		04/17[(From M95 sked - USB - C 04/17[(From M95 sked - USB - C	/ \		/-	JPL JPL	FRI MON
9054kH	z0917z 14/	04/17[(From M95 sked - USB - C	thinese - Female - // 4243 N	H) (Remote tuner	New Zealand)]	JPL	FRI
		04/17[(From M95 sked - USB - C 04/17[(From M95 sked - USB - C	, ,		7 -	JPL JPL	MON SAT
		04/17[(From M95 sked - USB - C	, ,		7 -	JPL	MON

Polytones, Data and Hybrids

XPA c

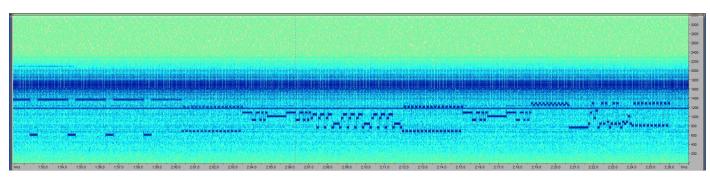
Wednesday/Saturday

March 2017

0700z	11409kHz	0720z	13509kHz	0740z	14609kHz	
01/03	456 1	05245 00139 9	98593 46640			Very strong
04/03	456 1	05245 00139 9	98593 46640		[0740z NRH]	Weak
08/03	456 00	00 02165 0000	1 00000 10140		[0700zWeak, u/w 0740z NRH]	Fair
11/03	456 00	00 03736 0000	1 00000 10140			Very strong
15/03	456 1	05789 00163 3	38573 06772		[0700zFair QSB3/4]	Very strong
18/03	456 1	05789 00163 3	38573 06772		[0700zFair QSB4]	Very strong
22/03	456 00	00 01914 0000	1 00000 10140		[0720/0740z NRH]	Very strong
25/03	456 00	00 02084 0000	1 00000 10140			Strong
29/03	456 1	01618 00157 5	53317 27252		[0720z Farir, QSB3/4, 0740z NRH]	Strong
April 20	17					

April 2017

0600z	10359kHz	0620z	11559kHz	0640z	13559kHz		
01/04	355 00	0 01376 0000	1 00000 10140		[0740z Fair]		Strong
05/04	355 1 (06701 00151 (01622 06742			Fair, QR	M3, QSB to nil 0700z
08/04	355 1 (06701 00151 (01622 06742				Strong
12/04	355 00	0 04634 0000	1 00000 10140				Fair
15/04	355 00	0 04971 0000	1 00000 10140				Strong
19/04	355 1 (02022 00137 8	35862 70444				Stromg, QSB to nil
22/04	355 1 (02022 00137 8	35862 70444				Strong, QSB2
26/04	355 00	0 06637 0000	1 00000 10140		[0640z Time Signal QRM3]		Very strong
29/04	355 00	0 08475 0000	1 00000 10140		[0640z Time Signal QRM3]		Very strong



Illustrates time signal QRM on 0640z 13559kHz transmissions

XPA2 m

Sunday/Tuesday

March 2017

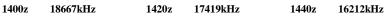
1500z	16138kHz	1520z	14438kHz	1540z	13438kHz	
05/03	02986 00	001 00000	10140			Very strong
07/03	05221 000	001 00000	10140		[1500/1520z unworkable]	Weak
12/03	02814 00	081 87324	47157		[1520zQSB3, 1540zFair]	Very strong

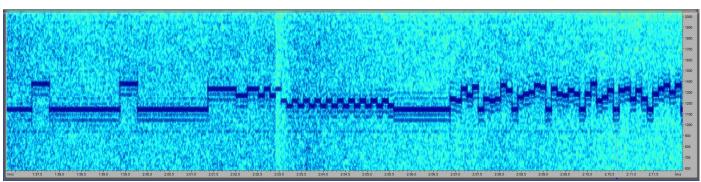
14/03	02814 0008	1 87924	47157		[1500z Weak,unworkable]	Weak QSB3/4
19/03	04922 0000	1 00000	10140			Very strong
21/03	05161 0000	1 00000	10140			Very strong
26/03	05056 00093	5 01240	60724			Very strong
28/03	05056 00099	5 01240	60724			Fair
April 20	017					
1800z	14538kHz 1	1820z	13538kHz	1840z	12138kHz	
02/04	07204 00093	3 26499	13315		[1800z Weak, noisy]	Very strong
04/04	07204 00093	3 26499	13315		[1800/1820z NRH]	Very weak
09/04	NRH					
11/04	08601 0000	1 00000	10140		[1800z Fair]	Strong
18/04	04581 0000	1 00000	10140			Very strong
23/04	07557 0000	1 00000	10140			Very strong
25/04	02451 0000	1 00000	10140		[1800/1820z Weak, QSB3]	Fair
30/04	08229 0008	5 04079 ′	76727		[1800z Weak]	Very strong
<u>XPA2 p</u>						
Monday	//Wednesday					
March 2	2017					
0800z		0820z	14956kHz	0840z	13956kHz	
	00.504.0000	1 00000	10140		[0820zNRH]	Very strong
01/03	08624 0000					, ,
01/03	05316 0000	1 00000	10140			Very strong
		1 00000	10140		[0800z NRH]	•
06/03	05316 0000	1 00000	10140 10140		[0800z NRH] [0800z QSB3/4, 0820z NRH]	Very strong
06/03 08/03	05316 0000 04767 0000 07702 0013 07702 0013	1 00000 1 00000 1 77142 1 77142	10140 10140 75530 75530			Very strong Fair
06/03 08/03 12/03	05316 0000 04767 0000 07702 0013	1 00000 1 00000 1 77142 1 77142	10140 10140 75530 75530		[0800z QSB3/4, 0820z NRH]	Very strong Fair Very strong
06/03 08/03 12/03 15/03	05316 0000 04767 0000 07702 0013 07702 0013	1 00000 1 00000 1 77142 1 77142	10140 10140 75530 75530 10140		[0800z QSB3/4, 0820z NRH] [0800/0820zz Weak,unworkable]	Very strong Fair Very strong Very strong
06/03 08/03 12/03 15/03 20/03	05316 0000 04767 0000 07702 0013 07702 0013 01361 0000	1 00000 1 00000 1 77142 1 77142 1 00000 1 00000	10140 10140 75530 75530 10140		[0800z QSB3/4, 0820z NRH] [0800/0820zz Weak,unworkable] [0840z Weak, QSB to nil]	Very strong Fair Very strong Very strong Very strong
06/03 08/03 12/03 15/03 20/03 22/03	05316 0000 04767 0000 07702 0013 07702 0013 01361 0000 08099 0000	1 00000 1 00000 1 77142 1 77142 1 00000 1 00000 15 62440	10140 10140 75530 75530 10140 10140 23410		[0800z QSB3/4, 0820z NRH] [0800/0820zz Weak,unworkable] [0840z Weak, QSB to nil] [UK was NRH]	Very strong Fair Very strong Very strong Very strong Strong via Twente
06/03 08/03 12/03 15/03 20/03 22/03 27/03 29/03 April 20	05316 0000 04767 0000 07702 0013 07702 0013 01361 0000 08099 0000 07509 00103 07509 00103	1 00000 1 00000 1 77142 1 77142 1 00000 1 00000 5 62440 5 62440	10140 10140 75530 75530 10140 10140 23410		[0800z QSB3/4, 0820z NRH] [0800/0820zz Weak,unworkable] [0840z Weak, QSB to nil] [UK was NRH] [0800z ,0820z NRH] [0800z, 0820z NRH]	Very strong Fair Very strong Very strong Very strong Strong via Twente Strong, QSB2
06/03 08/03 12/03 15/03 20/03 22/03 27/03 29/03 April 20 1500z	05316 0000 04767 0000 07702 0013 07702 0013 01361 0000 08099 0000 07509 00103 07509 00103	1 00000 1 00000 1 77142 1 77142 1 00000 1 00000 5 62440 5 62440	10140 10140 75530 75530 10140 10140 23410 23410	1540z	[0800z QSB3/4, 0820z NRH] [0800/0820zz Weak,unworkable] [0840z Weak, QSB to nil] [UK was NRH] [0800z ,0820z NRH] [0800z, 0820z NRH]	Very strong Fair Very strong Very strong Very strong Strong via Twente Strong, QSB2 Strong
06/03 08/03 12/03 15/03 20/03 22/03 27/03 29/03 April 20 1500z 02/04	05316 0000 04767 0000 07702 0013 07702 0013 01361 0000 08099 0000 07509 0010: 07509 0010: 16147kHz 1 06048 0000	1 00000 1 00000 1 77142 1 77142 1 00000 1 00000 5 62440 5 62440 1 1520z	10140 10140 75530 75530 10140 10140 23410 23410 14947kHz	1540z	[0800z QSB3/4, 0820z NRH] [0800/0820zz Weak,unworkable] [0840z Weak, QSB to nil] [UK was NRH] [0800z ,0820z NRH] [0800z, 0820z NRH]	Very strong Fair Very strong Very strong Very strong Strong via Twente Strong, QSB2 Strong
06/03 08/03 12/03 15/03 20/03 22/03 27/03 29/03 April 20 1500z 02/04 07/04	05316 0000 04767 0000 07702 0013 07702 0013 01361 0000 08099 0000 07509 00103 07509 00103 07509 00103 07509 00103	1 00000 1 00000 1 77142 1 77142 1 00000 1 00000 5 62440 5 62440 1 1520z	10140 10140 75530 75530 10140 10140 23410 23410 14947kHz	1540z	[0800z QSB3/4, 0820z NRH] [0800/0820zz Weak,unworkable] [0840z Weak, QSB to nil] [UK was NRH] [0800z ,0820z NRH] [0800z, 0820z NRH]	Very strong Fair Very strong Very strong Very strong Strong via Twente Strong, QSB2 Strong
06/03 08/03 12/03 15/03 20/03 22/03 27/03 29/03 April 20 1500z 02/04 07/04	05316 0000 04767 0000 07702 0013 07702 0013 01361 0000 08099 0000 07509 00103 07509 00103 07509 00104 06048 0000 08547 00144 NRH	1 00000 1 00000 1 77142 1 77142 1 00000 1 00000 5 62440 5 62440 1 1520z 1 00000 7 52586	10140 10140 75530 75530 10140 10140 23410 23410 14947kHz	1540z	[0800z QSB3/4, 0820z NRH] [0800/0820zz Weak,unworkable] [0840z Weak, QSB to nil] [UK was NRH] [0800z ,0820z NRH] [0800z, 0820z NRH] 14447kHz [1500z Weak, noisy]	Very strong Fair Very strong Very strong Very strong Strong via Twente Strong, QSB2 Strong Very strong Very strong
06/03 08/03 12/03 15/03 20/03 22/03 27/03 29/03 April 20 1500z 02/04 07/04 09/04 14/04	05316 0000 04767 0000 07702 0013 07702 0013 01361 0000 08099 0000 07509 00103 07509 00103 07509 00104 16147kHz 1 06048 0000 08547 0014 NRH 09975 0000	11 00000 11 00000 11 77142 1 11 77142 1 11 00000 11 00000 15 62440 1 15 62440 1	10140 10140 75530 75530 10140 10140 23410 23410 14947kHz	1540z	[0800z QSB3/4, 0820z NRH] [0800/0820zz Weak,unworkable] [0840z Weak, QSB to nil] [UK was NRH] [0800z ,0820z NRH] [0800z, 0820z NRH]	Very strong Fair Very strong Very strong Very strong Strong via Twente Strong, QSB2 Strong
06/03 08/03 12/03 15/03 20/03 22/03 27/03 29/03 April 20 1500z 02/04 07/04 09/04 14/04 16/04	05316 0000 04767 0000 07702 0013 07702 0013 01361 0000 08099 0000 07509 00103 07509 00103 07509 00104 NRH 09975 0000 Unworkable	11 00000 11 00000 11 77142 1 11 77142 1 11 00000 11 00000 15 62440 1 1520z 11 00000 17 52586 4	10140 10140 75530 75530 10140 10140 23410 23410 14947kHz 10140 45671	1540z	[0800z QSB3/4, 0820z NRH] [0800/0820zz Weak,unworkable] [0840z Weak, QSB to nil] [UK was NRH] [0800z, 0820z NRH] [0800z, 0820z NRH] 14447kHz [1500z Weak, noisy]	Very strong Fair Very strong Very strong Very strong Strong via Twente Strong, QSB2 Strong Very strong Very strong Very strong Very strong
06/03 08/03 12/03 15/03 20/03 22/03 27/03 29/03 April 20 1500z 02/04 07/04 09/04 14/04 16/04 21/04	05316 0000 04767 0000 07702 0013 07702 0013 01361 0000 08099 0000 07509 0010: 07509 0010: 07509 0010: NRH 09975 0000 Unworkable 07850 0010:	11 00000 11 00000 11 77142 1 11 77142 1 11 00000 11 00000 15 62440 2 15 62440 2 11 00000 17 52586 2 11 00000 13 09421	10140 10140 75530 75530 10140 10140 23410 23410 14947kHz 10140 45671	1540z	[0800z QSB3/4, 0820z NRH] [0800/0820zz Weak,unworkable] [0840z Weak, QSB to nil] [UK was NRH] [0800z, 0820z NRH] [0800z, 0820z NRH] 14447kHz [1500z Weak, noisy] [1500/1520z Unworkable]	Very strong Fair Very strong Very strong Very strong Strong via Twente Strong, QSB2 Strong Very strong Very strong Very strong Strong
06/03 08/03 12/03 15/03 20/03 22/03 27/03 29/03 April 20 1500z 02/04 07/04 09/04 14/04 16/04 21/04 23/04	05316 0000 04767 0000 04767 0000 07702 0013 07702 0013 01361 0000 08099 0000 07509 00103 07509 00103 07509 00104 NRH 09975 0000 Unworkable 07850 00103	1 00000 1 00000 1 77142 1 77142 1 00000 1 00000 5 62440 5 62440 7 52586 1 00000 7 52586 3 09421 3 09421	10140 10140 75530 75530 10140 10140 23410 23410 14947kHz 10140 45671 10140	1540z	[0800z QSB3/4, 0820z NRH] [0800/0820zz Weak,unworkable] [0840z Weak, QSB to nil] [UK was NRH] [0800z, 0820z NRH] [0800z, 0820z NRH] 14447kHz [1500z Weak, noisy] [1500/1520z Unworkable] [1500/1540z Very weak]	Very strong Fair Very strong Very strong Very strong Strong via Twente Strong, QSB2 Strong Very strong Very strong Very strong Very strong Weak
06/03 08/03 12/03 15/03 20/03 22/03 27/03 29/03 April 20 1500z 02/04 07/04 09/04 14/04 16/04 21/04	05316 0000 04767 0000 07702 0013 07702 0013 01361 0000 08099 0000 07509 0010: 07509 0010: 07509 0010: NRH 09975 0000 Unworkable 07850 0010:	1 00000 1 00000 1 77142 1 1 77142 1 1 00000 1 00000 1 00000 1 00000 7 52586 1 1 00000 2 3 09421 3 09421 1 00000	10140 10140 175530 175530 10140 10140 10140 23410 14947kHz 10140 45671 10140 16364 16364 10140	1540z	[0800z QSB3/4, 0820z NRH] [0800/0820zz Weak,unworkable] [0840z Weak, QSB to nil] [UK was NRH] [0800z, 0820z NRH] [0800z, 0820z NRH] 14447kHz [1500z Weak, noisy] [1500/1520z Unworkable]	Very strong Fair Very strong Very strong Very strong Strong via Twente Strong, QSB2 Strong Very strong Very strong Very strong Strong

XPA2 r

Friday/Saturday

March 2017





 $*18/03\ 1420z$ Distortion/over modulation noted by DanAr [weak in Argentine] and PLdn

03/03	07107 nnnnn 77903 75n34	[1400z NRH, 1420z unworkable]	Very weak
04/03	NRH		Condx very poor
10/03	03709 00001 00000 10140	[1400z NRH, 1420z unworkable]	Weak
11/03	05133 00001 00000 10140	[1420z Weak]	Very strong
17/03	00627 00085 13487 04640	[1400z Strong, QSB4]	Very strong
18/03	00627 00085 013847 04640	[1400z Weak, unworkable, 1420z Distortion]*	Very strong
24/03	05098 00001 00000 10140	[1400z NRH, 1420z weak]	Very strong
25/03	09048 00001 00000 10140	[1400z NRH, 1420z unworkable]	Strong
31/03	Very weak, unworkable		

April 2017

1900z	17462kHz	1920z	16114kHz	1940z	14828kHz	
01/04	Poor o	condx, very we	eak, unworkable			
07/04	04116	5 00061 31080	47126			Weak [Argentina]
08/04	04116	5 00061 32191	47126		[Note dk 'correction']	Weak[Argentina]
14/04	NRH					
15/04	02317	7 00001 00000	10140			Fair
21/04	08648	3 00107 44010	14705		[1900/1920z Very weak, unworkable]	Fair
22/04	Unwo	orkable			[Apparently audible in Wales - HJH]	
28/04	05916	5 00001 00000	10140		[1900z Weak, unworkable]	Very strong
29/04	01605	5 00001 00000	10140		[1900/1920z Weak, unworkable]	Very weak

XPA2 t

Tuesday/Friday

March 2017

0700z	13431kHz	0720z	14631kHz	0740z	15931kHz	
03/03	04210 00	0001 00000	10140			Weak
07/03	00542 00	0079 98569	24520			Fair, QRN3 QSB2
10/03	00542 00	0079 98569	24520			Weak

14/03	02016 00001 00000 10140	[0700zVery strong]	Fair
17/03	03378 00001 00000 10140		Very strong
21/03	06462 00161 07084 11373		Very strong
24/03	06462 00161 07084 11373		Very strong
28/03	07599 00001 00000 10140		Strong
31/03	01645 00001 00000 10140	[0720/0740z Weak, QSB to nil, unworkable]	Strong

April 2017

0700z	16347kHz	0720z	17447kHz	0740z	18747kHz	
04/04	Poor co	ndx, Unwork	table			
07/04	08133 0	0001 00000	10140		[0740z not monitored]	Weak, QSB3
11/04	Not mor	nitored				
14/04	Very we	eak, unworka	able Full message ~31	m28s lg		
18/04	01005 0	0001 00000	10140		[0740z NRH]	Very weak
21/04	06355 0	0001 00000	10140			Very weak
25/04	05338 0	0085 60596	30552		[0720/0740z NRH]	Fair, QSB3
28/04	05338 0	0085 60596	30552		[0720/0740z NRH]	Weak,QSB3/4

HYBRIDS

HM01

HM01 has continued on the same schedules and frequencies over the past two months. There have been long periods on several occasions where the callups have stopped incrementing. On two occasions after a week on the same callup they continued by incrementing +1 on the following day, on one occasion however they incremented +7 after 6 days on the same callups before again not incrementing the callups for the 12 days up to the end of April

On a few occasions the transmission at 1600z started with Spanish speaking broadcast stations.

HM01 11435kHz 1600z 2/4 [58675 62551 44101 45612 28555 70471] Same callups as yesterday. SUN HM01 11435kHz 1600z 3/4 [58675 62551 44101 45612 28555 70471] Same callups as yesterday. MON

Two files not ending in .txt were transmitted 50535005.F1C 36037047.F1G, as always files with F1C extensions begin 50 and those with .F1G start with 36

```
HM01 11435kHz 1600z 1/3 [53361 52513 33834 78655 73637 88405] WED
HM01 11435kHz 1600z 2/3 [53362 52514 33835 78656 73638 88406] THU
HM01 11435kHz 1600z 3/3 [53363 52515 33836 78657 75581 88407] FRI
HM01 11435kHz 1600z 4/3 [53364 52516 33837 54821 75582 88408] Started with spanish broadcast station, new callup position 4, 54821 = 20545482.TXT.
SAT
HM01 11435kHz 1600z 5/3 [53365 52517 33838 54821 75583 88409] SUN
HM01 11435kHz 1600z 6/3 [53366 52518 07011 54822 75584 50051] New callup positions 3 an 6, 07011 = 38670701.TXT, 50051 = 50535005.F1C MON
HM01 11435kHz 1600z 7/3 [53366 52518 07011 54822 75584 50051] Same callups as yesterday. TUE HM01 11435kHz 1600z 8/3 [53366 52518 07011 54822 75584 50051] Same callups as yesterday, TX started with a Spanish broadcast station. WED
HM01 11435kHz 1600z 9/3 [53366 52518 07011 54822 75584 50051] 10 minutes of Radio Havana Cuba followed by same callups as yesterday. THU
HM01 11435kHz 1600z 10/3 [53366 52518 07011 54822 75584 50051] Same callups as yesterday. FRI
HM01 11435kHz 1600z 11/3 [53366 52518 07011 54822 75584 50051] Same callups as yesterday. SAT
HM01 11435kHz 1600z 12/3 [53366 52518 07011 54822 75584 50051] Same callups as yesterday. SUN
HM01 11435kHz 1600z 13/3 [53366 52518 07011 54822 75584 50051]
                                                                  Same callups as yesterday. MON
HM01 11435kHz 1600z 14/3 [53366 52518 07011 54822 75584 50051] Same callups as yesterday. TUE
HM01 11435kHz 1600z 15/3 [53366 52518 07011 54822 75584 50051] Same callups as yesterday. WED
HM01 11435kHz 1600z 16/3 [53366 52518 07011 54822 75584 50051]
                                                                  Same callups as yesterday. THU
HM01 11435kHz 1600z 17/3 [53367 20541 07011 54823 75585 50051] Finally incrementing callups again, new callup position 2, 20541 = 67722054.TXT. FRI
HM01 11435kHz 1600z 18/3 [53368 20542 07012 54824 75586 50052] SAT
HM01 11435kHz 1600z 21/3 [58671 20545 07015 54827 28551 50055] New callups since saturday positions 1 and 5, 58671 = 08335867.TXT, 28551 =
68142855 TXT. TUE
HM01\ 11435kHz\ 1600z\ 22/3\ [58672\ 20546\ 07016\ 54828\ 28552\ 50056]\ \ WED
HM01 11435kHz 1600z 23/3 [58673 20547 07017 45611 28553 50057] New callup position 4, 45611 = 66384561.TXT. THU
HM01 11435kHz 1600z 24/3 [58673 20547 07017 45611 28553 50057] Same callups as yesterday. FRI
HM01 11435kHz 1600z 25/3 [58673 20547 07017 45611 28553 50057]
                                                                  Same callups as yesterday. SAT
HM01 11435kHz 1600z 26/3 [58673 20547 07017 45611 28553 50057]
                                                                  Same callups as yesterday. SUN
HM01 11435kHz 1600z 27/3 [58673 20547 07017 45611 28553 50057] Same callups as yesterday. MON
HM01 11435kHz 1600z 28/3 [58674 62551 07018 45611 28554 70471] New callups positions 2 and 6, 62551 = 86566255.TXT, 70471 = 36037047.FIG. TUE
HM01 11435kHz 1600z 29/3 [58674 62551 07018 45611 28554 70471] Same callups as yesterday. WED
HM01 11435kHz 1600z 30/3 [58674 62551 07018 45611 28554 70471] Same callups as yesterday. THU
HM01 11435kHz 1600z 31/3 [58674 62551 07018 45611 28554 70471] Same callups as yesterday. FRI
HM01 11435kHz 1600z 1/4 [58675 62551 44101 45612 28555 70471] New callup position 3, 44101 = 34624410.TXT. SAT
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HM01 11435kHz 1600z 4/4 [58675 62551 44101 45612 28555 70471] TUE
HM01 11435kHz 1600z 5/4 [13501 62552 44101 45613 28556 70472] New callup position 1, 13501 = 88231350.TXT. WED
HM01 11435kHz 1600z 6/4 [13502 62553 44102 45614 28557 70473] THU
HM01 11435kHz 1600z 7/4 [13503 62554 44103 45615 28558 70474] FRI
HM01 11435kHz 1600z 8/4 [13504 62555 44104 45616 28559 70475] SAT
HM01 11435kHz 1600z 9/4 [13505 62556 44105 45617 80611 70476] New callup position 5, 80611 = 11168061.TXT. SUN
HM01 11435kHz 1600z 10/4 [13506 62557 44106 45618 80611 70477] MON
HM01 11435kHz 1600z 11/4 [13507 62558 44107 83211 80612 75371] New callups positions 4 and 6, 83211 =, 75371 = TUE
HM01 11435kHz 1600z 12/4 [13507 62558 44107 83211 80612 75371] Same callups as yesterday. WED
HM01 11435kHz 1600z 13/4 [13507 62558 44107 83211 80612 75371] Same callups as yesterday. THU
HM01 11435kHz 1600z 14/4 [13507 62558 44107 83211 80612 75371] Same callups as yesterday. FRI
HM01 11435kHz 1600z 15/4 [13507 62558 44107 83211 80612 75371] Same callups as yesterday. SAT
HM01 11435kHz 1600z 16/4 [13507 62558 44107 83211 80612 75371] Same callups as yesterday. SUN
HM01 11435kHz 1600z 17/4 [13507 62558 44107 83211 80612 75371] Same callups as yesterday. MON
HM01 11435kHz 1600z 18/4 [31104 32856 33004 83217 80619 75377] Started with repeated "Unos" New callps positions 1, 2, 3 31104 = 28273110.TXT,
32856 = 74243285.TXT, 33004 = 66033300.TXT. callups
callups came back in the correct sequence as if they had been incrementing for the past 6 days. TUE
HM01 11435kHz 1600z 19/4 [31104 32856 33004 83217 80619 75377] Same callups as yesterday. WED
HM01 11435kHz 1600z 20/4 [31104 32856 33004 83217 80619 75377] Same callups as yesterday. THU
HM01 11435kHz 1600z 21/4 [31104 32856 33004 83217 80619 75377] Same callups as yesterday. FRI
HM01 11435kHz 1600z 22/4 [31104 32856 33004 83217 80619 75377] Same callups as yesterday. SAT
HM01 11435kHz 1600z 23/4 [31104 32856 33004 83217 80619 75377] Same callups as yesterday. SUN
HM01 11435kHz 1600z 24/4 [31104 32856 33004 83217 80619 75377] Same callups as yesterday. MON
HM01 11435kHz 1600z 25/4 [31104 32856 33004 83217 80619 75377] Same callups as yesterday. TUE
HM01 11435kHz 1600z 26/4 31104 32856 33004 83217 80619 75377] Same callups as yesterday. WED
HM01 11435kHz 1600z 27/4 [31104 32856 33004 83217 80619 75377] Same callups as yesterday. THU
HM01 11435kHz 1600z 28/4 [31104 32856 33004 83217 80619 75377] Same callups as yesterday. FRI
HM01 11435kHz 1600z 29/4 [31104 32856 33004 83217 80619 75377] Same callups as yesterday. SAT
HM01 11435kHz 1600z 30/4 [31104 32856 33004 83217 80619 75377] Same callups as yesterday. SUN
```

And other's logs:

March 2017

10715kHz 2200z 10715kHz 2200z	03/03(53363 52517 33836 78657 75581 88407) qsa2 05/03(53365 52517 33838 54821 75583 88409) qsa3	DanAR DanAr	FRI SUN
17480kHz 2200z 17480kHz 2200z 17480kHz 2200z	07/03(53366 52518 07011 54822 75584 50051) qsa3 09/03(53366 52518 07011 54822 75584 50051) qsa3 16/03(53366 20740 07011 54822 75884 50051) qsa2	DanAR DanAR DanAR	TUE THU THU
April 2017			
10715kHz2200z	02/04(58675 62551 44101 45612 28555 70471) qsa2	DanAR	SUN
17480kHz2200z	06/04(13502 62553 44102 45614 28557 70473) qsa3	DanAR	THU

Peter's findings and analysis of signals heard in Great Britain:

After data transmission a brief music ID from Radio Habana Cuba-

The HM01 station from Cuba appeared to be improving in signal strength earlier in the year and reception in February was considerably better than for some time; however, signals have not been so strong in the past couple of months.

13-Mar-17, Monday:- 0824:45s UTC, 9,065 kHz, "53366 52518 07011 54822 75584 50051", S9 with deep QSB, best copy so far in March, data after 0828 UTC.

15-Mar-17, Wednesday:- 0855 UTC, starting up with, "53366 52518 07011 54822 75584 50051", same 5Fs as on the 13th, S7 to S8 with the usual fading, audio appeared to be intermittent around 0900z.

16-Mar-17, Thursday:- $0926\,\mathrm{UTC}$, $11,462\,\mathrm{kHz}$, unusual to get good copy on this frequency, call-up in progress after the break, "53366 52518 07011 54822 75584 50051", same 5Fs. Peaking S9 with deep QSB.

20-Mar-17, Monday:- 0824:35s UTC, 9,065 kHz, "53369 20543 07013 54825 75587 50053", data at 0828 UTC, S7 to S8, rapidly became a much weaker signal shortly afterwards.

26-Mar-17, Sunday:- 0826 UTC, 9,065 kHz, call-up in progress, "58673 20547 07017 45611 20611 28553 50057", S7 with deep QSB, data at approx 0827:50s UTC.

9-Apr-17, Sunday:- 0842 UTC, 9,065 kHz, last few minutes of a transmission, "13504 62555 44104 45616 28559 70475", S9 with deep QSB. Stopped at 0848:30s UTC, carrier went off just after 0853. 0959:30s UTC, 9,240 kHz, 5Fs as earlier, S7 with deep QSB.

12-Apr-17, Wednesday:- 0800 UTC 9,065 kHz, call-up in progress, "13507 62558 44107 83211 80612 75371", S9 with deep QSB.

26-Apr-17, Wednesday:- 0700 UTC, 9,330 kHz, call-up in progress when tuned in, "31104 32856 33004 83217 80619 75377", data at 0702:35s UTC, best signal from HM01 for a fortnight, S9 with the usual deep fading.

Consists of a short FSK sequence that contains no data, possibly a tuning signal, followed by a message in FSK Morse. Changes times with daylight saving.

Schedule: Does not appear to follow a regular yearly frequency schedule - Frequency appears to be chosen to suit current conditions

Latest:	Daily:	4761kHz	0420z Regular at 04	20z from 31Mar 2017 to current date
Previous:	Daily:	6261kHz	0540 - 0600z (Variable)	Up to March28 2016
			0440 - 0500z (Variable)	From 29 March 2016 - Change due to Daylight Saving adjustment.
	Daily:	7351kHz	0440 - 0500z (Variable)	From 14 April - 28 Sept 2016
			0410 - 0430z (Variable)	From 15 Sept - 27 Sept 2016 - Settled around 0420z
		6261kHz	0420z	28 Sept only - Not heard again - found on 4761kHz 30 Dec 2016
	Daily:	4761kHz	0520z	Regular at 0520z from 30 Dec 2016 - 26 Mar 2017
			0420z	Change to 0420z for 27 & 28 March 2017
			0520z	back to 0520z for 29 March 2017 only
			0420z	then back to 0420z from 30 March 2017

Morse msg Logs

March 2017

4761	0520 - 0529z	01 Mar	901 49 = 68180 53334 20113 = 000	Good with OSB	AB/BR	WED
	0520 - 0528z	02 Mar	839 42 = 80278 32241 43673 = 000	Good Same msg as 14 & 18 Feb - All different IDs	AB/BR	THU
	0520 - 0529z	03 Mar	906 46 = 80278 32241 65901 = 000	Same msg as 02 Mar - With 4 added grps	AB/BR	FRI
	0520z	04 Mar	NRH	0	AB/BR	SAT
	0520 - 0537z	05 Mar	417 49 = 33968 76862 80031 = 000	Good. Several false starts. Msg started 0527z [Note 1]	AB/BR	SUN
	0520 - 0528z	06 Mar	531 44 = 82247 76594 03370 = 000	Fair	AB/BR	MON
	05 23 - 0532z	07 Mar	928 43 = 60686 12508 17480 = 000	Good	AB/BR	TUE
	0520 - 0529z	08 Mar	873 41 = 08323 45856 53086 = 000	Fair	AB/BR	WED
	0520 - 0525z	09 Mar	371 46 = 28037 23660 27614 = 000	Fair No repeat of message was sent [Note 2]	AB/BR	THU
	0520z	10 Mar	985 59 = 35755 34007 16676 = 000		AB	FRI
	0520 - 0523z	11 Mar	937 42 = 82367 23738 2	Strong. Transmission ceased mid-grp [Note 3]	AB/BR	SAT
	0520 - 0529z	12 Mar	948 48 = 24045 20602 74281 = 000	Good. Speed increased during grp09 of first sending	AB/BR	SUN
	0520 - 0531z	13 Mar	247 49 = 71712 34134 31823 = 000	Call-up sequence sent again at 0530z, 0533z & 0535z	AB/BR	MON
	05 21 - 0530z	14 Mar	274 46 = 12649 08179 08862 = 000	Good	AB/BR	TUE
	05 21 - 0529z	15 Mar	906 43 = 54848 22008 08236 = 000	Fair with QSB	AB/BR	WED
	0520 - 0528z	16 Mar	432 42 = 12649 08179 14015 = 000	Fair, noisy Same msg as 14 Mar - Omitting last 4 grps	AB/BR	THU
	0520 - 0530z	17 Mar	807 46 = 76636 62631 80472 = 000	Good	AB/BR	FRI
	0520z	18 Mar	256 42 = 76636 62631 87560 = 000	Same msg as 17 Mar - Omitting last 4 grps	AB	SAT
	0520 - 0529z	19 Mar	866 45 = 76636 62631 45678 = 000	Fair Same msg as 17 Mar - End grps changed [Note 4]	AB/BR	SUN
	0520z	20 Mar	NRH		AB/BR	MON
	0520 - 0529z	21 Mar	801 42 = 68720 20250 83430 = 000	Good	AB/BR	TUE
	0520 - 0529z	22 Mar	951 46 = 27687 30547 66007 = 000	Fair	AB/BR	WED
	0520 - 0527z	23 Mar	982 43 = 01306 02771 24188 = 000	Fair with QSB	AB/BR	THU
	0520 - 0528z	24 Mar	287 43 = 67957 54095 40930 = 000	Fair with QSB	AB/BR	FRI
	0520z	25 Mar	156 45 = 53515 11058 50024 = 000		AB	SAT
	0520 - 0528z	26 Mar	958 30 = 51060 85810 75604 = 000	Good	AB/BR	SUN
	0420z	27 Mar	Changed to 0420z			
	0420 - 0429z	28 Mar	846 51 = 88571 96459 01813 = 000	Good	AB/BR	TUE
	0520z	29 Mar	back to 0520z			
	0520 - 0529z	29 Mar	723 50 = 43578 35118 85180 = 000	Fair with QSB	AB/BR	WED
	0420 / 0520z	30 Mar	NRH		AB/BR	THU
	0420z	31 Mar	& back to 0420z again!			
	0420z	31 Mar	$809\ 46 = 12649\ 08179\ 08862\ = 000$	Same msg as 14 Mar - Different ID	AB	FRI

 $[Note\ 1]\ Long\ Pause\ after\ FSK\ Intro.\ Several\ false\ starts.\ Op.\ appeared\ to\ have\ problems\ selecting\ the\ correct\ msg\ \&\ mode.$

 0522z
 RTTY Stream - FSK 50Bd/129Hz - followed by tone
 244 45= 17725 24804.... (12 grps sent)

 0524z
 RTTY Stream - FSK 50Bd/129Hz - followed by tone
 815 47= 80244 67471.... (40 grps sent)

 0525z
 RTTY Stream - FSK 50Bd/129Hz - followed by tone
 815 47= 80244 67471.... (47 grps sent)

 0527z
 FSK Morse msg started
 (Thanks to Ary for the RTTY IDs & Transcripts)

[Note 2] The 2nd figure of group 11 was 4 dashes which is the Russian letter III (CH). Should have been a 1? (AB)

[Note 3] Sent 16 grps plus figure 2 of next grp. Morse ceased suddenly. Carrier cut after approximately 15 seconds. 937 42 =

82367, 23738, 10331, 43651, 17134, 56077, 04348, 30764, 71051, 22275

82367 23738 10331 43651 17134 56077 04348 30764 71051 22275 84383 74061 05028 03681 71404 17413 2 - then off....

[Note 4] Message was same as sent on 17 March to grp42, but last 3 grps were changed to the highly unlikely groups of 56781 54321 45678

April 2017

4761	0420 /0520z	01 Apr	NRH		AB/BR	SAT
	0420 - 0429z	02 Apr	191 47 = 05627 01316 34240 = 000	Good	AB/BR	SUN
	0420 - 0428z	03 Apr	121 41 = 40061 15774 90500 = 000	Good / Strong	AB/BR	MON
	0420 - 0428z	04 Apr	803 46 = 72787 89083 61422 = 000	Good	AB/BR	TUE
	0420 - 0428z	05 Apr	915 47 = 27687 30547 72646 = 000	Good / Strong, Noisy	AB/BR	WED
	0420 - 0429z	06 Apr	678 48 = 27687 30547 57635 = 000	Strong Same msg as 05 Apr plus 1 additional grp	AB/BR	THU
	04 22 - 0430z	07 Apr	531 44 = 82247 76594 03370 = 000	Strong	AB/BR	FRI
	0420 z	08 Apr	962 43 = 19067 93318 97902 = 000		AB	SAT
	0420z	09 Apr	NRH		AB/BR	SUN
	0420 - 0428z	10 Apr	960 44 = 60284 96562 64752 = 000	Good	AB/BR	MON
	0420 - 0428z	11 Apr	247 43 = 09720 34403 74234 = 000	Strong	AB/BR	TUE
	0420 - 0428z	12 Apr	921 46 = 04206 45081 50093 = 000	Good with QSB	AB/BR	WED
	0420z	13 Apr	NRH		AB/BR	THU
	0420 - 0429z	14 Apr	128 49 = 16413 64834 11742 = 000	Good, noisy with QSB	AB/BR	FRI
	0420 - 0430z	15 Apr	931 47 = 27687 30547 72646 = 000	Fair with QSB Same msg as 05 Apr	AB/BR	SAT
	0420 - 0428z	16 Apr	817 46 = 64146 40156 21999 = 000	Fair, noisy	AB/BR	SUN
	0420z	17 Apr	NRH		AB/BR	MON
	0420 - 0429z	18 Apr	275 46 = 55148 73896 85536 = 000	Good	AB/BR	TUE
	0420 - 0428z	19 Apr	257 42 = 03400 32973 15139 = 000	Good	AB/BR	WED
	0420 - 0428z	20 Apr	204 46 = 65005 63233 76873 = 000	Weak. (AB logged with a strong sig on Polish SDR)	AB/BR	THU
	0420z	21 Apr	NRH		AB/BR	FRI
	0420z	22 Apr	497 53 = 65005 63233 21687 = 000	Msg consists of 1st 40 grps of 20 Apr msg + 13 new	AB	SAT
	0420z	23 Apr	[Not Monitored]			SUN
	0420 - 0429z	24 Apr	107 56 = 65005 63233 40912 = 000	Same msg as 22 Apr plus 3 additional grps	AB/BR	MON
	0420z	25 Apr	NRH		AB/BR	TUE
	0420 - 0429z	26 Apr	529 46 = 87484 42925 52272 = 000	Fair	AB/BR	WED
	0420 - 0429z	27 Apr	294 48 = 12649 08179 50613 = 000	Fair	AB/BR	THU
	0420 - 0429z	28 Apr	984 45 = 12649 08179 75986 = 000	Good Same msg as 27 Apr - Omitting last 3 grps	AB/BR	FRI
	0420z	29 Apr	NRH		AB	SAT
	0420 - 0429z	30 Apr	849 46 = 12649 08179 39695 = 000	Fair Same msg as 28 Apr plus one additional new grp	AB/BR	SUN

HM02 4761kHz 0520z 13 Mar 2017
FSK-19.8bd/129Hz/FSK-CW
247 49 =
71712 34134 57130 11270 15360 00751 47875 64752 65880 78444 25253 71377 38432 34571 78253 15833 70362 54037 26840 07237 85717 70786 72538 38038 22243 51661 08326 25803 85262 46206 12446 44448 10336 58156 55756 81056 41007 43147 50570 73216 48780 15825 35704 70737 76625 81565 13477 15845 31823 =
247 49 247 49 = (Repeats message) = 247 49 000
0531zFSK-19.8bd/129HzCall-up sequence0533zFSK-19.8bd/129HzCall-up sequence0535zFSK-19.8bd/129HzCall-up sequence - Then off

Courtesy AB

HM02 4761kHz 0520z 16 Sep 2017

[FSK Call-up]

432 42 =

12649 08179 48307 61973 62828 21299 41755 28935 00332 30668 78326 32934 25231 44987 43062 63997 29242 14611 12987 81279 29975 44390 16623 78384 96004 70816 74533 59168 76907 09136 64489 66393 14742 53692 14278 68195 61964 16262 28545 63603 01290 14015 =

432 42

(Rpt of msg)

432 42 000

Courtesy BR

$\underline{FSK}_{\ by\ Danix}$

M42c

Monday	0025/0035z 0125/0135z	16023/13555 -"-/-"-	06/03 13/03 20/03 27/03	Link ID 00117, Date 3rd, Serial #10, Groups 186 Link ID 00117, Date 13th, Serial #11, Groups 181 No reports No reports
	0025/0035z	15820/13405	03/04	No reports
	0125/0135z	-"-/-"-	10/04	No reports
			17/04	No reports
			24/04	No reports

First Wednesday (repeats Friday)	1940/1950/2000z	10467/8094/6779	01/03	Serial #49, Groups 54
Friday	1840/1850/1900z 2230/2240z	12194/10581/8112 20700/18726	05/04	Null message No reports
	2330/2340z	-"-/-"-	10/03	No reports
			17/03	Link ID 00116, Date 17th, Serial #11, Groups 137
			24/03	No reports
			31/03	No reports
	2230/2240z	xxxxx/19405	07/04	No reports
	2330/2340z	-"-/-"-	14/04	No reports
			21/04	No reports
			28/04	No reports
Saturday	1300/1310/1320z	18437/16305/14719	04/03	Null message
			11/03	NRH
			18/03	NRH
			25/03	NRH (appears to be defunct)
Saturday	1810/1820/1830z	12184/10292/8054	04/03	Null message
			11/03	Null message
			18/03	Null message
			25/03	Null message
	1810/1820/1830z	14517/12196/10413	01/04	Null message
			08/04	Null message
			15/04	Null message
			22/04	Null message
			29/04	Null messag
<u>M42d</u>				
Sunday	1530/1540/1550z	16245/14356/12138	05/03	Link ID 20501, Null message
(repeats Monday)			12/03	Link ID 20501, Null message
			19/03	Link ID 20501, Null message
			26/03	Link ID 20501, Null message
	1530/1540/1550z	18626/16325/13458	02/04	Link ID 20501, Null message
			09/04	Link ID 20501, Null message
			16/04	Link ID 20501, Null message
			23/04	Link ID 20501, Null message
First/Third Monday	0500/0510/0520z	10249/8137/5948	06/03	Link ID 45079, Null message
(repeats Wednesday			20/03	Link ID 45079, Null message
2200/2210/2220z)	0.400/0.410/0.420-	10686/8184/6773	02/04	Link ID 45070 Nall
	0400/0410/0420z	10000/0104/07/3	03/04 17/04	Link ID 45079, Null message Link ID 45079, Null message
				·
Tuesday	1500/1510/1520z	17428/15646/12153	07/03	NRH NRH
			14/03 21/03	Link ID 16404, Null message
			28/03	Link ID 16405, Null message
	1500/1510/1520z	17534/15626/12214	04/04	
	1300/1310/1320Z	1/334/13040/14414	11/04	Link ID 16404, Null message Link ID 16405, Null message
			18/04	Link ID 16405, Null message
			25/04	Link ID 16404, Null message
Tuesday	1650/1700/1710z	16359/13986/11523	07/03	Link ID 20501, Null message
(repeats Wednesday)	1030/1700/17102	14/03		0501, Null message
(· F ······ ··· ··· ··· ··· ··· ··· ··· ··			21/03	Link ID 20501, Null message
			28/03	Link ID 20501, Null message
	1650/1700/1710z	18726/16238/13378	04/04	Link ID 20501, Null message
			11/04	Link ID 20501, Null message
			18/04	Link ID 20501, Null message
			25/04	Link ID 20501, Null message
Wednesday	0600/0610/0620z	18189/16046/14459	01/03	Link ID 32817, Date 25th, Serial #8, Groups 351
(repeats Thursday)			08/03	No reports
			15/03	Link ID 32816, Null message
			22/03	Link ID 32816, Date 18th, Serial #10, Groups 425
			29/03	Link ID 32817, Date 25th, Serial #11, Groups 219
				Link ID 3281?, Date 25th, Serial #12, Groups?

	0600/0610/0620z	16325/14724/12172	05/04 12/04 19/04 26/04	Link ID 32817, Date 1st, Serial #13, Groups 328 No reports No reports No reports
Wednesday (repeats Thursday)	0800/0810/0820z	18431/16278/14423 18038/16344/14563 (new freqs)22/03	01/03 08/03 15/03 Link ID 4 29/03	Link ID 45075, Null message Link ID 45075, Null message Link ID 45075, Null message 5075, Null message Link ID 45075, Null message
	0800/0810/0820z	16064/14367/12208	05/04 12/04 19/04 26/04	Link ID 45075, Null message
Second/Fourth Wednesday (repeats Thursday)	0900/0910/0920z	20386/18215/16061	08/03 22/03	Link ID 16404, Date 22nd, Serial #11, Groups 74 (rpt of 22/02) Link ID 16404, Date 21st, Serial #12, Groups 232
	0800/0810/0820z	19138/17545/15626	12/04 26/04	Link ID 16405, Date 11th, Serial #13, Groups 286 No reports
Wednesday (repeats Thursday)	1000/1010/1020z	20961/18553/16264	01/03 08/03 15/03 22/03 29/03	Link ID 49202, Null message Link ID 49202, Null message Link ID 49202, Null message Link ID 49202, Null message Link ID 49202, Null message
	2200/2210/2220z	13983/12209/10203	05/04 12/04 19/04 26/04	Link ID 49202, Null message Link ID 49202, Null message NRH No reports
Second/Fourth Wednesday (repeats Thursday)	1015/1025/1035z	20138/17428/14983	08/03 22/03	Link ID 20492, Null message Link ID 20492, Null message
	0915/0925/0935z	17538/14576/11639	12/04 26/04	Link ID 20492, Null message Link ID 20492, Null message
First/Third Wednesday	1230/1240/1250z	18563/16314/14723	01/03 15/03	Link ID 53277, Null message Link ID 53277, Null message
	1230/1240/1250z	18476/16168/14643	05/04 19/04	Link ID 53277, Null message Link ID 53277, Null message
Thursday (repeats Friday)	1330/1340/1350z	16054/13471/11062	02/03 09/03 16/03 23/03 30/03	Link ID 49237, Null message Link ID 42937, Null message Link ID 49237, Null message Link ID 49237, Null message Link ID 49237, Null message
	1330/1340/1350z	16351/14367/11483	06/04 13/04 20/04 27/04	Link ID 49237, Null message Link ID 49237, Null message Link ID 49237, Null message Link ID 49237, Null message
Second/Fourth Saturday (repeats Sunday)	0900/0910/0920z	14378/12217/10349	04/03 11/03 25/03	Link ID 45114, Date 3rd, Serial #51, Groups 140 (week 1 TX) Link ID 45114, Date 10th, Serial #52, Groups 92 Link ID 45114, Date 24th, Serial #53, Groups 94
	0800/0810/0820z	13466/11543/9328	08/04 22/04	Link ID 45114, Date 7th, Serial #54, Groups 236 Link ID 45115, Date 21st, Serial #55, Groups 272
Second/Fourth Saturday (repeats Sunday)	1000/1010/1020z	18948/16223/14639	11/03 & 25/03	Link ID 45057, Date 10th, Serial #93, Groups 90
	0900/0910/0920z	17481/15946/13543	08/04 & 22/04	Link ID 45057, Date 7th, Serial #94, Groups 188
Saturday (repeats Sunday)	1100/1110/1120z	16343/14367/12172	04/03 11/03 18/03 25/03	Link ID 36882, Date 3rd, Serial #86, Groups 446 Link ID 36882, Date 10th, Serial #87, Groups 270 Link ID 36882, Date 17th, Serial #88, Groups 296 Link ID 36882, Date 24th, Serial #89, Groups 232
	1100/1110/1120z	17437/15626/13464	01/04 08/04	Link ID 36882, Date 31st, Serial #90, Groups 300 Link ID 36882, Date 7th, Serial #91, Groups 86

			15/04	Replaced by E06 1100/1200z 17437/15626kHz ID 832
			22/04	Link ID 36882, Date 21st, Serial #92, Groups 114
			29/04	Link ID 36882, Date 28th, Serial #93, Groups 132
Saturday (repeats Sunday)	1500/1510/1520z	22913/20374/18406	04/03	Link ID 32821, Null message
sucur any (repents surrany)	1000/1010/10202	22,20,200, 1,20,100	11/03	, 8
			11/03	Link ID 32821, Null message
			18/03	Link ID 32821, Null message
			25/03	Link ID 32821, Null message
	2100/2110/2120z	20386/18509/16231	01/04	Link ID 32821, Null message
			08/04	Link ID 32821, Null message
			15/04	Link ID 32821, Null message
			22/04	Link ID 32821, Null message
			29/04	Link ID 32821, Null message

Logs sent by: Ary, Danix

Thanks Danix

Onto X06 and associated review of highlights by Jochen

History of ENIGMA2000's German Branch E2Kde (2004-2015)

Hallo liebe Freunde und Kollegen der deutschen Branche und des X06 Teams (Hello dear friends and colleagues of E2Kde and the X06 team)

This was always the start of the German Branch reports. In this E2K newsletter (the first one with 3 digits, which might look like an agent's ID \circledcirc) I will give a review of the highlights of E2Kde. More details you can find in the newsletters between 2004 and 2015.

All began on March 6th 2004 with an email from Paul, in which he asked me to build up a German Branch for ENIGMA2000, called E2Kde. I was already the « Kopf » of the German speaking numbers stations movement and speaker for the publicity in the German media about our hobby, and accidentally one day after this email, on March 7th, the Bavarian TV brought a contribution about numbers stations in the « Einblicke » series, for which I was interviewed (see and hear http://www.simonmason.karoo.net/page472.htm). Although I was asking myself: why a German Branch and not also a French or Dutch one, I asked some hobbyfriends to work together with me in this new E2Kde project. One of the hobbyists of the first hour was Daniel Stadermann, the later « vice-Kopf » of E2Kde, but also others worked with us.

Our first activities were logging of numbers stations and confirming logs from other E2K members out of E2Kde. In the newsletters we noted « double-logs » especially according to the confirmation of logs from the others. In 2005, Fritz Nusser from Switzerland changed to E2Kde as FritzE2Kch. He stayed with us till 2008, then he was only member of E2K. Unfortunately he died in 2014. 2005 was also the year of increasing my activities for X06, and from EN31 on I regularly wrote the reports about this network. In this time I became X06 officer/consultant.

Also the publicity in the media was continued. For example: On April 7th 2006, the weekend edition of « Financial Times Germany » brought an article about the hobby, for which I was interviewed and mentioned E2K (see EN34). In late 2006 I wrote a report about numbers stations for the electronic magazine « Elektor », also mentioning E2K (see EN37/38).

In June 2006 I had the great honor to become one of the E2K co-moderators, and I stayed it till 2015.

On July 22nd 2006 we reached out our first inofficial E2Kde meeting at my Marburg QTH. From this time on, the X06 logs appeared in table form, and we avoided « double-logs « of other stations. In 2007 the X06 team was created as closed group, and all X06 news run together there till today. Although we communicate in this closed group, our work is nevertheless a combining element for all numbers friends, cause the collected X06 logs are the basis for the reports of other current newsletters like N&O/UDXF. Many thanks go to Ary/NL and especially Peter/UK, the « vice-Kopf » of our team, for his great work on the analysis of the current X06 logs.

On August 30th 2008, we had the first official E2Kde meeting during the International Radio Exhibition (IFA = Internationale Funkausstellung) in Berlin (see EN 48), where we could welcome Christian Spremberg, who's living in Berlin for a long time. Unfortunately he was never a member of E2K or E2Kde, but I am still in contact with him sometimes.

A very important year for E2K and E2Kde was 2010. On May 29th, we reached out our 2nd inofficial E2Kde meeting in the living-room of DetlevE2Kde (Detlev Vreisleben) at his (former) QTH in Cologne (see EN59). Legendary was the choir of 9 Speech Morse generators, which we could present (see and hear https://www.youtube.com/watch?v=TP-gZ7PgAK8). At this meeting we could welcome Peter Staal/NL. Then we had a « hot summer » with many interesting activities. In EN60/61 you can find a 2-part documentary from Detlev about spying material and methods, translated by DanielE2Kde into English. In EN 60, Daniel brought an interesting article about his researches for G13. This article was the reason, why he became the « vice-Kopf » E2Kde. On September 9th, the TV channel Pro7/Sat1 brought a transmission about numbers stations, where I was interviewed as well as Mike Höhn, the former admin off our former German partner forum « Geheime Welten/SIGINT-Group » (see EN61). On November 20th we had the 2nd official E2Kde meeting, which took also place in Cologne at the same QTH as the inofficial one in May (see EN62). There we could again welcome Peter Staal, who introduced a « Lunch lecture » about numbers stations at the Delft University, which he reached out some months later (see EN64 with Youtube link). Also David/UK came to the meeting, a good friend of Paul, which was a great joy for all of us.

In EN64 you also find more about E2Kde's work like interviews in the media with Kopf, Christian Spremberg and FreakE2Kde (Sven Freitag, a younger member) and the 3rd official meeting in Erfurt on April 23rd 2011 (also reached out by Freak).

EN67 brings you back to September/October 2011, when a numbers article was written in the Swiss magazine « Mysteries » (E2Kde interview with link to E2K website) and the Russian spy couple was arrested in Marburg (E2Kde was interviewed).

EN68 reports about the « Buzzer » article by Peter Savodnick in the US magazine « Wired » and the German translation for the christmas edition of the « Süddeutsche Zeitung ». For this one I was interviewed amongst others. As a result of this article, a German journalist from Hamburg interviewed me on March 28th 2012 for a feature about this mysterious station (see EN69/70), which was send in German public radio in April/May 2013 (EN76). With this feature we won the « short burning microphone » of the « radio play festival » in Berlin in September 2013 (EN 78/79).

2012, DanielE2Kde made good publicity with an interview for the « Neue Westfälische » in his home town Münster (see EN70 with link to the German version and the English translation). In this article called « Die Signale der anderen » (The signals of the others), E2K and E2Kde are mentioned exclusively.

On October 6th 2012, we had our last official E2Kde meeting (a.k.a. « convention »). It was documented by Thomas (tiNGE2Kde), our busy member, who's still on E2K (see EN73 – special edition « German Report » with links to the documentary). Since this meeting I call myself « NumbersKopf ».

In the following years there was less publicity. On September 14th 2013 I held a referat about numbers stations on the DX camp in Wetzlar mentioning E2K/E2Kde (see EN 78/79). On March 26th 2014 (10 years after founding E2Kde), a team of the French-German TV channel ARTE interviewed me in Marburg for a transmission in the « X :enius » series called « Cryptology – searching for secret codes », which was sent on June 2nd (see EN 82/83 and 87 for the Youtube link to the French version).

Officially, E2Kde was last mentioned in EN89. In summer of 2015 I was moved away from the E2K co-moderators because of my decrease of logs and misleadings with Paul. As a result of this move I closed the work of and for E2Kde. But this status is no definitive end. It might be, that E2Kde comes again, when I take more time for logging stations (for example X06). These 11 active years of E2Kde were a piece of E2K history too, and I want to say many thanks to all members of E2Kde, who worked together with me over the years. But also after 2015 I stay on board of E2K and am still the X06 Teamkopf. In this function I continue now with the usual X06 logs:

X06 Mazielka (1c) logs section

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Day UTC
                                                 Comments
                       Freq Scale Monitor
Date
20170228 Tue 0801-0815
                        8157 6--1-- EdwardSmith X06b in progress
20170301 Wed 0602-0605 11525 156234 Edward
                                                 I. p., G21
20170301 Wed 0811
                       11400 6--1-- Ary/NL
                                                 X06b with test tones (0809/0810)
20170301 Wed 0845-1033 11400 6--1-- Ary, Kopf,
                                    Antonio/IT,
                                                 X06b again - very long
                                    Edward
20170301 Wed 1106-1113 16115 215346 Edward
                                                 I. p., G25
20170301 Wed 1109-1116 14750 111111 Edward
                                                 X06b single tone i. p.
20170305 Sun 1450-1453 16138 1--6-- Ary
                                                 X06b (S1) before/during XPA2 (S5)
20170305 Sun 1515-1523 14438 1--6-- Ary
                                                 Weak X06b before/during XPA2
20170305 Sun 1535-1543 13438 1--6-- Ary
                                                 Weak X06b before/during XPA2
20170310 Fri 0934-0942 10653 356412 Edward
                                                 I. p., G126
20170311 Sat 1323
                       18667 1--6-- LU5EMM
                                                 X06b with S1 before XPA2r
20170312 Sun 1407/1410 16138 1--6-- LU5EMM
                                                 X06b with S1 before XPA2m
20170314 Tue 1404/1417 14438 1--6-- LU5EMM
                                                 X06b before XPA2m
20170314 Tue 1409/1439 16138 1--6-- LU5EMM
                                                 X06b before XPA2m; 1st fair, 2nd weak
20170316 Thu 0833-0854 12219 162543 Edward
                                                 I. p., G175
20170317 Fri 0632-0641 12168 213546 Edward
                                                 I. p., G390
20170317 Fri 1002-1009 12215 361245 Edward
                                                 I. p., G190
                                                 I. p., G193
X06b i. p.
20170317 Fri 1025-1129 14824 625413 Edward
20170317 Fri 1101-1127 9320 1--6-- Edward
                                                 X06b before XPA2r (again at 1337)
20170318 Sat 1326/1333 18667 1--6-- LU5EMM
20170318 Sat 1327/1330 17419 1--6-- LU5EMM
                                                 X06b before XPA2r (again at 1335)
20170319 Sun 1410
                       16138 1--6-- Schorschi
                                                 X06b with S9 before XPA2
20170324 Fri 1510
                       11473 1--6-- Schorschi
                                                 X06b with S9 before E07
20170325 Sat 0625/0629 10112 1--6-- Ary
                                                 X06b before E07
20170325 Sat 1308/1310 18667 1--6-- LU5EMM
                                                 X06b before XPA2r (again at 1311)
20170325 Sat 1309
                       17419 1--6-- LU5EMM
                                                 X06b before XPA2r
20170327 Mon 0517
                       20323
                                                 UNID scale, received in Australia
20170329 Wed 0903-1021 12120 1--6-- Edward
                                                 {\tt X06b} i. p., strong and long
                       16147 1--6-- Schorschi
20170402 Sun 1310
                                                 X06b before XPA2p
20170404 Tue 0833-0852 13401 154263 Edward
                                                 I. p., G7
20170407 Fri 1100-1101 12190 123456 Edward
                                                 X06c
20170407 Fri 1805/1810 16114 1--6-- LU5EMM
                                                 X06b before XPA2r
20170407 Fri 1812/1814 16114 1--6-- LU5EMM
                                                 X06b before XPA2r with audio cuts
20170408 Sat 1820/1823 14828 1--6-- LU5EMM
                                                 X06b before XPA2r
                       17462 1--6-- LU5EMM
20170408 Sat 1825
                                                 X06b before XPA2r
20170408 Sat 1828
                       16114 1--6-- LU5EMM
                                                 X06b before XPA2r
                       14447 1--6-- LU5EMM
20170409 Sun 1355
                                                 X06b before XPA2p with S1
20170409 Sun 1356/1358 14947 1--6-- LU5EMM
                                                 X06b before XPA2p
20170409 Sun 1357/1359 16147 1--6-- LU5EMM
                                                 X06b before XPA2p
20170410 Mon 0934-0952 12214 463125 Edward
                                                 I. p., new frequency, G77
20170412 Wed 0934-0937 13419 465132 Edward
                                                 I. P., G100
20170413 Thu 1222-1259 16100 6--1-- Ary
                                                 Long X06b
20170414 Fri 1410
                       14947 1--6-- LU5EMM
                                                 X06b before XPA2p
20170414 Fri 1411/1414 16147 1--6-- LU5EMM
                                                 X06b before XPA2p (again at 1421)
20170419 Wed 0829-0838 12138 362154 Edward
                                                 I. p., G170
                       10212 6--1-- Ary
                                                 X06b before M42
20170422 Sat 1700
20170425 Tue 0834-0839 16257 542136 Edward
                                                 I. p., G88
20170425 Tue 1137-1213 11650 1--6-- Edward
                                                 Long X06b i. p.
20170427 Thu 1503-1506 10214 263145 Schorschi
                                                 I. p., S9, G256
20170430 Sun 1405
                       14447 1--6-- LU5EMM
                                                 Weak X06b before XPA2
20170430 Sun 1406/1408 16147 1--6-- LU5EMM
                                                 X06b before XPA2p
20170430 Sun 1407
                       14947 1--6-- LU5EMM
                                                 X06b before XPA2
20170430 Sun 1412/1419 14447 1--6-- LU5EMM
                                                 Weak X06b before XPA2 (again: 1426)
20170430 Sun 1420/1423 16147 1--6-- LU5EMM
                                                 X06b before XPA2p (again at 1429)
20170430 Sun 1421/1428 14947 1--6-- LU5EMM
                                                 X06b before XPA2p
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Thanks as usual to all contributors to the logs section.

I began this report traditionally and I will close in this way:

"Auf Wiedersehen" and "Good-bye"

Jochen Schäfer, Numbers- and X06 Team kopf

TALE OF TWO STATIONS By HJH [Thanks 499]

Radio that is, not railway! Here, to start with, is a question. What station had the same name, served in two wars, in each of which it was on each of the opposing sides, in two different countries, and each one pretending to be on the opposite side? (Clue: Each was targeting, (with propaganda) the Armed Forces of the opposition.) Those who answered "Deutscher Soldaten Sender" read no further and take the rest of the night off. Those few who did not, please read on! (If you have got this far, might as well finish, huh?)

The Deutscher Soldaten Sender or German Soldier's Transmitter (Station) was the brainchild, in WW2 of Sefton Delmar, of whom a few words here are appropriate. Sefton Delmar had been born in Germany, of British parents, long before the outbreak of WW2. He was taken to Britain by his family and eventually worked for the BBC as a reporter in Berlin immediately before the outbreak of the war. Having grown up in Germany, he was fluent in German and had the ability which is of inestimable value to speaking any foreign language, namely that of thinking in the language in which one is speaking at that time. He also thoroughly understood the German people and their way of life. He knew most of the Nazi party leaders, up to and including Adolf Hitler, with whom he even secured an interview, not long after Hitler's attainment of power in Germany. It is said that this interview convinced Hitler that the BBC were employing spies. (No such idea would enter ANYONE'S mind today on that score!) Back in UK in early 1941, he was appointed head of the Political Warfare Executive, (PWE) one of many such departments which had sprung up to fight this war, which was proving to be unlike any previous conflict. But, the plot thickens, as Gordon Ramsey was heard to say about his soup! Now read on!

During World War 2 one of the many aspects of operating on which this country had some serious catching up to do, was on the shady front of what I shall call the political warfare front, or propaganda. I shall use propaganda, as that describes it best. Why, one may ask, with a world class broadcasting service such as the BBC, which, despite its faults, it then was, would we require an independent station to broadcast propaganda? Now, propaganda is not as simple as one may think at first. Reading into it, it comes in various shades of gray, and also in pure black. All nations, Britain being no exception, are economical with the truth in time of war. (And all others, if recent news is any indicator!) There are many reasons for this, the chief one being, I believe, is to raise the morale of the home population, and secondly to lower, and if possible, destroy, that of the opposing population. Germany had it all here, given that William Joyce, aka Lord Haw Haw, was batting on their side. (A certain Dr Goebbels also had a hand in this!) A former member of the British Union of Fascists, William Joyce got into Germany pre WW2, and volunteered his services to the Germans. These guys must have thought it was Christmas! What is often forgotten, is that Germany had a TV broadcasting system equal to that which we had pre-war, and they did not shut theirs down during the war, as did we, in the belief that it would aid navigation to have all those radio beams whipping through the ether. They did not need it, they had Knickbein, but that is another NL, and you guys, being clued-up ENIGMA 2000 dudes, knew that already! Suffice to say, it was a Very High Frequency navigation aid, consisting of radio beams transmitted across the British Isles, and intersecting at the point at which it was desired the bombs should be dropped. That, very simply put, is what it was. (Sorry guys, I AM very simple!)

Okay, so far so good, we have a first rate propaganda system operating, fed by all types of intelligence gathered from various sources, and pumped out daily to destroy our morale. The big snag was, it did not seem to work as intended. I have talked to many people who listened to him, my parents and older relatives and family friends amongst them, (Yes I AM that old!) and they all seem to have treated his broadcasts as derisory rubbish. What may have helped is the fact that noone in UK was banned from listening to him, as the German nation, and ALL OCCUPIED NATIONS were banned from listening to British and other Allied broadcasts. Indeed, in extreme cases this offence was punishable by death. Also, in many cases, Mr Joyce got it very wrong! Okay, we have a fluent German speaker, Mr Delmar, who, having lived amongst the people, and, indeed, become very friendly with many, the problem now being, how best to attack the enemy verbally. This is, in effect, what propaganda does. Sefton Delmar's approach was to use what today, and indeed then, is described as "Black Propaganda." Enter here "Gustav Siegfried Eins." (Gustav Siegfried One.) Gustav Siegfried is no more than the then current German Armed forces phonetic of G and S. GS 1 started broadcasting in mid May 1941, and was pure black propaganda. Our Armed Forces would have used George Sugar, and these, like the number one, had no significance. This station, unlike Soldatensender, did try to fool its listeners into thinking it was a German radio station transmitting from Germany. Chief broadcaster was a genuine German, and has never, in my opinion, received the credit he deserves for leaving Germany and fighting against Hitlers forces in the best way he knew how. His name was Peter Seckelmann, and he was born in Berlin in 1902. A journalist by trade, he left Germany shortly after Hitler came to power. He was disgusted at the treatment of the Jewish people, and others suffering under the regime in power at that time. On arrival in Britain, he ended up in the Pioneer Corps, served in France and was evacuated at Dunkirk, together with thousands of others, and was found by Sefton Delmar whilst he was serving in a bomb disposal squad in London. Now, as you probably know, if at first you do not succeed, then bomb disposal is not for you, so he was recruited into Sefton Delmar's GS1 Scheme and started broadcasting in mid May 1941. Under the assumed name of Paul Sanders he went to work for PWE. His cover identity on air was to be known only as "Der Chef" or "The Chief." He posed as a Prussian officer of the old school who was bitterly opposed to Hitler and his supporters. His programme content was recorded onto disc and broadcast from either of the two HF transmitters at Gawcott or Potsgrove. His programme content was unashamedly of the "Black Propaganda" nature and, besides contrasting the courage of German soldiers dying in freezing foxholes in Russia to that of the Nazi hierarchy whooping it up in Berlin and other places, was bordering on pornographic in content to such an extent, that Sir Stafford Cripps, then a British Labour MP, made a serious complaint about this content. Having a world war to win and a nation, i.e. Britain, to save, fortunately counted for more and the station continued until he was brought to a startling violent and fortunately totally fictional on-air end, at the hands of Gestapo machine pistols, fortunately being supplied by the sound effects men at the UK radio station where it was all enacted. He was half way through his broadcast when men were heard to burst in and a shout of "I've finally caught you, you pig!" or some such, was followed by a fusillade of machine pistol fire. Thus ended the broadcasting career of "Der Chef", although when it was repeated about an hour later, due to a broadcast timing error, it may have lost some effect! However, given that he had run for 700 episodes, and went out with a bang, or many of them, quite literally, on November 11th 1943, he had had a good run for his money!

SOLDATENSENDER CALAIS.

Also run and created by Sefton Delmar, "Soldaten Sender Calais," would be an addition to an already operational HF station, and replace the now deceased, albeit only electronically, Chief. It would announce itself with a crash of drums accompanied by blaring trumpet fanfares and a martial voice announcing "Here is the Soldiers Radio Calais, broadcasting on wavebands 360 metres 410 metres and 492 metres. We bring music and news for comrades in the command areas West and Norway." Then would obviously follow music usually of a nature which could not be heard on normal German radio, given that jazz and such like was banned as decadent, and the news would have decidedly pro-Allied cause content. The station also provided coverage of sport and other events and items which would interest its German Armed Forces audience, and it got them in such a mood as to be receptive to the propaganda which would later be introduced. The music content contained a large amount of jazz music, which was then it its early days. Nor should it be forgotten that, as was stated earlier, in Hitlers Germany jazz music was looked on as "decadent" and banned in most places. This did not stop many German teenagers from pursuing their listening habits, although it sure made them careful. (Bit like us listening out for our long lost E10, or Tel Aviv Tina, I guess!)

Although Sefton Delmar was the driving force behind this station, he was obviously assisted by many people, amongst whom was a lady named Agnes Bernelli, whose cover name was "Vicky." The studio itself was in Milton Bryan in Bedfordshire, and this is where most programs were made and recorded. Obviously, outside broadcasts wer made as and when required, although hiding the reason for doing German language broadcasts in wartime Britain must have stretched the camouflage abilities of even the most resourceful folks! A big help was the playing of recorded speeches by Hitler and other Nazi party high ranking officials.

Now we come to something which I like to think is a fine example of woolly thinking by an organisation famous for such thinking, namely the BBC. They refused to co-operate with Mr Delmar's organisation on the grounds that it would damage the BBC reputation, post war, for truthful reporting. Well, they seem to have got over that handicap in recent years! Another thing which I find hard to swallow is that, given that this nation, namely Britain, and indeed the whole of Western civilisation, was at that time involved in what was literally a fight for survival, the BBC, seem to have not wanted to get their hands dirty. This despite the fact that

a whole nation, the British, (That's us guys!) were and are forced to pay extortionate amounts of money to finance this organization! (What was it Aunty Margaret Thatcher said? "Not a TV licence, but a BBC license!) This should not detract from the good work and unquestionable courage of the many war correspondents such as Richard Dimbleby and Wynford Vaughan-Thomas, who went with the troops, in some cases on air raids, others in actual landings and up-front where the action was taking place, to send back reports in real time. Just to give you a taste of the opposition which the BBC directed at Soldatensender, here is a verbatim quote from a report dated 19th November 1943 and marked as "Most secret: Copy No. 5." It is now since de-classified hence its publication. And these dudes were our side?

QUOTE: While assuming the character of an official German "SOLDATENSENDER" it provides the type of entertainment which research among prisoners of war and intelligence sources shows is most avidly sought after by war-jaded servicemen. It is calculated that, on medium wave, it can multiply in Western Europe the German audience which "Atlantik" has already acquired on short wave.

Its object is to demoralise, confuse and subvert the German forces in the west. It has been devised as part of the RANKIN and OVERLORD plans. Its methods and purpose have been worked out in consultation with COSSAC H.Q., The Admiralty, War Office and the Air Ministry. It is the vehicle for a series of specific operations planned in con-junction with the three Fighting Services, and these supply the appropriate service intelligence. END QUOTE:

Be that as it may, the station soldiered on until war's end, playing its most important role in the days prior to, and just after, D-Day. Having a backer as powerful as Churchill, who took the view that winning was and is all that mattered, he was on a winner really! Soldatensender Calais continued transmitting information to impress on German officers that the Normandy landings were in fact a feint, and that the Pas de Calais area was the real target. Another planted idea was the impression that the bridgehead was meant to be wider than it in fact was. Following the overrunning by Allied forces of the Pas de Calais area, the name of the station was changed to Soldatensender West. A further embellishment was the Soldatensender programme content being printed out and air dropped the next day in the newsletter put out by PWE/OSS Nachrichten für die Truppe (News for the Troops) and aimed at German troops. (OSS=Office of Strategic Services, the US organization.) The difficulties in running such a station as this successfully must have been enormous. So, one asks, how much of a contribution did this station make to the Allied victory? Any question of this nature is difficult to evaluate and most opinion can be formed by interrogation of captured POWs. Indeed, using this technique, post D-Day, prisoner interrogations showed that over 50 percent had listened to the stations. Many trusted Nachrichten für die Truppe (News for the Troops), more than their own national news sources. This newspaper was dropped by American air forces in quantities of an average of 250,000 copies, each night before and after the invasion. U-Boat crews, having been captured by Allied warships, admitted that they too, listened to this station. I will leave the last word on its effectiveness, or otherwise, as a weapon, to someone who knew a bit about it, Dr Josef Goebbels. In his diary, dated November 28, 1943, he wrote:

In the evening the so-called "Calais Soldiers Broadcast" which evidently originates in England and uses the same wavelength as Radio Station Deutschland when the latter is cut out during air raids, gave us something to worry about. The station does a very clever job of propaganda and from what is put on the air one can gather that the English know exactly what they have destroyed and what not.

The above quote is from Joseph Goebbels, The Goebbels Diaries: 1942-1943. trans. Louis P. Lochner (Garden City: Doubleday, 1948, and I have obtained it from a paper by Robert Rowenpresented to the New York Military Affairs Symposium April 18, 2003 The CUNY Graduate Center To whom credit and copyright is acknowledged.

ASPIDISTRA.

Which leads up nicely to my next question, namely, "It was made in USA, grew in a field in Sussex, and Gracey Fields had a hit record with it. What was it?" The answer of course is, "The Biggest Aspidistra in the World." Don't believe me, read further.

So, with the Beeb having thrown their toys out of the pram, having been told that PWE would be allowed to use black propaganda, or tell porkies, which is more or less what the Beeb do today, but they now hide it better, as evidenced by recent trials and police investigations.('Nuff said!) Far from being a plant, we are looking at a radio transmitter, which has a most interesting history, having been made in USA by RCA, and was then currently languishing in boxes, having been made too powerful to use by the limits placed on all commercial transmitters in USA, by the Federal Communications Commission of 50Kw. The RCA were only too glad to sell it to us dumb Brits for 165,000 British pounds sterling. This left PWE rubbing their hands, and Station WJV, Newark, New Jersey, for whom the transmitter was originally intended, wringing theirs! (Wonder what it would cost today?) So, the BBC was forced to hand over this great bit of kit to the PWE for their nefarious (had to spell check THAT baby!) purposes. Enter "Soldatensender Calais", (Soldiers Transmitter Calais) operating on 833 kHz (360Metres) 714 kHz (420Metres) 612 KHz (490 Metres) all Medium wave. (But you guys knew that!) A co-station, "Kurzwellensender Atlantik" (Short wave Transmitter Atlantic) operated on HF and was aimed specifically at U-Boat crews. (And their life was alraedy hard enough. If my Dad did not ASDIC/ Sonar them, the black propaganda on the radio would have them leaping overboard in droves!) Planted in a field near Crowborugh in Sussex, it soon grew to be a fine piece of kit. It transmitted from 14th. November 1943, and it ceased transmission on 30th. April 1945. Transmission times were from 1800 British local time until dawn. A much younger Plonker than he who writes these words, even got to visit it post war. (Much post war!) As those of you as long in the tooth as am I will recall from "Plonkers Progress, I visited it on a fault finding trip during my service as a Radio Technician (Light) on exercise in that area circa 1963 (Told you it was

SEFTON DELMAR: Sefton Delmar has written an excellent book on the subject which gives far more detail than can this weary old scribe! Now sadly out of print, this link my help anyone wishing to trace a copy- Black Boomerang Sefton Delmar's out-of-print book.)

DEUTSCHER SOLDATENSENDER 935 QSL



Okay, so we hop on some years and the Cold War is ticking along quite nicely, thank you. The Berlin wall is firmly in place and Germany is sliced in two, one part West and the other East. West Germany is called the Federal Republic of Germany, or Bundes Republik Deutschland, and the East is known as the Peoples Democratic Republic of Germany, or Deutscher Deomokratischer Republik. Both nations are now reformed but with the Russians, or Union of Soviet Socialist Republics, allied with the DDR, both of whom are members of the Warsaw Pact, and NATO (That is US guys!) are allied with the West Germans. Capital of West Germany is Bonn, and that of the DDR is good old Berlin. Now, Berlin is divided into 4 sectors, British, French and American, and not forgetting the Soviet (Russian) sector. Berlin is, or was, firmly in the Soviet Zone of East Germany. So, you have a divided nation with two capitals, one of which is divided. Try explaining that to your kids, as I often did! Okay, East Germany and West Germany both have their own Armed Forces, trained and equipped by their respective sponsors. No prizes if you said the Russians backed the East Germans and the Brits, USA, and the rest of NATO, backed the West. Conscription, or call up, (The Draft in USA) was alive and well in Germanys, East and West. This meant that both nations had large Armed Forces, and plenty of manpower. Now, one of the chief activities of any Armed Service is Intelligence gathering, or finding out what the opposition is doing, and what are they doing it with. This means you can do it first, or build a bigger or better one than them, or listen to, or watch them, that much more efficiently! Given that both Germanys spoke German, made intelligence gathering that much easier. No language problem. Okay, a guy from Bavaria would have trouble understanding a kid from Brandenburg, but nothing that could not be solved rapidly. One scheme tried by the West Germans was to start up a station called Rundfunk Battalion 990. (Radio Broadcast Battalion 990) This t

One of the early acts of the West German government was to ban the Communist Party of Germany, or KPD as it was called. (Kommunistische Partei Deutschland.) Not the smartest of moves, this had the effect of increasing covert activities in East Germany. One of the counter moves by the East Germans was the establishment of a radio station known as Deutsche Freiheit Sender 904, or German Freedom Station 904. It announced itself as the only German station not under the control of the government in Bonn. Well, they had that right. It sure wasn't, but it was most certainly under the control the government in East Berlin! It started transmitting on 17th. August 1956 from the transmitter at Burg near Magdeburg, although production of programmes was from a secret location in Berlin. (East, naturally!) It was known as Deutscher Freiheit Sender 904, (German Freedom Station 904) 904 was, oddly enough, the medium wave frequency, 904 kHz. on which it transmitted, later changing to 908 kHz. Some of you will recall the transmitter at Burg near Magdeburg as having been used, we believe, for our now venerable lady, "Magdeburg Annie", to send her coded messages. From September 30th 1971, transmission of this station was ended due to a change in the political climate between east and West German, although as stated below, the German Soldier Station soldiered on (pun intended!) until June 1972. The station had four 250KW Tesla transmitters, and yes guys, they DID have vacuum tube/valves as drivers! On the DFS 904 station, you could hear such gems as ""Achtung Förster, der Hamster bohnert, der Wachs ist alle", ("Attention Forester, the hamster is polishing (or waxing), the wax is finished. "Or in similar vein, "Ab sofort darf rechts und links überholt werden, aber erst bei Sonnenuntergang"' (From now on, you can overtake on the left and the right, but only at sundown." These were messages similar to those sent on the BBC to Occupied Europe during World War 2 intended for the Resistance Groups and others. They were, apparently, inspired by these messages. Most, we are told today, were a bluff, to get the guys in suits from Pullach (Pullach is the HQ of the Bundesnachrichten Dienst or West German Intelligence Service) looking under the beds for all those Reds. Those that did have meaning, according to one source, were instructions for couriers of the KPD, or German Communist Party, which, as stated earlier, had just been banned in West Germany. Transmission times of both stations are given below:

Deutscher Soldatensender 935 (German Soldiers Station)

Location: The Studio production –Grounds of the Broadcasting House Grünau.

Transmission Times and duration: 1.October 1960 bis 30.June 1972 24.00 Midnight

Frequency: 935 KHz (Medium wave)Transmission facilities were used simultaneously. Workforce: up to 30 People.

Transmission Times: 18.00 to 18.45; 20.15 to 20.45 and 23.30 to 0.30; From 1962 another morning time was added. 6.15-7.15/12.30-13.30. Evening

transmissions were increased by one hour to 01.30 Hours

Deutscher Freiheitssender 904 (German Freedom Station)

Transmission times to 1956: 04:30 till 06:00; 19:00 till 19:30; 22:00 till 22:45 Hours

Transmission times to 1969: 19.00 till 20.00; 21.00 till 22.00 Hours

In October of 1960 the Deutscher Soldaten Sender 935 began transmitting from the same station, following the decision by the National Defence Committee of East Germany to establish it as a counter to the station which was established by West Germany and aimed at the Armed Forces of the Peoples Democratic Republic. The same transmitters would be used, sending on 935khz, but the programme production taking place in Berlin Grünau. The same 250kw medium wave transmitters as powered up the Freedom Station were used, and the target audience was the members of the Bundeswehr, the Federal (West) German Armed Forces. They gave out their postal address as: Werner Schütz, Berlin W8, Postfach 116.

A letter and/or reception report to Werner would have got you a nice QSL card, as seen at the head of this article, but it may also have got you the unwanted attention of the men in suits from Pullach. While the Freedom station was an attempt to show the joys of the Communists system as opposed to our decadent Western democratic one, the German Soldiers Station was aimed at the large number of German Armed Forces personnel then serving. It should be remembered that in West Germany, at that time, conscription was alive and well, and of 18 months duration. Many of my German friends went through it, and most did it with resignation, and some even enjoyed it. Indeed, some even made money on it. One of the clauses in the Conscription Act guaranteed that no soldier would be penalised financially by serving. Thus, many waited for call up, and bought new Hi-Fi systems and clothes. Sort of made up for giving up 18 months of your life, I guess! The idea of the Soldatensender staff was to play plenty of the music then beloved by West German teenagers, and, ironically, much of which was banned in East Germany. Both stations employed announcers and commentators who could speak with West German accents. German is no different to any other language, in as much as there are regional dialects. Thus, there was an announcer who sounded as though he was from the Bavarian region and another who sounded like a native of the Ruhr area. (I myself, having spent much time in Dortmund, and later being stationed in North Rhine Westphalia, am often told that I sound like a North German.) The aim, of course, of this station was intelligence gathering and they encouraged bored West German squaddies to write in about anything which they felt they wanted to talk about. The DDR saw this as a good means of getting at the minds of the West German troops, and gathering intelligence, and who can blame them for that. We did a lot similar, and some worse! The written letter was alive and well in those days, (Now, we call it snail mail!) and a source I have consulted gives the total of letters written to the cover address given on the QSL card shown, as roughly 1000 letters weekly. Even if only one or two of those gave a clue or hint worth knowing, it paid or itself. I monitored the station once or twice, one time which I recall, was just after I and some colleagues had been on a mainly German Army exercise, in about October time, called HERMILN 2. The exercise was reported more or less blow by blow. I discussed it later with a buddy who had been on the same exercise, and at first we thought "These guys must have some good sources!" Later, of course, we realised that, as was then common practice, the West German press published much about this exercise, and gave full coverage especially to troop movements and convoys. It also explains why ALL Embassies have military attachés that buy copies of ALL military magazines and comb the internet, cos we tell them everything!

So, what did our German GIs get for their money? (Not that it cost them anything to listen: Bit different with Auntie Beeb, Ill bet!) Broadcast times for both stations are shown above in the table. DSS 935 started with the old faithful, the drumbeat. "Boom, Boom, Boom. Deutsche Soldatensender (German Soldiers station) Mittlerwelle 935khz (Medium wave 935 kilohertz) Wir melden uns täglich (We report daily) 06.15 Uhr, 12.30 Uhr, 18.00 Uhr und 22.30 Uhr. Boom Boom Boom". (Times are obvious) This was played at the opening and closing of the stations transmissions. Programme content varied between transmissions. For example, the Saturday slot at 18.00 hours and 1920 Hours was called "Informationen für den Bund." Or "News for the Forces" and was interspersed with evening commentaries, 2 minutes news reports and greetings for troops. The time between 1850 Hours and 1910 Hours was given over to a playing of the hit parade and a "Stars Portrait." The last programme of DSS 935 went on air on 30th June 1972 at 22.30 Hours. In the announcement, listeners were told the following: "For a few days the station is going off the air for technical reasons." In fact it never resumed broadcasting again. Listeners would not hear two of the speakers of DSS 935 again until the following Autumn, and then they would have had to upgrade and re-tune to "DDR-TV" (East German TV) when they were on the "Actual Kamera" (Actual Camera) show. They were of course, Joachim, real name Wolfgang Meyer, and Kathrin, real name Elisabeth Süncksen (Both names are open source and given in the DSS 935 website) Credit is due here to the excellent web site which is run by Wiedja Musebrink, himself a former member of this group, and here is a link to this excellent website for "Deutscher Soldatensender 935", for anyone who wishes to research this fascinating station further.

http://deutscher-soldatensender.de/ My thanks are due to Wiedja and his website for giving me such excellent help in writing this article. "Danke Wiedja, eines Tages gebe ich einen aus!" I would also like to pay tribute to those colleagues of Wiedja who he tells me are no longer with us. Sadly, that is a journey which we all must one day make. As an old Army buddy used to say, "I ain't afraid of dying; just want to be someplace else when it happens to me!"

DISCLAIMER: This article has been written using internet based sources, and private conversations with people who were involved in the operation of one of these stations at the time at which it was active, and I accord them the courtesy of anonymity which I would myself require, save for where their express permission had been given to publicise their identity All conclusions drawn, or opinions expressed, are my own, as are any errors. The content and sources have no relation to any organisation, military, civil or government, with which I am now, have in the past been, or may in the future be, associated. HJH: 2017.

Thanks for a nice surprise 499 excellently imformative!

More North Korean stuff in the Papers

'Page 924 number 49, page 14 number 76, page 418 number 37': Listen to North Korea's chilling coded radio messages to Kim Jong Un's spies in the dead of night

Message cuts through the airwaves of North Korea's station Radio Pyongyang Tells the team to 'review' the 'math assignment' after reading through numbers Broadcast similar to those used by Cold War spies, de-coded with cypher book Comes amid high tensions after death of Kim Jong Un's brother in Malaysia

By James Dunn For Mailonline

http://www.dailymail.co.uk/news/article-4283332/Is-cryptic-broadcast-North-Korea-using-Cold-War-tactics.html

This is one of the cryptic message North Korean dictator Kim Jon Un is believed to be using to direct his spies in the south.

The coded message, intercepted from a Pyongyang propaganda station, instructs members of the '21st exploration team' to 'review' their 'math assignment'.

The broadcast then recites a series of numbers, which it is believed could be used by North Korean spies in South Korea to translate into orders amid high tension between the nations - which remain technically at war after six decades.

A cryptic message intercepted in the Korean peninsular has fueled fresh fears that North Korea are using Cold War spy tactics to attack their enemies in the south. Pictured is North Korea's leader Kim Jong-un

A cryptic message intercepted in the Korean peninsular has fueled fresh fears that North Korea are using Cold War spy tactics to attack their enemies in the south. Pictured is North Korea's leader Kim Jong-un

It says: 'On page 924 number 49, on page 14 number 76, on page 418 number 37,' which are believed to be codes that can be translated by the spies.

In the days of Cold War espionage, spies would receive messages in number form that could be translated using cipher books they were issued, which they enemies could not de-code without them.

The message, broadcast on Radio Pyongyang, comes amid heightened international tensions with North Korea as Kim Jong-un's spies are accused of assassinating his brother in Malaysia.

Kim Jong-nam was killed at Kuala Lumpur International Airport with a nerve agent VX on February 13. South Korea says the North's regime ordered the killing and Malaysia has named several North Koreans as suspects, although four of them left the country on the day of the killing.

There has been intense media speculation that two of the suspects may be hiding inside the embassy. Pyongyang's envoys meanwhile have blasted Malaysia's investigation as biased and demanded the return of the body.

On Friday police issued an arrest warrant for one of the men believed holed up in the embassy, a North Korean airline employee. They also requested that the other, the second secretary at the mission, assist the probe.

North Korean military participate in the celebration of the 70th anniversary of the founding of the ruling Workers' Party of Korea, in 2015. It's is feared that the nation is becoming increasingly hostile amid heightened international tensions

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'They (the suspects) could be in the North Korean embassy as it is the safest place against questioning or possible arrest,' a senior government official, who did not want to be named, said.

The embassy, a two-storey neo-colonial house with a North Korean flag fluttering defiantly, is situated in Kuala Lumpur's well-heeled Bukit Damansara area known for its hipster cafes and restaurants.

For three weeks international media have been camped outside, awaiting the next doorstep statement and watching the comings and goings of black embassy cars and deliveries of ginseng chicken soup.

'This is extremely rare for a North Korean embassy to be in the spotlight because Pyongyang is usually low-profile,' said Dr Roy Rogers, from the Department of International and Strategic Studies at the University of Malaya.

The message, broadcast on Radio Pyongyang, comes amid heightened international tensions with North Korea as Kim Jong-un's spies are accused of assassinating his brother Kim Jong-nam (pictured) in Malaysia

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Malaysia formally established diplomatic relations with North Korea in the boom years of the 1970s.

'North Korea, despite its reclusiveness is part of the Non-Aligned Movement and Malaysia was trying to be a leader among developing countries,' Ibrahim Suffian, a political analyst with the Merdeka Centre think-tank, told AFP.

The most shocking assassination attempt in North Korea's history

The Blue House was targeted by North Korean commandos in 1968

In 1968 thirty-one North Korean commandos slipped across the demilitarised zone with one mission - kill the South Korean president in his official palace.

It would be the climax of years of guerrilla warfare and subversion carried out against the south.

North Korea had chosen its most elite soldiers for the operation.

However after slipping across the border they were discovered by South Korean villagers, who warned the police and military.

But the commandos were still able to get within a few hundred yards of the Blue House, South Korea's presidential palace.

A firefight broke out and dozens of South Korean troops were killed.

The commandos attempted to flee back across the border, but all but two were killed.

Bizarrely one of the survivors, Kim Shin-jo, later went on to become a Presbyterian minister.

As long ago as 2000 the United States and North Korea held abortive talks in the Malaysian capital on curbing the North's missile programme.

Pyongyang opened its embassy in 2003, providing a conduit between it and the wider world, with Kuala Lumpur serving as a discreet meeting place for talks with Washington.

A CCTV image posted on an open social media page of a suspected female assassin

Last October former US diplomats held closed-door talks with senior Pyongyang officials in the city.

There were also more covert operations.

A recent report by a UN Panel of Experts, identifying a front company run by North Korean intelligence out of Malaysia, exposed Kuala Lumpur to criticism that it had been naive in its dealings with Pyongyang.

'I don't think (Malaysian authorities) were naive. They should know what the North Koreans are doing in the country. They let it slip,' said Faisal Hazis, head of the Asian Studies Centre at the National University of Malaysia.

The Vienna Convention of 1961 grants diplomats and embassies protection, and some believe the suspects will use this to avoid prosecution or arrest if they are in the embassy.

'It potentially can become like the Assange case,' said Ibrahim, referring to Julian Assange, the founder of the secret-spilling Wikileaks website, who has found refuge at the Ecuadoran embassy in London since 2012.

'A lot depends on Malaysian authorities' patience,' he added.

Malaysia is now hardening its stance. With the ambassador's expulsion order and the cancellation of a rare visa-free travel deal with North Korea, it is edging close to severing diplomatic ties.

'We are closer but not equal to severing ties,' said Oh Ei Sun, a senior fellow at the S. Rajaratnam School of International Studies in Singapore.

'If they continue to make baseless accusations, refuse to cooperate with the investigations, or the investigations conclude that the assassination was state-sponsored, then indeed it could get worse diplomatically,' he added.

http://www.dailymail.co.uk/news/article-4283332/Is-cryptic-broadcast-North-Korea-using-Cold-War-tactics.html

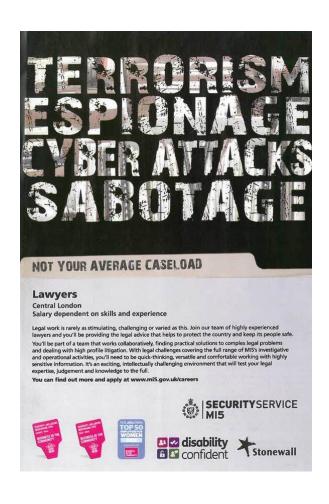
Ed: The message detail stated at the start of this piece is old Anyone know who James Dunn is?

A piece in Eye Spy Intelligence Mag appeared written by yours truly. Sadly the gremlins got into the piece [how?] and stated the E17z example of a clandestine message as being North Korean Not my mistake, please be aware,

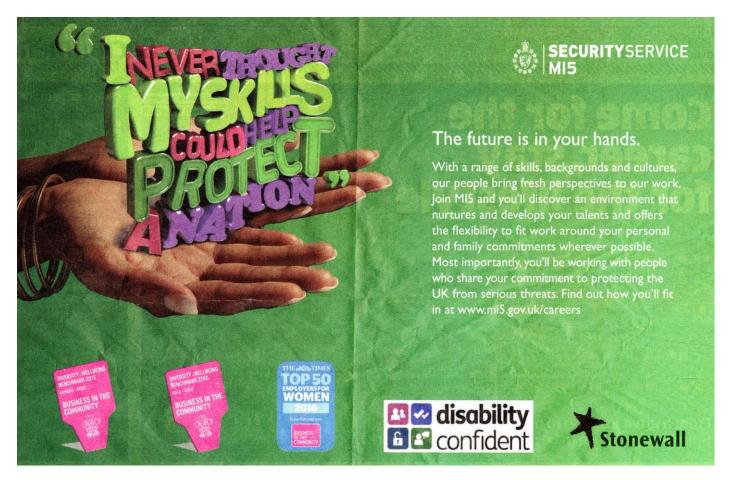
Gizza Job!











PoSW's Newsround

Items of Interest in the Media:-

The big story in the UK media at the moment is the forthcoming elections, both local in May and a general election for a new parliament in June, this tied in with the forthcoming "Brexit", the intention of the UK to leave the EU. There are forces at work trying to overturn the results of last year's referendum in which the nation voted by a small majority to leave the EU or at least to make sure that most of the rules of the EU remain in place, especially with regard to immigration. Big business has become so used to a plentiful supply of cheap labour from the former Eastern Bloc nations which joined the EU after the fall of communism, that they are terrified at the prospect of no longer having a workforce willing to work for low wages and live in conditions which we thought had long been eradicated from this country. I recall an item on the local TV news a few years back about the huge influx from Eastern Europe of casual agricultural workers in the Cambridgeshire Fens region, living in shared rented accommodation, a pan shot of one of the rooms showed six sleeping bags on the floor and there were two other rooms like it.

A local councillor was interviewed, a Labour Party councillor, and he thought it was, "wonderful, marvellous, how great they should want to come and work here, evidence of a booming economy and wasn't it brilliant the way Tony (Blair) and Gordon (Brown) had been running things since 1997." The Labour party was set up to improve social conditions and the lives of working people and the fact that they approve of what is in effect the return of slum housing shows how much they have changed. "We've moved on", they would say, no doubt.

Interesting story from the front page of *The Times* newspaper of 10-March with the headline "'Ghost ships' in European waters spark terror fears", written by Fiona Hamilton, Crime and Security Editor, which says, "Hundreds of ships are sailing into European waters after suspicious manoeuvres near terrorist hotspots, prompting fears that they are smuggling people and weapons with impunity.

An investigation by *The Times* has uncovered how cargo ships and other large vessels routinely switch off GPS tracking so that they can disappear, falsify their identification or veer off their usual course.

Figures compiled by Windward, a maritime data and analytics company, revealed that in January and February 40 ships entered Europe from Libya close to where the Islamic State is operating, after 'going dark' by ceasing transmission of their location. Twenty vessels travelled through Syrian or Lebanese waters and made dubious stops before reaching the Continent. This amounts to hundreds of ships a year if the data is extrapolated. During the same period vessels from elsewhere went dark on 2,850 occasions before.

entering Europe, while 45 cargo ships came to British waters after turning off their tracking for more than 24 hours. More than 300 vessels entered European seas with invalid shipping registration, including 50 that came to British waters.

Such behaviour fuels concerns of illegal activity, with experts warning that cargo ships may anchor in foreign waters to pass people, weapons and drugs to smaller vessels while avoiding detection by maritime authorities.

Senior naval officials warned that Britain was vulnerable to terrorist attacks because of insufficient resources to monitor ships. Admiral Lord West of Spithead, the former first sea-lord, said: There has to be real concern over the picture of what's happening on the surface

of the sea. It can be exploited'. Vice-Admiral John McAnally, president of the Royal Naval Association, said that maritime security vulnerability was 'out of sight, out of mind'.

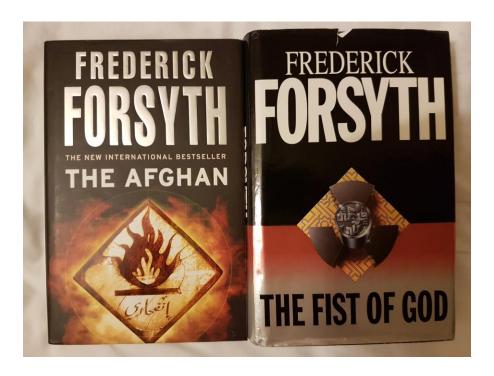
The authorities do not comment on intercepted vessels, but security sources said that identification data and manoeuvres were routinely examined before ships entered Britain."

The possibility of a ship being used in a terrorist operation was the theme explored by Frederick Forsyth in his book, *The Afghan*, over a decade ago, also available on compact disc – listening to it right now just to refresh my memory, from Random House Audio, read by actor Robert Powell. The theme in *The Afghan* is that a terrorist group have fitted out a merchant ship as a floating bomb, having installed tanks containing a large quantity of flammable gas which they intend to explode on a suicide mission close to a luxury liner being used to host a meeting of the world's political leaders. The terrorists are infiltrated by Mike Martin who manages to thwart the terrorist's plan although at the cost of his own life. As the "blurb" on the CD case says, "When British and American intelligence catch wind of a major Al Qaeda operation in the works, they are primed for action – but what can they do? They have no sources in Al Qaeda, and it's impossible to plant someone. Impossible, unless....."

Perhaps the authorities are, even now, studying Mr Forsyth's words - and getting just a little bit worried; they do say, after all, that truth is stranger than fiction and that life often imitates art.

Point to ponder:- "The only certainty is that nothing is certain" - Pliny the Elder, Roman statesman.

Thanks Peter. Another very decent Freddie Forsyth offering is 'The Fist of God' and introduces Mike Martin. If you haven't read it, it's worth picking up; a believable thriller indeed.



Onto Spectre's News takes:

http://www.telegraph.co.uk/news/2017/03/07/wikileaks-claims-mi5-cia-developed-spyware-turn-samsung-tvs/

Wikileaks claims MI5 and CIA developed spyware to turn televisions and smart phones into bugs

British spy agencies worked with the CIA to turn televisions and smart phones into bugging devices that can record conversations and even take photographs, according to leaked intelligence documents.

The CIA is accused of running a secret computer hacking programme giving its agents access to everyday items including mobile phones, TVs and iPads.

The CIA is also alleged to be targeting cars that contain onboard computers linked to the internet, amid unsubstantiated allegations that once in control of vehicles it could stage assassinations and make them look like accidents.

The catastrophic leak of data was obtained by WikiLeaks and published online yesterday, causing embarrassment to the American intelligence community at a time when it is at loggerheads with President Donald Trump.

In total, WikiLeaks published 8,761 documents, claiming it to be the largest ever release of CIA files in its history. The CIA declined to comment while experts said the documents, generated by the agency's Engineering Development Group, between 2013 and 2016, seemed genuine.

The British intelligence agencies - MI5 and GCHQ - were dragged into the row with files showing how the UK held workshops with the CIA to find ways to 'hack' into household devices.

connected televisions. It was developed in a 'joint workshop' held in June 2014 involving MI5 and the CIA and enabled the agencies to gain control of the TV, according to the documents.

It is alleged that MI5 created a 'fake-off' mode that meant television users thought sets were switched off. In fact users can be secretly recorded by them and conversations transmitted to a CIA operative listening in. The smart televisions come with a microphone that is normally used for voice-activated controls.

The leaked files also appeared to show evidence that GCHQ had collaborated with the CIA in hacking into Apple's iPhones as well as smartphones run using Google's rival Android software. The phones can even take photographs when owners thought them switched off.

According to the documents, GCHQ, the Government's listening agency based in Cheltenham, worked on six different methods for targeting the iOS operating system used on iPhones, iPods and iPads and one for spying on Android phones.

In total the CIA developed 14 applications targeting iPhones and 24 aimed at Android phone users.

In so doing, WikiLeaks claimed the CIA was able to circumvent encryption codes used in such messaging groups as WhatsApp.

The CIA is alleged to have exploited glitches in the technology that the original manufacturer or designer isn't yet aware of - called 'zero days' - to hack into the devices.

Another document suggests the CIA's cyber directorate is developing ways to infect control computer systems in cars and lorries.

"The purpose of such control is not specified, but it would permit the CIA to engage in nearly undetectable assassinations," said WikiLeaks.

In all, the documents suggest the agency created more than 1,000 viruses and other types of malware to gain access to everyday items.

WikiLeaks also accused the US government of failing to abide by a commitment to tell technology companies of any identified vulnerabilities, instead "hoarding" weaknesses for use by spy agencies. The deal was put in place to allow the tech giants to plug weaknesses in operating systems and prevent leaks to foreign intelligence agencies, especially Russia and China.

WikiLeaks claimed the archive had been circulated among former American government hackers and contractors, one of whom had passed on parts of the cache in order to start a wider debate. It is promising to release more documents in the future.

Julian Assange, WikiLeaks' founder who remains inside the Ecuadorean embassy in London where he is evading arrest, said: "There is an extreme proliferation risk in the development of cyber 'weapons'."

https://www.theguardian.com/technology/2017/mar/15/fbi-charges-two-russian-spies-hackers-yahoo-data-breach

US charges two Russian spies and two hackers in Yahoo data breach

Four indicted in conjunction with the hack of a billion Yahoo accounts, amid intense political controversy over Russian interference in the US election

The US has announced charges against two Russian intelligence officers and two hackers over a massive Yahoo data breach that affected at least 1 billion user accounts.

The indictment, unveiled by the justice department on Wednesday, said that the hack targeted the email accounts of Russian journalists and opposition politicians; former government officials in neighboring countries; and several US government figures, including "cyber security, diplomatic, military and White House personnel".

At a press conference in Washington, the acting assistant attorney general for national security, Mary McCord, said: "The department of justice is continuing to send a powerful message that we will not allow individuals, groups, nation-states, or a combination of them to compromise the privacy of our citizens, the economic interests of our companies or the security of our country.

The justice department has previously charged Russian hackers and hackers sponsored by the Chinese and Iranian governments, but Wednesday's indictment marked the first criminal case for cybercrimes brought against Russian government officials.

It comes amid intense political controversy over Russian interference in the US election, including a data breach of the Democratic National Committee.

McCord declined to comment on whether there was a link between the Yahoo hack and Russia's alleged attempts to sway the election in Donald Trump's favour.

But the indictment provides the latest indication that the US is willing to retaliate against data thefts with foreign ties in a criminal forum.

The two Russian intelligence agents were identified as Dmitry Dokuchaev and Igor Sushchin, both of whom work for the FSB, the Russian spy agency successor to the KGB.

Dokuchaev was described as an officer in the FSB Center for Information Security, known as "Center 18", which is supposed to investigate hacking.

According to the Washington Post, which first reported news of the charges, he began working for the agency to avoid prosecution for credit card fraud.

Dokuchaev was one of two FSB agents arrested in December, according to Russian news agencies, and charged with treason over alleged cooperation with the CIA

It was unclear at the time whether the arrests were linked to US election hacking, and details of what exactly the men were accused of have been scarce, with a series of contradictory insider leaks provided to various Russian outlets.

A top expert at Russian cybersecurity firm Kaspersky was also arrested, as well as people with links to a group of Russian hackers called Shaltai-Boltai, who posted hacked emails from government officials online and sold them in anonymous online auctions.

The two freelance hackers were named as Alexsey Belan and Karim Baratov, a Canadian citizen, who was arrested in Toronto earlier this week. Russian authorities are protecting Belan from extradition, it was reported.

Other law enforcement agencies, including M15, the Royal Canadian Mounted Police, and the Toronto police department participated in the investigation.

McCord declined to comment on any connection between the group's activities within Yahoo and very similar activities on the servers of the Democratic National Committee during the election. "Our indictment does not have any connection between this intrusion and the intrusions into the DNC," she said. "That is a separate investigation."

McCord said the attack was aimed at gathering information "clearly some of which has intelligence value". But she added that "the criminal hackers used this to line their own pockets for private financial gain."

The attack on Yahoo was exposed partially in September, but in December the company discovered the extent of the intrusion which was described as one of the largest hacking attacks in history.

The justice department indictment shed significant light on the hackers' tradecraft.

The team financed its efforts in part by forcing Yahoo's search engine results to point to a specific erectile dysfunction pill manufacturer for targeted users. The impotence pill manufacturer paid Belan for this fraudulent traffic by the click. McCord said that, unorthodox funding methods aside, the two intelligence officers "were acting in their capacity as FSB officials".

When news of the Yahoo breach broke last year, the company itself was widely condemned for what technologists called improper security – the breach was possible because the hackers were able to forge "cookies" that told Yahoo's servers to allow them full access to vast numbers of private email accounts.

That Yahoo's authentication cookies could be forged at all struck many experts as proof of the company's negligence. According to the indictment, the hackers were also very careful, uploading a program that cleaned evidence of the intrusion to Yahoo's servers.

According to the indictment, not only did the hackers write authentication cookies for use on their own computers, they were also able to forge cookies, upload them to Yahoo's system and push them to individual users they wished to target, according to the indictment.

The FSB-led team monitored more than 6,500 accounts with the technique, which was markedly similar to the activities of the "Cozy Bear" hacking team found lurking in the servers of the Democratic National Committee last year. Cozy Bear's activities have been widely attributed to the FSB.

According to the justice department, the hackers forced surreptitious entry to Yahoo networks in early 2014 to begin reconnaissance but did not begin stealing user data until October or November of that year.

Theft continued into 2016, a persistence unusual for money-motivated thieves and reminiscent of the patience demonstrated in the DNC intrusion.

Initial news of the breach in September caused friction between Yahoo and Verizon, which cut a \$4.83bn deal for the company earlier in 2016. When, in December, Yahoo admitted that the breach was far wider than even the historic 500m accounts it had originally reported, Verizon's general counsel began to suggest to reporters that the effects of the breach might materially diminish the agreed-upon value of the company.

Yesterday, Yahoo discounted the price of its core assets to Verizon by \$350m.

In 2014, the justice department indicted five Chinese military officers, believed to be serving in China's military hacking efforts, for the theft of hundreds of terabytes of data from several US companies and unions.

The then attorney general Eric Holder said the indictment, the first ever that targeted a foreign military engaged in hacking, signaled an "aggressive [US] response" to large-scale hacks.

https://www.theguardian.com/us-news/2017/mar/20/nsa-british-intelligence-trump-wiretap-spy

NSA director says British intelligence was not asked to spy on Trump

Michael Rogers denies Sean Spicer's claims Obama administration asked GCHQ to conduct surveillance on Trump, at hearing with House intelligence committee

British intelligence officials were formally exonerated on Monday by the director of the US National Security Agency from an extraordinary accusation of improper surveillance of Donald Trump.

The NSA director, Michael Rogers, made clear that it would have been a violation of US law to ask the British to conduct such an operation. Asked at the first public hearing into Trump's ties to Russia whether he, or anyone else, had asked GCHQ to spy on Trump or his allies, Rogers replied: "No, sir, nor would I."

GCHQ took rare public exception last week when the White House press secretary, Sean Spicer, cited a Fox News report that implied Barack Obama's administration had asked the UK to conduct surveillance on Trump.

GCHQ, which typically does not comment on news reports, called the accusation "nonsense", "utterly ridiculous" and an assertion that ought to be "ignored".

Rogers, his voice passionate, said that using GCHQ to effectively launder illegal surveillance on Americans would be "against the Five Eyes concept".

Five Eyes is the surveillance alliance between the US, UK, New Zealand, Canada and Australia, which include widespread intelligence sharing and mutual development of surveillance tools.

GCHQ in particular is the closest intelligence partner the NSA possesses. NSA and GCHQ personnel share code, and, in several locations, physically work side by side. Their intimate nature was underscored by Rogers' deputy, Rick Ledgett, telling the BBC that the accusation showed an ignorance of the GCHQ-NSA partnership.

"Of course they wouldn't do it. It would be epically stupid," Ledgett said.

Spicer recycled the GCHQ allegation, made by a Fox News pundit, in order to defend Trump's 4 March accusation, made on Twitter, that Obama placed Trump's associates under surveillance at Trump Tower. Obama has unequivocally denied the accusation, which, if proven, would mean that he had committed a felony.

The FBI director, James Comey, on Monday publicly called the accusation groundless, the first time he has commented on the explosive accusation. Comey joined the Republican and Democratic leadership of the intelligence committees in finding no basis for Trump's incendiary claim.

Yet Trump has still not backed away from the accusation of GCHQ surveillance on him, even after GCHQ expressed its anger. Trump, in a White House press conference meeting last week with Germany's chancellor, Angela Merkel, said he was merely citing Fox News. Trump joked that he and Merkel, whom the NSA had indeed spied upon, had something in common.

That remark prompted Sir Peter Westmacott, former British ambassador to Washington, to accuse Trump of "peddling falsehoods". "This is a dangerous game," Westmacott wrote in the Guardian. "The intelligence relationship between Britain and America is unique and precious. It is critical to our shared efforts to counter terrorism"

Asked by the House intelligence committee whether the false assertions might damage the intelligence-sharing relationship, Rogers, the NSA chief said: "It clearly frustrates allies of ours."

https://www.theguardian.com/world/2017/mar/28/germany-accuses-turkey-of-intolerable-spying-on-gulen-supporters

Germany to investigate claims of 'intolerable' spying by Turkey

The claims Erdoğan's agents are spying on supporters of exiled preacher Fethullah Gülen open new front in the diplomatic row between the two countries

German prosecutors have announced an investigation into claims that Turkish agents are spying on alleged followers of exiled preacher Fethullah Gülen in Germany.

News of the inquiry came as a German state minister accused Turkey of "intolerable and unacceptable" espionage against supporters of Gülen, blamed by President Recep Tayyip Erdoğan for a failed coup attempt last year.

The claims open a new front in the diplomatic row between the two Nato allies, whose relationship has been strained by a series of disputes centred on human rights issues.

"It is clear that the Turkish secret intelligence service, MIT, is investigating people living in Germany," said Boris Pistorius, the interior minister of the northern German state of Lower Saxony, deploring the "intensity and ruthlessness" of Turkey's pursuit of Turks living abroad.

"It's intolerable and unacceptable," he said at a press conference.

Erdoğan's government had asked Berlin to help spy on about 300 alleged Gülen supporters, Pistorius said, adding that the list was handed to Germany's BND spy service, which turned it over to state governments.

But Pistorius's state decided to inform the more than 10 targets in Lower Saxony, including a school and at least two companies, fearing people could suffer retaliation if they travelled to Turkey while unaware they were on a watch list.

Turkish authorities were acting with "something close to paranoia", he said, adding that "all Gülen supporters are assumed to be terrorists and enemies of the state even though there is not the tiniest scrap of evidence".

"As of today, we have no evidence whatsoever that Gülen supporters have violated any rules in any way."

According to German media, Turkish officials handed the target list including names, addresses, telephone numbers and photographs to their German counterparts during the Munich security conference in February.

Federal prosecutors will examine how Turkey compiled such detailed information on their targets.

"The success of our investigation will depend largely on the information shared with us by German counter-espionage agencies," spokeswoman Frauke Koehler said about the investigation into "persons unknown".

Meanwhile, the German interior minister, Thomas de Maizière, warned Turkey against spying in Germany, saying "espionage activities on German soil is punishable by law and will not be tolerated by us".

Although Gülen, a 75-year-old cleric living in the US, has denied charges that he was involved in the failed coup last July to overthrow Erdoğan, Ankara has cracked down on the preacher's followers.

More than 41,000 people in Turkey have been arrested over suspected links to Gülen's movement, and 100,000 fired or suspended from their jobs. Many of them are teachers, police, magistrates and journalists.

In February, German police raided the homes of four Turkish Muslim preachers suspected of spying on alleged Gülen supporters for Erdoğan's government.

Erdoğan has in turn accused Germany of harbouring Kurdish and other "terrorists", claiming that Berlin is refusing to hand over alleged suspects.

Separately, the foreign ministries in Sweden and Denmark have called in Turkey's envoys over claims of Turkish spying on opposition figures living in the Scandinavian countries.

Germany's foreign intelligence chief, Bruno Kahl, drew Ankara's ire last week when he said he did not believe that Gülen was behind the failed coup.

Berlin has emerged as a strident critic of Ankara's post-coup crackdown, and is also urging Turkey to release a correspondent for the German daily Die Welt, who is jailed on terror charges.

Ankara has been riled by German authorities' refusal to allow some Turkish ministers to campaign in the country for a yes vote before the 16 April referendum on giving Erdoğ and the powers of an executive presidency.

http://www.telegraph.co.uk/news/2017/04/27/15-russian-soldiers-missing-intelligence-vessel-crashes-cargo/

Russian spy ship sinks after colliding with livestock vessel off Turkey

A Russian naval spy ship on Thursday sank in the Black Sea off Turkey's coast after hitting a Togo-flagged vessel packed with livestock but all of its 78 crew were rescued by Turkish coastguards.

The Russian military said the Liman - a former research ship re-fitted as an intelligence vessel - had a hole ripped out of its hull in the early afternoon incident.

The collision took place in fog outside the northwestern entrance to the Bosphorus Strait, one of the world's biggest shipping thoroughfares that passes through Istanbul into the Sea of Marmara.

The Turkish coastguard said in a statement that the collision involved the Togo-flagged vessel Youzarsif H which was carrying a cargo of livestock.

It said that of 78 Russian personnel on board the ship, 63 were rescued by the Turkish coastguard and the other 15 by the Youzarsif H itself.

They were then transferred to a Turkish military ship, it said, without giving further details. "All the personnel were evacuated," it said.

Turkish media said the Youzarsif suffered minor damage and went on its way after the incident.

The Russian defence ministry confirmed the ship had gone down and said the crew were safe and would be taken from a Turkish vessel back onto a Russian ship.

Turkish news agency Dogan said the area where the ships collided was shrouded in thick fog at the time, suggesting that the incident was accidental.

Turkish Prime Minister Binali Yildirim spoke to his Russian counterpart Dmitry Medvedev by phone over the incident, describing it as an accident and expressing his sadness, the state-run Anadolu news agency said.

It was not known where the Liman was sailing from or its destination.

The ship was built as a hydrography research vessel in 1970 but turned into a spy ship in 1989 and armed with an Igla missile launcher, according to public records.

Russian warships have travelled frequently through the Bosphorus Strait to and from the Syrian coast, where a navy presence has been deployed to bolster Russia's air campaign in support of President Bashar al-Assad.

In February, military sources told Russian media that Liman would be observing NATO's Sea Shield exercise in the Black Sea.

Cem Devrim Yaylali, an Istanbul-based Turkish naval expert and editor of the Bosphorus Naval News website, said the Liman had previously been to the Syrian coast but it was not clear where it was headed on this occasion.

"A collision is not something that happens very frequently," he told AFP.

He said the incident was an embarrassment for the Russian authorities as the Liman was likely carrying sensitive surveillance equipment that Moscow would want returned.

"I imagine there will be a salvage effort to raise the ship before anyone else sees it," he said.

"If the ship cannot be salvaged then Russia surely will try to take away the sensitive equipment from on board by divers."

Relations between Russia and Turkey hit their worst state since the Cold War in November 2015 when Turkish war planes shot down a Russian jet over the Syrian border.

But there has since been a dramatic reconciliation, with Moscow and Ankara now engaged in a joint effort to bring peace to Syria despite standing on opposing sides of the conflict.

President Recep Tayyip Erdogan is due to hold his latest talks with Russian counterpart Vladimir Putin in Russia on May 3.

As a Black Sea littoral state, Russia is allowed to have its military ships pass through the Bosphorus under the 1936 Montreux Convention on the Straits.

The intense traffic of Russian vessels to and from Syria - known as the Syrian Express - has caused immense curiosity in Istanbul where the warships pass through the heart of the city in full view of ship-spotters.

http://www.bbc.co.uk/news/world-us-canada-39754906

China deports US 'spy' Sandy Phan-Gillis after conviction

An American businesswoman convicted of spying by China is back in the US, after a Chinese court ordered her deportation. Sandy Phan-Gillis was sentenced to three and a half years in prison on Tuesday, but will not serve the time.

She had already spent more than two years in detention before her trial.

Phan-Gillis, who has Chinese origins but was born in Vietnam, was arrested in March 2015 while travelling in China with a business delegation from Texas.

Her husband Jeff Gillis said China had accused his wife of visiting the country twice on spy missions in 1996, and working with the FBI to capture two Chinese spies in the US and make them into double agents.

Speaking last year, he called the allegations "beyond ridiculous", and said her passport showed she did not travel to China in 1996.

Beijing offers reward for spy tip-offs

China 'expanding Taiwan spy operations'

The UN Working Group on Arbitrary Detention previously denounced China's handling of the case, saying it had not observed "international norms relating to the right to a fair trial, and to liberty and security".

Phan-Gillis was reportedly held in a secret location for six months, and later placed in solitary confinement.

Mr Gillis said his wife had left China on Friday from the southern city of Guangzhou, and arrived in Los Angeles the same day.

Sign of warmer relations

"Sandy is overjoyed to be reunited with friends and family, and sends out her thanks to the many people who worked tirelessly for her release," he said.

The 57-year-old's return removes a source of tension between Washington and Beijing, a marker of the current warmer relations between them.

Negotiations to secure her release are said to have intensified when US Secretary of State Rex Tillerson visited China in March.

President Donald Trump has repeatedly praised China's leader, President Xi Jinping, since the pair met in Florida this month.

On Thursday, Mr Trump called his Chinese counterpart a "good man" who was doing his best to press North Korea over its controversial nuclear programme.

http://www.bbc.co.uk/news/world-europe-39763293

Swiss 'spy' arrested in Frankfurt

A Swiss man has been arrested in Frankfurt on suspicion of spying.

German federal prosecutors said the man was suspected of having worked "for the intelligence service of a foreign power" since early 2012.

Reports suggest the man may have spied on German tax investigators.

Tax authorities in Germany have controversially bought CDs of information from whistleblowers in Swiss banks as they try to catch German residents with Swiss bank accounts.

The issue has caused friction between the Swiss and German governments. Authorities in Germany's federal states have justified the hefty payments by saying the information gained would lead to much larger sums in unpaid taxes being retrieved.

But Switzerland thinks paying people who steal information from Swiss banks is wrong.

The 54-year-old, named only as Daniel M, was taken into custody on Friday, prosecutors said, but an arrest warrant had been issued for him in December.

Several residential and business premises in Frankfurt and the nearby Wetterau region were searched by officers from the Federal Criminal Police Office (BKA).

http://iwradio.co.uk/2017/05/01/spacex-launches-top-secret-spy-satellite-for-us-military/

SpaceX launches top-secret spy satellite for US military

A top-secret spy satellite has been launched by Elon Musk's SpaceX company, with the rocket booster landing itself just nine minutes later.

The mission - for the US military's National Reconnaissance Office - blasted off from Cape Canaveral Air Force Station in Florida at 7.15am local time.

Sonic booms rattled the area as the 23-storey rocket blasted off.

The Falcon 9 rocket returned to the base to cheers from mission control, landing upright in the fourth successful solid ground landing for the company.

SpaceX has already successfully landed multiple rockets on sea platforms and aims to reuse them to cut launch costs.

Its first recycled rocket flew last month.

Details of what the government satellite will be used for are classified.

The launch was put back a day after a problem with a sensor saw the first attempt abandoned seconds before liftoff.

High altitude wind shear was also near the limit for Monday's launch, with Musk tweeting it was 98.6% of the theoretical load limit but not a showstopper.

Billionaire Musk managed to win the contract instead of the United Launch Alliance – a partnership between Boeing and Lockheed Martin that previously had a monopoly.

Space X has also won two more contracts from the US Air Force to send up GPS satellites in 2018 an 2019.

The launch was the fifth of more than 20 the firm has in the pipeline this year. Its total backlog is more than 70 missions, worth about \$10bn.

The company is also working on a capsule that could put humans into orbit as early as next year.

Thank you to all our contributors of Logs in all sections and the extras for this edition

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- 8. XPA2 p Schedule

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	l b'am	May kHz, ID,	Jun kHz, ID,
		Х	Х				0315		E11	03	8565 25#	8565 25#
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Х	Х	Х	Х	Х	Х	x	0400		V13	0	480 15388	480 15388
			Х				0430/0450/0510		E07A	01B	7933/ 9133/10233	7933/ 9133/10233 741
Х	Х	Х	Х	Х	Х	Х	0440 (var)		HM02	01C	7351	7351
Х							0450		E11	03	10800 41#	10800 41#
	Х			Х			0455		S11A	03	5149	5149
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					х		0500/0520/0540		M12	01B	9167/10267/11567 125	9282/10982/12182 291
						Х	0500/0520/0540		V07	01B	/12182/ 511, search	
			Х	Х			0500/0600	1/3	E06	01A	14565/16125	13985/15830 328
Х			Х				0530		E11	03	7600 64#	7600 64#
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		Х		Х			0545		E11	03	34#	34#
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Х		Х		Х		Х	0600		HM01	18	10345	10345
	Х		Х		Х		0600		HM01	18	14375	14375
Х	Х	Х	Х	Х	Х	Х	0600		V13	0	11430	11430
	Х						0600/0610		S06S	01A	15945/16945 438	15945/16945 438
					Х	Х	0600/0620/0640		E07	01B	9064/10264/11464 024	9064/10264/11464 024
		Х			Х		0600/0620/0640		XPAc	01B	10868/12168/13368	11409/13509/14609
						Х	0600/0700		M14	01A	7590/ 8162 382	7590/ 8162 382
						Х	0630/0640		S06S	01A	16320/14875 524	16320/14875 524
	Х		Х				0645		E11	03	13424 51#	13424 51#
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						Х	0700		M01	01B	6780 025	6780 025
	Х						0700/0710(15)		S06S	01A	5430/ 6780 374	5430/ 6780 374
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	Х			Х			0700/0720/0740		XPA2t	01B	19667/18767/17467	19514/18214/16314
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				Х		Х	0730		E11	03	17120	17120
											35#	35#
											7245/12080	7245/12080
	Х						0730/0740		S06S	01A	7365/11655	7365/11655
											427	427
		Х					0730/0740		S06S	01A	12110/14977	12110/14977
											745	745
Х							0745		E11	03	9610	9610
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	Х		Х				0745		E11	03	15632	15632
											33#	33#
Х							0800	1/3	G06	01A	7320	7320
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Х		Х		Х		Х			HM01	18	9065	9065
	Х		Х		Х		0800		HM01	18	11365	11365
Х	Х	Х	Х	Х	Х	Х	0800		V13	0	15388	15388
			Х				0800/0810		E17Z	01A	16780/12850/	16780/12850/
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					Х		0800/0810	1	S06S	01A	12460/10250	12460/10250
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					Х		0800/0820/0840		E07A	01B	12177/13477/14877	13373/14373/14873
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		Х				x	0805		E11	03	14975	14975
											31#	31#
Х			Х				0820		E11	03	6807	6807
											43#, check	43#, check
	Х						0820		E11	03	15803	15803
											13#, check	13#, check
		Х					0820/0830		S06S	01A	9485/11085	9485/11085
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Х							0830/0840		S06S	01A	8221/ 9353	8221/ 9353
							· 				371	371
		Х					0830/0840		S06S	01A	x11565/12560	x11565/12560
											464, search	464, search
			Х	Х			0830/0930		S06	01A	17475/14736	16022/13925
											842	842
				Х			0830/0840		S06S	01A	x14373/12935	x14373/12935
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Х		Х					0900		E11	03	13427	13427
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	Х		Х		Х		0900		HM01	18	11462	11462
Х							0900/0910		S06S	01A	16380/14835	16380/14835
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				Х			0900/0910		S06S	01A	6844/ 7161	6844/ 7161
											624	624
	Х			Х			0915		S11A	03	8530	8530
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		Х	Х				0930		E11	03	27#	27#
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Х		Х		Х		Х	1000		HM01	18	x5855,x9155 search	x5855,x9155 search
	Х		Х		Х		1000		HM01	18	12180	12180
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	Х						1000/1010		3003	UIA	893, search x6440	893, search x6440
		Х					1000/1010		S06S	01A	14580/16020 729	14580/16020 729
Х			Х				1015		S11A	03	16530 47#	16530 47#
	Х			Х			1020		S11A	03	11581	11581
	Х			Х			1020		SIIA	0.5	42#	42#
	Х						1045		E11	03	13873	13873
	Λ						1045			0.5	57#	57#
	Х						1100/1110		S06S	01A	6810/ 7560 754	6810/ 7560 754
		Х					1200	?	G06	01A	x7425 691, search	x7425 691, search
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Х							1200/1210		S06S	01A	10230/12165 831	10230/12165 831
			Х				1200/1210		S06S	01A	13145/14535 425	13145/14535 425
					Х		1200/1210/1220		M42C	01A	17431/15827/13376	17496/15932/13481
	.,	.,					1205		E11	03	10302	10302
	^	Х									46#, check 13537	46#, check 13537
Х				Х			1225		E11	03	52#	52#
			Х		Х		1300		E11	03	11581 58#	11581 58#
		Х					1300	?	G06	01A	x6956 691, search	x6956 691, search
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			Х				1300	1/3	G06	01A	5890 329	5890 329
Х	Х	Х	Х	Х	Х	Х	1300		V13	0	9725	9725
			Х		Х		1310/1330/1350		M12	01B	919	13873/13373/11473 834
	Х				Х		1345		E11	03	15825	15825
										1.0	91#	91#
X	Х	X	X	Х	X	Х	1400		M08A	18	8096	8096
					Х		1500		M01	14	6435 025	6435 025
	Х	Х	Х				1500		S06	01A		13944 387
	Х						1500/1510		S06S	01A	6766/ 7744 537	6766/ 7744 537
				Х		Х	1500/1520/1540		XPA2p	01B	16314/15814/14514	

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID,	Jun kHz, ID,
				х			1510/1530/1550		E07A	01B	12182/11082/10182 101	12182/11082/10182 101
			Х				1530		E11	03	10356 26#	10356 26#
		Х			Х		1540		S11A	03	11092 56#	11092 56#
Х	Х	Х	Х	Х	Х	Х	1600		HM01	18	11435	11435
	Х	Х	Х				1500		S06	01A		11496 387
	Х	Х					1600	1/3	M14		x5826 273	x5826 273
	Х					Х	1605		E11	03	4783 23#	4783 23#
				Х			1610/1630/1650		E07A	01B	11435	11435
		Х				Х	1625		E11	03	15795 97#	15795 97#
				Х		Х	1650		E11	03	14940 92#	14940 92#
Х							1700	1/2	G06	01A	x5348 691, search	x5348 691, search
Х	Х	Х	Х	Х	Х	x	1700		HM01	18	11530	11530
		Х					1700/1720/1740		E07	01B		14842/13442/12142 841
				Х			1700/1800	1/3	M14	01A	7485/ 6891 382	7485/ 6891 382
		Х			Х		1705		E11	03	14865 39#	14865 39#
		Х			Х		1730		E11	03	7984 40#	7984 40#
			Х				1730		E11	03	8088 41#, 40# check	8088 41#, 40# check
Х						Х	1745		E11	03	14410 24#	14410 24#
Х							1800	1/2	G06	01A	x5859 691, search	x5859 691, search
Х	Х	Х	Х	Х	Х	Х	1800		HM01	18	11635	11635
	Х		Х				1800		M01	14	5280 025	5280 025
		Х					1800/1820/1840		M12	01B	9176/ 7931/ 6904 257	9176/ 7931/ 6904 257
Х							1810		M01B	14	5125, 5735 364	5125, 5735 364
					Х		1810/1820/1830		M42C	01A	15806/13512/11131	
	Х						1820	2/4	M14	01A	6856 163	6856 163
			Х				1830	2/4	G06	01A	6887 842	6887 842
			Х				1832		M01B	14	5095 , 5760 815	5095, 5760 815
X	X	Х		X			1900/1920/1940	1	M42C E07	01A 01B		16028/14828/13428
											11512 search	084

п	U U	Q	n	ŗ	4	п					May	Jun
Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	kHz, ID,	kHz, ID,
		Х					1900/1920/1940		M12	01B	8047/ 6802/ 5788	8047/ 6802/ 5788 463
	Х		Х				1900/1920/1940		XPA2p	01B		15884/14984/14384
				Х	Х		1900/1920/1940		XPA2r	01B	17462/16114/14828	
				Х			1900/2000	1/3	S06	01A	x10204/ 8058 514, search	
					Х		1900/2000	1/3	S06	01A	x6875/ 5935 913, search	x6875/ 5935 913, search
				Х			1902		M01B	14	5075 , 5465 336	5075 , 5465 336
х							1915		M01B	14	5150, 5475 858	5150, 5475 858
		Х					1920	2/4	M14	01A	5938 417	5938 417
	Х		Х				1925		E11	03	11581 52#	11581 52#
				Х			1930	2/4	G06	01A	5943 218	5943 218
		Х		Х			1955		S11A	03	4870 37#	4870 37#
				Х			2000		E11	03	8530 57#	8530 57#
	Х		Х				2000		M01	14	4905 025	4905 025
Х	Х	Х	Х	Х	Х	Х	2000		M08A/ V02A	18	7554	7554
		Х					2000/2020/2040		E07A	01A	12166/10766/ 9266 172	12166/10766/ 9266 172
	Х					Х	2000/2020/2040		XPA2m	01B	14538/13538/12138	
				Х			2000/2100	1/3	S06	01A		x10204/ 8058 514, search
					Х	Х	2005		E11	03	9130 36#	9130 36#

M01 FREQUENCY LIST

Frequencies may vary by a few kHz

JAN FEB NOV DEC

M01/1

197

DAY	TIME UTC	FREQ kHz
TUE / THU	1800	5320
TUE / THU	2000	4490
SAT	1500	5810
SUN	0700	5465

MAR APRIL SEPT OCT

M01/2

463

DAY	TIME UTC	FREQ kHz
TUE / THU	1800	5475
TUE / THU	2000	5020
SAT	1500	6260
SUN	0700	6510

MAY JUNE JULY AUG

M01/3

025

DAY	TIME UTC	FREQ kHz
TUE / THU	1800	5280
TUE / THU	2000	4905
SAT	1500	6435
SUN	0700	6780

Updated: 02/04/2014

Mon	Tue	Thu	Fri	Sat	UTC	ī,	wk S	Stn	Fam	Mar kHz, ID,	Apr kHz, ID,	May kHz, ID,	Jun kHz, ID,	Remarks
	х	х			0315	i	E	E11	03	7850 25#	5779 25#	8565 25#	8565 25#	since 01/14, last log 04/17
х					0450	1	F	311	03	6304	6304	10800	10800	since 02/10, last log 04/17
^					0450	·			0.5	41# 5358	41# 5358	41# 5149	41# 5149	2nd transmission Thu 1730z
	x		х		0455	i	S	511A	03	32#	32#	32#	32#	since 09/14, last log 04/17
x		х			0530)	E	E11	03	7317 64#	7317 64#	7600 64#	7600 64#	since 05/16, last log 03/17
	х		х		0545	,	F	311	03	15915	15915	13424	13424	since 06/11, last log 03/17
										34# 12202	34# 12202	34# 13908	34# 13908	
х			х		0600)	E	E11	() <	18#	18#	18#	18#	since 07/15, last log 04/17
	х	х			0645	i	E	E11	03	10800 51#	10800 51#	13424 51#	13424 51#	since 07/09, last log 04/17
	х		х		0710)	E	E11	03	9963	9963	14753	14753	since 02/11, last log 04/17
					0710			-11	0.0	63# 14769	63# 14769	63#, check 15905	63#, check 15905	. 07/15 1 . 1 04/17
		х		х	0710	'	F	E11	03	49#	49#	49#	49#	since 07/15, last log 04/17
x	х				0715	i	S	511A	03	18405 38#	18405 38#	20180 38#	20180 38#	since 05/14, last log 04/17
			х	2	0730)	E	E11	03	15825 35#	15825	17120	17120	since 04/15, last log 03/17
					0745			711	03	10213	35# 10213	35# 9610	35# 9610	since 03/14, last log 04/17
Х	-				0745	'	Ŀ	E11		26# 14575	26# 14575	26# 15632	26# 15632	2nd transmission Thu 1530z
	х	х			0745	i	E	Ξ11	03	14575 33#	33#	15632 33#	15632 33#	since 10/11, last log 04/17
	x			2	0805	i	E	211	03	11450 31#	11450 31#	14975 31#	14975 31#	since 07/14, last log 04/17
х	+	x	\Box	\dagger	0820		t	311	03	10125	6804	6807	6807	since 10/09, last log 04/17
_		^								43# 12530	43# 12530	43#, check 15803	43#, check 15803	
	x				0820)	E	E11	03	13#	13#	13#, check	13#, check	since 08/13, last log 04/17
х	х				0900)	E	311	03	9399 53#	9399 53#	13427 53#	13427 53#	since 10/05, last log 04/17
	х		х		0915	i	S	511A	03	7317	7317 48#	8530	8530	since 01/10, last log 04/17
	х	х			0930)	E	E11	03	48# 8803	6807	10213	10213	since 02/14, last log 04/17
					1000		-		03	27# 7840	27# 7840	27#	27#	
	х		х		1000	'	P	Ξ11	0.3	30#	30# 16112	30#, search 16530	30#, search 16530	since 11/16, last log 04/17
х		х			1015	i	S	511A	03	16112 47#	47#	47#	47#	since 04/10, last log 04/17
	х		х		1020)	5	511A	03	9960 42#	9960 42#	11581 42#	11581 42#	since 02/10, last log 04/17 2nd transmission Thu 1730z
	x				1045			311	03	8102	8102	13873	13873	since 01/12, last log 04/17
					1010	·				57# 9443	57# 7727	57# 10302	57# 10302	2nd transmission Fri 2000z since 03/10, last log 04/17
	х				1205	,	E	Ξ11	03	46#	46#	46#, check	46#, check	2nd transmission Mon 0450z
х			х		1225	5	E	211	03	20286 52#	20286 52#	13537 52#	13537 52#	since 05/15, last log 04/17
		x		х	1300)	E	E11	03	10302	10302	11581	11581	since 02/16, last log 04/17
										58# 13046	58# 13046	58# 15825	58# 15825	
	Х			х	1345)	E	Ξ11		91#	91#	91#	91#	since 10/15, last log 04/17
		х			1530)	E	Ξ11	03	10330 26#	10330 26#	10356 26#	10356 26#	since 06/14, last log 04/17 2nd transmission Mon 0745z
	х			х	1540)	5	511A	03	10800	10800	11092	11092	since 03/16, last log 04/17
\forall		1	\vdash	+	. 100			711	03	56# 6397	56# 6397	56# 4783	56# 4783	
	х	1		2	1605	,	E	311		23#	23#	23# 15795	23# 15795	since 11/15, last log 04/17
	х	1		2	1625	i	E	Ξ11		10448 97#	10448 97#	97#	97#	since 02/15, last log 04/17
			х	2	1650	,	E	E11	03	13873 92#	13873 92#	14940 92#	14940 92#	since 05/16, last log 04/17
H	x			x	1705		E	E11	03	10213	10213	14865	14865	since 02/14, last log 04/17
H		1								39# 5844	39# 5844	39# 7984	39# 7984	
	х			х	1730)	E	311	03	40#	40#	40#	40#	since 06/16, last log 04/17
		х			1730)	E	311	03	9371 41#	9371 41# 40#	8088 41#, 40# check	8088 41#, 40# check	since 03/10, last log 04/17 2nd transmission Mon 0450z
х				2	1745	,	E	E11		13470	13470	14410	14410	since 05/16, last log 04/17
	+		\vdash							24# 10620	24# 10620	24# 11581	24# 11581	
\sqcup	х	х		_	1925)	E	Ξ11	03	52#?	52#?	52#	52#	since 07/15, last log 04/17
	х		х		1955	i	2	511A	03	4016 37#	4016 37#	4870 37#	4870 37#	since 02/14, last log 04/17
			х		2000)	E	311	03	7377 57#	7377 57#	8530 57#	8530 57#	since 03/12, last log 04/17
H	+	1	\Box	x x	2005		,	311	03	8186	8186	9130	9130	2nd transmission Tue 1045z since 03/14, last log 04/17
				^ /	. 2000	•	Ē	-11	,,	36#	36#	36#	36#	2nd transmission Thu 1530z

Mon	Tue	Wed	Fri	Sat	Sun	UTC	wk	Stn	Fam		Apr kHz, ID,	May kHz, ID,	Jun kHz, ID,	Remarks
						0800	1 / 2	G06	01A	6810	6810	7320	7320	since 07/10, last log 04/17
Х						0800	1/3	GU6	UIA	329	329	329	329	repeat at Thu 1300Z
										5755	5755	×7425	x7425	since 10/14, last log 04/17
		Х				1200	?	G06	01A	691	691	691, search	691, search	yearly changing frequencies + id
										031	031	ogi, search	ogi, sealch	repeat at 1300Z
										4967	4967	x6956	x6956	since 10/14, last log 04/17
		Х				1300	?	G06	01A	691	691	691, search	691, search	yearly changing frequencies + id
										031	031	ogi, search	691, SealCH	repeat from 1200Z
			ζ.			1300	1/3	G06	01A	4598	4598	5890	5890	since 09/11, last log 02/17
		1	`			1300	1/3	300	OIA	329	329	329	329	repeat from Mon 0800Z
										4784	4784	x5348	x5348	since 04/10, last log 04/17
x						1700	1/2	G06	01A	-	691	691, search	691, search	yearly changing frequencies + id
										031	031	ogi, search	691, SealCH	repeat at 1800Z
										5460	5460	x5859	x5859	since 05/09, last log 04/17
x						1800	1/2	G06	01A		691			yearly changing frequencies + id
										691	931	691, search	691, search	repeat from 1700Z
						1830	2/4	G06	01A	5934	5934	6887	6887	since 05/01, last log 04/17
		1	۷.			1830	2/4	606	UIA	579	579	842	842	repeat at Fri 1930Z
						1930	2/4	G06	01A	5442	5442	5943	5943	since 04/01, last log 03/17
			Х			1330	2/4	600	UIA	947	947	218	218	repeat from Thu 1830Z

Current HM01 Schedules

Freq 1	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
5855	0500	0500		0500		0500	
11462			0500		0500		0500
10345	0600	0600		0600		0600	
14375			0600		0600		0600
9330	0700	0700		0700		0700	
13435			0700		0700		0700
9065	0800	0800		0800		0800	
11635			0800		0800		0800
9240	0900	0900		0900		0900	
11462			0900		0900		0900
5855	1000	1000		1000		1000	
9155	1000	1000		1000		1000	
12180			1000		1000		1000
11435	1600	1600	1600	1600	1600	1600	1600
11530	1700	1700	1700	1700	1700	1700	1700
11635	1800	1800	1800	1800	1800	1800	1800
11635	2100	2100		2100		2100	
16180			2100		2100		2100
10715	2200	2200		2200		2200	
17480			2200		2200		2200

M42d Schedules (May 3, 2017) Most schedules repeat the next day using the same times and frequencies if a message was sent, unless noted. Yellow schedules indicate message-only repeats of other schedules, not always present.

			_												
Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
F	Man Eni	02:00						16	321						41010
Every	Mon - Fri	03:00						14	881						41018
				New messa	nge every day, n	o repeats the fol	lowing days. Pa	rallels M42c at	0000/0100z, S0	6 at 0400z, and	M14 at 0500z.				
Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
		04:00		П	1	10686	11414	12064	11049	10748	9436	9354			
		04:10				8184	10169	10926	9126	9139	7923	7956			
1 . 2 1	N 1	04:20				6773	8169	9049	8137	7424	6776	6774			45070
1st, 3rd	Monday	05:00	6926	7328	10249		1				II.		7658	6788	45079
		05:10	5945	6778	8137								6778	5384	
		05:20	4816	5126	5948								5361	4454	
			1	Repeats messa	ages the following	ng Wednesday a	t 21:00 or 22:00	(look further de	own for frequence	cies) instead of	the following da	ay.	ı		I
Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
		16:50	10383	13374	16359	18726	19214	?	?	?	?	?	?	9313	
Every	Tuesday	17:00	9046	11165	13986	16238	17419	?	?	?	?	?	?	7928	20501
		17:10	7313	9219	11523	13378	14443	?	?	?	?	?	?	6783	
Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
		06:00	20154	20072	18189	16325	17420	17512	17419	16346	15930	19268	20082	20157	
Every	Wednesday	06:10	18304	18291	16046	14724	15673	15930	15707	14847	13503	17548	18207	18241	3281 <i>6</i> 32817
		06:20	16156	16071	14459	12172	13361	13503	13446	12223	11109	15779	16141	16204	32011
Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
		08:00	?	?	18038	16064	14694	?	?	?	?	?	?	?	
Every	Wednesday	08:10	?	?	16344	14367	12223	?	?	?	?	?	?	?	45075
		08:20	?	?	14563	12208	10163	?	?	?	?	?	?	?	
Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
		08:00		-1		19138	17488	16330	15795	16319	18178	20018			
		08:10	=			17545	15823	14367	13428	14378	15613	18325	-		
0.1.43		08:20				15626	13459	12141	11060	11636	13459	16248	1		16404
2nd, 4th	Wednesday -	09:00	20735	20916	20386		II.	1	<u>I</u>	L	1	1	20476	20875	16405
		09:10	18037	18730	18215								18915	18747	
		09:20	16250	16165	16061	1							16328	16316	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
		09:15				17538	14638	15629	14948	17434	16146	19476			
		09:25				14576	12156	13376	12176	14369	13385	17458			
2-1 44	W- 4 4	09:35				11639	10164	11544	10177	11163	11434	15884			20402
2nd, 4th	Wednesday	10:15	19433	20639	20138						-	<u> </u>	20349	18046	20492
		10:25	16048	17539	17428								18573	16326	
		10:35	14976	15644	14983								16245	14944	
Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
· · · · · ·	Day	10:00	19313	19984	20961	Пр	May	Jun	341	rug	Бер	22863	20996	20983	ID.
		10:10	16348	17489	18553							20674	19163	19139	_
		10:20	14494	15621	16264							18594	17428	17463	
Every	Wednesday	22:00	11.71	10021	10201	13983	15838	17476	16031	15618	12184	10071	17.120	17.105	49202
		22:10				12209	13984	15843	14369	13374	10168				
		22:20				10203	11167	13488	12193	11081	9286				
		· · · · ·	-		2.5		3.5	-			g	0.1			
Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
		12:30	16329	18235	18563	18476	17430	16286	16244	17455	18517	19363	18191	17478	_
1st, 3rd	Wednesday	12:40	14826	16144	16314	16168	15814	14517	14649	15923	16309	17476	15963	15838	53277
		12:50	12166	14519	14723	14643	13487	12179	12206	13388	14464	15873	13436	13387	
Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
		21:00		1	1	10636	?	12218	?	13548	?	9948		ı	
		21:10				8163	?	11164	?	11516	10161	8115			
Follows	l i	21:20				6854	?	9418	?	8145	8184	6826			
1st, 3rd Monday	Wednesday	22:00	6828	?	10164			'					?	?	45079
		22:10	5129	?	8076								?	?	
		22:20	4534	4989	6769								?	?	
	1					Message-only	repeat slot of 1	st & 3rd Monda	y 04:00 or 05:0	0.					

May

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Apr

16351

14367

11483

Jun

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Jul

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Aug

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Sep

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Oct

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ID

49237

Dec

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Nov

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Week

Every

Day

Thursday

UTC

13:30

13:40

13:50

Feb

14983

12196

9917

Mar

16054

13471

11062

Jan

12186

10243

8175

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
		08:00				13466	?	?	13468	12223	13384	14986			
		08:10				11543	?	?	11634	10186	11463	12219			
		08:20	_			9328	?	?	9486	8094	9328	10574	_		45114
2nd, 4th	Saturday	09:00	14534	15638	14378	7520		·	7.00	007.	7520	1007.	15623	13938	45114 45115
		09:10	12149	13486	12217								13469	12136	
		09:20	10483	11128	10349								11569	10314	
		07.20	10403	11120	10347								11307	10314	
Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
		09:00			-	17481	17426	16314	16089	16186	16341	18919			
		09:10				15946	15818	14569	14384	14571	14706	16268			
0-1 44	Cata 1	09:20				13543	13396	12191	12173	12195	12217	14486			45057
2nd, 4th	Saturday	10:00	20973	20894	18948		•	1					20868	20951	45057
		10:10	18736	18429	16223								18259	18643	
		10:20	16328	16153	14639								16113	16314	
Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
		11:00	16174	18911	16343	17437	?	?	?	?	?	?	16236	15623	
Every	Saturday	11:10	14855	16234	14367	15626	?	?	?	?	?	?	14419	13854	36882
		11:20	12214	14426	12172	13464	?	?	?	?	?	?	12128	11586	
Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
, , con	Duj	15:00	20564	22878	22913	pr	171u j	oun	541	1146	БСР	22963	22871	20648	12
		15:10	18471	20216	20374							20461	20629	18483	
		15:20	16308	18253	18406							18356	18553	16196	
Every	Saturday	21:00	10300	10233	10400	20386	18751	18323	17436	16289	15928	10330	10333	10170	32821
		21:10	-			18509	16174	15886	15789	14461	13396	-			
		21:20	-			16231	14563	13581	13473	12176	11143	-			
		#1,#V				10231	11303	15501	15715	12170	11173				
Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
		15:30	20868	22986	22874							20806	22984	20741	
		15:40	18689	20363	20634							18441	20719	18368	
		15:50	16156	18669	18751							17463	18348	16343	
2nd, 4th	Saturday	21:30				20589	18663	18521	18246	17429	?				32821
		21:40				18371	16344	16256	16149	15861	13498	_			
		21:50				16108	14869	14641	14474	13486	11054				
		21:50				10100	14007	14041	1++/+	13400	11054				

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
		15:30	10378	13464	16245	18626	?	?	?	?	?	?	?	?	
Every	Sunday	15:40	9169	11548	14356	16325	?	?	?	?	?	?	?	?	20501
		15:50	7419	9323	12138	13458	?	?	?	?	?	?	?	?	

M42c Schedules (May 1, 2017) Most schedules repeat the next day using the same times and frequencies if a message was sent, unless noted.

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Every	Mon - Fri	00:00						1	7471					
Every	MOII - FII	01:00						14	4421					
				N	lew message eve	ry day. Parallels	M42d at 0200/03	00z, S06 at 0400	z, and M14 at 05	00z.				

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Every	Monday	00:25 01:25	13452	15803	16023	15820	14941	16218	14878	16023	15672	14434	12101	10884
Every	Wonday	00:35 01:35	11106	12195	13555	13405	12221	?	12185	14373	13892	11439	9215	8157
						Doesn'	t repeat the follo	wing days.						

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		18:40				12194	14363	14621	14829	15854	13467	11136		
		18:50				10581	12189	12206	12214	13543	11084	9074		
1-4	W- 4 4	19:00				8112	10346	10465	10932	11126	9052	7723		
1st	Wednesday	19:40	7629	8156	10467								8172	7684
		19:50	6783	6844	8094								6791	5326
		20:00	4034	4527	6779								4546	4029

Repeats messages the following Friday (same times and frequencies) instead of the following day.

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Every	Friday -	22:30 23:30	17411	20741	20700	?	?	19224	18562	20823	20618	20966	20741	18169
Every	Filday	22:40 23:40	15956	18401	18726	19405	?	17491	16218	18397	18048	18954	18702	15765
						Doesn't	t repeat the follow	wing days.						

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		18:10	7684	9153	12184	14517	15806	16322	16147	15931	13384	11462	9247	8131
Every	Saturday	18:20	5387	7641	10292	12196	13512	14804	14389	13452	11441	9226	7762	6824
		18:30	4572	5251	8054	10413	11131	12207	12214	11093	9184	7829	5216	4471

XPA Sched c and XPA2 [Sched m, r & t] Russian Intelligence Multitone Systems [Radiogramma] Transmission Schedules

Zulu > Month v	Wedn	/0700 Sch esday/Sat SB 10bat	urday	XPA Variou H 00 1300,1	s times Sur	n/Tue H+40	Vario H 00	PA2 Schous times H+20 400, 1900, 2	Fri/Sat H+40		PA2 Sche esday/Frie H+20 0700z	
Jan	9108	10908	12208	16138	14438	13438	16167	14663	13923	13472	14772	16272
Feb	11409	13509	14609	16338	14538	13538	18667	17419	16212	14558	15958	17458
Mar	11409	13509	14609	16138	14438	13438	18667	17419	16212	13431	14631	15931
Apr	10359	11559	13559	14538	13538	12138	17462	16114	14828	16347	17447	18747
May	10868	12168	13368	14538	13538	12138	17462	16114	14828	19667	18767	17467
June	11409	13509	14609	14738	13438	12138	16167	14663	13923	19514	18214	16314
July	11409	13509	14609	14538	13538	12138	15967	13884	12217	20173	18763	17473
Aug	10868	12168	13368	14738	13438	12138	16167	14663	13923	20049	18549	17449
Sept	10359	11559	13559	14538	13538	12138	16167	14663	13923	17429	18629	20129
Oct	10868	12168	13368	16338	14538	13538	17462	16114	14828	16284	18184	19584
Nov	11409	13509	14609	18238	16238	14438	17462	16114	14828	14517	16017	17417
Dec	7756	9056	10656	14538	13538	12138	15967	13884	12217	13393	14493	16293

Notes: XPA c 0600/0700z schedule appears to be robust with reasonably strong signals into UK

XPA2 m Repetitive frequency triplets, appears robust, generally strong into UK

XPA2 r Schedule appears robust; generally very strong signals to UK

XPA2 t Weak in UK

XPA2 p Six day variable schedule, separate document

Bespoke decoding program used to decode: 'Sepal'

Undated 19/12/2016

XPA2 p Russian Intelligence Multitone Systems [Radiogramma] Transmission Schedules

Zulu H+20		Sun			Mon			Tue			Wed			Thu			Fri		Sat	
Jan 0800				15978	14978	14378				15978	14978	14378								
Feb 0800				15983	14783	13883				15983	14783	13883								
Mar 0800				15956	14956	13956				15956	14956	13956								
Apr 1500	16147	14947	14447													16147	14947	14447		
May 1500	16314	15814	14514													16314	15814	14514		
June 1900							15884	14984	14384				15884	14984	14384					
July 1900							15884	14984	14384				15884	14984	14384					
Aug 1900							16314	15814	14514				16314	15814	14514					
Sept 1500	16147	14947	14447													16147	14947	14447		
Oct 1500	16147	14947	14447													16147	14947	14447		
Nov 0800				16073	14973	14373				16073	14973	14373								
Dec 0800				15861	14761	13561				15861	14761	13561			_					

XPA2 p

Appears to be a robust schedule
Usually strong into UK, latest poorconditions affect sendings

SPECIAL MATTERS

Thanks to all our contributors:

Ary, Edd, BR, DanAr, DoK, E, HH, HJH, JkC, Jochen, KW, Malc, MaleAnon, MNSDB, PoSW, PLdn, RNGB, tING, Apologies to anyone missed.



Operation Jallaa: Nil Return

MESSAGES:

E: Thanks for input. 7077kHz ham sigs; 10100kHz probably Hamburg meteo

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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8	9	10	11	12	13	14	5	6	7	8	9	10	11	5	6	7	8	9	10	11
15	16	17	18	19	20	21	12	13	14	15	16	17	18	12	13	14	15	16	17	18
22	23	24	25	26	27	28	19	20	21	22	23	24	25	19	20	21	22	23	24	25
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16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24
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9	10	11	12	13	14	15	13	14	15	16	17	18	19	10	11	12	13	14	15	16
16	17	18	19	20	21	22	20	21	22	23	24	25	26	17	18	19	20	21	22	23
23	24	25	26	27	28	29	27	28	29	30	31	20	20	24	25	26	27	28	29	30
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8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31	20	20	21	20	26	27	28	29	30	24	20	24	25	26	27	28	29	30
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