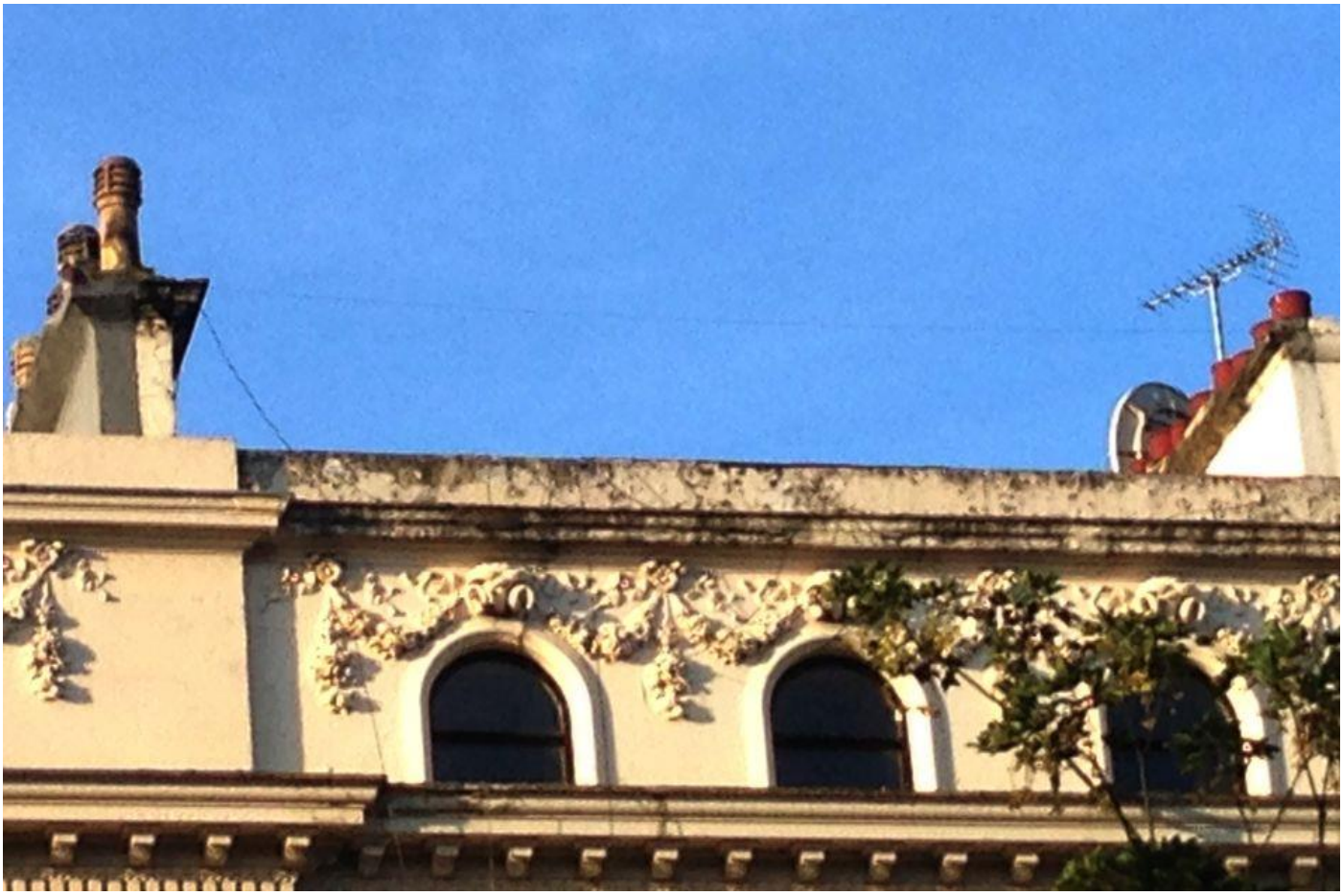
ENIGMA 2000 NEWSLETTER

http://enigma2000group.org



Long wire atop Tunisian Embassy London

Why? Tunisia has no external radio service? SWL or something darker?

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http://www.enigma2000.org.uk

Log information peculiar to this Issue:

The time slot covered by this newsletter has been affected by the holiday period; we have attempted to bring a full coverage where able. Readers will note that some logs have the suffix [A] attached. This indicates automatic monitoring at a remote site and analysis at a later, more convenient point.

FSK/M42nn operations:

One area that has remained virtually untouched is that of the FSK/M42(n) series. In a conversation with Daniel [aka Dannix of Priyom]concerning M42 I mentioned our lack of logs and someone to continue with Ian's good work. As a result Daniel kindly offered to fill the gap and I'm sure the rest of you will welcome him as a member. The column appears after the Polytone section and the Schedule Chart in the Chart Section. Welcome Daniel ….

For E07 and S06 PoSW notes observations worthy of a mention:-
The Sunday + Wednesday 1700Z E07 came up with a two-message transmission on Sunday the 17th of July; I cannot remember the last time I heard one of these, must be years ago rather than months. This was about the same time as the attempted *coup d'etat* in Turkey, which may or not be significant.
There must have been some reason to transmit two messages. The suggestion has been made that this event was staged managed by the Turkish government to give them the excuse to dismiss large numbers of army officers, teachers, university lecturers and journalists and to close down newspapers and broadcast outlets opposed to the ruling party, which duly happened. The lack of condemnation from governments in the European Union, of which Turkey is soon to be a member, was remarked upon in many quarters, together with the suggestion that many E.U. Governments would dearly love to do something like this if they thought they could get away with it.
Whatever the case, this E07 was back to the usual "000 - no message" routine on Wednesday the 20th, as has been the case with the majority of E07 transmissions in July and August.

The first + third Friday S06, call "761" transmitted a "full message" on the 5th of August, consisting of thirty-nine 5F groups, a bit out of the ordinary, making a change from the usual four minutes of "00000". This schedule also did a shift by one hour in August, moving to 1900 UTC + 2000 UTC from the 2000 + 2100 of June and July. As is usual with a full message, there was a repeat on the following day, Saturday the 6th.

Electronic Espionage, a new website.:

Once in a while a book on the subject of SIGINT and the rather shady world of espionage is published. The last of real note was member Chris Boyd's 'Special Operator: the Rise and Fall of a Cut-price Spy ' available via Amazon and other eBook outlets.

Going one step further Chris has opened his own Website: http://www.electronicspy.fr/

Definitely worth a visit by those with an interest in Number Stations, Radio Interceptions and signal/message analysis. This promises to be a site that is different to others, the owner having worked in the 'job' knows what is what and looks at the historical Y ops with insight.

The site promises to come up with the goods and in good form draws the readers interest to the world of Number Stations.

http://www.electronicspy.fr/

Interesting Snippet [PoSW]

Nothing to do with number stations as such, but perhaps a very slight connection to the espionage trade; 5-Aug-16, Friday:- 2049 UTC, 3,700 kHz or thereabouts, a very strong amateur SSB station with the call sign "Golf Bravo Five Radio Caroline", and GB5RC, operator's name Bill, was located on the *Ross Revenge* located in the River Blackwater estuary off the Essex coast.

Those of us of a certain age will remember the offshore or "pirate" pop music stations of the 1960's, the most famous of which was Radio Caroline which started broadcasting over the Easter weekend of 1964, and one of the vessels used by this station over the several years of its existence was the one from which GB5RC was working many other amateur stations.

And the connection with espionage?

Well, the offshore pirate stations were supplied with fuel, food and other essential supplies from vessels operating out of ports in the south-east of England, much to the anger of the British government of the day, a Labour government headed by Prime Minister Harold Wilson, who, determined to put an end to this breaking of the BBC's monopoly, brought in a piece of legislation called the "Marine Offences Act", of 1967 which made it illegal to supply Radio Caroline and the other offshore broadcasters from any UK port.

Most of them closed down, including "Wonderful Radio London", but Caroline carried on for some time afterwards being supplied from mainland Europe. And this same Harold Wilson was suspected by some high-ranking operatives of the British intelligence services of being a Soviet agent.

Seems ridiculous, appeared to be based on Wilson's many visits to the Soviet Union before he became PM, explained by his involvement with the Department of Trade and being part of delegations trying to boost British exports to the Russians.

M08a stop press:

From our columnist in US 'Today 2300z Tuesday 06/09 M08a returned as bold as brass and about as clear and consistent as I have ever heard it.

Worth checking daily

North Korea Number transmissions:

As we are all aware, N Korea has allegedly transmitted its usual style of Number transmission; too far for us to usually intercept via radio we have had contacts from persons with an interest in this station. The output from one person is shown after this news piece ……..

New Details of North Korean Spy Radio Messages Emerge [Note V15]
Wendell Minnick, Defense News 6:56 a.m. EDT July 22, 2016
SKOREA-NKOREA-MILITARY-BORDER

http://www.defensenews.com/story/defense/international/asia-pacific/2016/07/22/north-korea-spy-numbers-radio-message/87429280/

TAIPEI, Taiwan — A North Korean broadcast of numbers on June 24 ended a 16-year sojourn that is surprising many who thought Pyongyang had given up on the old spy trick.

The practice was halted in 2000 after the first inter-Korea summit between North Korean President Kim Jong Il and South Korean President Kim Dae Jun.

The 14-minute broadcast of two sets of numbers by a female voice appears to have been the work of the Voice of Korea (formerly Radio Pyongyang), a North Korean radio propaganda station that broadcasts accolades of the Kim family.

A retired US National Security Agency source said the fact it was a 10-11 meter frequency band in the middle of the night, considering that North Korea does not have relay stations like many other shortwave stations, would make the target local to South Korea, Japan or northern China.

“Sun Spot cycle is low to zero right now so would not expect it to be a DX [long distance] transmission," according to the NSA source.

The station is using old Soviet transmitters that give it a distinctive humming sound when broadcasting, said Keith Perron, an expert on spy number stations who runs the international shortwave and FM station, PCJ Radio, which broadcasts news, entertainment and serves as a relay for other content.

The hum is created due to the poor quality of transmitters and the fact that North Korea does not use microwaves to relay the message to the antennas but rather old telephone wires.

Perron said that Voice of Korea has sometimes broadcast gibberish between news stories that are also designed as messages to spies. This was a common tactic by the BBC during World War II to alert the French Resistance.

Number stations can be traced back to World War I and were made famous during the Cold War in Europe. At the end of the Cold War, number stations began shutting down and now are occasionally broadcast by Communist remnants, such as Cuba, China and North Korea, though Israel and Taiwan still use them.

The method is simple: The broadcasts contain a set of four or five numbers that correspond to letters or words that are decipherable using a one-time pad by a deep cover spy listening to a shortwave radio. Messages are broadcast at schedules and frequencies assigned to the spy. Perron claims North Korean one-time pads have never been broken by counter-intelligence.

There have been media reports out of South Korea that the North Koreans are using a more sophisticated method of sending secrets via steganography, a method of concealing a message within another file, image, or video, which makes the recent number broadcast by North Korea odd.

http://www.defensenews.com/story/defense/international/asia-pacific/2016/07/22/north-korea-spy-numbers-radio-message/87429280/

How on earth the ‘Number Station Expert’ manages to say it’s a 10 or 11 metre band sending [27 to 30MHz] beats me. I was reliably informed it was sent out concurrently on 785, 819 and 1080kHz in the Medium Wave band and on 2850, 3220. 4270, 6290 and 6600kHz during Raio Pyongyang 0400 – 0500z schedule.

That’s between 49 to 120 metres at a stretch.

Those with an interest in V24 [and indeed V15] might care to listen to the quality recordings appended to these notes kindly sent to us by a prospective member:

We monitored V24 on August 2016, so I think this is also helpful about Numbers Station.

These days, V24 has many mistakes during the transmission.

Its letter is like the letter which was uploaded on HFU.

V24 6215KHZ, 2016.June.5th, 15:00UTC

https://www.youtube.com/watch?v=KrIs0E8zrVo
SPY NO.1094, 57GROUPs
27031 15181 18209 08885 49910 89011 59859 43928 49870 34149
69486 74054 76940 21881 39868 43098 69365 47632 54604 80069
14992 19310 58136 08704 80069 14992 19310 58136 08704 47142
64191 88811 02701 87285 04342 53848 64860 02369 06704 46500
59139 39126 49359 04960 09942 84427 30694 37924 70053 47999
13759 84683 76887 79864 08715 20765 99755 60604 47099 06610
07064 36512

Comment: actually 62groups, not 57

V24 6310kHz 2016.JULY.3rd 15:30UTC
https://www.youtube.com/watch?v=2eVTykbUFko
SPY NO.3890, 43GROUPS
20525 88321 10190 76299 45147 44395 55207 08937 40031 12903
54638 86023 39896 73281 93671 29318 73800 26521 39494 52781
56221 81462 80003 66219 45972 25455 86282 28847 30520 29020
35355 78342 00883 97108 25662 48246 25986 19878 49234 24821
14440 93212 93907

V24 5900kHz 2016.JULY.22nd 16:00UTC
https://www.youtube.com/watch?v=QR7_Pkw0lX0
SPY NO.2693, 43GROUPS
20525 88321 10190 76299 45147 44395 55207 08937 40031 12903
54638 86023 39896 73281 93671 29318 73800 26521 39494 52781
56221 81462 80003 66219 45972 25455 86282 28847 30520 29020
35355 78342 00883 97108 25662 48246 25986 19878 49234 24821
14440 93212 93907
Comment: Numbers message of Spy NO.2693 is the same one of spy NO.3890 on July, 2016.

V24 5290kHz 2016.JULY.3rd 14:30UTC
https://www.youtube.com/watch?v=sewWmLIF2xw
SPY NO.1973, 46GROUPS
23545 05238 21971 08629 54002 25901 49006 62914 79721 74278
00869 04469 03091 19870 46397 58932 77829 63306 71245 85447
42964 08760 64688 44711 17108 54064 29231 75108 90268 04429
32476 35670 77996 68832 18310 67215 11043 93217 52980 01621
34395 25702 76014 12356 60934 59520

V24 5290kHz 2016.August.3rd 14:30UTC
https://www.youtube.com/watch?v=RkF7m9nE8cE
SPYNO.1973, 29GROUPS
87005 08538 62685 15600 43725 54917 47872 68517 60054 20454
99388 81950 28451 03682 43653 95928 40013 88336 88196 02144
05339 42761 32511 46595 47872 27912 67124 59747 82579

V24 5290kHz 2016.August.13th 14:30UTC
https://www.youtube.com/watch?v=hJFAZfTSPWY
SPY NO.1973, 46GROUPS
23545 05238 21971 08629 54002 25901 49006 62914 79721 74278
00869 04469 03091 19870 46397 58932 77829 63306 71245 85447
42964 08760 64688 44711 17108 54064 29231 75108 90268 04429
32476 35670 77996 68832 18310 67215 11043 93217 52980 01621
34395 25702 76014 12356 60934 59520
Comment: Normally, it should be the re-broadcast of numbers message on August, 3rd, 2016.
But it was the re-broadcast of numbers message on July, 2016

More on senior North Korean diplomat who defected in London
Posted by blogfactory On August 19, 2016 0 Comment
http://blogfactory.co.uk/archives/40174

A high-ranking North Korean diplomat, who defected with his wife and children in London, and is now in South Korea, is from a privileged family with a long revolutionary pedigree in North Korean politics. South Korea's Ministry of Unification confirmed on Wednesday that Thae Yong-Ho, the second-in-command at the North Korean embassy in the United Kingdom, had defected with his wife and children and had been given political asylum in South Korea. AsintelNews reported earlier this week, Thae, a senior career diplomat believed to be one of North Korea's foremost experts on Western Europe, had disappeared with his family and was presumed to have defected "to a third country".

New information has since emerged on Thae and his family, confirming that both he and his wife are members of North Korea's privileged elite, with decades-old connections to the ruling Workers' Party of Korea. According to the Seoul-based JoongAng Daily, Thae's wife, O Hye-Son, is a niece of the late O Peak-Ryong, a decorated communist guerrilla who fought Korea's Japanese colonialists in the 1930s. O, who died in the 1980s, joined the Korean anti-Japanese struggle alongside Kim Il-Sung, founder of the Workers' Party of Korea and first leader of North Korea. This means that O Hye-Son is also the cousin of O Peak-Ryong's son, General O Kum-Chol, who is currently vice chairman of the General Staff of the Korean People's Army. Thae himself is the son of Thae Pyong-Ryol, a four-star general who also fought against the Japanese in the 1930s, alongside Kim Il-Sung. In the postwar period, General Thae became a senior member of the Workers' Party of Korea and was appointed to the Party's powerful Central Committee. He died in 1997.

JoongAng Daily quoted an unnamed "source familiar with the matter" of Thae's defection, who said that the diplomat's loyalty to the North Korean leadership had been unquestioned prior to his surprise defection. Most North Korean diplomats are posted at an embassy abroad for a maximum of three years before being moved elsewhere in the world. The fact that Thae had been allowed to remain in the United Kingdom for 10 years shows his privileged status within the Workers' Party of Korea, said the source. Additionally, the children or most North Korean diplomats are required to return to their native country after completing high school. But this did not seem to apply to Thae, whose three children were living with him in Britain even after graduating from university. This and many other clues reflect Thae's "impeccable credentials", said the source, which made him one of the most trusted government officials in the regime's bureaucratic arsenal.

It is believed that Thae defected because he had been told that his tenure in London was coming to an end after a decade, and he would have to relocate to a less desirable location, or possibly recalled back to Pyongyang. Defections among North Korea's privileged elite are rare, but have been happening increasingly frequently in the past few years. This makes some observers believe that disillusionment among Supreme Leader Kim Jong-Un' inner circle is growing and that the North Korean regime is becoming weaker.

http://blogfactory.co.uk/archives/40174

One has to ask what triggered the NK Number station .....

Numbers interview on German radio:

On Sunday, July 31st, the German-Belgian radio station „Radio700“, which is also on shortwave, had its monthly series „Radio, Menschen und Geschichten“ (Radio, people and stories). There they spoke about the newly sent messages of V15 from Pyongjang. For this contribution, Jochen NumbersKopf was interviewed about numbers stations in general and V15 especially. In this short interview you could hear short clips of numbers stations (for example G15 „Papa November“ and G02 „Swedish Rhapsody“).

In reply to the question, which newsgroups about numbers stations are available on the internet, I told them about N&O, Priyom and E2K, the most serious numbers group.

Some hobbyfriends, who are also members of this group, heard this interview, for example David Woods from UK, who contacted me soon afterwards.

A small outlook at the end: In EN100, the jubileum edition of the newsletter, I will bring a historical review of the work of E2Kde, the German Branch of ENIGMA2000 (2004-2015).

Jochen NumbersKopf [*Tnx Jochen*]

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

M01/ 3 XIV MCW, hand (025 sched for May - Aug). Will change to M01/2 sched ID 463 for Sept - Oct.

July 2016:

4905	2000z	05 Jul	'025' 410 30 = =	46489...	...LG 79443 = =	Strong, fast. Severe QRM from FSK stn. HF	BR/CB	TUE
	2000z	07 Jul	'025' 471 30 = =	56368...	...LG 82462	Fair, med-fast, irregular. Errors noted	CB	THU
	1958z	12 Jul	'025' 603 30 = =	66364...	...LG 39793 = =	Fair, slow. Under data QRM. Errors noted	CB/JkC	TUE
	1958z	14 Jul	'025' 305 30 = =	25378...	...LG 55909 = =	Strong, V.fast. Excellent CW. Errors noted	BR	THU
	1958z	19 Jul	'025' 115 30 = =	78016...	...LG 22234 = =	Weak, fast. Poor copy	BR	TUE
	1958z	21 Jul	'025' 751 30 = =	00560...	...LG 81501 = =	Strong, med-fast. Errors noted in 2nd half	BR/CB	THU
	1958z	26 Jul	'025' 739 30 = =	72232...	...LG 19352 = =	Good, fast. Difficult copy due to QRM	BR	TUE
	1958z	28 Jul	'025' 146 30 = =	72974...	...LG 58759 = =	Strong, fast. Heavy QRM. Errors noted	BR/CB	THU
5280	1759z	05 Jul	'025' 118 30 = =	71364...	...LG 01969 = =	Strong, fast. Solid copy no noted errors	CB	TUE
	1800z	07 Jul	'025' 124 30 = =	. . . .	...LG 50672 = =	Weak, med-fast. Poor copy	BR	THU
	1800z	12 Jul	'025' Very weak signal into S.E UK - Unusable.			NRH on Twente SDR	BR	TUE
	1758z	14 Jul	'025' 901 30 = =	27777...	...LG 85863 = =	Weak, V.fast. Poor copy at times	BR/JkC	THU
	1758z	19 Jul	'025' Very weak signal into S.E. UK - Unusable.				BR	TUE
	1758z	21 Jul	'025' 907 30 = =	20521...	...LG 78481 = =	Fair, fast. 29 grps sent & 000 missing at end	BR/CB	THU
	1758z	26 Jul	'025' Very weak signal into S.E. UK - Unusable				BR	TUE
	1758Z	28 Jul	'025' 164 30 = =	99044...	...LG 01071 = =	Fair/Strong, fast. Errors noted in 2nd half	BR/CB	THU
6435	1500z	02 Jul	'025' 721 30 = =	66784...	...LG 82062 = =	V.weak, V.fast. Details via Twente SDR	BR	SAT
	1500z	10 Jul	'025' 134 30 = =	13941...	...LG 13025 = =	Fair, fast. Excellent CW. Several errors	BR	SAT
	1500z	24 Jul	NRH				BR/CB	SAT
	1500z	30 Jul	'025' 167 30 = =	56797...	...LG . . . . . = =	Weak. Poor copy. No copy after 1507z	BR	SAT
6780	0700z	03 Jul	'025' 678 30 = =	42993...	...LG 15692 = =	Weak, fast. Excellent CW. Errors Noted	BR/CB	SUN
	0700z	11 Jul	'025' 137 30 = =	14665...	...LG 84667 = =	Fair, Fast. Excellent CW. One noted error	BR/CB	SUN
	0700z	24 Jul	'025' 342 30 = =	65748...	...LG 67584 = =	Weak, V.fast. Copy difficult at times	BR	SUN
	0700z	31 Jul	NRH				BR	SUN

August 2016:

4905	2000z	02 Aug	'025' 692 30 = =	03713...	...LG 17336 = =	Strong, fast. Several errors noted.	BR	TUE
	2000z	04 Aug	'025' 334 30 = =	56317...	...LG 89096 = =	Strong, V.fast. Several errors noted	CB	THU
	2000z	09 Aug	'025' 906 30 = =	40458...	...LG 80746 = =	Strong, med-fast. Errors noted	CB	TUE
	2000z	11 Aug	'025' 251 30 = =	14253...	...LG 55300 = =	Strong, fast. Figs sent as continuous stream	BR/CB	THU
	2000z	16 Aug	'025' 939 30 = =	63601...	...LG 66594 = =	Strong, fast. Numerous errors	CB	TUE
	2000z	18 Aug	'025' 805 30 = =	61648...	...LG 74746 = =	Strong, med-fast. Excellent CW. No errors	BR	THU
	2000z	23 Aug	'025' 331 30 = =	42252...	...LG 41721 = =	Strong, V.fast. Figs sent as continuous stream	BR	TUE
	2000z	25 Aug	'025' 348 30 = =	24751 ...	...LG 07744 = =	Fair	JkC	THU
	1959z	30 Aug	'025' 518 30 = =	11789...	...LG 00411 = =	Strong, fast. Faultless delivery. No errors	CB	TUE
5280	1800z	02 Aug	'025' 779 30 = =	15307...	...LG 83507 = =	Weak, fast. V.poor copy. Details via Twente	BR	TUE
	1800z	04 Aug	NRH				BR/CB	THU
	1800z	09 Aug	NRH				BR/CB	TUE
	1800z	11 Aug	'025' 846 30 = =	27825...	...LG 60010 = =	Fair, fast. Figs sent as one continuous stream.	BR/CB	THU
	1800z	16 Aug	'025' 706 30 = =	69534...	...LG 6 . .83 = =	Weak, V.fast. Poor copy	BR	TUE
	1800z	18 Aug	'025' 901 30 = =	42942...	...LG 85863 = =	Weak, med-fast. Errors noted inc. ? & / used	BR	THU
	1800z	23 Aug	'025' 264 30 = =	70738...	...LG 95121 = =	Weak, V.fast. Figs sent as continuous stream	BR/JkC	TUE
	1800z	25 Aug	'025' 147 30 = =	35406 ...	...LG 59313 = =	Fair. Ends 1810z	CB/JkC	THU
	1759z	30 Aug	'025' 677 30 = =	12589...	...LG 02549 = =	Strong, fast. Faultless delivery. No errors	CB	TUE

6435	15**04**z	06 Aug	'025' 191 30 = =	93220...	...LG 26735 = =	Weak, fast. Late start. Several errors noted	BR	SAT
	1500z	20 Aug	NRH				CB	SAT
	1459z	27 Aug	'025' 813 30 = =	38558...	...LG 62913 = =	Fair, fast. Many pauses noted	BR/CB	SAT
6780	0700z	07 Aug	'025' .71 30 = =	2	...LG . . . . . = =	Weak, fast. Poor copy. 1st 4 grps only logged	BR	SUN
	0700z	14 Aug	'025' 403 30 = =	02425...	...LG 72607 = =	Fair, Med-fast. Each fig sent individually.	BR/CB	SUN
	0700z	21 Aug	'025' 405 30 = =	25502...	...LG 63940 = =	Weak with strong QSB	CB	SUN
	0700z	28 Aug	'025' 719 30 = =	27445...	...LG 41048 = =	Good/Weak. Several errors noted	BR/CB	SUN

M01a (From Feb 2016 M01a has been redefined to cover all M01 variants - excepting M01b)
On Wed 27 July Uascan reported that the previous 24 hours had been quite interesting in regard to M01a and S06 transmissions.
Starting on Tuesday, 26 July with a possible M01a transmission on 4965kHz.Due to thunderstorm activity nearby, Uascan had some problems copying the detail, so the transcript is understandably not complete. This was followed by a lot of M01a & a S06 (?) activity. *Thanks Uascan - good work.*

4965 2030z (Approx) 26 July CW (Short zero used) (Lost characters are indicated with _) Uascan TUE

9_6_7267546_980488160_8_0988573078161494_8_63404947206115_81_493_695_2_60_502858383=

34020_ 111 999 _

_2_90488_95044429671248633739249524_7425_9_47_436_2_7_5234476_536_653439965_161466102_36762_463429 = 49420

111 999 _69 120 =

53021561435_580_7_382_75086362937782_3893_768717246368_4430_95_7398_7_886_1_9283227309t7_22_69_20

111

This was followed by a FSK CW (approx. 130Hz (!) zero on lower) transmission on 5110.94kHz - 5111.07kHz (Note - same shift as VLF signals?)

5110 2040z 26 Jul FSK CW Uascan TUE

431 431 431 431 111 999 (Sent 7 times)

This was then followed by a FSK CW (200Hz, zero on lower) transmission on 5131.0kHz (Note - RMP day freq is 5131.5!)

5131 2105 - 2135z 26 Jul FSKCW Uascan TUE

999 _7_20

= 7911449_5_45454_291695958_263387322_6406121263_23_7128460606065_44031875_10326_91208_855770407=97420
= 036027419258470680_25393029986782410115805 95_10989025_77733_90788660088_8_50433210609_331829164188_88=80_20

958 958 958 111 999

= 52183915054250091135_043923536215384240_2262_62_68211_178947474550739367_38606456258_4531654_8469944=_7020

958 958 958 111 999
958 958 958 111 999

_2373_869696761149397543_83_59944b_89243538271_592_26966_790_953609802056787_692195594470_504t551_=4302_

958 958 958 111 000
958 958 958 111 000

5751 0845z 27 Jul CW Uascan WED

999 301 301 301
111 999
301 301 301
111 999

Mode then changed to FSK CW 200Hz:

111 301
111 999
301 301 301
111 999

(8170 0851z USB S06? transmission)

5391 0855 -1018z 27 Jul FSK CW 200Hz Uascan WED

975 975 975
111 999

(Repeated again at 1005z)

52320 =_43396 70713 38325 0_1383 76089 93186 37156 43500 52570 62552 0652_5 12349 64225 06_927 20077 86965 058911 06981 3 = 52320
(Grouping a bit uncertain)

975 975 975

5183	1319 - 1332z	27 Jul	CW	Uascan	WED
	346 346 346 86769 86769 (Sent 3 times)				
	87010 8701 87010 87010 (Sent 7 times)				
	346 346 346 86029 86029 (Sent 4 times)				
	346 346 346 87231 87231 (Sent 6 times)				
	00000 (Note - 5 dashes)				
5263.9	0824z	28 Jul	CW	Uascan	THU
	489 489 489 111 489 489 489 111 489 489 489 (0824z)				
	111 77168 77168 (Sent 5 times) (0825z)				
5263.9	0941z	28 Jul	CW	AB	THU
	489 489 489 77156 333 333 11 111 999 139 10 = 46853 31035 47965 22134 32134 18974 06354 16980 139 10 111 000				
3040,2	2105z (IP)	15 Aug	CW	Uascan	MON
	_9892 89892 (In progress)				
	575 575 575 (?) 982 982 982				
	571 571 571 982 982 982				
	571 571 571 98328 98328 (Sent 3 times)				

M01b

July 2016:

4895//5340	2010 - 2030z	01 Jul	'467' 146 36 = 31407 ... 32123 000 Fair//Fair	JkC	FRI
5065//5805	1940 - 1958z	14 Jul	'936' 707 30 = 11293 ... 41303 000 V.Weak//Weak	JkC	WED
5095//5760	1832 - 1848z	14 Jul	'815' 707 30 = 11293 ... 41303 000 Weak//Weak	JkC	WED
5125//5735	1810 - 1829z	11 Jul	'364' 146 36 = 31407 ... 32123 000 Weak//Fair	JkC	MON
5150//5475	1915 - 1934z	11 Jul	'858' 146 36 = 31407 ... 32123 000 Fair//Fair	JkC	MON

August 2016:

4895//5340	2010 - 2027z	26 Aug	'467' 903 31 = 76774 ... 51536 000 Fair//Fair	JkC	FRI
5065//5805	1942 - 1958z	25 Aug	'936' 903 31 = 76774 ... 51536 000 Weak//Fair	JkC	THU
5075//5465	1902 - 1920z	26 Aug	'336' 903 31 = 76774 ... 51536 000 Weak//Fair	JkC	FRI
5095//5760	1832 - 1849z	25 Aug	'815' 903 31 = 76774 ... 51536 000 Weak//V.Weak	JkC	THU
5125//5735	1810 - 1827z	29 Aug	'364' 903 31 = 76774 ... 51536 000 Weak//Weak	JkC	MON
5150//5475	1915 - 1933z	29 Aug	'858' 903 31 = 76774 ... 51536 000 Fair//Fair	JkC	MON

M01b 5095//5760kHz 1832z 14 July16

815 (R4m) 707 707 30 30 = =

11293 84579 21901 54181 76541
61305 21295 65468 36268 65211
58713 43112 76443 47241 33748
41743 22356 50176 69188 10822
46889 38851 65135 29956 54950
18189 88234 63255 11444 41303
= =

707 707 30 30 000

Courtesy JkC

M01b 5065//5805kHz 1942z 25 Aug16

936(R4m) 903 903 31 31 = =

76774 67655 44633 94944 90479
20831 77160 53167 84179 70327
44403 32114 54070 21377 59285
19313 35813 32398 51045 25295
88879 34694 59642 48998 43145
60337 36556 69979 62054 57816
51536 = =

903 903 31 31 000

Courtesy JkC

M03 III ICW, some CW

No reports. The number of transmissions decreased dramatically during 2015, leaving only the 4505kHz & 4828kHz schedules on Mon/Wed & Thu/Sun respectively. The two remaining schedules for M03 appeared in January, but apart from a report from Ary (AB) of a weak transmission on 04 February no further transmissions have been heard or reported since.

M08a XVIII ICW / CW, some MCW

Regular M08a schedules have been missing since 24 June - But there are recent signs of life. A report from our 'Man in America'.

As reported in the previous newsletter nothing was heard from M08a between 24 June & the end of the month. In addition to this nothing was heard during the whole of July. Then in early August a very weak transmission was heard & this was followed by two more during the month.

All transmissions were extremely weak with only a few groups audible over the length of the transmission. The latter two heard suggest there may be a new format with what sounded like groups of 5 followed by a single cut number or a group of 4 followed by 2 cut numbers. It's possible due to the fading that it was just the first 1 or 2 numbers of the following 5FG that were heard.

Hopefully the transmissions will return or become stronger so we can verify what is going on.

Even with the lack of transmissions on most week days transmitter checks are performed on 8096kHz before 1400z & also on 7554kHz before 2000z & these have continued right up to the end of August.

Logs

8095	05 Aug	Extremely weak, fading most of the time. Groups 85652 and 72311 audible	AnonUS	FRI
8095	15 Aug	Barely audible 24623 2 78747 1	AnonUS	MON
8095	23 Aug	Weak and very broken numbers/groups heard included 3, 7652 4, 23, 52, 410?? 51, 10, 6, 2671 2	AnonUS	TUE

Thanks AnonUS. We are all hoping that this is not the last we have heard of M08a.

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.

July 2016:	**New scheds in bold type**				
6857/7557/---	0430/0450/0510z	04 Jul	850 000	BR	MON
	0430/0450/0510z	18 Jul	850 000	BR	MON
	0430/0450/0510z	25 Jul	850 000	BR	MON
7984/9184/---	0630/0650/0710z	21 Jul	911 000	E.SMITH	THU
	0630/0650/0710z	28 Jul	911 000	E.SMITH	THU
8047/6802/5788	1810/30/50z	04 Jul	463 1 (6248 119) 72257 87867....	BR	MON
	1900/20/40z	06 Jul	463 1 (3203 143) 36956 12340....	BR	WED
	2000/20/40z	07 Jul	463 1 (3111 69) 56236 18321....	BR/HFD	THU
	1810/30/50z	11 Jul	463 1 (5076 116) 65805 07039....	BR	MON
	1900/20/40z	13 Jul	463 1 (1418 130) 57193 34832 ... 80944 17417 000 Fair [Note 1]	JkC	WED
	2000/20/40z	14 Jul	463 1 (4287 79) 94501 83987 ... 12760 60115 000 Fair	JkC	THU
	1810/30/50z	18 Jul	463 1 (7684 111) 90620 22441....	BR/HFD	MON
	1900/20/40z	20 Jul	463 1 (8607 139) 28145 53012 ... 48097 26796 000 Fair	JkC	WED
	2000/20/40z	21 Jul	463 1 (2396 82) 97975 14117....	BR	THU
	1810/30/50z	25 Jul	463 1 (6633 119) 51062 17710....	BR	MON
	2000/20/40z	28 Jul	463 1 (2620 66) 55390 66859....	BR	THU
8053/9178/10287	**0800/20/40z**	**26 Jul**	**816 1 (4922 59) 28899 67638 .... 17417 71922 000 000 Weak**	E.SMITH	TUE
9176/7931/6904	1800/20/40z	04 Jul	257 1 (7060 150) 31521 34779....	BR	MON
	1900/20/40z	07 Jul	257 1 (7472 114) 69911 77369 ... 64553 63976 000 000	BR/Gert	THU
	1800/20/40z	11 Jul	257 1 (1321 154) 45634 23221 ... 57076 65822 000 Fair	JkC	MON
	2000/20/40z	12 Jul	257 1 (9994 79) 42914 91495 ... 16233 88351 000 Fair	JkC	TUE
	1800/20/40z	13 Jul	257 1 (9516 152) 25238 17958 ... 51264 61109 000 Fair	JkC/JPL	WED
	1900/20/40z	14 Jul	257 1 (4007 120) 98162 23960 ... 01060 23665 000 Fair	Gert/JkC	THU
	1800/20/40z	18 Jul	257 1 (1343 148) 69237 95478....	BR	MON
	1800/20/40z	20 Jul	257 1 (7914 133) 48736 30967 ... 73671 87612 000 Fair	JkC	WED
	1900/20/40z	21 Jul	257 1 (9611 124) 35847 79461....	BR	THU
	1800/20/40z	25 Jul	257 1 (6170 147) 18489 97070....	BR	MON
	1900/20/40z	28 Jul	257 1 (1347 112) 97710 25353....	BR	THU
9217//10617/12217	0500/20/40z	02 Jul	262 000	BR	SAT
	0500/20/40z	09 Jul	262 000	AB/HFD	SAT
	0500/20/40z	16 Jul	262 1 (103 121) 56010 11794 ... 49820 68259 000 000	AB	SAT
	0500/20/40z	23 Jul	262 000	BR	SAT
	0500/20/40z	30 Jul	262 1 (4825 139) 34143 10414.... 87940 85541 000 000	AB/E.SMITH	SAT
9379/7979/6879	2100/20/40z	06 Jul	398 000	BR	WED
	2100/20/40z	13 Jul	398 1 (103 121) 56010 11794 ... 49820 68259 000 Fair	HFD/JkC	WED
	2100/20/40z	20 Jul	398 000 Fair	JkC	WED

11435/10598/9327	1800/20/40z	07 Jul	938 1 (1820 150) 27502 64756 ... 77690 10422 000 000	BR/Gert	THU
	1800/20/40z	14 Jul	938 1 (3223 148) 37865 35563 ... 32272 88788 000 000	Gert/JkC	THU
	1800/20/40z	21 Jul	938 1 (8160 142) 73728 74530....	BR	THU
	1800/20/40z	28 Jul	938 1 (7864 147) 50058 00574....	BR	THU
12205/13559/14728	1100/20/40z	04 Jul	973 1 (7446 116) 57815 08172 ... 36772 82483 000 000	AB/HFD	MON
13926/12126/---	1310/30/50z	02 Jul	919 000	HFD	SAT
	1310/30/50z	07 Jul	919 1 (7986 155) 37007 83172.... 79362 47594 000 000 [Note 2]	AB/DanielE2kde	THU
	1310/30/50z	09 Jul	919 1 (7986 155) 37007 83172....	BR	SAT
	1310/30/50z	14 Jul	919 000	BR	THU
	1310/30/50z	16 Jul	919 000	BR	SAT
	1310/30/50z	21 Jul	919 1 (9712 119) 13789 49961....	BR	THU
	1310/30/50z	23 Jul	919 1 (9712 119) 13789 49961....	BR	SAT
	1310/30/50z	28 Jul	919 000	E.SMITH	THU
	1310/30/50z	30 Jul	919 000	E.SMITH	SAT
14869/13569/---	2110/30/50z	02 Jul	851 000	HFD	SAT
	2110/30/50z	06 Jul	851 1 (1993 71) 41797 16557....	BR	WED
	2110/30/50z	09 Jul	851 1 (1993 71) 41797 16557....	BR	SAT
	2110/30/50z	13 Jul	851 000 Fair	JkC	WED
	2110/30/50z	20 Jul	851 1 (7029 65) 15265 16824 ... 06335 61409 000 Weak	JkC	WED
	2110/30/50z	23 Jul	851 1 (7029 65) 15265 16824....	BR	SAT
	2110/30/50z	31 Jul	851 000	BR	SAT
15821/13921/12221	**1400/20/40z**	**13 Jul**	**892 1 (8473 75) 12800 49391 ... 43561 37773 000 Fair**	JkC	WED
	1400/20/40z	27 Jul	892 1 (5890 93) 88058 70944 ... 60350 21473 000 000	E.SMITH	WED
16332/18032/---	0710/30/50z	27 Jul	303 000 Severe QRM from 'C' Marker, Moscow on 16332kHz	E.SMITH	WED
19251/18051/---	**1500/20/40z**	**01 Jul**	**203 000 Fair**	JkC	FRI
	1500/20/40z	08 Jul	203 000 Both sigs very weak in S.E. UK,. 1500z better of the two	BR	FRI

[Note 1] Tx broke at 1923z. Returned to call-up, then continued *Jkc*

[Note 2] Normal start followed by the first 28 groups of the message. Signal stopped, then restarted with a stronger signal, first with the '919 1' call then resumed sending the message from group 22 without repeat of the DK/GC. A weaker CW was noted mixing into the first few seconds of the restarted transmission, which may have been another M12 transmission.
(Thanks to DanielE2kde & Ary for their combined reports of the above incident - Most interesting!)

August 2016:

5792/6992/---	0430/0450/0510z	01 Aug	796 000	E.SMITH	MON
	0430/0450/0510z	08 Aug	796 000	E.SMITH	MON
	0430/0450/0510z	15 Aug	796 000	E.SMITH	MON
	0430/0450/0510z	22 Aug	796 000	BR	MON
	0430/0450/0510z	29 Aug	796 000 Fair	JkC	MON
7484/8084/---	0630/0650/0810z	04 Aug	402 000	E.SMITH/HFD	THU
	0630/0650/0710z	11 Aug	402 000	E.SMITH	THU
	0630/0650/0710z	18 Aug	402 000	BR	THU
8047/6802/5788	1810/30/50z	01 Aug	463 1 (1170 114) 04722 63864....	BR	MON
	1900/20/40z	03 Aug	463 1 (6388 136) 55866 65779....	BR	WED
	2000/20/40z	04 Aug	463 1 (2487 85) 86893 58202....	BR/HFD/RT	THU
	1810/30/50z	08 Aug	463 1 (1291 120) 21524 36364....	BR	MON
	1900/20/40z	10 Aug	463 1 (3246 141) 85603 50091....	BR	WED
	2000/20/40z	11 Aug	463 1 (1234 83) 98400 19089....	BR	THU
	1810/30/50z	15 Aug	463 1 (4079 114) 10840 19402....	BR	MON
	1900/20/40z	17 Aug	463 1 (2949 141) 10884 72143....	BR	WED
	2000/20/40z	18 Aug	463 1 (9676 93) 77397 38201....	BR	THU
	1810/30/50z	22Aug	463 1 (4586 110) 63592 73494....	BR	MON
	1900/20/40z	24 Aug	463 1 (6395 148) 15461 88717..... 22276 49096 000 Fair	JkC	WED
	2000/20/40z	25 Aug	463 1 (737 151) 93096 63364..... 48181 97951 000 Fair	JkC	THU
	1810/30/50z	29 Aug	463 1 (3446 120) 62465 87985..... 88785 54343 000 Fair	JkC	MON
	1900/20/40z	31 Aug	463 1 (9598 145) 87024 80297....	BR	WED
8123/6923/---	2100/20/40z	03 Aug	198 000	BR/HFD	WED
	2100/20/40z	10 Aug	198 1 (3749 101) 77928 36083....	BR	WED
	2100/20/40z	17 Aug	198 000	BR	WED
	2100/20/40z	24 Aug	198 1 (6983 91) 18224 62946..... 08968 77268 000 Fair	JkC	WED
	2100/20/40z	31 Aug	198 000	BR	WED
8053/9178/10287	**0800/20/40z**	**02 Aug**	**816 1 (8379 51) 69755 80676 ..... 16675 48238 000 000**	E.SMITH	TUE
	0800/20/40z	09 Aug	816 1 (9043 63) 04890 69902 ..... 07262 47684 000 000	E.SMITH	TUE
	0800/20/40z	16 Aug	816 1 (9483 61) 29390 82066 ..... 62979 03589 000 000	E.SMITH	TUE
9167/10267/---	0500/20/40z	06 Aug	125 000	E.SMITH/HFD	SAT
	0500/20/40z	13 Aug	125 1 (3749 101) 77928 36083 ..... 17516 40783 000 000	E.SMITH	SAT
	0500/20/40z	20 Aug	125 000	BR	SAT
	0500/20/40z	27 Aug	125 000	BR	SAT

9176/7931/6904	1800/20/40z	01 Aug	257 1 (2183 141) 92198 58122....	BR	MON
	1800/20/40z	03 Aug	257 1 (1652 134) 96543 60208....	BR	WED
	1900/20/40z	04 Aug	257 1 (5377 119) 83060 67537....	BR	THU
	1800/20/40z	08 Aug	257 1 (2524 147) 15708 86888....	BR	MON
	1900/20/40z	11 Aug	257 1 (5420 123) 85949 25445....	BR	THU
	1800/20/40z	15 Aug	257 1 (8925 142) 64670 66752....	BR	MON
	1800/20/40z	17 Aug	257 1 (3261 149) 59464 33743....	BR	WED
	1900/20/40z	18 Aug	257 1 (9297 113) 77944 96481....	BR	THU
	1800/20/40z	22 Aug	257 1 (4373 147) 05227 36440....	BR	MON
	1800/20/40z	24 Aug	257 1 (1945 140) 05613 96680..... 00326 20761 000 Fair	JkC	WED
	1900/20/40z	25 Aug	257 1 (6010 119) 30152 50894..... 85633 66942 000 Fair	JkC	THU
	1800/20/40z	29 Aug	257 1 (3435 147) 26688 45143..... 04788 13125 000 Fair	JkC	MON
	1800/20/40z	31 Aug	257 1 (2191 145) 36416 03259....	BR	WED
10343/9264/8116	**1200/20/40z**	**12 Aug**	**124 1 (. . . ..) Weak signal - Unusable**	E.SMITH	FRI
11435/10598/9327	1800/20/40z	04 Aug	938 1 (9148 148) 72051 80998....	BR	THU
	1800/20/40z	11 Aug	938 1 (3994 143) 92134 39707....	BR	THU
	1800/20/40z	18 Aug	938 1 (6720 151) 77944 96481....	BR	THU
	1800/20/40z	25 Aug	938 1 (788 150) 80720 58212.... 16485 39105 000 Fair	JkC	THU
12205/13559/14728	1100/20/40z	01 Aug	973 1 (427 41) 80511 84930 ..... 43101 58051 000 000	E.SMITH	MON
	1100/20/40z	15 Aug	NRH	BR	MON
13369/12179/10469	2110/30/50z	03 Aug	314 1 (3085 135) 47243 14794....	BR/HFD	WED
	2110/30/50z	06 Aug	314 1 (3085 135) 47243 14794....	BR	SAT
	2110/30/50z	10 Aug	314 000	BR	WED
	2110/30/50z	13 Aug	314 000	BR	SAT
	2110/30/50z	17 Aug	314 1 (2408 79) 31845 86126....	BR	WED
	2110/30/50z	24 Aug	314 000 Fair	JkC	WED
	2110/30/50z	31 Aug	314 000	BR	WED
14468/13568/12178	1310/30/50z	06 Aug	451 000	E.SMITH	SAT
	1310/30/50z	11 Aug	451 1 (8579 167) 66735 71344 ..... 77823 92685 000 000	E.SMITH	THU
	1310/30/50z	13 Aug	451 1 (8579 167) 66735 71344 ..... 77823 92685 000 000	E.SMITH	SAT
	1310/30/50z	18 Aug	451 000	BR	THU
	1310/30/50z	20 Aug	451 000	BR	SAT
	1310/30/50z	25 Aug	451 1 (2201 149) 10736 94141 ..... 23756 91870 000 000	AB/JkC	THU
	1310/30/50z	27 Aug	451 1 (2201 149) 10736 94141....	BR	SAT
15983/14683/13383	**1400/20/40z**	**10 Aug**	**963 000**	E.SMITH	WED
	1400/20/40z	**22 Aug**	**963 000 Fair**	JkC	MON
	1400/20/40z	24 Aug	963 000 Fair	JkC	WED
	1400/20/40z	29 Aug	963 1 (1595 103) 84337 83242..... 92853 29688 000 Fair	JkC	MON
	1400/20/40z	31 Aug	963 1 (1595 103) 84337 83242....	BR	WED
16348/18148/---	0710/30/50z	03 Aug	316 000	E.SMITH	WED
	0710/30/50z	10 Aug	316 000	E.SMITH	WED
	0710/30/50z	17 Aug	316 000	E.SMITH	WED
20167/18667/---	**1500/20/40z**	**12 Aug**	**164 000**	E.SMITH	FRI
	1500/20/40z	19 Aug	164 000 Weak	BR	FRI
	1500/20/40z	26 Aug	164 000 Weak	JkC	FRI

M14 IA MCW / ICW Short 0

July 2016:

5240	2300z	03 Jul	376 (427 68) = 37612 80644.... 20801 00000	AB	SUN
5415	1600 - 1621z	20 Jul	361 ... (Rest unworkable) Weak	JkC	WED
5824	0000z	04 Jul	376 (427 68) = 37612 80644.... 20801 00000	AB	MON
5938	1920 - 1941z	13 Jul	417 (124 89) = 67345 ... 89340 00000 Good (Same fake msg as yesterday)	JkC	WED
6856	1820 - 1842z	12 Jul	163 (124 89) = 67345 ... 89340 00000 Good Fake msg	JkC	TUE
6891	1800z	15 Jul	382 00000 Expected repeat of 1700z msg - Sent null 382 00000 (most unusual)	RNGB	FRI
7485	1700 - 1703z	01 Jul	382 00000 Good	JkC	FRI
	1700z	15 Jul	382 (190 50) = 12345 43435 67644..... (weak)	RNGB	FRI
7590	0600z	24 Jul	382 00000	HFD	SUN
7651	0603z (IP)	18 Jul	(021 77) = In Progress 70557 13196 84541 021 021 77 77 00000	Danix	MON
8095	1830 - 1845z	13 Jul	343 (296 51) = 92396 33225 ... 72614 00000 Fair	JkC	WED
8162	0700z	24 Jul	382 00000	HFD	SUN
9463	1700z	15 Jul	801 (467 52) = 304513 22289 ... 49815 00000 Heavy BC QRM so difficult copy	RNGB	FRI

August 2016:

5938	1920z	24 Aug	417 (518 86) = 32498 53900 ... 61220 00000 Fair	JkC	WED
16347	0930z	10 Aug	617 00000	E.SMITH	WED

M14 5240kHz 2300z 03 July 16

376 (R4m) 427 427 68 68 = =

37612 80644 32250 72880 72119 55276 17439 87341 90653 40498
10100 53082 42643 61771 22098 53762 43309 87109 00538 72530
52091 63871 29445 64410 82070 51860 00340 82630 92215 42627
51161 82994 40871 21905 64420 52761 19081 74409 53801 26331
50362 77409 83210 63091 10103 62175 83630 98901 53787 62181
52760 00830 93117 71152 43871 52891 15227 26021 58901 01200
42729 87001 20940 37116 53092 26061 46671 20801 = =

427 427 68 68 00000

Courtesy AB

M14 8095kHz 1830z 13 July 16

343 (R4m) 296 296 51 51 = =

92396 33225 85221 75121 52460 94594 88647 31688 15208 21463
56514 78006 78487 80195 81270 54414 09498 09293 42983 74113
13575 07098 66657 03509 04653 27819 21056 50068 13307 65527
57466 49889 93344 30835 11841 72162 12863 49941 18756 82714
40714 40718 10626 33821 64324 45550 00603 72476 99796 25581
72614 = =

296 296 51 51 00000

Courtesy JkC

M23 O ICW

M23 was found again from 07 July on 5921kHz with regular 12 minute transmissions at 0559z, 0629z, 1559z 2029z & 2129z, using the call 579. Despite efforts by members searching for a parallel frequency, none was found. Although two parallel frequencies are often used this is not always the case & single frequency use has also been logged before.

PoSW noted: M23 activity in the 49 metre band:- what appeared to be some variant of M23 Morse, a single three-figure group sent slowly for several minutes logged many times in the first half of July. Frequency was 5,921 kHz inside the 49 metre broadcast band, always a strong signal even when heard in daylight hours when there is not much else doing in this band.
Often ended abruptly in the middle of the 3F, no start or finish routine, started on the hour or half hour – or to be more precise about 50 seconds before these times on the several occasions when a transmission was heard from the beginning. Three different 3F groups were heard over the week or so that this was active:-
7-July-16, Thursday:- 2034 UTC, 5,921 kHz, slow CW sending "579", over S9 signal, found by chance after giving up on the Thursday 2030Z E06 on 5,948 flattened by BC interference, by contrast 5,921 fairly clear with only a much weaker broadcaster on 5,920
not strong enough to be a problem. The "579" CW had gone when checked again at 2043 UTC.

8-July-16, Friday:- 2033 UTC, "579" again, over S9, stopped in full-flow after "5" after 2041Z.

10-July-16, Sunday:-:- 1601 UTC, "579" at a different time, S7 to S9, stopped after "5" just after 1611Z.
1632 UTC, "579" in progress again, stopped after a "5" just after 1641Z.

11-July-16, Monday:- 1600 UTC, "579" in progress, S9 CW, ended after 1611Z on a "5" again.
2029 and 10s UTC, monitored from the very start, "579", S9+, very strong signal, stopped after 2041Z.
2129 UTC and 10s, "579", still a strong S9+, stopped 2141:11s UTC.
12-July-16, Tuesday:- 0608 UTC, active in the morning with "579", stopped in full-flow at 0611:25s UTC. 0629 and 10s UTC, starting up with "579" again.

13-July-16, Wednesday:- 1001 UTC, in progress with a different 3F, "123". Stopped just after 1011Z.
1130 UTC, active again with "123".
1629:10s UTC, now sending "246", double what it was this morning! Did not stop until after 1644 UTC.
2100 UTC, in progress, gone back to "579", stopped suddenly after 2111 UTC.

14-July-16, Thursday:- 0631 UTC, in progress with "246", carried on until just after 0644Z.
1633 UTC, in progress with "246", stopped after 1644 UTC.
And this seems to have been the last day on which this one was active, nothing heard on the following days in July at any of the above times or in between despite keeping a receiver tuned to 5,921. *Thanks Peter.*

Logs

5921	0559 - 0611z	08 Jul	579 (R12m)		AB	FRI
	0629 - 0641z	08 Jul	579 (R12m)		AB	FRI
	1559 - 1611z	08 Jul	579 (R12m)	Fair	BR	FRI
	1629 - 1641z	08 Jul	579 (R12m)	Strong	BR	FRI
	2029 - 2041z	08 Jul	579 (R12m)	Good with BC QRM	BR	FRI
5921	0559 - 0611z	09 Jul	579 (R12m)		AB	SAT
	0629 - 0641z	09 Jul	579 (R12m)		AB	SAT
	1559 - 1611z	09 Jul	579 (R12m)	Strong	AB/BR	SAT
	1629 - 1641z	09 Jul	579 (R12m)	Good	BR	SAT
	2029 - 2041z	09 Jul	579 (R12m)	Strong	BR	SAT
5921	1559 - 1611z	10 Jul	579 (R12m)	Strong	BR	SUN
	1629 - 1641z	10 Jul	579 (R12m)	Strong	BR	SUN
	2029 - 2041z	10 Jul	579 (R12m)	V.Strong [Note 1]	BR	SUN
5921	0559 - 0611z	11 Jul	579 (R12m)			
	0629z	11 Jul	NRH - No transmission		AB	MON
	2029 - 2041z	11 Jul	579 (R12m)	Strong	BR	MON
	2129 - 2141z	11 Jul	579 (R12m)	Strong	BR	MON

5921	1559 - 1611z	12 Jul	579 (R12m) Good	JkC	TUE
	1629 - 1641z	12 Jul	579 (R12m) Good	JkC	TUE
	2029 - 2041z	12 Jul	579 (R12m) Good	JkC	TUE
	2129 - 2141z	12 Jul	579 (R12m) Good	JkC	TUE
5921	0559 - 0611z	13 Jul	579 (R12m)	AB	WED
	0629 - 0641z	13 Jul	579 (R12m)	AB	WED
	1559z	13 Jul	NRH - No transmission	AB/BR/JkC	WED
	1629 - 1644z	13 Jul	**246 (R15m)** Strong	BR/JkC	WED
	2029z	13 Jul	NRH - No transmission	AB/BR	WED
	2059 - 2111z	13 Jul	579 (R12m) Good	JkC	WED
	2129z	13 Jul	NRH - No transmission	AB/BR	WED
5921	0629 - 0641z	13 Jul	579 (R12m)	AB	THU
	1629 - 1644z	14 Jul	**246 (R15m)** Strong	BR/JkC	THU
	2029z	14 Jul	NRH - No transmission	BR	THU
	2059z	14 Jul	NRH - No transmission	JkC	THU
	2129z	14 Jul	NRH - No transmission	BR	THU
5921	1400 - 2230z	15 Jul	NRH - No transmissions heard	BR	FRI

[Note 1] Also present on freq. Prior to, during & after the M23 transmission, weak CW was present on freq intermittently calling stns using LKDW as call.

M23 was heard again on Saturday 30 July by Edd, (E.SMITH) on 6890kHz, who also noted that the single dash usually heard on active M23 frequencies was present every 30 minutes - at 1325z & 1355z etc.

6890	1311z (IP) - 1313z	30 Jul	456 (R)	E.SMITH	SAT
	1328 - 1343z	30 Jul	456 (R15m)	E.SMITH	SAT
	1358 - 1410z	30 Jul	789 (R12m)	E.SMITH	SAT
	1428 - 1440z	30 Jul	789 (R12m)	E.SMITH	SAT
6890	1258 - 1310z	31 Jul	456 (R15m)	AB	SUN
	1328 - 1343z	31 Jul	456 (R15m)	AB	SUN
	1358 - 1410z	31 Jul	789 (R12m)	AB	SUN
	1428 - 1440z	31 Jul	789 (R12m)	AB	SUN

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

9075	1638 (IP) - 1641z	14 Jul	089 (278 12) = 31955 ... 21562 = 278 12 00000 Good 27wpm	[Note 1]	JkC	THU
	1648 - 1652z	14 Jul	089 00000 Good 29wpm		JkC	THU

[Note 1] Transmission broke at grp09, very brief return to call-up, then continued from grp01 JkC

Jim (JkC) comments that this M24 & associated S06 activity seems to be similar to that heard in May on 9073kHz & which could suggest training ?

M24 9075kHz 1638z 14 July16

089 (R4m) 278 278 12 12 =

31955 21545 66775 32246 70525 29729 71642 64210 29295 24705
36001 21562 = =

278 278 12 12 00000

Courtesy JkC

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.

Reception of M76 has proved impossible during the summer months here in the UK. Guy (GD) reports that he has been unable to hear it on the last known frequency of 3280kHz. This is most likely due to the poor reception conditions of this station here in the summer It is also possible there is another change of frequency during these months that we are unaware of for the same reason.

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.

No reports. Checking on this station has been difficult of late due to the unavailability of suitably situated online receivers.

Morse Stations - Not Number Related

M51 XlX

3881//6825 Usual unscheduled & random continuous transmissions heard throughout July & August

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

3881//6825

1130 - 1217z	15 Aug	Lundi-Leçon	11-1/1 Codé	11-1/2 Clair,	11-1/3 Codé,	11-1/4 Clair (420 grps/hr)	BR	MON
1130 - 1204z	16 Aug	Mardi-Leçon	12-1/1 Codé	12-1/2 Clair,	12-1/3 Codé,	12-1/4 Clair (600 grps/hr)	BR	TUE
1130 - 1155z	17 Aug	Mercredi- Leçon	13-1/1 Codé,	13-1/2 Clair,	13-1/3 Codé,	13-1/4 Clair (720 grps/hr)	BR	WED
1130 - 1156z	18 Aug	Jeudi- Leçon	14-1/1 Codé,	14-1/2 Clair,	14-1/3 Codé,	14-1/4 Clair (840 grps/hr)	BR	THU

M89 O

Once again, logs from Jean-Paul, (JPL) have been affected by the intermittent availability of suitable on-line SDRs that JP relies on for his daily monitoring of the M89 group of stations.

Operator Chat from M89

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

3636 3651 3750 3800 3830 3883	4657	5415 5555 5671	6074 6636 6639 6720 6741		8888

New Scheds for Jul/Aug 2016: From logs submitted from JPL

3777 1843z 14 Aug [V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (// 4532 N/H) (Remote tuner Siberia) **Note: Last time heard on this frequency was 14 Jan 16**

Chart of M89 Freq & Call signs heard in Jul/Aug 2016 New Scheds shown in Bold Type

Freq in KHz	Call Slip
3300//NRH	V MW3D (x3) DE 2SLC (x2)
3642//NRH	V DKG6 (x3) DE 3A7D (x2)
3642//7602	V DKG6 (x3) DE 3A7D (x2)
3777//NRH	V M8JF (x3) DE RIS9 (x2)
3777//4532	V M8JF (x3) DE RIS9 (x2)
4131//NRH	V JKDJ (x3) DE SLBC (x2)
4322//NRH	V B9GJ (x3) DE FSC8 (x2)
4532//6793	V M8JF (x3) DE RIS9 (x2)
4532//8060	V M8JF (x3) DE RIS9 (x2)
4720//NRH	VVV WNF (x3) DE FXM (x2)
4860// 6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?

Freq in kHz	Call Slip
5177//NRH	V JKDJ (x3) DE SLBC (x2)
5588//NRH	V MW3D (x3) DE 2SLC (x2)
5801//NRH	V DKG6 (x3) DE 3A7D (x2)
5801//10180	V DKG6 (x3) DE 3A7D (x2)
6793//8060	V M8JF (x3) DE RIS9 (x2)
6840//NRH	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
6840//10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
7602//NRH	V DKG6 (x3) DE 3A7D (x2)
10180//NRH	V DKG6 (x3) DE 3A7D (x2)
10640//NRH	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K

Courtesy JPL

M89 3636kHz 1351 (IP) - 1400z 07 July 2016

R R (IP – 1351z)
QSL QSL 2149 K
GA
NR NR **NR 118 118 CK 91 0U CK 91 31 0707 3III 2150 K**
GA (1352z)
BT BT BT BT BT BT BT BT
U7T4 U7T4 U7T4 U7N4 UNU6 T3US 74U6 (Cont'd – Handsent – 1354z)
GA GA K (1357z) (Other station also on this freq but mostly U/R)
GA GA (1400z)

M89 8888kHz 1255 (IP) - 1317z 18 July 2016

65A4 7TAN 365D U47T AU43 5D67 (IP – Cont'd – Hand sent)
III BT 5U3N 46AD 7T5A 3N46 DU7T (Cont'd – 1258z)
III BT 6D3T N47U 5A6D T34T 7UA5 (Cont'd – 1311z)
IIII BT 5T.. 636U 7..4 (Fading badly now – 1317z)

M89 10180//5801kHz 0958 - 1000z 16 July 2016

[V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd)]
6845 TO 6617 BT (IP – Hand sent – 0958z)
CL/1830/ZBT/6845/6617 AR
HR SVC GA
NR 063 1800 RMKS 6845 TO 6617 BT
CL/1830/ZBT/6845/6617 AR
QSL ? HR WK NR 230 (Return to R/S – 1000z)

M89 6636kHz 1326 - 1346z 07 August 2016

[DP91]

TU64 N7TU T7A5 N533 N354 TD54 TTT5 (IP – Cont'd)
(Machine sent - Silent – 1327z)
BT BT BT BT BT BT N566 NA7U N4DU DA4. N6D5 IIII T63U6 7N44 7ATA N373 T6U6 (Cont'd – 1329z)
AR (1329z)
EEEEEEEEEEEEEEEEEEEEEEE (1330z)
DP91 DP91 DP921 DP91 (1331z - Silent)
DP91 DP921 (1343z)
DP921 DP91 CD K
DP921 DP921 CL K
DP92 DP921 R DP921 DP91 QSA 3 U ?
DP91 DP921 (1345z)
DP91 DP921 DA9NTITIT (1346z - Silent) (Monitored until 1420z)

6825kHz 1000 - 1005z 21 August 2016

[DP91]

DP91 (x3) DE CQ (x2) V (IP – Cont'd – Machine sent – 1000z)
HR NNIL SK GB (1004z) (New frequency for DP91)
HR NIL SK GB
HR NR
HR NIL SK GB (x2) (1005z - Silent)

Courtesy JPL

DP Stations

6636	1326 (IP) - 1346z	07 Aug	DP91	Calls to DP921	(Remote tuner Siberia)	JPL	SUN
	1403 - 1617z	10 Aug	DP91	Calls to DP7091 with traffic & msgs	(Remote tuner Siberia)	JPL	WED
6825	0205 - 0211z	07 Aug	CQ (x4) DE DP9AR UA (x2) (Cont'd) (Moved from 6845kHz at 0204z)		(Remote tuner Siberia)	JPL	THU
	1000 - 1005z	21 Aug	DP91 (x3) DE CQ (x2) V (Cont'd)		(Remote tuner Siberia)	JPL	SUN
6845	0159 - 0204z	07 Aug	CQ (x3) DE DP91 (x2) V (Cont'd) E A CQ DP91 V (Appears to have moved to 6825kHz at 0204z)		(Remote tuner Siberia)	JPL	THU
	1003 - 1008z	31 Aug	CQ (x3) DE DP91 (x2) V HR NIL SK GB (x8)		(Remote tuner Siberia)	JPL	WED

M95 O XSV, XSV70, XSV85

M95 Morse Logs

4242	4GJW					
	1143 - 1155z	22 Jul	05 05 05 (x2) Long Zeros - then various calls to outstations (Full log available below)	(Remote Hong Kong)	JPL	FRI
4243//9054	Message number differs from current XSV70 and XSV85 message numbers. All logged via Remote tuner Hong Kong unless stated.					
	1142 (IP) - 1148z	14 Jul	NR 28 CK 114 35 0714 1507		JPL	THU
	1138 (IP) - 1204z	16 Jul	NR 32 CK 128 35 0716 1518 BT		JPL	SAT
			NR 089 CK 23 35 0716 1522 BT		JPL	SAT
			NR 045 CK 19 35 0716 1643 BT		JPL	SAT
	1141 (IP) - 1205z	22 Jul	NR 071 CK 17 35 0722 1636 BT		JPL	FRI
	1142 (IP) - 1154z	23 Jul	NR 003 CK 19 35 0723 1517 BT		JPL	SAT
			NR 46 CK 144 35 0723 1520 BT		JPL	SAT
	1148 (IP) - 1208z	25 Jul	NR 50 CK 36 35 0725 1529 BT		JPL	MON
			NR 007 CK 25 35 0725 1535 BT		JPL	MON
			NR 080 CK 17 35 0725 1649 BT		JPL	MON
	1155 (IP) - 1207z	26 Jul	NR 009 23 35 0726 1515 BT		JPL	TUE
			NR 0083 16 35 0726 1719 BT		JPL	TUE
	1145 (IP) - 1204z	09 Aug	NR 03. CK 1. 35 0809 1526 BT		JPL	TUE
			NR 026 CK 15 35 0809 1.00 BT		JPL	TUE
			NR 18 CK 091 35 0809 1550 BT		JPL	TUE
	1145 (IP) - 1214z	19 Aug	NR 057 CK 28 35 0819 1510 BT		JPL	FRI
			NR 38 CK 108 35 0819 1602 BT		JPL	FRI
			NR 056 CK 33 35 0819 1645 BT		JPL	FRI
	1147 (IP) - 1154z	31 Aug	NR 62 CK 187 35 0831 1458 BT		JPL	WED

4283//7553	Call sign XSV70					
	0916 (IP) - 0922z	15 Aug	0002 CK 81 35 0815 0607	(Remote tuner Hong Kong)	JPL	MON
			NR 703 CK 14 64 35 0815 1607		JPL	MON
5555	1530 (IP) - 1542z	21 Jul	In progress Traffic & msgs	(Remote tuner Hong Kong)	JPL	THU
			CK 20 18 0721 2255 RMKS 0457 TO 6918 K		JPL	THU
			NR 0684/CCK CK 20 18 0721 2255 RMKS 6918 TO 0457		JPL	THU
	1116 (IP) - 1130z	19 Aug	In progress Traffic & msgs	(Remote tuner Hong Kong)	JPL	FRI
			NR 01/CCK CK 45 11 081. 1400 RMKS CQ		JPL	FRI
			NR 01/CCK CK 35 11 0817 1400 RMKS CQ		JPL	FRI
	1227 (IP) - 1313z	19 Aug	In progress Traffic & msgs	(Remote tuner Hong Kong)	JPL	FRI
			NR 1029 7G6567UDA4 4657 T		JPL	FRI
			NR 267/CCK CK .99 28 0819 2000 SB SB		JPL	FRI
	1737 (IP) - 1756z	19 Aug	In progress Traffic	(Remote tuner Hong Kong)	JPL	FRI
	1123 (IP) - 1025z	31 Aug	In progress Traffic Possibly QV5B	(Remote tuner Hong Kong)	JPL	WED
7582	05 05 This frequency normally used by QV5B					
	0803(IP) - 0816z	29 Aug	In progress Traffic 05 05 BT	(Remote tuner Hong Kong)	JPL	MON
8073	Usual format is Initial call-up in voice USB, then to digital 4+4 mode LSB, finally, switching to CW					
	CW call-up is **V BNGC (x3) DE XSV85 (x2)** All logged via Remote tuner Hong Kong unless stated.					
	1129 - 1138z	14 Jul	NR 552 CK 137 35 0714 1554 BT		JPL	THU
	1129 - 1136z	16 Jul	NR 0556 CK 137 35 07A6 A553 BT		JPL	SAT
	0001 - 0003z	20 Jul	(Too weak to copy)		JPL	WED
	1131 - 1138z	20 Jul	NR 0564 CK 100 35 0720 1521 BT		JPL	WED
	1131 - 1139z	22 Jul	NR 0568 CK 116 35 0722 1549 BT		JPL	FRI
	1130 - 1141z	23 Jul	NR 0570 CK 231 35 07.3 A608 BT		JPL	SAT
	1131 - 1145z	25 Jul	NR 575 CK 317 350725 1653 BT		JPL	MON
	1131 - 1154z	26 Jul	NR 0582 CK 176 35 0726 1604 BT		JPL	TUE
			NR 0583 CK 54 35 0726 1622 BT		JPL	TUE
	1131 - 1204z	27 Jul	NR 0588 CK 127 35 0727 1536 BT		JPL	WED
			NR 0589 CK 61 35 0727 1615 BT	[Note 1]	JPL	WED
	1130 - 1144z	09 Aug	NR 0640 CK 40 35 0809 1518 BT		JPL	TUE
			NR 0641 CK 125 35 0809 1557 BT		JPL	TUE
	1131 - 1145z	19 Aug	NR 0696 CK 172 35 0819 1514 BT		JPL	FRI
	1600 - 1601z	19 Aug	Initial call-up in voice USB - 1600z - Female operator - (Monitored until 1632z)		JPL	FRI
			DID NOT GO to Chinese digital 4+4 QPSK 75/3000 - LSB or CW - 1601z - Silent			
	1130 - 1137z	21 Aug	NR 0702 CK 128 35 0821 1523 BT	(Lost use of remote receiver at 1137z)	JPL	SUN
	1131 - 1147z	31 Aug	NR 0722 CK 267 35 0831 1531 BT		JPL	WED

[Note 1] Normally sends only one message per sked, but occasionally two messages are sent. Have noticed over the last 3 days that message numbers have increased by 14. If two messages were sent during the two skeds, then the message count would have increased by six at the most. It appears that the number of skeds has been increased from two to possibly four.

8888	Call Sign XSV85					
	0826 (IP) - 0920z	25 Jul	NR 785CCK CK 45 71 0725 1620 RMKS 7168 TO 3691	(Remote Hong Kong)	JPL	MON
			NR 785/CCK CK 45 71 0725 1620 RMKS 7168 TO 3691	(Repeated several times)	JPL	MON
9054	Call sign XSV85 All logged via Remote tuner Hong Kong unless stated					
	(See also 4243//9054kHz listing)					
	2338 (IP) - 2348z	19 Jul	V (Switched to CW - 2348z)... PSE CY NR ... (Too weak to copy)		JPL	TUE
	1210 (IP) - 1216z	11 Aug	NR 032 CK 15 35 0811 1638 BT	(IP - // 4243 Not monitored) (Remote tuner Siberia)	JPL	THU
	2341 (IP) - 2356z	15 Aug	NR 045 CK 15 35 0816 055.	(Very weak)	JPL	MON
			NR 045 CK 15 35 0816 052.		JPL	MON
			NR 31 CK 043 35 0816 0531 BT		JPL	MON

M95 4242kHz 1141 - 1155z Friday 22 July 2016 4GJW (Remote tuner Hong Kong)

05 05 05 (x2) (Long zeros – 1143z)

VVV **JNVB DE 4GJW** K (1143z)
R R **DE NF9E** QSA 3 K
R HR KP N QSA 4 NIL SK K
R NIL SK PSE
VVV 3SX EEEEEDE 4GU EEEEE
VVV **3SXS DE 4GJW** K (1144z)
R **DE N...** QSA 2 K
R HR HR KP EEEEEE
R HR KP U QA EEEEEEEE
R HR KP U QSA 1 NIL SK
VVV ZBYU NI EEEEEE
VVV **ZBYU DE 4GJW** K (1146z)
NR **DE MUF7** QSA 3 K
R HR KPU QSA 3 NIL SK K
NOK VA PSE
VVV **WDQ2 DE 4GJW** K
R TRR **DE DEBB** K
R R DE DE T EEEE D EEE R R DE BBK
R HR KPU QA 2 K
TR N QSA 3 K
R R OM EEEEEEE R R OM EEEEEEEE
R R OK NIL SK K
TR R OK NIL SK EEEEE R R OK NIL SK PSE
VVV **AXJ7 DE 4GJW** K
R R **CB3P** K
R HR KPU QSA 1 K
R QSA ... QSA 1 K
R OK NIL SK K (1149z)
VVV **IKR3 DE 4GJW** K
DE R R **DE VNF4** K (Cont.)

(Cont.)

R HR KPU QA EEEEEE R HR W EEEEEEE
R HR KPU QSA 2 K
R QSA 2 K
R OK NIL SK K
OK NIL SK (1150z)
VVV **KNV7 DE 4GJW** K
R HR KA EEEEE R HR KPU QSA 3 K
R HR KPU QSA 1 NIL SK K
VVV W2A EEEEE R EEEEEEE
VVV **W2XJ DE 4GJW** K
R **DE Q9ZD** R K
R HR KPU QSA 3 K
R QSA 2 K
R OK NIL SK K
R NIL SK (1153z)
NIL SK
VVV **MGBB DE 4GJW** K
DE YRT8 K
R HR KPU QSA 3 K
R QSA 2 K
R OK NIL SK K
OK NIL SK
VVV **RCN4 DE 4GJW** K
R R **DE DKZ2** QSA 3 K
R HR KPU QSA 2 NIL SK K
OK NIL SK PSE (1155z - Silent)

(10 outstations in this network)

(Interesting to see how each station replies with a different call sign than the one used by the control station) *Courtesy JkC*

M95 4243//9054kHz 1138 - 1204z 16 July 2016

In Progress Voice USB - Chinese
In Chinese digital 4+4 QPSK 75/3000 - LSB (1140z)
V (Switched to CW – Hand sent – 1147z)

HR MSG TOYR PSE CY
NR 32 CK 128 35 0716 1518 BT
UTU TA6 3U6 3A4 TTU 773 357 373 4TA 34A (Cont'd)
AR (1158z)
HR MSG GA
NR 089 CK 23 35 0716 1522 BT
5TD UTT TA6 3U6 7T3 7TA (Cont'd – 1200z)
AR (1202z)
HR MSG GA
NR 045 CK 19 35 0716 1643 BT
UT5 TA6 (Cont'd – 1203z)
AR AR AR AR AR (1204z)

M95 4243//9054kHz 1142 - 1148z 14 July2016

In Progress - Chinese digital 4+4 QPSK 75/3000 - LSB
V (Switched to CW – Hand sent (1146z)
VVV HR MSG TOYR PSE CY (1147z)
NR 28 CK 114 35 0714 1507
UTU TA4 3U6 3A4 TTU 773 (Cont'd – 1148z)

Courtesy JPL

M95 8073kHz 1131 - 1204z 27 July 2016

V BNGC (x3) DE XSV85 (x2) (Cont'd)

Initial call-up in voice USB - 1131z - Male operator
Chinese digital 4+4 QPSK 75/3000 - LSB) (1131z)

V BNGC (x3) DE XSV85 (x2) (Switched to CW Cont.)

HR MSGS GA (1139z)
HR MSG GA
NR 0588 CK 127 35 0727 1536 BT
TU7 3U6 3AN 3U7 TAU 773 TA7 773 TU5 773 35U (Cont'd – 1140z)
AR (1147z)
MSG AGN MSG AGN
NR 0588 CK 127 35 0727 1536 BT
TU7 3U6 3AN 3U7 TAU 773 TA7 773 TU5 773 35U (Cont'd – 1149z)
AR (1156z)
A HR MSG GA
AHR MSG GA
NR 0589 CK 61 35 0727 1615 BT
TT7 N5U TU7 N53 TAD N54 7TT TAT 746 6T4 (Cont'd – 1157z)
AR (1200z)
MSG AGN
MSG AGN
MSG AGN
NR 0589 CK 61 35 0727 1615 BT
T7 N5U TU7 N53 TAD N54 7TT TAT 746 6T4 (Cont'd – 1202z)
AR AR (1204z) (Switched to voice – USB – Male – Chinese – Now V26 sked – 1204z)

Courtesy JPL

Oddities

S28 **'The Buzzer'**

Noted off-air on Monday 08 August & again on Sunday 28 August - presumably for routine maintenance or repairs. (Thanks to Enzo for the notifications)

4625	1732z	31 Aug	S28	'Buzzer' Very Strong	chpa	WED

S30 **'The Pip'**

3756	1743z	31 Aug	S30	'Pip' Marker (Night freq) Very Strong	chpa	WED

S32 **'Squeaky Wheel'**

5474	1749z	31 Aug	S32	'Squeaky Wheel' marker Alternating tones Very Strong	chpa	WED

Contributors: AB, AnonUS, BR, CB, chpa, DanielE2kde, Danix, Enzo, E.SMITH, Gert, HFD, JkC, JPL, RNGB, Uascan *Thank you all for your logs.*

VOICE, FSK, MAZEILKA and POLYTONE STATIONS

E06 July/August log:

First /Third Thursday (repeats Friday) 0500z 13825kHz 0600z 15615kHz

07/07 & 21st '679' 583 102 67038 20056 12532 52691 71706 28722 04274 62361 19201 84272 83267 17730 69037 53407 03588 67083 27136 63351 64523 97666 58702 60030 70192 77507 16055 40952 62691 64905 04829 79974 14710 15288 37001 86167 92568 40115 44159 63938 25596 97520 49473 66608 42788 19384 21789 60649 62702 04513 60290 42735 47496 32623 83164 76826 57077 78813 18709 43450 64281 33209 22320 18386 17023 55478 67791 22926 58357 18886 86373 12908 40394 23600 52021 98701 92988 83911 36267 13345 33162 19078 81170 71007 26175 02459 63759 82979 34211 48645 50420 23360 13577 43261 64666 61643 46397 45135 16722 04391 17698 15513 68358 13169 583 102

0500z 13540kHz 0600z 16115kHz

04/08 & 18th '210' 947 135 52690 91800 81679 40521 96061 75857 87486 44730 30770 06688 72888 52120 90237 19628 30759 82997 30653 43951 24032 09911 79192 12668 78489 40360 41305 67753 52605 84763 34280 96706 64129 08105 39269 61405 78087 88721 88946 05179 85908 32650 33008 49042 30339 16983 48687 13029 55856 60663 88480 23557 89249 46153 82262 92767 80073 40431 35987 80777 55641 88729 94155 76773 70262 79475 58247 59897 53409 03849 78285 25849 86490 58418 59743 90154 62927 64273 52965 04027 11222 01101 17300 43764 85694 79639 77117 59621 54588 00952 11923 95092 40229 75947 47729 12537 90910 03602 41887 86093 89222 31301 78567 47818 26475 45753 17067 97981 97936 67904 60139 15461 98554 50295 34529 29169 23850 00299 00903 36459 05683 77672 35361 79436 37558 39861 49724 15117 69179 33501 42764 40372 74920 55540 99594 57597 25919 947 135 00000

First/Third Thursday of month 2030z 5948kHz

07/07 '724' 569 63 14259 22676 32782 32782 76723 89409 12215 74326 64070 90235 38085 59543 12319 74328 36664 12256 18841 73311 98089 12250 57878 87897 79879 99990 98878 89889 87879 56787 09000 76578 87878 89898 89890 98798 65656 54545 56566 56578 87876 9987738085 59543 12319 74238 36664 12256 18841 73311 98089 12250 87878 89898 89890 98798 65656 54545 56566 56578 87876 99877 32333 43433 54545 569 63 00000

Friday following First & Third Thursday 2130z 5731kHz

22/07 '315' 569 63 14259 22676 32782 32782 76723 89409 12215 ….etc (Same old message)

05/08 '315' 569 63 14259…….54545 569 63 00000] 2143z S9

Other transmissions:

14648kHz 0300z 25/08 '361' 427 50 …. Danix THU

12084kHz 0400z 25/08 '361' 427 50….. Danix THU

This E06 schedule goes out of the Far East every week on Thursday and Friday, and is not audible in Europe.

361 427 50
76916 04821 86664 42100 48330 39624 96128 00551 65671 98921
91442 50436 77669 51739 19559 10672 74674 03703 53015 40993
15600 25523 01113 41588 44811 31192 69621 95394 22393 23068
54972 82774 16236 46040 83841 23226 29371 17974 34099 23838
60997 28601 98029 39178 24647 24059 73783 72283 71900 19267

Daniel

E06 logs from PoSW:

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

7-July-16:- 5,948 kHz, still on the summertime frequency inside the 49 metre band, flattened by an S9++ broadcaster on 5,950; could hear the call "724" but largely unreadable with any receiver in my possession. Back in May, on the 19th, this schedule did a QSY to 5,940 – well clear of any broadcasters, but then went back to 5,948.

21-July-16:- 5,948 kHz, slightly better copy than usual, the station on 5,950 not quite as strong as on previous occasions, call "724", DK/GC "613 613 20 20", has gone back to the message of twenty 5F groups which used to be the norm.

Friday Schedule 2130 UTC Schedule Following First + Third Thursdays in the Month:-

8-July-16:- 5,731 kHz, call "315", DK/GC "569 569 63 63", S9+ signal on a clear frequency. Ended after 2145Z, loud mains-frequency type hum came up for several minutes after the end of the transmission.

22-July-16:- 5,731 kHz, "315" and "569 569 63 63" again.

5-Aug-16:- 5,731 kHz, started about 40 seconds before the half-hour, call "315" and DK/GC "569 569 63 63", strong signal, over S9.

E07

PoSW observed:

Sunday + Wednesday Schedule, 1700 UTC Start:-
3-July-16, Sunday:- 1700 UTC, 13,898 kHz, “817 817 817 1” for a full message. DK/GC “315 125” x 2. S9 signal with reasonable audio and a somewhat longer message than usual,
total transmission time of about 15 minutes.
1720 UTC, 12,198 kHz, second sending, over S9.
1740 UTC, 10,798 kHz, third sending, also S9, same frequencies as in July of past few years.

6-July-16, Wednesday:- 1700 UTC, 13,898 kHz, and 1720 UTC, 12,198 kHz, both S9 with better than usual audio, back in the old routine with, “817 817 817 000”.

10-July-16, Sunday:- 1700 UTC, 13,898 kHz, “817 817 817 000”.
1720 UTC, 12,198 kHz, second sending, both over S9 with good audio.

17-July-16, Sunday:- something unusual this evening, a *two message* transmission; can't remember the last time I heard one of these! 1700 UTC, 13,898 kHz, “817 817 817 2”, first DK/GC “799 65” x 2 followed by the first message. Finished 1709 UTC then “817” call-up routine again for about one minute, then second DK/GC “962 131” and second message. Ended around 1723 and 30s UTC. Over S9 with better than usual audio.
1729 UTC, 12,198 kHz, second sending, over S9 most of the time.
1758 UTC, 10,798kHz, third sending, over S9.

20-July-16, Wednesday:- 1700 UTC, 13,898 kHz, “817 817 817 000”, back to the usual, over S9 with good audio. Carrier did not go off at around 2 minutes 28 seconds after the start of transmission but stayed on until 1703:15s UTC.
1720 UTC, 12,198 kHz, second sending, S9+ with good audio, carrier went QRT just before 1722:30s UTC.

24-July-16, Sunday:- 1700 UTC, 13,898 kHz, and 1720 UTC, 12,198 kHz, both S9+ with good audio, “817 817 817 000”.

3-Aug-16, Wednesday:- 1700 UTC, 13,881 kHz, “818 818 818 000”, S8 with reasonable audio.
1720 UTC, 12,181 kHz, second sending, also peaking S8.

7-Aug-16, Sunday:- 1700 UTC, 13,881 kHz, and 1720 UTC, 12,181 kHz, both over S9 with better than usual audio, “818 818 818 000”.

21-Aug-16, Sunday:- 1700 UTC, 13,881 kHz, “818 818 818 000”, S9 with good audio.
1720 UTC, 12,181 kHz, second sending, S9+, good audio.

Monday + Wednesday SSB Schedule, 1900 UTC Start:-
This schedule dumped the old-style amplitude modulation with two side-bands and a carrier
and went over to upper-side-band suppressed carrier mode as of June, so no more complaints about, “strong carrier but very low audio”. Continues in July with a change of frequencies.
4-July-16, Monday:- 1900 UTC, 16,263 kHz, “273 273 273 000”, S8 signal.
1920 UTC, 14,763 kHz, second sending, over S9.

6-July-16, Wednesday:- 1900 UTC, 16,263 kHz, and 1920 UTC, 14,763 kHz, both S9 SSB signals, “273 273 273 000”.

11-July-16, Monday:- 1900 UTC, 16,263 kHz, “273 273 273 000”, S6 at best.
1920 UTC, 14,763 kHz, second sending, much stronger, over S9.

13-July-16, Wednesday:- 1900 UTC, 16,263 kHz, S6, and 1920 UTC, 14,763 kHz, S9, “273 273 273 000”.

18-July-16, Monday:- 1900 UTC, 16,263 kHz, S9+, very strong signal, “273 273 273 000”.
1920 UTC, 14,763 kHz, second sending, also S9+.

20-July-16, Wednesday:- 1900 UTC, 16,263 kHz, and 1920 UTC, 14,763 kHz, both S5 to S6 at best, “273 273 273 000”.

1-Aug-16, Monday:- 1900 UTC, 16,147 kHz, new frequencies for a new month, “164 164 164 000”, S9 signal.
1920 UTC, 14,647 kHz, second sending, also S9.

3-Aug-16, Wednesday:- 1900 UTC, 16,147 kHz, “164 164 164 000”, weak signal, only just readable, compare and contrast with Monday.
1920 UTC, 14,647 kHz, second sending, much stronger, S8 to S9.

8-Aug-16, Monday:- 1900 UTC, 16,147 kHz, “164 164 164 000”, S6.
1920 UTC, 14,647 kHz, second sending, much stronger, S9.

10-Aug-16, Wednesday:- 1900 UTC, 16,147 kHz, “164 164 164 000”, S8.
1920 UTC, 14,647 kHz, second sending, also S8.

22-Aug-16, Monday:- 1900 UTC, 16,147 kHz, a “full message” this evening, “164 164 164 1”, DK/GC “831 25” x 2, wide variations in signal strength, peaking S7 to S8 fading down to a much weaker signal at times. Ended 1905 UTC.
1920 UTC, 14,647 kHz, second sending, over S9 at times.
1940 UTC, 13,447 kHz, third sending, wide variations in signal strength.

Thursday Schedule, 2010 UTC Start:-
7-July-16:- 2010 UTC, 11,539 kHz, “553 553 553 000”, peaking S9, better than usual audio.
2030 UTC, 10,547 kHz, second sending, S9 with QSB.

14-July-16:- 2010 UTC, 11,539 kHz, and 2030 UTC, 10,547 kHz, both S9 with reasonable audio, “553 553 553 000”.

21-July-16:- 2010 UTC, 11,539 kHz, and 2030 UTC, 10,547 kHz, both S9, reasonable audio, “553 553 553 000”. When did this Thursday schedule last send anything other than two minutes of, “No Message”?

4-Aug-16:- 2010 UTC, 10,753 kHz, S9+, unusually good audio, “716 716 716 000”.
2030 UTC, 9,147 kHz, second sending, over S9.

25-Aug-16:- 2010 UTC, 10,753 kHz, and 2030 UTC, 9,147 kHz, both over S9 with reasonable audio, “716 716 716 000”.

Others’ logs

Sunday/Wednesday

July 2016

1700z	**13898kHz**	**1720z**	**12198kHz**	**1740z**	**10798kHz**	
03/07	817 1 315 125 47724 ... 53107 000 000					Very strong
10/07	817 000					Fair
13/07	817 2 799 65 29036 ... 60271 817 2 962 131 42760 ... 56150 000 000					Fair, QRM3, QSB3

817 817 817 2 799 65 799 65
29036 53494 44634 32486 12003 37471 68567 80873 36426 94757
07840 89759 65508 38360 95086 27503 58861 07512 63805 63870
06900 16940 79933 12358 24643 53113 08990 92690 08158 18726
36756 26017 22635 72383 02385 61644 85786 14019 35736 36455
80934 35502 95267 78866 91115 75984 88438 60353 43024 17501
38091 66672 02437 96365 99340 29737 58699 06391 19121 58014
41212 66611 37904 31188 60271

817 817 817 2 962 131 962 131
42760 15131 12609 66767 81020 50041 36810 30988 33007 50408
49710 54220 95228 59652 10778 73982 40181 03035 39452 75132
86430 03388 34898 74383 08459 47303 39386 61691 63583 74617
94752 08813 31865 35564 40836 72279 07049 07634 33838 43523
89819 07268 46318 94162 95874 60640 49733 54585 28130 40445
84682 88422 56974 58323 13721 92825 06924 40651 88957 12987
39937 97669 75272 53591 88341 76074 93050 12479 92273 96384
62504 68895 63648 36808 48726 92966 54326 92657 64291 99898
96735 85880 27992 21359 10415 14622 97420 76229 50899 56814
76947 92951 43778 64874 73425 53479 44761 56334 49830 32593
78266 98110 11098 80320 98248 16833 41114 87167 93343 60925
75985 84080 04980 66609 21480 89275 16578 20061 60817 66485
97531 92989 19485 03808 48784 08641 66122 69183 93939 17999
56150
000 000 *Both Courtesy AB*

17/07	817 2 799 65 29036 ... 60271 817 2 962 131 42760 ... 56150 000 000					Fair, QRM3
20/07	817 000					Fair
24/07	817 000					Strong
27/07	817 000					Strong
31/07	817 000					Strong

August 2016

1700z	**13881kHz**	**1720z**	**12181kHz**	**1740z**	**10881kHz**	
07/08	818 000					Very strong
10/08	818 000		[1700z Very strong carrier only, 30mins]			Weak
14/08	818 000		[1700z -2kHz]			Fair
17/08	818 000					Very strong
21/08	818 000					Very strong
24/08	818 000					Fair
31/08	818 1 304 78 36486 ... 77088 000 000					Very strong

Monday/Wednesday

July 2016

1900z	**16263kHz**	**1920z**	**14763kHz**	**1940z**	
20/07	273 000				Weak
25/07	273 000				Very strong
28/07	273 000				Very strong

August 2016

1900z	**16147kHz**	**1920z**	**13647kHz**	***1940z***	***11467kHz***	
08/08	164 000					Very strong
10/08	164 000					Strong
15/08	164 000					Very strong
17/08	164 000					Very strong
22/08	164 1 831 25 50546 ... 20223 000 000					Strong
24/08	164 1 831 25 50462 ... 20223 000 000					Strong

164 1 831 25
50462 60772 26830 79885 62291 36819 81681 74676 96456 78218
03566 09384 99006 65602 22686 64516 09700 62112 17831 14138
96922 75064 06629 85288 20223
000 000 *Courtesy JkC*

29/08	164 000					Strong
31/08	164 000					Very strong

Thursday

July 2016

2010z	**11539kHz**	**2030z**	**10547kHz**	**2050z**	**9388kHz**	
14/07	553 000					Fair
28/07	553 000					Strong, QSB to nil

August 2016

2010z	**10753kHz**	**2030z**	**9147kHz**	**2050z**	**7637kHz**	
04/08	716 000					Very strong
11/08	716 000					Very strong
18/08	716 000					Very strong
25/08	716 000					Very strong

Sunday/Saturday

July 2016

0600z	**9064kHz**	**0620z**	**10264kHz**	**0640z**	**11464kHz**	
02/07	024 000					Weak, QSB2
03/07	024 000					Weak
09/07	024 000					Weak
10/07	024 000					Strong
16/07	024 000					Fair
17/07	024 000					Weak
23/07	Very weak, unworkable					
24/07	024 000	[0620z Extremely weak]				Strong
30/07	024 000					Fair
31/07	024 000					Strong

August 2016

06/08	024 000					Strong
07/08	024 000					Weak, QSB3
13/08	024 000					Very strong
28/08	024 1 944 98 40497 ... 03752 000 000			[0620z XJTQRM3]		Strong

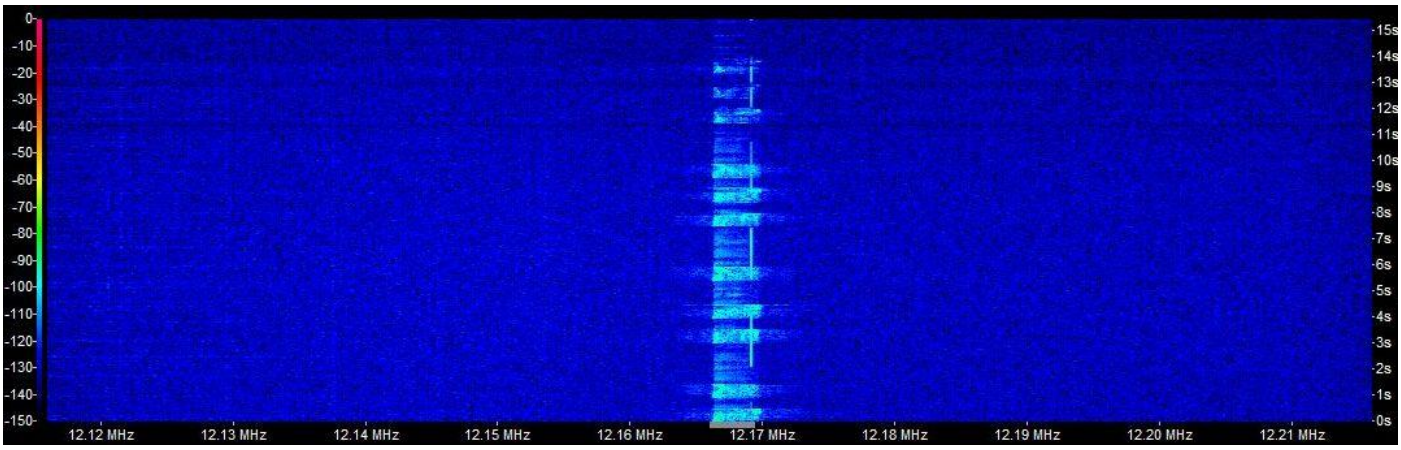
E07a

Wednesday

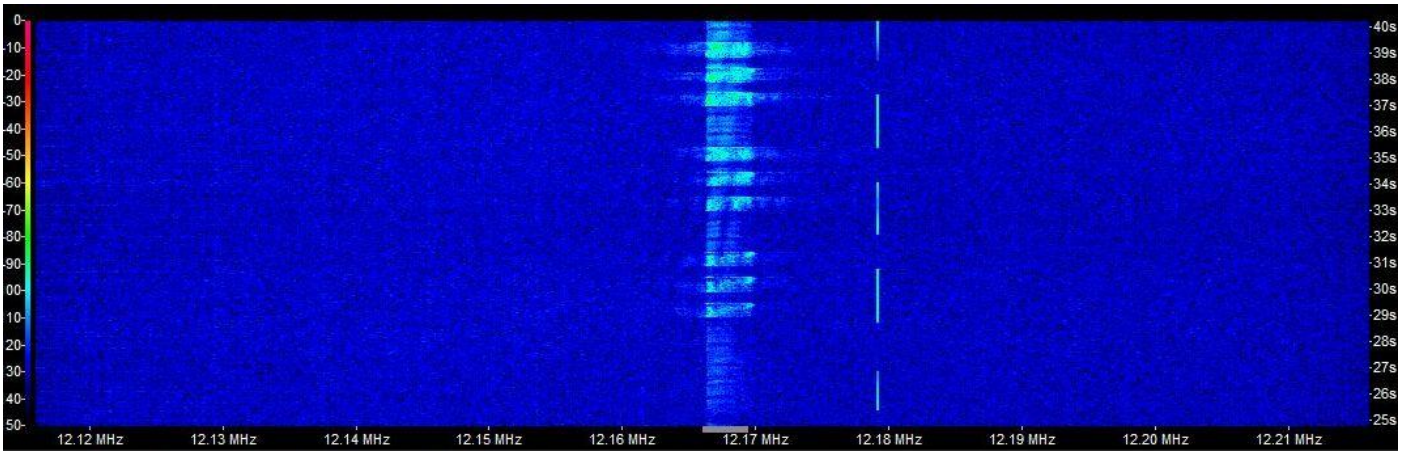
July 2016

2000z	**12166kHz**	**2020z**	**10766kHz**	**2040z**	**9266kHz**	
06/07	172 1 64632 7071 79 33725 ... 02837 000 000					Very strong
13/07	172 1 31310 7185 59 20798 ... 85449 000 000					Very strong
20/07	172 000					Very strong
27/07	172 000					Very strong

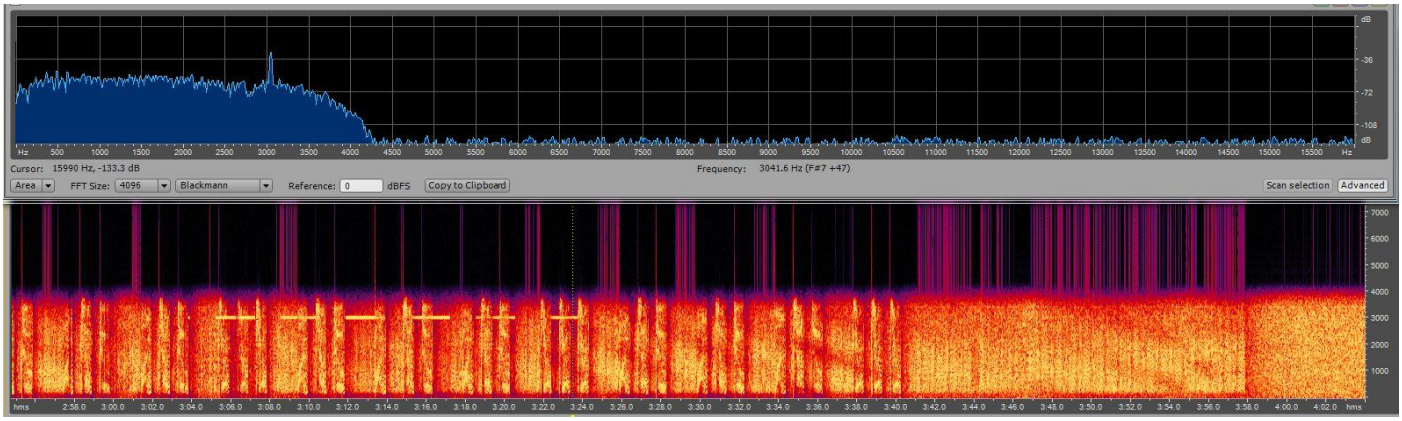
August 2016



12166kHz2000z carrier sent within sigs plus hum on sigs.



12166kHz2000z carrier sent within sigs. Freq change prominent, plus hum on sigs.



12166kHz2000z carrier, sonogram indicates 3015Hz tone plus hum ending 18s after final.

03/08	172 000	[Hum on freq, plus carrier sent in 2000z slot – *see above*]	Very strong
10/08	172 000		Very strong
17/08	172 000		Very strong
24/08	172 1 31310 7185 59 20798 ... 85449 000 000	[Rpt of 13/07]	Strong
31/08	172 000		Very strong

Thursday

July 2016

0430z	**7933kHz**	**0450z**	**9133kHz**	**0510z**	**10233kHz**	
07/07	912 1 64632 7071 79 33725 ... 02837 000 000					Very strong
14/07	912 1 31310 7185 59 20798 ... 85449 000 000					Very strong
21/07	912 000					Very strong
28/07	912 000					Very strong

August 2016

04/08	912 000	Very strong
11/08	912 000	Fair [A]
18/08	912 000	Strong [A]
25/08	912 1 31310 7185 59 20798 ... 85449 000 000	

912 912 912 1 31310 7185 59 7185 59
20798 66213 52802 27160 24799 12062 06372 66727 47071 65502
06511 13851 55212 71412 97422 45989 99717 38432 01545 83948
76754 98756 89360 29294 12465 39209 10048 66301 70152 31236
13996 50033 22835 34959 09857 57132 71628 75882 05694 56334
74966 87538 53314 40313 70903 82931 10057 49301 51413 68217
05512 03343 22287 42085 88008 89899 69571 55606 85449
000 000 *Courtesy Ary*

Friday

July 2016

1510z	**12213kHz**	**1530z**	**11413kHz**	**1550z**	**10113kHz**	
01/07	241 000					Strong
08/07	241 1 12915 1419 59 36084 ... 04426 000 000					Very weak
15/07	241 000					Weak
19/08	241 000					Fair, QSB3 [A]
22/07	241 000					Weak, QRM3
29/07	241 000					Very weak

August 2016

05/08	241 000	Fair
12/08	241 000	Fair
26/08	241 1 65855 4957 73 30404 ... 15106 000 000	Strong

241 1 65855 4957 73
30404 52971 54136 24865 51162 41829 24334 44842 94777 27064
49410 49318 00879 26247 95847 42790 28064 49699 98515 31424
68952 69460 06308 29332 80413 52962 11945 83402 43920 99331
78947 97282 87259 70185 04313 33211 94204 29610 53461 35682
46122 40505 14466 74027 28367 94471 86066 14146 46329 35401
65559 58049 85243 83984 94751 62002 43741 38846 57841 01964
85499 88174 20924 13208 48931 40587 20254 89756 79667 24302
77071 47376 15106
000 000 *Courtesy JkC*

Saturday

July 2016

0800z	**12173kHz**	**0820z**	**13973kHz**	**0840z**	**14873kHz**	
02/07	198 000					Weak
09/07	NRH					
16/07	198 000					Strong
23/07	198 000					Very weak
30/07	198 000					0800z Weak, 0820z Strong

August 2016

0800z	**12177kHz**	**0820z**	**13477kHz**	**0840z**	**14877kHz**	
06/08	148 000					Weak
13/08	148 000					Fair
20/08	148 000					Weak [A]
27/08	148 1 65855 4957 73 30404 ... 15106 000 000					Fair [A]

PoSW noted these two schedules:

Saturday Schedule, 0800 UTC Start:-
2-July-16:- 0800 UTC, 12,173 kHz, “198 198 198 000”, S8 SSB signal.
0820 UTC, 13,973 kHz, second sending, slightly weaker.

9-July-16:- 0800 UTC, 12,173 kHz, a “full message” on this fine summer's morning, “198 198 198 1 12915”, DK/GC “1499 59” x 2, S6, not too strong.
0820 UTC, 13,973 kHz, second sending, also about S6.
0840 UTC, 14,873 kHz, third sending, strongest of the three, S7 but with occasional deep fading.

16-July-16:- 0800 UTC, 12,173 kHz, S8, and 0820 UTC, 13,973 kHz, S6 to S7, “198 198 198 000”.

23-July-16:- 0800 UTC, 12,173 kHz, “198 198 198 000”, S7.
0820 UTC, 13,973 kHz, second sending, much weaker signal.

6-Aug-16:- 0800 UTC, 12,177 kHz, “148 148 148 000”, peaking S7.
0820 UTC, 13,477 kHz, second sending, weaker.

27-Aug-16:- 0800 UTC, 12,177 kHz, “148 148 148 1 65855” for a full message, DK/GC “4957 73” x 2.
0820 UTC, 13,477 kHz, second sending, interference from a rapidly swept carrier and a pulse signal on a close frequency.
0840 UTC, 14,877 kHz, third sending, signal strength peaking S8.

Wednesday Schedule, 2000 UTC Start:-
6-July-16:- 2000 UTC, 12,166 kHz, “172 172 172 1 64632” for a full message, DK/GC “7071 79” x 2, S9 plus many dB, Old Man, very strong signal.
2020 UTC, 10,766 kHz, second sending, also S9+.
2040 UTC, 9,266 kHz, third sending, and another S9+.

13-July-16:- 2000 UTC, 12,166 kHz, full message again, but not the same as last week, “172 172 172 1 31310”, DK/GC “7185 59” x 2, S9+ signal.
2020 UTC, 10,766 kHz, and 2040 UTC, 9,266 kHz, the repeats, both S9+.

3-Aug-16:- 2000 UTC, 12,166 kHz:- “172 172 172 000”, S9+ signal.
2020 UTC, 10,766 kHz, second sending, also S9+.

24-Aug-16:- 2000 UTC, 12,166 kHz, “172 172 172 1 31310”, DK/GC “7185 59” x 2, same as on 13-July, S9+ SSB signal.
2020 UTC, 10,766 kHz, second sending, and 2040 UTC, 9,266 kHz, third sending, both S9+.

E17z

Thursday

July 2016

0800z	**16780kHz**	**0810z**	**12850kHz**	
21/07	674 295 8 44365 43025 39283 33578 47568 40573 42474 34680 295 8 00000			Weak
28/07	674 295 8 44365 43025 39283 33578 47568 40573 42474 34680 295 8 00000			Weak

August 2016

04/08	674 918 5 63901 65337 63890 84613 73082 918 5 00000	[0800z Weak, unworkable]	Fair
04/08	674 918 5 63901 65337 63890 84613 73082 918 5 00000	[0800z Unworkable]	Fair
25/08	674 201 5 36304 38135 35782 31823 37474 201 5 00000		

E11 log July/August

4783kHz	1605z	03/07 [232/00] Out 1608z S4	Malc	SUN
	1605z	12/07 [232/00]	RNGB	TUE
	1605z	17/07 [232/00]	Jochen	SUN
	1605z	19/07 [232/00] Weak	RNGB	TUE
	1605z	24/07 [232/00] Out 1608z S2	Malc	SUN
	1605z	26/07 [232/00] Out 1608z S2	Malc	TUE
	1605z	31/07 [232/001 Out 1608z S2	Malc	SUN
	1605z	16/08 [232/00] Out 1608z S3	Malc	TUE
	1605z	21/08 [232/00] Out 1608z S3	Malc	SUN
	1605z	23/08 [232/00] Out 1608z S4	Malc	TUE
6807kHz	0820z	11/07 [438/00]	RNGB	MON
	0820z	25/07 [438/00] Out 0823z S2	Malc	MON
	0820z	01/08 [438/00] Out 0823z S3	Malc	MON
	0820z	04/08 [438/00] Out 0823z S3	Malc	THU
	0820z	08/08 [438/00] Out 0823z S4	Malc	MON
	0820z	11/08 [438/00] Weak	RNGB	THU
	0820z	22/08 [438/00] Out 0820z S4	Malc	MON
	0820z	25/08 [438/00]	RNGB	THU
	0820z	29/08 [438/00] Out 0823z S3	Malc	MON
7600kHz	0530z	28/07 [649/00] Out 0533z	Ed Smith	THU
	0530z	11/08 [649/00] Out 0533z	Ed Smith	THU
	0530z	29/08 [649/00] Out 0533z QSA4 QRM1 QSB1	JkC	MON
7984kHz	1730z	20/07 [405/00] Out 1733z S9	Malc, JkC	WED
	1730z	27/07 [405/00] Out 1733z S7	Malc	WED
	1730z	03/08 [405/001 Out 733z S9	Malc	WED
	1730z	06/08 [405/00] Out 1733z S9	Malc	SAT
	1730z	16/08 [405/00] Out 1733z S9	Malc	WED
	1730z	24/08 [405/00] Out 1733z QSA4 QRM1 QSB1	JkC, Malc	WED
	1730z	27/08 [405/001 Out 1733z S9	Malc	SAT
8088kHz	1730z	04/08 [416/00] Out 1733z S6	Malc	THU
	1730z	25/08 [416/00] Out 1733z QSA4 QRM1 QSB1	JkC	THU
8530kHz	2000z	01/07 [576/00] Out 2003z S7	Malc	FRI
	2000z	15/07 [576/00] Strong	RNGB	FRI
	2000z	22/07 [576/00] Out 2003z S7	Malc	FRI
	2000z	05/08 [576/00] Out 2003z S7	Malc	FRI
	2000z	26/08 [576/00] Out 2003z QSA4 QRM1 QSB1	JkC, Malc	FRI
8565kHz	0315z	28/07 [253/00] (Utwente SDR.)	Ed Smith	THU
	0315z	25/08 [253/00]	Ary, JkC	THU
9052kHz	1450z	26/07 [441/00] Out1453z S4	Malc	TUE
	1450z	02/08 [441/00] Out 1453z S3	Malc	TUE
	1450z	04/08 [441/00] Out 1453z S2	Malc, Tony	THU
	1450z	23/08 [441/00] Out 1453z S2	Malc	TUE
	1450z	25/08 [441/00]	Gary H, JkC	THU
9130kHz	2005z	10/07 [363/00] Strong	RNGB	SUN
	2005z	16/07 [363/00] Good	RNGB	SAT
	2005z	17/07 [363/00] Strong	RNGB	SUN
	2005z	23/07 [363/00] Out 2008z S7	Malc	SAT
	2005z	24/07 [363/00] Out 2008z S4	Malc	SUN
	2005z	31/07 [363/00] Out 2008z S5	Malc	SUN
	2005z	06/08 [363/00] Out 2008z S9	Malc	SAT
	2005z	07/08 [363/00] Out 2008z S9	Malc	SUN
	2005z	27/08 [363/00] Out 2008z S9	Malc	SAT

9610kHz	0745z	04/07 [262/00] Out 0748z S4	Malc	MON
	0745z	18/07 [262/00]	RNGB	MON
	0745z	01/08 [262/00] Out 0748z S4	Malc	MON
	0745z	15/08 [262/00] Fair	RNGB	MON
	0745z	22/08 [262/00] Out 0748z S5	Malc	MON
	0745z	29/08 [262/00] Out 0748z S3	Malc	MON
10213kHz	0930z	06/07 [270/00] Out 0933z Weak	Topol, Gary H	WED
	0930z	27/07 [270/00] Out 0933z S2	Malc	WED
	0930z	10/08 [270/00] Out 0933z	Ed Smith	WED
	0930z	11/08 [270/00] Out 0933z	Ed Smith	THU
	0930z	24/08 [270/00] Out 0933z S3	Malc	WED
10302kHz	1205z	06/07 [469/00] Out 1208z Very Weak	Topol, RNGB	WED
	1205z	26/07 [469/00] Out 1208z S3	Malc, Ed Smith	TUE
	1205z	02/08 [469/00] Out 1208z S5	Malc	TUE
	1205z	03/08 [469/001 Out 1208z S3	Malc	WED
	1205z	10/08 [469/00] Out 1208z	Ed Smith	WED
	1205z	24/08 [469/00] Out 1208z S2	Malc	WED
10356kHz	1530z	04/08 [262/00] Out 1533z S9+10	Malc , Tony	THU
	1530z	25/08 [262/00] Out 1533z QSA4 QRM1 QSB1	JkC	THU
10800kHz	0450z	15/08 [416/00] Out 0453z	Ed Smith	MON
11581kHz	1300z	02/07 [585/00] Out 1303z S4	Malc	SAT
	1925z	05/07 [551/00] Strong	RNGB	TUE
	1925z	12/07 [551/00] Out 1928z QSA4 QRM1 QSB1	JkC	TUE
	1925z	14/07 [551/00] Out 1928z QSA4 QRM1 QSB1	JkC	THU
	1300z	16/07 [585/00] Good	RNGB	SAT
	1925z	19/07 [551/00] Out 1925z S9	Malc	TUE
	1300z	28/07 [585/00] Out 1303z	Ed Smith	THU
	1925z	02/08 [551/00] Out 1928z S9	Malc, Gary H	TUE
	1300z	04/08 [585/00] Out 1303z S9	Malc	THU
	1300z	06/08 [585/00] Out 1303z S6	Malc	SAT
	1300z	11/08 [585/00]	RNGB	THU
	1925z	23/08 [551/00]	Gary H	TUE
	1925z	25/08 [551/00]	Gary H	THU
	1925z	30/08 [551/00]	Gary H	TUE
13424kHz	0645z	05/07 [517/00] Weak	RNGB	TUE
	0645z	26/07 [517/00] Out 0648z S4	Malc	TUE
	0545z	27/07 [348/00] OUT 0548z	Ed Smith	WED
	0645z	04/08 [517/00] Out 0648z S9	Malc	THU
	0545z	10/08 [348/00] Good	RNGB	WED
	0545z	12/08 [348/00] Out 0548z	Ed Smith	FRI
	0645z	16/08 [517/00] Out 0648z S4	Malc	TUE
	0645z	23/08 [517/00] Out 0648z S9	Malc	TUE
13427kHz	0900z	04/07 [534/00] Out 0903z S3	Malc	MON
	0900z	06/07 [534/00] Fair	RNGB	WED
	0900z	25/07 [534/00] Out 0903z S2	Malc	MON
	0900z	27/07 [534/00] Out 0903z S3	Malc	WED
	0900z	01/08 [534/00] Out 0903z S2	Malc	MON
	0900z	03/08 [534/00] Out 0903z S4	Malc	WED
	0900z	08/08 [534/00] Out 0903z S2	Malc	MON
	0900z	10/08 [534/00] Out 0903z	Ed Smith	WED
	0900z	22/08 [534/00] Out 0903z S3	Malc	MON
	0900z	24/08 [534/00] Out 0808z S4	Malc	WED
	0900z	29/08 [534/00] Out 0903z S7	Malc	MON
13537kHz	1205z	01/07 [521/00] Out 1228z S4	Malc	FRI
	1225z	22/07 [521/00] Out 1228z S6	Malc	FRI
	1225z	08/08 [521/00] Out 1228z S6	Malc	MON
	1225z	12/08 [521/00] Out 1228z	Ed Smith	FRI
	1225z	15/08 [521/00] Out 1228z S7	Malc	MON
	1225z	22/08 [521/00] Out 1228z S7	Malc	MON
	1225z	26/08 [521/00] Out 1228z S6	Malc	FRI
	1225z	29/08 [521/00] Out 1228z S6	Malc	MON

13873kHz 1045z	19/07 [576/00] Fair	RNGB	TUE
1045z	02/08 [576/00] Out 1048z S3	Malc	TUE
1045z	16/08 [576/00] Out 1048z S6	Malc	TUE
1045z	23/08 [576/00] Weak	RNGB	TUE
13908kHz 0600z	22/07 [181/00] Out 0603z	Ed Smith	FRI
0600z	08/08 [181/00] Out 0603z S3	Malc	MON
14410kHz 1745z	31/07 [242/00] Out 1748z S2	Malc	SUN
1745z	01/08 [242/00] Out 1748z S7	Malc	MON
1745z	07/08 [242/00] Out 1748z S5	Malc	SUN
1745z	15/08 [242/00] Out 1248z S7	Malc	MON
1745z	21/08 [242/00] Out 1748z S2	Malc	SUN
1745z	22/08 [242/00] Out 1748z S2	Malc	MON
1745z	28/08 [242/00] Out 1748z S6	Malc	SUN
1745z	29/08 [242/00] Out 1748z QSA3 QRM4 QSB1	JkC, Malc	MON
14753kHz 0710z	01/07 [633/00] Out 0713z S2	Malc	FRI
0710z	05/07 [633/00] Weak	RNGB	TUE
0710z	19/07 [633/00]	RNGB	TUE
0710z	22/07 [633/00] Out 0713z S3	Malc	FRI
0710z	26/07 [633/00] Out 0713z S3	Malc	TUE
0710z	09/08 [633/00] Weak	RNGB	TUE
0710z	12/08 [633/00] Out 0713z	Ed Smith	FRI
0710z	16/08 [633/00] Out 0713z S3	Malc	TUE
0710z	19/08 [633/00] weak	RNGB	FRI
0710z	23/08 [633/00] Out 0713z S5	Malc	TUE
0710z	26/08 [633/00] Out 0713z S3	Malc	FRI
14865kHz 1705z	10/07 [392/00] Out 1708z S2	Malc	SAT
1705z	13/07 [392/00] Out 1708z QSA2 QRM1 QSB1	JkC	WED
1705z	20/07 [392/00] Out 1708z S4	Malc	WED
1705z	03/08 [392/00] Out 1708z S7	Malc	WED
1705z	06/08 [392/00] Out 1708z S5	Malc	SAT
1705z	13/08 [392/00] Out 1708z S6	Malc	SAT
1705z	24/08 [392/00] Out 1708z QSA4 QRM1 QSB1	JkC	WED
1705z	27/08 [392/00] Out 1708z S2	Malc	SAT
14940kHz 1650z	01/07 [921/00] Out 1653z S7	Malc	FRI
1650z	03/07 [921/00] Out 1653z S4 QSB3	Malc	SUN
1650z	24/07 [921/001 Out 1653z S2	Malc	SUN
1650z	21/08 [921/00] Out 1653z S5	Malc	SUN
1650z	26/08 [921/00] Out 1653z S5	Malc	FRI
14975kHz 0805z	03/07 [311/00] Out 0808z S6	Malc	SUN
0805z	06/07 [311/00] Weak	RNGB	WED
0805z	20/07 [311/00] Out 0808z S5	Malc	WED
0805z	24/07 [311/00] Out 0808z S3	Malc	SUN
0805z	27/07 [311/00] Out 0808z S4	Malc , Ed Smith	WED
0805z	31/07 [311/00] Out 0808z S5	Malc	SUN
0805z	03/08 [311/00] Out 0808z S5	Malc	WED
0805z	07/08 [311/00] Out 0808z S5	Malc	SUN
0805z	10/08 [311/00] Out 0808z	Ed Smith	WED
0805z	28/08 [311/00] Out 0808z S5	Malc	SUN
15632kHz 0745z	19/07 [335/00] Weak	TUE	TUE
0745z	26/07 [335/00] Out 0748z S4	Malc	TUE
0745z	02/08 [335/00] Out 0748z S3	Malc	TUE
0745z	04/08 [335/00] Out 0748z S3	Malc	THU
0745z	09/08 [335/00] Weak	RNGB	TUE
0745z	16/08 [335/00] Out 0748z S3	Malc	TUE
15795kHz 1625z	13/07 [972/00] Out 1628z QSA1 QRM1 QSB1	JkC	WED
1625z	20/07 [972/00] Out 1628z S3	JkC, Malc	WED
1625z	27/07 [972/00] Out 1628z S3	Malc	WED
1625z	21/08 [972/00] Out 1628z S2	Malc	SUN
1625z	24/08 [972/00] Out 1628z QSA2 QRM1 QSB3	JkC	WED

15803kHz	1300z	06/07 [133/00] Weak	RNGB	WED
	1300z	19/07 [133/00] Fair	RNGB	TUE
	1300z	02/08 [133/00] Out 1303z S3	Malc	TUE
	1300z	03/08 [133/00] Out 1303z S2	Malc	WED
	1300z	23/08 [133/00] Out 1303z S2	Malc	TUE
	1300z	24/08 [133/00] Out 1303z S3	Malc	WED
15825kHz	1345z	02/07 [911/00] Out 1348z S2 QRM	Malc	SAT
	1345z	12/07 [911/00] Very weak	RNGB	TUE
	1345z	19/07 [911/001 Out 1348z S2	Malc	TUE
	1345z	23/07 [911/00] Out 1348z S3	Malc, Ed Smith	SAT
	1345z	26/07 [911/00] Out 1348z S3	Malc	TUE
	1345z	13/08 [911/00] Out 1348z S2 QRM	Malc	SAT
	1345z	16/08 [911/00] Out 1348z S5	Malc	TUE
	1345z	23/08 [911/00] Out 1348z S3	Malc	TUE
	1345z	27/08 [911/00] Out 1348z S3 QRM	Malc	SAT
15905kHz	0710z	23/07 [491/00] Out 0713z S2	Malc	SAT
	0710z	04/08 [491/00] Out 0710z S5	Malc	THU
	0710z	06/08 [491/00] Out 713z S2	Malc	SAT
	0710z	13/08 [491/00] Out 0713z	Ed Smith	SAT
	0710z	13/08 [491/00] Out 0713z S3	Malc	SAT
17120kHz	0730z	01/07 [352/00] Out 0733z S2	Malc	FRI
	0730z	03/07 [352/00]	RNGB	SUN
	0730z	22/07 [352/00] Out 0733z S2	Malc	FRI
	0730z	24/07 [352/00] Out 0733z S2 QSB1	Malc	SUN
	0730z	31/07 [352/00] Out 0733z S2 QRM1	Malc	SUN
	0730z	05/08 [352/00] Out 0733z S3	Malc	FRI
	0730z	07/08 [352/00] Out 0733z S2	Malc	SUN
	0730z	26/08 [352/00] Out 0733z S2	Malc	FRI
	0730z	28/08 [352/00] Out 0733z S6	Malc	SUN

E11a log July/August

4783kHz	1605z	02/08 [235/38 54350……19541] Out 1615z S4	Malc	TUE
	1605z	07/08 [235/38 54350……etc] Repeat of Tuesday	Malc	SUN
6807kHz	0820z	04/07 [438/34 06027 54397 60807 97050 88538 82995 55177……43105] Out 0829z S4	RNGB, Malc	MON
	0820z	15/08 [439/38 23439……..72296] Out 0829z S4	Malc	MON
7600kHz	0530z	18/07 [646/33 75269 37852 74133 46880 15344 54378 42559 98320…… 05204 96993]	Ary	MON
	0530z	21/07 [646/33 75269…...] Repeat of Monday	Ary	THU
	0530z	25/08 [648/40 81274 41351 54854 81077 02824 47196 95245……88697 57119]	Ary	THU
7984kHz	1730z	13/07 [400/32 80998 80705 13873 32790 63768 25631 61532 15467 26895……51677 38991]	JkC	WED
	1730z	13/08 [404/39 70456……..50308] Out 1740z S9	Malc	SAT
8088kHz	1730z	14/07 [414/37 37630 24811 91067 24073 31277 22056 56076 17599 80525……73185 24751]	Gert	THU
8565Hz	0315z	11/08 [258/34] QSB4 QRM4 RTTY Unable to read message	Ed Smith	THU
9052kHz	1450z	12/07 [440/32 56825 75642 93566 66424 26193 30891 74110 15651 13167……98960 89211]	JkC	TUE
	1450z	14/07 [440/32 56825…..etc] Repeat of Tuesday	Gert	THU
	1450z	16/08 [442/35 56653……60121] Out 1459z S3	Malc	TUE
9130kHz	2005z	02/07 [364/31 17869……66444] Out 2013z S7	Malc	SAT
	2005z	13/08 [364/32 10782……04686] Out 2013z S9+10	Malc	SAT
9610kHz	0745z	11/07 [269/40 67859 60273 96876 67920 99278 26827 00094 98646 13685……16803 17876]	Ary	MON
	0745z	08/08 [269/38 48087……..78370] Out 0754z S3	Malc	MON
10213kHz	0930z	03/08 [276/34 05869……03160] Out 0939z S2	Malc	WED
10302kHz	1205z	19/07 [464/34 15353 59363 84414 10697 00748 09336 33351……99768 31685] Fair	RNGB	TUE
	1205z	20/07 [464/34 15353……31685] Out 1214z S3 Repeat of Tuesday	Malc	WED
	1205z	16/08 [464/38 94655 77389 93350 21260 37259 54391 56915……59923 06394] Out 1214z	Ed Smith, Malc	TUE
10356khz	1530z	14/07 [269/40 67859 60273 96876 67920 99278 26827 00094 98646 13685……16803 17876]	Gert	THU
10800kHz	0450z	11/07 [414/37 37630 24811 91067 24073 31277 22056 56076 17599 80525……73185 24751]	Ary	MON

11581kHz 1300z	23/07 [585/35 72373 92568.....55269 60218] Out 1309z	Ed Smith	SAT
1925z	26/07 [523/32 55399……57301] Out 1933z S9	Malc	TUE
1925z	16/08 [521/40 92681……92713] Out 1934z S9	Malc	TUE
1300z	25/08 [589/38 53908 37302 81098 29980 16588 74685 49295……73010 95502]	JkC	THU
1300z	27/08 [589/38 53908……etc] Repeat of Thursday	Malc	SAT
13424kHz 0545z	03/08 [346/32 58374 41976 10020 01344 85439 66629 99790 18434……38493 12708]	Ary	WED
0645z	09/08 [518/31 43767 93187 01578 43263 15497 38746 08195 38635……08293 04375]	Ary	TUE
13427kHz 0900z	11/07 [538/31 70527 67201 05168 72757 71433 32137 78898 91992 02299……92772 83604]	Ary	MON
0900z	15/08 [537/34 72992 37398 33748 38520 39358 78559 52976……37132 74704] Out 0909z S3	Ed Smith. Malc	MON
0900z	17/08 [537/34 72992…..etc] Repeat of Monday	Ed Smith	WED
13537kHz 1225z	04/07 [527/40 38084 95242 84672 18636 26702 19760 37057 99230 61246…… 67987 38305]	Ary, Malc	MON
1225z	01/08 [524/31 18358……86700] Out 1233z S2	Malc	MON
1225z	05/08 [524/31 18358……86700] Out 1233z S5	Malc	FRI
13873kHz 1045z	26/07 [576/34 43710……79991] Out 1054z S3	Malc	TUE
1045z	09/08 [579/34 55365 59404 95693 84622 79608 95883 97223 17344……32464 76957]	Ary	TUE
14753kHz 0710z	15/07 [632/33 06236 56325 75153 54381 54567 41186 57466 57379 91418……64124 31248]	Ary	FRI
0710z	02/08 [637/40 82758 26372 61424 69569 78274 60084 86755 28076 54314……98902 60737]	Ary	TUE
0710z	05/08 [637/40 82758……etc} Repeat of Tuesday	Malc	FRI
14865kHz 1705z	27/07 [390/38 62651……31377] Out 1715z S9	Malc	WED
14940kHz 1650z	29/07 [922/36 15799 78836 56730 96115 55742 85214 46316 25471……51704 38630]	Ary	FRI
1650z	31/07 [922/36 15799…..etc] Repeat of Friday	Malc	SUN
1650z	05/08 [921/36 88677 88567 11448 03444 73489 36119 34071 76853……90175 97076]	Ary	FRI
1650z	07/08 [921/36 88677……etc] Repeat of Friday	Malc	SUN
14975kHz 0805z	16/08 [319/35 72941……..13959] Out 0815z S3 QSB2	Malc	WED
0805z	21/08 [319/39 29416……..13959] Out 0814z S5	Malc	SUN
15632kHz 0745z	23/08 [334/34 25743 09108 74010 67982 55658 64958……76003 21086] Out 0754z S4	Malc	TUE
0745z	25/08 [334/34 25743……etc] Repeat of Tuesday	RNGB	THU
15795kHz 1625z	03/08 [974/33 78944……49050] Out 1633z S5 QSB3	Malc	WED
1625z	07/08 [974/33 78944……etc] Repeat of Wednesday	Malc	SUN
15803kHz 1300z	16/08 [136/36 61293……28205] Out 1309z S3	Malc	TUE
15825kHz 1345z	02/08 [912/34 55289……37077] Out 1354z S2 QRM	Malc	TUE
15905khz 0710z	27/08 [469/40 43623……48779] Out 0713z S5	Malc	SAT
17120kHz 0730z	17/07 [350/32 82965 98631 27104 51747 46833 99605 59539 34392……14275 13141]	RNGB	SUN

E25

6140kHz 0745z 14/07

Windows sound
254 254 254 254 254 254 254 254 254
Message Message Message
2744 2001 6810 5920 5283 5736 6998 0558 5003 6810
Rebeat Rebeat Rebeat
2744 2001 6810 5920 5283 5736 6998 0558 5003 6810
End of message. End of transmission
Courtesy Ary

6140kHz 0759z 14/07

012 012 012 012 012 012 012 012 012 012 012 012 012 012
Message Message Message
4005 2730 3012 8183 0786 5927 9857 7274
Rebeat Rebeat Rebeat
4005 2730 3012 8183 0786 5927 9857 7274
End of message. End of transmission
Courtesy Ary

6140kHz0930z 09/08

333 333 333 333 333 333 333 333 333 333 333 333
Message Message Message
2080 6220 4146 7261 1001 3489 2833 6220
Rebeat Rebeat Rebeat
2080 6220 4146 7261 1001 3489 2833 6220
End of message. End of transmission
Beeps, Windows sounds, short Arabic music after the message
Courtesy Ary

G06

Monday

July 2016

0759z 7320kHz

04/07 329 00000 Weak

August 2016

01/08 329 00000 Weak

15/08 329 00000 Fair

1659z 5348kHz 1759z 5859kHz

July 2016

04/07 574 00000 Weak

11/07 574 00000 Weak

August 2016

01/08 574 00000 Fair

03/08 574 00000 Fair
08/08 574 00000 Fair

Thursday

July2016

1830z 6887kHz

14/07 842 317 90 37839 ... 84784 317 90 00000 Fair

842 317 90
37839 35787 98253 62187 16222 95625 31691 52538 61225 22567
93296 67423 43968 16891 63781 34822 24842 62491 75924 24594
77878 36766 29298 78643 29548 46677 95926 89898 56566 67677
76748 84848 84877 16891 63781 34822 24842 87874 78788 78888
93296 67423 42968 16891 63781 34822 24842 62491 75924 56784
29548 48677 92926 89898 76566 67677 23445 34344 45454 34344
35787 98273 62187 16222 95625 46565 43434 89798 54746 78788
76748 84848 84877 16891 34567 34822 24842 87874 78788 78888
68768 76876 58746 58764 87564 85764 87567 64848 85748 84784
317 90 00000 *Courtesy HJH*

28/07 842 317 90 37839 ... 84784 317 90 00000 Strong

August2016

11/08 842 317 90 37839 ... 84784 317 90 00000

842 317 90
37839 35787 98273 60187 16202 95625 31691 52538 61025 22567
93296 67423 40968 16891 63781 34820 04842 60491 75924 04594
77878 46766 09098 78643 09548 46677 90906 89898 56566 67677
76748 84848 84877 16891 63781 34820 04842 87874 78788 78888
93296 67423 40968 16891 63781 34820 04842 60491 75924 56784
09548 46677 90906 89898 56566 67677 23445 34344 45454 34344
35787 98273 60187 16202 95625 46565 43434 89798 54546 78788
76748 84848 84877 16891 34567 34820 04842 87874 78788 78888
68768 76876 58746 58764 87564 85764 87567 64848 85748 84784
317 90 00000 *Courtesy Ary*

25/08 842 272 20 14529 ... 12250 272 20 00000

842 272 20
14259 22676 32782 32782 76723 89409 12215 74326 64070 90235
38085 59543 12319 74238 36664 12256 18841 73311 98089 12250
272 20 0000[0?] *Courtesy Ary*

Friday

August 2016

1930z 5943kHz

26/08 218 569 63 14259 ... 54545 569 63 00000 Very strong

G06 As logged by PoSW:

Second + Fourth Thursdays in the Month 1830 UTC Schedule:-
14-July-16:- 6,887 kHz, calling "842", DK/GC "317 317 90 90", "37839 35787 98273 ...".
Looks like the same message of ninety 5Fs first used in March.

28-July-16:- 6,887 kHz, started about a minute before the half-hour, "842" and "317 317 90 90" again.

11-Aug-16:- 6,887 kHz, early start again, "842" and "317 317 90 90" again.

25-Aug-16:- 6,887 kHz, call "842" and a "truncated" message this evening, in the sense of being cut down to a mere twenty 5F groups, DK/GC "272 272 20 20", S9 signal on a clear frequency.

Friday 1930 UTC Schedule Following Second + Fourth Thursdays in the Month:-
29-July-16:- 5,943 kHz, difficult to impossible copy due to S9++ BC station on 5,945. G06 carrier was up on 5,943 when checked at around 1915Z, no sign of the broadcaster then, fired up its carrier at about 1925Z; it went off for about one second at approx 1932Z, a much weaker G06 heard in call-up mode.

12-Aug-16:- 5,943 kHz, competing well with the broadcast station 2kHz up for the first few minutes, call "218", DK/GC "317 317 90 90", the BC station became stronger by 1940Z.

First + Second Mondays in the Month 1700 + 1800 UTC Schedule:-
11-July-16:- 1700 UTC, 5,348 kHz, started about 15s before the hour, "574 574 574 00000",
S6 to S7.
1800 UTC, 5,859 kHz, second sending, S8, also started before the hour.

8-Aug-16:- 1700 UTC, 5,348 kHz, "574 574 574 00000", in progress when tuned in just before the hour, voice stopped 1703:20s UTC.

S06 log July 2016

Daily Mon- Fri 0400z 15721kHz
No reports

Thursdays (Repeats following day) 0830z 15875kHz 0930z 13469kHz
14/07 '842' 975 43 83330 15099 26358 68418 50817 64731 76054 27194 09352 46594 60917 77210 27683 78237 12724 72444 26763 88742 88471 30864 34555 01500 53036 91480 96024 47948 16622 45319 40773 29461 12922 70010 77730 69560 28953 22677 77746 23649 22477 70816 46734 38460 87961 975 43 000000

21/07 '842' 601 44 67010 06612 68987 54294 30910 04067 43597 51798 79671 48902 47031 35870 87560 91132 97800 16229 33986 56886 76934 24942 78938 19322 01311 73848 33825 96594 32245 06243 13668 56561 17774 72020 81577 32915 92054 48470 04453 82427 00348 43895 99838 36994 82989 14252 601 44 00000

28/07 '842' 379 45 09112 54631 69640 75333 49931 43055 81741 27427 76840 52276 13616 77660 92354 01852 73084 90299 18658 82038 82803 10446 15317 35898 59511 03988 97787 45782 15240 07430 05300 66412 91440 42261 91473 71721 61956 73572 36129 07658 65779 17591 01724 68130 55532 27831 82861 378 45 00000

Fridays (1st & 3rd) 2000z 10204khz 2100z 8058kHz (frequencies may vary slightly)
01/07 '761' 00000
15/07 '761' 00000

Saturdays (1st/3rd) 1900z 6875kHz 2000z 5931kHz (frequencies may vary slightly)
02/07 '614' 00000
16/07 '614' 00000

Non- scheduled:
S06 9075kHz 1700z 14/07 [975 975 975 45679 (R4m) 00000] 1704z JkC THU
Frequency in use earlier for M24

S06s July log:

Monday			
4th/11th	0830/0840z	8221/9353	'371' 894 5 …..
18th/25th			'371' 509 6 65906 66610 20336 17301 88554 82045
4th/11th	0900/0910z	16380/14835	'872' unreadable
18th/25th			'872' 514 6 24035 48115 24151 51802 23807 53006
4th/11th	1200/1210z	10230/12165	'831' 470 5 38536 82123 44698 38818 33533
18th.25th			'831' 542 6 15009 24140 48387 90147 82963 24162
Tuesday			
5th/12th	0600/0610z	15945/16945	'438' 576 9 31034 39477 33367 37555 33300 92480 82123 44698 40461
19th/26th			'438' 260 5 17298 94961 35826 65906 77231
5th/12th	0700/0715z	5430/6780	'374' 801 5 87240 34625 38363 33136 36133
19th/26th			'374' 291 5 79211 79352 54949 12906 16186
5th/12th	0730/0740z	7365/11655	'427' 986 5 91480 34850 49855 33771 40467
19th/26th			'427' 960 5 22860 17584 99715 96824 68885
5th/12th	0800/0810z	14373/12935	'352' 849 6 48318 30605 43003 83659 86760 36014
19th/26th			'352' 987 6 54990 22911 83297 11321 97967 80757
5th/12th	1000/1010z	6440/5660	'893' 246 5 37596 83663 89353 30950 37014
19th/26th			'893' 276 5 40135 45637 54562 67969 10865
5th/12th	1100/1110z	6810/7560	'754' 210 6 36489 48648 33184 43886 45494 81397
19th/26th			'754' Too weak to copy
5th/12th	1500/1510z	6766/7744	'537' 214 6 33365 47183 31326 36388 94323 45547
19th/26th			'537' 491 6 52401 62819 92699 14600 74248 48754
Wednesday			
6th/13th	0530/0540	11565/12560	'464' 809 5 48992 45648 40613 83314 48992
20th/27th			'464' 287 5 88620 58069 61732 74537 57440
6th/13th	0730/0740z	12110/14977	'745' 832 6 31331 49468 91296 93550 44280 49877
20th/27th			'745' 823 6 45032 39366 87471 31487 40130 30905
6th/13th	0820/0830z	9485/11085	'471' 958 6 93738 81704 38342 33489 16930 30384
20th/27th			'471' 985 6 75193 04875 34895 73904 57934 73537
6th/13th	1000/1010z	14580/16020	'729' 860 5 50479 34266 41945 36506 48184
20th/27th			'729' 513 6 44024 31373 35876 35436 33024 87540
Thursday			
7th/14th(E17z)	0800/0810z	16780/12850	'674' 920 5 33796 13577 74526 46647 79302
21st/28th			'674' 295 8 44365 43025 39283 33578 47568 40573 42474 34680
7th/14th	0900/0910z	12952/13565	'167' 294 5 40614 77249 40678 17976 21816
21st/28th			'167' NRH
7th/14th	0900/0910z	6844/7161	'624' 983 5 84090 09531 88430 33240 61135
21st/28th			'624' 950 7 44024 31373 35876 35436 33024 87540 38713
7th/14th	0930/0940z	9255/10325	'314' 860 5 00559 55784 11453 57325 84789
21st/28th			'314' 975 6 62876 12164 83539 72813 53078 42164
7th/14th	1200/1210z	13145/14535	'425' 893 6 10900 58079 46009 15744 15521 63577
21st/28th			'425' 936 7 62781 92552 64515 63145 09809 72616 53619
Friday			
1st/8th	0930/0940z	10290/9655	'516' 809 7 33699 39998 30667 35947 83964 40774 45983
15th/22nd			'516' 829 7 46062 68672 97478 39685 30485 96632 52537
Saturday			
2nd	0800/0810z	12460/10259	'254' 860 7 14111 21484 10618 85692 32018 12886 14986
Sunday			
3rd/10th	0730/0740z	16320/14875	'524' 906 7 40639 33180 48007 37230 46446 43476 35453
17th/24th			'524' 809 6 75193 04875 34895 73904 57934 75894

Thanks to RNGB, Malc (M8), Ed Smith, Ary, JkC

S06 log August 2016

Daily Mon- Fri 0400z 15721kHz
No reports

Thursdays (Repeats following day) 0830z 16327kHz 0930z 13875kHz
11/08 '842' 367 48 38788 76742 03726 37820 94718 89106 24329 10814 89952 18464 46323 43208 95969 28435 93940 61800 49945 95884 81457 62751 31597 88915 71930 49015 69044 89890 61026 93242 72097 55650 46892 30867 16433 32133 71992 13052 27084 65577 47859 74189 34686 77486 98688 93642 02907 95559 84725 56397 367 48 000000

18/08 '842' Too weak to copy
25/08 '842' 769 50 63676 86506 56660 60520 35611 66813 10480 36628 79242 40565 57891 70387 48627 75874 03605 81019 93264 62202 79761 28425 83624 81760 21709 85806 43029 12654 02471 05756 46813 68451 49340 96979 74714 03869 91042 53853 27417 41249 08899 06025 43198 97535 90436 80150 75603 16421 08872 91124 18107 35352 769 50 00000

Fridays (1st & 3rd) 2000z 10204khz 2100z 8058kHz (frequencies may vary slightly)
05/08 '761' 502 39 44317 96204 21487 10639 64678 92087 77490 47583 13698 61606 99276 89922 60388 28777 95081 52021 45949 49566 70555 02235 68548 31922 61493 62677 04270 49197 31043 35083 82580 00418 97156 89377 40365 38434 40866 87367 68204 70591 98220

Saturdays (1st/3rd) 1900z 6875kHz 2000z 5931kHz (frequencies may vary slightly)
06/08 '614' 00000 (used 6885kHz at 1900z)

S06s August log:

Monday

1st/8th	0830/0840z	8221/9353	'371' 958 6 88620 58069 61732 74537 57440 10597
15th/22nd			'371' 240 5 73912 35109 38143 46173 31090
1st/8th	0900/0910z	16380/14835	'872' 946 5 39534 17228 15636 47891 23247
15th/22nd			'872' 460 5 74528 92315 62830 53975 17295
1st/8th	1200/1210z	10230/12165	'831' 279 5 79211 79352 54949 12906 16186
15th/22nd			'831' 276 5 23718 93427 03512 73549 53891

Tuesday

2nd/9th	0600/0610z	15945/16945	'438' 972 5 10900 58070 46009 15744 15521
16th/23rd			'438' 907 5 73912 21983 25163 93027 66381
2nd/9th	0700/0715z	5430/6780	'374' 809 5 75193 04845 34895 73904 57934
16th/23rd			'374' 502 6 54999 88233 40232 53443 49053 44259
2nd/9th	0730/0740z	7365/11655	'427' 801 5 59105 10959 41305 70193 48579
16th/23rd			'427' 869 5 86138 47635 49920 93416 13506
2nd/9th	0800/0810z	14373/12935	'352' 901 6 34895 78914 75017 50195 73904 75905
16th/23rd			'352' 416 7 93898 97362 87782 40940 11355 54522 54715
2nd/9th	1000/1010z	6440/5660	'893' 261 5 87509 34785 89473 50197 59384
16th/23rd			'893' 275 6 52401 62919 92699 14600 74248 48754
2nd/9th	1100/1110z	6810/7560	'754' 218 6 27459 78209 09287 27589 07349 52819
16th/23rd			'754' 901 6 88620 58069 61732 74537 57440 10597
2nd/9th	1500/1510z	6766/7744	'537' 219 6 09269 99206 78926 97869 77195 98595
16th/23rd			'537' 890 6 96320 36792 53038 76342 15009 34140

Wednesday

3rd/10th	0530/0540	11565/12560	'464' 810 5 61509 71908 57190 87593 48475
17th/24th			'464' 910 5 46062 68672 97478 39685 30485
3rd/10th	0730/0740z	12110/14977	'745' 891 6 74310 09581 34905 70918 75908 71841
17th/24th			'745' 819 6 32553 53202 31373 30131 35369 81456
3rd/10th	0820/0830z	9485/11085	'471' 236 5 47728 61515 75468 87675 46217
17th/24th			'471' 263 5 32939 43631 32939 31096 35264
3rd/10th	1000/1010z	14580/16020	'729' 830 5 94584 89315 90718 99057 84585
17th/24th			'729' 803 5 31808 36823 32879 35438 48641

Thursday

4th/11th(E17z)	0800/0810z	16780/12850	'674' 918 5 63901 61327 63890 84613 73082
18th/25th			'674' 201 5 36304 38135 35782 31823 37474
4th/11th	0900/0910z	12952/13565	'167' NRH
18th/25th			'167' NRH
4th/11th	0900/0910z	6844/7161	'624' 837 5 03514 62832 63418 04628 74512
18th/25th			'624' 907 5 46062 68672 97478 39685 30485
4th/11th	0930/0940z	9255/10325	'314' 297 5 75192 04875 34895 73904 57934
18th/25th			'314' 958 6 42216 34041 49433 43195 57998 89796
4th/11th	1200/1210z	13145/14535	'425' 817 6 34895 78914 75017 50195 73904 57905
18th/25th			'425' 907 6 47183 89128 59662 97572 41530 48543

Friday			
12th	0930/0940z	10290/9655	'516' 892 7 11171 64385 82707 06123 22536
26th			'516' 00000
Saturday			
6th	0800/0810z	12460/10259	'254' 801 6 34895 78914 75017 50195 73904 57905
Sunday			
7th/14th	0730/0740z	16320/14875	'524' 861 7 50195 73904 57905 34859 03485 79024 87594
21st/28th			'524' no reports

Thanks to RNGB, Malc (M8), Ed Smith, Ary, JkC

For S06 transmissions PoSW noted:

Only two S06 Russian Man schedules appear to be active at the present time:-
First + Third Fridays in the Month 2000 + 2100 UTC Schedule:-
1-July-16:- 2000 UTC, 10,204 kHz, "761 761 761 00000", peaking S9 with deep QSB.
2100 UTC, 8,058 kHz, second sending, also S9.

15-July-16:- 2000 UTC, 10,204 kHz, and 2100 UTC, 8,058 kHz, both peaking over an indicated S9, "761 761 761 00000".

In August this schedule did that which it has done before, i.e. moving by one hour so as to show up at 1900 + 2000 UTC:-
5-Aug-16:- 1900 UTC, 10,204 kHz, and a "full message" this evening, unusual enough to be worthy of comment, call "761", DK/GC "502 502 39 39", S9 signal, ended 1912 UTC.
2000 UTC, 8,058 kHz, second sending, also S9.

6-Aug-16, Saturday:- a "full message" means a repeat on the following day:-
1900 UTC, 10,204 kHz, first sending, a weaker signal than just 24 hours earlier, S6 at best.
2000 UTC, 8,058 kHz, second sending, by contrast slightly stronger than on Friday, peaking over S9.

First + Third Saturdays in the Month 1900 + 2000 UTC Schedule:-
16-July-16:- 1900 UTC, 6,875 kHz, over S9, "614 614 614 00000".
2000 UTC, 5,946 kHz, second sending, suffering from strong 49 metre band broadcast stations interference.

6-Aug-16:- 1900 UTC, 6,885 kHz, "614 614 614 00000", S9+, very strong.
2000 UTC, 5,946 kHz, second sending with broadcast station interference. On at the same time as the two "761" transmissions, see above.

S06s YL Voice:- A selection of some of the better S06s signals heard in the UK in July and August:-
Monday 0830 + 0840 UTC Schedule, Call "371":-
11-July-16:- 0830 UTC, 8,221 kHz:- DK/GC "894 894 5 5", "31900 48366 36534 32840 48436", S7 to S8.
0840 UTC, 9,353 kHz, second sending, much weaker signal, way down in the noise.

18-July-16:- 0830 UTC, 8,221 kHz, DK/GC "509 509 6 6", "65906 66610 20336 17301 88554 82045", S7.
0840 UTC, 9,353 kHz, second sending, weak signal, difficult copy.

1-Aug-16:- 0830 UTC, 8,221 kHz, DK/GC "958 958 6 6", "88620 58069 61732 74537 57440 10597", S6 with QSB.
0840 UTC, 9,353 kHz, second sending, weak signal as usual.

Monday 1200 + 1210 UTC Schedule, call "831":-
4-July-16:- 1200 UTC, 10,230 kHz, DK/GC "470 470 5 5", weak signal, at first, came up to S5 – S6, "38536 82123 44698 38818 33533".
1210 UTC, 12,165 kHz, second sending, stronger, S7.

Tuesday 0730 + 0740 UTC Schedule, Call "427":-
5-July-16:- 0730 UTC, 7,365 kHz, DK/GC "986 986 5 5", Over S9, over-riding a weaker broadcast station on the same frequency, "91480 34850 49855 33771 40467".
0740 UTC, 11,655 kHz, second sending, also over S9.

12-July-16:- 0730 UTC, 7,365 kHz, "986 986 5 5" and 5Fs the same as on the 5th.
S8 to S9 over-riding the broadcaster.
0740 UTC, 11,655 kHz, second sending, over S9.

19-July-16:- 0730 UTC, 7,365 kHz, DK/GC "960 960 5 5", the weaker BC station heard underneath, "22860 17584 99715 96824 68885".
0740 UTC, 11,655 kHz, second sending, over S9, voice stopped for about 30 seconds during the call-up.

9-Aug-16:- 0730 UTC, 7,365 kHz, DK/GC "801 801 5 5", the broadcast station on the same frequency about the same strength as S06s, a low frequency beat note "flutter" of a few cycles per second noticeable between the two carriers. "59105 10959 41305 70193 48579".
0740 UTC, 11,655 kHz, second sending, S8 to S9.

23-Aug-16:- 0730 UTC, 7,365 kHz, DK/GC "869 869 5 5", S7, "86138 47635 49920 93416
13506".
0740 UTC, 11,655 kHz, second sending, stronger signal, peaking S9+.

Wednesday 0730 + 0740 UTC Schedule, Call "745":-
6-July-16:- 0730 UTC, 12,110 kHz, DK/GC "832 832 6 6", over S9, "31331 49468 91296 93550 44280 49877".
0740 UTC, 14,977 kHz, second sending, also over S9.

20-July-16:- 0730 UTC, 12,110 kHz, DK/GC "823 823 6 6", "45032 39366 87471 31487 40130 30905", over S9.
0740 UTC, 14,977 kHz, second sending, also over S9.

24-Aug-16:- 0730 UTC, 12,110 kHz, DK/GC “819 819 6 6”, “32553 53202 31373 30131 35369 81456”. Signal strength peaking over “9” on the S-meter.
0740 UTC, 14,977 kHz, second sending, also over S9.

Wednesday 1000 + 1010 UTC Schedule, Call “729”:-
6-July-16:- 1000 UTC, 14,580 kHz, weak signal, DK/GC “860 860 5 5”, “50479 34266 41945 36506 48184”.
1010 UTC, 16,020 kHz, second sending, also weak, came up to S5 to S6 at times.

20-July-16:- 1000 UTC, 14,580 kHz, DK/GC “513 513 6 6”, signal varying S4 to S7,
“44024 31373 35876 35436 33024 87540”.
1010 UTC, 16,020 kHz, second sending, weak signal.

10-Aug-16:- 1000 UTC, 14,580 kHz, over S9, DK/GC “830 830 5 5”, “94584 89315 90718 99057 84585”.
1010 UTC, 16,020 kHz, second sending, S7 to S8.

24-Aug-16:- 1000 UTC, 14,580 kHz, DK/GC “803 803 5 5”, “31808 36823 32879 35438 48641”, S9 with deep QSB.
1010 UTC, 16,020 kHz, second sending, also S9 with QSB.

Friday 0930 + 0940 UTC Schedule, Call “516”:-
8-July-16:- 0930 UTC, 10,290 kHz, DK/GC “809 809 7 7”, weak signal, “33699 39998 30667 35947 83964 40774 45983”.
0940 UTC, 9,655 kHz, second sending inside the 31 metre broadcast band, much stronger signal, peaking S9.

15-July-16:- 0930 UTC, 10,290 kHz, over S9 this morning, DK/GC “829 829 7 7”, “46062 68672 97478 39685 30485 96632 52537”.
0940 UTC, 9,655 kHz, second sending, also over S9.

12-Aug-16:- 0930 UTC, 10,290 kHz, DK/GC “892 892 7 7”, over S9, “11171 64385 82707 06123 22536 88280 84116”.
0940 UTC, 9,655 kHz, second sending, S8 to S9.

S11a log July/August

4870kHz	1955z	01/07 [371/00] Konyetz 1958z S9	Malc	FRI
	1955z	12/07 [371/00] 1958z QSA4 QRM1 QSB1	JkC	WED
	1955z	20/07 [372/40 89281 68573 27842 03711 68350 91108 40216 07691……23185 92936]	JkC	WED
	1955z	22/07 [372/40 89281……..92936] repeat of Weds	Malc	FRI
	1955z	27/07 [371/00] Konyetz 1958z S9	Malc	WED
	1955z	16/08 [370/35 12096…….25667] Konyetz 2005z S9	Malc	WED
	1955z	24/08 [371/00] КОНЕЦ 1958z QSA4 QRM1 QSB1	JkC	WED
	1955z	26/08 [371/00] КОНЕЦ 1958z QSA4 QRM1 QSB1	JkC	FRI
5149kHz	0455z	19/07 [321/00]	RNGB	TUE
	0455z	09/08 [328/38 74861 16971 03399 06098 03896 78017 17336……04697 65763] КОНЕЦ 0506z	Ed Smith	TUE
	0455z	12/08 [328/38 74861 16971 03399 06098 03896 78017 17336……04697 65763]	Ary	FRI
8530kHz	0915z	01/07 [484/00] Konyetz 0918z S2	Malc	FRI
	0915z	05/07 [481/34 56883 51637 47015 42518 38502 46770 12529 71524……49398 56431] Good	RNGB	TUE
	0915z	12/07 [484/00]	RNGB	TUE
	0915z	15/07 [484/00] Strong	RNGB	FRI
	0915z	22/07 [484/00] Konyetz 0918z S2	Malc	FRI
	0915z	26/07 [484/00] Konyetz 0918z S2	Malc	TUE
	0915z	02/08 [484/00] Konyetz 0918z S3	Malc	TUE
	0915z	09/08 [480/34 72982 67223 37018 03643 12419 32070 35593……22587 37654]	Ary	TUE
	0915z	12/08 [480/34 72982…..ect] Repeat of Tuesday	Ed Smith	FRI
	0915z	16/08 [484/00] Konyetz 0918z S3	Malc	TUE
	0915z	23/08 [484/00] Konyetz 0918z S3	Malc	TUE
	0915z	26/08 [484/00] Konyetz 0918z S3	Malc	FRI
	0915z	30/08 [484/00]	RNGB	TUE
11092kHz	1540z	05/07 [563/00]	Gary H	WED
	1540z	12/07 [563/00] КОНЕЦ 1543z QSA4 QRM1 QSB1	JkC	WED
	1540z	20/07 [560/37 44134 74002 84661 31906 16921 11221 04889 18211 46532……29401 07632]	JkC, Malc	WED
	1540z	27/07 [563/00] Konyetz 1543z S2	Malc	WED
	1540z	06/08 [563/00] Konyetz 1543z S7	Malc	SAT
	1540z	13/08 [563/00] Konyetz 1543z S4	Malc	SAT
	1540z	16/08 [564/32 26904…….63611] S9	Malc	WED
	1540z	24/08 [563/00] КОНЕЦ 1543z QSA4 QRM1 QSB1	JkC	WED
	1540z	27/08 [563/00] Out 1543z S2	Malc	SAT
11581kHz	1020z	01/07 [426/00] Konyetz 1023z S3	Malc, RNGB	FRI
	1020z	19/07 [426/00] Good	RNGB	TUE
	1020z	22/07 [426/00] Konyetz 1023z S8	Malc	FRI
	1020z	26/07 [426/00] Konyetz 1023z S4	Malc	TUE
	1020z	02/08 [426/00] Konyetz 1023z S6	Malc	TUE
	1020z	05/08 [426/00] Konyetz 1023z S5	Malc	FRI
	1020z	09/08 [426/31 57426 26313 26726 37726 79661 95791 17203……24101 96360]	Ary	TUE
	1020z	16/08 [426/00] Out 1023z S5	Malc	TUE
	1020z	26/08 [426/00] 1023z S6	Malc	FRI
	1020z	30/08 [426/00] Good	RNGB	TUE

16530kHz	1015z	11/07 [479/31 00327 22677 65632 54438 22247 28656 43666 05480……72334 44278 74620]	Ary	MON
	1015z	21/07 [475/00] Konyetz 1018z S2	Malc	THU
	1015z	25/07 [475/00] Konyetz 1018z S2	Malc	MON
	1015z	01/08 [475/00] Konyetz 1018z S2	Malc	MON
	1015z	08/08 [472/40 57529 02958 64188 24886 16417 36991 85051……23850 25250] Weak	RNGB	MON
	1015z	22/08 [475/00] Konyetz 0718z S2	Malc	MON
20180kHz	0715z	04/07 [382/00]	RNGB	MON
	0715z	27/07 [380/37 16597…….76978] Konyetz 0726z S6 QSB3	Malc	WED
	0715z	01/08 [382/00] Konyetz 0718z S3	Malc	MON
	0715z	10/08 [385/31 53324 86081 55526 36744 86452 23773 81243 28790……99800 47194]	RNGB	WED
	0715z	15/08 [382/00] Konyetz 0718z S6	Malc	MON

V07

Sunday

July 2016

0700z	**13582kHz**	**0720z**	**12182kHz**	**0740z**	**10282kHz**			
03/07	512 000					Weak		
10/07	512 1 711 41 37085 31217 ... 17339 87318 000 000					Weak		

512 711 41
37085 31217 22153 25720 98771
34198 05241 83774 04841 00014
13500 97343 38187 30287 33449
13197 44824 83314 12437 34358
13704 83240 00113 03071 15024
98570 47325 11157 82888 09340
73371 43498 05835 80452 98353
80895 42837 13839 23332 17339
87318
000 000 *Courtesy DanAr*

17/07	512 000	Fair			
24/07	512 000	Weak			
31/07	512 1 544 87 07422 ... 02156 000 000	Via GlobalTuners California	Danix		SUN

512 1 544 87
07422 41162 33797 58430 11827 10133 06561 22675 51144 98253
69569 69360 19942 31723 47167 35831 61337 00004 80841 07690
97535 64231 25479 37164 61551 63454 97013 08967 25714 85302
33359 87077 08426 55630 92435 06378 73241 36617 71061 28231
43705 48534 66553 07520 08719 38535 16524 23423 37421 18544
33055 71702 75271 82161 40960 24692 95483 67281 24671 75260
40194 83976 23761 10963 55264 18620 68011 65391 27696 47155
61611 64943 76810 51331 23932 25073 49850 00755 09482 76997
06961 90948 60581 43903 08285 55517 02156
000 000 *Courtesy Danix*

August 2016

0500z	**14823kHz**	**0520z**	**13423kHz**	**0540z**	**11523kHz**			
07/08	845 000					Weak		
21/08	NRH							
28/08	Message, unworkable							

V21

The Babbler continues to be mostly weak and difficult to copy. Only the following were logged.

V21 5637kHz 1300z 5/7 Present but too weak to copy

V21 6529kHz 1300z 12/7 Very weak, counts to 20 barely audible. TUE

V21 5637kHz 1300z 15/8 Present but too weak to copy. MON

V21 6529kHz 1300z 15/8 Present but weak, some counts to 40 heard. MON

V21 5637kHz 1300z 17/8 Present but too weak to copy. WED

V26

July 2016

4243kHz1208z	25/07/16[(From M95 Sked - Voice - USB - Chinese - Female - //9054) (Remote tuner Hong Kong)]	JPL	MON
4243kHz1207z	26/07/16[(From M95 Sked - Voice - USB - Chinese - Female - //9054) (Remote tuner Hong Kong)]	JPL	TUE
4243kHz1204z	27/07/16[(IP - Voice - USB - Chinese - Female - //9054) (Remote tuner Hong Kong)]	JPL	WED
4283kHz1016z	19/07/16[(IP - Voice - USB - Female - Chinese - //75533) (Remote tuner Hong Kong)]	JPL	TUE
7553kHz1016z	19/07/16[(IP - Voice - USB - Female - Chinese - //4283) (Remote tuner Hong Kong)]	JPL	TUE
8073kHz1154z	26/07/16[(From M95 Sked - Voice - USB - Chinese - Male - //9054) (Remote tuner Hong Kong)]	JPL	TUE
8073kHz1204z	27/07/16[(From M95 Sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)]	JPL	WED
9054kHz1208z	25/07/16[(From M95 Sked - Voice - USB - Chinese - Female - //4243) (Remote tuner Hong Kong)]	JPL	MON
9054kHz1207z	26/07/16[(From M95 Sked - Voice - USB - Chinese - Female - //4243) (Remote tuner Hong Kong)]	JPL	TUE
9054kHz1204z	27/07/16[(IP - Voice - USB - Chinese - Female - //4243) (Remote tuner Hong Kong)]	JPL	WED

August 2016

4243kHz1204z	09/08/16[(IP - Voice - USB - Chinese - Female - //9054) (Remote tuner Hong Kong)]	JPL	TUE
4532kHz1214z	19/08/16[(From M95 sked - Voice - USB - Chinese - Female - //9054) (Remote tuner Hong Kong)]	JPL	FRI
9054kHz1204z	09/08/16[(IP - Voice - USB - Chinese - Female - //4243) (Remote tuner Hong Kong)]	JPL	TUE
9054kHz1216z	11/08/16[(From M95 sked - Voice - USB - Chinese - Female - //4243 N/H) (Remote tuner Siberia)]	JPL	THU
9054kHz1214z	19/08/16[(From M95 sked - Voice - USB - Chinese - Female - //4243) (Remote tuner Hong Kong)]	JPL	FRI

X06 reports

The focus lies on the X06 variants before transmissions of family Ib – not only X06b, but also X06a. Of course you will also find usual X06 transmissions, which are still on air. Thanks to all contributors.

X06 Mazielka (1c) logs section

Date	Day	UTC	Freq	Scale	Monitor	Comments
20160701	Fri	0620-0624	18260	123456	Antonio/IT	X06c
20160703	Sun	0706-0711	13481	452163	Peter/UK	S1, G66
20160704	Mon	0910-0917	13452	165324	Peter	S9, G1
20160704	Mon	1543-1544	10270	532614	Peter	Fair, G4
20160704	Mon	1700	8047	1-----	Danix/PL	X06b single tone variant before M12
20160705	Tue	0922-0928	18206	246531	Peter	Fair, G16
20160705	Tue	1817/1822	15884	1-6-16	LU5EMM	Rare X06b before XPA2p
20160706	Wed	0610	16332	1-----	Danix	X06b single tone variant before M12
20160706	Wed	1855	12166	1--6--	LU5EMM	X06b before E07a
20160707	Thu	1805/1819	14384	1--6--	LU5EMM	X06b before XPA2p
20160707	Thu	1806-1820	14984	1--6--	LU5EMM	X06b before XPA2p
20160707	Thu	1807/1820	15884	1--6--	LU5EMM	X06b before XPA2p(1)
20160712	Tue	0810-0819	13420	534216	Danix	G87
20160712	Tue	1804	14384	2--6--	LU5EMM	X06b before XPA2p(2)
20160712	Tue	1804/1808	15884	2--6--	LU5EMM	X06b before XPA2p(2)
20160712	Tue	1805/1809	14984	2--6--	LU5EMM	X06b before XPA2p
20160712	Tue	1807/1808	14384	2--6--	LU5EMM	X06b before XPA2p(2)
20160713	Wed	0815-0822	13423	421635	Danix	R
20160713	Wed	1919	9266	61-6-3	LU5EMM	Rare X06b before E07a
20160713	Wed	1920	10766	61-6-3	LU5EMM	Rare X06b before E07a
20160713	Wed	1923/1925	12166	61-6-3	LU5EMM	Rare X06b bef. E07a (2nd TX w/ hum)
20160714	Thu	1658-1659	11435	1-----	Danix	X06b single tone variant before M12
20160714	Thu	1709	10943	1--6--	Ary/NL	X06b before XPA
20160714	Thu	1814/1816	14984	1--6--	LU5EMM	X06b before XPA2p
20160714	Thu	1815/1817	15884	1--6--	LU5EMM	X06b before XPA2p
20160715	Fri	0825	14570	324615	Antonio/IT	G189
20160716	Sat	1928	15967	1--6--	LU5EMM	X06b before XPA2r
20160716	Sat	1939/1942	15967	1--6--	LU5EMM	X06b before XPA2r
20160716	Sat	1941	12217	1--6--	LU5EMM	X06b before XPA2r
20160716	Sat	1942	13884	1--6--	LU5EMM	X06b before XPA2r
20160718	Mon	0710-0712	12177	356412	Antonio	R
20160718	Mon	0802-0806	12150	256341	Danix	R
20160718	Mon	0835-0837	14392	532614	Antonio	Alert 2 (G147) 1
20160718	Mon	0835-0843	14570	324615	Antonio	R
20160718	Mon	0847-0850	13395	532614	Schorschi	2.2 S9
20160718	Mon	0855-0857	14631	362154	Antonio	R
20160718	Mon	1106	14501	214356	Schorschi	S9, R
20160719	Tue	0826-0909	12157	165423	Danix	S6, G151
20160719	Tue	0843-0848	12149	154263	Danix	S9+20, G151

Date	Day	UTC	Freq	Scale	Monitor	Comments
20160719	Tue	1814/1823	14384	1--6--	LU5EMM	X06b before XPA2p
20160719	Tue	1815/1824	14984	1--6--	LU5EMM	X06b before XPA2p (parallel TXs)
20160719	Tue	1815/1824	15884	1--6--	LU5EMM	X06b before XPA2p (parallel TXs)
20160720	Wed	1117-1118	13978	215346	ANON	G167
20160720	Wed	1839	12166	1--6--	LU5EMM	X06b before E07
20160720	Wed	1854-1855	12166	1--6--	LU5EMM	X06b before E07 (last rpt: 1859)
20160720	Wed	1855	9266	1--6--	LU5EMM	Weak X06b without E07 (0-msg)
20160720	Wed	1857	10766	1--6--	LU5EMM	X06b before E07
20160722	Fri	0509-0513	13510	216435	Danix	G336
20160722	Fri	1247-1253	12177	356412	Schorschi	S9+20, G271
20160722	Fri	1956/1959	12217	1--6--	LU5EMM	X06b before XPA2r (with high hum)
20160722	Fri	1957/2000	13884	1--6--	LU5EMM	X06b before XPA2r (w/ high hum(3))
20160722	Fri	2000/2003	15967	1--6--	LU5EMM	X06b before XPA2r(3)
20160722	Fri	2002	12217	1--6--	LU5EMM	X06b before XPA2r
20160722	Fri	2003	13884	1--6--	LU5EMM	X06b before XPA2r
20160722	Fri	2005	15967	1--6--	LU5EMM	X06b before XPA2r
20160723	Sat	1959/2009	15967	1--6--	LU5EMM	X06b before XPA2
20160723	Sat	2007	12217	1--6--	LU5EMM	X06b before XPA2
20160723	Sat	2008	13884	1--6--	LU5EMM	X06b before XPA2
20160724	Sun	1947/2005	12138	1--6--	LU5EMM	X06b before XPA2
20160724	Sun	1949	13538	1--6--	LU5EMM	X06b before XPA2
20160724	Sun	1951	14538	1--6--	LU5EMM	X06b before XPA2
20160724	Sun	2002/2007	14538	1--6--	LU5EMM	X06b before XPA2
20160725	Mon	0950-0951	13517	463125	Schorschi	S9+, G222
20160726	Tue	1821/1823	14384	1--6--	LU5EMM	X06b before XPA2p
20160726	Tue	1822/1824	14984	1--6--	LU5EMM	X06b before XPA2p
20160726	Tue	1822/1824	15884	1--6--	LU5EMM	X06b before XPA2p
20160727	Wed	0729-0731	16045	435621	Danix	G244
20160727	Wed	0810-0833	13320	1--6--	Danix	X06b (not related to family Ib)
20160727	Wed	1818	12166	1--6--	LU5EMM	X06b before E07
20160727	Wed	1819	10766	1--6--	LU5EMM	X06b before E07
20160728	Thu	1413-1416	13441	263145	Schorschi	S9, G256
20160728	Thu	0811-0818	14550	153624	Danix	G249
20160728	Thu	1806/1810	14384	1--6--	LU5EMM	X06b before XPA2p
20160728	Thu	1808/1811	14984	1--6--	LU5EMM	X06b before XPA2p
20160728	Thu	1842/1845	15884	1--6--	LU5EMM	X06b before XPA2p
20160801	Mon	1301	13383	1-----	Danix	X06b single tone variant before M12
20160801	Mon	1302	14683	1-----	Danix	X06b single tone variant before M12
20160801	Mon	1303	15983	1-----	Danix	X06b single tone variant before M12
20160802	Tue	0824-0852	15989	125643	Danix	Alert 2 (rare scale, G317) 1
20160802	Tue	0837-0841	12149	154263	Danix	G7
20160802	Tue	0937-0942	14615	125643	Danix	2.2
20160802	Tue	0949-0951	13411	165423	Danix	G12
20160802	Tue	1207-1210	16188	325614	Antonio	G392
20160803	Wed	1842	10766	1--6--	LU5EMM	X06b before E07
20160803	Wed	1844/1932	12166	1--6--	LU5EMM	X06b before E07
20160805	Fri	0547	13954	213546	Antonio	G338
20160805	Fri	0958-1038	9158	361245	Danix	Rare frequency, G53
20160805	Fri	1758-1800	16167	1--6--	LU5EMM	X06b before XPA2r
20160805	Fri	1801	14663	1--6--	LU5EMM	Weak X06b before XPA2r
20160805	Fri	1804	16167	1--6--	LU5EMM	Weak X06b before XPA2r
20160806	Sat	0503/0505	10868	1--6--	Ary	X06b before XPA (2nd rpt: 0509)
20160806	Sat	0507	12168	1--6--	Ary	X06b before XPA
20160806	Sat	0508	13368	1--6--	Ary	X06b before XPA
20160808	Mon	0808-0810	11537	421635	Danix	Alert 2 (G74) 1
20160808	Mon	0840-0848	7426	421635	Danix	2.2
20160808	Mon	0943-1019	16117	463125	Danix	G77
20160809	Tue	0812-0835	14861	542136	Danix	G88
20160809	Tue	1007-1013	13510	612534	Danix	G89
20160809	Tue	1009-1012	17470	216354	Danix	G388
20160809	Tue	1810/1813	16314	1--6--	LU5EMM	X06b before XPA2p
20160809	Tue	1811	14514	1--6--	LU5EMM	X06b before XPA2p
20160809	Tue	1812	15814	1--6--	LU5EMM	X06b before XPA2p
20160809	Tue	1917/1926	14738	1--6--	LU5EMM	X06b before XPA2m
20160809	Tue	1921	13438	1--6--	LU5EMM	X06b before XPA2m
20160809	Tue	1924	12138	1--6--	LU5EMM	X06b before XPA2m
20160810	Wed	0512/0516	10868	1--6--	Ary	X06b before XPA
20160810	Wed	0802-0819	11153	465132	Danix	G100
20160810	Wed	0852-0902	16116	134265	Danix	G90
20160811	Thu	0732-0738	9065	561243	Danix	Rare scale, G117
20160811	Thu	0821-0837	13843	153624	Danix	G249
20160811	Thu	1803/1805	14514	1--6--	LU5EMM	X06b before XPA2p
20160811	Thu	1804/1807	15814	1--6--	LU5EMM	X06b before XPA2p
20160811	Thu	1806/1808	16314	1--6--	LU5EMM	X06b before XPA2p
20160813	Sat	2006-2007	10469	1-----	Danix	X06b single tone variant before M12
20160813	Sat	1807-1808	12179	1-----	Danix	X06b single tone variant before M12
20160813	Sat	2008-2009	13369	1-----	Danix	X06b single tone variant before M12
20160814	Sun	1901/1906	14738	1--6--	LU5EMM	X06b before XPA2m
20160814	Sun	1902	12138	1--6--	LU5EMM	X06b before XPA2m with hum
20160814	Sun	1903	13438	1--6--	LU5EMM	X06b before XPA2m with hum
20160816	Tue	1653	12187	1--6--	Ary	X06b before XPA
20160816	Tue	1807	14514	1--6--	LU5EMM	X06b before XPA2p
20160816	Tue	1808	15814	1--6--	LU5EMM	X06b before XPA2p

Date	Day	UTC	Freq	Scale	Monitor	Comments
20160816	Tue	1809	16314	1--6--	LU5EMM	X06b before XPA2p
20160817	Wed	1108-1120	16115	215346	Danix	G167
20160817	Wed	1856/1920	12166	1--6--	LU5EMM	X06b before E07
20160817	Wed	1917	9266	1--6--	LU5EMM	X06b before E07
20160817	Wed	1918	10766	1--6--	LU5EMM	X06b before E07
20160819	Fri	1830	13923	6--1--	LU5EMM	X06b invert before XPA2r
20160819	Fri	1831	14663	6--1--	LU5EMM	X06b invert before XPA2r
20160819	Fri	1832	16167	6--1--	LU5EMM	X06b invert before XPA2r
20160823	Tue	1757	15814	1--6--	LU5EMM	X06b before XPA2p
20160823	Tue	1758-1800	16314	1--6--	LU5EMM	X06b before XPA2p (rpt at 1821)
20160825	Thu	1818/1820	14514	1--6--	LU5EMM	X06b before XPA2p
20160825	Thu	1819/1822	15814	1--6--	LU5EMM	X06b before XPA2p
20160825	Thu	1821/1826	16314	1--6--	LU5EMM	X06b before XPA2p
20160826	Fri	1430	12213	616161	Ary	X06a before E07a
20160827	Sat	1740	13923	6--1--	LU5EMM	X06b before XPA2r
20160827	Sat	1742	14663	6--1--	LU5EMM	X06b before XPA2r
20160827	Sat	1759/1801	16167	6--1--	LU5EMM	X06b before XPA2r (2nd rpt: 1805)
20160831	Wed	1925/1928	9266	1--6--	LU5EMM	X06b before E07a (2nd rpt: 1936)
20160831	Wed	1926/1929	10766	1--6--	LU5EMM	X06b before E07a (2nd rpt: 1938)
20160831	Wed	1930	12166	1--6--	LU5EMM	X06b before E07a
20160831	Wed	1933	12166	1--6--	LU5EMM	X06b before E07a (then test tone)
20160831	Wed	1935/1937	12166	1--6--	LU5EMM	X06b before E07a

1) 2nd transmission parallel to 14984 kHz
2) First and last transmission on 15884 and 14384 kHz in parallel
3) Parallel TXs at 2000 UTC

Thanks Jochen

Polytones

XPA c

Wednesday/Saturday

July 2016

0600z	**11409kHz**	**0620z**	**13509kHz**	**0640z**	**14609kHz**	
02/07	456 1 08762 00197 23554 25001					Fair
06/07	456 000 02995 00001 00000 10140					Very strong
09/07	456 000 03906 00001 00000 10140					Very strong
13/06	456 1 05752 00213 52615 17617					Very strong
16/07	456 1 05752 00213 52615 17617					Fair
20/06	456 1 05752 00213 52615 17617					Very strong
23/07	456 000 03906 00001 00000 10140					Very strong
27/07	456 1 06704 00193 98661 12374			[0640z Weak]		Strong
30/07	456 1 06704 00193 98661 12374			[0640z Weak]		Very strong

August 2016

0600z	**10868kHz**	**0620z**	**12168kHz**	**0640z**	**13368kHz**	
03/08	813 1 00344 00213 01582 31766					Very strong
06/08	813 1 00344 00213 01582 31766					Very strong
10/08	813 000 07738 00001 00000 10140					Very strong [A]
13/08	813 000 05677 00001 00000 10140					
17/08	813 1 05405 00197 75897 21120					Very strong [A]
20/08	813 1 05405 00197 75897 21120					Very strong [A]
24/08	813 000 05729 00001 00000 10140					Weak [A]
27/08	813 000 08998 00001 00000 10140					Very strong [A]
31/08	813 1 06610 00221 46447 31531					Weak, noisy

XPA e

Tuesday/Thursday

July 2016

1730z	**10943kHz**	**1750z**	**10243kHz**	**1810z**	**9243kHz**	
05/07	922 000 03790 00001 00000 10140					Fair
07/07	922 000 07763 00001 00000 10140					Weak
12/07	922 1 07168 00153 23972 55765					Weak
14/07	921 1 07168 00153 23972 55765					Strong
19/07	922 000 08307 00001 00000 10140					Weak
21/07	922 000 07918 00001 00000 10140					Strong
26/07	922 1 05161 00113 99891 33057			[1730/1750z unworkable]		Weak
28/07	922 1 05161 00113 99891 33057					Fair

August 2016

1730z	**12187kHz**	**1750z**	**10787kHz**	**1810z**	**9387kHz**	
02/08	173 000 09734 00001 00000 10140			[1810zHETQRM3}		Very strong
04/08	173 000 05421 00001 00000 10140			[1810z BCQRM3]		Very strong
09/08	173 1 06858 00231 61999 56251					Very strong [A]
11/08	173 1 06858 00231 61999 56251					Weak [A]
16/08	173 000 09657 00001 00000 10140					Weak [A]
18/07	173 000 08701 00001 00000 10140					Fair [A]
23/08	Weak					[A]
25/08	Weak					[A]
30/08	173 000 01275 00001 00000 10140			[1810z BCQRM4]		Fair

XPA2 m

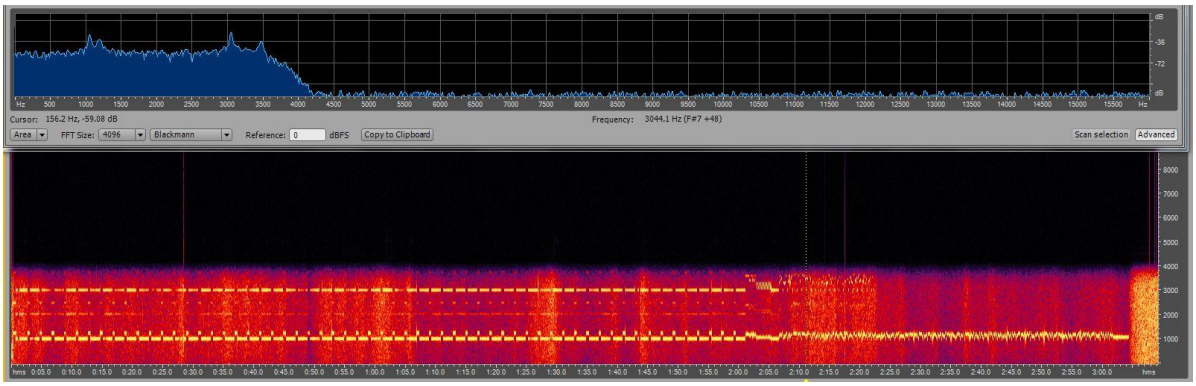
Sunday/Tuesday

July 2016

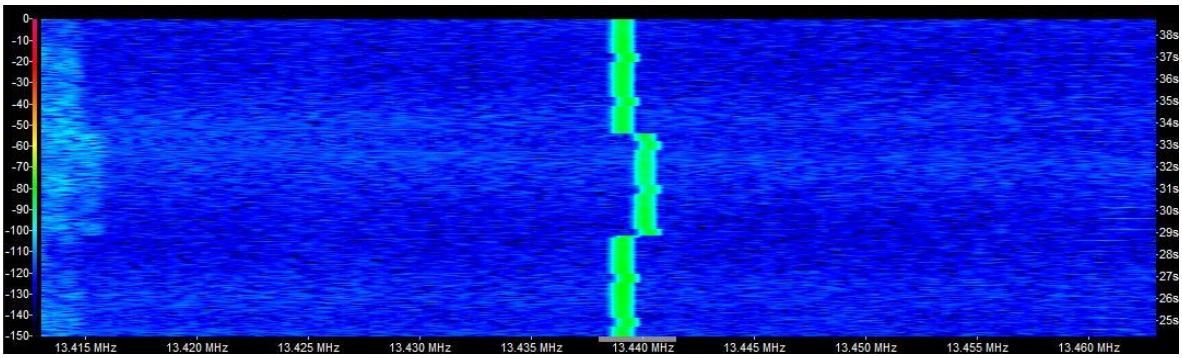
2100z	**14538kHz**	**2120z**	**13538kHz**	**2140z**	**12138kHz**	
03/07	02194 00001 00000 10140					Strong
05/07	06399 00109 44517 52001					Very strong
10/07	06399 00109 44517 52001					Very strong
12/07	06399 00109 44517 52001					Very strong
17/07	01423 00001 00000 10140					Very strong
19/07	07975 00097 39040 56326			[2100z weak unworkable]		Strong
24/07	07975 00097 39040 56326					Very strong
26/07	02311 00001 00000 10140			[2120z 8s sent only]		Strong
31/07	07010 00001 00000 10140					Very strong

August 2016

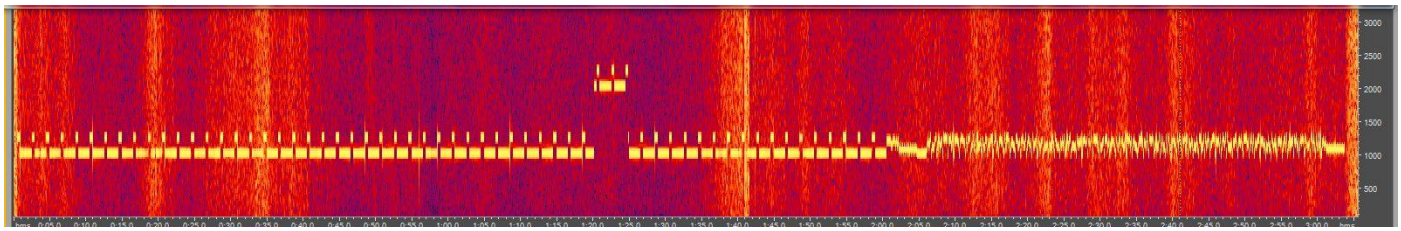
2000z 14738kHz 2020z 13438kHz 2040z 12138kHz



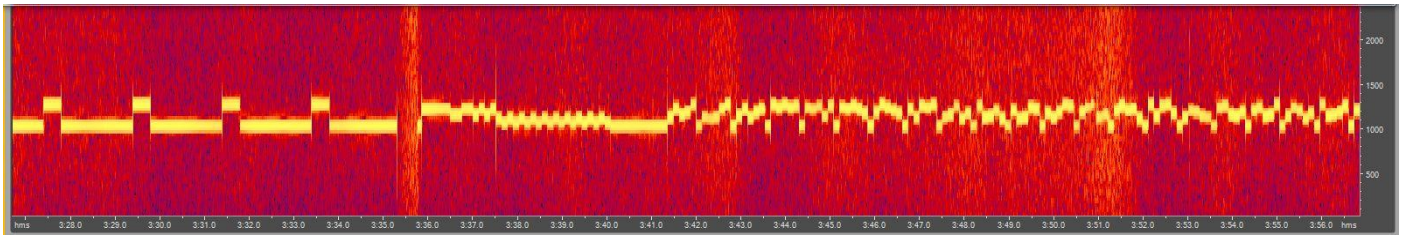
2000z 02/08 Double sending



2020z 02/08 Shift in frequency [spectral image]

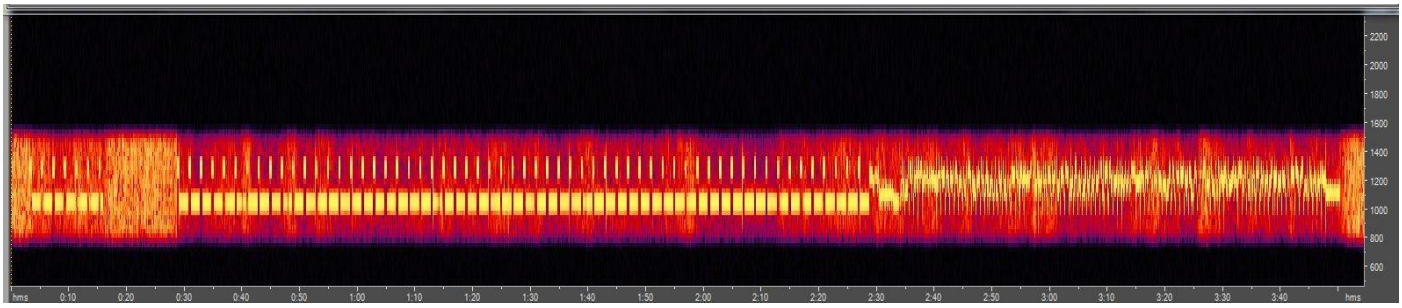


2020z 02/08 Shift in frequency [Sonogram image]



2040z 02/08 Break in transmission

02/08	06249 00069 16046 36751	*Scheduled transmissions beset with problems - see above.*	Very strong
07/08	06249 00069 16046 36151		Very strong
14/08	04629 00001 00000 10140		Weak DanAr
16/08	05468 00085 02944 21253		Weak DanAr
21/08	05468 00085 02944 21253		Strong [A]
23/08	Weak		[A]
28/08	08988 00001 00000 10140		Very strong
30/08	08864 00093 78099 75243	[2020z Break in sending 13s, see below]	Very strong



XPA2 m 13438kHz 2020z 30/08 Very strong signals, note 13s break in transmission during run in

XPA2 p

Tuesday/Thursday

July 2016

1900z	**15884kHz**	**1920z**	**14984kHz**	**1940z**	**14384kHz**	
05/07	06382 00261 92510 65154					Very strong
07/07	06382 00261 92510 65154			[1900z NRH]		Very weak
12/07	09123 00001 00000 10140					Weak
14/07	02983 00001 00000 10140					Very strong
19/07	07426 00219 77095 11046			[1920/1940z Weak]		Fair
21/07	07426 00219 77095 11046					Very strong
26/07	04357 00001 00000 10140					Very Strong
28/07	04968 00001 00000 10140					Very strong

August 2016

1900z	**16314kHz**	**1920z**	**15814kHz**	**1940z**	**14514kHz**	
02/08	03122 00171 14797 25430					Very strong
04/08	03122 00171 14797 25430					Very strong
11/08	06917 00001 00000 10140					Weak DanAr
16/08	00323 00195 12375 32233					Weak DanAr
18/08	00323 00195 12375 32233					Weak DanAr
23/08	02000 00001 00000 10140					Weak DanAr
25/08	03762 00001 00000 10140					Weak DanAr
30/08	01572 00183 38963 00224			[1900z Weak and noisy]		Very strong

XPA2 r

Friday/Saturday

July 2016

2100z	**15967kHz**	**2120z**	**13884kHz**	**2140z**	**12217kHz**	
01/07 / 02/07	08442 00001 00000 10140 / 08961 00001 00000 10140					Strong / Very strong
08/07	01591 00001 00000 10140			[2100z Very weak]		Strong
09/07	06595 00001 00000 10140			[2100z Very weak]		Very strong
15/07	00651 00057 61649 11472					Very strong
16/07	00651 00057 61649 11472					Strong
22/07	03816 00001 00000 10140					Very strong
23/07	03512 00001 00000 10140					Very strong

29/07 Extremely weak, poor condx, unworkable

30/07 05560 00001 00000 10140 Very strong

August 2016

1900z 16167kHz 1920z 14663kHz 1940z 13923kHz

05/08 01037 00001 00000 10140 Very strong

06/08 02417 00001 00000 10140 Very strong

12/08 01165 00079 01885 56667 Weak DanAr

19/08 08875 0001 00000 10140 Fair [A}

20/08 08092 0001 00000 10140 Strong [A]

26/08 07965 00103 93784 74653 Weak DanAr

27/08 07965 00103 93784 74653 Weak DanAr

XPA2 t

Tuesday/Friday

July 2016

0070z 20173kHz 0720z 18763kHz 0740z 14763kHz

01/07 04967 00001 00000 10140 Strong

05/07 05893 00157 41217 46377 Strong

08/07 0700z NRH; 0720, 0740z very weak Unworkable

12/07 05845 00001 00000 10140 Weak

15/07 06101 00001 00000 10140 Fair

19/07 02497 00127 67640 11033 Weak, QSB, noise

22/07 02497 00127 67640 11033 [0700z NRH, 0720z Very weak QSB4 unworkable] Fair

26/07 09276 00001 00000 10140 Very strong

29/07 MISSED

August 2016

0700z 20049kHz 0720z 18549kHz 0740z 17449kHz

02/08 09900 00001 00000 10140 Very strong

05/08 06824 00001 00000 10140 Strong

Unattended operation between 09/08 to 30/08 ….. poor condx, unworkable signals recorded.

M42 FSK [Schedules in Chart Section].

Welcome to the M42* column. I am Danix, a member of Priyom. M42c and M42d are frequently neglected digital counterparts of Family Ia analogue broadcasts such as E06, G06, S06, and M14.

These two modes used to be covered by Ian Wraith in his *Digital, Incursions and Unexplained Signals* column up until the Newsletter Issue #90, under the names *FSK200/500* and *FSK200/1000*, respectively. The difference from his column is that I am going to focus more on traffic analysis and logs, in the same manner as the rest of the Newsletter.

M42c and M42d are to Family Ia what XPA and XPA2 are to Family Ib. Unlike XP*, which possess about the same amount of schedules as each of their analogue counterparts, M42* represent a clear majority of their family's broadcasts:

Unlike XP*, which are MFSK modes with tones mapped directly to digits, M42* are binary FSK modes with more sophisticated encoding which features error detection capabilities (which I'm not able to make use of unfortunately). M42c is 200bd/500Hz/1.5sb Baudot RTTY sending 5FG's in a 25-character block format. M42d is a proprietary 200bd/1000Hz modem that encodes *16-bit binary groups* in 288-bit blocks. Since protocol descriptions would extend this already long column way too much, you can find them at Priyom:

http://priyom.org/number-stations/digital/f01/protocol

http://priyom.org/number-stations/digital/f06/protocol

While the format of XP* directly links them to Family Ib, M42* show less similarities. Their headers, instead of using the 3FG 3FG 2/3FG format known from E06/G06/S06/M14, are 5 groups long and include the message date (day of the month only) and a serial number (ranging from 1 to 99), which is always increased with each new message, and is an indicator of how much traffic was or was not missed. In addition to that, this header format is not unique to these two modes, but has been used by FAPSI intelligence/diplomatic broadcasts in general. What links these modes to Family Ia are:

Next day repeats in case of messages but not nulls, which are unique to this family;

A M42d schedule that's been replaced by E06 on 4 one-off occasions since July 2015;

A M42d schedule on weeks 2/4 with M14 on weeks 1/3 on the same time slots and frequencies; (sadly defunct since October 2015)

One of the unique features of these modes are the groups 1-12 (M42c) or 2-11 (M42d), which on a number of schedules, but not all of them, are very similar between messages. The schedules with this feature present have the relevant groups highlighted in yellow in the logs on the following pages. The same feature was present in the E06 messages that were made in place of the M42d schedule mentioned above!

What have these modes been doing for the last 2 months? One long-running M42d schedule was deleted in the middle of July. Then, later that month, a number of schedules that have not been heard with messages for at least 2 months started sending them. This included links that receive less than 6 messages per year. Outside of M42*, it even affected one S06 schedule.

You can find a schedule chart for M42c and M42d at the end of this newsletter. If you have any logs or feedback , you can send it either to the Group or directly to me, danix111@priyom.org.

M42c

Monday

Cuban schedule

0025z/0125z 14878kHz 0035/0135z 12185kHz

04/07 No reports

11/07 No reports

18/07 Link ID 00117, Date 18th, Serial #33, Groups 116 (11177 00117 73158 18033 01169)
99093 47317 82531 21292 64696 99409 51072 33287 16191 21460 73652 24396 …33114 00000

25/07 No reports

0025/0125z 16023kHz 0035/0135z 14373kHz

01/08 Link ID 00117, Date 1st, Serial #35, Groups 157 (11177 00117 35697 01035 01579)
20340 26014 53632 70748 18629 26327 04058 00701 37490 78364 39314 43295 …35155 00000

08/08 No reports

15/08 Link ID 00117, Date 15th, Serial #37, Groups 130 (11177 00117 84125 15037 01309)
95060 83782 10585 50738 23077 76911 90898 80370 69217 79762 71588 45656 … 37128 00000

22/08 Link ID 00117, Date 22nd, Serial #38, Groups 165 (11177 00117 62495 22038 01659)
_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ … 38163 00000

Apart from the area of Moscow and an unknown site in Far Eastern Russia, one of the places M42c emits from is, surprisingly, Cuba. Despite its location, this schedule is often readable in Europe. It has been reported for over 3 years, but 00117 is an old link ID that was already noted in the 1990s as sending from Cuba, but using a completely different mode. It appears to always deliver one new message every week.

First Tuesday (repeats Friday)

1840z 14829kHz 1850z 12214kHz 1900z 10932kHz

05/07 Null message

1840z 15854kHz 1850z 13543kHz 1900z 11126kHz

02/08 & 05/08 Serial #47, Groups 60
76428 51551 08726 90984 89388 72979 59203 15965 61499 54686 32716 99563 …47060 00000

Up until January 2016, this schedule, which broadcasts only once a month, sent about 6-8 messages per year. Then it changed to delivering only nulls, up until August 2016, when a message turned up during the low traffic schedule message sending event.

Friday

Cuban schedule

2230/2330z 18562kHz 2240/2340z 16218kHz

01/07 No reports

08/07 No reports

15/07 No reports

22/07 Link ID 00116, Date 22nd, Serial #34, Groups 210 (11177 00116 71825 22034 02109)
52907 60073 27071 33763 96959 81753 80773 46555 89396 64150 76681 68231 … 34208 00000

29/07 Link ID 00116, Date 29th, Serial #35, Groups 169 (11177 00116 42358 29035 01699)
64475 38273 53748 00164 58312 29554 _____ _____ _____ _____ _____ _____ … 35167 00000

2230/2330z 20823kHz 2330/2340z 18397kHz

05/08 Link ID 00116, Date 5th, Serial #36, Groups 155 (11177 00116 29465 05036 01559)
83236 22470 49654 64251 61377 12108 90134 85822 06361 05742 00339 04334 … 36153 00000

12/08 Link ID 00116, Date 12th, Serial #37, Groups 174 (11177 00116 45912 12037 01749)
54765 69374 52547 44307 86884 31492 06892 66495 04871 72722 61061 59490 … 37172 00000

19/08 Link ID 00116, Date 19th, Serial #38, Groups 189 (11177 00116 78153 19038 01899)
_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ … 38187 00000

26/08 Link ID 00116, Date 26th, Serial #39, Groups 146 (11177 00116 35974 26039 01469)
36787 26629 70372 35178 94164 35487 33501 45707 89939 46455 56062 69929 … 39144 00000

Another Cuban M42c schedule, very similar to Monday 0025/0035/0125/0135z; it also delivers one new message every week, and also uses an old known link ID from the 1990s. However, this one is inaudible in Europe, and so I always need to use remotes in the Americas to receive it, and even there it's often only partially readable. If any American monitors could help, I'd be thankful!

Saturday

1200z 16329kHz 1210z 14641kHz 1220z 12187kHz

02/07 Null message

09/07 Null message

16/07 Null message

23/07 Null message

30/07 Null message

1200z	**17482kHz**	**1210z**	**15967kHz**	**1220z**	**13396kHz**

06/08 Null message

13/08 Null message

20/08 Null message

27/08 Null message

This schedule sends traffic very rarely. While there were 4 messages between April 2012 and April 2013, none have been logged since.

Saturday

1810z	**16147kHz**	**1820z**	**14389kHz**	**1830z**	**12214kHz**

02/07 Null message

09/07 Null message

16/07 Null message

23/07 Null message

30/07 Null message

1810z	**15931kHz**	**1820z**	**13452kHz**	**1830z**	**11093kHz**

06/08 Null message [1810z using erroneous 250 Hz shift]

13/08 Null message

20/08 Null message

27/08 Null message

This schedule was first logged in June 2013, but it was definitely active earlier. No known traffic logs.

M42d

Sunday (repeats Monday, and also Tuesday 1650/1700/1710z)

1530z	**17544kHz**	**1540z**	**15626kHz**	**1550z**	**13496kHz**

03/07 Link ID 20501, Null message

10/07 Link ID 20501, Null message

17/07 Link ID 20501, Null message

24/07 Link ID 20501, Null message

31/07 Link ID 20501, Null message

1530z	**17428kHz**	**1540z**	**15663kHz**	**1550z**	**13424kHz**

07/08 & 08/08 Link ID 20501, Date 4th, Serial #56, Groups 128 (1be9 5015 dce4 288c 8cef) 3b76 92e2 cbdc a863 7e4c a76a 7482 67ae 0095 67ad ca7d e4d8 … 6227 08a0

Link ID 20501, Date 5th, Serial #57, Groups 119 (1be9 5015 9734 328e 82f6) bae2 9382 ce5c a8da e99c b16a d882 7a6c 4096 67b4 0a7d bdb9 … 8abd 8000

14/08 Link ID 20501, Null message

21/08 Link ID 20501, Null message

28/08 Link ID 20501, Null message

Link ID 20501 is presently the only M42d link ID that maintains two schedules. It first broadcasts on Sunday 1530/1540/1550z. The Tuesday schedule is primarily used for repeats from Sunday, though sometimes it gives newer messages. In addition to that, both the Sunday and Tuesday broadcasts give repeats the next day, making it possible to catch one message for 4 days in a row.

The least satisfying part of this double schedule scheme is that each of those schedules maintain two different serial numbers. Currently the Tuesday number is 5 messages ahead comparing to the Sunday one. What's the point?

This link ID gives mainly nulls, but curiously it always has to send at least one message in May. This was noted in 2013, 2014, 2015, and 2016; no data available for earlier years. It still sends some traffic in other months, though.

First/Third Monday (repeats Wednesday 2100/2110/2120z)

0400z	**11049kHz**	**0410z**	**9126kHz**	**0420z**	**8137kHz**
04/07	Link ID 45079, Null message				
18/07	Link ID 45079, Null message				
0400z	**10748kHz**	**0410z**	**9139kHz**	**0420z**	**7424kHz**
01/08	Link ID 45079, Date 26th, Serial #15, Groups 224 (1be9 b017 462d 0425 f4e7) 583b 4f12 ddd7 0996 971b 56e2 f917 e2a0 dce1 15fa 2318 7b19 … a6b2 f200				
15/08	Link ID 45079, Null message				

Interesting schedule, in that until late 2015 it had almost no traffic. First logged in September 2013 on its message-only repeat slot, and perhaps active earlier, there were two messages earlier in 2015, in April and July, with very low serial numbers, #3 and #4 respectively. From October 2015 to March 2016, there was always at least one new message every month, but since then it has slowed down. Started adopting new frequencies in January 2016.

Tuesday (repeats Wednesday)

1400z	**17438kHz**	**1410z**	**15849kHz**	**1420z**	**13376kHz**
05/07	Link ID 32799, Null message				
12/07	Link ID 32799, Null message				
19/07	NRH				
26/07	NRH				

Long-running schedule that has unfortunately become inactive while compiling this column. It was first logged in March 2009. During its 7+ years of operation, it sent messages very sparsely, giving only 7 from October 2014 to April 2016. Its final message was on April 19, 2016, with serial number #41.

Tuesday (repeats Wednesday)

1650z	**17479kHz**	**1700z**	**15931kHz**	**1710z**	**13567kHz**
05/07	Link ID 20501, Null message				
12/07	Link ID 20501, Null message				
19/07	Link ID 20501, Null message				
26/07	Link ID 20501, Null message				
1650z	**17431kHz**	**1700z**	**15842kHz**	**1710z**	**13408kHz**
02/08	Link ID 20501, Null message				
09/08 & 10/08	Link ID 20501, Date 4th, Serial #61, Groups 128 (1be9 5015 dce4 2898 8cef) 3b76 92e2 cbdc a863 7e4c a76a 7482 67ae 0095 67ad ca7d e4d8 … 6227 08a0 Link ID 20501, Date 5th, Serial #62, Groups 119 (1be9 5015 9734 329b 82f6) bae2 9382 ce5c a8da e99c b16a d882 7a6c 4096 67b4 0a7d bdb9 … 8abd 8000 Repeat of the 07/08 & 08/08 Sunday 1530/1540/1550z double message except with different serial numbers.				
16/08	Link ID 20501, Null message				
23/08	Link ID 20501, Null message				

See the Sunday 1530/1540/1550z schedule for information.

Tuesday (repeats Friday 0600/0610/0620z)

2300z	**14456kHz**	**2310z**	**12188kHz**	**2320z**	**11084kHz**
05/07	Link ID 40988, Null message				
12/07	Link ID 40988, Date 8th, Serial #70, Groups 138 (1be9 a01c 15c0 50af 97e6) 315a 5261 9055 b5fa 66f3 1a6f bcba f50e 2831 be75 13aa d108 … 5d85 6254				

19/07 Link ID 40988, Null message

26/07 Link ID 40988, Null message

2300z 12184kHz 2310z 10189kHz 2320z 8116kHz

02/08 Link ID 40988, Null message

09/08 Link ID 40988, Null message

16/08 Link ID 40988, Null message [2320z started using erroneous 500 Hz shift, switched to correct 1000 Hz 34 seconds in]

23/08 Link ID 40988, Null message

Up until mid-2015, this schedule delivered short messages almost every week. Then it changed to sending one massive message (500-1000 groups) in the middle of each month, while leaving the rest of the broadcasts with nulls. Since June 2016, this is being followed erratically, with no messages sent at all that month, and neither in August.

Wednesday (repeats Thursday)

Far Eastern schedule

0600z 17419kHz 0610z 15707kHz 0620z 13446kHz

06/07 & 07/07 Link ID 32817, Date 2nd, Serial #73, Groups 428 (1be9 8031 0358 14b6 d2ee)
621e 5529 50fc 9f73 4b69 870d 420c d4d0 d869 1fc4 e15b 36d5 … d5b8 6dea

13/07 No reports

20/07 No reports

27/07 & 28/07 Link ID 32816, Date 23rd, Serial #76, Groups 285 (1be9 8030 8510 e6be 3eea)
2c1a d127 d367 c786 6588 e241 17a5 129b 2ad7 f528 b995 c269 … 5626 b280

0600z 16346kHz 0610z 14847kHz 0620z 12223kHz

03/08 No reports

10/08 & 11/08 Link ID 32817, Date 6th, Serial #78, Groups 231 (1be9 8031 29c4 3cc3 fce5)
d00d f234 d0f7 1dde 186b c98f 8e09 3948 f181 5240 1617 f9cc … c16f 0e7d

Link ID 32817, Date 6th, Serial #79, Groups 318 (1be9 8031 9688 3cc5 5aec)
4725 a183 cc2c 15ab 27ef 3d40 d72f 90f8 f213 a7a4 695e 720c … f1d9 6e00

17/08 Link ID 32816, Null message

24/08 & 25/08 Link ID 32816, Date 20th, Serial #80, Groups 292 (1be9 8030 0804 c8c8 3eec)
a337 abc6 6995 66b2 0c48 02c5 48b2 ca2a f754 99c3 2d94 22f0 … cf6f 3280

Busy schedule that is often difficult to receive in Europe. It typically sends one 200-500 group message every week, sometimes two, always with the same date – the Saturday before the broadcast. Null messages have been logged, but they're uncommon.

Wednesday (repeats Thursday)

0800z 15844kHz 0810z 13396kHz 0820z 11089kHz

06/07 Link ID 45075, Null message

13/07 Link ID 45075, Null message

20/07 Link ID 45075, Null message

27/07 & 28/07 Link ID 45075, Date 26th, Serial #8, Groups 132 (1be9 b013 5359 0414 90e3)
3821 c531 a659 4a5c 57b0 e2cb 394a 453d e008 1076 d031 62c9 … 2020 8e00

0800z 15938kHz 0810z 13554kHz 0820z 11461kHz

03/08 Link ID 45075, Null message

10/08 & 11/08 Link ID 45075, Date 9th, Serial #9, Groups 227 (1be9 b013 c564 5a16 f7e6)
6d89 de86 cde7 89e0 5c25 4ef7 533f 6033 8a08 773a 2629 ed00 … ac52 7d00

17/08 Link ID 45075, Null message

24/08 Link ID 45075, Null message

This schedule sent at least 3 messages in the former half of 2014. Then it started giving only nulls in August 2014. The silence was broken only almost 2 years later, on May 4, 2016. Since the low traffic schedule message sending event started in late July 2016, it has sent two new messages.

Second/Fourth Wednesday (repeats Thursday)

0800z	**15795kHz**	**0810z**	**13428kHz**	**0820z**	**11060kHz**
13/07 & 14/07 & 27/07 & 28/07	Link ID 16405, Date 11th, Serial #2, Groups 205 (1be9 4015 be48 6e05 e0ed) cf0d 4d68 710c fd7b 7700 a63e 546a b4b7 6758 b84c 5592 8207 … 892c 8162				

0800z	**16319kHz**	**0810z**	**14378kHz**	**0820z**	**11636kHz**
10/08 & 11/08 & 24/08 & 25/08	Link ID 16404, Date 8th, Serial #3, Groups 154 (1be9 4014 cf6c 5007 a8f1) c505 4b89 710c fdba 3ed0 2457 546a b85e a745 d14c 5593 e156 … d8c8 a600				

Old stable schedule that usually sticks to giving one new message on week 2 and repeating it on week 4. However, newer traffic can be sent on week 4 as well, as well as nulls on either week. Started adopting new frequencies in January 2016. The serial number turned over from #99 to #1 in June 2016.

Second/Fourth Wednesday

0915z	**14948kHz**	**0925z**	**12176kHz**	**0935z**	**10177kHz**
13/07	Link ID 20492, Null message				
27/07	Link ID 20492, Null message				

0915z	**17434kHz**	**0925z**	**14369kHz**	**0935z**	**11163kHz**
10/08	Link ID 20492, Null message				
24/08	Link ID 20492, Null message				

Only one message was logged from this schedule – on December 24, 2014, with serial #25. Since then it has been sending only nulls. Despite that, it started adopting new frequencies in January 2016.

First/Third Wednesday

1230z	**16244kHz**	**1240z**	**14649kHz**	**1250z**	**12206kHz**
06/07	Link ID 53277, Null message				
20/07	Link ID 53277, Null message				

1230z	**17455kHz**	**1240z**	**15923kHz**	**1250z**	**13388kHz**
03/08	Link ID 53277, Null message				
17/08	Link ID 53277, Null message				

This schedule appears to have existed in the past on Saturday at 1220/1230/1240z – logs exist from September 2009 through November 2009, and September 2010, which show that it used the same frequencies as this first/third Wednesday schedule today, making it likely it was the same link. It was first logged on its current schedule in November 2012. While around 2009-2010 it seems to have been sending messages regularly, only nulls have been heard for the last few years.

Wednesday (message-only repeat slot of Monday 0400/0410/0420z)

2100z	**13548kHz**	**2110z**	**11516kHz**	**2120z**	**8145kHz**
03/08	Same message as 01/08 0400/0410/0420z				

Wednesday (repeats Thursday)

2200z	**16031kHz**	**2210z**	**14369kHz**	**2220z**	**12193kHz**
06/07	Link ID 49202, Null message				
13/07	Link ID 49202, Null message				
20/07	Link ID 49202, Null message				
27/07	Link ID 49202, Null message				

2200z	**15618kHz**	**2210z**	**13374kHz**	**2220z**	**11081kHz**

03/08 Link ID 49202, Null message

10/08 Link ID 49202, Null message

17/08 Link ID 49202, Null message

24/08 Link ID 49202, Null message

The earliest available log of this schedule is from July 2011, but it was definitely active earlier. Two messages were caught in December 2013 and January 2014, with serials #42 and #43, respectively. However, it appears to have been sending only nulls since.

Thursday (repeats Friday)

1330z	**13387kHz**	**1340z**	**11023kHz**	**1350z**	**9166kHz**

07/07 Link ID 49237, Null message

14/07 Link ID 49237, Null message

21/07 Link ID 49237, Null message

28/07 Link ID 49237, Null message

1330z	**13439kHz**	**1340z**	**11138kHz**	**1350z**	**9244kHz**

04/08 & 05/08 Link ID 49237, Date 4th, Serial #22, Groups 128 (1be9 c055 e674 2837 8ce4)
8bc8 c773 2d33 0738 f5e8 587d c883 a70c 63f8 5295 ef7b b5c0 … eae5 88a0

11/08 & 12/08 Link ID 49237, Date 5th, Serial #23, Groups 119 (1be9 c055 9df0 3239 82e9)
8814 c813 2fb3 0789 4138 627d 2c83 b383 23f9 529c 2f7b 93d5 … 41b4 8000

18/08 Link ID 49237, Null message

25/08 Link ID 49237, Null message

Another schedule that sends messages very sparsely. It has given only 3 messages between August 2015 and June 2016. Then it delivered another two in August 2016, during the low traffic schedule message sending event.

Stop, wait a minute… These two messages in August written on the 4th and the 5th. The Sunday 1530/1540/1550z schedule also had two messages written on the 4th and 5th. And both of them were 128 and 119 groups long, respectively. Did they just send the same text on two different schedules but encrypted with different keys? None of the earlier messages on this schedule have been seen with those 10-group preambles too…

Friday (message-only repeat slot of Tuesday 2300/2310/2320z)

0600z	**16291kHz**	**0610z**	**14519kHz**	**0620z**	**12186kHz**

15/07 Same message as 12/07 2300/2310/2320z

Second/Fourth Saturday (repeats Sunday)

0800z	**13468kHz**	**0810z**	**11634kHz**	**0820z**	**9486kHz**

09/07 & 10/07 Link ID 45115, Date 8th, Serial #35, Groups 117 (1be9 b03b 99a4 5057 80f9)
0992 0641 c015 b8de 938b c903 9307 07c7 7339 f400 1774 78b7 … 5011 f410

23/07 & 24/07 Link ID 45115, Date 22nd, Serial #36, Groups 123 (1be9 b03b 7594 dc5a 86ee)
d2f5 1541 c015 b83b 36a8 6d03 9307 2ccf f2b3 f400 1774 7c4b … 8608 4000

0800z	**12223kHz**	**0810z**	**10186kHz**	**0820z**	**8094kHz**

13/08 & 14/08 Link ID 45115, Date 12th, Serial #37, Groups 143 (1be9 b03b 98f0 785c 9cf4)
4853 0f02 c015 b892 5518 091c 9307 3a64 b2a3 1300 1777 18fb … 8997 8700

27/08 & 28/08 Link ID 45115, Date 26th, Serial #38, Groups 135 (1be9 b03b a5dd 045f 96f0)
20b3 17c2 c015 b84c 3518 951c 9307 3643 b2b7 1300 1776 f3ed … 7a62 fc12

This schedule mostly sticks to giving two new messages each month, one per each week it broadcasts. However, it's known to send out of schedule, albeit uncommonly, also on week 1 and/or 3. This happened the last time in June 2016. In July 2016, it started adopting new frequencies, which are 4-5 MHz lower than the ones previously used.

Second/Fourth Saturday (repeats Sunday)

0900z	**16089kHz**	**0910z**	**14384kHz**	**0920z**	**12173kHz**

09/07 & Link ID 45057, Date 8th, Serial #85, Groups 141 (1be9 b001 093c 50d4 9af5)
10/07 & 1290 9c61 d07b 193c 0f36 c9d7 9fa7 060c 8628 058c def7 4786 … 6dab 4980
23/07 &
24/07

0900z 16186kHz 0910z 14571kHz 0920z 12195kHz

13/08 & Link ID 45057, Date 12th, Serial #86, Groups 135 (1be9 b001 ced0 78d7 93ed)
14/08 & 7084 4784 f4e6 66dd 51f9 d094 e09f 5598 a924 ea53 3b44 00fe … 7762 4000
27/08 &
28/08

Another old stable schedule that sends one new message on week 2 and repeats it on week 4. It follows this behavior much more strictly than the second/fourth Wednesday 0800z slot, though – the last time newer traffic was given on week 4 was in August 2014.

Saturday (repeats Sunday)

1100z 15964kHz 1110z 13549kHz 1120z 11524kHz

02/07 & Link ID 36882, Date 1st, Serial #55, Groups 134 (1be9 9012 60a8 0a89 92eb)
03/07 6f48 2f32 b99a dd49 f857 9627 1211 e5bf 1d30 5dc2 a6d9 d690 … a380 9900

09/07 & Link ID 36882, Date 8th, Serial #56, Groups 135 (1be9 9012 d784 508c 94e2)
10/07 9b53 2d52 b99a dcbc 03a7 dc27 1211 cfac dd37 5dc2 a6d9 f5c1 … 744c 6314

16/07 & Link ID 36882, Date 15th, Serial #57, Groups 165 (1be9 9012 28cc 968e b4e2)
17/07 7952 37f2 b99a dcba 0214 3a27 1211 cf59 9d44 5dc2 a6d8 8b6c … ede3 bc30

23/07 & Link ID 36882, Date 22nd, Serial #58, Groups 99 (1be9 9012 34f8 dc91 6ce2)
24/07 & 2af6 3c52 b99a dcb5 66c4 8027 1211 ce84 5d51 5dc2 a6d8 ee56 … 09ca a580
30/07 &
31/07

1100z 16153kHz 1110z 14438kHz 1120z 12216kHz

06/08 Link ID 36882, Null message

13/08 & Link ID 36882, Date 12th, Serial #59, Groups 53 (1be9 9012 7c40 7893 3ae5)
14/08 df15 3613 b99a dcf0 8534 1c40 1211 d7c6 1d41 76c2 a6d8 a602 … 27c3 8000

20/08 & Link ID 36882, Date 19th, Serial #60, Groups 78 (1be9 9012 73ec be96 56e7)
21/08 f27d 3433 b99a dd12 2d04 6240 1211 dd07 5d48 76c2 a6d9 0c89 … de18 258d

27/08 & Link ID 36882, Date 26th, Serial #61, Groups 192 (1be9 9012 1e49 0498 d2e5)
28/08 b455 3893 b99a dcee 0534 a840 1211 d76c 1d55 76c2 a6d8 e6d6 … d7b4 a54d

This schedule normally gives one new message every week, but it can suddenly start sending nulls for weeks, and then return to the previous habits. The biggest surprise of all is that since July 2015 it has been replaced by E06 on 4 occasions, sending at 1100/1200z using the 1100/1110z frequencies and ID 832. The E06 messages are not even counted into the M42d serial number!

Saturday (repeats Sunday)

2100z 17436kHz 2110z 15789kHz 2120z 13473kHz

02/07 Link ID 32821, Null message

09/07 & Link ID 32821, Date 7th, Serial #25, Groups 198 (1be9 8035 bbc8 463e d8e6)
10/07 6e4e 9bf3 92d6 5476 f889 4a54 950d 5120 eaa6 e01c 84eb cded … a925 4d60

16/07 Link ID 32821, Null message

23/07 Link ID 32821, Null message

30/07 Link ID 32821, Null message

2100z 16289kHz 2110z 14461kHz 2120z 12176kHz

06/08 Link ID 32821, Null message

13/08 Link ID 32821, Null message

20/08 & Link ID 32821, Date 19th, Serial #26, Groups 369 (1be9 8035 6604 be41 92e7)
21/08 b5d3 a374 9556 5462 4d39 c26d f90d 4e13 aab8 f922 c4e9 45e9 … e97f 4a00

27/08 & Link ID 32821, Date 26th, Serial #27, Groups 189 (1be9 8035 0f6d 0443 cef0)
28/08 b2bb a7d4 9556 538a 656a 086d f90d 6adb eac5 f922 c4e8 9813 … a2ce cc00

Low traffic schedule that uses high frequencies, using as high as 20 MHz at 2100z in April, and ~23 MHz at 1500z during most of winter. It seems to have become more important in the last 2 months. Prior to July, there were only 2 messages this year, one each in March and May.

HM01

HM01 has continued with all the usual schedules. One thing touched upon last newsletter was the loss of the 5855kHz transmission at 0500z which has approximately doubled its frequency to 10860kHz all other schedules remain intact. Several messages with F1* extensions were transmitted over the past two months, as always file names beginning with 36 have the F1G extension and those beginning 50 have the F1C extension. Files transmitted were 36577564.F1G 36538828.F1G 50280351.F1C 36864301.F1G 36338773.F1G 50663243.F1C

Not much else to report, the 1600z transmissions often begin with the previous day's callups before switching to the correct ones. This was reported as an anomaly but appears to be the norm.

Logs

HM01 11435kHz 1600z 1/7 [58563 33823 52233 86203 13281 08563] Started with yesterday's callups before switching to the correct ones. New callup position 5, 13281 = 77881328.TXT. FRI
HM01 11435kHz 1600z 2/7 [58564 33824 52234 86204 13281 08564] Started with yesterday's callups before switching to the correct ones. SAT
HM01 11435kHz 1600z 3/7 [58565 33825 52235 86205 13282 08565] Started with yesterday's callups before switching to the correct ones. SUN
HM01 11435kHz 1600z 4/7 [58566 33826 52236 86206 13283 08566] Started with yesterday's callups before switching to the correct ones. MON
HM01 11435kHz 1600z 5/7 [58567 33827 52237 86207 13284 08567] Started with yesterday's callups before switching to the correct ones. TUE
HM01 11435kHz 1600z 6/7 [28361 33828 52238 86208 13285 57681] Started with yesterday's callups before switching to the correct ones. New callups positions 1 and 6, 28361 = 70802836.TXT, 57681 = 30125768.TXT. WED
HM01 11435kHz 1600z 8/7 [28362 21851 70561 01071 13287 57682] New callups positions 2, 3, 4. 21851 = 01602185.TXT, 70561 = 65887056.TXT, 01071 = 33160107.TXT. FRI
HM01 11435kHz 1600z 9/7 [28363 21852 70562 01072 13288 57683] SAT
HM01 11435kHz 1600z 10/7 [28364 21853 70563 01073 20221 57684] New callup position 5, 20221 = 34062022.TXT. SUN
HM01 11435kHz 1600z 11/7 [28365 21854 70564 01074 20221 57685] MON
HM01 11435kHz 1600z 12/7 [28366 21855 70565 01075 20222 57686] TUE
HM01 11435kHz 1600z 13/7 [28366 21856 70566 01076 20223 57687] WED
HM01 11435kHz 1600z 14/7 [28367 21857 70567 01077 20224 57688] THU
HM01 11435kHz 1600z 15/7 [07611 21857 70567 01077 20224 57688] New callup position 1, 07611 = 36510761.TXT. THU
HM01 11435kHz 1600z 16/7 [07611 00211 75641 01078 20225 57689] New callups positions 2 and 3, 00211 = 82850021.TXT, 75641 = 36577564.F1G. THU
HM01 11435kHz 1600z 17/7 [07613 00212 75642 15521 20227 13351] Last digit jumped +2 since yesterday. New callups positions 4 and 6, 15521 = 28561552.TXT, 13351 = 10431335.TXT. SUN
HM01 11435kHz 1600z 18/7 [07614 00213 75643 15521 20228 13352] MON
HM01 11435kHz 1600z 19/7 [07615 00214 75644 15522 20229 13353] TUE
HM01 11435kHz 1600z 20/7 [07616 00215 75645 15523 88281 13354] New callup position 5, 88281 = 36538828.F1G. WED
HM01 11435kHz 1600z 21/7 [07617 00216 75646 15524 88281 13355] THU
HM01 11435kHz 1600z 22/7 [07617 00216 75646 15524 88281 13355] FRI
HM01 11435kHz 1600z 25/7 [33232 03761 44611 15528 88285 13359] New callups since 22nd in positions 1, 2 and 3 33232 = 62373323.TXT, 03761 = 44611 = 28454461.TXT. MON
HM01 11435kHz 1600z 26/7 [33233 03762 44612 86301 88286 03511] New callups positions 4 and 6, 86301 = 28658630.TXT, 03511 = 50280351.F1C. TUE
HM01 11435kHz 1600z 27/7 [33234 03763 44613 86301 88287 03511] WED
HM01 11435kHz 1600z 28/7 [33235 03764 44614 86302 88288 03512] THU
HM01 11435kHz 1600z 30/7 [33237 03766 44616 86304 41251 03514] New callup position 5, 41251 = 67754125.TXT. SAT
HM01 11435kHz 1600z 31/7 [33238 03767 44617 86305 41251 03515] SUN
HM01 11435kHz 1600z 1/8 [33239 03768 44618 86306 41252 03516] MON
HM01 11435kHz 1600z 4/8 [43012 24672 51321 64771 41255 18641] New callups since Monday in positions 1, 2, 3, 4, and 6, 43012 = 36864301.F1G, 24672 = 41842467.TXT, 51321 = 04325132.TXT, 64771 = 68566477.TXT, 18641 = 03441864.TXT. THU
HM01 11435kHz 1600z 5/8 [43013 24673 51322 64772 41256 18642] FRI
HM01 11435kHz 1600z 6/8 [43014 24674 51323 64773 41257 18643] SAT
HM01 11435kHz 1600z 7/8 [43015 24675 51324 64774 41258 18644] SUN
HM01 11435kHz 1600z 8/8 [43016 24676 51325 64775 41259 18645] MON
HM01 11435kHz 1600z 9/8 [43017 24677 51326 64776 23171 18646] New callup position 5, 23171 = 16352317.TXT. TUE
HM01 11435kHz 1600z 10/8 [25881 24678 51327 64777 23171 18647] New callup position 1, 25881 = 01332588.TXT. WED
HM01 11435kHz 1600z 11/8 [25881 26801 20271 64778 23172 18648] New callups positions 2 and 3, 26801 = 84032680.TXT, 20271 = 70752027.TXT. THU
HM01 11435kHz 1600z 12/8 [25882 26801 20271 64779 23173 87731] New callup position 6, 87731 = 36338773.F1G. FRI
HM01 11435kHz 1600z 13/8 [25883 26802 20272 43251 23174 87731] New callup position 4, 43251 = 32034325.TXT. SAT
HM01 11435kHz 1600z 14/8 [25884 26803 20273 43251 23175 87732] SUN
HM01 11435kHz 1600z 15/8 [25885 26804 20274 43252 23176 87733] MON
HM01 11435kHz 1600z 16/8 [25886 26805 20275 43253 23177 87734] TUE
HM01 11435kHz 1600z 17/8 [25887 26806 20276 43254 70141 87735] New callup position 5, 70141 = 03187014.TXT. WED
HM01 11435kHz 1600z 18/8 [33461 26807 20277 43255 70141 87736] New callup position 1, 33461 = 76413346.TXT. THU
HM01 11435kHz 1600z 19/8 [33461 26808 20278 43256 70142 87737] FRI
HM01 11635kHz 2100z 20/8 [33462 62851 20279 43257 70143 71711] New callups positions 2 and 6, 68251 = 06816285.TXT, 71711 = 82227171.TXT. SAT
HM01 11435kHz 1600z 21/8 [33463 62851 85401 37661 70144 71711] New callups positions 3 and 4, 85401 = 64658540.TXT, 37661 = 12423766.TXT. SUN
HM01 11435kHz 1600z 22/8 [33464 62852 85401 37661 70145 71712] MON
HM01 11435kHz 1600z 23/8 [33465 62853 85402 37662 70146 71713] TUE
HM01 11435kHz 1600z 24/8 [33466 62854 85403 37663 70147 71714] WED
HM01 11435kHz 1600z 25/8 [33467 62855 85404 37664 70148 71715] THU
HM01 11435kHz 1600z 26/8 [33468 62856 85405 37665 32431 71716] New callup position 5, 32431 = 50663243.F1C. FRI
HM01 11435kHz 1600z 27/8 [33469 62857 85406 37666 32431 71717] SAT
HM01 11435kHz 1600z 28/8 [88741 62858 85407 37667 32432 61001] New callups positions 1 and 6, 88741 = 87658874.TXT, 61001 = 31576100.TXT. SUN
HM01 11435kHz 1600z 29/8 [88741 62859 71781 37668 32433 61001] New callp position 3, 71781 = 76637178.TXT. MON
HM01 11435kHz 1600z 30/8 [88742 74581 71781 37669 32434 61002] New callup postion 2, 74581 = 45337458.TXT. TUE
HM01 11435kHz 1600z 31/8 [88743 74581 71782 24021 32435 61003] New callup postion 4, 24021 = 68682402.TXT. WED

As received in Argentina by DanAr

10715kHz2200z	03/07[58565 33825 52235 86205 13282 08565] QSA2	DanAR	SUN
17480kHz2200z	05/07[58567 33827 52237 86207 13284 08567] QSA2	DanAr	TUE
2200z	12/07[28366 21855 70565 01075 20222 57686] QSA2	DanAr	TUE
2200z	16/07[07612 00211 75641 01079 20226 13351] QSA2	DanAr	SAT

HM02 - Believed variant of Russian Family 1. Station under investigation

Transmission times are variable with the carrier often appearing some time before the transmissions start.

Schedule: Current Daily: 7351kHz 0440 - 0500z (Variable) From 14 April.

Previously: 6261kHz 0540 - 0600z (Variable) Up to March28
0440 - 0500z (Variable) From 29 March change due to Daylight Saving adjustment.

HM02 - Some Message Oddities

Something very strange has been happening with the FSK Morse messages of late. Some of the anomalies are fairly straightforward so let us look at those first.

Partially Repeated Messages

On Thu 07 July a 60 group message was sent. At this stage all appeared to be the normal daily message that we have become accustomed to receiving for several months now. The following day, Friday 08 July, the station failed to appear, but on Saturday 09 July sent a 57 group message - the first 41 groups of which were the same as that of the 07 July message.

HM02 7351kHz 0434z Thursday 07 July 2016

241 60 =
18542 31487 09634 25191 48221 14983 15547 41376 07994 86600
17533 73393 45736 90939 52968 40730 91700 04506 09790 97463
97995 32608 39029 14924 85474 15545 34822 31315 32129 47059
45431 10462 55243 76654 54865 38314 53993 83195 51623 20177
25869 15456 58032 14402 97339 70156 88522 71757 35621 25594
32118 60025 91965 34345 47573 95066 12358 67973 14390 67628
=

Courtesy AB

HM02 7351kHz 0430z Saturday 09 July 2016

364 57 =
18542 31487 09634 25191 48221 14983 15547 41376 07994 86600
17533 73393 45736 90939 52968 40730 91700 04506 09790 97463
97995 32608 39029 14924 85474 15545 34822 31315 32129 47059
45431 10462 55243 76654 54865 38314 53993 83195 51623 20177
25869 25648 12548 54875 55698 13486 12458 21547 48659 12458
75845 89748 23698 47895 47854 12578 95748 =

Courtesy AB

Message comparison between Thu 07 July & Sat 09 July showing that the first 41 groups are identical

Then on Tuesday, 26 July another partially repeated message was sent. This was a 58 group message, with the first 50 groups and the last 8 groups identical to the message sent on Saturday, 23 July. Or put another way, it was the same message as sent on 23 July - but with groups 51 to 60 omitted.

HM02 7351kHz 0443z Saturday 23 July 2016

365 68 =
53714 76041 75462 44754 54647 06442 85520 37662 78243 37756
76418 31154 40613 45215 25345 56254 70225 47118 01432 04765
52481 68320 76110 86781 03481 81466 42813 43430 65410 53212
56288 16183 87153 33122 53578 16205 74513 45831 87246 62681
88512 75504 47477 60248 23664 01583 75841 88644 10304 03857
78031 28440 15845 60638 28000 55830 13314 74350 53885 84385
60102 87154 54212 68442 85316 50228 54444 66514 =

Courtesy AB

HM02 7351kHz 0511z 26 July 2016

961 58 =
53714 76041 75462 44754 54647 06442 85520 37562 78243 37756
76418 31154 40613 45215 25345 56254 70225 47118 01432 04765
62481 68320 76110 86781 03481 81466 42813 43430 65410 53212
56288 16183 87153 33122 53578 16205 74612 45831 87246 62681
88512 75504 47477 50248 23664 01583 75844 88644 10304 03857
60102 87154 54212 68442 85316 50220 54444 66514

Courtesy AB

Message comparison between Sat 23 July & Tue 26 July showing the groups omitted from the original message

Repeated Groups & Sequences

This rather interesting looking message was sent on Wednesday, 20 July. The composition of the last 14 groups stand out as being far from random. The last 2 groups are both 12554, as is group 53, & 9 of the final 10 groups all start with the figures 12. There are several other sequences that also repeat in these groups including 122 & 125 as starting figures & 54 as the last two figures. Could these groups be fillers?

HM02 7351kHz 0431z Wednesday 20 July 2016

357 62 =
07373 18164 55078 13064 37276 62704 76016 05482 30686 51856
71525 28723 82672 11473 18466 07085 50814 34040 11156 87152
38662 26262 72068 05563 53720 71285 51356 27085 43323 44361
63613 87518 38354 73410 63788 77803 40347 01836 07041 22401
12721 32505 00872 01361 80146 57243 60563 03650 70351 **12**546
15478 54875 **12554** **12**548 **12**256 **12**255 **12**566 **12**254 22554 **12**365
12554 **12554** =

Courtesy BR

Full & Partially Repeated Message - July

This incident is far more complex & a good deal more puzzling. Once again it began with an ordinary message - in this case a59 group message sent on Wednesday 06 July which seemed to be just another daily coded message sent with a Decode Key & a Group Count.

Then on Sunday 10 July the same 59 group message was sent, but with a different Decode Key & an incorrect Group Count of 54. As regular monitors will know, mistakes happen & some of the station operators are not in the premier division when it comes to competence, so it would be easy to dismiss this as operator error... Except that on the following day, Monday 11 July the same message appeared once more, again with a different Decode Key but with four extra groups added to the end of the message & a correct Group Count of 63.

When the message appeared again on Thursday 14 July it was beginning to be clear that this was something more than coincidence or simple error. This time the Group Count was incorrectly sent as 57 for the 59 group message. This was not to be the last appearance of this message, however, but to continue to try to lay out the detail of the various transmissions would be to confuse the reader further, so the summary of the appearances of this message are tabled below.

Date	DK GC	No. of Grps	Message Detail	Comments
06 Jul	487 59	59	**24562 67874**.... **59269**	First appearance - Correct Group Count
10 Jul	549 **54**	59	**24562 67874**.... **59269**	**Incorrect Group Count**
11 Jul	621 63	63	**24562 67874**.... 25434	Same message **plus 4 grps**
14 Jul	218 **57**	59	**24562 67874**.... **59269**	**Incorrect Group Count**
18 Jul	869 **48**	59	**24562 67874**.... **59269**	**Incorrect Group Count**
19 Jul	489 57	57	**24562 67874**.... 90598	Same msg with **last 2 grps omitted**
21 Jul	385 46	46	**24562 67874**.... 88598	First 46 grps of original msg
22 Jul	871 **56**	59	**24562 67874**.... **59269**	**Incorrect Group Count**
10 Aug	482 49	49	**24562 67874** ... 63290	First 49 grps of original msg

As all the decode keys are different for each sending, they are also obviously worthless.

HM02 7351kHz 0432z Wednesday 06 July 2016

549 59 =
24562 67874 25634 74385 13052 48709 30152 12935 80863 18062
62667 80390 50685 74457 15635 60684 34735 26767 95677 54890
47431 76805 20793 10739 84424 28369 14227 55362 79390 25434
08490 32717 77894 41118 57382 92732 57535 61722 19886 25888
24904 14671 71867 23398 55992 88598 57093 85807 63290 **84600**
20809 72249 99220 79543 26055 63341 90598 00830 59269 =

Courtesy BR

HM02 7351kHz 0450z Monday 11 July 2016

621 63 =
24562 67874 25634 74385 13052 48709 30152 12935 80863 18062
62667 80390 50685 74457 15635 60684 34735 26767 95677 54890
47431 76805 20793 10739 84424 28369 14227 55362 79390 25434
08490 32717 77894 41118 57382 92732 57535 61722 19886 25888
24904 14671 71867 23398 55592 88598 57093 85807 63290 **84500**
20809 72249 99220 79543 26055 63341 90598 00830 59269 **14227**
55362 79390 25434 =

Courtesy AB

Message comparison between Wed 06 July & Mon 11July showing the groups added to the original message

Full & Partially Repeated Message - August

On Saturday 30 July a 57 group message was sent. This same message appeared again on Wednesday, 03 August - but with an additional group added & the correct group count of 58. Then on Thursday 11 August the same message was again sent -but this time consisting of the first 53 groups of the original message from 30 July. On 15 August again the first 53 groups of the original message were used, but with three new groups substituted in place of the original. On 19 August, only the first 43 groups of the message were used with two new groups added in place of the original.

Date	DK GC	No. of Grps	Message Detail	Comments
30 Jul	839 57	57	***53714 76041***.... 54444	First appearance - Correct Group Count
03 Aug	916 58	58	***53714 76041***.... 90654	Same message with one additional group - 90654
11 Aug	476 53	53	***53714 76041***.... 54212	First 53 groups of original message
15 Aug	436 56	56	***53714 76041***.... 43609	First 53 groups of original message + 34561 76109 43609
19 Aug	348 45	45	***53714 76041***.... 76109	First 43 groups of original message + 34561 76109

HM02 7351kHz 0442z Saturday 30 July 2016

839 57 =
53714 76041 75462 44754 54647 06442 85520 37662 78243 37756
76418 31154 40613 45215 25345 56254 70225 47118 01432 04765
62481 68320 76110 86781 03481 81466 42813 43430 65410 53212
56288 16183 87153 33122 53578 16205 74613 45831 87246 62681
88512 75504 47477 60248 23664 01583 75841 88644 10304 03857
60102 87154 54212 68442 85316 50228 54444 =
839 57 839 57 =

Courtesy AB

HM02 7351kHz 0429z Monday 15 August 2016

436 56 =
53714 76041 75462 44754 54647 06442 85520 37662 78243 37756
76418 31154 40613 45215 25345 56254 70225 47118 01432 04765
62481 68320 76110 86781 03481 81466 42813 43430 65410 53212
56288 16183 97153 33122 53578 16205 74613 45831 87246 62381
88512 75504 47477 60248 23664 01583 75841 88644 10304 03857
60102 87154 54212 **34561 76109 43609** =

Courtesy BR

Message comparison between Sat 30 July & Mon 15Aug showing the 3 groups substituted after grp 53 of the original message

Repeated Message Comprised of Rearranged Lines of Ten Groups - August

This oddity spotted by Ary (AB) followed on from the discovery of the above repeated messages, & shows how a message - first sent on 06 August, has been split & reconstructed to create 'new' message made up from lines of 10 groups that have been put together in a different order. The same message was also reused on Friday 12 August - but with the first 10 lines omitted.

HM02 7351kHz 0427z Saturday 06 August 2016

458 63 =
08686 21567 66548 75843 71303 18800 25444 56135 65216 72741
86183 03636 84303 10135 07108 62340 15036 75546 75322 77663
87880 30056 62445 80724 45686 22587 44311 77663 76550 18471
50151 63185 44470 86331 78213 86843 01726 12622 57450 12145
87865 57670 82532 57467 15855 47475 64053 63108 75415 53267
12010 13163 13317 45525 82873 32815 63768 27038 84374 75426
46575 60513 12736 =

Courtesy AB

HM02 7351kHz 0430z Tuesday 09 August 2016

268 59 =
87880 30056 62445 80724 4568S 22587 44311 76563 76550 18471
08686 21567 66548 75843 71303 18800 25444 56135 65216 72741
50151 63185 44470 86331 78213 86843 01726 12622 57450 12145
86183 03636 84303 10135 07108 62340 15036 75546 75322 77563
87865 57670 82532 57467 15855 47475 64053 63108 75415 53267
12010 13163 13317 45525 82873 32815 63768 27038 84374 =

Courtesy AB

Message comparison between Sat 06 Aug & Tue 09Aug showing how the original message has been rearranged in lines of 10 Groups

Morse msg Logs

Jul 2016

7351	0432 - 0441z	01 Jul	149 52 = 84286 73709.... 31857 = 000	Strong	BR FRI
	0428z	02 Jul	710 49 = 11262 90438.... 62476 = 000	FSK-19.8bd/129Hz/FSK-CW	AB SAT
	0434 - 0445z	03 Jul	843 55 = 29230 33884.... 89042 = 000	Strong with QSB	AB/BR SUN
	0438 - 0451z	04 Jul	570 59 = 22395 20154.... 72492 = 000	Strong with QSB [Note 1]	AB/BR MON
	0430 - 0441z	05 Jul	257 51 = 51112 01392.... 09812 = 000		AB TUE
	0435 - 0446z	06 Jul	487 59 = **24562 67874**.... **59269** = 000	Good	BR WED
	0434z	07 Jul	241 60 = **18542 31487**.... 67628 = 000		AB THU
	0410 - 0507z	08 Jul	NRH - No trace either on home receivers or Twente 24hr waterfall		AB FRI
	0430z	09 Jul	364 57 = **18542 31487**.... 95748 = 000	[Note 2]	AB SAT
	0432 - 0443z	10 Jul	549 **54** = **24562 67874**.... **59269** = 000	Strong. **Msg was 59 grps**	AB/BR SUN
	0450z	11 Jul	621 63 = **24562 67874**.... 25434 = 000	Same message **plus 4 additional grps**	AB MON
	0430 - 0441z	12 Jul	253 58 = 65388 52734.... 02062 = 000	Good	AB/BR TUE
	0430 - 0440z	13 Jul	685 52 = 65984 31487.... 89748 = 000	Good 999 sent just prior to Morse DK/GC	AB/BR WED
	0437z	14 Jul	218 **57** = **24562 67874**.... **59269** = 000	**Msg was 59 grps**	AB THU
	0422 - 0431z	15 Jul	905 48 = 27687 30547.... 38050 = 000	Strong Carrier on until 0606z!	AB/BR FRI
	0427z	16 Jul	547 51 = 87594 89283.... 87850 = 000		AB SAT
	0426 - 0434z	17 Jul	659 30 = 09733 64247.... 21563 = 000	Fair with QSB	AB/BR SUN
	0431 - 0443z	18 Jul	869 **48** = **24562 67874**.... **59269** = 000	Strong **Msg was 59 grps**	AB/BR MON
	0431 - 0442z	19 Jul	489 57 = **24562 67874**.... 90598 = 000	Strong Same msg with **last 2 grps omitted**	AB/BR TUE
	0431 - 0443z	20 Jul	357 62 = 07373 18164.... 12554 = 000	Fair [Note 3]	AB/BR WED
	0430 - 0439z	21 Jul	385 46 = **24562 67874**.... 88598 = 000	Fair First 46 grps of same msg. Carrier off 0651z	AB/BR THU
	0426 - 0437z	22 Jul	871 **56** = **24562 67874** ... **59269** = 000	Fair **Msg was 59 grps**	AB/BR FRI
	0443z	23 Jul	365 68 = **53714 76041.... 66514** =	000 not sent at end of transmission	AB SAT
	0424 - 0434z	24 Jul	936 51 = 11605 63631.... 66254 = 000	Good	AB/BR SUN
	0426 - 0436z	25 Jul	784 49 = 82247 76594.... 30462 = 000	Strong 1st sending at slower speed, 2nd fast as usual	AB/BR MON
	0511 - 0524z	26 Jul	961 58 = **53714 76041.... 66514** = 000	Fair [Note 4]	AB/BR TUE
	0430 - 0440z	27 Jul	214 53 = 27460 10547.... 37382 = 000	Strong	BR WED
	0431 - 0442z	28 Jul	312 54 = 84187 03530.... 06372 = 000	Weak/Fair	BR THU
	0427 - 0440z	29 Jul	176 63 = 73856 39588.... 95746 = 000	Started fair & improved during transmission	BR FRI
	0442z	30 Jul	839 57 = ***53714 76041***.... 54444 = 000	Good	AB SAT
	0424 - 0436z	31 Jul	231 54 = 31402 80962.... 68877 = 000	Good	AB/BR SUN

[Note 1] Started Morse message which was garbled & unreadable. Stopped after grp13 & after a pause, restarted the message after a brief FSK data burst. Now the transmission was fine & the Morse readable.

[Note 2] The message sent on Saturday 11 July started with the same first 41 groups as that sent on Thu 09 July.

[Note 3] Groups 53, 61 & 62 were identical. 9 of the last 10 grps all started with 12 & of those 10, 5 end with 54 (See transcript below for full message)

[Note 4] The message is identical to that sent on Saturday 23 July, less groups less groups 51 - 60.
After the coded FSK start sequence, the operator started the message in RTTY (FSK 50/129), noticed his error after the 20th group. Switched to CW and restarted the message.
= was missing after the message but it appeared between the two id's/group counts.

Aug 2016

7351	0430 - 0441z	01 Aug	912 58 = 80278 32241.... 32133 = 000	Strong	BR MON
	0432 - 0441z	02 Aug	985 43 = **09733 64247.... 54878** = 000	Strong. Op. increased speed from grp13 of 1st sending	AB/BR TUE
	0423 - 0432z	03 Aug	916 58 = ***53714 76041***.... 90654 = 000	Same message **plus one additional group**	AB/BR WED
	0441 - 0450z	04 Aug	452 45 = **09733 64247.... 45870** = 000	Good. [Note 5]	AB/BR THU
	0430 - 0441z	05 Aug	249 57 = 43572 86515... 25373 = 000	Good	AB/BR FRI
	0427z	06 Aug	458 63 = 08686 21567.... 12736 = 000		AB SAT
	0410 - 0526z	07 Aug	NRH		AB/BR SUN
	0426 -0437z	08 Aug	263 52 = 85951 44942.... 52752 = 000	Strong. 1st sending at slower speed, 2nd fast as usual	AB/BR MON
	0430 - 0441z	09 Aug	268 59 = 87880 30056.... 84374 = 000	Good. Short burst of idling FSK 50/129 at 0442z	AB/BR TUE
	0432 - 0442z	10 Aug	482 49 = **24562 67874** ... 63290 = 000	Good with QSB. First 49 grps of 06 July msg	AB/BR WED
	0436 - 0446z	11 Aug	476 53 = ***53714 76041***.... 54212 = 000	Fair First **53** grps of same message.	AB/BR THU
	0425 - 0435z	12 Aug	950 52 = 86183 03636.... 60513 = 000	Fair [Note 6]	AB/BR FRI
	0430 - 0441z	13 Aug	267 62 = 70356 05556.... 76011 = 000	Strong	AB/BR SAT
	0433 - 0443z	14 Aug	251 54 = 09720 34403.... 02129 = 000	Fair with QSB	AB/BR SUN
	0428 - 0438z	15 Aug	436 56 = ***53714 76041***.... 43609 = 000	Fair First **53** groups **plus 3 additional groups**	AB/BR MON
	0425 - 0436z	16 Aug	451 53 = 88211 34653.... 60929 = 000	Weak	AB/BR TUE
	0428 - 0437z	17 Aug	279 48 = 38226 09795.... 52081 = 000	Strong	AB/BR WED
	0419 - 0427z	18 Aug	524 41 = 80898 53131.... 55548 = 000	Strong	AB/BR THU
	0431 - 0439z	19 Aug	348 45 = ***53714 76041***.... 76109 = 000	Very weak	AB/BR FRI
	0426z	20 Aug	710 49 = 11262 90438.... 62476 = 000	Good	AB SAT
	0426z	21 Aug	264 58 = **05084 58141.... 15640** = 000		AB SUN
	0410 - 0510z	22 Aug	NRH		AB/BR MON
	0437 - 0450z	23 Aug	262 58 = **05084 58141.... 15640** = 000	Fair. Message same as 21 Aug. [Note 7]	AB/BR TUE
	0427 - 0436z	24 Aug	414 46 = 45619 05459.... 71254 = 000	Weak / Strong	AB/BR WED
	0426 - 0436z	25 Aug	192 54 = 87417 56020.... 60017 = 000	Strong	AB/BR THU
	0434 - 0445z	26 Aug	354 57 = 95396 42885.... 63685 = 000	Strong/Fair	AB/BR FRI
	0432z	27 Aug	548 51 = 40066 62077.... 62765 = 000	Strong	AB SAT
	0441 - 0451z	28 Aug	905 48 = 27687 30547.... 38050 = 000	Good	AB/BR SUN
	0430 - 0440z	29 Aug	819 53 = 67534 46631.... 28515 = **00000**	Fair/Good Note 00000 sent at EOM	AB/BR/JkC MON
	0420 - 0429z	30 Aug	283 42 = 09733 64247.... 00071 = 000	Strong	AB/BR TUE
	0427 - 0435z	31 Aug	823 47 = 08351 20583.... 25146 = 000	Strong	AB/BR WED

[Note 5] Message sent on Thursday 04 August was the same as sent on Tuesday 02 August. The message used **452** 45 = at the start of the message, then **952** 45 = at the end. Same was used for the repeat sending.

[Note 6] Message sent on Friday 12 August was the same as sent on Saturday 06 August, but the first 10 groups were omitted.

[Note 7] Message sent on Tuesday 23 August was the same as sent on Sunday 21 August but using a different serial number (262 vs 264). After the non-decodable FSK intro the operator made a mistake and started the message in RTTY (FSK 50/129), then stopped and restarted in Morse. The RTTY part however was a different message !!!
548 51 =
40066 62077 62044 6136 51328 45334 62664 83820 00874 58621
07832 51251 72476 35625 5631# 57153 54417 80330 62.... message stopped & switched to Morse (AB)

Thanks to all our contributors

PoSW's Items of Interest in the Media:-

Continuing on a Russian theme, a piece in *The Times* newspaper of 8-July no doubt made the Main Man in Russia shake in his boots - with laughter. "Britain sends 650 troops to Estonia in message for Putin", is the headline over a story by Deborah Haynes, Defence Editor reporting from Warsaw which says, "Britain will send 650 troops to eastern Europe next year as part of a reinforcement of NATO's border with Russia that is expected to provoke an outcry from Moscow.
The force will be described as a 'persistent' or 'enduring' presence to avoid breaking a long-standing deal with Russia that NATO will not 'permanently' deploy troops on its eastern flank.

David Cameron will use a summit of alliance leaders in Warsaw today to announce that a further 3,000 British military personnel will lead a new emergency task force in 2017.

Mr Cameron will be keen to show that Britain remains committed to the transatlantic alliance after the referendum vote to leave the EU. There is also concern that countries such as Germany and France are seeking to build a European army rather than focusing
their military resources on NATO..... Mr Cameron said as he prepared for the meeting: 'This summit is a chance for us to reiterate our strong support for Ukraine and our eastern allies to deter Russian aggression. The UK is proud to be taking the lead role, deploying troops across eastern Europe.'
Tensions between NATO and Russia have escalated since the crisis in Ukraine erupted more than two years ago. Alliance members are neighbours of Russia are concerned that President Putin may seek to create unrest within their borders as well.
NATO forces have increased exercises in the Baltic states but any move towards a more permanent presence is sure to bring a rebuke from Moscow.
Five hundred British troops will be stationed from next year in Estonia and 150 will form an 'enduring' presence in Poland. The forces will be 'defensive in nature but clearly combat
capable', a Whitehall source said. They will be part of a commitment by NATO to station four new battalions totalling about 4,000 personnel on its eastern flank.
The UK will also take over the leadership of NATO's 'very high readiness' joint task force, created after the last summit of alliance leaders in Wales in 2014. Three thousand British troops, based in Britain and Germany, will make up the bulk of the 5,000 strong detachment, with forces from countries including Denmark, Spain, Estonia and the US.
The 20th Armoured Infantry Brigade will provide land headquarters and there will be an armoured infantry battle group from the 1st battalion The Princess of Wales' Royal Regiment and a light infantry battle group from 1st Battalion Grenadier Guards.
Jens Stoltenberg, secretary-general of NATO, said that Russia had tripled its defence spending since 2000 as well as having used force against Ukraine.
'This has really changed our security environment' he said. When the world is changing, we have to change'. "

More drone news:- The use of drones, remotely controlled pilot-less aircraft, seems to be an up and coming technology. Drones are the latest plaything of many of the world's armies and appear to be making their mark in the Arab – Israel confrontation. "Middle East's finest fighting force powerless to stop mystery drone" is the headline over a piece written by Gregg Carlstrom reporting from Tel Aviv in *The Times* of 19-July. "Israel launched missiles costing more than $6 million in a failed attempt to shoot down a mysterious drone that crossed its northern border with Syria. After the unmanned aircraft was seen to have entered Israeli airspace late on Sunday afternoon, the army first tried to bring it down with two Patriot surface-to-air missiles. Both missed. It then scrambled a fighter jet to fire another missile, which also failed to hit its target.
The US made Patriots cost up to $3 million each, and the air-to-air missile added at least another $125,000 to the cost. The drone, which managed to fly about four kilometres intoIsraeli territory, turned around and made it back to Syria unscathed.
Officials suspect it was a reconnaissance vehicle, sent to observe a military exercise in the north that began on Sunday. Anis al-Naqqash, a Lebanese political analyst who is close to Hezbollah, said the drone belonged to the Shia militant group.
'It's an unacceptable result', said Colonel Kobi Marom, the former head of an Israeli combat brigade in the north. 'For almost an hour they couldn't hurt the drone. It's a failure.'
Israel was one of the first armies to use unmanned aerial vehicles (UAVs), and it quickly became a world leader in the technology: 41 percent of all drones exported between 2001 and 2011 came from Israeli firms, according to the Stockholm International Peace Research Institute, a think tank. In recent years, though, Israel's foes have tried to catch up and develop UAV technology for themselves. Hezbollah released a video in 2014 that showed a drone bombing a rebel position in Syria, the first time a non-state group had used one to carry out an air-strike.
Israel expects that Hezbollah will use offensive UAVs in a future war.
It wasn't clear who built the drone that flew into Israel on Sunday, though many of Hezbollah's UAVs are thought to be built with Iranian technology. The Israeli air force shot one down in 2012; afterwards Hassan Nasrallah, Hezbollah's leader, said it was made in Iran.
Satellite imagery suggests that Hezbollah uses a small airstrip in Lebanon's Bekka Valley to launch routine surveillance flights over Israel.
Hamas, which controls the Gaza Strip, has fielded its own fleet of primitive drones which have made several reconnaissance missions into Israel and Egypt over the past two years.
The Israeli air force shot one down in 2014, and a second crashed in Israel last year.
In August Hamas also claimed that it had took control of an Israeli made Skylark drone which crashed in Gaza. The drones flown by groups such as Hamas are often simple, closer to a £60 quad-copter from Argos than the multimillion Reapers and Watchkeepers used by the US and British armies.
Still, even small drones pack a deadly punch. The Israeli made Harop drone, with a length of 2.5m, made its combat début in April during clashes in the breakaway Caucasus republic of Nagorno-Karabakh. The Harop flew into a bus full of Armenian soldiers, killing seven. Yossi Gofer, a former Israeli air defence official, said, 'Simple aircraft like these can cause major damage.' "

These drone things are also making their presence felt a bit closer to home; my local paper, the *Saffron Walden Reporter* of 28-July carried on its front page a story by Michael Steward with the headline, "Drone serious risk to plane" which said, "A drone came within 25 metres of a plane landing at Stansted Airport and posed a 'serious risk of collision' ….
The four-rotor drone went across the path of a Boeing 737 at 3,000ft on its final approach in May.
Pilots estimated the drone was about 25-50m away …... The UK Airport Board, which assesses such incidents, gave it a Category A risk rating in a report this week.
Drone flight above 400ft is prohibited in airspace without permission, and at 3,000ft an observer is needed.
The board said that even if an observer was used, they would not be able to see the drone clearly at that level.
The report said: 'Although the pilot stated avoiding action was unnecessary, separation had been reduced to a bare minimum. They therefore determined a serious risk of collision had existed.'
The incident took place over Castle Camps in Cambridgeshire.
The near-miss follows two other incidents involving drones and Boeing 737 planes near Stansted.
In March, a pilot reported a drone 200ft away while over Hertfordshire at 2,000ft, and another was spotted 3-4m above their aircraft at 4,000ft in the Great Dunmow area in September, which came with in 50m of colliding with the aircraft. In all cases the drone pilots were not found.
A Stansted Airport spokesman said: 'Drones pose a serious risk when flown near airports.
Owners face prosecution if they breach guidelines, which include a complete ban on their
use in the vicinity of airports.' "

So - one more thing to worry about then, for anyone about to fly off for a late summer break from London Airport Stansted; as if the grim-faced armed police and the jobsworth "security" staff confiscating your bottles of liquids and interrogating and searching little old grandmothers - because everyone knows little old grandmothers are the section of the population most likely to carry out a terrorist act - were not enough.

Point to Ponder:- "Kill a man, and you are an assassin. Kill millions of men, and you are a conqueror. Kill everyone, and you are a god." (Jean Rostand, French biologist).

Thanks PoSW

Spectre's Newsround

Enigma News Articles July 2016

http://www.nationalsecurity.news/2016-07-01-cold-war-ii-russia-building-spy-station-in-nicaragua.html

01/07/2016

Cold War II: Russia Building Spy Station In Nicaragua

Moscow is constructing an electronic eavesdropping and intelligence-gathering station in Nicaragua as part of the Russian military's effort to bolster its spy activities in the Western Hemisphere.

The SIGINT site is part of a deal Russia signed recently with Managua involving the sale of 50 T-72 tanks, officials familiar with the deal told the Washington Free Beacon. The tank sale along with the construction of the spy facility has raised red flags with some officials in the Pentagon, as well as other nations in the region, about a military buildup under Left-wing leader Daniel Ortega.

Disclosure of the deals came as a trio of U.S. officials were expelled from Nicaragua last week, the WFB reported. The three officials, from the Department of Homeland Security, were picked up by Nicaraguan officials and driven to the airport where they were put on a plane bound for the U.S. without any of their belongings.

John Kirby, a spokesman for the State Department, called the June 14 expulsion "unwarranted and inconsistent with the positive and constructive agenda that we seek with the government of Nicaragua.

"Such treatment has the potential to negative impact U.S. and Nicaraguan bilateral relations, particularly trade," he continued.

Analysts observed that the Nicaraguan treatment of U.S. officials signals that President Obama's recent diplomatic outreach to Cuba has not led to better relationships with dictatorial Left-wing regimes in the region.

Ortega has remained close to the communist Castro regime in Cuba and the Left-wing government of crumbling Venezuela. Ortega was once part of the communist Sandinista dictatorship, and after winning his country's presidency in 2006 shifted towards socialism.

The WFB reported that no details of the Russia spy site or its location and when it would be completed could be learned.

http://www.dailymail.co.uk/news/article-3694826/More-Russian-spies-trying-gather-intelligence-Britain-height-Cold-War-warns-former-GCHQ-official.html

17/07/2016

More Russian spies are trying to gather intelligence in Britain now than at the height of the Cold War, warns former GCHQ official

Foreign intelligence agents are trying to intercept secret communications
Ex GCHQ official claims there could be Russian spies outside buildings
Warned that Islamic State militants could also use spy technology

There are now more Russian spies trying to gather intelligence in Britain than at the height of the Cold War, a former GCHQ official warned last night.

Foreign intelligence agents are trying to intercept secret communications between arms companies making deadly weapons, members of the Armed Forces and the Ministry of Defence.

Techniques they are using include sending code to mobile phones which allows them to turn the device into an eavesdropping device, monitoring all calls, and also text messages, he said.

John Bayliss, a former official at Britain's eavesdropping agency GCHQ, said spies could also be sitting outside key buildings in vans intercepting information from computer screens.

He also warned Islamic State militants were sophisticated enough to use the mobile phone spying technology in Britain.
Speaking after his nearly 40-year career at the top agency, which included training Royals, soldiers and four-star generals, he said: 'There are more Russian intelligence agents now than at the height of the cold war.'

While some are involved in traditional state espionage, many others are engaged in industrial spying for the commercial benefit of Russian firms, he said.

Mr Bayliss, who now runs the security consultancy firm Communications Risk Management, added: 'A lot of them want information from defence contractors and also the MoD.'

He said there are approximately six Russian intelligence officers for every British intelligence officer in the world.
Earlier in the year it emerged there were as many agents working in Britain as there were during the Cold War - around 30 - but it is believed the figure has since soared towards the 100 figure.

Spies are mainly operating in London and cities and towns with a big Royal Navy presence, particularly the Clyde, home to the nuclear deterrent.

Mr Bayliss has briefed security teams at defence contractors such as Rolls Royce working on the nuclear submarines on how to stop their devices being intercepted and controlled by spies.

Detailing one of the common techniques used by the enemy, he said agents would be able to send code they can buy online to mobile phones.

This would enable them to take control of the phone.

He said: 'They can then listen to conversations and see your texts. It is even possible for them to get a text saying this person has just received a phone call.

'They can then dial in and join the conversation as a conference call, only the other two don't know they are there.
'They can also turn the phone's microphone on and off and listen to all the conversations had near the mobile phone.'
Mr Bayliss briefed soldiers before they went out to Afghanistan on security issues. He said there was evidence of locals selling cheap sim cards to soldiers outside their bases.

He added: 'I advised them not to take advantage of these SIMs as there was no telling what may have been done to them'
The enemy could potentially have had access to their communications.
Another source said that in Afghanistan family members back in the UK were even contacted by insurgent terrorists who wrongly told them their husband or son had been killed on the battlefield.

Mr Bayliss, who also briefed Prince Harry on security before he deployed, added: 'One of the main aims of terrorists is to terrorise.'

'The Russians are throwing their weight around so there's concern about them and Islamic State are also sophisticated enough to be able to use this technology.'

Speaking about another technique, he warned of spies sitting outside buildings and being able to read computer screen images.
They do this by intercepting the electromagnetic radiation from the screen - a technique known as TEMPEST.
'The longer the image is on the screen, the easier it is to recover in its entirety'

'They can also intercept keystrokes due to the electronic pulse the keys emit from up to 25 metres away'.

http://www.theaustralian.com.au/news/nation/spies-pulled-out-of-asia-to-fight-isis/news-story/6f551fba61b2e94e8610f429df4591ce

30/07/2016

Spies pulled out of Asia to fight ISIS

Australia's foreign espionage agency has stripped officers from across its Southeast Asian and central Asian stations, sending spies to the Middle East in an urgent bid to meet the growing threat posed by Islamic State.

Foreign Minister Julie Bishop has described for the first time how the Australian Secret Intelligence Service retooled in the wake of Islamic State's success in Iraq and Syria, forging new partnerships with overseas intelligence services and reopening stations. The 2014 invasion of Iraq, where Islamic State annex large tracts of northern Iraq and declared a Muslim "caliphate'', prompted one of the greatest upheavals in Australia's intelligence community since the Cold War.

Having lowered its presence across the Middle East following the cooling of the Iraq and Afghan wars, ASIS had to pivot quickly and sharply back towards the - region.

ASIS, which had been tasked mainly with spying on people- smugglers, took officers from stations up the people-smuggling chain in Southeast and central Asia, and redeployed them.

It also brokered new relationships with foreign intelligence services with which it had not previously dealt in its quest to learn more about Australians travelling to Syria to fight for Islamic State, also known as ISIS.

Ms Bishop described the talks she had with ASIS as the Syrian crisis was unfolding in 2013-14.

"We would consider where our intelligence needed to be directed and we would discuss that with our agencies,'' Ms Bishop told The Weekend Australian.

"They would seek our approval to commence discussions or enhance discussions with these intelligence organisations for the purpose of gathering more information about Australians who may be travelling.''

Among the most forthcoming was Jordan, which has become a hub for Western spies, including ASIS operatives, since the Syrian civil war began. Contrary to the popular image, most spies work as declared officers, meaning their identity and purpose is known to the host country.

Such officers need the permission of the host country to operate, meaning bolstering their numbers is not always quick or straightforward.

Until the people-smuggling trade stopped in 2013-14, ASIS was largely occupied with gathering information of smuggling targets in Southeast Asia, Pakistan, Afghanistan and the subcontinent.

When the trade ended, ASIS was free to pull officers from its Southeast Asian and central Asian stations and send them to the Middle East.

It reopened its Iraq station, which it reportedly shut in July 2010, as part of a larger downsizing of its operations across the Middle East.

It also sent several declared officers into Jordan.

Ms Bishop said the spy service also struck up relationships with new partners.

"That is what ASIS does, it makes connections with groups and agencies that would not otherwise be seen as being in Australia's national interest,'' Ms Bishop said.

"They were making contact with intelligence agencies that we would not otherwise have seen a need to contact, but because of the foreign fighter threat, we felt that it was in our national interest for these connections to be made.''

The Weekend Australian understands the spy service performed a similar “surge’’ after the 2014 downing of Malaysia Airlines Flight MH17, which was shot down over the Ukraine by Russian-backed rebels.

In the wake of the attack, which claimed 38 Australian lives, it was widely reported that then prime minister Tony Abbott canvassed sending Australian troops on to the crash site, situated as it was in a war zone, to secure the area.

But it seems the tragedy also made heavy demands on Australia’s spy service, which had to pull staff from other stations and redeploy them to gather intelligence about the sort of situation Australian officials could expect to find.

ASIS’s ability to expand into the Middle East was further helped by Mr Abbott’s decision in August 2014 to lift spending across all spy agencies by $630 million in the face of the growing Islamic State threat.

Ms Bishop brokered the key agreement to lift the ASIS presence in Jordan during a series of meetings with King Abdullah II in 2014.

That agreement gave the Australian spy agency a window into Syria that it did not previously have, and gave Australia a chance to better monitor those Australians seeking to travel to or return from Syria as foreign fighters.

https://www.engadget.com/2016/08/01/uk-spies-tracked-activists-with-url-shortener/

01/08/2016

UK spies tracked Middle East activists with a web link shortener

GCHQ used the tech to both foster and monitor groups during Arab Spring revolutions.

Intelligence agencies don't always rely on hacks to monitor and influence political events. Motherboard has learned that the UK's GCHQ created its own URL shortener, lurl.me, to both disseminate pro-revolution talk during Iranian and Arab Spring protests as well as track activists. Puppet accounts would use lurl.me to help get around government censorship, while GCHQ would send special links to help identify activists who were otherwise hard to follow. The combination also made it easy to understand the effectiveness of revolutionary campaigns online -- if many people clicked a link and behavior changed, GCHQ would know that its efforts made a difference.

The shortener doesn't appear to have been used past 2013, and it's not clear whether or not the agency has either switched shorteners or dropped the strategy entirely. When asked, GCHQ would only issue its stock response that it doesn't comment on "intelligence matters," and that all its activity is conducted inside a "strict legal and policy framework" with "rigorous oversight."

Specialized web links aren't nearly as intrusive as hacks, of course, but there's still a reason for concern. The same concept used to pinpoint would-be revolutionaries has also been used to identify Anonymous and LulzSec participants, and could be used to monitor any group a government doesn't like. Online activists can avoid this kind of tracking by refusing to click links from unfamiliar URL shorteners, but that's one more thing they have to worry about.

http://www.dw.com/en/munich-court-convicts-ex-yugoslav-spies-in-1983-killing/a-19446792

03/08/2016

Munich court convicts ex-Yugoslav spies in 1983 killing

A German court has convicted two former spies for Yugoslavia, in the 1983 killing of a dissident. Zdravko Mustac and Josip Perkovic were sentenced to life in prison for their roles in the death of Stjepan Djurekovic.

The state court in Munich sentenced two former spies for Yugoslavia to life, for complicity in the 1983 murder of the dissident Stjepan Djurekovic, found dead after being shot multiple times and beaten with a cleaver in a garage in the Bavarian town of Wolfratshausen. Now 74, Zdravko Mustac had headed the SDS state security service at the time, and his 71-year-old co-defendant, Josip Perkovic, worked under him.
"The court finds that the accused Zdravko M. had asked the accused Josip P. to plan and prepare for the murder of Stjepan Djurekovic," the court announced in a statement.

According to the court, Perkovic - who would become a senior official in the independent Croatia's spy agency - had obtained a key to the garage from the building's owner, who was convicted in 2008. Perkovic passed the key on to the three or four people who carried out the killing and remain unidentified, the court found.

'Muzzled - politically ... physically'

Djurekovic was one of 22 Croatians murdered on orders from Belgrade in Germany between 1970 and 1989. Most of those cases remain untried. This time around, prosecutors successfully argued that the spies had sought to silence Djurekovic who had information about alleged illegal business dealings by the son of a leading Yugoslav politician.

"The prime motive was to kill a regime critic, a separatist," Manfred Dauster, the presiding judge, told the court on Wednesday. "Djurekovic was to be muzzled - politically, but also physically."

The defense had sought acquittal, citing a lack of evidence. Attorneys plan to appeal the verdict to Germany's federal high court. Should the sentences stick, Perkovic and Mustac could apply to serve them back home.

Yugoslavia disbanded in a series of wars and secessions from the early 1990s until Kosovo became the country's seventh and final independent nation in 2008. Three days before Croatia joined the EU on July 1, 2013, officials changed a law to, like many members, prohibit extradition on charges for crimes committed before August 2002 in an effort to shield people accused of crimes during the 1991-95 war for independence.

Croatia ultimately extradited the men in 2014 under pressure from Germany and threats from the European Commission that EU development funding could be withdrawn. The trial began that October.

Thanks Spectre

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September 2016

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Sep kHz, ID, ...	Oct kHz, ID, ...
						x	0100/0120/0140		V07	01B		18074/15874/14374 883
x	x	x	x	x	x	x	0200		V13	0	search (15388?)	search (15388?)
						x	0300/0320/0340		V07	01B	16037/14637/12137 661	
x	x	x	x	x	x	x	0300		V13	0	search (15388?)	search (15388?)
		x	x				0315		E11	03	7850 253/00	7850 253/00
x	x	x	x	x			0400		S06	01A	15721 480	15721 480
x	x	x	x	x	x	x	0400		V13	0	search (15388?)	search (15388?)
			x				0430/0450/0510		E07A	01B	6788/ 7488/ 9322 741	6788/ 7488/ 9322 741
x							0430/0450/0510		M12	01B	5792/ 6992 796, search	4617/ 5317/ 5817 638
x	x	x	x	x	x	x	0440 (var)		HM02	01C	7351	7351 during Summertime
x							0450		E11	03	6304 416/00	6304 416/00
	x			x			0455		S11A	03	5358 321/00	5358 321/00
x		x		x		x	0500		HM01	18	10860	10860
	x		x		x		0500		HM01	18	11462	11462
x	x	x	x	x	x	x	0500		V13	0	search (9522, 11430, 13750?)	search (9522, 11430, 13750?)
					x		0500/0520/0540		M12	01B	8176/ 9376/10476 134	6832/ 7932/ 892, search
			x	x			0500/0600	1/3	E06	01A	14370/16265 354	
		x					0530/0540		S06S	01A	9296/10365 464	9296/10365 464
x	x	x	x	x	x	x	0540 (var)		HM02	01C		7351 during Wintertime
		x		x			0545		E11	03	15915 348/00	15915 348/00
	x		x		x		0600		HM01	18	14375	14375
x	x	x	x	x	x	x	0600		V13	0	search (9522, 11430, 13750?)	search (9522, 11430, 13750?)
x				x			0600		E11	03	181/00, search	181/00, search
	x						0600/0610		S06S	01A	15855/16485 438	15855/16485 438
					x	x	0600/0620/0640		E07	01B	9064/10264/11464 024	9064/10264/11464 024
		x			x		0600/0620/0640		XPAc	01B	10359/11559/13559	10868/12168/13368
			x	x			0600/0700	1/3	E06	01B		18425/20230 186
						x	0600/0700		M14	01A	6824/6990 382	6824/6990 382
						x	0630/0640		S06S	01A	22185/20050 524	22185/20050 524
			x				0630/0650/0710		M12	01B	6784/7684/8184 761	6784/7684/8184 761
	x		x				0645		E11	03	10800 517/00	10800 517/00

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Sep kHz, ID, ...	Oct kHz, ID, ...
x		x		x		x	0700		HM01	18	9330	9330
	x		x		x		0700		HM01	18	13435	13435
						x	0700		M01	01B	6510 463	6510 463
	x						0700/0710(15)		S06S	01A	5760/ 6930 374	5760/ 6930 374
x	x	x	x	x	x	x	0700		V13	0	search (15388?)	search (15388?)
		x			x		0700/0720/0740		XPAc	01B		
	x			x			0700/0720/0740		XPAt	01B	17429/ □search	16284/18184/19584
	x			x			0710		E11	03	10221 633/00	10221 633/00
			x		x		0710		E11	03	14769 491/00	14769 491/00
x		x					0715		S11A	03	14940 382/00, check	14940 382/00, check
				x		x	0730		E11	03	15825 352/00	15825 352/00
	x						0730/0740		S06S	01A	7425/11560 11560/12140 427	7425/11560 11560/12140 427
		x					0730/0740		S06S	01A	11530/12140 745	11530/12140 745
x							0745		E11	03	10213 262/00	10213 262/00
	x		x				0745		E11	03	14575 335/00	14575 335/00
x							0800	1/3	G06	01A	6810 329	6810 329
x		x		x		x	0800		HM01	18	9065	9065
	x		x		x		0800		HM01	18	11365	11365
x	x	x	x	x	x	x	0800		V13	0	search (15388?)	search (15388?)
			x				0800/0810		E17Z	01A	14260/12930 674	14260/12930 674
	x						0800/0810		S06S	01A	11635/10420 352	11635/10420 352
					x		0800/0810	1	S06S	01A	10350/ 8520 254	10350/ 8520 254
					x		0800/0820/0840		E07A	01B	11153/12153/13453 114	11484/12184/13384 413
					x		0800/0900		M14	01A		5430/ 5561 171
		x				x	0805		E11	03	11450 311/00	11450 311/00
x			x				0820		E11	03	6923 438/00	6923 438/00
		x					0820/0830		S06S	01A	8630/ 9255 471, check!	8630/ 9255 471, check!
x							0830/0840		S06S	01A	9220/ 8270 371	9220/ 8270 371
			x	x			0830/0930		S06	01A	19035/17256 842	20312/16237 842
x		x					0900		E11	03	9399 534/00	9399 534/00
x		x		x		x	0900		HM01	18	9240	9240
	x		x		x		0900		HM01	18	11462	11462

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Sep kHz, ID, ...	Oct kHz, ID, ...
x							0900/0910		S06S	01A	14580/13165 872	14580/13165 872
			x				0900/0910		S06S	01A	12952/13565 167	12952/13565 167
			x				0900/0910		S06S	01A	5744/ 6524 624	5744/ 6524 624
	x			x			0915		S11A	03	7317 484/00	7317 484/00
		x	x				0930		E11	03	8803 270/00	8803 270/00
			x				0930/0940		S06S	01A	9081/10514 314	9081/10514 314
				x			0930/0940		S06S	01A	12140/13515 516, search	12140/13515 516, search
x		x		x		x	1000		HM01	18	9155	9155
	x		x		x		1000		HM01	18	12180	12180
	x						1000/1010		S06S	01A	6410/ 7340 893	6410/ 7340 893
		x					1000/1010		S06S	01A	13365/14505 729	13365/14505 729
x			x				1015		S11A	03	16112 475/00	16112 475/00
	x			x			1020		S11A	03	9960 426/00	9960 426/00
	x						1045		E11	03	8102 576/00	8102 576/00
	x						1100/1110		S06S	01A	6190/ 7230 754	6190/ 7230 754
x							1100/1120/1140		M12	01B	12205/13559/14728 973, check	12205/13559/14728 973, check
		x					1200	?	G06	01A	5186 574	5186 574
x	x	x	x	x	x	x	1200		V13	0	search (7502?)	search (7502?)
x							1200/1210		S06S	01A	9145/11460 831	9145/11460 831
			x				1200/1210		S06S	01A	12415/14212 425	12415/14212 425
					x		1200/1210/1220		M42C	01C	17441/15845/13506	19526/17460/15824
	x	x					1205		E11	03	9443 469/00	9443 469/00
x				x			1225		E11	03	20286 521/00	20286 521/00
	x	x					1300		E11	03	15632 133/00	15632 133/00
		x					1300	?	G06	01A	5436 574	5436 574
			x				1300	**1/3**	G06	01A	4598 329	4598 329
x	x	x	x	x	x	x	1300		V13	0	search (7502?)	search (7502?)
			x		x		1310/1330/1350		M12	01B	13873/13373/11473 834	12214/10814/ 9214 282
	x				**x**		1345		E11	03	13046 911/00	13046 911/00

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Sep kHz, ID, ...	Oct kHz, ID, ...
x	x	x	x	x	**x**	x	1400		M08A	18	8096	8096
				x	x		1400/1420/1440		XPA2r	01B		17462/16114/14828
	x		x				1450		E11	03	10641 441/00	10641 441/00
					x		1500		M01	14	6260 463	6260 463
	x						1500/1510		S06S	01A	6464/ 7242 537	6464/ 7242 537
			x				1500/1520/1540		M12	01B	13386/12189/11491 725	13386/12189/11491 725
	x					x	1500/1520/1540		XPA2m	01B		16338/14538/13538
				x		x	1500/1520/1540		XPA2p	01B	16147/14947/14447	16147/14947/14447
				x			1510/1530/1550		E07A	01B	10583/ 9383/ 8183 531	11424/10124/ 9124 411
			x				1530		E11	03	10330 262/00	10330 262/00
		x			x		1540		S11A	03	10800 563/00	10800 563/00
x	x	x	x	x	x	**x**	1600		HM01	18	11435	11435
	x					x	1605		E11	03	6397 232/00	6397 232/00
		x				x	1625		E11	03	10448 972/00	10448 972/00
x							1700	1/2	G06	01A	4767 574	4767 574
x	x	x	x	x	x	**x**	1700		HM01	18	11530	11530
		x				x	1700/1720/1740		E07	01B	12223/11062/10116 201	11454/ 9423/ 8123 441
			x				1700/1720/1740		M12	01B	12162/11566/10711 546	12162/11566/10711 546
				x			1700/1800	1/3	M14	01A	5945/ 5477 382	5945/ 5477 382
		x			x		1705		E11	03	10213 392/00	10213 392/00
			x				1730		E11	03	9371 416/00	9371 416/00
		x					1740/1840	3	E06	01A		2015: 13457/10204 634, search
x							1800	1/2	G06	01A	4953 574	4953 574
x	x	x	x	x	x	**x**	1800		HM01	18	11635	11635
	x		x				1800		M01	14	5475 463	5475 463
x		x					1800/1820/1840		M12	01B	9176/ 7931/ 6904 257	9176/ 7931/ 6904 257
			x				1800/1820/1840		M12	01B	11435/10598/ 9327 938	11435/10598/ 9327 938
	x					x	1800/1820/1840		XPA2m	01B	14538/13538/12138	
x							1810		M01B	14	3535, 4590 420	3535, 4590 420
x							1810/1830/1850		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
					x		1810/1820/1830		M42C	01C	11462/ 9226/ 7829	11462/ 9226/ 7829

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Sep kHz, ID, ...	Oct kHz, ID, ...
	x						1820	2/4	M14	01A	5945 346	5945 346
			x				1830	2/4	G06	01A	5934 579	5934 579
			x				1832		M01B	14	3510, 4605 201	3510, 4605 201
	x			x			1840/1850/1900	1	M42C	01C	13467/11084/ 9052	11136/ 9074/ 7723
x		x					1900/1920/1940		E07	01B	ex 12108/10708/ 9208 search	ex 10243/ 9243/ 7943 search
x			x				1900/1920/1940		M12	01B	9176/ 7931/ 6904 257	9176/ 7931/ 6904 257
		x					1900/1920/1940		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
	x		x				1900/1920/1940		XPA2p	01B		
				x	x		1900/1920/1940		XPA2r	01B	16167/14663/13923	
	x		x				1900/1920/1940		XPAe	01B	11576/10476/ 9276	9362/ 8062/ 7462
				x			1900/2000	1/3	S06	01A	9496/ 6924 761	
					x		1900/2000	1/3	S06	01A	4756/ 4059 614	
				x			1902		M01B	14	3625, 4941 153	3625, 4941 153
x							1915		M01B	14	3644, 4454 771	3644, 4454 771
		x					1920	2/4	M14	01A	5464 537	5464 537
	x		x				1925		E11	03	10620 551/00	10620 551/00
				x			1930	2/4	G06	01A	5442 947	5442 947
		x		x			1955		S11A	03	4016 371/00	4016 371/00
				x			2000		E11	03	7377 576/00	7377 576/00
	x		x				2000		M01	14	5020 463	5020 463
x	x	x	x	x	x	x	2000		M08A/ V02A	18	7554	7554
		x					2000/2020/2040		E07A	01A	8144/ 6944/ 5744 147	8144/ 6944/ 5744 147
			x				2000/2020/2040		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
				x			2000/2100	1/3	S06	01A		9496/ 6924 761
					x		2000/2100	1/3	S06	01A		4756/ 4059 614
					x	x	2005		E11	03	8186 363/00	8186 363/00
				x			2010		M01B	14	3520, 4585(4940) 582	3520, 4585(4940) 582
			x				2010/2030/2050		E07	01B	9387/ 7526/ 5884 358	7516/ 5836/ 4497 584
			x				2030	1/3	E06	01A	5186 891	5186 891
x		x		x		x	2100		HM01	18	11635	11635

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Sep kHz, ID, ...	Oct kHz, ID, ...
		x					2100/2120/2140		M12	01B	6793/ 5893/ 4593 785	5814/ 5214/ 4614 826
		x			x		2110/2130/2150		M12	01B	11469/10469/ 9169 441	10269/ 9269/ 7969 229
				x			2130	1/3	E06	01A	5197 634	5197 634
x		x		x		x	2200		HM01	18	10715	10715
	x		x		x		2200		HM01	18	17480	17480
x		x		x		x	2300		HM01	18	8009	8009
	x		x		x		2300		M08A	18	8135	8135

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

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...	Sep kHz, ID, ...	Oct kHz, ID, ...	Remarks
		x	x				0315		E11	03	8565 253/00	8565 253/00	7850 253/00	7850 253/00	since 01/14, last log 08/16
x							0450		E11	03	10800 416/00	10800 416/00	6304 416/00	6304 416/00	since 02/10, last log 08/16 2nd transmission Thu 1730z
	x			x			0455		S11A	03	5149 321/00	5149 321/00	5358 321/00	5358 321/00	since 09/14, last log 08/16
		x		x			0545		E11	03	13424 348/00	13424 348/00	15915 348/00	15915 348/00	since 06/11, last log 08/16
x				x			0600		E11	03	13908 181/00	13908 181/00	181/00, **search**	181/00, **search**	since 07/15, last log 08/16
	x		x				0645		E11	03	13424 517/00	13424 517/00	10800 517/00	10800 517/00	since 07/09, last log 08/16
	x			x			0710		E11	03	14753 633/00	14753 633/00	10221 633/00	10221 633/00	since 02/11, last log 08/16
			x		x		0710		E11	03	15905 491/00	15905 491/00	14769 491/00	14769 491/00	since 07/15, last log 08/16
x		x					0715		S11A	03	20180 382/00	20180 382/00	14940 382/00, **check**	14940 382/00, **check**	since 05/14, last log 08/16
				x		x	0730		E11	03	17120 352/00	17120 352/00	15825 352/00	15825 352/00	since 04/15, last log 08/16
x							0745		E11	03	9610 262/00	9610 262/00	10213 262/00	10213 262/00	since 03/14, last log 08/16 2nd transmission Thu 1530z
	x		x				0745		E11	03	15632 335/00	15632 335/00	14575 335/00	14575 335/00	since 10/11, last log 08/16
		x				x	0805		E11	03	14975 311/00	14975 311/00	11450 311/00	11450 311/00	since 07/14, last log 08/16
x			x				0820		E11	03	6807 438/00	6807 438/00	6923 438/00	6923 438/00	since 10/09, last log 08/16
x		x					0900		E11	03	13427 534/00	13427 534/00	9399 534/00	9399 534/00	since 10/05, last log 08/16
	x			x			0915		S11A	03	8530 484/00	8530 484/00	7317 484/00	7317 484/00	since 01/10, last log 08/16
		x	x				0930		E11	03	10213 270/00	10213 270/00	8803 270/00	8803 270/00	since 02/14, last log 08/16
x			x				1015		S11A	03	16530 475/00	16530 475/00	16112 475/00	16112 475/00	since 04/10, last log 08/16
	x			x			1020		S11A	03	11581 426/00	11581 426/00	9960 426/00	9960 426/00	since 02/10, last log 08/16 2nd transmission Thu 1730z
	x						1045		E11	03	13873 576/00	13873 576/00	8102 576/00	8102 576/00	since 01/12, last log 08/16 2nd transmission Fri 2000z
	x	x					1205		E11	03	10302 469/00	10302 469/00	9443 469/00	9443 469/00	since 03/10, last log 08/16
x				x			1225		E11	03	13537 521/00	13537 521/00	20286 521/00	20286 521/00	since 05/15, last log 08/16
	x	x					1300		E11	03	15803 133/00	15803 133/00	15632 133/00	15632 133/00	since 08/13, last log 08/16
	x				**x**		1345		E11	03	15825 911/00	15825 911/00	13046 911/00	13046 911/00	since 10/15, last log 08/16
	x		x				1450		E11	03	9052 441/00	9052 441/00	10641 441/00	10641 441/00	since 02/16, last log 08/16
			x				1530		E11	03	10356 262/00	10356 262/00	10330 262/00	10330 262/00	since 06/14, last log 08/16 2nd transmission Mon 0745z
		x			x		1540		S11A	03	11092 563/00	11092 563/00	10800 563/00	10800 563/00	since 03/16, last log 08/16
	x					x	1605		E11	03	4783 232/00	4783 232/00	6397 232/00	6397 232/00	since 11/15, last log 08/16
		x				x	1625		E11	03	15795 972/00	15795 972/00	10448 972/00	10448 972/00	since 02/15, last log 08/16
		x			x		1705		E11	03	14865 392/00	14865 392/00	10213 392/00	10213 392/00	since 02/14, last log 08/16
			x				1730		E11	03	8088 416/00	8088 416/00	9371 416/00	9371 416/00	since 03/10, last log 08/16 2nd transmission Mon 0450z
	x		x				1925		E11	03	11581 551/00	11581 551/00	10620 551/00	10620 551/00	since 07/15, last log 08/16
		x		x			1955		S11A	03	4870 371/00	4870 371/00	4016 371/00	4016 371/00	since 02/14, last log 08/16
				x			2000		E11	03	8530 576/00	8530 576/00	7377 576/00	7377 576/00	since 03/12, last log 08/16 2nd transmission Tue 1045z
					x	x	2005		E11	03	9130 363/00	9130 363/00	8186 363/00	8186 363/00	since 03/14, last log 08/16 2nd transmission Thu 1530z

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...	Sep kHz, ID, ...	Oct kHz, ID, ...	Remarks
x							0800	1/3	G06	01A	7320 329	7320 329	6810 329	6810 329	since 07/10, last log 08/16 repeat at Thu 1300Z
		x					1200	?	G06	01A	7425 574	7425 574	**5186** **574**	**5186** **574**	since 10/14, last log 08/16 yearly changing frequencies + id repeat at 1300Z
		x					1300	?	G06	01A	6956 574	6956 574	5436 574	5436 574	since 10/14, last log 08/16 yearly changing frequencies + id repeat from 1200Z
			x				1300	**1/3**	G06	01A	5890 329	5890 329	4598 329	4598 329	since 09/11, last log 08/16 repeat from Mon 0800Z
x							1700	1/2	G06	01A	5348 574	5348 574	**4767** **574**	**4767** **574**	since 04/10, last log 08/16 yearly changing frequencies + id repeat at 1800Z
x							1800	1/2	G06	01A	5849 574	5849 574	**4953** **574**	**4953** **574**	since 05/09, last log 08/16 yearly changing frequencies + id repeat from 1700Z
			x				1830	2/4	G06	01A	6887 842	6887 842	5934 579	5934 579	since 05/01, last log 08/16 repeat at Fri 1930Z
				x			1930	2/4	G06	01A	5943 218	5943 218	5442 947	5442 947	since 04/01, last log 08/16 repeat from Thu 1830Z

Current HM01 Schedules as of 1 September 2016

Freq 1	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
10860	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
11530	2300	2300		2300		2300	
17540			2300		2300		2300

Text in red requires confirmation.

Transmissions in cells highlighted in Yellow have not been heard since early January 2014 and appear to have been discontinued. Although HM01 is occasionally heard on 8009 and 8135kHz in this time slot.

M42d Schedules (August 13, 2016) 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
Every	Mon - Fri	**02:00**	16321												41018
		03:00	14881												
New message every day, no repeats the following days. Parallels M42c at 0000/0100z, S06 at 0400z, and M14 at 0500z.															

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
1st, 3rd	Monday	**04:00**				?	11414	12064	11049	10748	?	?			45079
		04:10				8184	10169	10926	9126	9139	?	?			
		04:20				6773	8169	9049	8137	7424	?	?			
		05:00	6927	?	10249								?	?	
		05:10	5945	?	8137								?	?	
		05:20	4816	5126	5948								?	?	
Repeats messages the following Wednesday at 21:00 or 22:00 (look further down for frequencies) instead of the following day.															

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Tuesday	**16:50**	9143	11471	13386	15658	17436	17451	17479	17431	15848	13426	11441	9228	20501
		17:00	7861	9216	11129	13395	15789	15865	15931	15842	13385	11116	9069	7845	
		17:10	5384	7637	9244	11036	13376	13483	13567	13408	11089	9175	7648	5269	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Tuesday	**23:00**	8126	9234	10643	11124	13378	14981	14456	12184	11158	10521	8173	8048	40988
		23:10	7643	7819	8051	9248	11096	12203	12188	10189	9175	8044	6836	6789	
		23:20	5148	5361	6924	7946	9129	11148	11084	8116	7919	6941	5267	4038	
Repeats messages the following Friday at 06:00 (look further down for frequencies) instead of the following day.															

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Wednesday	**06:00**	?	?	18189	16325	17420	17512	17419	16346	15930	19268	20082	?	32816 32817
		06:10	?	?	16046	14724	15673	15930	15707	14847	13503	17548	18207	?	
		06:20	?	?	14459	12172	13361	13503	13446	12223	11109	15779	16141	?	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Wednesday	**08:00**	19928	19654	18431	17496	15993	15906	15844	15938	16324	18546	20314	20838	45075
		08:10	17489	17461	16278	15829	13581	13468	13396	13554	14616	16231	18183	18294	
		08:20	15914	15869	14423	13408	11494	11114	11089	11461	12188	14629	16154	16313	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Wednesday	**08:00**				19138	17488	16330	15795	16319	?	?			16404 16405
		08:10				17545	15823	14367	13428	14378	?	?			
		08:20				15626	13459	12141	11060	11636	?	?			
		09:00	20735	20916	20386								?	?	
		09:10	18037	18730	18215								?	?	
		09:20	16250	16165	16061								?	?	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Wednesday	**09:15**				17537	14638	15629	14948	17434	?	?			20492
		09:25				14576	12156	13376	12176	14369	?	?			
		09:35				11639	10164	11544	10177	11163	?	?			
		10:15	19433	20639	20138								?	?	
		10:25	16048	17539	17428								?	?	
		10:35	14976	15644	14983								?	?	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Wednesday	**10:00**	19313	19984	20961							22863	20996	20983	49202
		10:10	16348	17489	18553							20674	19163	19139	
		10:20	14494	15621	16264							18594	17428	17463	
		22:00				13983	15838	17476	16031	15618	12184				
		22:10				12209	13984	15843	14369	13374	10168				
		22:20				10203	11167	13488	12193	11081	9286				

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
1st, 3rd	Wednesday	**12:30**	16329	18235	18563	18476	17430	16286	16244	17455	?	19363	18191	17478	53277
		12:40	14826	16144	16314	16168	15814	14517	14649	15923	16309	17476	15963	15838	
		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
Follows 1st, 3rd Monday	Wednesday	**21:00**				10636	?	12218	?	13548	?	?			45079
		21:10				8163	?	11164	?	11516	?	?			
		21:20				6854	?	9418	?	8145	?	?			
		22:00	6828	?	10164								?	?	
		22:10	5129	?	8076								?	?	
		22:20	4534	4989	6769								?	?	
Message-only repeat slot of 1st & 3rd Monday 04:00 or 05:00.															

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Thursday	**13:30**	14661	16154	17468	15951	15814	13543	13387	13439	14396	15841	13384	12169	49237
		13:40	12186	14483	15859	13506	13411	11154	11023	11138	12194	13376	11428	10364	
		13:50	10243	12196	13471	11483	11146	9221	9166	9244	10529	11108	10376	8168	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
		06:00	9068	12214	?	15991	16189	17483	16291	15946	15864	?	13381	10236	
–	Friday	**06:10**	7853	10226	13419	13546	14408	15888	14519	13561	13483	?	11018	8093	40988
		06:20	6964	9091	11133	11161	12191	13394	12186	11148	11126	?	9139	6814	
Message-only repeat slot of Tuesday 23:00.															

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Saturday	**08:00**				?	?	?	13468	12223	?	?			45114 45115
		08:10				?	?	?	11634	10186	?	?			
		08:20				?	?	?	9486	8094	?	?			
		09:00	?	?	?								?	?	
		09:10	?	?	?								?	?	
		09:20	?	?	?								?	?	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Saturday	**09:00**				17481	17426	16314	16089	16186	16341	18919			45057
		09:10				15946	15818	14569	14384	14571	14706	16268			
		09:20				13543	13396	12191	12173	12195	12217	14486			
		10:00	20973	20894	18948								20868	20951	
		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
Every	Saturday	**11:00**	19436	19823	18344	17463	16354	14689	15964	16153	?	?	?	?	36882
		11:10	17524	17546	16273	15648	14536	12143	13549	14438	?	?	?	?	
		11:20	15638	15825	14434	13425	12218	10186	11524	12216	?	?	?	?	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Saturday	**15:00**	20564	22878	22913							22963	22871	20648	32821
		15:10	18471	20216	20374							20461	20629	18483	
		15:20	16308	18253	18406							18356	18553	16196	
		21:00				20386	18751	18323	17436	16289	15928				
		21:10				18509	16174	15886	15789	14461	13396				
		21:20				16231	14563	13581	13473	12176	11143				

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Sunday	**15:30**	12148	14368	16034	16357	17433	18214	17544	17428	16253	14859	12224	11084	20501
		15:40	10236	12083	14353	14374	15838	16234	15626	15663	14387	12184	10173	9346	
		15:50	8129	10214	12195	12213	13426	14433	13496	13424	12075	10273	8137	7829	

M42c Schedules (August 1, 2016) 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**	17471											
		01:00	14421											
New message every day. Parallels M42d at 0200/0300z, S06 at 0400z, and M14 at 0500z.														

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Every	Monday	**00:25** **01:25**	?	?	16023	?	?	16218	14878	16023	?	?	?	10884
		00:35 **01:35**	?	?	13555	?	?	?	12185	14373	?	?	9215	?
Doesn't repeat the following days.														

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1st	Tuesday	**18:40**				12194	14363	14621	14829	15854	13467	11136		
		18:50				10581	12189	12206	12214	13543	11084	9074		
		19:00				8112	10346	10465	10932	11126	9052	7723		
		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**	?	?	20700	?	?	19224	18562	20823	?	20966	?	?
		22:40 **23:40**	?	?	18726	19405	?	17491	16218	18397	?	?	?	?
Doesn't repeat the following days.														

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Every	Saturday	**12:00**				18206	17431	17496	16329	17482	17441	19526		
		12:10				16159	15827	15932	14641	15967	15845	17463		
		12:20				14551	13376	13481	12187	13396	13506	15824		
		13:00	18526	19441	18437								20374	20562
		13:10	16142	17456	16305								18351	18194
		13:20	14674	15817	14719								16249	16107

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Every	Saturday	**18:10**	7684	9153	12184	14517	15806	16322	16147	15931	13384	11462	9247	8131
		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 & e] and XPA2[Sched m, r & t] Russian Intelligence Multitone Systems [Radiogramma] Transmission Schedules

Zulu > / Month v	0600/0700 Sched c Wednesday/Saturday USB 10baud			1730/1900 Sched e Tuesday / Thursday USB 10baud			XPA2 Sched m Various H 00 / Sun/Tue H+20 H+40 1300,1500,1800,2000,2100			XPA2 Sched r Various H 00 / Fri/Sat H+20 H+40 1400, 1900, 2100			XPA2 Sched t Tuesday/Friday H 00 H+20 H+40 0700		
Jan	9108	10908	12208	7891	6791	5391	16138	14438	13438	16167	14663	13923	13472	14772	16272
Feb	11409	13509	14609	8123	7523	6823	16338	14538	13538	18667	17419	16212	14558	15958	17458
Mar	11409	13509	14609	9362	8062	7462	16138	14438	13438	18667	17419	16212	13431	14631	15931
Apr	10359	11559	13559	10943	10243	9243	14538	13538	12138	17462	16114	14828	16347	17447	18747
May	10868	12168	13368	10438	9938	9138	14538	13538	12138	17462	16114	14828	19667	18767	17467
June	11409	13509	14609	10438	9938	9138	14738	13438	12138	16167	14663	13923	19514	18214	16314
July	11409	13509	14609	10943	10243	9243	14538	13538	12138	15967	13884	12217	20173	18673	17473
Aug	10868	12168	13368	12187	10787	9387	14738	13438	12138	16167	14663	13923	20049	18549	17449
Sept	10359	11559	13559	11576	10476	9276	14538	13538	12138	16167	14663	13923	17429	18629	20129
Oct	10868	12168	13368	9362	8062	7462	16338	14538	13538	17462	16114	14828	16284	18184	19584
Nov	11409	13509	14609	8123	7523	6823	18238	16238	14438	17462	16114	14828	14517	16017	17417
Dec	7756	9056	10656	8164	7364	5864	14538	13538	12138	15967	13884	12217	13393	14493	16293

Notes:

Freqs shown in *italics* indicate unsure freqs, or en bloc transmissions that are believed to have closed.

XPA c 0600/0700z schedule appears to be robust with reasonably strong signals into UK
XPA e 1730/1900z schedule E appears robust; sometimes difficult to receive in Great Britain, monitor in Slovenia has good success.
XPA2 m Repetitive frequency triplets, appears robust, generally strong into UK
XPA2 r Schedule appears robust; generally very strong signals to UK
XPA2 t Replaces E07, remains weak in UK. Intercept via online SDR. Tertiary freq sometimes difficult to hear.

XPA2 p Six day variable schedule, separate document

Updated 19/04/2016

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
Strong into UK

05/09/2015

SPECIAL MATTERS

Thanks to all our contributors:
Ary, Edd, BR, DanAr, DE, DoK, E, HH, HJH, JkC, Jochen, Malc, MaleAnon, MNSDB, PoSW, PLdn, RNGB, Schorshi, T!, tING,

Apologies to anyone missed.

Operation Jallaa: Nil Return

MESSAGES:

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