

ENIGMA 2000 NEWSLETTER



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Ever wondered where the Number Stations have gone?

A leaky phone serving the Chinese and it's not even a Huawei!

Story inside!

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See last page also.

Editorial

Propagation on the short-wave bands continues to be somewhat variable with considerable differences in signal strength from number stations which have regular schedules from one week to another. The mixed mode HM01 station from Cuba has been particularly weak during May and June in the UK morning time on those days when frequencies in the 9 MHz band are used. It has been just about possible to confirm that it is still there but way down in the noise and not strong enough to justify spending any time over.

Changes are also being noted in the frequencies used across the monitored Polytone schedules, the Sunday/Tuesday 'm' schedule being no stranger to this.

E07a Wed 2000z/Thurs0430z as seen previously is bereft of full messages, sending only null, but message expected in July 2019.

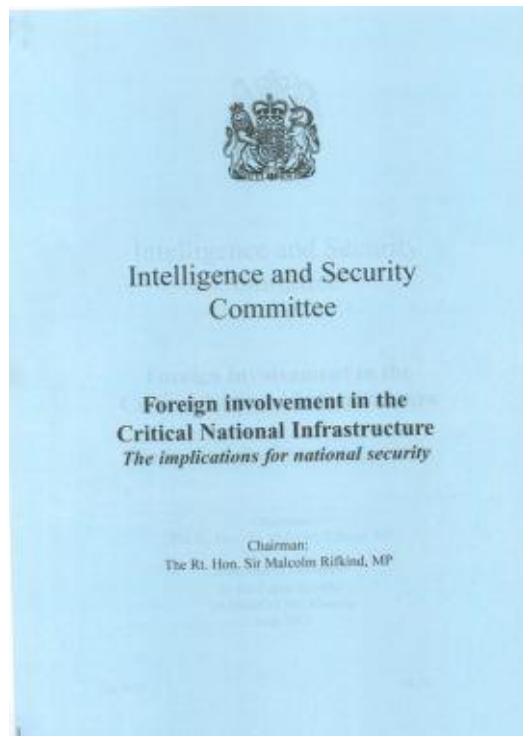
Of S06 RRGB notes: One of the S06s transmitters is suffering from dreadful USB, but strangely it is perfectly readable (apart from a few fades) in AM mode. No trace of LSB.

Noise remains a severe and increasing problem for many UK listeners and amateurs; I know one die hard amateur who is selling his gear.

Recommended Reading

Not a book as such but given the climate surrounding Huawei, 5G and recent actions by Google and US actions this Stationery Office item is well worth a read. It is a real 'eye opener' to the machinations of National Infrastructure protection.

Twenty-seven pages of real, interesting and in-depth reading.



Interesting to note that on Saturday 29th June Huawei were pushing their 5G activities at a London University during their Science Festival. A sizeable queue awaited the reopening at 1500. Not me though; I had more interest in the use of the fruit fly, *Drosophila Melanogaster* and the exploitation of the LOLA gene in the hunt for a vehicle to encourage neurons to regenerate from Stem Cell conversion and back.

Chinese embassies worldwide are well known for the antenna farms usually mounted on their rooves; here, from 'E', is sight of that seen in Berlin. Thanks E



As seen October 2018

Former MI6 chief Sir Richard Dearlove warns Chinese telecoms giant Huawei could 'disrupt our national security in a crisis'...and claims you should never take your iPhone or iPad to China

<https://www.dailymail.co.uk/news/article-7018895/Former-MI6-chief-Sir-Richard-Dearlove-says-Huawei-disrupt-national-security.html>

Former MI6 boss Sir Richard Dearlove has warned Chinese telecoms giant Huawei could ‘disrupt national security’ in a crisis if it was allowed to help build new, high-speed internet infrastructure.

The ex spy chief also warned against taking mobile phones to China over fears they could be hacked.

In an interview with The Mail on Sunday, Sir Richard – who worked at MI6 for 38 years – has slammed the Government’s decision to allow Huawei to take part in the construction of Britain’s new ultra-fast 5G internet network.

In extreme scenarios, he suggested, Huawei’s involvement in building the network, which will allow consumers to download films on their phones in seconds and enable the development of sophisticated technologies like self-driving cars and artificial intelligence, could lead to security risks.

Former MI6 boss Sir Richard Dearlove (pictured) has warned Chinese telecoms giant Huawei could ‘disrupt national security’.

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‘[It could mean] you lose control of your robots as it were, maybe, to a foreign power,’ he said. ‘In a crisis, they might be able to disrupt our national security communications.’

It emerged last month that Theresa May was prepared to allow Huawei to supply non-core technology for 5G, which could include antennae and other network components. The news emerged through a highly controversial leak that led to the sacking of Defence Secretary Gavin Williamson.

Earlier this year, Australia banned Huawei from taking part in the construction of its own 5G network. Mike Pompeo, the US secretary of state, last week blasted the UK’s plans to allow the firm to do so here – claiming it would allow China to ‘control the internet of the future’ and ‘divide Western alliances through bits and bytes’.

Sir Richard, who worked across the world as a frontline MI6 officer before rising to lead the organisation, warned Huawei could be ordered by the Chinese state to insert secret chips into 5G infrastructure that could be ‘triggered’ to disrupt British technology. He said Huawei’s insistence it is independent of the Chinese government was ‘irrelevant’.

Huawei have been banned from taking part in constructing 5G networks in the US and Australia, but no such ban was implemented in the UK.

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He added: ‘It’s a significant strategic company in the People’s Republic of China and if the Communist leadership of China says to Huawei at some point, “jump”, the response is: “Well, yes, how high do you want us to jump?” It’s not: “No.”’ He added that China was ‘very aggressive’ in its intelligence gathering and even warned Britons against taking their normal phones on trips there.

Sir Richard said: ‘If you go to China and you’re an important businessman, and you take the phone you normally use and the iPad that you normally use, the likelihood is that the Chinese will take an interest in that equipment and, as it were, log it against future usefulness. If I’m going to China, I would not take my normal iPad or my normal iPhone. I’d just take a throwaway phone.’

From 'E' With thanks!

<https://www.dailymail.co.uk/news/article-7018895/Former-MI6-chief-Sir-Richard-Dearlove-says-Huawei-disrupt-national-security.html>

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

We start the Morse section with the second part of our article looking at M01a, followed by news of changes to the M01b transmissions that has made the station much easier to receive in the UK.

Notes & Observations on M01a

(Part 2)

In this second, concluding part we look at recently compiled schedules of M01a transmissions, some intriguing data bursts & some associated FSK transmissions.

Schedule

M01a Schedule by Days of Week

Tuesday	Wednesday	Thursday	Friday
0530z 9411kHz	0530z 9129kHz 9192kHz **	0530z 9129kHz 9192kHz **	0530z 9411kHz
0620z 10233kHz 10235kHz **	0540z 7692kHz	0540z 7692kHz	0620z 10233kHz 10235kHz **
0630z 9447kHz	0620z 9421kHz *	0620z 9421kHz *	0630z 9447kHz
0710z 10651kHz	0630z 8111kHz	0630z 8111kHz	0710z 10651kHz
0720z 9151kHz	0710z 9175kHz	0710z 9175kHz	0720z 9151kHz

M01a Freqs vs Day/Time in UTC (With Known IDs)

Freq [kHz]	SUN	MON	TUE	WED	THU	FRI	SAT	Ident 01	Ident 02
7692				0540	0540			536	
8111				0630	0630			902	536

9129 9192 **				0530	0530			498	
9151			0720			0720		728	
9175				0710	0710			146	208
9411			0530			0530			751
9421				0620*	0620*				135
9447			0630			0630		143	796
10233 10235 **			0620			0620		354	458
10651			0710			0710		297	358

All monitoring of M01a using Twente SDR. All best received in Western Europe with the exception of 9421kHz

* Not audible in Western Europe, under Greek B/C station. Best copied in Eastern Europe.

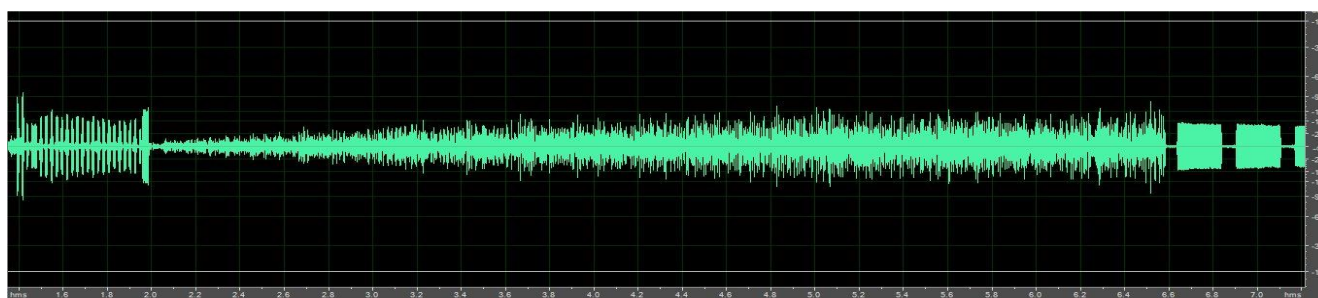
** Alternative frequencies shown in bold. One or the other Frequency is used at that time.

In addition to the schedule shown above, there are also several days each month given to what is believed to be M01a training. These sessions take place on frequencies between 3MHz & 6MHz

Data Bursts

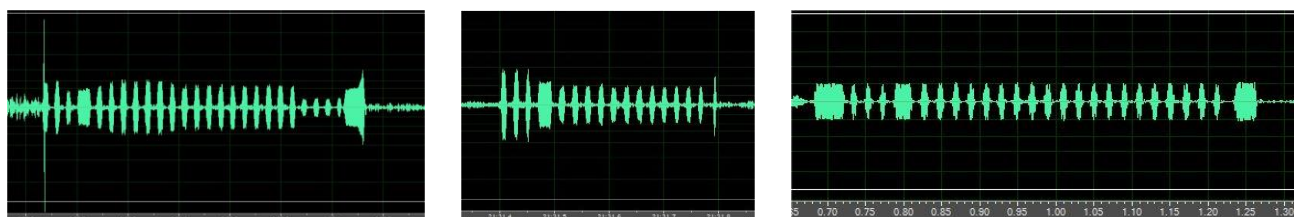
Mixed in with the Morse transmissions are numerous short digital data bursts associated with M01a. These appear just before the beginning of a transmission & also before the continuation of a transmission following a pause or period of silence.

Here is an example showing the data burst followed by the commencement of the M01a transmission;



Examination of a number of these data bursts has shown that they are not identical & that there are variations in the length of some pulses as well as with the number of pulses sent.

Here are three examples that clearly show the differences & variations between data bursts;



If we look at the similarities between the various data bursts it can be seen they do seem to consist of the same basic elements, that is three short pulses, a long pulse, a number of short pulses & ending with a long pulse, (although that is absent from one of the samples obtained).

Differences can be seen in the length of the longer pulses & also the number of short pulses that make up the central part of the data burst. In the last example shown above it can be seen that there is also a long pulse at the start of the data burst, although this was not present on the remainder of the examples examined.

There are also variations in the time between the data burst being transmitted & the start of the M01a Morse with no two samples having the same time delay before the start of the Morse. However, it does seem that the data bursts are connected to the Morse transmissions as they consistently appear prior to the start of the Morse activity, whether that is the start of a transmission or following a pause in the Morse transmission.

The construction of the data bursts indicates that they carry no intelligent data & that is all we can say with certainty. The purpose of these is unknown & can only be surmised. However, the construction of the data bursts would seem to suggest some form of control codes, perhaps for remote switching purposes.

Is M01a an Automated System?

Although M01a does use some manual Morse, a large part of their output is automated consisting of repetitive sequences, often with long periods of silence between these active sessions. It has also been noted that these sequences can start or end part-way through a sequence & even part-way through a Morse character. Whoever these sequences are intended for could have an operator on continuous listening watch but given the nature of the sequences it is also possible that the system is automated to allow for unattended remote monitoring of the signals.

While this could be achieved today using computers, Russia is not known for being the most up to date with their equipment & will often utilise older systems & equipment, particularly where a low-tech solution will suffice.

Could these data bursts be used to remotely activate receive systems, perhaps using teleprinters or other recording equipment to log the output from the M01a sessions? Could the variations noted in the data bursts be used to selectively activate an individual remote station?

Although all the examples examined had a data burst prior to the Morse there was only one that had an equivalent burst at the end of the Morse transmission, so if used for remote switching, there only appears to be a command for switching the system on & not for deactivating it once the transmission has finished.

FSK

In addition to the Morse & data burst content, following a training Morse session an FSK, (Frequency Shift Keying), transmission was logged around five minutes after a training session had ended on 4920kHz. While this may be unrelated to the M01a operation it has been identified as encrypted 75bd with a 250Hz shift, which is a known standard used by the Russian military.

This article has been compiled by the ENIGMA 2000 Morse Team.

Thanks to those involved & particularly to Edd Smith for the huge effort he has put into monitoring, transcribing & analysing M01a transmissions & on whose work & recordings this article is based.

Changes to M01b

M01b Using 'Two-Tone' Modulation & New Transmitter?

M01b is usually a difficult station to copy in the UK & is only received at a fair strength at its best during the spring & summer. The station has always used Modulated Carrier Wave, (MCW) mode & although the carrier was often at good strength, the modulation was poor and required the best of conditions to enable the message to be heard with any reliability.

First Development - CW Signal with Strong Signal

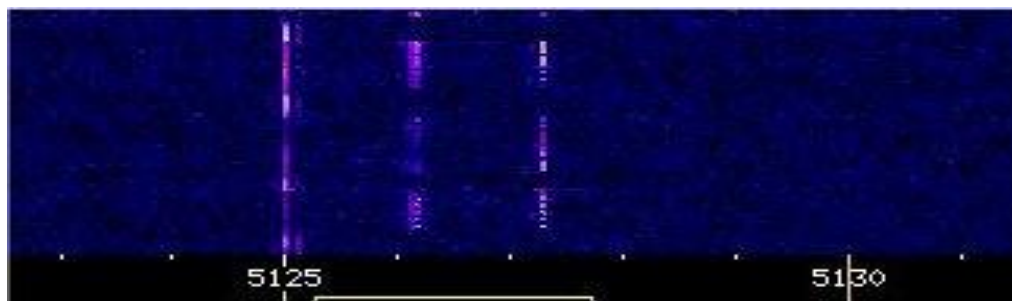
On Thursday, 09 May the 1832z schedule was missing. At 1940z a station started calling '936 936 936' in CW with a good / strong signal strength on 5805kHz. The first thought was that this might be a pirate operator but on tuning to the // frequency of 5065kHz found the same call being sent at the same strength. The signal was also audible on AM and appeared to have the same tone as heard on M01 transmissions. The station sent the full message & ending as expected from M01b. The Morse speed used was faster than that previously used by M01b & may have been hand-sent.

Confirmed 'Two-Tone' Profile in Use for M01b

On Fri 10 May, both schedules were monitored on Twente SDR as well as on the shack receiver. The characteristic 'Two-Tone' profile was clearly present on the Twente waterfall display & once again the signal strength for both of the schedules was giving a good to strong signal into south-east England & also the Twente receiver in the Netherlands. The Morse speed for these two schedules was slower than noted on Thursday's 1940z transmission & was more in line with that used in previous M01b schedules. Mode used was again CW using the 'Two-Tone' profile.

Carrier Added to M01b Transmissions - Back to Usual Slow Speed

Listening for the Monday, 13 May transmissions, both freqs had carrier present before the schedule time



M01b - 13 May 1810z Showing Carrier on 5125kHz & 'Two-Tones' of M01 Transmitter *Courtesy BR*

Permanent Change?

At first it was thought that M01b was using the M01 transmitter as a comparison of strength & tone were almost identical on 09 May, the frequencies & times being sufficiently close to each other to be able to make a fair comparison. However, over the following weeks it became clear that while the M01 transmissions vary quite widely in terms of received strength, the M01b transmissions remain fairly consistent giving good to strong signals for all transmissions. The tone from M01b also sounds sharper & cleaner than that of M01.

Although it is possible that M01b is using the M01 transmitter, the consistent signal strength would suggest that M01b is either using higher power than that used by M01 or that the location of the M01b transmission site provides more favourable reception into Southern England.

It is also possible that M01b is still using its original transmitter and that it is the change of modulation that has improved the signal. The carrier was usually of a good strength - It was the poor levels of modulation that made such poor copy much of the time.

Whatever the case, we have to be grateful that the changes mean that good, reliable reception of M01b is now possible. It remains to be seen if these changes are permanent or if they are just a temporary solution to some technical issue.

Summary

09 May	Thu	M01b appeared with strong signal for 1940z schedule. CW used with 'Two-Tone' profile. The 1832z schedule had failed to appear.
10 May	Fri	M01b strong on both schedules & 'Two-Tone' profile. CW mode used
13 May	Mon	M01b appeared on both schedules using this same transmitter & 'Two-Tone' profile. Carrier now present on transmissions.

M01 Logs

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

Variant formats continue to be used on an irregular but frequent basis. Four variant formats have been identified.

Standard Format:	197 (R4m) 117 117 30 30 == 93447 20478 == 117 117 30 30 000	(Still the most commonly used format)
Variant Format 1:	197 (R4m) 147/30 147/30 78902 ... 86083 147/30 000	(Not used for some time now)
Variant Format 2:	197 (R4m) 521=30 == 521=30 == 46547 ... 88305 = 521=30 == 521=30 0=0=0	(Not used for some time now)
Variant Format 3:	463 (R4m) 127 30 == = 84820 ... LG 82607 == = = 127 127 30 30 000	(Used a number of times in May/June)
Variant Format 4:	197 (R4m) 589 589 = 30 30 == = 40728 58918 = = 589 589 = 30 30 000	(Used a number of times in May/June)

Variant Format 4 is also used infrequently for the M01b transmissions

May 2019:

4905	2000z	02 May	'025' 133 = 30 == = 87171 ... 53596 == = Strong, slow. Error in grp11	Format 4	BR	THU
	2000z	07 May	'025' 642 30 == = 73960 ... 69327 == = Strong. Good, steady delivery. Errors noted		CB	TUE
	2000z	09 May	'025' 127 30 == = 24874 ... 17048 == = Strong, fast. Several errors. Grp11 repeat had 9 figs!		CB	THU
	2000z	14 May	'025' 395 = 30 == = 41513 ... 73746 == = Strong, slow. One error noted Grp26	Format 4*	BR	TUE
	2000z	16 May	'025' 821 30 == = = 38414 ... 07898 == = = Strong, fast. Some jumbled grps	Format 3	CB/PLdn	THU
	2000z	21 May	'025' 211 30 // 44159 ... 71305 // Strong, Fast. Msg grps sent as continuous stream - No errors		BR/CB	TUE
	2000z	23 May	'025' 845 30 == = 17863 ... 83515 == = Strong, fast. Smooth rapid delivery, no noted errors		CB	THU
	2000z	28 May	'025' 147 30 == = = 71568 ... 32788 == = = Strong, slow. Errors noted	Format 3	CB	TUE
	2000z	30 May	'025' 901 30 == = 94353 ... 63689 == = Strong, fast. Errors noted. Some pauses		CB	THU
5280	1800z	02 May	'025' 315 = 30 == = 11288 ... 21919 == = Fair, slow & steady. Error in grp03	Format 4	CB	THU
	1800z	07 May	'025' 987 30 == = 63954 ... 17996 == = Strong. Good, steady delivery. Errors noted		CB	TUE
	1800z	09 May	'025' 121 30 == = 64328 ... 13078 == = Weak-Fair, fast. Good delivery, faded towards end of msg.		BR	THU
	1800z	14 May	'025' 137 = 30 == = 34605 ... 40132 == = Good, slow. One error noted Grp13	Format 4*	BR	TUE
	1800z	16 May	'025' 837 30 == = = 20454 ... 34822 == = = Weak/Fair, fast. Errors noted	Format 3	CB/PLdn	THU
	1800z	21 May	'025' 217 30 == = 26022 ... 70984 Msg grps sent as continuous stream - No pauses. With errors		BR/CB/PLdn	TUE
	1800z	23 May	'025' Under heavy noise - No useful copy		BR	THU
	1800z	28 May	'025' 169 30 == = = 47458 == = = Fair, slow. Poor due to QSB	Format 3	BR	TUE
6535	1500z	04 May	Found in progress on 6535kHz ..69327 == = = 877 877 30 30 000	Format 3	BR	SAT
6435	1500z	11 May	NRH		CB	SAT
	1500z	18 May	'025' 141 = 30 == = 08458 = Weak, slow. Difficult copy - Faded towards end of msg		BR/CB	SAT
	1500z	25 May	'025' 219 30 == = 80490 Fair, fast. Difficult copy. Faded towards end of msg		BR	SAT
6780	0700z	05 May	'025' 816 30 == = 63954 ... 17996 == = Good, fast. Numerous errors		BR	SUN
	0700z	12 May	'025' 994 30 == = 96242 ... 91293 == = = Weak-Fair, fast. Partial copy due to strong STANAG		BR	SUN
	0700z	19 May	'025' 397 30 == = 46782 ... 20823 == = Good, fast. Perfect textbook sending. No errors		BR/PLdn	SUN
	0700z	26 May	'025' 237 30 == = 98912 ... 27826 == = Good, fast. Several errors noted		BR	SUN

*Transmissions on Tuesday 14 May were in CW, Not the usual MCW 'Two-Tone' profile

June 2019:

4905	2000z	04 Jun	'025' 517 30 == = = 89045 ... 85320 == = = Fair, fast. Hvy static. No errors. Format 3		BR/CB	TUE
	2000z	11 Jun	'025' 333 30 == = 16790 ... 10065 == = Good, slow. One error - Grp14. Long call-up of 5 mins.		BR	TUE
	2000z	18 Jun	'025' 391 30 == = 16460 ... 97077 == = Good, slow. Many grps with no pause between grp & repeat		BR	TUE
	2000z	25 Jun	'025' 372 30 == = 22790 ... 24225 == = Good, med-fast. Several errors inc. symbols in place of figs		BR	TUE
(4905.5)	2000z	27 Jun	'025' 511 30 == = 58562 ... 10749 == = Strong, fast Errors noted **		BR	THU
5280	1800z	04 Jun	'025' 121 30 == = 36161 ... 87607 == = Fair, fast. Excellent Morse. No noted errors		BR/CB	TUE
	1800z	11 Jun	'025' 074 30 == = 97293 ... 73922 == = Good, slow. Several errors noted. Long call-up of 5 mins.		BR	TUE
	1800z	18 Jun	'025' 213 30 == = 46597 ... 83160 == = Fair, slow. Poor copy due to static & signal strength		BR	TUE
	1800z	20 Jun	'025' 351 30 == = 81482 ... 97273 == = Good, fast. Slow call-up. Three errors, two corrected		BR	THU
	1800z	25 Jun	'025' 258 30 == = = . 0048 ... 14414 == = = Weak, med-fast. Errors noted. Format 3		BR	TUE
	1800z	27 Jun	'025' 918 30 == = (SDR Poland)		ER	THU
6435	1500z	01 Jun	'025' 731 = 30 == = 56947 = Weak, slow. Poor copy due to QSB	Format 4	BR	SAT
	1501z	08 Jun	'025' 211 30 == = 16645 ... 86220 == = Fair, fast. Two errors - One corrected. 29 grps sent?		BR	SAT
	1500z	15 Jun	'025' 004 30 == = 46337 ... 70684 == = Weak, fast. Copy difficult at times. One Error grp27		BR	SAT
	1500z	29 Jun	'025' 169 30 == = 21235 ... 60611 == = Fair, fast. Good Morse. Occasional hesitation. No errors		BR/HFD	SAT
6780	0700z	09 Jun	'025' 606 = 30 == = 41938 ... 17884 == = Fair, slow. Poor copy due to QSB	Format 4	BR	SUN
	0700z	16 Jun	'025' 210 30 == = 89740 ... 03715 == = Good, fast. Chaotic sending with numerous errors		BR	SUN
	0700z	23 Jun	'025' 793 30 == = 54103 ... 41266 == = Fair, fast. QRM from STANAG HF. Several errors noted		BR	SUN
	0700z	30 Jun	'025' 125 30 == = 81589 ... 47997 == = Weak, fast. One error grp08 64537 645637		BR	SUN

** Appeared on 4905.5kHz using CW. Not the usual 'Two-Tone' profile

M01a (From Feb 2016 M01a has been redefined to cover all M01 variants - excepting M01b)

No logs - See article above.

M01b**May 2019:**

4895//5340	2010z	03 May	'467' 157 31 = 04381....			BR/ER/HFD	FRI
	2010z	10 May	'467' 157 = 31 = 04381 35035....	Strong//Strong	Variant.format 4	BR	FRI
	2010z	17 May	'467' 157 31 = 04381 35035....		Good//Strong	BR	FRI
5065//5805	1940z	02 May	'936' 157 31= 04381 35035 ... 53323 51907 = = 000			ER/HFD	THU
	1940z	09 May	'936' 157 31= 04381 35035 ... 53323 51907 = = 000	Good//Good		BR/ER	THU
	1940z	16 May	'936' 157 31= 04381 35035 ... 53323 51907 = = 000	Strong//Strong		BR/ER	THU
	1940z	23 May	'936' 157 31= 04381 35035....	Strong//Good		BR	THU
	1940z	30 May	'936' 157 31= 04381 35035....	Strong//Good		BR	THU
5076//5465	1902z	03 May	'336' 157 31 = 04381....			ER/HFD	FRI
	1902z	10 May	'336' 157 = 31 = 04381 35035....	Good//Good	Variant.format 4	BR	FRI
5095//5760	1832z	02 May	'815' 157 31 = 04381 35035 ... 53323 51907 = = 000			ER/HFD	THU
	1832z	09 May	NRH both freqs			ER	THU
	1832z	16 May	'815' 157 31 = 04381 35035 ... 53323 51907 = = 000	Strong//Strong		BR/CB/ER	THU
	1832z	30 May	'815' 157 31 = 04381 35035....	Both signals audible under strong STANAG		BR	THU
5125//5735	1810z	06 May	'364' 157 31 = 04381....	5735 stronger //5735		HFD	MON
	1810 - 1827z	13 May	'364' 157 31 = 04381 35035 ... 53323 51907 = = 000	Strong//Strong		BR/ER	MON
	1810z	20 May	'364' 157 31 = 04381 35035....	Strong//Good		ER/BR	MON
	1810z	27 May	'364' 157 31 = 04381 35035....	Good//Good		ER/BR	MON
5150//4475	1915z	06 May	'858' 157 31 = 04381....			HFD	MON
	1915z	13 May	'858' 157 31 = 04381 35035 ... 53323 51907 = = 000	Strong//Strong		BR/ER	MON
	1915z	20 May	'858' 157 31 =	Strong (Via SDR Horndean)		ER	MON
5150	1915z	27 May	'858' 157 31 =	Strong (Via SDR Horndean)		ER	MON

June 2019:

4895//5340	2010z	07 Jun	'467' 367 33 = 72762 35906....	Strong//Strong		BR	FRI
5065//5805	1940z	06 Jun	'936' 367 33 = 72762 35906....	Good//Good		BR	THU
	1940z	20 Jun	'936' 367 33 = 72762 35906....	Strong//Strong		AB/BR	THU
5075//5465	1902z	07 Jun	'336' 367 33 = 72762 35906....	Strong//Strong		BR	FRI
5095//5760	1832z	13 Jun	'815' 367 33 = 72762 35906....	Strong//Strong*		BR	THU
	1834z	20 Jun	'815' 367 33 = 72762 35906.... (Late start)	Strong//Strong*		BR	THU
	1832z	27 Jun	'815' 367 33 =	(SDR Poland)		ER	THU
5125//5735	1810 - 1828z	03 Jun	'364' 367 33 = 72762 35906 ... 51341 57133 = = 000	Fair//Good-Strong		BR	MON
	1810z	10 Jun	'364' 367 33 = 72762 35906....	Good//Good		BR/ER	MON
	1810z	17 Jun	'364' 367 33 = 72762 35906....	Good//Good		BR/ER	MON
5150//5475	1915z	03 Jun	'858' 367 33 = 72762 35906....	Fair//Good-Strong		BR	MON
	1915z	10 Jun	'858' 367 33 = 72762 35906....	Strong//Strong		BR/ER	MON
5150	1915z	17 Jun	'858' 367 367 33 33 = = (SDR Horndean) S9 Signal				

* Mo1b heard over strong STANAG signal on 5760kHz

M01b 5075//5465kHz 1902z 10 May 2019 336 (R4m) 157 157 = 31 31 = = 04381 35035 53986 36141 97261 61184 92412 63653 00644 28498 57672 44300 60537 69013 71483 41008 27836 27843 55343 25936 91004 80456 23577 87094 56453 89843 71342 67137 84206 53323 51907 = = 157 157 = 31 31 000 <i>Courtesy BR</i>	M01b 5125//5735kHz 1810z 03 June 2019 364 (R4m) 367 367 33 33 = = 72762 35906 29332 19505 92200 14107 48924 79149 14762 99184 04910 40433 01580 00822 71264 00665 62017 35840 51057 47417 43719 51569 53061 46975 28538 78991 45860 21753 93197 98315 75071 51341 57133 = = 367 367 33 33 000 <i>Courtesy BR</i>
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M08a XVIII ICW / CW, some MCW**Report for March & April**

Due to an early publication date for Newsletter 112 the M08a report for March & April was received too late for that issue. Here is the brief summary received from Our Man in America;

Sadly following last our last report stating that schedules had become erratic with the last TX being noted on 25 February, nothing has changed during March and April with no transmissions being heard. Of more concern the transmitter checks heard before 1400z most days also seem to have ceased. Hopefully either they have changed frequencies and are at least still doing transmitter checks or they are awaiting transmitter repairs.

[We've seen this before from this M08a. We can only hope that it is only a temporary situation & that the station will soon be back on the air - Ed.]

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.

Asiatic M12 Schedules

15918/14818/13918	0210/30/50z	17 Jun	989 1			HFD	MON
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European M12 Logs

May 2019:

New scheds in bold type

8047/6802/5788	2000/20/40z	04 May	463 1 (4028 83)		(Via SDR Utwente)	ER	SAT
	1800/20/40z	06 May	463 1 (5020 93)	27027 88795....		BR	MON
	2000/20/40z	11 May	463 1 (1572 91)	32238 48284....		BR	SAT
	1800/20/40z	13 May	463 1 (3116 99)	59989 00748....		BR/HFD	MON
	2000/20/40z	18 May	463 1 (4216 94)	38267 47646....		BR	SAT
	1800/20/40z	20 May	463 1 (2483 99)		(Via SDR Utwente)	ER	MON
	2000/20/40z	25 May	463 1 (2282 98)	48681 82969....		BR	SAT
	1800/20/40z	27 May	463 1 (8014 95)	48487 08615....		BR/ER	MON
10183/9083/8083	2210/30/50z	04 May	199 1			HFD	SAT
	2210/30/50z	18 May	199 1 (405 26)	56293 30072....	(Very fast)	BR	SAT
	2210/30/50z	25 May	199 1 (8490 90)	30200 66838....		BR	SAT
10343/9264/8116	2000/20/40z	06 May	124 1 (6811 107)	63993 02947 ... 72062 14670 000 000		Gert/HFD	MON
	2000/20/40z	13 May	124 1 (2268 108)	36381 66787....		BR	MON
	2000/20/40z	20 May	124 1 (8628 105)	04596 08046....		BR	MON
	2000/20/40z	27 May	124 1 (6503 108)	33309 54564....		BR	MON
10843/10243/9243	2100/20/40z	04 May	822 1			HFD	SAT
	2100/20/40z	18 May	822 1 (8718 67)	23476 92955....		BR	SAT
	2100/20/40z	25 May	822 1 (105 33)	87607 79413....		BR	SAT
11435/10598/9327	1710/30/50z	06 May	938 1 (1790 106)	28443 17768 ... 98960 99817 000 000		Gert	MON
	1710/30/50z	13 May	938 1 (5464 110)	21116 33547....		BR	MON
	1800/20/40z	14 May	938 1 (1671 111)	53440 80179 ... 62102 29396 000 000		Gert	TUE
	1710/30/50z	20 May	938 1 (1786 107)	11304 49693....		BR/ER	MON
10598	1820z	21 May	938 1 (3937 107)		(Via SDR Utwente)	ER	TUE
	1710/30/50z	27 May	938 1 (9607 109)	11347 50265....		BR/ER	MON
12162/11566/10711	1710/30/50z	01 May	546 1 (2048 105)	51598 57819....		BR	WED
	1700/20/40z	02 May	546 1 (1796 106)	55111 56023....		BR	THU
	1800/20/40z	02 May	546 1 (2258 105)	56023 53032....		BR	THU
	1710/30/50z	08 May	546 1 (4639 109)	39478 74187....		BR	WED
	1700/20/40z	09 May	546 1 (2189 109)	38355 75206....		BR	THU
	1800/20/40z	09 May	546 1 (2466 112)	15936 68685....		BR	THU
	1710/30/50z	15 May	546 1 (5622 105)	42005 77546....		BR	WED
	1700/20/40z	16 May	546 1 (8287 112)	93268 94733....		BR	THU
	1800/20/40z	16 May	546 1 (6603 104)	37933 56469....		BR	THU
	1700/20/40z	23 May	546 1 (6872 110)	17540 49492....		BR	THU
	1800/20/40z	23 May	546 1 (489 67)	02111 57061....		BR	THU
	1710/30/50z	29 May	546 1 (8286 108)	95729 49388....		BR/ER	WED
	1700/20/40z	30 May	546 1 (5800 105)	60275 01186....		BR	THU
	1800/20/40z	30 May	546 1 (7573 109)	33227 92082....		BR	THU
12187/10987/- - -	1210/30/50z	01 May	192 000			AB	WED
	1210/30/50z	03 May	192 000			HFD	FRI
	1210/30/50z	08 May	192 1 (9941 14)	47826 37640....		BR	WED
	1210/30/50z	10 May	192 1 (9941 14)	47826 37640....		BR	FRI
	1210/30/50z	17 May	192 1 (9941 14)	47826 37640....		BR	WED
	1210/30/50z	29 May	192 1 (181 33)	81744 64633....	(New msg!)	BR	WED
13381/12181/- - -	2110/30/50z	02 May	317 000			BR	THU
	2110/30/50z	06 May	317 000		Strong signal	Gert/HFD	MON
	2110/30/50z	09 May	317 000			BR	THU
	2110/30/50z	13 May	317 000			BR	MON
	2110/30/50z	16 May	317 000			BR	THU
	2110/30/50z	20 May	317 000			BR	MON
	2110/30/50z	23 May	317 000			BR	THU
	2110/30/50z	27 May	317 000			BR	MON

13423/12123/11123 11123	0700/20/40z 0740z	09 May 19 May	411 1 (433 26) 411 1	36845 10337 ... 62272 83401	(Via SDR Russia) (Via SDR Japan)	AB/HFD HFD	THU SUN
16194/14794/- - -	1950/2010/2030z	01 May	173 000			BR	WED
	1950/2010/2030z	03 May	173 000			HFD	FRI
	1950/2010/2030z	08 May	173 000			BR	WED
	1950/2010/2030z	10 May	173 000			BR	FRI
	1950/2010/2030z	15 May	173 000			BR	WED
	1950/2010/2030z	17 May	173 000			BR	FRI
	1950/2010/2030z	22 May	173 000			BR	WED
	1950/2010/2030z	24 May	173 000			BR	FRI
	1950/2010/2030z	29 May	173 000			BR	WED
	1950/2010/2030z	31 May	173 000			BR	FRI
17451/15951/14451	1400/20/40z	01 May	494 1 (22 ... 266)	8538 ... 1 ...	Weak signals	BR/HFD	WED
	1400/20/40z	06 May	494 1 (9793 67)	73007 02891 ... 07175 23692 000 000		Gert	MON
	1400/20/40z	08 May	494 1 (9793 67)	73007 02891....		BR	WED
	1400/20/40z	22 May	494 1 (9567 . 18)	71724 80433....	Weak signals	BR	WED
	1400/20/40z	29 May	494 000			BR	WE
June 2019:							
8047/6802/5788	2000/20/40z	01 Jun	463 1 (5184 95)	62278 16924....		BR	SAT
	1800/20/40z	03 Jun	463 1 (9708 97)	82018 66450....		BR	MON
	2000/20/40z	08 Jun	463 1 (3106 99)	61944 27767....		BR	SAT
	1800/20/40z	10 Jun	463 1 (8789 96)	07010 43506....		BR/ER	MON
	1800/20/40z	15 Jun	463 1 (5521 97)	46052 84463....		BR	SAT
	1800/20/40z	17 Jun	463 1 (7110 97)	64039 55748....		BR/ER	MON
	1800/20/40z	24 Jun	463 1 (6735 99)	20208 81376....		BR	MON
	2000/20/40z	29 Jun	463 1 (6356 93)	83076 26293....		BR	SAT
10233/9323/8023	2210/30/50z	08 Jun	239 1 (335 104)	75900 10231....		BR	SAT
	2210/30/50z	15 Jun	239 1 (6328 98)	82071 11131....		BR	SAT
	2210/30/50z	22 Jun	239 1 (7373 82)	02284 80225....		BR	SAT
	2210/30/50z	29 Jun	239 1 (101 70)	64246 18612....		BR/HFD	SAT
10343/9264/8116	2000/20/40z	03 Jun	124 1 (9057 106)	00458 41819....		BR	MON
	2000/20/40z	10 Jun	124 1 (8961 101)	08121 94580....		BR	MON
	2000/20/40z	17 Jun	124 1 (1063 107)	12967 21650....		BR	MON
	2000/20/40z	24 Jun	124 1 (2570 104)	71905 34068....		BR	MON
9344	2140z	01 Jun	(In progress)			BR	SAT
11144/10544/9344	2100/20/40z	07 Jun	153 1 (5312 53)	00568 39489....		BR	FRI
	2100/20/40z	08 Jun	153 1 (5312 53)	00568 39489....		BR/HFD	SAT
	2100/20/40z	15 Jun	153 1 (5312 53)	00568 39489....		BR	SAT
	2100/20/40z	21 Jun	153 1 (9534 190)	34893 44867....		BR	FRI
	2100/20/40z	22 Jun	153 1 (9534 190)	34893 44867....		BR	SAT
	2100/20/40z	28 Jun	153 1 (9534 190)	34893 44867....		BR	FRI
	2100/20/40z	29 Jun	153 1 (9534 190)	34893 44867....		BR	SAT
11435/10598/9327	1710/30/50z	03 Jun	938 1 (5828 105)	31700 67257....		Gert	MON
	1700/20/40z	10 Jun	938 1 (7052 107)			ER	MON
	1800/20/40z	04 Jun	938 1 (6809 106)	00311 35785....		BR	MON
	1710/30/50z	10 Jun	938 1 (7052 107)	54894 50381....		BR	MON
	1710/30/50z	17 Jun	938 1 (3677 108)	62224 11742....		BR/ER	MON
	1800/20/40z	18 Jun	938 1 (3146 108)	69849 35791....		BR	TUE
	1710/30/50z	24 Jun	938 1 (8335 108)	38330 14134....		BR	MON
	1800/20/40z	25 Jun	938 1 (9402 104)	35367 92020....		BR	TUE
12162/11566/10711	1700/20/40z	06 Jun	546 1 (7523 109)	72738 84899....		BR	THU
	1710/30/50z	12 Jun	546 1 (4836 104)	26007 46667....		BR	WED
	1700/20/40z	13 Jun	546 1 (5016 106)	34732 37195....		BR	THU
	1800/20/40z	13 Jun	546 1 (1211 110)	81902 06533....		BR	THU
	1710/30/50z	19 Jun	546 1 (1104 105)	06865 03335....		BR	WED
	1700/20/40z	20 Jun	546 1 (6085 106)	55668 13718....		BR	THU
	1800/20/40z	20 Jun	546 1 (9554 109)	98487 30620....		BR	THU
	1710/30/50z	26 Jun	546 1 (2929 112)	11292 31384....		BR	WED
	1700/20/40z	27 Jun	546 1 (8545 110)	27047 75153....		BR/ER	THU
	1800z	27 Jun	546 1 (8989 109)		(SDR Utwente)	ER	THU
13384/12184/11484	1210/30/50z	05 Jun	314 1			HFD	WED
	1210/30/50z	12 Jun	314 1 (5950 53)	58636 84278....		BR	WED
	1210/30/50z	14 Jun	314 1 (5950 53)	58636 84278 ... 99665 68216 000 000		Gert	FRI
	1210/30/50z	19 Jun	314 000			BR	WED
	1210/30/50z	26 Jun	314 000			BR	WED
14581/13481/12181	0700/20/40z	06 Jun	541 1			HFD	THU
14493/13393/---	2110/30/50z	03 Jun	431 000			BR	MON
	2110/30/50z	06 Jun	431 000			BR	THU
	2110/30/50z	10 Jun	431 000			BR	MON
	2110/30/50z	17 Jun	431 000			BR	MON
	2110/30/50z	24 Jun	431 000	(NRH on 14493kHz)		BR	MON
	2110/30/50z	27 Jun	431 000			BR	THU

16117/14717/13417	1400/20/40z	03 Jun	174 1 (5130 245) 83390 72839....	BR/HFD	MON
	1400/20/40z	05 Jun	174 1 (5130 245) 83390 72839....	BR	WED
	1400/20/40z	19 Jun	174 000	BR	WED
	1400/20/40z	26 Jun	174 1 (121 78) 14492 86971....	BR	WED
16217/14817/---	1950/2010/2030z	05 Jun	284 000	HFD	WED
	1950/2010/2030z	07 Jun	284 000	BR	FRI
	1950/2010/2030z	12 Jun	284 000	BR	WED
	1950/2010/2030z	14 Jun	284 000	BR	FRI
	1950/2010/2030z	19 Jun	284 000	BR	WED
	1950/2010/2030z	21 Jun	284 000	BR	FRI
	1950/2010/2030z	26 Jun	284 000	BR	WED
	1950/2010/2030z	28 Jun	284 000	BR	FRI

M12 11435/10598/9327kHz 1710/1730/1750z 06 May 2019

938 938 938 1 (R2m) 1790 106 1790 106

28443 17768 71523 75730 74095 47945 67656 45018 44528 95017
94305 36971 60484 76531 71449 43943 55120 23847 91932 53950
11511 25747 76651 66697 00886 12058 85045 79678 58576 85192
80523 90583 11060 37120 43319 98269 56168 56683 01909 11394
93434 14073 10232 46969 85254 43815 43911 04810 34092 76128
48079 21576 66449 67521 95016 94160 97106 43348 98732 20410
29516 88933 54788 32145 32281 97509 48165 01390 67402 66058
42841 27164 50483 35186 85345 12546 88869 66444 17458 60870
37780 18283 23802 80509 08478 79618 04758 64582 79102 17074
50783 18972 68892 37637 05009 18672 58617 91323 54822 96994
78277 98458 02329 43551 98960 99817 000 000

Courtesy Gert

M14 IA MCW / ICW Short 0

May 2019:

4650	0900z	04 May	523	(via SDR Poland)		HFD	SAT
	0900z	11 May	523 (142 42) 89163 67352 ... 43785 99451 == 142 142 42 42 00000	[Note 1]	MCW	AB/ER	SAT
4730	0800z	04 May	523 (676 41) = 25189....	Repeat of 27 April (Via SDR Poland)		ER/HFD	SAT
	0800z	11 May	523 (146 1116 2 42) = 67134 76351 ... 27130 90456 == 146 146 42 42 00000		MCW	AB/ER	SAT
	0800z	25 May	523 (657 44) = 89765 70896 ... 34572 34573 == 657 657 44 44	[No 00000 sent]		AB/ER	SAT
5242.2	0400z	10 May	735 00000		CW	F5JBR	FRI
5938	1920z	15 May	417 (545 38) = 12345 56720....		MCW	HFD	WED
6856	1820z	14 May	163 (545 38) = 12345 56720 ... 95178 32060 == 545 545 38 38 00000	(Via SDR Poland)		ER/HFD	TUE
6876	2000z	17 May	735 00000 (Switched to E06 voice USB 111 111 111 00000 - Then off)		MCW	AB	FRI
7390	1600z	22 May	239			HFD	WED
14878	0930 - 0953z	11 May	617 (583 49) = 61862 90101 52788 28283 83414..... = 583 49 (Double msg) 617 (920 47) = 29281 57907 79162 54998 21487..... = 920 47 00000		CW	F5JBR	SAT
16347	0930z	10 May	617 (583 49) = 61862 90101 ... 12715 52301== 583 583 49 49 (Double msg) 617 (920 47) = 29281 57907 ... 83495 29007 == 920 920 47 47 00000		CW	AB	FRI
	0930z	25 May	617 (583 49) = 61862 90101 ... 12715 52301== 583 583 49 49 (Double msg) 617 (920 47) = 29281 57907 ... 83495 29007 == 920 920 47 47 00000		CW	AB	FRI

[Note 1] Different msg sent at 0900z. Usually a repeat of the 0800z msg.

June 2019:

4650	0900z	29 Jun	523 (562 42) = 93164 ?8525 ... ????? 66870 == 562 42 00000	V.Poor sigs. (Via SDR Poland)		ER	SAT
4730	0800z	29 Jun	523 (562 42) = 93164 ?8525 ... ????? 66870 == 562 42 00000	Poor sigs. (Via SDR Poland)		ER	SAT
5938	1920z	12 Jun	417 (321 42) = =	(SDR Horndean)		ER	WED
6876	2000z	07 Jun	735 00000			HFD	FRI
6953	1600z	19 Jun	239 00000			HFD	WED
7390	1600z	19 Jun	239 00000		MCW	RNGB	WED
7605	1900z	07 Jun	735 00000			HFD	FRI

14878	0930z	12 Jun	617 (248 35) = 87081 49184 ... 55144 66287 = 248 35 00000	RNGB	WED
16347	0930z	11 Jun	617 (248 35) = 87081 49184 ... 55144 66287 = 248 35 00000	RNGB	TUE

<p>M14 16347kHz 0930z 10 May 2019 (Double Message)</p> <p>617 (R4m) 583 583 49 49 ==</p> <p>61862 90101 52788 28283 83414 24392 23647 43767 41319 67381 09275 81339 23299 60399 13305 54511 49815 98936 20132 12325 02919 85058 91541 26513 94674 21996 39204 37479 96246 62592 43143 01841 47956 66704 46396 45304 78002 04440 26478 26347 96335 00948 72496 49823 18356 43394 98038 12715 52301 ==</p> <p>583 583 49 49</p> <p>617 617 617 617 617 617 617 617 617 617 617 617 617 617 617 617 617 920 920 47 47 ==</p> <p>29281 57907 79162 54998 21487 29885 10084 45869 20006 68121 94535 70814 55183 84722 63685 13324 65036 50929 68180 89975 33643 04166 49668 48449 42831 36329 39041 07684 34965 02013 96174 76172 67630 95621 57102 25938 31749 02659 39571 72785 93253 08093 22040 30144 50526 83495 29007 ==</p> <p>920 920 47 47 00000</p> <p style="text-align: right;"><i>Courtesy AB</i></p>	<p>M14 6856kHz 1820z 14 May 2019</p> <p>163 (R4m) 545 545 38 38 ==</p> <p>12345 56720 34569 53412 12040 53960 63217 10410 68320 34450 89012 56790 41235 17236 21060 84590 34512 32617 17845 24060 62340 45210 47321 93476 93164 83032 62752 92174 59356 14056 48385 94732 63832 45170 75841 58932 95178 32060 ==</p> <p>545 545 38 38 00000</p> <p style="text-align: right;"><i>Courtesy ER</i></p> <p>M14 16347kHz 0930z 11 June 2019</p> <p>617 (R4m) 248 248 35 35 ==</p> <p>87081 49184 51576 01733 72260 82139 93026 70247 76272 84471 41855 69826 46083 47357 53494 81659 25279 21760 72169 06981 02283 34918 90142 92335 94265 74100 51083 55145 61538 26275 59559 37289 54867 55144 66287 ==</p> <p>248 248 35 35 00000</p> <p style="text-align: right;"><i>Courtesy RNGB</i></p>
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To end the M14 section we have logs & comments from PoSW;

M14 MCW Wednesday continues to be a busy day for this constant carrier keyed audio tone Morse station:-

Wednesday 1920 UTC Schedule:-

15-May-19:- 5938 kHz, calling "417" for a "full message", then "545 545 38 38 = =" and into 5Fs, good signal, ended after 1932 UTC.

12-June-19:- 5938 kHz, call "417" went on until well after 1924 UTC, a bit of a pause then "321 321 42 42 = =" and 5Fs.

Wednesday 1600 UTC Schedule:-

Forgot all about this first + third Wednesdays in the month schedule in May, contact re-established in June:-

05-June-19:- 7390 kHz Tuned in at approx.. 1602 UTC, in progress with, "239 239 239 00000"
Must have started late because it did not stop until approx.. 1605:40s UTC.

19-June-19:- 7390 kHz Missed the start again, weak signal when tuned in approx. 1601 UTC, "239 239 239 00000"
Stopped in full flow at 1604.

M23 O ICW

We are grateful to Ary, (AB), for his reports of M23 activity on 5345kHz. Although our monitoring of M23 was sporadic, previous experience would indicate that the transmissions were daily from 12 - 19 June.

5345	1458 - 1510z	12 Jun	222 (R12m)	AB	WED
5345	1428 - 1440z	14 Jun	222 (R12m)	AB	FRI
	1458 - 1510z	14 Jun	222 (R12m)	AB	FRI
	1528 - 1540z	14 Jun	222 (R12m)	AB	FRI
5345	1428 - 1440z	15 Jun	222 (R12m)	AB	SAT
	1458 - 1510z	15 Jun	222 (R12m)	AB	SAT
	1528 - 1540z	15 Jun	222 (R12m)	AB	SAT
5345	1428z	17 Jun	222 (R12m)	(SDR Utwente) ER	MON
3545	1428 - 1440z	18 Jun	222 (R12m)	BR	TUE
	1458 - 1510z	18 Jun	222 (R12m)	BR	TUE
	1528 - 1540z	18 Jun	222 (R12m)	BR	TUE
3545	1428 - 1440z	19 Jun	222 (R12m)	BR	WED
	1458 - 1510z	19 Jun	222 (R12m)	BR	WED
	1528 - 1540z	19 Jun	222 (R12m)	BR	WED
3545		20 Jun	NRH - No further transmissions	AB/BR	THU

No transmissions either before or after the times above. A single 'dit' was noted at 1425z, 1455z & 1525z. These single 'dits' are usually present with M23 transmissions, but have previously been noted on the hour. (BR)

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

No reports for a long time - May have ceased

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

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

No logs

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

Due to the poor reception of this signal in both the UK and Canada, GlobalTuners receivers at Hong Kong, Mojave Desert & Sydney - as well as the Twente SDR, were used frequently to confirm the msg detail.

No reports for a long time - Believed to have ceased

Morse Stations - Not Number Related

M51 XIX

M51 & M51a have been experiencing problems over May & June, which would appear to be due to malfunctioning equipment.

Ary, (AB), caught these announcements & in addition some M51a logs on 19 June & 20 June, where problems were evident.

3881//6825 0615z 18 May SVC ATTENTION: RZO F9TM MAINTENU JEUDI 25 MAI (ASCESION) AB SAT

Ary points out that this must be an old message as Ascension Day on 25 May occurred in 2017. However, this was corrected in a similar message sent on Friday, 24 May.

3881//6825 24 May SVC ATTENTION: RZO F9TM MAINTENU JEUDI 30 MAI (ASCENSION) AB FRI

F9TM is an amateur call sign that has a long association with M51 as they are controlled by the same official body, Direction Interarmées des Réseaux d'Infrastructure et des Systèmes Informatiques (Thanks for that information , Ary)

From QRZ.com the listing for the amateur call sign F9TM France is;

DIRISI CNMOTSR Centre de Contrôle des Fréquences
BP 10019
FAVIERES 28170
France

...which is also where M51 / M51a is believed to originate.

3881//6825 2112z (IP) - 2300+ 13 May Continuous grps - Mostly 5-ltr, but with occasional 5-number or 5-punctuation chars BR MON

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

3881//6825	1130 - 1204z	08 May	Mercredi- Leçon	23-2/1 Codé,	23-2/2 Clair,	23-2/3 Codé,	23-2/4 Clair (720 grps/hr)	BR	WED
	1130 - 1157z	09 May	Jeudi- Leçon	24-2/1 Codé,	24-2/2 Clair,	24-2/3 Codé,	24-2/4 Clair (840 grps/hr)	BR	THU
	1130 - 1203z	10 May	Vendredi- Leçon	25-2/1 Codé,	25-2/2 Clair,	25-2/3 Codé,	25-2/4 Clair (960 grps/hr)	BR	FRI

3881//6825 0700z 18 May VVV VVV DE FAV22 FAV22 FAV22 QLH3881//6825 KHZ AB SAT

LEÇON NO1/1 VITESSE 420 CODÉ

JHFRD NJSDE ZPOYT QRWET IYUTO POLKJ ZCXVB MNJHB ASFDG 13957
VXSGW ...\$% QDSSG LJPUO NVBFG YRTQW ASZXA QPLIH BCVDN HDYEI
10369 VXSUW \$?., TRYEU QEWAR BCXDS MJKHU RQEOH BGHVT XAZSQ
MNKHI 47850 BQTBS %\$/? .XCZPQ MLHPI XASQW LCMFY RGSWG XCADQ
PLKMO ZXCVD 75301 XUWDL ./?.,= PLOIU BVDGW QTYRE ZXQWU PRUTY
BDGRT XCSRW OKRYU 85247 GRWTJ /?.,' FBFBI PLOIU VZBQI ETFGR
\$/? NVDME 52036 VDGFS SHGCD AZSQL MNEYH DJFVO ALKCI QWIVJ
BDGVX 50369 QAVNR %\$#.? CBXZN MLFKE CALSD ETFUB

3881//6825 0830z 22 May VVV VVV DE FAV22 FAV22 FAV22 QLH 3881//6825 KHZ AB WED

MERCREDI-LEÇON 13-1/1 VITESSE 720 CODÉ =

BHCGF DUEJS QKALP MQLOI RTDHS WVXCD FSGQU JQKAO LQMNJ DBXVF
WNSJQ AUJTG HBCVD 45278 10945 SCXVN QNHJA ZUJDI QKALP MLIKH
UJHNB CGDTE SGQTA ZGWJQ AJQKL 23492 HBCGD XNWQI SDZOL APMQJ
HGBCV KQLAO UJFGC XVDTR 45378 WBDGY 68642 DHBXJ QNJAK LWNQI
UJDOL IKHBV FGCUR SJNWK QKLAM PLATF RUDGC XVWSH QNBHJ DKJKI
XGDHS WHNDK QKAUI RTDFS XNHJD JKJHG QKLAM LPWOR DFZHW XVCHS

DUIJQK YHWH D XCVSH QNBHW 23528 6YERS XCWHQ HNGTR 65473 HSIJQK
JQKH N XCDGZ 352// HNCVX SJQUA JQKLP MQJBG RTDFC XVWHQ YHTRF
VXCWD QHAUJ QKALP 45739 HBCGF RTSHQ AIKDG XVWBQ ZYAJK AR

MERCREDI-LEÇON 13-1/2 VITESSE 720 CLAIR =
DEPUIS 2008, LA MISSION DE CONSOLIDATION DE LA PAIX EN RÉPUBLIQUE CENTRAFRICAINE PERMET
L'INTERVENTION DE LA FORCE OPÉRATIONNELLE D'AFRIQUE CENTRALE POUR GARANTIR LA STABILITÉ DU PAYS. LA
MISSION DU DÉTACHEMENT BOALI EST D'ACCOMPAGNER LES AFRICAINS ET D'ASSURER LE SOUTIEN TECHNIQUE ET
OPÉRATIONNEL DE CETTE FORCE INTERNATIONALE. LES FORCES ARMÉES SONT RENFORCÉES PAR LA
COLLABORATION D'ARMÉES ÉTRANGÈRES APPARTENANT A LA FOMAC. AR

MERCREDI-LEÇON 13-1/3 VITESSE 720 CODÉ =

FVXGQ AHWJQ AJKQL AMPOU HNXJD SHWBD RTSUA JQIKD XHSIR ZUQYH
CWVQH AJNWK QLAQU 45723 ZUJGD XVWHQ 65107 DGSHA BWNDG OLAUH
BCHDF XVWHS QHUYR DGXHS MBQHZ AJKQI BWHDR 54738 UJGBV XGDRE
IGQHA WHNQJ AIKOQ LPAUH GDVXR DFCXH WBSHQ JAYHF OLNHG CBXHR
46538 19053 SHBXJ QNWJR ZYHSU AKQLA OLPQJ IKHGT VCBHD JSKQL
EUJHL QMLQK NWHDF SGQHZ AUJGD SKQLA NJFGR TSYQH WBCHD ZUAHD
45376 ZUHSK QNVHF BTDFS WCQUA IKJKL AMPNH VXHDR QGWHE ZYGSF
WCGQB UJQKI 35271 BWJNG CBXHR GBXCP QHAYT 35271 GBWHQ JKALP
MWBXH DGVXH ZYHSU QINAW AUJGT AJGV B 67013 47282 HBXVC WNQJK
ALMPQ JHYTG DFSVX WNHQU AJKMQ AR

MERCREDI-LEÇON 13-1/4 VITESSE 720 CLAIR =

LE RACCORDEMENT DU SYSTÈME D'INFORMATION DES RESSOURCES HUMAINES (SIRH) CONCERTO AU CALCULATEUR
LOUVOIS EST EFFECTIF DEPUIS LE 1ER OCTOBRE 2011. CETTE INNOVATION, DE TRÈS GRANDE AMPLÉUR, VISANT À
AUTOMATISER LE CALCUL DE LA SOLDE DES MILITAIRES, S'INSCRIT DANS LE FUTUR PROJET INTERMINISTÉRIEL (2016)
D'ORGANISME NATIONAL DE PAYE. UN PREMIER BILAN POSITIF : L'ÉVOLUTION DES RÉSULTATS ENTRE LES MOIS
D'OCTOBRE 2011 ET JANVIER 2012 MONTRE UNE DIMINUTION RÉGULIÈRE DES ANOMALIES. AR

CQ DE FAV22 VA

3881//6825
1130z

22 May

VVV VVV DE FAV22 FAV22 FAV22 QLH 3881//6825 KHZ

AB

WED

MERCREDI-LEÇON 13-2/1 VITESSE 720 CODÉ =

GDFSJ ZUHDF XCAIK LOMAI PQKAU DHSJR ZTGSB BVCFX WNSJZ QKAUI
UFOLA MPLKJ HNBVF CXHSU AJQKD XKNJI 52718 9462/ HNCVS WNSGR
PMLDF HNERZ CXVWH ZUJSK AIKQJ HNXVS WHZRT AUJSL WOKLJ NQHDG
YHDGS XVCHZ TSGQJ AOLQP MAUJG 27489 JNVBF XGSHA 23482 HNXVD
SHAZI OLDBH NCJRY DFXCS WBQHZ AJKSM QPKV BXNDH ZUHSJ QKNHY
GBCKR YHGBV CNDJR SJOLQ LPAMU UJHGD VWCXG DHRTZ QJNAU JKQLZ
IKHBY DGXVC BCUJ SKLAZ PMJKL 74538 ZUJGV XBSJZ QJNKA KLQPO
IOBNG UHNBG VFCKO LAZSO WLKNP FVSHL MAOKP SHQJL BHDGX WVDJR
CJNGH YUZGW XNSJK ALPMD XHNFJ RTSU3 46378 HGCBD WNSDZ AJKQL
PMYGV AR

MERCREDI-LEÇON 13-2/2 VITESSE 720 CLAIR =

\SCIENTA POTESTAS EST\ S'IL EST UN DOMAINE À LA FOIS PRIMORDIAL ET INCONTOURNABLE, ET QUI NE DOIT
JAMAIS ÊTRE LAISSÉ AU HASARD, C'EST BIEN CELUI DE LA FORMATION, QUELLE SOIT INITIALE OU CONTINUE. EN
EFFET, RIEN DE PLUS ESSENTIEL, POUR UNE ARMÉE À FORTE CONNOTATION TECHNOLOGIQUE MAIS DONT LA FORCE
DÉCOULE DE SON POTENTIEL HUMAIN QUE DE POUVOIR INCULQUER À SON PERSONNEL LES CONNAISSANCES ET LES
SAVOIRS FAIRES POUR LA MISE EN ŒUVRE DE SYSTÈMES COMPLEXES. AR

MERCREDI-LEÇON 13-2/3 VITESSE 720 CODÉ =

PALKF HCBDU RTSJZ QJAKI DKLSV WBQHA JKQJO LKDGR VXC DG CBXVM
YHFGC BSKLA IKQLS DLMXB VVHRT 27648 01984 DHNVX WBSHZ QJKA
KLSGF CGVXO LAJH BXNDY RZYSU QJAIK SKHNQ WCXYR TJGBC VJAPL
UJDBG ZYHSK 376/3 DHBXJ QKALP SJHGB CVRPA LKHNB CJDUR UJDVG
XBSJZ QJNWN LAUZR DHBCH XJSUK QLKFG CHNDU HJSTY IKGHD VXB DG
35271 HNVCH 45383 SHBXJ QJAKL DGFUY HVCND ETDFX IKDHB VDPJ
CHFGT SJWNS QJLAI UJDCG BXHRT DGHKZ QJCSG UJGBC VSHRT SJQHU
35473 SJAKI UHFGC 563/9 HNVXJ SJAKL SMQPO IKHNB CGDLR DHFCV
FGCKL SJNWK ZUHGC VFRZT SHBWN JSKLZ QLHJR GBCJT AR

MERCREDI-LEÇON 13-2/4 VITESSE 720 CLAIR =

DANS UN CONTEXTE OU RATIONALISATION ET EFFICIENCE SONT DEVENUES MAÎTRE-MOTS, L'ARMÉE DE L'AIR AURA
SU CONSERVER SA CAPACITÉ À INSTRUIRE. DANS UNE DÉMARCHE INTERARMÉES, ELLE FORME DÉSORMAIS TOUS LES
TECHNICIENS AÉRONAUTIQUES DE LA DÉFENSE, AU SEIN DE L'ÉCOLE DE ROCHEFORT. ELLE EST ÉGALEMENT
OUVERTE AUX ÉTRANGERS POUR DES MÉTIERS POINTUS COMME CELUI DE PILOTE DE CHASSE, OU, EN PLEINE
COOPÉRATION AVEC LES BELGES, ELLE S'EST DOTÉE D'UNE ÉCOLE AYANT UNE ENVERGURE EUROPÉENNE. ELLE
DÉTIENT UNE EXPERTISE RECONNUE PAR L'OTAN AU PROFIT DES FUTURS CONTRÔLEURS AÉRIENS. AR

CQ DE FAV22 VA

3881//6825
0830z

19 June

VVV VVV VVV DE FAV22 FAV22 FAV22 QLH 3881/6825 KHZ

AB

WED

Mercredi-Leçon numéro 23-1/1 Vitesse 720 codé =

JKQNH VXB DH EYSUA WBDHR QKALY VCGRY WNDHR QKNWJ AJAOK UJAOK
QMAUJ YHDGT WQHA ZUSHL AIKDH 35281 BXNDH QMAJK NBCGD XHETS
QJSGZ UJGHC ETSX WBCGZ AUJSK QKLWP 53829 NXBDJ SWBQK LAPMH
NCJDU YHDIK 16738 NXDHZ UJQHW 1764/ NCJDU HQKAZ BXGDJ QKALI
HNQGB IKJNH XVSHZ QBWNA YTDGS WBQJU AKHDK LQMAP NBXHD YHSJZ
53803 YHDGX //ZSP JNCGD XHNSJ AUJQL ZUYRT 37264 HBXND KAYS
QMAPO CDHXL WNQFG DFXU ZJSKA SKWNV CHDUT YHSLK 37208 BXNVJ
SKALG TGDJH WBQIL AMPKH BCNDH SJ AUG BXVQH ZUJAL HNDJT YHSKA
BWNSJ YHDKZ 28563 BXNDH SKAJY HSQKA UJDM P GBCJD XJSUH NWHER +

"Mercredi-Led", then off

3881//6825
0830z

20 Jun

VVV VVV VVV DE FAV22 FAV22 FAV22 QLH 3881/6825 KHZ

AB

THU

JEUDI-LEÇON NUMÉRO 24-1/1 VITESSE 840 CODÉ =

GDHSJ WNDHE AUJSK QQLAO NBGFV QLMAP JKDUR JSNWK EUIOK HNDTS

IKGCV 37628 AYSGX WBSUJ YHYTG DHSJQ BHDTR FJAIK WNDHC VZJJK
 OLHGF 87452 XVSGR SHWUZ 10964 ETDFX CBSHA WJNHE SHGZU ALSGF
 LGBCH XNBWH DSJZU AGWCD QKLAU GBXHR SJHAU YHGDV CLQJO AMLJH
 YHBGR ZUJXV WNGSU 46381 BWNDU ZKQLA PLAYG BVXCD WNSHR ZJHSK
 GBVCG DJSKZ WKQHJ AKLXV WCSGR ZJHSU 65953 BWNSJ AKUJH DGVXT +

JEUDI-LEÇON NUMÉRO 24-1/2 VITESSE 840 CLAIR =

PRODUITES DE 1963 À 1968, LES LOCOMOTIVES 68000 ET 68500 AU NOMBRE DE 80, ONT ÉTÉ ÉTUDIÉES À L'ORIGINE POUR RECEVOIR INDISTINCTEMENT, SOIT UN MOTEUR DIESEL SULZER, SOIT UN MOTEUR AGO TYPE V12 POUR LES 68500 DE 1660 KW. LES MOTEURS SULZER SE SONT PROGRESSIVEMENT DÉGRADÉS PAR RAPPORT AUX MOTEURS AGO. +

JEUDI-LEÇON NUMÉRO 24-1/3 VITESSE 840 CODÉ =

GBXVD QJAUD WNQMA QPLHJ FGCVR QKJHF VXBET SFQGA JKWIR TGQLP
 YHDJZ BWNSJ AUJQK 28765 01753 GBCHS WBSJA WNQJK AIKSL QMAPH
 YUHDJ SJBSF VXHSF QHAUJ WNQKA IKDGV 63784 BGCJD XNSJR SJHQK
 HBCJD WVSJZ 3764/ WNHSF QJHAU RTDGC XMLQI KDHSB XNDGR SHGIM
 KJFHC XNWKS ZJAK WKQLA YHDOL 67849 NXKDJ SHWBS IJDGZ WNBCH
 UJDKL WNBCG DFZRS WBWNU ZHSGQ AJHJU 78356 WBXVD QJHND UJDHB
 WCXVS QHAMQ WNHZI JQKAL HNBCH DUJXB VWGDT ZRFSX WNBHU UHFGC
 VXHSD WXCSE ZYHQK WNBHX ZUJAL KNJUH BXHDF 65382 BXNSH JQHBX
 WNBCY FGDHZ WJQKZ HBXKS IAJHF BXNDK SLKWH DYXHR SKZLF +

JEUDI-LEÇON NUMÉRO 24-1/4 VITESSE 840 CLAIR =

A L'ORIGINE, LES 68000 ET 68500 POSSÉDAIENT UNE CHAUDIÈRE DESTINÉE AU CHAUFFAGE PAR VAPEUR DES TRAINS DE VOYAGEURS, LE MATÉRIEL VOYAGEUR MODERNE ÉTANT ÉQUIPÉ D'UNE LIGNE DE TRAIN ÉLECTRIQUE, ELLES ONT ÉTÉ SPÉCIALISÉES AU FRET. CES MACHINES ONT ÉTÉ AFFECTÉES À NEUF DÉPÔTS DONT CAEN, CHALINDREY, TOURS ST PIERRE ET SOTTEVILLE. DESTINÉES AUX TRAINS DE TRAVAUX EN FIN DE CARRIÈRE, LEUR RADIATION S'EST ACCÉLÉRÉE À PARTIR DE 2003, ET LA SÉRIE S'EST ÉTEINTE EN 2005 À CHALINDREY. +

CQ DE FAV22 VA

3881//6825

1142z

20 Jun

Problems with scheduled Morse practice exercise

AB

THU

Started far too late at 1142 instead of 1130. Normally it should send message 24-2/1 Vitesse 840 codé and message 24-2/2 Vitesse 840 clair. When the transmitter was activated message 24-2/2 was almost finished.

..... RTOUT, UN PLANCHER MOBILE DE COFFRE PERMET ENFIN D'OBTENIR UNE SURFACE PLANE UNE FOIS LES DOSSIERS ARRIÈRE RABATTUS. +

JEUDI-LEÇON NUMÉRO 24-2/3 VITESSE 840 CODÉ =

PLDHS BXJZU QJAKA UVFGR SJNWK AIKDL SPMAO XNCVF XHNCV SHZUJ
 PLDHS WBXCS VAUJD FVXGR SHZUJ QKALP KJHNB 67352 IUJHG BXNDH
 YHDKZ WBXVF CJERZ QJAKO MLDHB NWBJU 67354 IKDIX 65372 NWJAL
 PMHBN XCFSB CPAMK WNSJG VCURT FVXIS UJSKZ WKALP JNBCH TGDJL
 UJFHB NXJSF CVFRD XVCBF ZKJSU 637/2 89167 BGCJD UJDKZ WMLON
 PMFHC VXJZI SKAPL NXJFY WCXSV SHZUJ QJAIK 76491 NVXBF YHFKC
 PLKHB NJKSI SLZUH XBCHF YHYTG XVCHD KSHET AVBCK VBXHZ 65371
 IJDUY XVDGZ WNXCV SHAUJ WNBXU TGDHZ IKSLA PMWNV XHRTZ BWNSJ
 OLFHR VXBYS 35281 WNBXH ZUJDO ALKDH BXNFT WCXVA ZKSLP WMNJD +

JEUDI-LEÇON NUMÉRO 24-2/4 VITESSE 840 CLAIR =

UN ESSAI SUR NOTRE BASE DE MONTLHÉRY A ÉTÉ L'OCCASION DE POUSSER CE LUDOSPACE DANS SES DERNIERS RETRANCHEMENTS. IL TIEN T LA ROUTE! IL FAIT PREUVE D'UNE BELLE STABILITÉ. NOTRE TEST DE L'ÉLAN, QUI SIMULE UN ÉVITEMENT D'URGENCE À 90 KM /H, A RÉVÉLÉ QUE L'ARRIÈRE RESTAIT RIVÉ SUR SA TRAJECTOIRE, IMPERTURBABLE. BIEN QUE DOTÉ DE FREINS À TAMBOUR AU TRAIN POSTÉRIEUR, IL AFFICHE DES DISTANCES D'ARRÊT COURTES. +

CQ DE FAV22 VA

...then the old maintenance marker again SVC ATTENTION: RZO F9TM MAINTENU JEUDI 25 MAI (ASCENSION).

M89 O

This is a summary of activity from the M89 stations.

Traffic & Operator Chat from M89

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

3249.8	4186	5154
3269.8	4205	5265
3549.8	4222	5354
3731	4321	
	4411	
	4433	
	4635	
	4956	

New Scheds for May / Jun 2019:

From logs submitted from JPL & F5JBR

4321//NRH	Previously unknown Round Slip	First heard 12 May	V 7TEF (x3) DE 8RVF (x2)
10383//NRH	New frequency for this Round Slip	First heard 14 June	V D72H (x3) DE 1HM4 (x2)
4192//4489	Sending different Round slips	From 22 May	V D72H (x3) DE 1HM4 (x2) on 4192kHz

V HFL2 (x3) DE M6NY (x2) on 4489kHz

4192//4489	Sending different Round slips	From 31 May	V 2B7D (x3) DE 3GR1 (x2) on 4192kHz V HFL2 (x3) DE M6NY (x2) on 4489kHz
4192//4489	Sending different Round slips	From 15 June	V D72H (x3) DE 1HM4 (x2) on 4192kHz V HFL2 (x3) DE M6NY (x2) on 4489kHz
4192//4489	Sending different Round slips	From 25 June	V HFL2 (x3) DE M6NY (x2) on 4192kHz V D72H (x3) DE 1HM4 (x2) on 4489kHz
5691//10383	Sending different Round slips	From 25 June	V HFL2 (x3) DE M6NY (x2) on 5691kHz V D72H (x3) DE 1HM4 (x2) on 10383kHz

Chart of M89 Freq & Call signs heard in May / Jun 2019

New Schedules shown in Bold Type

From logs submitted from JPL & F5JBR

<u>Freq in KHz</u>	<u>Call Slip</u>
3156//NRH 3156//3597	VVV (x3) 3JWV (x3) DE QH4P (x2) VVV (x3) 3JWV (x3) DE QH4P (x2)
4131//NRH 4131//4886	V JKDJ (x3) DE SLBC (x2) V JKDJ (x3) DE SLBC (x2) (Rarely hear 4886 //)
4192//NRH 4192//4489 4192//4489 4192//4489	V D72H (x3) DE 1HM4 (x2) V D72H (x3) DE 1HM4 (x2) (Same R/Slip) V D72H (x3) DE 1HM4 (x2) (Different R/Slip) V 2B7D (x3) DE 3GR1 (x2) (Different R/Slip)
4321//NRH	V 7TEF (x3) DE 8RVF (x2)

<u>Freq in kHz</u>	<u>Call Slip</u>
4489//NRH 4489//NRH 4489//4192	V D72H (x3) DE 1HM4 (x2) V HFL2 (x3) DE M6NY (x2) V HFL2 (x3) DE M6NY (x2) (Different R/Slip)
5177//NRH	V JKDJ (x3) DE SLBC (x2)
5691//NRH 5691//NRH 5691//10383	V D72H (x3) DE 1HM4 (x2) V HFL2 (x3) DE M6NY (x2) V HFL2 (x3) DE M6NY (x2) (Different R/Slip)
6913//7397	V 3JWV (x3) DE QH4P (x2)
10383//NRH 10383//5691	V D72H (x3) DE 1HM4 (x2) V D72H (x3) DE 1HM4 (x2) (Different R/Slip)

3249.8	1858z (IP) 12 May	NR 004/EX 0809 BT NR 005/EX 0812 BT	B1F2/G0P6 AR Z9MJ/OJP3 AR	(Remote tuner Hong Kong) (Moved to 3269.8kHz)	JPL	SUN
3269.8	1858z (IP) 12 May	NR 006/EX 0815 BT NR 007/EX 0818 BT NR 008/EX 0821 BT	E5P6/JJQ3 AR JJM2/T3W4 AR U5S6/E7B8 AR	(From 3249.8kHz)	JPL	SUN
3549.8	1921z (IP) 12 May	MSY SW WZSB SIT VVV (Appears to be same station heard on 3249.8kHz & 3269.8kHz)			JPL	SUN
3731	KU5F 1642z 17 Jun	NR 1079/EX03 = 03C5/N42R AR and NR 1090 CK 61 19 0618 0033 RMKS (KU5F working KD8S, 8UYT, NJ8D, C1CR, 6FWE, [QSO and MSG] in Duplex)		(Via SDR Japan)	F5JBR	MON
4205	1215z (IP) 25 Jun	NR 1196/EX TIME 2015 BT	B6X7/Y3I5 AR	(Remote tuner Siberia)	JPL	TUE
4222	1226z (IP) 25 Jun	NR 2069 CK 41 98 0625 2030 RMKS 5425 TO 5428		(Remote tuner Siberia)	JPL	TUE
4411	LK5Y 1500z 17 Jun	NR 0442/03 A2N3/Q4T9 AR QSY 09 QSY 09 AR VVV 1PXQ NR 0443/EX 03 = B2T3/V1N4 AR QSY 13 AR / ... QRL With Russian Pacific Fleet NR 0448/EX 03= N3T2/K4V9 AR QSY 16 QSY 16 NR 0449/EX 03 = T0N3/U8Q1 AR NR 0449/EX 03= 02M3/U8Q1 AR QSY 21 NR 0450/EX 03 = 02N3/V4Q1 AR SK SK SK (1513z)		(Via SDR Japan)	F5JBR	MON
4433	1750z 19 Jun	VVV L1TN VVV L1TN VVV L1TN VVV LK5Y VVV 1PXQ VVV L1TN VVV L1TN VVV L1TN VVV L1TN VVV L1TN VVV LK5Y VVV 1PXQ VVV 1PXQ	NR0585/EX 04 TU =A6G9/K2B4 AR QSY 06 NR 0584/EX 04 01 = G8K6/R9C2 AR QSY 02 NR 0585/EX 04 02 = A6G9/K2B4 AR QSY 06 NR 0586/EX04 03 = Y8L2/C3A4 AR QSY 09 NR 0587/EX04 04 = R2G3/W7K9 AR NR 0584/EX04 01 = G8K6/R9C2 AR QSY 02 NR 0584/EX04 01 = G8K6/R9C2 AR QSY 02 NR 0584/EX04 01 = G8K6/R9C2 AR QSY 02 NR 0585/EX 04 02 = A6G9/K2B4 AR QSY 06 NR 0586/EX04 03 = Y8L2/C3A4 AR QSY 09 NR0587/EX04 04 = F2G3/W7K9 AR QSY 12 NR 0588/EX 04 05 = B3E9/L7N8 AR QSY 13	(Via SDR Japan)	F5JBR	WED

NOTE : 4433 kHz & 4411 kHz probably same network F5JBR

4489	M6NY 1538z (IP) 22 May	943U COMM BT (IP – Hand sent – 1538z) 23163/2507/0100/117NR/5413 C BT 23163/2507/0100/117NR/5423 AR (1540z) BT 23163/2507/0100/117NR/5423 AR (1540z – Return to R/S)	(// 4192)	(Remote tuner Siberia)	JPL	WED
4635	0712z (IP) 06 Jun	VV 6UCA 6UCA K VV BF9G BEN9 K VV QF9Q QF9Q K VV 6VXN 6VXN K	QSL 1510 HR WK NR 319 K QSL 1510 1510 HR WK NR 501 K QSL 1510 HR WK NR 918 918 K QSL 1515 1515 HR WK NR 100 K	(Remote tuner China) (Other stations also on this freq)	JPL	THU

4956	2UKN UVE1	1645z 1834z	19 Jun 21 Jun	Working IQAM (QSO and MSG and Traffic in LSB mode) in Duplex (Via SDR Japan) Working 9ETI (QSO and MSG and Traffic in LSB mode) in Duplex 4143kHz (Via SDR Japan) HR MSG NR 0544 CK 41 23 06 22 0230 RMKS 8077 TO 7647	F5JBR F5JBR	WED FRI
5271	H6QM	1722z	17 Jun	NR 4528 CK 41 27 06 18 0130 RMKS 9807 TO 6605 (Via SDR Japan) (H6QM working 8LRD (QSO and MSG : groups 4 Fig/ltrs – & Traffic in LSB mode) in Duplex – Qsx on 5357kHz)	F5JBR	MON
5354		1306z (IP)	24 May	RPT 1P 10W (IP – Hand sent – 1306z) (Remote tuner China) BT TAUT TAUT K RPT 1P 10W BT TAUT TAUT AR K (1307z) RPT 84W BT BT 35TU 35 AR K RPT 83W BT 7N3N 7N3N AR K (Cont'd repeating groups - 1308z)	JPL	FRI

M89	3269.8kHz	1903 (IP) - 1913z	12 June 2019
[IP - From 3249.8kHz)			
E5P6/RTRM AR3 AR		(IP – Hand sent – 1903z)	
NR 006/EX 0815 BT			
E5P6/JJQ3 AR			
NR 006/3X 08 15 BT		(1904z)	
E5P6/JJQ3 AR QSY 20 QSY 20 VVV			
RBP3 (Cont'd – 1905z)			
FFF NR 007 QSY SW QSY SW			
FFFF NR 007/EX 0818 BT			
JJM2/T3W4 AR			
NR 007/EX 0818 BT		(1907z)	
JJM2/T3W4 AR			
NR 007/EX 0818 BT			
JJM2/T3W4 AR QSY .. VVV	(Having problems with his keying)		
D4WC	(Cont'd – 1909z)		
FFF NR 009/EX 0....			
.../ENS. AR			
NR 008/EX 0821 BT			
U5S6/E7B8 AR			
NR 008/EX 0811 BT			
U5S6/E7B8 AR QSY 14 QSY 14 VVV		(1912z)	
VSB (Cont'd – 1913z)			
FFF NR 009/EX 0834 BT			
A12	(Lost remote tuner – 1913z)		
<i>Courtesy JPL</i>			

M89	4411kHz	1500 - 1513z	17 June 2019
LK5Y NR 0442/03 A2N3/Q4T9 AR QSY 09 QSY 09 AR VVV 1PXQ NR 0443/EX 03 = B2T3/V1N4 AR QSY 13 AR / ... QRL With Russian Pacific Fleet VVV E8QF NR 0448/EX 03= N3T2/K4V9 AR QSY 16 QSY 16 VVV DQ4B NR 0449/EX 03 = T0N3/U8Q1 AR NR 0449/EX 03 = 02M3/U8Q1 AR QSY 21 VVV 4NSC NR 0450/EX 03 = 02N3/V4Q1 AR SK SK SK			
M89	4411kHz	1800 - 1814z	17 June 2019
... in progress QSY 06 QSY 06 VVV LK5Y NR 0453/EX04 02 = B3V1/N2T9 AR QSY 09 QSY 09 VVV 1PXQ NR 0454/EX03 03= A5B4/S2N1 AR QSY 11 VVV ZAG1 NR0455/EX04 04 = N302/U4A4 AR QSY 12 VVV 1P4Q NR 0456/EX04 05 = D6E3/T1N9 AR QSY LW VVV L1TN NR 0457/EX04 06 = N8V9/A1C3 AR QSY 14 QSY 14 VVV 6XVG NR 0458/EX04 07 = V8S9/N1T2 AR QSY 15 QSY 15 VVV E8MY NR 0459/EX04 08 = V4U2/N4Q1 AR QSY 16 QSY 16 VVV D4Q8 NR 0460/EX04 09 = T8U3/A6Q9 AR QSY17 QSY 17 VVV MB9Z NR 0461/EX04 10 = A2C8/N3V4 AR			
<i>Courtesy F5JBR</i>			

M95 O XSV, XSV70, XSV85

M95 Morse Logs (Bold type indicates new logging)

3045	E2UG	1705 (IP) - 1717z	21 Dec	V JX0N (x3) DE E2UG (x2) (IP - Cont'd)	(Remote tuner Siberia)	JPL	FRI
3642//NRH	Call Sign 3A7D			(Active daily - only first marker log has been included)			
3642//7602	Call Sign 3A7D			(Active daily - only first marker log has been included)			
	1654z	08 May		V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd)	(Remote tuner Siberia)	JPL	WED
	2024z	06 Jun		V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd)	(Remote tuner Siberia)	JPL	THU
3880		1400z (IP)	01 Jun	NR NR NR 001/CCK CK 99 U4 T6TA UA5D RMKS 1234 TO 5678 K (1400z) R BT BT BT 56NT AT3U AU3D 756T 6TD3 7453 6U37 6TD3 U653 D436 (Cont'd – 1401z) (Notice same group) (Possibly Exercise or Training message)	(Remote tuner Siberia)	JPL	SAT
4243//NRH	Message number differs from current XSV70 and XSV85 message numbers.						
	1142z	16 May		NR 058 CK 58 35 0516 1530 BT NR 013 CK 14 35 0516 1621 BT NR 32 CK 177 35 0516 1623 BT	(Remote tuner Hong Kong)	JPL	THU
	1142 (IP) - 1218z	03 Jun		NR 094 CK 54 35 0603 1547 BT NR 06 CK 185 35 0603 1618 BT NR 078 CK 13 35 0603 1636 BT	(Remote tuner Hong Kong)	JPL	MON
4243//9054	Message number differs from current XSV70 and XSV85 message numbers.						
	1142 (IP) - 1158z	06 May		NR 03 CK 35 49 0503 2105 BT NR 038 CK 25 35 0506 1529 BT NR 082 CK 13 35 0506 1535 BT NR 12 CK 146 35 0506 1544 BT	(Remote tuner Hong Kong)	JPL	MON
	1151 (IP) - 1158z	13 May		NR 052 CK 22 35 0513 1526 BT	(Remote tuner Hong Kong)	JPL	MON

			NR 004 CK 15 35 0513 1608 BT NR 26 CK 145 35 0513 1633 BT NR 072 CK 30 35 0523 1542 BT NR 46 CK 146 35 0523 1602 BT	(Remote tuner New Zealand)	JPL	THU
4364//8073	Call Sign XSV85					
	1138 - 1143z	06 May	NR 0350 CK 285 35 0506 1554 BT	(Remote tuner Hong Kong)	JPL	MON
	1132 - 1141z	16 May	NR 0375 CK 222 35 0516 1610 BT	(Remote tuner Hong Kong)	JPL	THU
	1134 - 1140z	23 May	NR 0389 CK 224 35 0523 1624 BT	(Remote tuner New Zealand)	JPL	THU
5700	0716 (IP) - 0717z	24 May	RPT 11W TO 12W K (Both stns on this freq)	(Remote tuner China)	JPL	FRI
	0735 (IP) - 0737z	24 May	CCK/CK 19 03 0524 1535 RMKS 7546 TO 7522 K HR WK NR 1238 K	(Remote tuner China)	JPL	FRI
5801//10180	Call Sign 3A7D 1203z	(Active daily - only first marker log has been included) 06 May	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd)	(Remote tuner Hong Kong)	JPL	MON
	0936z (IP)	01 Jun	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) CL/1800/ZBT/4210/4387 AR QSL ? HR WK NR 160 ((IP - Hand sent - Return to R/S - 0936z)	(Remote tuner Siberia)	JPL	SAT
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)					
	1132 - 1140z	03 Jun	NR 0411 CK 181 35 0603 1550 BT	(Remote tuner Hong Kong)	JPL	MON
10180	Call Sign 3A7D 1251z	(Active daily - only first marker log has been included) 02 May	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd)	(Remote tuner India)	JPL	THU
	0653z	06 Jun	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd)	(Remote tuner Siberia)	JPL	THU

M95	4243kHz	1142z	16 May 2019
Initial call-up in voice USB 1130z Female operator Chinese digital 4+4 QPSK 75/3000 LSB 1142z Switched to CW 1148z			
V HR 7G TO YR PSE CY (1149z) NR 058 CK 58 35 0516 1530 BT 5AA UTT TA6 3U6 3A4 TTU 773 35U N3D (Cont'd - 1150z) AR 7G AGN NR 058 CK 58 35 0516 1530 BT (Repeats message - 1153z) AR A HR MSG NR 013 CK 14 35 0516 1621 BT UT5 TA6 3U6 3A4 TTA TTU TT3 773 356 36U 4AD 446 4D4 3D. AR 7G AGN NR 013 CK 14 35 0516 1621 BT (Repeats message - 1157z) AR A HR 7G GA NR 32 CK 177 35 0516 1623 BT UTU TA6 3U6 3A4 TTU 773 3.3 .4 T35 (Cont'd - 1159z)			
<i>Courtesy JPL</i>			

M95	4243kHz	1142z	03 June 2019
Initial call-up in voice USB 1130z Female operator Chinese digital 4+4 QPSK 75/3000 LSB 1142z Switched to CW 1148z			
V HR 7G TO YR PSE CY (1148z) NR 094 CK 54 35 0603 1547 BT 5AA UTT TT3 3U6 3A4 TTU 773 353 U4T 354 (Cont'd - 1149z) AR 7G AGN NR 094 CK 54 35 0603 1547 BT (Repeats message - 1151z) AR A HR 7G GA NR 06 CK 185 35 0603 1618 BT (Unsure of group count) UTU TT3 3U6 3A4 TTU 773 35A N3D (Cont'd - 1155z) AR 7G AGN NR 06 CK 185 35 0603 1618 BT (Repeats message - 1205z) AR A HR 7G ga NR 078 CK 13 35 0603 1636 BT UT5 TT3 3U6 3A4 TTA TTU TT3 773 353 4A7 435 484 D33 AR AR 7G AGN NR 078 CK 13 35 0603 1636 BT (Repeats message - 1216z) AR A HR UP WK SB (1217z)			
(Switched to voice USB Chinese Female Now V26 sked - (1218z)			
<i>Courtesy JPL</i>			

Marker Beacons (MX MXI)

3168.5	2250zz	26 Jun	MX	CW Beacon "L" (Fast)	WED
4558.1	2247z	08 May	MXI	CW Beacon "A" Astrakhan	WED
5153.7	2249z	08 May	MXI	CW Beacon "D" Sevastopol (Fault on every sixth character - sent as N or R)	WED
5154.1	2254z	26 Jun	MXI	CW Beacon "A" Astrakhan	WED
5156.9	2353z	08 May	MX	CW Beacon "L" St Petersburg (Fast)	WED
5466	1500z	03 May	MX	CW Beacon "V"	FRI
	2230z	05 May	MX	CW Beacon "V"	SUN

8497.8	2259z	26 Jun	MX	CW	Beacon	"L"	St Petersburg	WED
10871.7	1520z	30 Jun	MXI	CW	Beacon	"D"	Sevastopol	SAT
10871.9	1518z	30 Jun	MXI	CW	Beacon	"S"	Sevoromorsk	SAT
10872	1518z	30 Jun	MXI	CW	Beacon	"C"	Moscow	SAT
10872.1	0005z	27 Jun	MXI	CW	Beacon	"A"	Astrakhan	THU
13527.7	1513z	29 Jun	MXI	CW	Beacon	"D"	Sevastopol	SAT
13527.9	1515z	29 Jun	MXI	CW	Beacon	"S"	Sevoromorsk	SAT
13528.1	1516z	29 Jun	MXI	CW	Beacon	"A"	Astrakhan	SAT

Contributors: AB, AnonUS, BR, CB, E.SMITH, ER, F5JBR, Gert, HFD, JPL, PLdn, PoSW, RNGB *Thank you all for your logs.*

Voice, Polytone, Tones, Hybrids and FSK

E06

PoSW offers:

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

2-May-19:- 5938 kHz, call "724", DK/GC "970 970 44 44", strong signal, started about 35 seconds before the half-hour.

16-May-19:- 5951 kHz, "724" and "970 970 44 44" again, a bit too close to strong broadcast stations for comfort.

6-June-19:- 5940 kHz, call "724", DK/GC "970 970 44 44", strong signal.

20-June-19:- 5935 kHz, call "724", DK/GC "947 947 42 42", good signal on a clear frequency, a few weak static crashes, thunderstorms about somewhere.

Friday 2130 UTC Schedule Following First + Third Thursdays:-

3-May-19:- 5731 kHz, started about 40 seconds before the half-hour, call "315", DK/GC same as heard on the previous day, "970 970 44 44".

17-May-19:- 5731 kHz, "315" and an old favourite, "149 149 52 52".

7-June-19:- 5731 kHz, started about 20 seconds after the half-hour, "315", DK/GC "972 972 46 46", strong signal.

21-June-19:- 5731 kHz, call "315", DK/GC "947 947 42 42", same as yesterday's 2030z message.

From RNGB:

E06 May/June log:

First /Third Thursday (repeats Friday)	0500z	14565kHz	0600z	16125kHz
02/05	'460' 381 59 67169 17953 40162 19236 64527 84594 97913 54160 32312 75956 25031 81803 33462 09546 98086 02227 59228 96372 20939 53725			
	71180 69753 62484 67391 32771 61865 33200 18529 10133 26497 92626 32841 46807 31422 05002 33355 42079 68846 85229 38996			
	87619 57350 02362 50763 42111 33779 32793 86439 48551 58512 80344 49779 23922 82543 23659 74582 71952 75931 15843 381 59			
	00000			

16/05	'460' 293 57 21841 83428 75591 70839 12349 27844 97972 88935 55741 26608 74924 54030 36141 19547 75460 47628 87306 84121 06415 64581
	91870 50358 76872 24070 79498 10417 41742 46209 53669 71215 58253 05312 01750 23571 25384 95756 68062 26272 97988 71379
	94622 28533 92822 44352 59245 79267 28/// 54454 65699 96613 67611 44711 65601 96146 50069 04301 16734 293 57 00000

	0500z	13985khz	0600z	15830kHz
06/06	'328' 749 50 05730 18695 62249 86921 36958 01076 31057 43955 28589 03500 16764 01646 68991 96024 85744 47376 47003 58938 94984 18786			
	89366 93717 65160 65225 36465 45407 13543 94797 46263 66115 85726 49225 37421 74309 75354 73749 07498 89601 14539 74223			
	87195 47705 67862 78602 16575 25260 75237 45029 54176 29205 749 50 00000			

20/06	'328' 694 51 49342 45929 55658 47096 87324 74000 11730 30531 42445 52110 78774 68078 40908 93675 10875 40080 09117 29125 27236 52897
	05504 58796 45435 48882 89173 89914 35077 18414 98809 24847 27796 93661 40258 92809 44544 28783 06255 42218 26107 96229
	76708 35871 77771 53856 72991 16160 64094 62513 64675 32472 14711 694 51 00000

First/Third Thursday of month	2030z	5948kHz (frequency may vary slightly)
02/05 & 16/05	'724' 970 44 53067 42412 12464 78912 87463 94712 18514 02953 38414 13204 42325 23285 15802 65245 87462 36425 18635 75742 14712 84853	
	98520 32210 53746 87582 11532 37595 68553 23462 73659? 65847 87535 37473 27624 17923 54332 81620 81244 41265 96183	
	32874 66753 78203 80329 38565 970 44 00000] 2040z (Check last group)	

20/06	'724' 947 42 58375 38195 96930 68273 72375 23572 92358 23653 29359 23659 12345 23582 23692 60232 23658 23689 13245 23682 03956 68722
	69382 23765 83726 96874 27165 65736 43837 34572 28716 65896 23876 26372 90684 96844 27252 13945 76845 94038 37265 57693

Friday following First & Third Thursday 2130z 5731kHz (frequency may vary slightly)

03/05 '315' 970 44 53067.....38935 970 44 00000] Same message as Thursday
 17/05 '315' 149 52 12265 10965 47839 38654 84677 93453 72217 84393 04673 97564 01824 75643 84221 95647 92112 94543 76577 43435 47322 84232
 95674 87344 57438 45763 49325 57438 92190 96785 21244 05674 01765 76354 83645 21234 97564 82133 07564 83234 75312 71211
 05674 65374 67321 94884 23483 82521 41212 57333 85331 53234 05124 95732 149 52 00000

07/06 '315' 972 46 15464.....etc
 21/06 '315' 947 42 58375 38195.....etc (Repeat of Thursday 20th)

Other transmissions:

16/05 1500z 16034kHz
 '548' 706 2 11111 00059 706 2
 '548' 129 67 23424 36413 69905 59727 43711 78363 52046 81502 53548 60366 66xx7 74529 31203 28324 89971 39659 26608 35302 8038x 98142
 95219 79551 08647 79909 33144 48897 25380 70531 05717 32395 62753 40320 86730 85221 02681 03986 50498 57719 65796 84306
 83927 24543 00928 78230 10809 74833 79744 48870 45497 49379 26270 91795 18169 35669 35937 49098 38862 56807 63894 69634
 92456 15210 87226 38902 81817 77015 70795 129 67 00000 Thanks Ary

The 67 group message was a repeat of the 15th (previous day).

E07

PoSW starts the logs on this active station; his reception mirroring those from other members:

Monday + Wednesday Schedule, 1900 UTC Start:-

1-May-19, Wednesday:- 1900 UTC, 17472 kHz, very weak signal of some kind on the predicted frequency for this schedule in May, unable to confirm as E07; better copy from the second sending:-
 1920 UTC, 15872 kHz, "483 483 483 000", weak but clear.

6-May-19, Monday:- 1900 UTC, 17472 kHz, "483 483 483 000", around S4.
 1920 UTC, 15872 kHz, over S9.

8-May-19, Wednesday:- 1900 UTC, 17472 kHz, very weak, unreadable.
 1920 UTC, 15872 kHz, "483 483 483 000", weak, compare and contrast with the strong signal just 48 hours earlier.

13-May-19, Monday:- 1900 UTC, 17472 kHz, and 1920 UTC, 15872 kHz, both weak but clear, "483 483 483 000".

15-May-19, Wednesday:- 1900 UTC, 17472 kHz, "483 483 483 000", S5 to S6.
 1920 UTC, 15872 kHz, over S9, much stronger than on the 13th.

22-May-19, Wednesday:- 1900 UTC, 17472 kHz, and 1920 UTC, 15872 kHz, both back to being weak signals again, "483 483 483 000".

29-May-19, Wednesday:- 1900 UTC, 17472 kHz, and 1920 UTC, 15872 kHz, both around S5 to S6, "483 483 483 000".

3-June-19, Monday:- 1900 UTC, 16328 kHz, "384 384 384 1" for a full message – business picking up in the new month, then. DK/GC "253 64" x 2, weak signal, difficult copy.
 1920 UTC, 14828 kHz, second sending, stronger but only up to a 3 or 4 on the S-meter.
 1940 UTC, 13428 kHz, around S6.

5-June-19, Wednesday:- 1900 UTC, 16328 kHz, very weak, unreadable.
 1920 UTC, 14828 kHz, weak but clear, "384" and "253 64" again.
 1940 UTC, 13428 kHz, strongest of the three transmissions, S6 to S7.

12-June-19, Wednesday:- 1900 UTC, 16328 kHz, still "253 64", weak.
 1920 UTC 14828 kHz, and 1940 UTC, 13428 kHz, both much stronger, S8 to S9.

19-June-19, Wednesday:- 1900 UTC, 16328 kHz, "384" and "253 64", again, strong signal this evening, over S9.
 1920 UTC, 14828 kHz, very strong, well over S9.
 1940 UTC, 13428 kHz, also over S9, propagation much improved since last Wednesday.

24-June-19, Monday:- 1900 UTC, 16328 kHz, very weak signal, appeared to stop after 1902z which suggests "no message", more evidence of propagation being all over the place these days.
 1920 UTC, 14828 kHz, "384 384 384 000", weak but clear.

Saturday + Sunday Schedule, 0600 UTC Start:-

4-May-19, Saturday:- 0600 UTC, 9064 kHz, "024 024 024 1" for a full message, DK/GC "297 73" x 2, around S8.
 0620 UTC, 10264 kHz, second sending, peaking over S9.
 0640 UTC, 11464 kHz, third sending, S9+, very strong.

5-May-19, Sunday:- 0600 UTC, 9064 kHz, "024" and "297 73" again, much weaker signal than twenty-four hours earlier, S4 to S5.
 0620 UTC, 10264 kHz, and 0640 UTC, 11464 kHz, both S4 to S5 at best, propagation must have taken a turn for the worst since yesterday.

11-May-19, Saturday:- 0600 UTC, 9064 kHz, "024" and "297 73" again, S5, not too strong.

0620 UTC, 10264 kHz, and 0640 UTC, 11464 kHz, around S7.

18-May-19, Saturday:- 0600 UTC, 9064 kHz, “024 024 024 000”, S7.
0620 UTC, 10264 kHz, weaker.

19-May-19, Sunday:- 0600 UTC, 9064 kHz, and 0620 UTC, 10264 kHz, “024 024 024 000”.

1-June-19, Saturday:- 0600 UTC, 9064 kHz, “024 024 024 000”.
0620 UTC, 10264 kHz, second sending, both S6 to S7.

2-June-19, Sunday:- 0600 UTC, 9064 kHz, and 0620 UTC, 10264 kHz, both around S6 to S7, “024 024 024 000”.

8-June-19, Saturday:- 0600 UTC, 9064 kHz, “024 024 024 1”, full message, DK/GC “131 19” x 2, nice and short, total transmission time about 4min 20s, weak signal.
0620 UTC, 10264 kHz, stronger, peaking around S8.
0640 UTC, 11464 kHz, also around S8.

9-June-19, Sunday:- 0600 UTC, 9064 kHz, “131 19” again, stronger than yesterday, peaking around S7.
0620 UTC, 10264 kHz, very strong “XJT” noise maker on frequency this morning, has been noted in past years, E07 largely unreadable.
0640 UTC, 11464 kHz, around S7.

22-June-19, Saturday:- 0600 UTC, 9064 kHz, “024 024 024 000”, S7 with QSB.
0620 UTC, 10264 kHz, slightly weaker.

Sunday + Wednesday Schedule, 1700 UTC Start:-

5-May-19, Sunday:- 1720 UTC, 12134 kHz, must be the second sending, strong signal, over S9, “919 919 919 1”, DK/GC “226 69” x 2.
1740 UTC, 10934 kHz, third sending, slightly weaker. First sending probably on 13934.

8-May-19, Wednesday:- 1700 UTC, 13934 kHz – well there we are, then, “919 919 919 000”.
6 to 7 on the S-meter.
1720 UTC, 12134 kHz, stronger.

15-May-19, Wednesday:- 1700 UTC, 13934 kHz, “919 919 919 000”, S5 at best.
1720 UTC, 12134 kHz, peaking S9 but fading down at times.

19-May-19, Sunday:- 1700 UTC, 13934 kHz, “919 919 919 1”, DK/GC “419 85” x 2.
1720 UTC, 12134 kHz, peaking S9.
1740 UTC, 10934 kHz, S5 at best, weakest of the three transmissions.

29-May-19, Wednesday:- 1700 UTC, 13934 kHz, “919 919 919 1”, DK/GC “6883 156” x 2,
weak signal, only just readable.
1720 UTC, 12134 kHz, stronger, up to a “7” on the S-meter.
1740 UTC, 10934 kHz, S5 to S6.

5-June-19, Wednesday:- 1700 UTC, 13368 kHz, strong signal, no problem to find, “354 354 354 1”, DK/GC “6883 156” x 2, same as in the last days of May.
1720 UTC, 11568 kHz, second sending, around S8.
1740 kHz, 10468 kHz, S7.

9-June-19, Sunday:- 1700 UTC, 13368 kHz, “354” and “6883 156” again, weaker than on the 5th.
1720 UTC, 11568 kHz, and 1740 UTC, 10468 kHz, both S7 to S8.

19-June-19, Wednesday:- 1700 UTC, 13368 kHz, “354 354 354 000”, “no message”.
1720 UTC, 11568 kHz, both transmissions strong signals.

Others’ Logs

Sunday/Wednesday

May 2019

1700z	13394kHz	1720z	12134kHz	1740z	10934kHz	
01/05	919 1 226 69 94091 ... 71465 000 000					Weak
05/05	919 1 226 69 94091 ... 71465 000 000			[1700z Weak]		Fair
08/05	919 000					Weak
12/05	919 000			[1700z (Dutch SDR)]		Weak
19/05	919 1 419 85 10896 ... 72860 000 000					Fair
22/05	919 1 419 85 10896 ... 72860 000 000					Weak
26/05	919 1 6883 156 29156 ... 08936 000 000					Weak
29/05	919 1 6883 156 29156 ... 08936 000 000					Weak

June 2019

1700z	13368kHz	1720z	11568kHz	1740z	10468kHz		
02/06	354 1 6883 156 29158 ... 08936 000 000					[1700/1720z starts missed]	Weak
09/06	354 1 6883 156 29156 ... 08936 000 000						Weak
12/06	354 1 6883 156 29156 ... 08936 000 000						Weak
16/06	354 000						Fair
19/06	354 000						1700z Fair, 1720z Weak
23/06	354 1 263 130 50437 ... 06076 000 000						Weak
26/06	354 1 263 130 50437 ... 48073 000 000						Weak
Sunday/Saturday 0600z Schedule							
0600z	9064kHz	0620z	10264kHz	0640z	11464kHz		
11/05	024 1 297 73 39552 ... 09737 000 000						Weak
12/05	024 1 297 73 39552 ... 09737 000 000						Weak
18/05	024 000						Fair
19/05	024 000						Weak
25/05	024 000					[0600z Weak]	Fair
26/05	024 000					[0600z Weak, QRM3]	Fair
June 2019							
01/06	024 000						Weak
02/06	024 000						Weak
29/06	024 000						Weak
30/06	024 000					[0620z XJTQRM3]	Weak
Sunday/Thursday 1300z schedule							
1300z	9064kHz	1320z	10264kHz	1340z	11464kHz		
02/05	024 1 297 73 39552 ... 09737 000 000					[1320z Fair]	Weak
04/05	024 1 297 73 39552 ... 09737 000 000					0740z stopped after group 16 and restarted with group 9	Ary SAT
024 024 024 1 297 73 297 73 39552 61383 93531 18756 16186 58457 83626 89505 13621 71502 49949 12343 12675 13340 36838 56752 69808 29217 60755 86344 42185 25777 13183 03551 49591 89130 98597 74063 03535 14883 93635 03192 43195 44606 08077 59435 76306 12275 09616 52634 19183 41854 97668 89842 55170 01470 06559 24085 65925 08999 02390 16492 03707 62342 64498 06016 71415 32364 43093 10365 91102 62238 98637 97100 45256 96470 80236 47709 05889 66025 78023 20081 09737 000 000							
<i>Courtesy Ary</i>							
05/05	024 1 297 73 39552 ... 09737 000 000						Weak
12/05	024 1 297 73 39552 ... 09737 000 000						Weak
16/05	024 000						Weak
19/05	024 000						Fair
23/05	024 000					[1320z Weak, QRM3]	Weak
26/05	024 000					[1300z Weak, QRM3]	Fair
30/05	024 000						Weak, Dutch SDR/Rx PLdn
June 2019							
02/06	024 000						Weak
06/06	024 000						Weak

09/06	024 1 131 19 47672 ... 06116 000 000		Weak
15/06	024 1 131 19 47672 ... 06116 000 000		WeakQSB3
16/06	024 1 131 19 47672 ... 06116 000 000		Weak
16/06	024 1 131 19 47672 ... 06116 000 000	[1300z Weak, QRM3]	Weak
20/06	NRH		
23/06	024 000	[1320z Weak]	Weak (Dutch SDR)
30/06	024 000	[1320z XJTQRM3]	Weak

Monday/Wednesday

May 2019

1900z	17472kHz	1920z	15872kHz	1940z	14372kHz		
01/05	483 000					[1900z NRH]	Weak
06/05	483 000					[1900z NRH]	Weak
08/05	483 000						Weak (DutchSDR)
13/05	483 000					[1900z (Dutch SDR)]	Weak
20/05	483 000						Weak, poor condx
22/05	483 000						Weak
27/05	483 000						Weak (DutchSDR)
29/05	483 000						Weak

June 2019

1900z	16328kHz	1920z	14828kHz	1940z	13428kHz		
03/06	384 1 253 64 72595 ... 79283 000 000					[1900z (Dutch SDR)]	Weak
10/06	384 1 253 64 72595 ... 79283 000 000					[1900z Weak, unworkable, 1920z Weak]	1940z Very strong
12/06	384 1 253 64 72595 ... 79283 000 000					[1900z Weak]	Fair
17/06	384 1 253 64 72595 ... 79283 000 000					[1900z Weak]	Very strong
19/06	384 1 253 64 72595 ... 79283 000 000					[1900z Fair]	Strong
24/06	384 000					[1900z (Dutch SDR)]	Weak
26/06	384 000						Weak

Tuesday/Friday

May 2019

0700z	16246kHz	0720z	18446kHz	0740z	19246kHz		
10/05	242 1 395 58 32120 ... nnnnn 000 000						Weak, unworkable
14/05	242 000					[0720z Unworkable]	Weak (Dutch SDR)
17/05	242 000					[0720z Unworkable]	Weak
21/05	242 1 395 58 32120 ... 19031 000 000						Weak (Dutch SDR)
24/05	242 1 395 58 32120 ... 19031 000 000					[0720z (DutchSDR)]	Weak
28/05	242 000					[0720z (DutchSDR)]	Weak
31/05	242 000					[0720z NRH]	Weak

June 2019

0700z	16331kHz	0720z	18731kHz	0740z	19331kHz		
07/06	373 1 178 58 66316 ... 27637 000 000						Weak(Dutch SDR)
11/06	373 000						Weak(Dutch SDR)

14/06	373 000		Weak(Dutch SDR)
18/06	373 1 178 58 66316 ... 27637 000 000		Weak
21/06	373 1 178 58 66316 .. 27637 000 000		Weak(Dutch SDR)
25/06	373 000	[0720z (Dutch SDR)]	Weak
28/06	373 000	[0720z (Dutch SDR)]	Weak

Tuesday/Friday

May 2019

1100z	19695kHz	1120z	17459kHz	1140z	16159kHz		
03/05	641 1 252 40 51475 ... 69761 000 000					[1100z NRH]	Weak
07/05	641 000						Weak
10/05	641 000						Weak
14/05	641 1 171 76 58954 ... 06883 000 000					[1100/1120z (Dutch SDR)]	Weak
17/05	641 1 171 76 58954 ... 06883 000 000					[1100z (Dutch SDR)]	Weak
21/05	641 000					[1100z (Dutch SDR)]	Weak
24/05	641 000						Weak(Dutch SDR)
28/05	641 1 424 154 21758 ... 66033 000 000						Weak
31/05	641 1 424 154 21759 ... 66033 000 000						Weak

June 2019

1100z	18637kHz	1120z	17437kHz	1140z	15837kHz		
07/06	648 1 238 48 28444 ... 59288 000 000						Weak
11/06	648 000					[1100z (Dutch SDR)]	Weak
14/06	648 000						Weak
18/06	648 1 277 102 23451 ... 87504 000 000						Weak
21/06	648 1 277 23451 ... 87504 000 000					[Break in transmission at 71567, restart]	Weak(Dutch SDR)
25/06	648 000					[1100z NRH]	Weak
28/06	648 000						Weak

Thursday/Saturday

May 2019

1410z	15836kHz	1430z	14636kHz	1450z	???????????		
04/05	157 000						Weak
11/05	157 000					[1410z (Dutch SDR)]	Weak
16/05	157 1 333 107 38457 ... 55931 000 000					Ary	THU

157 1 333 107
38457 22551 56917 64846 16758 92971 32566 42237 67931 55730
72496 06446 05590 39010 70323 50775 43823 95231 36436 29985
31324 59154 23694 13196 73430 14906 36803 61044 09879 80346
02745 48959 07583 92351 70520 14334 21680 00054 38188 66654
30017 62931 58974 29975 50189 60016 82608 28660 08865 05464
62065 12428 70594 12703 69061 52898 45327 98476 07979 26038
55958 66035 12869 01839 17669 59853 41740 30221 81488 43568
88234 53127 80430 22251 62239 82709 62331 81415 87168 92606
62923 04330 65099 47940 46107 48459 44498 63246 61750 95261
71567 20137 28175 90125 15492 20071 15878 26857 64427 37504
37026 71582 41265 16277 23819 06083 55931 000 000

Courtesy Ary

18/05	157 1 333 107 38457 ... 55931 000 000	[1430z Fair]	Weak
23/05	157 000		Weak

25/05	157 000				Weak
30/05	157 1 5559 86 12354 ... 61698 000 000			[1430z(Dutch SDR)]	Weak

June 2019

1410z	13417kHz	1430z	14717kHz	1450z	15817kHz
01/06	Transmission missed				
06/06	603 1 5559 86 12354 ... 61698 000 000				Weak
08/06	603 1 5559 86 12354 ... 61698 000 000			[1450z Unworkable]	Weak
15/06	603 000				Weak, QRM
20/06	603 000				Weak
27/06	603 000				Weak

E07a

Wednesday

May 2019

2000z	12166kHz	2020z	10766kHz	2040z	9266kHz
01/05	172 000				Strong
08/05	172 000				Very strong
15/05	172 000				Very strong
22/05	172 000				Very strong
29/05	172 000				Very strong

June 2019

05/06	172 000				Very strong
12/06	172 000				Fair
19/06	172 000				Very strong
26/06	172 000				Very strong

Thursday

May 2019

0430z	7933kHz	0450z	9133kHz	0510z	10233kHz
02/05	912 000				0430z Strong, 0450z Weak
09/05	912 000				[0450z NRH] Strong
16/05	912 000				[0450z NRH] Very strong
23/05	912 000				[0450z NRH] Very strong
30/05	912 000				Very strong

June 2019

06/06	912 000				Very strong
13/06	912 000				[0450z LocalQRM3] Strong
20/06	912 000				[0450z Weak] Very strong
27/06	912 000				Very strong

Friday

May 2019

1510z	12182kHz	1530z	11082kHz	1550z	10182kHz
03/04	101 000				1610z Weak, 1630z Fair
10/05	101 000				Weak
17/05	101 000				Weak
24/05	101 000			[0800z QRM]	Weak
31/05	101 000				Fair

June 2019

07/06	101 000				Weak
14/06	101 000				Weak
21/06	101 000				Weak
28/06	101 000				Weak

Saturday

May 2019

0800z	12177kHz	0820z	13477kHz	0840z	14877kHz
04/05	148 000				Weak
11/05	148 000				Weak
18/05	148 000				Fair
25/05	148 000				Weak

June 2019

0800z	13373kHz	0820z	14373kHz	0840z	14873kHz
01/06	338 000				Weak
08/06	338 000				Weak
15/06	338 000				Fair
22/06	338 000				Weak
29/06	338 000			[0820z Unworkable]	Weak

PoSW's logs illustrate the same level of null messages as others. Watch this space!

Wednesday Schedule, 2000 UTC Start:-

1-May-19:- 2000 UTC, 12166 kHz, "172 172 172 000", very strong signal.
2020 UTC, 10766 kHz, second sending, slightly weaker.

8-May-19:- 2000 UTC, 12166 kHz, and 2020 UTC, 10766 kHz, both very strong, "172 172 172 000",

15-May-19:- 2000 UTC, 12166 kHz, and 2020 UTC, 10766 kHz, "172 172 172 000", both the usual S9+ many dB signals.

29-May-19:- 2000 UTC, 12166 kHz, "172 172 172 00000", very strong.
2020 UTC, 10766 kHz, also very strong.

5-June-19:- 2000 UTC, 12166 kHz, and 2020 UTC, 10766 kHz, both very strong, "172 172 172 000".

12-June-19:- 2000 UTC, 12166 kHz, and 2020 UTC, 10766 kHz, "172 172 172 000".

19-June-19:- 2000 UTC, 12166 kHz, and 2020 UTC, 10766 kHz, "172 172 172 000".

Friday Schedule, 1510 UTC Start:-

3-May-19:- 1510 UTC, 12182 kHz, "101 101 101 000", good signal, around S8.
1530 UTC, 11082 kHz, second sending, weaker.

10-May-19:- 1510 UTC, 12182 kHz, and 1530 UTC, 11082 kHz, "101 101 101 000".

17-May-19:- 1510 UTC, 12182 kHz, "101 101 101 000", S7 signal.
1530 UTC, 11082 kHz, weaker.

31-May-19:- 1510 UTC, 12182 kHz, and 1530 UTC, 11082 kHz, both around S7, “101 101 101 000”.

7-June-19:- 1510 UTC, 12182 kHz, “101 101 101 000”, up to S9 with QSB.
1530 UTC, 11082 kHz, weaker.

21-June-19:- 1510 UTC, 12182 kHz, and 1530 UTC, 11082 kHz, “101 101 101 000”.

Saturday Schedule, 0800 UTC Start:-

4-May-19:- 0800 UTC, 12177 kHz, “148 148 148 000”, strength around a “6”.
0820 UTC, 13477 kHz, second sending, much weaker.

11-May-19:- 0800 UTC, 12177 kHz, “148 148 148 000”, strong signal, indicating over S9.
0820 UTC, 13477 kHz, S7.

18-May-19:- 0800 UTC, 12177 kHz, “148 148 148 000”, S8 to S9.
0820 UTC, 13477 kHz, S8 with QSB.

1-June-19:- 0800 UTC, 13373 kHz, “338 338 338 000”, S4 to S5 at best.
0820 UTC, 14373 kHz, weak.

8-June-19:- 0800 UTC, 13373 kHz, and 0820 UTC, 14373 kHz, “338 338 338 000”.

E11&E11a log May/June

E11 & E11a log May/June

4783kHz	1705z	02/05 [394/32 70228 58090 59941 80965 56748 83133 95676.....02578 16667]	Ary	WED
	1705z	04/05 [394/32 70228.....etc] Repeat of Wednesday	Malc	SAT
	1605z	05/05 [235/00] Out 1608z S2	Malc	SUN
	1605z	07/05 [235/40 42325.....12149] Out 1616z S4 (Dutch SDR)	Malc	TUE
	1705z	08/05 [396/00] Out 1708z S3	Malc	WED
	1705z	11/05 [390/00] Out 1708z S2	Malc, RNGB	SAT
	1605z	12/05 [235/40 42325.....12149] Out 1616z S2 (Repeat of Tuesday)	Malc	SUN
	1605z	14/05 [235/00] Out 1608z S3 (Dutch SDR)	Malc	TUE
	1705z	15/05 [393/00] Out 1708z S3	Malc	WED
	1705z	18/05 [399/00] Out 1708z S3	Malc	SAT
	1605z	19/05 [235/00] Out 1608z S2	Malc	SUN
	1705z	21/05 [233/00] Out 1708z S2	Malc	TUE
	1705z	22/05 [396/00] Out 1708z S5	Malc	WED
	1705z	25/05 [392/00] Out 1708z S4	Malc	SAT
	1605z	26/05 [233/00] Out 1608z S2	Malc	SUN
	1605z	28/05 [235/00] Out 1608z S2	Malc	TUE
	1705z	29/05 [394/00] Out 1708z S2	Malc	WED
	1705z	01/06 [393/00] Out 1708z S3	Malc	SAT
	1705z	08/06 [395/00] Good	RNGB	SAT
	1605z	09/06 [236/40 90872.....84657] Out 1616z S3 (Dutch SDR)	Malc	SUN
	1605z	11/06 [238/00] Out 1608z S4 (Dutch SDR)	Malc	TUE
	1705z	12/06 [392/39 14490.....08936] Out 1716z S6 (Dutch SDR)	Malc	WED
	1605z	16/06 [232/00] Out 1608z S6 (Dutch SDR)	Malc	SUN
	1705z	19/06 [390/00] Good	RNGB	WED
	1705z	22/06 [394/00] Out 1708z S3	Malc	SAT
	1705z	26/06 [392/00] Out 1708z S2	Malc, RNGB	WED
4909kHz	0820z	09/05 [432/00] Out 0823z S2 (Dutch SDR)	Malc	THU
	0820z	16/05 [431/00] Out 0823z S2	Malc	THU
	0820z	23/05 [435/00] Out 0823z S2 (Dutch SDR)	Malc	THU
	0820z	30/05 [438/37 16489.....50580] Out 0830z S2 (Dutch SDR)	Malc	THU
	0820z	06/06 [436/00] Out 0823z S2 (Dutch SDR)	Malc	THU
	0820z	13/06 [431/39 55470 20134 76636 73062 26222 10493 20441 44789 74901.....97238 28427]	RNGB, Malc	THU
	0820z	20/06 [430/00] Out 0823z S2	Malc	THU
	0820z	27/06 [431/000 Out 0823z S2 (Dutch SDR)	Malc	THU
5082kHz	1930z	04/05 [364/00] Out 1933z S5	Malc	SAT
	1930z	05/05 [366/00] Out 1933z S5	Malc	SUN
	1930z	11/05 [369/33 70899.....80056] Out 1940z S7	Malc	SAT
	1930z	18/05 [366/00] Out 1933z S	Malc	SAT
	1930z	19/05 [365/00] Out 1933z S3	Malc	SUN
	1930z	25/05 [364/00] Out 1933z S7	Malc	SAT
	1930z	26/05 [360/00] Out 1933z S5	Malc	SUN
	1930z	01/06 [360/00] Out 1933z S5	Malc	SAT
	1930z	02/06 [363/00] Out 1933z S3 QRM	Malc	SUN

	1930z	09/06 [366/001 Out 1933z S4	Malc	SUN
	1930z	16/06 [360/00] Out 1933z S5	Malc	SUN
	1930z	22/06 [363/33 84513.....92051] Out 1940z S3	Malc	SAT
	1930z	23/06 [363/33 84513.....92051]	Malc	SUN
5371kHz	1605z	23/06 [231/35 36868.....06811] Out 1615z S2 (New Freq)	Malc	SUN
	1605z	25/06 [231/00] Out 1608z S2	Malc	TUE
5409kHz	1530z	06/05 [524/00] Out 1533z S3 (Dutch SDR)	Malc	MON
	1530z	10/05 [520/00] Out 1533z S3 (Dutch SDR)	Malc	FRI
	1530z	13/05 [521/00] Out 1533z S3 (Dutch SDR)	Malc	MON
	1530z	17/05 [521/00] Out 1533z S2	Malc	FRI
	1530z	20/05 [521/00] Out 1533z S2	Malc	MON
	1530z	24/05 [521/00] Out 1653z S4 (Dutch SDR)	Malc	FRI
	1530z	27/05 [528/34 20265.....28605] Out 1540z S3 (Dutch SDR)	Malc	MON
	1530z	31/05 [528/34 20265.....etc] Repeat of Monday	Malc	FRI
	1530z	03/06 [524/00] Out 1533z S3 (Dutch SDR)	Malc	MON
	1530z	07/06 [524/00] Out 1533z S2	Malc	FRI
	1530z	10/06 [525/34 55398.....21518] Out 1541z S2 (Dutch SDR)	Malc	MON
	1530z	14/06 [525/34 55398.....etc] Repeat of Monday	Malc	FRI
	1530z	17/06 [521/00] Out 1533z S2	Malc	MON
	1530z	24/06 [521/00] Out 1533z S2 (Dutch SDR)	Malc	MON
	1530z	28/06 [522/00] Out 1533z S2	Malc	FRI
5737kHz	0805z	04/05 [315/00] Strong	RNGB	SAT
	0805z	05/05 [316/00] Out 0808z S2	Malc	SUN
	0805z	11/05 [313/36 96187.....28013] Out 0815z S3	Malc	SAT
	0805z	12/05 [313/36 96187.....etc] Repeat of Saturday	Malc	SUN
	0805z	18/05 [310/00] Out 0808z S2	Malc, RNGB	SAT
	0805z	19/05 [310/00] Out 0808z S2	Malc	SUN
	0805z	25/05 [314/00] Out 0808z S3	Malc	SAT
	0805z	01/06 [316/00] Out 0808z S3 (Dutch SDR)	Malc, RNGB	SAT
	0805z	02/06 [313/00] Out 0808z S2	Malc	SUN
	0805z	08/06 [310/00] Out 0808z S2	Malc	SAT
	0805z	09/06 [311/00] Out 0805z S2	Malc, RNGB	SUN
	0805z	15/06 [311/00] Out 0808z S2	Malc	SAT
	0805z	16/06 [310/00] Out 0808z S2	Malc	SUN
	0805z	22/06 [311/00] Out 0808z S2	Malc	SAT
	0805z	23/06 [310/00] Out 0808z S2	Malc	SUN
6304kHz	1205z	07/05 [465/31 59749.....91659] Out 1214z S2 (Dutch SDR)	Malc	TUE
	1205z	08/07 [465/31 59749.....etc] Repeat of Tuesday	Malc	WED
	1205z	14/05 [462/00] Out 1208z S2 (Dutch SDR)	Malc	TUE
	1205z	15/05 [463/00] Out 1208z S2 (Dutch SDR)	Malc	WED
	1205z	21/05 [465/00] Out 1208z S2	Malc	TUE
	1205z	22/05 [469/00] Out 1208z S2 (Dutch SDR)	Malc	WED
	1205z	28/05 [465/00] Out 1208z S2 (Dutch SDR)	Malc	TUE
	1205z	29/05 [464/00] Out 1208z S2	Malc	WED
	1205z	11/06 [464/36 73784 46167 68405 12616 27172 51389 92423 07421 18042.....47888 61965]	RNGB, Malc	TUE
	1205z	12/06 [464/36 73784.....etc] Repeat of Tuesday	Malc	WED
	1205z	18/06 [466/00] Out 1208z S2 (Dutch SDR)	Malc	TUE
	1205z	19/06 [469/00] Out 1208z S2 (Dutch SDR)	Malc	WED
	1205z	26/06 [465/00] Out 1208z S2	Malc	WED
6480kHz	0710z	04/05 [492/00] Out 0713z S2	Malc, RNGB	SAT
	0710z	05/05 [498/00] Out 0713z S2	Malc	SUN
	0710z	11/05 [497/00] Out 0713z S3	Malc	SAT
	0710z	12/05 [497/00] Out 0713z S4	Malc	SUN
	0710z	18/05 [495/00] Out 0713z S2	Malc, RNGB	SAT
	0710z	19/05 [498/00] Out 0713z S2	Malc	SUN
	0710z	25/05 [497/31 53195.....14299] Out 0713z S4 (Dutch SDR)	Malc	SAT
	0710z	01/06 [498/00] Out 0713z S2	Malc	SAT
	0710z	02/06 [491/00] Out 0713z S2	Malc	SUN
	0710z	08/06 [492/00] Out 0713z S3	Malc	SAT
	0710z	09/06 [497/00] Out 0713z S2	Malc	SUN
	0710z	15/06 [496/00] Out 0713z S2	Malc	SAT
	0710z	22/06 [490/00] Out 0713z S2	Malc	SAT
	0710z	23/06 [490/33 99683.....98003] Out 0720z S2	Malc	SUN
	0710z	30/06 [492/00] Fair	RNGB	SUN
6923kHz	0930z	02/05 [278/00] Out 0933z S3	RNGB, Malc	THU
	0930z	08/05 [276/00] Out 0933z S2	Malc	WED

	0930z	09/05 [274/00] Out 0933z S2	Malc	THU
	0930z	15/09 [276/00] Good	RNGB	WED
	0930z	16/05 [270/00]	RNGB	THU
	0930z	22/05 [279/00] Out 0933z S2	Malc	WED
	0930z	23/05 [279/00] Out 0933z S2	Malc	THU
	0930z	29/05 [277/32 09605.....38996] Out 0940z S2	Malc	WED
	0930z	30/05 [277/32 09605.....etc] Repeat of Wednesday	Malc	THU
	0930z	06/06 [277/38 72781.....12391] Out 0940z S3 (Dutch SDR)	Malc	THU
	0930z	12/06 [270/00] Out 0933z S2	Malc	WED
	0930z	13/06 [273/00] Out 0933z S3	Malc, RNGB	THU
	0930z	19/06 [279/00] Out 0933z S3 (Dutch SDR)	Malc	WED
	0930z	20/06 [276/00]	RNGB	THU
	0930z	26/06 [270/00] Out 0933z S2	Malc, RNGB	WED
	0930z	27/06 [271/00] Out 0933z S3	Malc	THU
7439kHz	0900z	06/05 [534/00] Out 0903z S3	Malc	MON
	0900z	08/05 [532/00] Out 0903z S2	Malc	WED
	0900z	13/05 [534/37 64253.....65940] Out 0910z S2	Malc	MON
	0900z	15/05 [534/37 64253 75520 24816 41510 54749 82236 28250 44781.....80393 65940]	RNGB, Malc	WED
	0900z	20/05 [532/00] Out 0903z S2	Malc	MON
	0900z	22/05 [537/00] Out 0903z S2	Malc	WED
	0900z	27/05 [538/00] Out 0903z S5 (Dutch SDR)	Malc	MON
	0900z	29/05 [538/00] Out 0903z S4	Malc, RNGB	WED
	0900z	03/06 [538/00] Out 0903z S2 (Dutch SDR)	Malc	MON
	0900z	10/06 [534/00] Out 0903z S2	Malc	MON
	0900z	12/06 [536/00] Out 0903z S3	Malc	WED
	0900z	17/06 [530/00] Out 0903z S2	Malc, RNGB	MON
	0900z	19/06 [533/00] Out 0903z S2 (Dutch SDR)	Malc	WED
	0900z	24/06 [533/32 31819.....49292] Out 0909z S2	Malc	MON
	0900z	26/06 [533/32.....etc] Repeat of Monday	Malc	WED
7600kHz	1900z	02/05 [647/00] Out 1903z S4	Malc	THU
	1900z	06/05 [647/00] Out 1903z S4	Malc	MON
	1900z	09/05 [647/00] Out 1903z S5	Malc	THU
	1900z	13/05 [648/00] Out 1903z S3	Malc	MON
	1900z	16/05 [640/00] Out 1903z S3	Malc	THU
	1900z	20/05 [643/35 90952 52582 98526 06393 53734 82202 83914.....17717 04624 Out 1911z S4	Gary H, Malc	MON
	1900z	23/05 [643/35 90954.....04624] Out 1911z S4	Malc	THU
	1900z	27/05 [643/00] Out 1903z S8	Malc	MON
	1900z	06/06 [648/00] Out 1903z S4	Malc	THU
	1900z	10/06 [644/00] Out 1902z S3	Malc	MON
	1900z	17/06 [647/34 33556.....95317] Out 1910z S3	Malc	MON
	1900z	20/06 [647/34 33556.....etc] Repeat of Monday	Malc	THU
	1900z	24/06 [646/00] Out 1903z S3	Malc	MON
7863kHz	1625z	15/05 [976/40 65843 02190 85273 42797 41473 43393 38346.....59423 00275]	Ary, Paul	WED
	1625z	19/05 [976/00 65843.....etc] Repeat of Wednesday	Malc	SUN
	1625z	22/05 [975/00] Out 1628z S2	Malc	WED
	1625z	26/05 [974/00] Out 1628z S2	Malc	SUN
	1625z	09/06 [978/00] Out 1728z S9	Malc	SUN
	1625z	12/06 [970/38 84594.....86458] Out 1636z S5	Malc	WED
	1625z	16/06 [970/38.....etc] Repeat of Wednesday	Malc	SUN
	1625z	19/06 [970/00] Out 1628z S3	Malc	WED
	1625z	26/06 [977/00] Out 1628z S4	Malc	WED
7984kHz	1730z	01/05 [406/32 29241.....71645] Out 1739z S9	Malc	WED
	1730z	04/05 [406/32 29241.....etc] Repeat of Wednesday	Malc	SAT
	1730z	08/05 [405/00] Out 1733z S4	Malc	WED
	1730z	11/05 [405/00] Out 1733z S7	Malc	SAT
	1730z	15/05 [408/00] Out 1733z S5	Malc	WED
	1730z	18/05 [403/00] Out 1733z S6	Malc	SAT
	1730z	22/05 [406/00] Out 1733z S3	Malc	WED
	1730z	25/05 [402/00] Out 1733z S6	Malc	SAT
	1730z	01/06 [405/00] Out 1733z S7	Malc	SAT
	1730z	12/06 [404/00] Out 1733z S5	Malc	WED
	1730z	19/06 [402/32 96549.....73450] Out 1739z S3 + QRM	Malc	WED
	1730z	22/06 [402/32 96549.....etc] Repeat of Wednesday	Malc	SAT
	1730z	26/06 [409/00] Out 1733z S7	Malc	WED
	1730z	29/06 [400/00] Good	RNGB	SAT
8088kHz	1730z	02/05 [412/00] Out 1733z S5	Malc	THU
	1730z	09/05 [412/00] Out 1733z S3	Malc	THU

	1730z	16/05 [414/00] Out 1733z S2	Malc	THU
	1730z	23/05 [416/00] Out 1733z S4	Malc	THU
	1730z	30/05 [424/34 88205.....36246] Out 1740z S2	Malc	THU
	1730z	06/06 [411/001 Out 733z S3	Malc	THU
	1730z	13/06 [410/00] Out 1733z S3	Malc	THU
	1730z	20/06 [413/00] Out 1733z S6	Malc	THU
	1730z	27/06 [418/30 71710.....43674] Out 1739z S4	Malc	THU
8545kHz	1045z	01/05 [693/00] Out 1048z S2	Malc	WED
	1045z	08/05 [693/00] Out 1048z S2 (Dutch SDR)	Malc	WED
	1045z	13/05 [692/35 35103.....19032] Out 1055z S2	Malc	MON
	1045z	15/05 [692/35 35103.....etc] Repeat of Monday	Malc	WED
	1045z	20/05 [694/00] Out 1048z S3	Malc	MON
	1045z	22/05 [698/00] Out 1048z S2	Malc	WED
	1045z	29/05 [699/47 05308.....15607] Out 1057z S2	Malc	WED
	1045z	03/06 [698/00] Out 1048z S3	Malc	MON
	1045z	10/06 [696/39 15090.....67348] Out 1056z S2	Malc	MON
	1045z	12/06 [696/39 15090.....etc] Repeat of Monday	Malc	WED
	1045z	19/06 [693/00] Out 1048z S2	Malc, RNGB	WED
	1045z	24/06 [694/00] Out 1048z S3	Malc	MON
	1045z	26/06 [693/00] Out 1048z S3	Malc	WED
8680kHz	0700z	07/05 [577/00] Good	RNGB	TUE
	0700z	10/05 [576/00] Out 0703z S3	Malc	FRI
	0700z	14/05 [577/00] Out 0703z S3	Malc	TUE
	0700z	17/05 [575/00] Out 0703z S2	Malc	FRI
	0700z	24/05 [575/38 51089.....97305] Out 0711z S2	Malc	FRI
	0700z	28/05 [579/00] Out 0703z S2	Malc	TUE
	0700z	31/05 [571/00] Out 0703z S2	Malc	FRI
	0700z	07/06 [575/00] Out 0703z S2	Malc, RNGB	FRI
	0700z	11/06 [570/00] Out 0703z S3	Malc	TUE
	0700z	14/06 [571/00] Out 0703z S3 (Dutch SDR)	Malc	FRI
	0700z	18/06 [574/33 61585 59092 24981 72100 57685 51818 36943.....7077332976] Out 0709z S2	RNGB, Malc	TUE
	0700z	21/06 [574/33 61585.....etc] Repeat of Tuesday	Malc	FRI
	0700z	25/06 [577/00] Out 0703z S3	Malc	TUE
	0700z	28/06 [573/00] Out 0703z S3	Malc	FRI
9610kHz	1910z	03/05 [618/00] Out 1913z S2 QRM9	Malc	FRI
	1910z	05/05 [610/00] Out 1913z S2 S9 QRM	Malc	SUN
	0745z	06/05 [264/00] Out 0748z S4	Malc	MON
	1910z	10/05 [612/00] Out 1903z S2 buried in B/C Station S9	Malc	FRI
	0745z	13/05 [264/00] Out 0748z S2	Malc	MON
	1910z	17/05 [618/34.....ATTENTION] too weak to copy buried in B/C Station]	RNGB, Malc	FRI
	0745z	20/05 [269/34 57236 92936 96672 06358 37007 32721 93247 28366.....57804 03439]	RNGB	MON
	1910z	24/05 [614/00] Out 1913z S3 QRM8 B/C station	Malc	FRI
	1910z	26/05 [618/00] Out 1913z S3 QRM S9 B/C Station	Malc	SUN
	0745z	27/05 [264/00] Out 0748z S2	Malc	MON
	0745z	03/06 [264/37 87294 2324763291 68714 74494 45506 00565.....71877 21563] Out 0748z S2	RNGB, Malc	MON
	1910z	07/06 [610/00] Out 1913z S3 S9 QRM B/C Station	Malc	FRI
	0745z	10/06 [267/00] Out 0748z S2	Malc	MON
	1910z	16/06 [610/00] Out 1913z S2 + QRM	Malc	SUN
	1910z	14/06 [613/00] Out 1913z S4 + S7 QRM	Malc	FRI
	0745z	17/06 [260/00] Out 0748z S2	Malc, RNGB	MON
	0745z	24/06 [264/00] Out 0748z S2	Malc, RNGB	MON
	1910z	28/06 [610/35.....ATTENTION too weak to copy msg due S9 B/C Station]1920z S2 QRM	Malc	FRI
10356kHz	1530z	02/05 [266/00] Out 1533z S6	Malc	THU
	1530z	09/05 [264/00] Out 1533z S5	Malc	THU
	1530z	16/05 [268/00] Out 1533z S5	Malc	THU
	1530z	23/05 [269/34 57236.....03439] Out 1540z S3	Malc	THU
	1530z	06/06 [264/37 87294 23247 63291 68714 74494 45506 00565 98616.....71877 21563]	Gary H	THU
	1530z	30/05 [261/00] Out 1533z S7	Malc	THU
	1530z	06/06 [264/37 87294.....21563] Out 1541z S5	Malc	THU
	1530z	13/06 [267/00] Out 1533z S3	Malc	THU
	1530z	20/06 [260/00] Out 1533z S3	Malc, Gary H	THU
	1530z	27/06 [260/00] Out 1533z S4	Malc	THU
10429kHz	0715z	03/05 [637/00] Out 0718z S3	Malc	FRI
	0715z	07/05 [637/39 43346 23567 71780 62395 99975 38666 32632.....67627 62399] Out 0718z S2	RNGB, Malc	TUE
	0715z	10/05 [637/39 43346.....etc] Repeat of Tuesday	Malc	FRI
	0715z	14/05 [639/00] Out 0718z S2	Malc	TUE
	0715z	17/05 [635/00] Out 0718z S4	Malc	FRI

	0715z	21/05 [630/00] Out 0718z S2	Malc	TUE
	0715z	24/05 [635/00] Out 0718z S2	Malc	FRI
	0715z	28/05 [637/00] Out 0748z S2	Malc	TUE
	0715z	31/05 [631/00] Out 0718z S2	Malc	FRI
	0715z	07/06 [630/00] Out 0718z S3	Malc	FRI
	0715z	11/06 [635/00] Out 0748z S3	Malc, RNGB	TUE
	0715z	14/06 [636/00]	RNGB, Malc	FRI
	0715z	18/06 [636/31 26884 11587 43414 44892 48898 1615251635] Out 0724z S2	RNGB, Malc	TUE
	0715z	21/06 [636/31 26884.....etc] Repeat of Tuesday	Malc	FRI
	0715z	25/06 [633/00] Out 0718z S2	Malc	TUE
	0715z	28/06 [635/00] Out 0718z S3	Malc	FRI
11092kHz	1300z	09/05 [585/00] Out 1303z S6	Malc	THU
	1300z	11/05 [585/00] Out 1303z S2	Malc	SAT
	1300z	16/05 [588/00] Out 1303z S6 M8 TH		
	1300z	18/05 [581/00] Out 1303z S3	Malc	SAT
	1300z	23/05 [580/00] Out 1303z S2	Malc	THU
	1300z	25/05 [585/00] Out 1303z S3	Malc	SAT
	1300z	01/06 [583/00] Out 1303z S4	Malc	SAT
	1300z	06/06 [588/38 35322.....80020] Out 1310z S5 (Dutch SDR)	Malc	THU
	1300z	08/06 [588/38 35322.....etc] Repeat of Thursday	Malc	SAT
	1300z	20/06 [580/00] Out 1303z S2	Malc, RNGB	THU
	1300z	22/06 [588/00]	RNGB	SAT
	1300z	27/06 [585/00] Out 1303z S3	Malc	THU
11559kHz	0600z	24/06 [189/00]	RNGB	MON
12153kHz	0845z	02/05 [159/00] Out 0848z S5	Malc	THU
	0845z	07/05 [155/00] Good	RNGB	TUE
	0845z	09/05 [157/00] Out 0848z S3	Malc	THU
	0845z	14/05 [155/00] Out 0848z S2	Malc	TUE
	0845z	16/05 [159/00] Out 0855z S3	Malc	THU
	0845z	23/05 [156/00] Out 0848z S3	Malc	THU
	0845z	28/05 [152/39 72153.....21047] Out 0855z S3	Malc	TUE
	0845z	30/05 [152/39 72153.....etc] Repeat of Tuesday	Malc	THU
	0845z	06/06 [157/00] Out 0848z S3	Malc	THU
	0845z	11/06 [151/00] Out 0848z S4	Malc	TUE
	0845z	13/06 [156/00] Out 0848z S2	Malc	THU
	0845z	18/06 [155/30 37679 35048 54367 20730 23970 18232 35357.....91471 74899]	RNGB, Malc	TUE
	0845z	20/06 [155/30 37679.....etc] Repeat of Tuesday	Malc	THU
	0845z	25/06 [159/00] Out 0848z S2	Malc	TUE
	0845z	27/06 [156/00] Out 0848z S2	Malc	THU
12229kHz	1650z	23/06 [922/00] Out 1653z S2	Malc	SUN
	1650z	28/06 [921/00] Out 1653z S4	Malc	FRI
12397kHz	1000z	03/05 [302/00] Out 1003z S3	Malc, RNGB	FRI
	1000z	07/05 [304/00] Good	RNGB	TUE
	1000z	10/05 [302/00] Out 1003z S2	Malc	FRI
	1000z	14/05 [306/00] Out 1003z S4	Malc	TUE
	1000z	17/05 [305/00] Out 1003z S2	Malc	FRI
	1000z	21/05 [304/28 47800.....78085] Out 1008z S7	Malc	TUE
	1000z	24/05 [304/28 47800.....etc] Repeat of Tuesday	Malc	FRI
	1000z	28/05 [306/00] Out 1003z S3	Malc	TUE
	1000z	31/05 [304/001 Out 1003z S3	Malc	FRI
	1000z	04/06 [306/40 64719 38017 04504 83627 15267 86981 91676.....95852 06691]	RNGB	TUE
	1000z	07/06 [306/40 64719.....06691] Out 1011z S2	Malc	FRI
	1000z	11/06 [305/00] Out 1003z S3	Malc	TUE
	1000z	14/06 [306/00] Out 1003z S2	Malc	FRI
	1000z	18/06 [305/00] Out 1003z S3	Malc	TUE
	1000z	21/06 [308/00] Out 1003z S3	Malc	FRI
	1000z	25/06 [304/00] Out 1003z S3	Malc	TUE
	1000z	28/06 [308/00] Out 1003z S2	Malc	FRI
12630kHz	1925z	09/05 [552/00] Out 1928z S2 QSB1	Malc	THU
	1925z	14/05 [556/39 11098 42223 60963 07685 22539 93764 56059 84953.....11774 39270]	RNGB, Malc	TUE
	1925z	16/05 [556/39 11098.....etc] Repeat of Tuesday	Malc	THU
	1925z	21/05 [558/00] Out 1928z S3	Malc	TUE
	1925z	28/05 [557/00] Out 1928z S2	Malc	TUE
	1925z	30/05 [557/00] Out 1928z S4	Malc	THU
	1930z	06/06 [556/34 84613.....33311] Out 1940z S2	Malc	THU
	1925z	18/06 [553/00] Out 1928z S2	Malc	TUE

	1925z	20/06 [557/00] Out 1928z S2	Malc	THU
	1925z	25/06 [557/00] Out 1928z S2	Malc	TUE
12984kHz	1345z	07/05 [917/00]	Ary	TUE
	1345z	11/05 [915/00] Out 1348z S2	Malc	SAT
	1345z	14/05 [912/31 98246.....33923] Out 1355z S3	Malc	TUE
	1345z	18/05 [912/31 98246.....etc] Repeat of Tuesday	Malc	SAT
	1345z	21/05 [911/00] Out 1348z S3	Malc	TUE
	1345z	25/05 [915/00] Out 1348z S2	Malc	SAT
	1345z	28/05 [912/00] Out 1348z S3	Malc	TUE
	1345z	01/06 [918/00] Out 1348z S2	Malc	SAT
	1345z	08/06 [910/40 15566.....31987] Out 1356z S2	Malc	SAT
	1345z	11/06 [911/00] Out 1348z S3	Malc	TUE
	1345z	15/06 [911/00] out 1348z S2 + QRM	Malc	SAT
	1345z	18/06 [911/00] Out 1348z S3	Malc	TUE
	1345z	25/06 [919/00] Out 1348z S2	Malc	TUE
13424kHz	0645z	02/05 [511/00] Out 0648z S2	Malc, RNGB	THU
	0645z	07/05 [517/00] Out 0648z S2	Malc	TUE
	0645z	09/05 [518/00] Out 0648z S4	Malc	THU
	0645z	14/05 [512/40 20162 01680 15842 82856 01285 68208 53273 37379.....38133] Out 0656z S3	RNGB, Malc	TUE
	0645z	16/05 [512/40 20162.....etc] Repeat of Tuesday	Malc	THU
	0645z	21/05 [517/00] Out 0648z S3	Malc	TUE
	0645z	23/05 [517/00] Out 0648z S3	Malc	THU
	0645z	28/05 [518/00] Out 648z S2	Malc	TUE
	0645z	30/05 [514/00] Out 0648z S3	Malc, RNGB	THU
	0645z	06/06 [518/00] Out 0648z S3	Malc	THU
	1745z	09/06 [249/00] Out 1748z S2	Malc	SUN
	0645z	11/06 [519/00] Out 0648z S3	Malc, RNGB	TUE
	0645z	13/06 [518/00] Out 0648z S3	Malc	THU
	0645z	18/06 [512/33 30948 58251 85134 59094 59496 08763 35345 13815.....22716 07173]	RNGB, Malc	TUE
	0645z	20/06 [512/33 30948 58251 85134.....etc] Repeat of Tuesday	RNGB, Malc	THU
	0645z	25/06 [518/00] Out 0648z S3	Malc	TUE
	0645z	27/06 [517/00] Out 0648z S3	Malc	THU
14410kHz	1745z	06/05 [246/39 06122.....72312] Out 1755z S2 (Dutch SDR)	Malc	MON
	1745z	12/05 [246/39 06122.....etc] Repeat of Monday	Malc	SUN
	1745z	20/05 [245/00] Out 1748z S2	Malc	MON
	1745z	26/05 [242/00] Out 1748z S3	Malc	SUN
	1745z	27/05 [249/00] Out 1748z S3	Malc	MON
	1745z	02/06 [247/00] Out 1748z S2	Malc	SUN
	1745z	03/06 [246/00] Out 1748z S2 (Dutch SDR)	Malc	MON
	1745z	10/06 [240/00] Out 1748z S2	Malc	MON
	1745z	16/06 [249/00] Out 1748z S2	Malc	SUN
	1745z	17/06 [248/35 74739.....06076] Out 1755z S4 +QRM S4 (Dutch SDR)	Malc	MON
	1745z	23/06 [248/35 74739.....etc] Repeat of Monday	Malc	SUN
	1745z	24/06 [244/00]1 Out 1748z S3	Malc	MON
14415kHz	0600z	03/05 [180/00]	Ary	FRI
	0600z	13/05 [181/00]	RNGB	MON
	0600z	20/05 [182/26 63587 69697 72219 57386 29371 49519 18244.....12524 56640] (Qatar SDR)	RNGB	MON
14575kHz	1645z	02/05 [332/00] Out 1648z S2	Malc, RNGB	THU
	1645z	09/05 [334/39 49034.....20871] Out 1656z S2 (Dutch SDR)	Malc	THU
	1645z	21/05 [330/00] Out 1648z S2	Malc	TUE
	1645z	23/05 [331/00] Out 1648z S2	Malc	THU
	1645z	28/05 [334/00] Out 1648z S2	Malc	TUE
	1645z	30/05 [333/00] Out 1648z S2	Malc	THU
	1645z	13/06 [332/36 78228.....17384] Out 1655z S2	Malc	THU
	1645z	18/06 [335/00] Out 1648z S2	Malc	TUE
	1645z	25/06 [335/00] Out 1648z S2	Malc	TUE
14940kHz	1650z	03/05 [929/00] Out 1653z S4	Malc	FRI
	1650z	05/05 [921/00] Out 1653z S2 (Dutch SDR)	Malc	SUN
	1650z	12/05 [921/00] Out 1653z S2	Malc	SUN
	1650z	17/05 [920/00] Out 1653z S2	Malc, RNGB	FRI
	1650z	19/05 [926/00] Out 1653z S2	Malc	SUN
	1650z	24/05 [927/32 01130.....86897] Out 1700z S3 QSB1	Malc	FRI
	1650z	26/05 [927/32 01130.....etc]Repeat of Friday	Malc	SUN
	1650z	31/05 [922/00] Out 1913z S2	Malc	FRI
	1650z	02/06 [926/00] Out 1653z S2 (Dutch SDR)	Malc	SUN
	1650z	09/06 [921/00] Out 1653z S2	Malc	SUN

1650z	14/06 [920/00] Out 1653z S3	Malc	FRI
1650z	16/06 [921/00] Out 1653z S6 (Dutch SDR)	Malc, Gary H	SUN
15720kHz 0745z	08/05 [348/00] Out 0748z S2	Malc	WED
0745z	10/05 [344/00] Out 0748z S6 QSB3	Malc	FRI
0745z	15/05 [343/00] Out 0748z S2	Malc	WED
0745z	17/05 [344/00] Out 1748z S2 (Dutch SDR)	Malc	FRI
0745z	22/05 [343/00] Out 0748z S2	Malc	WED
0745z	24/05 [346/00] Out 0748z S3	Malc	FRI
0745z	29/05 [348/34 70961.....33956] Out 0755z S2	Malc	WED
0745z	31/05 [348/33 70961.....etc] Repeat of Wednesday	Malc	FRI
0745z	07/06 [347/38 43484 29937 43255 59196 44762 45857 23040.....98814 23535] Out 0756z	RNGB, Malc	FRI
0745z	12/06 [344/00] Out 0748z S2	Malc	WED
0745z	14/06 [344/00] Out 0748z S2 (Dutch SDR)	Malc	FRI
0745z	19/06 [346/00] Out 0748z S3	Malc, RNGB	WED
0745z	21/06 [342/00] Out 0748z S2	Malc	FRI
0745z	28/06 [340/00] Out 0748z S3	Malc	FRI
15795kHz 1625z	01/05 [976/00] Out 1628z S2	Malc	WED
1625z	08/05 [976/00] Out 1628z S2	Malc	WED
1625z	12/05 [978/00] Out 1628z S2	Malc	SUN
15800kHz 0640z	01/05 [940/00] Out 0643z S1 (Dutch SDR)	Malc	WED
0640z	06/05 [940/00] Out 0643z S4	Malc	MON
0640z	13/05 [941/25 71343 57356 25002 01867 17313 98668 26128.....83008 29149]	RNGB	MON
0640z	15/05 [941/25 71343.....29149] Out 0648z S4	Malc	WED
0640z	20/05 [945/00]	RNGB	MON
0640z	22/05 [940/00] Out 0643z S3	Malc	WED
0640z	27/05 [948/00] Out 0643z S3 (Dutch SDR)	Malc	MON
0640z	29/05 [944/00] Out 0643z S3	Malc	WED
0640z	03/06 [945/00] Out 0643z S3	Malc, RNGB	MON
0640z	10/06 [942/00] Out 0643z S3	Malc, RNGB	MON
0640z	12/06 [949/00] Out 0643z S3	Malc	WED
0640z	17/06 [941/00] Out 0643z S3	Malc, RNGB	MON
0640z	19/06 [941/00] Out 0643z S2	Malc, RNGB	WED
15825kHz 1345z	04/05 [910/00] Out 1348z S2	Malc	SAT
17378kHz 0820z	07/05 [134/36 97536 48676 85708 22419 45976 56958 10161.....57493 41924]	Ary	TUE
0820z	15/05 [158/00] Out 0823z S2	Malc	WED
0820z	28/05 [135/00] Out 0823z S3	Malc	TUE
0820z	29/05 [136/00] Out 0823z S2	Malc	WED
0820z	04/06 [131/00]	RNGB	TUE
0820z	11/06 [135/33 69308.....06808 15650] Very weak with QSB	RNGB	TUE
0820z	12/06 [135/33 69308.....etc] Repeat of Tuesday	Malc	WED
0820z	18/06 [138/00] Out 0823z S2	Malc, RNGB	TUE
0820z	19/06 [132/00] Out 0823z S2	Malc, RNGB	WED
0820z	25/06 [132/00] Out 0823z S2	Malc	TUE

E17z

May 2019

Thursday

0800z	16780kHz	0810z	12850kHz		
02/05	674 953 8 15339 91460 26995 97723 99626 84780 98956 43258 953 8 00000			[0800z NRH]	Weak
09/05	674 953 8 15339 91460 26995 97723 99626 84780 98956 43258 958 8 00000			[0800z Dutch SDR)]	Weak
16/05	674 928 5 48915 01856 64045 42757 01171 928 5 00000			[0800z Unworkable]	Weak

23/05	674 928 5 48915 01856 64045 42757 01171 928 5 00000	Weak(Dutch SDR)
30/05	674 00000	Weak
June 2019		
06/06	674 908 5 01405 95003 34357 60583 54545 908 5 00000	Weak(Dutch SDR)
13/06	674 908 5 01405 15003 24357 60583 54545 908 5 00000 Sound distorted on both sendings; each freq +1kHz	Weak M8 Ary
20/06	674 291 5 40639 33180 48007 37330 46446 291 5 00000 [Dannix: Sounds ok in AM; Ary: +1kHz both freqs]	Weak (Dutch SDR)
27/06	NRH	

E25

G06

PoSW's G06 log leads us to others' logs and comment:

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

6-May-19:- 1701 UTC, 5344 kHz, "145 145 145 00000", found in progress, reasonable signal strength up to "8" on the S-meter, voice stopped after 1703:15s UTC.

Unable to find a repeat at 1800 UTC, strange because the second transmission is usually the stronger of the two.

13-May-19:- 1700:15s UTC, 5344 kHz, started a little bit late for a change, "145 145 145 00000", peaking around S7. Still no sign of a repeat one hour later, several strong carriers noted in the minutes before 1800z but none of them were connected with G06.

3-June-19:- 1700:30s UTC, 5344 kHz, "145 145 145 00000", fair signal, started about half a minute after the hour.

1801 UTC, 5904 kHz, second sending found in progress, strong DRM type signal on the HF side, inside the 49 metre broadcast band. Expected the 1800z to be on a lower frequency because in May and June of last year frequencies used were 1700z 5287 and 1800z 4935.

10-June-19:- 1700 UTC, 5344 kHz, "145 145 145 00000", tuned in at approx 1701 UTC so missed start, voice stopped around 1704:10s UTC so probably started close to the hour.

1800 UTC, 5915 kHz, not the same frequency as last time, tuned in about 30 seconds in, voice stopped after 1804 UTC, computer shut-down sound heard at 1804:30s approx.

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

9-May-19:- 6887 kHz, started about 25 seconds after the half-hour, call "842", DK/GC "472 472 52 52", heard many times in the past.

23-May-19:- 6887 kHz, started about 40 seconds before the half-hour, "842", DK/GC "973 973 48 48", good signal on a clear frequency.

13-June-19:- 6887 kHz, call "842", DK/GC "973 973 48 48" again, ended 1842 UTC, computer shut-down sound just before 1843.

Friday 1930 UTC Following Second + Fourth Thursdays:-

10-May-19:- 5928 kHz, call "218", DK/GC "472 472 52 52", same as on the previous day's 1830z sending. Inside the 49 metre broadcast band, slight side-band splash from a strong broadcast station on a close frequency.

14-June-19:- 5937 kHz, started a second or two before the half-hour, "218" and "973 973 48 48", good signal

Onto others' logs and comment:

Monday

May 2019

0759z 7320kHz

06/05	329 00000	Weak
20/05	329 00000	Weak

1700z 5344kHz 1800z 5916kHz

06/05	145 00000	Ary	MON
13/05	145 00000	[at 1648z 111 111 111 00000 S06]	Weak

June 2019

0800z 7320kHz

03/06	329 00000	Weak
17/06	329 00000	Weak

1700z 5344kHz 1800z 5915kHz

03/06	145 00000	[1800z NRH]	Weak
10/06	145 00000		Weak

Wednesday

May 2019

1200z 7525kHz

08/05	145 00000	Ary	WED
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Thursday

May 2019

1830z 6887kHz

09/05	842 472 52 12265 ... 95832 472 52 00000	Weak
23/05	842 973 48 90874 ... 45678 973 48 00000	Weak

June 2019

1200z 7533kHz 1300z 5890kHz

06/06	329 00000	Weak(Dutch SDR)
12/06	145 00000	Weak
20/06	329 00000	Weak(Polish SDR) at 1300z

1830z 6887kHz

13/06	842 973 48 92874 ... 97363 00000	Fair
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Friday

May 2019

1930z 5928kHz

10/05	218 472 52 12265 ... 95732 472 52 00000	Ary, E	FRI
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218 472 52
12265 10965 47839 38654 84677 93453 62217 84393 04673 97564
01824 75643 84221 95647 92112 94543 76577 43435 47322 84232
95674 87344 57438 45763 49325 57438 92190 96785 21244 05674
01765 76354 83645 21234 97564 82133 07564 83234 75312 71211
05674 65374 67321 94884 23483 82521 41212 57333 85331 53234
05124 95732
472 52 00000

Courtesy Ary

1930z 5952kHz

24/05	218 973 48 90874 ... 45678 973 48 00000	Weak
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June 2019

1930z 5937kHz [±2kHz]

14/06	218 937 48 90874 ... 45678 973 48 00000	Fair
28/06	218 968 43 43057 ... 36125 968 43 00000	Fair

S06

S06 log May 2019

Thursday	0830z	17475kHz	0930z	14736kHz
16/05	'842' 367 40 68678 83968 87267 35316 44761 20245 75220 44155 15488 12315 56550 99752 58435 52911 94218 88375 37230 96678 18939 26067 19471 93488 14524 79127 47858 87876 33793 37418 75491 39271 18495 07697 01271 42714 21658 19150 66313 54766 55831 58323 367 40 00000			

23/05	'842' 159 38 72848...No whole msg due fading.....00508 159 38 00000]0841z S2 QSB1 (Dutch SDR)	Malc	THU
31/05	'842' 306 49 61343 too weak to copy full msg due fading 00000]0942z S2 QSB1	Malc	FRI (repeat of Thursday)

Fridays (1st & 3rd)	1900z	9336khz	2000z	7314kHz
03/05	'627' 00000			
17/05	'627' 00000			

S06s May log:**Monday**

6th/13th	0630/0640z	16320/14875	'524' 831 6 33699 39998 30667 35947 83964 40774
20th/27th			'524' 817 6 32805 37450 46501 31053 44246 31824
6th/13th	0830/0840z	8221/9353	'371' 246 5 45983 48882 31151 32860 43334
20th/27th			'371' 908 5 76148 25163 22415 25821 73717
6th/13th	0900/0910z	16380/14835	'872' 903 5 30147 03494 43014 81051 46544
20th/27th			'872' 941 5 42881 54814 38884 24421 40239
6th/13th	1300/1310z	10230/12165	'831' 420 5 54544 54612 43306 34498 33890
20th/27th			'831' 904 5 42867 39654 42387 44142 39883

Tuesday

7th/14th	0600/0610z	15855/16485	'438' 250 6 68385 96732 33885 31840 34645 86952
21st/28th			'438' No reports
7th/14th	0700/0710z	5430/6780	'374' 561 8 43337 89152 46544 36478 31315 36184 36194 37650
21st/28th			'374' 569 8 35944 64372 12078 10915 84612 76148 25163 22415
7th/14th	0730/0740z	7365/11655	'427' 853 6 32079 40063 40372 36343 33365 97541
21st/28th			'427' 581 6 28571 15277 58881 64604 49656 65963
7th/14th	0800/0810z	14373/12935	'352' 918 6 89762 42149 46198 36148 34433 36421
21st/28th			'352' 487 6 07414 62694 84843 81185 08844 75117
7th/14th	1000/1010z	4820/5660	'893' 572 6 85518b83939 48340 30054 30909 39394
21st/28th			'893' 574 6 groups (too weak to copy)
7th/14th	1100/1110z	6810/7560	'754' 201 6 44475 30322 36034 45445 44008 38453
21st/28th			'754' 208 6 62881 34814 38884 24424 50143 53571
7th/14th		6766/7744	'537' 824 6 32640 39976 43843 39801 35875 43806
21st/28th			'537' 498 6 77378 3064? 31464 40750 42433 35630

Wednesday

1st/8th	0730/0740z	12110/14977	'745' 203 6 52401 63919 92699 14600 74248 48754
15th/22nd			'745' 208 6 98058 44693 07628 61154 97511 24047
1st/8th	0820/0830z	9485/11085	'471' NRH
15th/22nd			'471' NRH
1st/8th	0830/0840z	12110/14977	'464' 213 5 46062 68672 97478 39685 30485
15th/22nd			'464' 509 7 07931 98755 84638 45752 64655 58202 44206
1st/8th	1000/1010z	14580/16020	'729' 416 5 88630 58069 61732 74537 57440
15th/22nd			'729' 581 6 33445 69424 38167 05423 75458 59421

Thursday

2nd/9th (E17z)	0800/0810z	16780/12850	'674' 953 8 15339 91460 26995 97723 99626 84780 98956 43258
16th/23rd			'674' 928 5 48915 01856 64045 43757 01171
2nd/9th	0930/0940z	9255/10325	'314' 269 5 31485 36928 70560 15222 90585
16th/23rd			'314' 286 5 78655 75855 07443 51240 62434
2nd/9th	1200/1210z	13145/14535	'425' 901 6 46421 46775 35602 49696 55471 83447
16th/23rd			'425' 908 6 33445 69424 38167 05423 76458 59421

Friday

3rd/10th	0900/0910z	6844/7161	'624' 531 7 05423 76458 59421 21677 15542
17th/24th			'624' 907 5 76585 39626 43217 94450 26859
3rd	0930/0940z	10290/9655	'516' 948 7 38611 33218 45503 44449 37631
10th/17th/24th			'516' NRH

Saturday

4th	0800/0810z	12460/10250	'254' 873 6 31315 36184 36194 37650 43773 46793
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With thanks to RNGB, Malc, Ary, HfD

S06 log June 2019

Thursday	0830z	16022kHz	0930z	13925kHz
06/06	'842' 175 44 60406 17353 13674 93470 09703 33572 73814 41257 43323 71509 94608 10411 63368 84805 34945 23878 02021 96659 97237 00728 64659 59136 42649 26043 48063 87937 83759 08019 94652 77373 78119 39459 68706 25177 71111 05845 65484 21881 61569 07185 89201 84430 88591 85813 175 44 00000			
13/06	'842' 906 38 27135 49864 04751 62340 75976 47038 13943 17401 59166 14442 68284 76024 88344 47947 10491 43572 24170 96155 75130 50662 83684 35984 10292 55296 19656 23109 98575 41552 82824 36969 50841 82057 03003 35001 71140 56415 49957 99800 906 38 00000			
20/06	'842' 135 40 37697 88678 55775 37009 20859 98289 50097 26179 85675 72967 55257 04884 13935 39002 64503 23318 51406 74244 87076 02665 53882 82045 36683 71196 36439 81315 00533 03215 36858 67385 62374 27997 29146 23349 77986 00963 48088 86584 26531 54226 135 40 00000			
27/06	'842' 609 47 45556 16545 66242 36378 59672 86119 27747 05322 77798 75346 24569 31443 61343 72099 75253 78344 57680 35095 57636 31467 50336 38589 01072 02992 02250 82401 05327 70044 65528 34469 22065 25885 56150 98095 59873 48771 17043 21102 98755 18191 17984 89060 25040 33140 65744 69792 22631 609 47 00000 (Thanks Ary)			

Fridays (1st & 3rd)	2000z	9336khz	2100z	7314kHz
07/06	'627' 00000			
21/06	'627' 00000			

Other transmissions:

	1500z	13944khz	1600z	11496kHz
05/06	'387' 546 2 11111 00056 followed by 219/40 47236.....etc			(thanks HFD)

S06s June log:**Monday**

3rd/10th	0630/0640z	16320/14875	'524' 976 8 46062 68672 97478 39685 30485 96632 52537 53317
17th/24th			'524' 879 6 98058 55693 07628 61154 97511 24047
3rd/10th	0830/0840z	8221/9353	'371' 985 6 21767 53672 11834 81022 36903 41412
17th/24th			'371' 204 5 62795 74228 64661 44999 47730
3rd/10th	0900/0910z	16380/14835	'872' 943 5 52401 63919 92699 14600 74248
17th/24th			'872' 431 5 12444 38625 89531 52814 95931
3rd/10th	1300/1310z	10230/12165	'831' 972 5 33796 13577 74526 46647 79302
17th/24th			'831' 267 5 33445 69424 38167 05423 75458

Tuesday

4th/11th	0600/0610z	15855/16485	'438' 975 6 65906 66610 20336 17301 88554 82045
18th/25th			'438' 520 6 07931 98755 84638 45752 64655 58202
4th/11th	0700/0710z	5430/6780	'374' 801 5 53516 25616 26069 96813 14199
18th/25th			'374' 968 5 968 5 43798 46937 33032 38334 44613
4th/11th	0730/0740z	7365/11655	'427' 593 6 30485 96632 52537 53317 06675 41736
18th/25th			'427' 908 5 98058 55693 07628 61154 97511
4th/11th	0800/0810z	14373/12935	'352' 984 6 05899 50387 45847 23013 89758 52343
18th/25th			'352' 470 6 62795 74228 56551 44999 47773 55580 - Faulty transmitter
4th/11th	1000/1010z	4820/5660	'893' 524 6 88554 82045 36717 24042 75956 31670
18th/25th			'893' 247 5 12444 38625 89531 52814 95931
4th/11th	1100/1110z	6810/7560	'754' 980 6 54545 50128 99477 83534 48874 94031
18th/25th			'754' 231 6 33445 69424 38167 05423 76458 59421
4th/11th		6766/7744	'537' 901 6 96320 36793 53038 76342 15009 21816
18th/25th			'537' 419 6 37888 32451 33983 42283 32618 31250

Wednesday

5th/12th	0730/0740z	11530/14977	'745' 209 6 34053 32546 33766 37399 32148 35819
19th/26th			'745' 829 6 60241 06194 40729 11644 01699 75984
5th/12th	0820/0830z	9485/11085	'471' NRH
19th/26th			'471' NRH
5th/12th	0830/0840z	12110/14977	'464' 892 5 88620 58069 61732 74537 57440
19th/26th			'464' 875 9 08704 77511 52626 82027 29630 41019 28146 38590 46291
5th/12th	1000/1010z	14580/16020	'729' 814 5 01405 15003 24357 60583 54545
19th/26th			'729' 845 6 93286 74659 25754 26242 28716 70094

Thursday

6th/13th (E17z)	0800/0810z	16780/12850	'674' 908 5 01405 15003 24357 60583 54545
20th/27th			'674' 291 5 40639 33180 48007 37230 46446
6th/13th	0930/0940z	9255/10325	'314' 908 5 11171 64385 82707 06123 22536
20th/27th			'314' 298 5 37218 30440 35401 34072 83030
6th/13th	1200/1210z	13145/14535	'425' 801 6 88146 57856 98835 46186 16945 80744
20th/27th			'425' 807 6 85518 83939 48340 40054 40909 39394

Friday

7th/14th	0630/0640z	10290/9655	'516' 293 7 27184 26129 22982 83321 85246 22992 22529
21st/28th			'516' 847 9 37545 30989 41691 43753 32543 40926 36892 45221 43796
7th/14th	0900/0910z	6844/7161	'624' 897 5 42990 22000 32968 25222 36880
21st/28th			'624' 853 7 42990 33000 32968 35332 36880 33582 44060

Saturday

1st	0800/0810z	12460/10250	'254' 879 6 42881 54814 38884 24421 40239 38792
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With thanks to RNGB, Malc, Ary, HfD

From PoSW:**S06s, OM Voice:-****First + Third Fridays in the Month 1900 UTC + 2000 UTC Schedule:-**

17-May-19:- 1901 UTC, 9336 kHz, found about a minute in, "627 627 627 00000", S5 to S6 at best. Unable to find a repeat at 2000 UTC on a lower frequency.

In June this schedule, not unexpectedly, moved by one hour:-

7-June-19:- 2000 UTC, 9336 kHz, "627 627 627 00000", peaking around S8.

2104 UTC, 2104 UTC, 7315 approx, searching for the second sending with the receiver in wide AM mode, fairly sure the last few seconds of "nulls" were in there somewhere, went off air before being tuned in properly, inside the 41/42 metre broadcast band.

21-June-19:- 2000 UTC, 9336 kHz, "627 627 627 00000", not too strong.

2100 UTC, 7314 kHz, second sending, competing well with broadcast stations on close frequencies.

S06s, YL Voice:-

Some of the stronger S06s transmissions heard recently, several more too weak to justify spending any time over. The month of May saw the expected change of frequencies for the late spring / summer season.

No sign of the Friday 0930 + 0940 UTC "516" schedule in May or June on 10290 + 9655 kHz - the predicted frequencies - on the several occasions when looked for in these two months. Was always one of the stronger S06s schedules in past years.

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

20-May-19:- 0830 UTC, 8221 kHz, DK/GC "908 908 5 5", "76148 25163 22415 25821 73717", reasonable signal.

0840 UTC, 9353 kHz, second sending, much weaker.

10-June-19:- 0830 UTC, 8221 kHz, DK/GC "985 985 6 6", signal strength S5 to S7, "21767 53672 11834 81022 36903 41412", a distinct pause after group no. 5.

0840 UTC, 9353 kHz, weak.

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

7-May-19:- 0730 UTC, 7365 kHz, DK/GC "853 853 6 6", S6 to S7, "32079 40063 40372 36343 33365 97541".

0740 UTC, 11655 kHz, second sending, stronger, peaking over S9.

14-May-19:- 0740 UTC, 11655 kHz, 0730 sending on 7365 was too weak to copy, "853 853 6 6" and 5Fs as on the 7th, as expected, strength around "7".

21-May-19:- 0730 UTC, 7365 kHz, DK/GC "581 581 6 6", S9 signal this morning, "28571 15277 58881 64604 49656 65963".

0740 UTC, 11655 kHz, also a strong signal.

Wednesday 0730 + 0740 UTC Schedule, Call "745":-

1-May-19:- 0730 UTC, 12110 kHz, DK/GC "203 203 6 6", "52401 63919 92699 14600 74248 48754", strong signal.

0740 UTC, 14977 kHz, in contrast with the first sending very weak.

8-May-19:- 0730 UTC, 12110 kHz, "203 203 6 6", and 5Fs as on 1-May, still following the

"same message appearing for two successive weeks" format. Strong signal.

0740 UTC, 14977 kHz, around S7, much stronger than last time.

15-May-19:- 0730 UTC, 12110 kHz, DK/GC "208 208 6 6", peaking over S9, "98058

44693 07628 61154 97511 24047".

0740 UTC, 14977 kHz, S9 with QSB.

22-May-19:- 0730 UTC, 12110 kHz, "208 208 6 6" and 5Fs as on 15-May, over S9 with QSB.

0740 UTC, 14977 kHz, slightly weaker.

5-June-19:- 0730 UTC, nothing heard on the expected frequency of 12110 kHz; however after waiting for several minutes in case of a late start before giving up and tuning away found S06s on another frequency:-

0735 UTC approx, 11530 kHz, last few seconds, this frequency was used in the springtime, competing with a strong broadcast station, just caught the ending of, “.... 35819 209 209 6 6 00000”.

0740 UTC, 14977 kHz, second sending showed up as expected, “34053 32546 33766 37399 32148 35819”.

12-June-19:- 0730 UTC, 11530 kHz, still using this frequency inside the 25 metre band,

difficult copy due to very strong broadcast station, appeared to start late, no voice heard until a bit before 0731z, DK/GC heard close to 0735z, “209 209 6 6”, same as on 5-June.

0741 UTC, just after, 14977 kHz, this did start late, good signal on a clear frequency.

19-June-19:- 0730 UTC, 11530 kHz, DK/GC “60241 06194 40729 11644 01699 75984”, over-riding the broadcast station for most of the time.

0740 UTC, 14977 kHz, strong signal.

Wednesday 1000 + 1010 UTC Schedule, Call “729”:-

15-May-19:- 1000 UTC, 14580 kHz, DK/GC “581 581 6 6”, “33445 69424 38167 05423 75458 59421”, strength around a “5” at best.

1010 UTC, 16020 kHz, very weak signal of some kind, unreadable.

22-May-19:- 1000 UTC, 14580 kHz, “581 581 6 6” and 5Fs as on 15-May, much stronger signal, over S9.

1010 UTC, 16020 kHz, also much stronger than last time, over S9 with QSB.

5-June-19:- 1000 UTC, 14580 kHz, DK/GC “814 814 5 5”, weak signal, “01405 15003 24357 60583 54545”. The last 5F group “54545” seemed familiar by its very repetitive

nature and it seemed that it had been heard before and a bit of research showed this to be the case; if heard correctly the same sequence of 5Fs was used by S06s 1000z “729” schedule on Wednesday 5-Sept-18 but with a DK of “813”, and again as the first five 5Fs of a message with a group count of six from the 0800z “254” schedule on Saturday 7-July-18.

1010 UTC, 16020 kHz, very weak, difficult copy.

12-June-19:- 1000 UTC, 14580 kHz, “814 814 5 5” and 5Fs as on 5-June, good signal.

1010 UTC, 16020 kHz, strong.

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

4-May-19:- 0800 UTC, 12460 kHz, weak signal, DK/GC “873 873 6 6”, “31315 36184 36194 37650 43773 46793”.

0810 UTC, 10250 kHz, second sending, very weak, unreadable.

1-June-19:- missed the possible first sending at 0800z on 12,450.

0810 UTC, 10250 kHz, very weak, DK/GC “879 879 6 6”, sank into noise, fairly sure “38884 24427 40239” were in there somewhere.

S11a log May/June

5082kHz	0915z	03/05 [487/00] Weak		RNGB	FRI
	0915z	06/05 [424/00] Konyetz 0918z S2	(Dutch SDR)	Malc	MON
	0915z	10/05 [482/00] Konyetz 0918z S2		Malc	FRI
	0915z	13/05 [423/00] Konyetz 0918z S3		Malc	MON
	0915z	17/15 [482/00] Konyetz 0918z S2		Malc	FRI
	0915z	20/05 [482/35 75869.....60858] Konyetz 0926z S2	(Dutch SDR)	Malc	MON
	0915z	24/05 [482/35 75869.....etc] Repeat of Monday		Malc	FRI
	0915z	27/05 [480/00] Konyetz 0918z S3	(Dutch SDR)	Malc	MON
	0915z	31/05 [480/00] Konyetz 0918z S2	(Dutch SDR)	Malc	FRI
	0915z	03/06 [484/00]		RNGB	MON
	0915z	07/06 [482/00] Konyetz 0918z S4	(Dutch SDR)	Malc, RNGB	FRI
	0915z	10/06 [486/00] Konyetz 0918z S3	(Dutch SDR)	Malc	MON
	0915z	14/06 [485/00]		RNGB, Malc	FRI
	0915z	17/06 [482/00] Konyetz 0918z S3	(Dutch SDR)	Malc	MON
	0915z	21/06 [482/00] Konyetz 0918z S2	(Dutch SDR)	Malc	FRI
	0915z	24/06 [483/33 40807.....32576] Konyetz 0726z S6	(Polish SDR)	Malc	MON
	0915z	28/06 [483/33 40807.....etc] Repeat of Monday		Malc	FRI
5149kHz	1100z	08/05 [379/00] Konyetz 1103z S3	(Dutch SDR)	Malc	WED
	1100z	10/05 [377/00] Konyetz 1103z S3	(Dutch SDR)	Malc	FRI
	1100z	15/05 [373/00] Konyetz 1102z S2		Malc	WED
	1100z	17/05 [373/00] Konyetz 1103z S2		Malc	FRI
	1100z	22/05 [373/35 09866.....23407] Konyetz 1023z S4 (Dutch SDR)		Malc	WED

	1100z	24/05 [373/35 09866.....etc]	Repeat of Wednesday	Malc	FRI
	1100z	29/05 [376/00]	Konyetz 1103z S4	Malc	WED
	1100z	31/05 [370/00]	Konyetz 1103z S2 (Dutch SDR)	Malc	FRI
	1100z	07/06 [377/32 41620 54308 77670 09715 17306 41845 76000.....36674 93568]	Konyetz 1110z	RNGB, Malc	FRI
	1100z	12/06 [378/00]	Konyetz 1103z S2 (Dutch SDR)	Malc	WED
	1100z	14/06 [373/00]	Konyetz 1103z S4 (Dutch SDR)	Malc	FRI
	1100z	21/06 [379/00]	Konyetz 1103z S3 (Dutch SDR)	Malc	FRI
	1100z	26/06 [378/00]	Konyetz 1103z S2	Malc, RNGB	WED
	1100z	28/06 [377/001]	Konyetz 1103z S3 (Dutch SDR)	Malc	FRI
5844kHz	0455z	03/05 [327/00]		Ary	FRI
	0455z	18/06 [328/00]	Strong	RNGB	TUE
6977kHz	1020z	03/05 [425/00]	Konyetz 1023z S2	RNGB, Malc	FRI
	1020z	07/05 [421/00]	Konyetz 1023z S2	Malc	TUE
	1020z	10/05 [420/00]	Konyetz 1023z S2	Malc, RNGB	FRI
	1020z	14/05 [424/00]	Konyetz 1023z S2	Malc	TUE
	1020z	17/15 [424/00]	Konyetz 1023z S3 (Dutch SDR)	Malc	FRI
	1020z	21/05 [420/34 98323.....60598]	Konyetz 1026z S2	Malc	TUE
	1020z	24/05 [420/34 98323.....etc]	Repeat of Tuesday	Malc	FRI
	1020z	28/05 [429/00]	Konyetz 1023z S2	Malc	TUE
	1020z	31/05 [427/00]	Konyetz 1023z S2	Malc	FRI
	1020z	04/06 [422/00]		RNGB	TUE
	1020z	07/06 [427/00]	Konyetz 1023z S2	Malc	FRI
	1020z	11/06 [425/40 86660.....35291]	Konyetz 1033z S2	Malc	TUE
	1020z	14/06 [425/40 86660.....etc]	Repeat of Tuesday	Malc	FRI
	1020z	18/06 [425/00]	Konyetz 1023z S2	RNGB, Malc	TUE
	1020z	21/06 [426/00]	Konyetz 1023z S2	Malc	FRI
	1020z	25/06 [427/00]	Konyetz 1023z S2	Malc	TUE
	1020z	28/06 [424/00]	Konyetz 1023z S2	Malc	FRI
10210kHz	1015z	02/05 [472/00]	Konyetz 1018z S2	Malc, RNGB	THU
	1015z	06/05 [478/00]	Konyetz 1018z S2	Malc	MON
	1015z	09/05 [470/00]	Konyetz 1018z S3	Malc	THU
	1015z	13/05 [478/00]	Konyetz 1018z S2	Malc	MON
	1015z	16/05 [470/00]	Konyetz 1018z S3	Malc	THU
	1015z	20/05 [477/34 52440.....32126]	Konyetz 1026z S2	Malc	MON
	1015z	23/05 [477/34 52440.....etc]	Repeat of Monday	Malc	THU
	1015z	30/05 [478/00]	Konyetz 1023z S2	Malc	THU
	1015z	03/06 [472/00]		RNGB	MON
	1015z	06/06 [471/00]	Konyetz 1018z S2	Malc	THU
	1015z	10/06 [472/00]	Konyetz 1018z S2	Malc	MON
	1015z	13/06 [472/00]	Konyetz 1018z S2	Malc	THU
	1015z	17/06 [477/00]	Konyetz 1018z S4 (Dutch SDR)	Malc, RNGB	MON
	1015z	20/06 [476/00]	Konyetz 1018z S2	Malc	THU
	1015z	24/06 [477/37 12696.....43422]	Konyetz 1027z S3	Malc	MON
11092kHz	1540z	01/05 [565/00]	Konyetz 1543z S2	Malc	WED
	1540z	04/05 [561/00]	Fair	RNGB	SAT
	1540z	08/05 [563/31 24996.....86087]	Konyetz 1550z S3	Malc	WED
	1540z	15/05 [567/00]	Konyetz 1543z S2	Malc	WED
	1540z	18/05 [569/00]	Konyetz 1543z S3	Malc	SAT
	1540z	22/05 [561/001]	Konyetz 1543z S2	Malc	WED
	1540z	29/05 [566/00]	Konyetz 1543z S2	Malc	WED
	1540z	01/06 [564/00]	Konyetz 1543z S3	Malc	SAT
	1540z	08/06 [560/00]	Konyetz 1543z S4	Malc	SAT
	1540z	12/06 [564/39 83377.....91693]	Konyetz 1552z S3	Malc	WED
	1540z	15/06 [564/39 83377.....91693]		Malc	SAT
	1540z	19/06 [569/00]	Konyetz 1543z S3	Malc, RNGB	WED
	1540z	22/06 [565/00]	Konyetz 1543z S2	Malc, Gary H	SAT
	1540z	26/06 [565/001]	Konyetz 1543z S3	Malc	WED
12457kHz	1850z	01/05 [288/00]	Konyetz 1853z S2	Malc	WED
	1850z	04/05 [286/00]	Konyetz 1853z S2	Malc	SAT
	1850z	08/05 [285/00]	Konyetz 1853z S3	Malc	WED
	1850z	11/05 [288/00]	Konyetz 1853z S4	Malc	SAT
	1850z	15/05 [284/00]	Konyetz 1853z S2 QRM S9	Malc	WED
	1850z	18/05 [282/00]	Konyetz 1853z S5	Malc	SAT
	1850z	22/05 [285/33 70911.....72907]	Konyetz 1901z S3	Malc	WED
	1850z	25/05 [285/33 70911.....etc]	Repeat of Wednesday	Malc	SAT
	1850z	29/05 [280/001]	Konyetz 1853z S4	Malc	WED
	1850z	01/06 [285/001]	Konyetz 1853z S3	Malc	SAT

1850z	12/06 [288/31 16253.....39332] Konyetz 1901z S4
1850z	19/06 [281/00] Konyetz 1853z S5
1850z	22/06 [287/00] Konyetz 1853z S3
1850z	26/06 [281/00] Konyetz 1853z S4

Malc	WED
Malc	WED
Malc	SAT
Malc	WED

V02 a

Not heard.

V07

May 2019

0300z	13521kHz	0320z	12121kHz	0340z	11421kHz
12/05	NRH				
19/05	NRH				
26/05	NRH, Poor HF Conx				

V15 North Korean Intelligence via Radio Pyongyang

3320kHz1545z	23/05 PBS- Pyongyang N. Korea //6400. Perseus net- Japan	SR	THU
6400kHz1545z	23/05 PBS- Pyongyang N. Korea //3320. Perseus net- Japan	SR	THU
3320//6400kHz			
1445z	22/06 AM North Korean intelligence via PBS Pyongyang Pansong. Message in Korean	Ary	SAT

V24

4900kHz1545z	23/05 S. Korea heard. Perseus net- Japan	SR	THU
5900kHz1600z	18/05 K-popsong followed by a message in Korean	Ary	SAT

V26

4243kHz1218z	03/06/19[(From M95 sked - USB - Chinese - Female - // N/H) (Remote tuner Hong Kong)]	JPL	MON
4243kHz1202z	16/06/19[(From M95 sked - USB - Chinese - Female - // 9054) (Remote tuner Japan)]	JPL	SUN
9054kHz1202z	16/06/19[(From M95 sked - USB - Chinese - Female - // 4243) (Remote tuner Japan)]	JPL	SUN

Polytones

XPA1 and XPA2 ten minute schedules. Stated as 'Exercise,' previously thought to be Diplomatic Newsround in past occurrences; These have not been reported for some time although the message text varies with every schedule. Usually short lived. Thanks Ary/Dannix [See also **end of this section** section].

XPA1

0600z	17434kHz	0610z	15834kHz	0620z	14434kHz
09/05	558 1 02150 00075 65768 ... 34626				
558 558 558 1 558 558 558 1 558 558 558 1					

Ary	THU
-----	-----

02150 00075 65768 57675 35747 96936 16013 40743 79452 67801
96898 18051 82449 05634 50137 41220 18827 47021 50134 54052
10566 95524 06759 03265 24318 48782 91698 12267 92881 92644
22309 77471 07604 99868 70685 06599 22339 77691 38547 26842
94967 16449 12479 83207 13854 85112 37070 82768 13109 13858
83870 55319 64225 31761 56615 72852 47634 99364 29562 61946
06142 17613 37894 97875 37018 61998 62391 75212 23131 41612
82182 25955 08626 14877 35743 05704 54760 34626

0700z 17434kHz 0710z 15834kHz 0720z 14434kHz

09/05 558 1 03402 00075 61259 ... 36320 Ary THU

558 558 558 1 558 558 558 1 558 558 558 1
03402 00075 61259 27749 78431 20925 37551 33293 12718 53972
94988 11771 55261 96746 85708 50356 91105 88669 16477 59109
95414 46803 18202 33202 09154 20933 58257 37061 10637 23453
16188 94961 46477 35628 63690 02771 86491 97477 98347 55964
77167 89178 76143 72557 61958 89225 53124 14813 95790 36809
29388 58679 87912 35802 34418 03945 10132 59248 28025 15566
77885 85207 18217 75697 42419 53166 48377 32373 07266 46847
69592 52790 43532 35433 52956 70844 85790 36320

0800z 13434kHz 0810z 0820z 14434kHz

08/05 558 1 03096 00075 82010 ... 25222 Ary WED

558 558 558 1 558 558 558 1 558 558 558 1
03096 00075 82010 43264 11519 04580 90651 39971 93884 55339
35434 05299 55923 86597 54444 73674 50197 45201 76076 34556
89463 90986 78543 44058 24480 84681 37105 66458 36343 81541
94064 44665 43073 07497 89475 50041 78272 97560 20893 96613
16662 99208 43148 60254 31885 81545 94910 12642 94476 88416
83069 97714 84859 04037 34724 87126 96376 53211 34404 56976
48033 45721 26544 10184 61823 80789 27352 16932 96008 78953
44030 29804 38938 43023 40764 91736 00144 25222

0900z 17434kHz 0910z 15834kHz 0920z 14434kHz

08/05 558 1 00376 00075 66731 ... 30243 Ary WED

558 558 558 1 558 558 558 1 558 558 558 1
03376 00075 66731 67636 80170 18314 77511 32560 48286 82823
41568 16268 75665 81528 41921 98311 99170 52939 60973 92537
76649 21248 33149 73869 61221 31192 72933 23777 40445 28586
53941 53326 19311 04706 46194 67878 56326 33528 99416 46225
81422 92995 84630 46057 68427 42930 94610 32007 14679 42101
86748 96257 72685 48536 25986 22732 11811 37120 79520 87714
57839 26985 79826 64572 76229 29677 55586 33419 67373 81264
41097 95547 29110 13052 39375 93580 16032 30243

0800z 16236kHz 0810z 14886kHz 0820z 13921kHz

Exercise traffic.Two messages

28/05 661 2 05485 00073 97902 ... 04272 00000 00000
 07117 00073 18153 ... 45522 Ary TUE

661 661 661 2 661 661 661 2 661 661 661 2
05485 00073 97902 01744 71372 61911 92080 27759 12539 62384
64502 66736 38937 76190 34142 46986 48064 47054 59386 32262
91381 22087 96972 47293 06554 30288 23366 34251 16174 90662
59231 25847 19295 62209 95771 35714 23663 21043 76870 14228
67672 91518 78694 73652 42861 37079 92537 57933 05866 99822
88693 49059 21828 42319 03221 93202 38740 16593 56441 87671
65721 56484 17025 34317 87484 49702 16486 71435 52651 86198
44503 81987 58352 53167 19952 04272 00000 00000
07117 00073 18153 87096 30796 96234 02657 61667 06940 19681
01200 96395 11376 91577 71326 70294 90423 99558 07715 82181
84813 97943 83445 17137 96097 04177 58474 51284 19129 62264
10711 33943 55267 98699 94295 04790 71535 41360 11859 56549
76264 77850 96036 30913 84987 75700 39302 09987 72851 51495
47310 36386 10747 02915 41135 66471 51845 55299 45016 75480
32331 36054 72661 01391 50911 91968 11568 38431 94652 19306
51465 22222 27373 56987 16072 45522

XPA2

1000z 17434kHz 1010z 15834kHz 1020z 14434kHz

 Ary WED

07844 00075 85239 32307 38513 36218 33668 28631 20803 43113
56646 71010 22355 58556 45085 29579 05073 76190 17529 97258
57558 95894 76210 71527 96545 60795 47094 29593 28252 55321
72079 81101 87830 05277 86695 04010 17577 26206 07474 49941
92643 15128 30900 12057 33216 01941 15591 81046 65022 98472
18378 60582 06617 85991 02590 72996 26219 22815 86226 09953
48552 93360 30519 34515 66742 40330 83452 31699 98211 70022

1100z	17434kHz	1110z	15834kHz	1120z	14434kHz	Ary	WED
09618 00075 73192 05200 79182 03388 97324 15983 51093 92638 81721 61169 05451 90850 45474 69243 76900 80018 04393 06574 83123 26985 69621 36443 89770 02543 93404 35677 10151 08079 42045 96423 01546 34577 89661 88159 11849 63055 71437 05798 63291 45327 15821 83059 94020 75391 30173 88834 09784 12128 74198 13093 82413 03083 04609 07178 44004 88192 57996 75544 72288 27107 31209 41475 11068 25641 51730 21211 07128 35901 51883 61506 70782 13896 39254 40884 65626 11514							

0800z	17434kHz	0810z	15834kHz	0820z	14434kHz	Ary	THU
09/05	01672 00075 09772 ... 77207						
01672 00075 09772 74928 06287 47260 45292 00172 89400 82613 69858 51687 90592 47751 62109 02289 10023 57716 84203 83476 15197 48857 39896 89357 79693 20171 77427 69059 68132 96234 80909 18164 36140 65619 98750 88363 67722 68436 77406 07736 40035 92390 35428 59813 80251 14690 00909 67373 34523 23120 18597 37514 45499 25432 85189 45029 83489 24026 91238 79620 78791 57793 86325 11697 84173 63892 49812 95463 46087 28977 63642 27065 28879 98106 56962 14290 83125 77207							

0910z 14801kHz 0920z 13434kHz

Exercise traffic. Two messages

28/05	02143 00072 42282 ... 06420	Ary	TUE
02143 00072 42282 11515 10303 72519 92020 31904 12140 21228 02662 13440 32874 12079 92563 88800 60329 75309 97491 93308 01429 87024 24334 38786 58080 27654 55820 55021 05157 44158 06532 11627 01478 65028 78576 06415 75174 80508 49740 91470 94860 11772 47460 40638 50033 71066 82606 37473 72783 74045 94074 93322 00003 20406 75801 32296 30617 41966 92142 71641 70077 35041 61569 03938 00836 53374 16788 29833 91440 87552 31261 72711 00309 03676 10726 00000 00000 05832 00072 32816 31143 55748 67857 95623 79357 44003 05473 07547 94556 38285 76578 47578 14718 12026 20144 34893 62145 49689 31866 47474 17013 74035 08641 82253 15133 02580 69141 92018 99338 45447 14833 65773 59229 06221 62163 21848 47009 10814 34273 07138 83120 83291 56288 78137 97178 19322 40450 16700 88899 72496 25759 02348 99976 42687 01129 09180 95460 92860 92211 98134 55615 14568 10539 34266 23077 88009 27735 49219 47289 86817 55462 06420			

XPA2 [Reported NL112 also]

Thursday/ Saturday

0910z	14794kHz	0930z	13994kHz	0950z	12194kHz	
02/05	MISSED					
04/05	MISSED					
09/05	00416 00122 94307 ... 23246					Weak
16/05	08338 00020 06995 ... 32103			[0910z NRH]		Fair
18/05	08338 00020 06995 ... 32013			[0910z Unworkable]		Weak
23/05	06508 00001 00000 ... <u>36656</u>			Unsure last group		Weak
25/05	02408 00001 00000 ... 37252			[0930/0950z Unworkable]		Weak

XPA1 c

Tuesday/Thursday

May 2019

0710z	11169kHz	0730z	12179kHz	0750z	13431kHz	Ary	THU
02/05	214 1 00274 00200 46436 ...72305						
214 214 214 1 214 214 214 1 214 214 214 1 00274 00200 46436 19372 92024 11970 83071 40206 64329 88372 22213 63099 73828 49317 47981 85841 36280 17043 94147 88016							

95894 79816 30151 18515 20851 56186 78853 23279 66563 15178
21579 92718 77702 14199 57290 21883 63613 58887 26529 74293
90246 68791 83511 45530 28301 04967 02431 47787 20308 65876
42539 32956 92413 87233 73292 78553 31061 91846 43603 31814
14186 95414 73745 27507 71426 16528 11636 44295 64131 92537
45521 48930 64202 85653 96973 38887 33964 98979 73579 57353
05384 95143 77352 16431 42374 54100 39395 86658 62816 76478
74884 80397 13644 32043 55439 47628 79077 98892 90419 75312
55680 49923 28142 89821 91586 96685 95334 72408 97403 10313
26999 21337 53969 29889 58015 71646 51053 65509 09676 12061
28013 21654 23461 56461 31900 30622 29660 17547 20567 70944
58430 93667 86482 58130 31576 13402 35854 55314 66725 72609
55748 98677 94918 72872 10772 43948 03331 66824 04752 40483
11057 07046 50706 13008 87549 59329 95558 51094 61883 90631
07007 59550 40492 67299 13859 61155 00910 39063 97235 29285
33013 35212 55016 28987 85962 04085 01485 67223 58015 02186
25122 90219 47799 10910 08023 46990 24123 41443 76592 17640
88733 41179 20320 55900 54446 46693 90313 26494 24047 99107
50633 18414 72305
Courtesy Ary

09/05	214 000 06979 00001 00000 ... 42265	[0710z Weak]	Very strong
14/05	214 000 08271 00001 00000 ... 32667	[0710z Weak]	Fair
16/05	214 000 08281 00001 00000 ... 32670	[0710z Weak]	Very strong
21/05	214 1 06742 00133 94574 ... 14502		Very strong

214 214 214 1 214 214 214 1 214 214 214 1

06742 00133 94574 08797 27585 06870 28715 39524 20865 39657
23700 53271 94034 24306 49892 83843 86264 52887 32020 87606
40275 91332 16327 74767 38524 52900 05647 37570 67112 54404
45057 73792 03657 07391 61768 68027 83929 34784 01855 64307
26696 15252 33653 74168 17231 72818 96751 54411 66704 63199
43487 00476 42587 02924 25673 23552 91947 83515 13427 60880
50291 30639 78787 78366

89263 65669 52456 92150 62632 43854 26277 73783 21440 41044
72483 24554 33068 90005 30409 97333 20865 67014 44844 16770
66191 56188 76396 04531 03717 20217 10526 37930 35483 89059
32072 01615 88308 39579 55438 13733 15755 59570 71614 09755
14305 86000 84953 96104 03159 89696 46664 14623 66675 73715
40820 68933 75239 18120 32914 87396 78962 63747 54938 81776
43500 35689 28485 42122

62773 44574 69030 07042 21390 99782 61778 14502
Courtesy PLdn

23/05	214 1 06742 00133 94574 ... 14502	[0710z Fair]	Very strong
28/05	214 1 06742 00133 94574 ... 14502	[0710z Weak, noisy]	Fair
30/05	214 1 06472 00133 64574 ... 14502	[0710z Weak, noisy]	Fair

June 2019

0710z	11421kHz	0730z	12151kHz	0750z	13972kHz		
04/06	976 1 07962 00153 91210 ... 44317					[0730z Strong]	Weak
06/06	976 1 07962 00135 91210 ... 44317						Fair
10/06	976 1 07962 00135 91210 ... 44317					[0730z Strong]	Fair
13/06	976 1 07962 00153 91210 ... 44317					[0730z Strong]	Weak, noisy
18/06	976 1 00313 00121 61596 ... 02070					[0750z Fair]	Weak, QSB3

976 976 976 1 976 976 976 1 976 976 976 1

00313 00121 61596 15217 37644 83041 42558 42998 03298 29439
06602 75998 69728 89785 29927 98584 76878 91248 56896 84402
12814 93693 81617 78020 63370 76712 19708 49921 07750 74672
68487 32332 81293 26274 48740 29455 41945 99874 36786 97805
09896 25540 99138 46036 79716 70121 29453 14152 76837 06162
18608 74769 93148 81146 13293 94393 73815 65318 86134 65927
34894 96812 56293 45814

61214 80222 11003 74250 83959 83404 42194 51542 46080 32418
58736 32028 81848 07725 20201 56701 34505 87513 91658 65436
23310 59806 18122 05130 43626 73348 38094 60573 01624 20948
39839 22004 37540 59286 11988 06003 96714 25040 85889 09676
80313 35803 76013 18789 18108 58205 94546 69770 03902 38843
17802 48582 45749 01988 67385 15906 07281 59572 40293 02070
Courtesy PLdn

20/06	976 1 00313 00121 61596 ... 02070		Strong
25/06	976 1 00313 00121 61596 ... 02070	[0710z Strong]	Very strong (SDR Twente)
27/06	976 1 00313 00121 61596 ... 02070		Fair

XPA2 m

Sunday/Tuesday

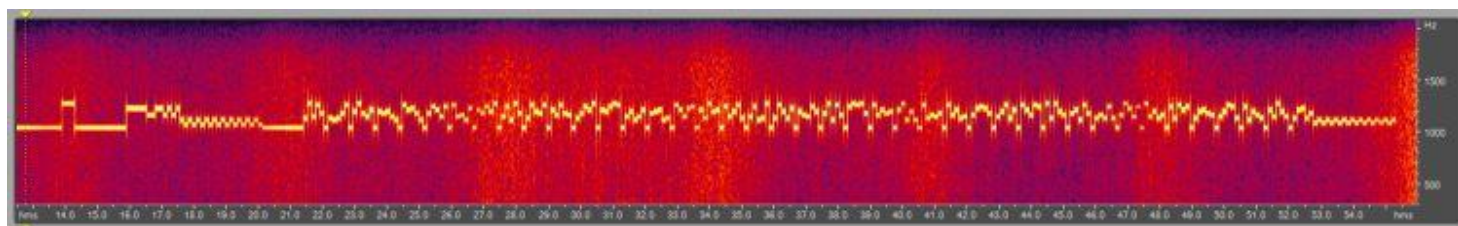
May 2019

2000z	14538kHz	2020z	13538kHz	2040z	12138kHz
04/05	MISSED				
07/05	MISSED				
12/05	08641 00088 40243 ... 53041			[2000z Unworkable]	Fair UK, Weak Argentine
14/05	08641 00088 40243 ... 53041			[2000z Unworkable]	Fair
19/05	07297 00082 24857 ... 13106				Very strongUK, Weak Ar

07297 00082 24857 03103 72498 71416 66464 15449 40182 94819
 50958 59176 29471 84471 21821 74204 01946 01242 27980 11694
 51192 80682 27709 74410 46511 89986 70580 40117 26982 77082
 10541 94041 50061 66998 18456 04575 02812 27244 40909 45008
 51578 57806 50410 22248 92565 06559 05654 14879 64841 16741
 99592 18207 42966 62466 79547 57409 88645 48674 67490 44441
 64681 76848 49481 26545 71285 50627 85289 73554 18882 81424
 65515 39492 98146 04864 15657 83811 57646 80382 31254 54014
 41294 34389 56669 67500 13106

Courtesy DanAr/PLdn

21/05	07297 00082 24857 ... 13106				Very strong
26/05	09183 00038 49315 ... 05603			[2020z QRM3]	FairUK, Weak Ar



28/05 09183 00038 49315 ... 05603 as seen below

28/05	09183 00038 49315 ... 05603			[2040z Strong]	Weak
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09183 00038 49315 43411 85633 37517 81116 53749 17793 08438
 52832 03759 54788 14415 34550 85167 50945 71480 17709 08406
 41174 39981 79893 81534 59944 80113 81501 16763 14805 85187
 90941 35583 01070 19617 91401 70857 04531 14870 77410 51941
 05603

Courtesy PLdn

June 2019

2100z	14738kHz	2120z	13438kHz	2140z	12138kHz
02/06	00499 00106 30548 ... 53605				Very strong
04/06	00499 00106 30548 ... 53605				Very strong
09/06	09542 00102 56725 ... 54523				See notes below:
		DanAr	2100z 09/06 - Transmission goes off after 39 seconds then 5 minutes later X06b		
			2120/2140z - Weak		
		PLdn	2100z 09/06 - NRH		
			2120/2140z - Fair		
11/06	NRH				
16/06	NRH, Poor condx				
23/06	Unworkable				
25/06	NRH				

XPA2 p

Monday/Wednesday

May 2019

0700z	11541kHz	0720z	13441kHz	0740z	14941kHz
01/05	00389 00200 43548 ... 20072			[0700z Weak]	Fair
13/05	08956 00145 10830 ... 66533			[0740z Weak, QSB3]	Fair

15/05	08956 00145 10830 ... 66533	[0740z Weak]	Fair
20/05	09509 00001 00000 ... 40261	[0740z NRH, Strong on Twente]	Strong
22/05	06233 00001 00000 ... 33661	[0740z TwenteSDR]	Very strong
27/05	05862 00001 00000 ... 36263	[0700z MISSED, 0740z QRM3]	Fair
29/05	09851 00001 00000 ... 35666		Fair

June 2019

0700z	10324kHz	0720z	11524kHz	0740z	13524kHz	
03/06	00509 00113 18752 ... 03421					Strong
05/06	00509 00113 18752 ... 03421					Fair
10/06	00509 00113 18752 ... 03451					Fair
12/06	00509 00113 18752 ... 03421					Fair
17/06	00418 00193 45310 ... 46440					Fair
24/06	MISSED					
26/06	00418 00193 45310 ... 46440			[0700z Strong]		Fair

XPA2 r

Friday/Saturday

May 2019

1900z	17462kHz	1920z	16114kHz	1940z	14828kHz	
03/05	MISSED					
04/05	MISSED					
10/05	00403 00018 01450 ... 63126			[1900/1920z Unworkable]		Strong
11/05	Unworkable throughout schedule					
17/05	00288 00116 57987 ... 52662			[1900z Unworkable]		Strong

00288 00116 57987 05432 56704 96542 36588 14650 90947 39082
08215 21786 56566 77334 05156 28265 18642 52361 48627 70102
89161 36602 11594 62726 39133 19846 80788 43019 11311 09169
06943 10150 99884 95788 71174 05773 53871 09570 38077 17350
91063 17141 81439 95159 85597 07765 80090 47984 27692 28130
47401 91064 94982 97663 78412 58089 95121 15462 09101 10715
33125 65895 97857 07741 96479 10136 55065 53530 41506 05573
83600 05065 10281 55274 98434 51528 20768 79549 27676 06237
32472 54641 84020 29248 60892 95521 25285 43919 89082 82596
62045 99397 85951 71921 66088 13006 69909 22525 66213 73094
41387 39666 12791 89211 20536 17977 54232 40836 29795 91958
39966 97905 78942 97067 80575 62602 80305 21952 52662

Courtesy PLdn

18/05	00288 00116 57987 ... 52662	[1900z NRH, 1920z Unworkable]	1940z Strong
25/05	00305 00082 01086 ... 44405	3m13s lg [1900/1920z Unworkable]	Weak
26/05	1900z NRH	3m13s lg	Unworkable
31/05	09636 00084 83245 ... 56150	[1900z Weak, QSB3]	Very strong

June 2019

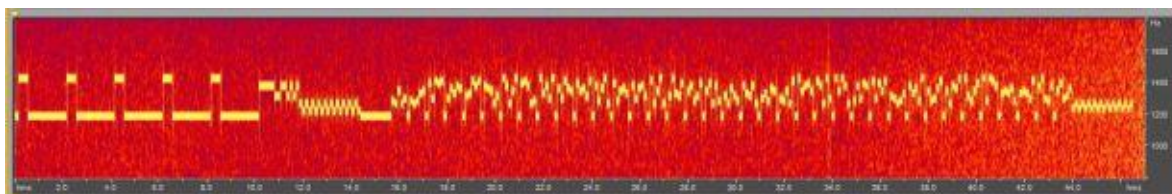
2100z	16167kHz	2120z	14663kHz	2140z	13923kHz	
01/06	09636 00084 83245 ... 56150					Weak
07/06	MISSED					
08/06	09634 00090 06920 ... 56137					Fair
14/06	09634 00090 06920 ... 56137					Strong
15/06	09634 00090 06920 ... 56137			[2120z Unworkable]		Weak
21/06	Unworkable					

22/06

00079 00036 nnnnn ... 65575

[2100/2120z Unworkable]

Weak, QSB3



34 group message sent 28 and 29 June and at excellent strength

28/06 00441 00034 71878 ... 47125 [2120z TTYQRM2] Very strong

28/06 00441 00034 71878 ... 47125 [2100z Strong] Very strong

00441 00034 71878 15365 23868 65442 96649 78660 93619 51854
74528 60599 70453 61562 88499 29327 46027 47760 22520 63266
13054 10448 94674 86691 94966 06176 81748 21103 63509 40158
44659 92047 90986 34350 34318 69106 47125 Courtesy PLdn

XPB1

Priyom shew the schedule for this new station: <http://priyom.org/number-stations/digital/xpb>

Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Speed
Tuesday Sunday	19:00				13447	14852	?	?	?	?	?			~65.79 Bd
	19:10				12147	13952	?	?	?	?	?			
	19:20				11547	12152	?	?	?	?	?			
	19:30				10447	11152	?	?	?	?	?			
	19:40				9347	10352	?	?	?	?	?			
	19:50				8147	9252	?	?	?	?	?			
	20:00	7771	7967	9181								6776	5458	
	20:10	7471	7567	7881								5876	5358	
	20:20	6771	6967	6881								5376	5158	
	20:30	5771	6767	5881								5176	4958	
	20:40	5171	5867	5181								4876	4558	
	20:50	4771	4867	4581								4576	4458	

13952kHz 1910z	12/05 QSA2	DanAR	SUN
12152kHz 1920z	12/05 QSA2	DanAR	SUN
11152kHz 1940z	12/05 QSA3	DanAR	SUN
9252kHz 1950z	12/05 QSA2	DanAR	SUN
13952kHz 1910z	19/05 QSA2	DanAR	SUN
12152kHz 1920z	19/05 QSA2	DanAR	SUN
13952kHz 1910z	26/05 QSA3	DanAR	SUN
12152kHz 1920z	26/05 QSA3	DanAR	SUN
11152kHz 1930z	26/05 QSA3	DanAR	SUN
10352kHz 1940z	26/05 QSA3	DanAR	SUN

UNCLASSIFIED Data [See also start of POLYTONE section]

17434	08-05-2019	1200	8x62.5Bd QPSK/250Bd BPSK	Russian Intel. Exercise	Danix	WED
16234	08-05-2019	1205	8x62.5Bd QPSK/250Bd BPSK	Russian Intel. Exercise	Danix	WED
15834	08-05-2019	1210	8x62.5Bd QPSK/250Bd BPSK	Russian Intel. Exercise	Danix	WED
14934	08-05-2019	1215	8x62.5Bd QPSK/250Bd BPSK	Russian Intel. Exercise	Danix	WED
14434	08-05-2019	1220	8x62.5Bd QPSK/250Bd BPSK	Russian Intel. Exercise	Danix	WED
13434	08-05-2019	1225	8x62.5Bd QPSK/250Bd BPSK	Russian Intel. Exercise	Danix	WED

Tones, Hybrids and FSK

X06 Mazielka (1c) logs section

X06 report, March - July 2019

Date	Day	UTC	Freq	Scale	Monitor	Comments
20190305	Tue	0936-0940	15687	154263	Schorschi	TX to Rome, G405
20190306	Wed	0920-0923	13465	362154	Edd Smith	I. p., TX to Athens, G32
20190310	Sun	1425	16138	1--6--	LU5EMM	Fair X06b before XPA2
20190325	Mon	0905-0906	11424	421635	Edd	I. p., TX to Oslo, G220
20190327	Wed	0831	11483	412356	Nils/DK	TX to Budapest, G243 (log via UDXF)
20190327	Wed	0912	13419	255663	Nils	X06b - error? (log via UDXF)
20190328	Thu	1530-1533	11561	263145	Edd	I. p., QSA4, TX to Prague, G256
20190331	Sun	1455	16138	1--6--	LU5EMM	Fair X06b before XPA2m
20190402	Tue	0756-0801	13411	165423	Ary	Alert 2 (TX to Brussels, G12) 1
20190402	Tue	0804-0817	11462	165423	Edd	2.2 I. p., QSA3(1)
20190415	Mon	0746-0748	12152	432516	Ary	I. p., TX to Bern, G341
20190416	Tue	1819/1827	13447	1--6--	Ary	X06b before XPB
20190416	Tue	1826	12147	1--6--	Ary	X06b before XPB
20190503	Fri	1517	12182	1--6--	Ary	X06b after E07a
20190506	Mon	0836	16550	1--6--	HFD	X06b
20190507	Tue	1037	14358	154263	HFD	TX to Rome, G7 (heard on 14359)
20190514	Tue	0623	11169	1--6--	Ary	X06b before XPA1
20190515	Wed	1117	16115	215346	HFD	G167
20190517	Fri	1422/1424	12182	1--6--	Ary	X06b before E07a
20190517	Fri	1423/1425	11082	1--6--	Ary	X06b before E07a
20190606	Thu	0746-0754	8470	1--6--	Edd	X06b i. p.
20190606	Thu	0802-0802	8470	1--6--	Edd	X06b
20190607	Fri	0902-0905	6740	1--6--	Edd	X06b i. p.
20190607	Fri	0906-0921	16320	241563	Edd	I. p., G50
20190607	Fri	1006-1007	14501	361245	Edd	I. p., G53, TX to Copenhagen
20190609	Sun	2105-2107	14738	1--6--	LU5EMM	X06b after short XPA2
20190616	Sun	1834/1839	15863	362-62	Ary	X06b before XPB1
20190623	Sun	1559	11568	1--6--	Ary	X06b before E07
20190623	Sun	1600	13368	1--6--	Ary	X06b before E07
20190623	Sun	1804	11163	1--6--	Ary	X06b before XPB
20190623	Sun	1804	10463	1--6--	Ary	X06b before XPB
20190623	Sun	1805	12163	1--6--	Ary	X06b before XPB
20190623	Sun	1806	15863	1--6--	Ary	X06b before XPB
20190623	Sun	1806	14963	1--6--	Ary	X06b before XPB
20190623	Sun	1806	13963	1--6--	Ary	X06b before XPB
20190623	Sun	1808	10463	1--6--	Ary	X06b before XPB
20190623	Sun	1809	12163	1--6--	Ary	X06b before XPB
20190623	Sun	1809	11163	1--6--	Ary	X06b before XPB
20190623	Sun	1810	13963	1--6--	Ary	X06b before XPB
20190623	Sun	1811	15863	1--6--	Ary	X06b before XPB
20190623	Sun	1811	14963	1--6--	Ary	X06b before XPB
20190623	Sun	1814	11163	1--6--	Ary	X06b before XPB
20190623	Sun	1815	14963	1--6--	Ary	X06b before XPB
20190623	Sun	1815	12163	1--6--	Ary	X06b before XPB
20190623	Sun	1816	13963	1--6--	Ary	X06b before XPB
20190623	Sun	1816	10463	1--6--	Ary	X06b before XPB
20190623	Sun	1817	15863	1--6--	Ary	X06b before XPB
20190624	Mon	0806	9055	1--6--	Ary	X06b shortie (ca. 30 secs)
20190701	Mon	0930-0931	14825	641523	Ary	I. p., TX to Lusaka, G5

- 1) At 0808z the transmission ceased for thirty seconds (including the carrier), and restarted with the same tone order

Many thanks to all contributors.

Best regards

Jochen Schäfer, Numbers-, X06 Database and Teamkopf Thanks Jochen

HM01

We start with the round up omitted from NLI12 due to circumstances that necessitated a quick production:

Very little to report from the past two months. As of 28/4 the callups had remained the same since they stopped incrementing on 22/2, transmissions were present on most days with the gaps in our logs mainly caused by computer issues. Let's hope things pick up in May.

Logs

HM01 11435kHz 1600z 1/3 [18253 65311 55104 83886 28556 23037] FRI
HM01 11435kHz 1600z 4/3 [18253 65311 55104 83886 28556 23037] MON
HM01 11435kHz 1600z 5/3 [18253 65311 55104 83886 28556 23037] TUE
HM01 11435kHz 1600z 7/3 [18253 65311 55104 83886 28556 23037] THU
HM01 11435kHz 1600z 8/3 [18253 65311 55104 83886 28556 23037] FRI
HM01 11435kHz 1600z 9/3 [18253 65311 55104 83886 28556 23037] SAT
HM01 11435kHz 1600z 11/3 [18253 65311 55104 83886 28556 23037] MON
HM01 11435kHz 1600z 12/3 [18253 65311 55104 83886 28556 23037] TUE
HM01 11435kHz 1600z 13/3 [18253 65311 55104 83886 28556 23037] WED
HM01 11435kHz 1600z 16/3 [18253 65311 55104 83886 28556 23037] SAT
HM01 11435kHz 1600z 17/3 [18253 65311 55104 83886 28556 23037] SUN
HM01 11435kHz 1600z 18/3 [18253 65311 55104 83886 28556 23037] MON
HM01 11435kHz 1600z 21/3 [18253 65311 55104 83886 28556 23037] THU
HM01 11435kHz 1600z 22/3 [18253 65311 55104 83886 28556 23037] FRI
HM01 11435kHz 1600z 23/3 [18253 65311 55104 83886 28556 23037] SAT
HM01 11435kHz 1600z 24/3 [18253 65311 55104 83886 28556 23037] SUN
HM01 11435kHz 1600z 26/3 [18253 65311 55104 83886 28556 23037] TUE
HM01 11435kHz 1600z 27/3 [18253 65311 55104 83886 28556 23037] WED
HM01 11435kHz 1600z 28/3 [18253 65311 55104 83886 28556 23037] THU
HM01 11435kHz 1600z 29/3 [18253 65311 55104 83886 28556 23037] FRI
HM01 11435kHz 1600z 1/4 [18253 65311 55104 83886 28556 23037] MON
HM01 11435kHz 1600z 2/4 [18253 65311 55104 83886 28556 23037] TUE
HM01 11435kHz 1600z 3/4 [18253 65311 55104 83886 28556 23037] WED
HM01 11435kHz 1600z 4/4 [18253 65311 55104 83886 28556 23037] THU
HM01 11435kHz 1600z 5/4 [18253 65311 55104 83886 28556 23037] FRI
HM01 11435kHz 1600z 6/4 [18253 65311 55104 83886 28556 23037] SAT
HM01 11435kHz 1600z 7/4 [18253 65311 55104 83886 28556 23037] SUN
HM01 11435kHz 1600z 8/4 [18253 65311 55104 83886 28556 23037] MON
HM01 11435kHz 1600z 9/4 [18253 65311 55104 83886 28556 23037] TUE
HM01 11435kHz 1600z 10/4 [18253 65311 55104 83886 28556 23037] WED
HM01 11435kHz 1600z 11/4 [18253 65311 55104 83886 28556 23037] THU
HM01 11435kHz 1600z 12/4 [18253 65311 55104 83886 28556 23037] FRI
HM01 11435kHz 1600z 13/4 [18253 65311 55104 83886 28556 23037] SAT
HM01 11435kHz 1600z 14/4 [18253 65311 55104 83886 28556 23037] SUN
HM01 11435kHz 1600z 15/4 [18253 65311 55104 83886 28556 23037] MON
HM01 11435kHz 1600z 16/4 [18253 65311 55104 83886 28556 23037] TUE
HM01 11435kHz 1600z 17/4 [18253 65311 55104 83886 28556 23037] WED
HM01 11435kHz 1600z 18/4 [18253 65311 55104 83886 28556 23037] THU
HM01 11435kHz 1600z 19/4 [18253 65311 55104 83886 28556 23037] FRI
HM01 11435kHz 1600z 20/4 [18253 65311 55104 83886 28556 23037] SAT
HM01 11435kHz 1600z 21/4 [18253 65311 55104 83886 28556 23037] SUN
HM01 11435kHz 1600z 22/4 [18253 65311 55104 83886 28556 23037] MON
HM01 11435kHz 1600z 23/4 [18253 65311 55104 83886 28556 23037] TUE
HM01 11435kHz 1600z 24/4 [18253 65311 55104 83886 28556 23037] WED
HM01 11435kHz 1600z 25/4 [18253 65311 55104 83886 28556 23037] THU
HM01 11435kHz 1600z 26/4 [18253 65311 55104 83886 28556 23037] FRI
HM01 11435kHz 1600z 27/4 [18253 65311 55104 83886 28556 23037] SAT
HM01 11435kHz 1600z 28/4 [18253 65311 55104 83886 28556 23037] SUN
8253 65311 55104 83886 28556 23037] Same callups as yesterday. WED

Many thanks Tim.

FSK Sample:

New F06 frequencies

15784 08-05-2019 0800 F06 FSK 200/1000

13849 08-05-2019 0810 F06 FSK 200/1000

11646 08-05-2019 0820 F06 FSK 200/1000

11166 00052 39754 07040 01729

64260 26117 46876 22078 75987 84802 60414 40426 97369 76284

05302 97356 81265 22304 20418 23853 25717 64981 58252 69712

24748 21154 16530 38529 45811 76058 01492 51264 37389 92463

87335 46064 36278 90199 15753 05232 50894 16033 25653 41672

41502 15301 32562 29303 81361 03708 85339 33715 22170 01468

91682 90330 36646 07893 54444 22749 15417 86362 70270 11363

14492 35517 36679 21088 74237 92088 85716 88522 38751 38937

93618 42901 95431 72125 33946 63932 57266 98488 08889 89859

10323 86266 69986 57369 96886 12313 23233 53200 65854 06977

16723 76247 74992 38372 15806 65443 89686 73548 69102 02000

90455 78894 83639 53250 15329 15404 48186 79576 46782 98897

61634 71176 12532 89438 98442 64426 42470 93886 43055 13590

62961 40813 16820 39725 89346 33261 10058 21017 87434 57460

01259 52626 31903 60337 39931 46014 15490 37651 44124 27472

98907 96829 12905 69945 42201 64001 82571 67845 48611 67316

34217 79777 41426 78610 76504 01777 21649 81590 87622 51991

Gizza Job



PoSW's Items of Interest in the Media:-

“Whatever happened to Leon Trotsky, he got an ice-pick which made his ears burn” - the opening line from No More Heroes by The Stranglers, a sizeable hit in 1977, and which came to mind upon reading a short item in the I newspaper of 10-May. With the headline, “Trotsky murder weapon on display”, it says, “A museum dedicated to spies – the real kind rather than James Bond – is re-opening in Washington DC. It has 10,000 artefacts, including the ice-axe used to kill Russian revolutionary Leon Trotsky in Mexico in 1940. It also has code-breaking equipment, secret cameras and a pregnant women disguise”.

New government communications scheme to cost much more than expected; “Oh, what a surprise”, said no-one, ever; the second item on the 7 am news on BBC radio 4, also on 10-May, which said, “A Home Office project to modernise the communications system used by the emergency services in England, Scotland and Wales is expected to cost an extra £3 billion, nearly 50% more than planned. In a highly critical report, the National Audit Office says the introduction of the Emergency Services Network is likely to be hit by further delays..... The National Audit Office is scathing about the Home Office's handling of the Emergency Services Network programme saying it has failed to manage the risks involved. The watchdog says it's now estimated to cost £3.1 billion more than forecast and warns that after a three year delay, the new target date for replacing the current system Air Wave in 2022 may not be met. According to the report, key technology has yet to be properly tested and work hasn't even started on upgrading control rooms or providing coverage for police helicopters and air ambulances. The report also reveals that ministers are expected to approve a decision which will mean that the new system will not be as resilient to power cuts as the existing one. The Home Office says when fully implemented the ESN will transform the service offered by emergency teams resulting in faster and better treatment for victims”.

Loud bang heard over a wide area causes concern:- On the early evening of Saturday 22-June the sound of what seemed to be a powerful explosion was heard over a wide area of the county of Essex. Many people rushed outside – myself included – looking for a column of smoke indicating the source of whatever had taken place. However, it turned out that this was not the work of a terrorist bomb – not even a “false flag” from some government agency desperate to convince the public of a threat from the “far right” to give the Political Class the excuse they are seeking to cancel that “Brexit” thing which has so divided the country. It was not long before the TV news was reporting that there had been an incident involving a rowdy passenger on a commercial airliner which had been escorted to Stansted Airport by a pair of jet fighters travelling to the scene at some considerable speed, as the front page of one of our local papers, the Walden Local reported in its next issue with the headline, “SONIC BOOM!” - in heavy type block capitals with an exclamation mark - which said, “Town shaken as jets are scrambled to escort holiday flight to Stansted; Two Royal Air Force Typhoon jets created a sonic boom on Saturday evening when they were scrambled to escort a Jet2 plane to Stansted after a female passenger 'rushed the cockpit' and threatened passengers.

The 25-year-old from Maidenhead in Berkshire was arrested on suspicion of common assault, criminal damage and endangering an aircraft. She was released on bail until July 30.

The sonic boom was reported for up to 40 miles around Stansted. Many residents feared an explosion reporting rattling windows and crockery.

A sonic boom is created when supersonic aircraft accelerate through the sound barrier which is banned except in emergencies.”

This is not the first time something like this has happened; there was a similar incident in early February 2017 involving a passenger airliner, on that occasion a plane belonging to Pakistan International Airlines and a security threat the exact nature of which was not disclosed but which also resulted in the airliner being escorted into Stansted by a pair of Typhoon fighters. I was out and about on the day on which that event took place and I saw the Typhoons up quite high heading in a northerly direction so presumably after “mission accomplished and returning to base”. There was no sonic boom on that occasion but the noise of the jet engines was really something. The question has to be asked, what is the purpose of deploying jet fighters in a situation like this? Are they really, if the pilot of the airliner does not do as he is told, going to open fire with 30mm cannon and kill all the passengers and crew and scatter burning wreckage over a large swathe of countryside?

And again:- In the last days of June there was yet another incident involving an airliner, this time an Air India flight; on Thursday 27-June it was reported that Typhoon fighters had been scrambled to escort a flight from India into Stansted following a phone call suggesting there was a bomb on board. After a thorough search of the plane together with everyone and everything on it, the conclusion was that it was a hoax and the aircraft

eventually took off and continued on its journey. The Typhoons must have stayed sub-sonic on their route to the operational area because there were no reports of loud bangs as there had been on with Saturday's incident.

Point to ponder:- "When the rich wage war it is the poor who die" - Jean-Paul Sartre, French writer.

Many thanks Peter.

The Spectre's News articles

The Telegraph 09-05-2019 <https://www.telegraph.co.uk/news/2019/05/09/russian-spies-sentenced-montenegro-coup-plot/>

Russian spies sentenced in Montenegro coup plot

Two Russian military spies have been given prison sentences after being convicted of trying to overthrow Montenegro's government in a bloody coup to stop the Balkan nation joining Nato.

The officers from Russia's GRU military intelligence agency were convicted of attempted terrorism after being accused of recruiting a gang of radicals and paramilitaries to kill the then prime minister on election day.

The assassination of Milo Djukanovic would have left the nation in turmoil and allowed a pro-Russian leader to take power, government officials said.

After the October 2016 plan was foiled with the help of European intelligence agencies, the men identified in court as Eduard Shishmakov and Vladimir Popov returned to Russia and on Thursday were sentenced in their absence. Shishmakov was given 15 years, and Popov was given 12 years.

Russia has always denied any involvement in the coup plot.

A total of 13 people were given prison sentences including two senior opposition leaders. Andrija Mandic and Milan Knezevic had both said the plot was fabricated to discredit them and keep Mr Djukanovic in power. Both were sentenced to five years in prison.

"Every member of the criminal organisation had a predetermined task and role," Judge Suzana Mugosa said at the end of the 19 month trial.

"All included in the indictment are guilty for attempting an act of terrorism."

"In the functioning of [this] criminal group there was the readiness for the use of violence and intimidation," she said.

Shishmakov and Popov spent months overseeing the plot according to prosecutors. The pair gave their appointed ringleader large sums for weapons and equipment and he was also given a lie detector test to check he was not a Western intelligence agent.

The network was given sophisticated encrypted phones set up from Moscow, while at least one money transfer to the conspirators was made from the same street as GRU headquarters.

Britain and America have have accused the GRU of involvement in the 2018 nerve agent attack on a Russian ex-spy in Britain, hacking the 2016 US presidential campaign and disrupting anti-doping efforts in world sports. Russian authorities have rejected the accusations.

BBC News 19/05/2019 <https://www.bbc.co.uk/news/uk-48324690>

Geoffrey Robinson: Labour MP denies claims he was 'Czech spy'

Labour MP Geoffrey Robinson has denied claims that he was a Cold War spy who passed confidential government files to communist Czechoslovakia in the 1960s.

The Mail on Sunday says the allegations are contained in files archived by the current Czech government.

They centre on information about Britain's nuclear deterrent, including its Polaris missile programme, and details about Nato.

Mr Robinson said the allegations are a "complete fabrication".

A spokesperson for Mr Robinson told the BBC in a statement: "The allegations allegedly made by the Czech authorities are a lie.

"At no time did Mr Robinson ever pass confidential government documents or information to any foreign agent and he did not have access to such material."

Labour denies ex-Czech agent's claims

The Czechoslovak spy who met Jeremy Corbyn

The Mail on Sunday says the claims are contained in 390 pages of files compiled by the StB security service in Cold War Czechoslovakia and now administered by the Czech Republic's state security archives.

The files allege scores of meetings with a Czech "handler" between 1966 and 1969.

The BBC has not independently verified the claims.

In a further statement given to the BBC, Mr Robinson's spokesperson said: "The Mail on Sunday have sent Mr Robinson a one page document written by the Czech authorities but every key fact in this document about Mr Robinson is wrong.

"It is wrong about his then job (he was never secretary to Mr Denis Healey) and about his date of birth - and when it refers to the activities of Mr Robinson the document itself states 'these moments were neither proven nor clarified'."

Last year in a separate development, the Labour Party denied claims that Jeremy Corbyn had either been a collaborator or an agent of the communist regime in Czechoslovakia in the 1980s.

The party said the claims had come from a single source and were "absurd and hallucinogenic".

Mr Robinson has been the MP for Coventry North West since 1976, and was paymaster general in 1997-1998 when Tony Blair was prime minister. He is also ex-chairman of Jaguar and Coventry City FC.

Communist rule lasted in Czechoslovakia from 1948 until the "Velvet Revolution" in 1989.

Less than four years later, the "Velvet Divorce" saw the country divide into the Czech Republic and Slovakia.

The Guardian 14-05-2019 <https://www.theguardian.com/technology/2019/may/14/huawei-founder-shut-down-china-eavesdrop>

Huawei 'prepared to sign no-spy agreement with UK government'

Chinese telecoms company's chairman says concerns about surveillance are overblown

Huawei's chairman has said the Chinese company would be prepared to sign a "no-spy agreement" with the British government to reassure politicians it has no intention of allowing its technology to be used for surveillance.

Speaking on a visit to London, Liang Hua said the company did not want to spy on western consumers and that concerns about Chinese laws requiring the company to cooperate with the regime's intelligence agencies were overblown.

"We are willing to sign a no-spy agreement with the UK government," the company's chairman told reporters, the first time he has made the offer of such a commitment public. "No spying, no back doors."

He said Huawei had not been asked to conduct any surveillance by the Chinese government and insisted there were "no laws requiring the companies to collect intelligence from foreign governments".

Huawei is at the centre of a political controversy in the UK over whether it should be allowed to provide 5G mobile phone technology, with the US arguing for a total ban, citing concerns that its equipment could be exploited by China for surveillance.

Last month, it emerged that the UK's national security council (NSC) had taken a decision in principle to allow Huawei to supply "non-core" equipment after a fraught meeting in which five cabinet ministers raised objections.

Shortly afterwards, Gavin Williamson was fired as defence secretary after being accused by the prime minister of being behind the leak.

Critics of the NSC decision, including the foreign secretary, Jeremy Hunt, have pointed to a 2017 Chinese intelligence law that requires companies to cooperate with the country's government if required and say Huawei could be forced to comply with surveillance demands.

Asked whether concerns about the law were overblown, Liang said there was "some sense in that statement". He said the law could not be enforced in practice because "there is no law that says if we refuse to enforce it [a request from Chinese intelligence agencies], it will be a crime".

On Tuesday, Hunt struck a cautious tone. The minister said the UK was in the process of making an assessment "to what extent, if at all, we are using Huawei kit" in 5G networks and that the UK "will never take a decision to compromise intelligence sharing" with the US and other allies.

But Liang said he would wait for the conclusions of an ongoing UK review of 5G network supply to conclude. He said the UK should make a decision based on a risk assessment, adding: "We shouldn't stop just because of fear."

The chairman endorsed remarks made earlier in the day by a colleague who had said Huawei's founder was prepared to close down the business if it was asked by China's communist regime to eavesdrop on mobile phone calls.

Tim Watkins, the company's vice-president for western Europe, said: "Our founder, Mr Ren [Zhengfei], has made it clear that he has never been asked to hand over any customer data or information and he has made it clear that if asked he would refuse and if it was attempted to be enforced he would shut the company down."

A report from Oxford Economics, commissioned by the company, claimed Huawei had directly contributed £287m to the UK economy by 2018 and the contribution of its suppliers and employees took the total to £1.7bn. It employs 1,600 people in the UK, where it has supplied equipment since 2001.

British intelligence agencies led by GCHQ have argued that any risks from Huawei can be contained because a special unit known as "the Cell" exists to monitor the company's software to ensure it cannot be exploited. Theresa May followed their advice at the controversial NSC meeting.

However, the former defence secretary Sir Michael Fallon said the UK should "take account of American warnings" and ban Huawei entirely. "I don't see the distinction between so-called core and so-called edge. That's the view that the US and Australia have taken and it would be a great mistake to be out of line with our allies."

Senior Huawei executives including Liang have come to the UK for a long-arranged meeting with suppliers and partners, where they are publicly lobbying to be allowed to supply kit for mobile phone networks. Liang said he had not met any government officials.

Last week, Mike Pompeo, the US secretary of state, argued for a total ban on Huawei. "Ask yourself: would the Iron Lady be silent when China violates the sovereignty of nations through corruption or coercion?"

New America 26-05-2019 <https://www.newamerica.org/in-depth/americas-counterterrorism-wars/somalia/>

U.S. Air Strikes, Drone Strikes, and Ground Raids in Somalia

In his inaugural year in office, President Donald J. Trump presided over an unprecedented escalation of the U.S. counterterrorism war in Somalia. In 2017, he conducted twice as many operations in Somalia as had been conducted in any year since the start of the program. With this escalation and subsequent policy changes, he intensified a war that had persisted, though at a slower pace, since 2003, and which had killed more than 350 people before Trump took office.

The first recorded post-9/11 operation in Somalia occurred on March 19, 2003, under the Bush administration. It involved the capture and interrogation of Suleiman Abdullah and reflected the U.S. preference to detain, interrogate, and prosecute terrorists. American counterterrorism operations in Somalia have since expanded to include airstrikes, drone strikes, and ground raids to kill suspected terrorists.

Targeting al-Shabaab

The U.S. has a long history of military engagement in Somalia, extending back to the bloody 1993 Battle of Mogadishu—one of nine, in Somalia's decades-long civil war. The blowback of this failed operation, most famously known as "Black Hawk Down," resulted in a withdrawal of U.S. forces, which further destabilized Somalia, leaving an opening for the rise of local extremist groups.

In the absence of a central government, an Islamist militia called the Islamic Courts Union (ICU) emerged to institute order. Opposite this growing organization was the Transitional Federal Government and various tribes and individuals unwilling to cede power to the ICU.

Ethiopia, with American support, moved across the border into Somalia in 2006 to support the transitional government. The ICU splintered, leading to the emergence of al-Shabaab, a jihadist group which would eventually publicly align with al Qaeda. The U.S. Department of State designated al-Shabaab a Foreign Terrorist Organization in February 2008. With the rise of al-Shabaab, what had been low-level targeting of high-level militant leaders escalated into a broader targeting of the new jihadist group. This escalation was aided by a shift from ground operations—often aimed at capturing militants—to drone strikes, which began in 2011.

In March 2017, President Trump approved a Department of Defense proposal to give the military even more latitude to conduct lethal operations in Somalia, designating parts of the country as "areas of active hostilities," which, under Obama-era policy, effectively institutes "war-zone targeting rules," despite the absence of a war declaration on Somalia. And in November 2017, the Trump administration authorized a strike on ISIS fighters in Somalia for the first time, expanding the targeted groups in the open-ended counterterrorism campaign.

Ground Raids in Somalia

Counterterrorism operations in Somalia have included a number of ground raids, setting Somalia apart from Yemen and Pakistan, where U.S. counterterrorism operations have mostly been limited to drone strikes. The U.S. conducted 12 counterterrorism operations in Somalia between the opening of the post-9/11 campaign and the expansion of the U.S. drone program to the country in 2011.

These operations were limited to ground raids—three across 2003 and 2004—until the United States began conducting airstrikes in 2007, which coincided with Ethiopia's invasion of Somalia. On January 7, 2007, an AC-130 war plane guided by surveillance from a Predator drone fired on al-Qaeda operatives involved in the 1998 U.S. Embassy bombings in Tanzania and Kenya. At least eight militants were reportedly killed in the operation, the first casualties of the U.S. counterterrorism campaign in Somalia.

On June 23, 2011, the Obama administration approved the first military drone strike on two al-Qaeda-linked operatives in Somalia. U.S. military officials had intelligence that Somali militants were communicating frequently with militants in Yemen—where the drone program had already commenced in earnest.

Where do Strikes Occur?

As of late 2017, al-Shabaab has lost control of most cities, mostly due to an African Union offensive that pushed the group out of Mogadishu in 2011 and waves of U.S. strikes that decimated Shabaab leadership in 2008. However, it still operates training camps in many rural areas in the southern half of the country. The U.S. has twice felled large numbers of Shabaab foot-soldiers at these camps. In March 2016, the U.S. conducted an operation several miles northwest of Mogadishu including drone and air strikes, killing approximately 150 fighters, according to officials. In November 2017, under a new administration, the Pentagon again conducted a large operation near the same location which killed more than 100 suspected Shabaab militants.

BBC News 27-05-2019 <https://www.bbc.co.uk/news/world-africa-48390166>

Somalia's frightening network of Islamist spies

Somalia's militant Islamists remain relatively undiminished, despite a 12-year UN-backed campaign against them, largely thanks to its sophisticated web of spies, writes the BBC's Mary Harper.

Often, when I return to the UK from Somalia, I get a phone call from al-Shabab. It usually happens even before I talk to my family, while I am waiting for my luggage or in a taxi on the way home.

Once, after a trip to the south-western Somali town of Baidoa, I was given a detailed account of what I had done and where I had been.

"You walked to a bank but it was shut. You knocked on the doors and tried to open them. You took some photos," said the man from al-Shabab, an affiliate of al-Qaeda.

"Your bodyguards were not at all professional. They were wandering about, chatting amongst themselves with their guns slung around their shoulders, instead of keeping watch over you."

When I ask members of al-Shabab how they know all these things, how they can be so accurate, my contacts simply tell me they have friends everywhere.

I tell them I am scared they know my itinerary so intimately, but they tell me not to worry as they have far more important targets than me. However, they do say I could be in "the wrong place at the wrong time" and suffer the consequences.

'They are everywhere'

I presume some of the people who track my movements in Somalia are part of the militant group's ruthless intelligence wing, the Amniyat. Others might be people who work on a "pay-as-you-go" basis, receiving small sums for imparting information.

Even more terrifying is the way the militants track people they want to recruit, threaten or kill.

"Al-Shabab are like djinns [spirits]. They are everywhere," said one young man the militants wanted to punish because he sold fridges and air conditioners to members of the UN-backed Somali government and the African Union intervention force [Amisom], both considered enemies by al-Shabab.

Another man who had defected from al-Shabab explained how, one day, a member of the group called him to tell him the colour of the shirt he was wearing and which street he was walking down on a particular day at a particular time.

Others have spoken about how militants come to their houses and places of work inside Mogadishu to threaten or try to recruit them. All this, despite the fact that the group "withdrew" from the capital in August 2011.

Al-Shabab at a glance:

Means "The Youth" in Arabic

Formed as a radical offshoot of the Union of Islamic Courts, which controlled Mogadishu, in 2006

Core fighters number between 5,000 and 6,000

Members of spy network number between 500 and 1,000

Main funding via tax collection and protection money

Controls most rural areas of southern Somalia

Who are Somalia's al-Shabab?

"The Amniyat is the veins of the organisation. It is all-powerful. If the Amniyat was destroyed, there would be no al-Shabab," says Hussein Sheikh Ali, a former security adviser to the Somali president and director of the Hiraal Institute, a Mogadishu-based think tank.

He says the Amniyat is more than an intelligence unit.

"It literally controls al-Shabab. As well as its core purpose which is intelligence gathering, it deals with sensitive areas of security. If a senior member of al-Shabab is sick or injured, the Amniyat will deal with it. It manages finances of a secret and delicate nature, and plans the big terror attacks inside and outside the country."

People in the Amniyat are better paid than other members of the movement. They have spread their tentacles far and wide, including in place considered to be safe.

'At home in enemy territory'

One time, when I didn't leave the heavily protected international airport, and stayed in accommodation on the base, a militant called to say it knew I had been in Somalia.

Mohamed Mubarak, a researcher based in Mogadishu, estimates that the number of people in the Amniyat ranges from between 500 and 1,000.

"They are designed to live in enemy territory. They spend most of their time in government territory," he says.

According to Mr Mubarak, women play a crucial role in helping members of the Amniyat.

"Women support the Amniyat. They are part of its infrastructure. Al-Shabab wives have to help them by providing a bed for the night, feeding them, transporting things for them and passing on messages."

The Amniyat is highly secretive. Its members hide their identities from each other. Mr Mubarak explains how Amniyat cells do not know the details of other cells. Members cover their faces when they meet amongst themselves, even within the same cell.

"Only their leaders know their faces," he says.

'Like Stalinist secret police'

The Amniyat has a number of different departments. The main one focuses on intelligence and counter-intelligence, while others deal with bombings and assassinations.

People who defect from al-Shabab are terrified the Amniyat will track them down.

Defectors in a rehabilitation centre said the only way they could be safe from al-Shabab would be to flee Somalia.

"Al-Shabab calls me on the phone," said one man who had fought with the group for six years. "I will try to melt away in a big city like Mogadishu or Baidoa, but I am scared they will find me there. I will only be safe if I go to Europe or the Gulf."

More on life amid Somalia's conflict:

'999 hero': The man behind Somalia's free ambulances

How the US has stepped up its war in Somalia

Although the US has increased airstrikes in Somalia in recent months, it is facing great difficulty in destroying al-Shabab. This is partly because so many members of the Amniyat hide in plain sight in government territory, making them impossible to target.

According to Richard Barrett, a former director of British global counter-terrorism operations who now works in Somalia, the Amniyat is "the elite of al-Shabab, with a reputation both inside and outside the movement as efficient, ruthless and disciplined".

"There is no doubt that much of al-Shabab's success in government-held areas can be ascribed to the Amniyat," he says. "It is a Stalinist secret police with extensive powers and operational latitude."

Spectres Note:

"It's interesting to note that the first article states that the US Government are ramping up drone strike in Somalia, then the next day there is an article in the BBC News regarding Somalia Spies. Are the UK media trying to support or justify these US drone strikes in Somalia, by publishing such an article?"

The Atlantic 01-06-2019 <https://www.theatlantic.com/magazine/archive/2019/06/female-spies-world-war-ii/588058/>

Female Spies and Their Secrets

An old-boy operation was transformed by women during World War II, and at last the unsung upstarts are getting their due.

Are women useful as spies? If so, in what capacity? Maxwell Knight, an officer in MI5, Britain's domestic-counterintelligence agency, sat pondering these questions. Outside his office, World War II had begun, and Europe's baptism by blitzkrieg was under way. In England—as in the world—the intelligence community was still an all-male domain, and a clubby, upper-crust one at that. But a lady spy could come in handy, as Knight was about to opine.

In a memo “on the subject of Sex, in connection with using women as agents,” Knight ventured that one thing women spies could do was seduce men to extract information. Not just any woman could manage this, he cautioned—only one who was not “markedly oversexed or undersexed.” Like the proverbial porridge, a female agent must be neither too hot nor too cold. If the lady is “undersexed,” she will lack the charisma needed to woo her target. But if she “suffers from an overdose of Sex,” as he put it, her boss will find her “terrifying.”

“What is required,” Knight wrote, “is a clever woman who can use her personal attractions wisely.” And there you have it—the conventional wisdom about women and spycraft. Intelligence officers had long presumed that women's special assets for spying were limited to strategically deployed female abilities: batting eyelashes, soliciting pillow talk, and of course maintaining files and typing reports. Overseeing operations? Not so much.

Historically, women had indeed counted on their charms in practicing espionage, mostly because charms were often the only kind of weapon permitted them. During the American Civil War, when a group of elite hostesses relied on their social connections to gather intelligence for both sides, Harriet Tubman was an outlier who actually ran spying efforts. But the aggression, vision, and executive capacity required to direct an operation were not considered within the female repertoire.

Even as Knight was ordering his memo typed, however, change was at hand. World War II, a “total war” that required all able male bodies for global fighting, offered new opportunities. In the United States, “Wild Bill” Donovan recruited blue-blooded women for his Office of Strategic Services, the forerunner of the CIA. Among them was the future chef Julia Child. But most OSS women were consigned to the secretarial pool, the “apron strings” of Donovan's outfit, in his words. Those who went far beyond their brief—his secretary Eloise Page helped plan Operation Torch, the invasion of North Africa—got little recognition.

Europe presented more possibilities. Spy agencies were expanding to cope with the need for covert action in countries where insurrection had to be plotted under the noses of occupying Germans. The French Resistance called on women's courage, as did the Special Operations Executive, or SOE, created by Winston Churchill to “set Europe ablaze” by planting bombs, stealing plans, and stoking internal opposition. Colloquially known as the Ministry of Ungentlemanly Warfare, the SOE sought agents willing to parachute into occupied France or be off-loaded by air or sea. Behind enemy lines, SOE operatives had to recruit locals as agents, establish networks, receive clandestine shipments, set up safe houses, manage communications, suss out traitors.

The SOE's leaders were readier than the old boys of MI5 and MI6, the foreign-intelligence agency, to grant that women enjoyed certain advantages. Many French men had been sent to labor camps in Germany, so women operatives were better able to blend in with a mostly female population. As Sarah Rose writes in *D-Day Girls: The Spies Who Armed the Resistance, Sabotaged the Nazis, and Helped Win World War II*, a British captain who recruited three female SOE agents, Selwyn Jepson, believed that women were psychologically suited to behind-enemy-lines work—“secretive, accustomed to isolation, possessed of a ‘cool and lonely courage.’” Some officers thought women had greater empathy and caretaking instincts, which equipped them to recruit and support ordinary citizens as agents. Women were considered good couriers—a high-risk role—because they could rely on ingratiation and seeming naïveté as tools in tight spots. The war also provided openings for women to show that they could execute operations, making strategic life-and-death decisions.

In intelligence, as in computer science and so many other fields associated with male prowess, women have made far more important contributions than they have gotten credit for—but a recent boom in attention to their stories is remedying that. “In the French resistance as a whole, women played crucial roles,” the historian Lynne Olson writes in *Madame Fourcade's Secret War: The Daring Young Woman Who Led France's Largest Spy Network Against Hitler*, her masterful biography of Marie-Madeleine Fourcade, the patronne, or boss, of Alliance, one of the largest Resistance networks. Nazi sexism helped: Germans' stereotyped ideas about female domesticity blinded them, early on at least, to women spies in their midst.

In some cases, women had their own blinkered views of female leadership to overcome. Barely 30 when she was recruited in 1940, Fourcade had lived abroad, and relished the liberated environment of 1930s Paris. Still, she was astonished when “Navarre,” the code name for Georges Loustau-Lacau, asked her to be his deputy. Being a woman surely ruled her out, she protested to the World War I hero, who was secretly mobilizing citizens worried by Nazi aggression in Europe. That was precisely why she would be above suspicion, he told her. “Good God—it's a woman!” cried another recruit, who became one of her most trusted aides. After Navarre was arrested in Algiers in 1941, Fourcade became the undisputed leader of Alliance.

The Alliance network, backed by MI6, comprised thousands of agents; its main mission was to infiltrate German submarine bases along the coast and report on U-boat movements. The head of a shipyard provided crucial plans and drawings. On the bases, bartenders and prostitutes listened to chatter, which Fourcade passed on to the British in code. She and her lieutenants hiked into fields at night, waving in planes flown by Royal Air Force pilots. Fourcade's code name—POZ 55 at first, and later Hedgehog—initially enabled her to hide her gender from the old-line British officers. She feared they wouldn't take her seriously, and she didn't want to risk the lives of agents in her network, who depended on British support and funding. When she did meet one U.K. colleague, she was accompanied by a male deputy. “This is a joke, isn't it?” the British agent said. Looking at the man, he asked: “You are the real POZ 55?”

Fourcade showed the skeptics who was boss—not least by pushing the British to alter their communications routine to protect her agents. In occupied Europe, being a wireless-radio operator was one of the most dangerous jobs, and it often fell to women. Nazis on patrol would look for a signal emanating from a house or a hotel room, and then strike. For Fourcade's agents in touch with London, every moment spent awaiting a British response put them at risk. She wanted the Brits to make contact first. Hammering at the war bureaucracy of men in pin-striped suits, she persisted in making the case for her department's safety and welfare.

The intelligence her network provided was astonishing. One of her assets was the brilliant Jeannie Rousseau, who spoke five languages and at age 20 began working as a German translator. Rousseau hung around with Nazi officers, who seized the chance to mansplain their exploits, including a new rocket technology, the V-2, the first ballistic missile. As she later put it: “I was such a little one sitting with them, and I could not but hear what was said. And what they did not say, I prompted.” They also showed her their plans. Rousseau had a photographic memory. Fourcade passed the material to the British, who bombed the rocket plant at Peenemünde. Impressed, the British sought to bring Rousseau to London for debriefing. En route, she was captured and taken to a concentration camp, where she survived through remarkable acts of defiance.

In 1943, when the Germans began to crack down on saboteurs in grim earnest, the Alliance network was a chief target. Scores of agents were arrested in successive waves. Among them were women tortured by Klaus Barbie, the “Butcher of Lyon,” who burned their breasts with cigarettes. “In my network, no woman ever faltered, even under the most extreme kinds of torture,” Fourcade later remembered. “I owed my freedom to many who were questioned until they lost consciousness, but never revealed my whereabouts, even when they knew exactly where I was.” She was exfiltrated to England, after a two-and-a-half-year career running operations against the Nazis—most Resistance leaders lasted no more than six months in place before their cover was blown—and continued to work from there. “I've often wondered what you were like,” one male British colleague confessed upon meeting her.

If obstacles hone leadership (as research suggests), few female spies cleared more hurdles than Virginia Hall, one of the SOE's first operatives of either gender and the subject of *A Woman of No Importance: The Untold Story of the American Spy Who Helped Win World War II*. She became, as the British journalist Sonia Purnell writes, “the most successful Allied female secret agent,” unimpeded by her sex or by a wooden leg she nicknamed “Cuthbert.” (According to a famous anecdote, Hall was trekking across the snowy Pyrenees to escape the Gestapo, and radioed to her handlers that Cuthbert was giving her trouble. The response from a novice: “Have him eliminated.”)

Born into Baltimore high society in 1906, Hall grew up outdoorsy, adept with horses and guns. She ditched a boring fiancé, attended Barnard College, traveled to Jazz Age Paris, and studied in Vienna. When her father lost his fortune during the Depression and then died, she took jobs as a clerk in the American embassies in

Poland and Turkey (where, while snipe-hunting, she blew off her foot and nearly died of sepsis). She tried over and over to join the U.S. diplomatic corps, but the State Department kept turning her down on flimsy pretexts. After war broke out, she began driving an ambulance in France, among the few active jobs for which women, even one missing a leg, were accepted.

What many of these women spies had in common—along with grit and remarkable courage—was a man who saw their potential. Key in Hall's case was George Bellows, an undercover British agent milling around a Spanish border-town train station in 1940, gathering intelligence for the SOE. He chatted with Hall, whose sights were set on England as the Nazis overran France. The British realized that an American—the U.S. was still neutral—could move freely without attracting suspicion in occupied France.

Under the cover of being a newspaper reporter, Hall operated as a "secret liaison officer," on an ambitious and dangerous mission to build a Resistance network in Lyon, where she knew no one. "In the field, she would either learn fast or die," Purnell writes. Hall learned fast. In a city overrun with refugees from occupied sectors, she recruited women helpers from marginalized communities. Hall quickly went way beyond her job description. She began collecting details on the political situation in France. She helped downed British pilots escape, organizing French women to escort them to safety.

Much like successful women today, Hall was called brusque, and her handlers were reluctant to formalize her authority as chief. Instead they elevated a reckless and incompetent agent codenamed Alain. Yet her self-taught professionalism and, yes, caretaking instincts made Hall a magnet for incoming operatives. "Her apartment had become the center of all resistance," Purnell writes, and she was soon directing operations herself. Alain, her nemesis, was fired for "womanizing, boasting, and boozing."

Hall's "success opened the gates to more women agents," Purnell points out—agents who faced mounting danger. Nazi reprisals became savage. Hitler wrote a memo saying that saboteurs would be "annihilated without exception," and of the 39 women sent to France by the SOE, a third never returned. Some ended up in Ravensbrück, the women's concentration camp. Some were poisoned, others shot. Odette Sansom, one of the operatives featured in Rose's D-Day Girls and the subject of a biography by Larry Loftis, Code Name: Lise, survived being burned and having her toenails pulled out. She never divulged the information the Germans wanted.

Virginia Hall, though hunted by Klaus Barbie and arrested at least once, always managed to get away. Eventually she was exfiltrated, and worked in Spain until late 1943. She was then finally hired by her own country, and the OSS sent her back into France, under heavy disguise. She directed guerrilla forces to support the D-Day landings by destroying railway communications, organizing roadblocks and ambushes, and cutting telephone wires. Incredibly, the OSS refused to put her officially in charge. Having a woman at the head of a paramilitary operation was considered "controversial," so putative control was given to her petulant, often-absent male boss. Disguised as a milkmaid, she sold cheese and eavesdropped on the German Seventh Army, which, Purnell writes, helped "pave the way for the Allied recapture of Paris."

After the war, the contribution of these women was overlooked and then forgotten. The CIA blossomed, becoming institutionalized, slick, and buttoned-down—a place where, in Purnell's words, "brilliant masculine brains and well-connected college kids had taken charge." Hall stayed on, but nobody quite knew what to do with the person one wet-eared upstart described as "the gung-ho lady" from the war. In 1953, the head of the CIA, Allen Dulles, convened a "Petticoat Panel" to look into attitudes toward women at the agency. Compared with men, they were seen as more emotional, less objective, and insufficiently aggressive.

That was then. Now the CIA is directed by a woman, Gina Haspel, who has promoted veteran women to head top directorates. These leaders have antecedents, whether or not they know it. Thanks to these overdue volumes, they can now find out all about them.

The Telegraph 06-06-2019 <https://www.telegraph.co.uk/news/2019/06/06/vladimir-putin-says-time-turn-page-uk-ties-skripal-poisoning/>

Vladimir Putin says time to 'turn the page' in UK ties after Skripal poisoning

Vladimir Putin has said Britain's next prime minister should "forget about" the poisoning of a former Russian spy on British soil last year and move on to rebuilding relations between London and Moscow.

Relations between Russia and the UK collapsed in March 2018 after Sergei Skripal and his daughter Yulia were found in critical condition on a park bench in the town of Salisbury.

It was determined the two were poisoned with a Soviet-designed nerve agent, known as Novichok, in an attack blamed on the Russian government.

Russia has repeatedly denied any involvement, throwing out an array of alternate theories -- including that British secret services synthesized Novichok at the nearby Porton Down chemical weapons laboratory and framed Russia for the attack to undermine its image.

The US and a number of other Western countries agreed with the UK's assessment and joined in accusing Russia of the poisoning.

The US responded with a new round of sanctions against Russia. Russia, on its part, expelled diplomats from every country that followed suit.

But at a major international economic forum in St. Petersburg on Thursday, Mr Putin said it was time to put the Skripal affair to rest once British Prime Minister Theresa May hands over the reins to a new Conservative Party leader.

"When all's said and done we need to turn this page connected with spies and assassination attempts," Mr Putin said, referring to Skripal as a British agent who betrayed dozens of his former Russian colleagues to MI6, the UK's foreign intelligence agency.

"He's your agent not ours," Mr Putin said, in reference to Mr Skripal, a double agent who provided information to MI6.

"That means you spied against us and it's hard for me to say what happened with him subsequently. We need to forget about all of this in the final analysis."

In September last year, independent open-source investigators at Bellingcat identified Petrov and Boshirov as aliases used by Russian military intelligence officers Anatoliy Chepiga and Alexander Mishkin to carry out the attack.

The Kremlin continued to deny the men were GRU agents, and the two were rolled out for a surreal television interview, in which they claimed to be humble sports nutrition salesmen caught up in a terrible misunderstanding while visiting Salisbury Cathedral.

Mr Putin said that these kinds of spy games take a second place to global issues and common economic, social and security interests.

"We need to cast off this fluff and get down to business," he said, noting that 600 British companies continue to work in Russia and that "they want to feel secure ... and we regard them as friends."

A spokeswoman for Mrs May said that while the UK still works with Russia on security issues, the UK has been "clear that Russia's pattern of aggression and destabilising behaviour undermines its claims to be a responsible international partner."

"The PM has made clear on numerous occasions we can only have a different relationship if Russia changes its behavior," the spokeswoman said.

NPR 10-06-2019 <https://text.npr.org/s.php?sId=724099134>

'Moscow Rules': How The CIA Operated Under The Watchful Eye Of The KGB

As a young government employee in 1975, Marti Peterson was assigned to the U.S. Embassy in Moscow. She loved the social scene and it earned her a nickname.

"I was known as 'Party Marti' because I was out socializing with the Marine guards, with younger secretaries, the single, social life," Peterson said. "We did drink our share of Carlsberg beer."

Peterson was actually with the CIA — the first female officer sent to Moscow. Her "cover" was to be a fun-loving clerical worker, someone Soviet security could safely ignore as it obsessively tracked actual and suspected CIA officers.

Her mission was to handle one of the most valuable Soviet sources the CIA had ever cultivated, a Foreign Ministry worker who saw the incoming cables from every Soviet embassy in the world.

"So we got a huge insight into what the Soviets were planning, what their intentions were and what their negotiating points were before we even sat down with them," she said.

Peterson and her source — code name TRIGON — communicated by dead drops, in the dead of night, often at a Moscow park.

She would place a fake log with messages inside. He would show up an hour later and drop a rusty can or an old, oily glove. Tucked inside was film of top secret documents he'd photographed with a miniature camera.

Peterson never met him. And she never saw those photos, but U.S. presidents did.

"We just knew that we were picking up gold off the street," said Peterson, now retired and living in Wilmington, N.C.

Special rules for Moscow

This is just one of many spy tales in a new book, *The Moscow Rules*, by Tony and Jonna Mendez, a couple who both had long careers at the CIA.

Jonna spelled out some of those rules:

"You are never alone. Don't trust anyone. Not the little lady in the restroom who's sweeping out the stalls. Not the flower girl in the corner. You just didn't trust anyone in Moscow," she said.

The CIA considered it too risky to recruit Soviet citizens inside the communist country. They were recruited when they were abroad, and when they returned to the Soviet Union, communication was never direct.

"In Moscow for many, many years, we never met face-to-face because we thought it was too dangerous," she added.

Chiefs of disguise

At separate points, Tony and Jonna Mendez each served as chief of disguise at the CIA. They were part of the Office of Technical Services.

"We were the equivalent of 'Q' in the James Bond movies," she said.

Tony Mendez, who died in January, is best known for a previous book he wrote, *Argo*, which became the Oscar-winning movie of the same name. Ben Affleck portrayed Mendez, who guided trapped American diplomats out of revolutionary Iran in 1980.

The couple was never based in Moscow, but traveled there to help CIA officers operate in the city.

Tracking CIA officers

The main Soviet security agency, then known as the KGB, made that as difficult as possible, said Oleg Kalugin, a former KGB officer who became a critic of the Soviet system. He now lives outside Washington, D.C.

"The Soviet KGB was a strong, powerful organization," said Kalugin, who was one of its top officers in a nearly 30-year career.

To escape KGB surveillance, Tony Mendez developed one technique called "disguise on the run."

"He had started as a businessman in a raincoat and a briefcase," said Jonna Mendez. He turned the raincoat inside out, and it became a pink, woman's overcoat. He pulled up his pant legs, revealing black stockings. He put on a mask and the wig of an elderly woman. The briefcase sprouted wheels.

In just 45 seconds "he ended up [as] an old woman in a pink coat wearing a shawl with gray hair coming out, pushing a grocery cart. And it was just kind of an amazing transformation," she said.

Tony Mendez worked with some of Hollywood's top makeup artists to refine his methods of deception and disguise.

Jonna Mendez would develop the tiny rolls of film provided by the agency's Soviet spies who used the CIA's miniature cameras hidden in items like pens or lipstick cases.

"You'd think about the people that had risked their lives to get that information on film and you'd just be so careful," she recalled. "Every time you did it, I mean, your heart would just pound."

Their book looks at the Soviet era, and some of the spycraft may be a bit dated.

But the espionage game carries on, Oleg Kalugin said. Many years ago, he was Vladimir Putin's boss at the KGB and said Putin's background is essential to understanding today's Russia.

"Putin brought back some of the worst sides of the Soviet regime," said Kalugin, now 84. "As a former KGB guy, his psychology is based on the old traditions of the Soviet system."

A source is uncovered

Speaking of the Soviet system, whatever happened to "Party Marti" Peterson and the Soviet source she handled?

After almost two years in Moscow, Peterson went to the bridge one night in the summer of 1977 and hid a package for him. It included money, emerald jewelry and a new camera.

As she walked away, she was "accosted by these three men who grabbed me," she said. "They knew exactly where the package was and there was a whole van full of people in suits."

They were KGB, and they took Peterson to their notorious headquarters in central Moscow, Lubyanka.

She learned that her source TRIGON — whose real name was Alexandar Ogorodnik — had been uncovered by Soviet security three weeks earlier.

When confronted, Ogorodnik said he would write a confession — but only with his own pen.

"This pen contained a natural poison the CIA had provided to him, fulfilling his request to have a way to commit suicide, which he did at that time," said Peterson.

Peterson was kicked out of the Soviet Union the next day. But she worked another 26 years with the CIA before retiring and now lives in Wilmington, N.C.

Before all these stories could be published in The Moscow Rules, Tony and Jonna Mendez had to submit their manuscript to the CIA for review. It's a lengthy process that came as Tony's health was declining from Parkinson's disease.

The CIA "knew that Tony was not well," Jonna Mendez said. "I sent a note in, saying, 'Could you consider pulling our manuscript and putting it on the top of your pile? Because I'd really like for him to know it's OK.' "

The CIA gave its approval this past January. Tony Mendez died the next day.

Historical Trips An Advertisement For A Spy Location Tour And Lecture In London. See Link:

<https://www.historicaltrips.co.uk/tour/89/UnitedKingdom/The-Spying-Game.html?site=UK>

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Itinerary 2019

Day1

09.45 Meet at National Liberal Club, 1 Whitehall Pl, Westminster, London SW1A 2HE

10.00 Introduction by BORIS VOLODARSKY : 'The real spy world'.

11.00 Board bus for our tour around 'the spies' London.

12.30 Buffet lunch at The Liberal Club

14.00 Lecture by BORIS VOLODARSKY : 'The Cold War : yesterday, today and tomorrow'.

15.15 Break tea coffee

15.30 Lecture by Andrew Lownie - Historian biographer of Stalin's Englishman: The Lives of Guy Burgess

16.30 Finish

What's Included

Expert Guide Lecturer

Tour Manager

When they're not travelling around the world with us, hot on the trail of historical knowledge, we know that our guests are a busy lot. But take just one day, and you'd be surprised what you can do — that's why we've condensed all the startling revelations and expert insight you'd expect from our tours into single Study Days, right here in the UK. We update our list regularly, so be sure to keep an eye out!

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£155
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Thanks Spectre!

More from elsewhere:

How a former CIA officer convicted of spying for the Chinese was recruited on LinkedIn, sold top-secret documents for \$25,000 and put the lives of American operatives at risk

<https://www.dailymail.co.uk/news/article-6527231/Former-CIA-officer-convicted-spying-Chinese.html>

Kevin Mallory, 61, was convicted in June 2018 of conspiracy under the Espionage Act and lying to the FBI. When he is sentenced, the former CIA operative could face up to a life in prison. Mallory was arrested in April 2017 after returning from his second trip to Shanghai. He was found to be in possession of more than \$16,000 in undeclared cash and **a special communications device for transmitting documents**. Prosecutors say Mallory sent classified documents to a Chinese intelligence officer who had reached out to him on LinkedIn. One of the documents contained names of a couple who had been spying on the Chinese for the US.

By Snezana Farberov For Dailymail.com
Published: 17:41, 24 December 2018 | Updated: 22:00, 24 December 2018

Shocking new details have emerged about the washed-out former CIA operative who was convicted earlier this year of conspiring to commit espionage for China, including how his handlers first contacted him on LinkedIn, and how he blew the cover of a couple who had been spying on China for the US.

Kevin Mallory, 61, of Virginia, was busted traveling from Shanghai to Chicago with undeclared \$16,500 in cash in his carry-on luggage in April 2017, which led to his arrest a month later on federal counts of conspiracy under the Espionage Act and lying to the FBI.

In June of this year, a jury found Mallory guilty. Despite his conviction, Mallory has consistently denied selling any classified documents to the Chinese.

Former CIA operative Kevin Mallory (pictured left in a LinkedIn profile photo), 61, was convicted in June 2018 of conspiracy under the Espionage Act and lying to the FBI for sending classified documents to a Chinese spy.

The latest installment of 60 Minutes, which aired on CBS Sunday night, took an in-depth look at Mallory's betrayal and eventual downfall.

Mallory was an Army veteran and worked as a special agent for the Diplomatic Security Service at the US State Department from 1987 to 1990.

Since 1990 he has worked for a variety of government agencies, including as a case officer with the CIA with a Top Secret security clearance. Prosecutors say Mallory was recruited on LinkedIn and eventually came in contact with suspected Chinese intelligence officer Michael Yang (pictured)

Prosecutors say Mallory was recruited on LinkedIn and eventually came in contact with suspected Chinese intelligence officer Michael Yang (pictured)

By the time a man the Department of Justice believed was a Chinese spy reached out to Mallory via the professional networking site LinkedIn, the former clandestine agent had been out of work for months, falling behind on his mortgage payments and facing debt.

Mallory, who speaks Mandarin, eventually ended up communicating with a suspected Chinese intelligence officer who called himself Michael Yang, according to Ryan Gaynor, the FBI supervisory special agent who investigated Mallory.

Yang initially passed himself off as a staffer at a Chinese think tank, but Gaynor said Mallory believed him to be a spy.

In the Spring of 2017, Yang paid Mallory \$25,000 to travel to Shanghai twice. Around the same time, the former CIA agent contacted some of his colleagues asking to put him in touch with people in possession of up-to-date intelligence on China.

Mallory returned from his second trip to China in April with a special communications device disguised as a regular cellphone.

The phone came equipped with special software for transmitting secure text messages and documents **[SEE FRONT COVER]**

The 61-year-old sat down for an interview with the CIA after being detained at Customs at O'Hare Airport last year.

Mallory's sudden interest in Chinese intelligence set off alarm bells and prompted his former co-workers to report him to CIA security.

So when Mallory flew into O'Hare Airport from Shanghai in April, law enforcement officials were on alert and stopped him at Customs after he failed to declare \$16,500 in cash found in two carry-on bags.

More importantly, a search of Mallory's luggage turned up a box containing what at first glance looked like a garden-variety cellphone, which the former CIA agent claimed was a gift for his wife.

Upon closer examination, the gadget was determined to be a special communications device for transmitting secure text messages and documents.

They found an SD card wrapped in foil, which contained eight secret and top secret documents

But the Virginia man was frightened, having been stopped at Customs and subjected to a search, so he voluntarily reached out to the CIA saying he thought he was being recruited by the Chinese.

During an interview with intelligence officials, Mallory admitted that the phone was a covert communication device given to him by a suspected Chinese operative, but he lied that he had only used it to send out some test messages, but could not figure out how it works.

In reality, Mallory had transmitted a classified white paper, a classified table of contents and made attempts to send other documents, according to investigators.

Mallory then offered to hand over the phone to the CIA, thinking that his exchanges with Yang had been deleted by the software. He was wrong.

When Mallory arrived at the meeting and powered up the device to show officials how it works, his incriminating chat history appeared on the screen.

‘Your object is to gain information,’ one of his texts to Michael Yang read, ‘and my object is to be paid for.’

The Chinese agent responded: ‘My current object is to make sure your security and to try to reimburse you.’

Another text from Mallory to Yang stated: ‘I will destroy all electronic records after you confirm receipt. I already destroyed the paper records. I cannot keep these around, too dangerous. At this point all the risk is on me.’

Among the messages was a text from Mallory telling his handler that he could ‘bring the remainder of the documents’ during his third planned trip to China in June.

Investigators obtained surveillance footage from inside a FedEx location, which they said showed Mallory handing top secret documents to a clerk to scan

When FBI agents raided Mallory’s home in Virginia following his arrest in April, they seized an SD card wrapped in foil, which contained eight secret and top secret documents.

Investigators also obtained surveillance footage from inside a FedEx location, which they said showed Mallory handing top secret documents to a clerk to scan.

One of the documents could have revealed the identity of a couple who had been engaging in espionage against China on behalf of the US.

Jennifer Gellie, who prosecuted the case against Mallory for the National Security Division of the Department of Justice, said that the defendant had personally supervised the couple years earlier and knew that they were planning a trip to China in the future, meaning that his betrayal could have put their lives in danger.

Mallory could face up to a life in prison when he is sentenced at a later date.

<https://www.dailymail.co.uk/news/article-6527231/Former-CIA-officer-convicted-spying-Chinese.html>

You can read the Official ‘complaint’ here:

<https://www.justice.gov/opa/press-release/file/975671/download>

Ex-CIA officer Kevin Mallory sentenced to 20 years for spying for China

Former special agent jailed for selling classified US ‘defence information’ for \$25,000 in 2017
Agence-France Presse

Sat 18 May 2019 05.08 BST

<https://www.theguardian.com/us-news/2019/may/18/ex-cia-officer-kevin-mallory-sentenced-to-20-years-for-spying-for-china>

Former CIA officer Kevin Mallory is one of several US officials with high-level security clearances charged over dealings with Chinese intelligence.

An ex-CIA officer was sentenced to 20 years in prison on Friday for spying for China in a case called part of an “alarming trend” in the US intelligence community.

Kevin Mallory, 62, was convicted under the Espionage Act for selling classified US “defence information” to a Chinese intelligence agent for \$25,000 during trips to Shanghai in March and April 2017.

“Your object is to gain information, and my object is to be paid,” he told the Chinese agent in a 5 May 2017 message.

US defense contractor caught with \$16,500 in luggage is charged with spying for China

Read more

The fluent Mandarin speaker had served in the US army, then as a special agent for the security service of the state department, before becoming a covert case officer for the CIA.

Mallory is one of several US officials with high-level security clearances arrested and charged over unsanctioned dealings with Chinese intelligence.

The former defence intelligence agency official Ron Hansen faces 15 years in prison after pleading guilty in March to charges of attempting to sell classified information to China.

In April, a former diplomat Candace Marie Claiborne pleaded guilty to lying to investigators about money she received from Chinese intelligence agents in exchange for US documents.

And in the most significant case, on 1 May, the former CIA officer Jerry Chun Shing Lee pleaded guilty to spying for China.

Lee, 54, faces a possible life sentence. Arrested in January 2018, he was suspected of having provided Beijing the information it needed to bring down a CIA network of informants in China between 2010 and 2012.

“This case is one in an alarming trend of former US intelligence officers being targeted by China and betraying their country and colleagues,” assistant attorney general John Demers said of the Mallory case.

“This sentence, together with the recent guilty pleas of Ron Hansen in Utah and Jerry Lee in Virginia, deliver the stern message that our former intelligence officers have no business partnering with the Chinese, or any other adversarial foreign intelligence service.”

Mallory’s lawyers said they planned to appeal the conviction.

<https://www.theguardian.com/us-news/2019/may/18/ex-cia-officer-kevin-mallory-sentenced-to-20-years-for-spying-for-china>

Finally, from our Boyne operations centre we receive:

RAF Menwith Hill: Base in bid for extra radar antenna shelters
<https://www.bbc.co.uk/news/uk-england-york-north-yorkshire-48920515>

Plans for extra radar shelters at a communications and intelligence base have been lodged by the Ministry of Defence (MoD).

The application for three shelters - called radomes - at RAF Menwith Hill, in North Yorkshire, was submitted to Harrogate Borough Council in June.

If approved, it would take the number of domes at the base to 37.

They protect radar antennas from the elements and due to their appearance are often known as the "golf balls".

The proposed radomes are 68ft (21m) and the plans also include a new support building.

The additions are "required to meet the operational output of the station", the MoD documents said.

More news and Yorkshire stories

The listening base near the A59 covers 245 hectares (605 acres) and plays an important role in US and UK intelligence-gathering and communications.

Staff from the UK's Government Communications Headquarters (GCHQ) and America's National Security Agency operate there, the Local Democracy Reporting Service said.

The operations at the site have made it the subject of demonstrations from a variety of groups who oppose its presence.

The latest application comes after the council approved construction of a single additional radome in November 2018, which is due to be built in August 2021.

The council also approved the demolition of 13 buildings at the site last year.

<https://www.bbc.co.uk/news/uk-england-york-north-yorkshire-48920515>

Many thanks!

Chart Section Index

1. Prediction Chart
2. M01 Schedule
3. Family III
4. G06 Chart
5. XPA, XPA2 m, p and r, Schedules

July 2019

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Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...
		x	x				0315		E11	03	8565 25#	8565 25#
x	x	x	x	x	x	x	0400		V13	0	search (15388?)	search (15388?)
x	x	x	x	x			0400		S06	01A	15721 480	15721 480
			x				0430/0450/0510		E07A	01B	7933/ 9133/10233 741	7933/ 9133/10233 741
x							0450		E11	03	7469 41#	7469 41#
	x			x			0455		S11A	03	5844 32#	5844 32#
x	x	x	x	x	x	x	0500		V13	0	11430	11430
x		x		x		x	0455		HM01	18	10860	10860
	x		x		x		0455		HM01	18	11462	11462
x	x	x	x	x			0500		M14	01A	18041 952	18041 952
	x		x				0500/0520/0540		M12	01B	search	search
					x		0500/0520/0540		M12	01B	9217/10617/12217 262	9167/10267/11567 125
						x	0500/0520/0540		V07	01B		search
			x	x			0500/0600	1/3	E06	01A	13825/15615 679	13540/16115 210
	x						0530		M01A	14	9441 751	9441 751
		x					0530		M01A	14	9129 498	9129 498
			x				0540		M01A	14	7692 536	7692 536
x	x	x	x	x	x	x	0600		V13	0	11430	11430
x				x			0600		E11	03	14415 18#	14415 18#
x		x		x		x	0555		HM01	18	10345	10345
	x		x		x		0555		HM01	18	14375	14375
	x						0600/0610		S06S	01A	15945/16945 438	15945/16945 438
			x		x	x	0600/0620/0640		E07	01B	9064/10264/11464 024	9064/10264/11464 024
	x			x			0620		M01A	14	10233 354/458	10233 354/458
		x					0620		M01A	14	9421 135	9421 135
	x			x			0630		M01A	14	9447 143/792	9447 143/792
			x				0630		M01A	14	8111 902	8111 902
x							0630/0640		S06S	01A	16320/14875 524	16320/14875 524
x		x					0640		E11	03	15800 94#	15800 94#
	x		x				0645		E11	03	13424 51#	13424 51#
x		x		x		x	0655		HM01	18	9330	9330
	x		x		x		0655		HM01	18	13435	13435
	x			x			0700		E11	03	8680 57#	8680 57#
x	x	x	x	x	x	x	0700		V13	0	15388	15388

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...
						x	0700		M01	01B	6780 025	6780 025
	x						0700/0710(15)		S06S	01A	5430/ 6780 374	5430/ 6780 374
	x			x			0700/0720/0740		E07	01B	15962/17462/18562 945	16246/18446/19246 242
	x		x				0700/0720/0740		M12	01B	search	search
						x	0700/0720/0740		V07	01B	search	search
x		x					0700/0720/0740		XPA2	01B	11167/12167/13567	10278/12178/13478
					x	x	0710		E11	03	6480 49#	6480 49#
	x			x			0710		M01A	14	10651 297	10651 297
		x					0710		M01A	14	9175 146	9175 146
	x		x				0710/0730/0750		XPA1	01B	search	search
	x			x			0715		E11	03	10429 63#	10429 63#
	x						0720		M01A	14	9151 728	9151 728
	x						0730/0740		S06S	01A	7365/11655 427	7365/11655 427
		x					0730/0740		S06S	01A	12110/14977 745	12110/14977 745
x							0745		E11	03	9610 26#	9610 26#
		x		x			0745		E11	03	15720 34#	15720 34#
x		x		x		x	0755		HM01	18	9065	9065
	x		x		x		0755		HM01	18	11365	11365
x	x	x	x	x	x	x	0800		V13	0	15388	15388
x							0800	1/3	G06	01A	7320 329	7320 329
			x				0800/0810		E17Z	01A	16780/12850/ 674	16780/12850/ 674
	x						0800/0810		S06S	01A	14373/12935 352, check cf. Fri 0830	14373/12935 352
					x		0800/0810	1	S06S	01A	12460/10250 254	12460/10250 254
					x		0800/0820/0840		E07A	01B	12173/13973/14873 198	12177/13477/14877 148
x		x					0800/0820/0840		XPA2	01B		
					x		0800/0900		M14	01A	4730/ 4650 523	4730/ 4650 523
					x	x	0805		E11	03	5737 31#	5737 31#
	x		x				0810/0830/0850		XPA1	01B		
x			x				0820		E11	03	4909 43#	4909 43#
	x	x					0820		E11	03	17378 13#	17378 13#
		x					0820/0830		S06S	01A	9485/11085 471	9485/11085 471

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...
x							0830/0840		S06S	01A	8221/ 9353 371	8221/ 9353 371
		x					0830/0840		S06S	01A	11565/12560 464	11565/12560 464
				x			0830/0840		S06S	01A	x14373/12935 352, search cf. Fri 0830	x14373/12935 352, search
			x	x			0830/0930		S06	01A	15875/13469 842	16327/13875 842
	x		x				0845		E11	03	12153 15#	12153 15#
x		x		x		x	0855		HM01	18	9240	9240
	x		x		x		0855		HM01	18	11462	11462
x		x					0900		E11	03	7439 53#	7439 53#
x							0900/0910		S06S	01A	16380/14835 872	16380/14835 872
				x			0900/0910		S06S	01A	6844/ 7161 624	6844/ 7161 624
x		x					0910/0930/0950		XPA2	01B	search	search
			x		x		0910/0930/0950		XPA2	01B	13445/12145/11545	14372/13372/12172
x				x			0915		S11A	03	5082 48#	5082 48#
x	x	x	x	x	x	x	0930		M14	01A	16347/14878 617, only 10., (11.), 25.,(26)	16347/14878 617, only 10., (11.), 25.,(26)
		x	x				0930		E11	03	6923 27#	6923 27#
			x				0930/0940		S06S	01A	9255/10325 314	9255/10325 314
				x			0930/0940		S06S	01A	10290/ 9655 516	10290/ 9655 516
x		x		x		x	0955		HM01	18	9155	9155
	x		x		x		0955		HM01	18	12180	12180
	x			x			1000		E11	03	12397 30#	12397 30#
	x						1000/1010		S06S	01A	4820/ 5660 893	4820/ 5660 893
		x					1000/1010		S06S	01A	14580/16020 729	14580/16020 729
x			x				1015		S11A	03	10210 47#	10210 47#
	x			x			1020		S11A	03	6977 42#	6977 42#
x		x					1045		E11	03	8545 69#	8545 69#
		x		x			1100		S11A	03	5149 37#	5149 37#
	x						1100/1110		S06S	01A	6810/ 7560 754	6810/ 7560 754
	x			x			1100/1120/1140		E07	01B	19252/17452/16252 242	20146/18246/16346 123
x	x	x	x	x	x	x	1200		V13	0	9725	9725

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...
		x					1200/1300	1/2	G06	01A	7525/ 6974 145	7525/ 6974 145
x							1200/1210		S06S	01A	10230/12165 831	10230/12165 831
			x				1200/1210		S06S	01A	13145/14535 425	13145/14535 425
	x	x					1205		E11	03	6304 46#	6304 46#
		x		x			1210/1230/1250		M12	01B	search	search
			x				1300	1/3	G06	01A	5890 329	5890 329
			x		x		1300		E11	03	11092 58#	11092 58#
x	x	x	x	x	x	x	1300		V13	0	9725	9725
			x				1300/1320/1340		E07	01B	9064/10264/11464 024, check	9064/10264/11464 024, check
	x				x		1345		E11	03	12984 91#	12984 91#
x	x	x	x	x	x	x	1400		M08A	18	8096	8096
x		x					1400/1420/1440		M12	01B	15821/13921/12221 174	15983/14683/13383 963
			x		x		1410/1430/1450		E07	01B	search	search
					x		1500		M01	14	6435 025	6435 025
	x						1500/1510		S06S	01A	6766/ 7744 537	6766/ 7744 537
x					x		1600/1620/1640		XPA2	01B	search	search
				x			1510/1530/1550		E07A	01B	12213/11413/10113 241	12213/11413/10113 241
x				x			1530		E11	03	5409 52#	5409 52#
			x				1530		E11	03	10356 26#	10356 26#
		x			x		1540		S11A	03	11092 56#	11092 56#
x	x	x	x	x	x	x	1555		HM01	18	11435	11435
	x	x					1600	1/3	M14	01A	6953 (tue) 73290(wed) 239	6953 (tue) 73290(wed) 239
	x		x				1600/1620/1640		XPA2	01B	search	search
	x					x	1605		E11	03	4783 23#	4783 23#
		x				x	1625		E11	03	7863 97#	7863 97#
	x		x				1645		E11	03	14575 33#	14575 33#
				x		x	1650		E11	03	12229 92#	12229 92#
x							1700/1800	1/2	G06	01A	5344, 5916 145	5344, 5916 145
x	x	x	x	x	x	x	1655		HM01	18	11530	11530
		x				x	1700/1720/1740		E07	01B	12223/11023/10123 201	13397/12197/10697 316
				x			1700/1800	1/3	M14	01A	7485/ 6891 382	7485/ 6891 382

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...
		x			x		1705		E11	03	4783 39#	4783 39#
		x			x		1730		E11	03	7984 40#	7984 40#
			x				1730		E11	03	8088 41#	8088 41#
x						x	1745		E11	03	14410 24#	14410 24#
	x		x				1800		M01	14	5280 025	5280 025
x	x	x	x	x	x	x	1755		HM01	18	11635	11635
x							1810		M01B	14	5125, 5735 364	5125, 5735 364
	x						1820	2/4	M14	01A	6856 163	6856 163
			x				1830	2/4	G06	01A	6887 842	6887 842
			x				1832		M01B	14	5095, 5760 815	5095, 5760 815
	x			x			1840/1850/1900	1	F01	01A	14829/12214/10932	15854/13543/11126
		x			x		1850		S11A	03	12457 28#	12457 28#
x			x				1900		E11	03	7600 64#	7600 64#
	x					x	1900/1910/1910 1930/1940/1950		XPB1	01B	search	search
x		x					1900/1920/1940		E07	01B	16263/14763/13363 273	16147/14647/13447 164
		x					1900/1920/1940		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
				x	x		1900/1920/1940		XPA2	01B		16167/14663/13923
				x			1900/2000	1/3	M14	01A	7605/ 6876 735	7605/ 6876 735
				x			1900/2000	1/3	S06	01A		9336/ 7314 627
				x			1902		M01B	14	5075, 5465 336	5075, 5465 336
				x		x	1910		E11	03	9610 61#	9610 61#
x							1915		M01B	14	5150, 5475 858	5150, 5475 858
		x					1920	2/4	M14	01A	5938 417	5938 417
	x		x				1925 (1930?)		E11	03	12630 55#	12630 55#
				x			1930	2/4	G06	01A	5935 218	5935 218
					x	x	1930		E11	03	5082 36#	5082 36#
			x				1942 (1940)		M01B	14	5065, 5805 936	5065, 5805 936
		x		x			1950/2010/2030		M12	01B	16323/14923/13523 395	16148/14748/13448 174
	x		x				2000		M01	14	4905 025	4905 025

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...
x	x	x	x	x	x	x	2000		M08A/ V02A	18	7554	7554
x							2000/2020/2040		M12	01B	10343/ 9264/ 8116 463	10343/ 9264/ 8116 463
		x					2000/2020/2040		E07A	01A	12166/10766/ 9266 172	12166/10766/ 9266 172
	x					x	2000/2020/2040		XPA2	01B		14738/13438/12138
				x			2000/2100	1/3	S06	01A	9336/ 7314 627	
				x			2010		M01B	14	4895, 5340 467	4895, 5340 467
			x				2030	1/3	E06	01A	5940 724	5940 724

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	May kHz, ID, ...	Jun kHz, ID, ...	Jul kHz, ID, ...	Aug kHz, ID, ...	Remarks
		x	x				0315		E11	03	8565 25#	8565 25#	8565 25#	8565 25#	since 01/14, last log 06/19
x							0450		E11	03	7469 41#	7469 41#	7469 41#	7469 41#	since 02/10, last log 06/19 2nd transmission Thu 1730z
	x			x			0455		S11A	03	5844 32#	5844 32#	5844 32#	5844 32#	since 09/14, last log 06/19
x				x			0600		E11	03	14415 18#	14415 18#	14415 18#	14415 18#	since 07/15, last log 06/19
x		x					0640		E11	03	15800 94#	15800 94#	15800 94#	15800 94#	since 07/17, last log 06/19
	x		x				0645		E11	03	13424 51#	13424 51#	13424 51#	13424 51#	since 07/09, last log 06/19
	x			x			0700		E11	03	8680 57#	8680 57#	8680 57#	8680 57#	since 01/12, last log 06/19
					x	x	0710		E11	03	6480 49#	6480 49#	6480 49#	6480 49#	since 07/15, last log 06/19
	x			x			0715		E11	03	10429 63#	10429 63#	10429 63#	10429 63#	since 02/11, last log 06/19
x							0745		E11	03	9610 26#	9610 26#	9610 26#	9610 26#	since 03/14, last log 06/19 2nd transmission Thu 1530z
		x		x			0745		E11	03	15720 34#	15720 34#	15720 34#	15720 34#	since 06/17, last log 06/19
					x	x	0805		E11	03	5737 31#	5737 31#	5737 31#	5737 31#	since 07/14, last log 06/19
x			x				0820		E11	03	4909 43#	4909 43#	4909 43#	4909 43#	since 10/09, last log 06/19
	x	x					0820		E11	03	17378 13#	17378 13#	17378 13#	17378 13#	since 12/18, last log 06/19
	x		x				0845		E11	03	12153 15#	12153 15#	12153 15#	12153 15#	since 07/17, last log 06/19
x		x					0900		E11	03	7439 53#	7439 53#	7439 53#	7439 53#	since 10/05, last log 06/19
x				x			0915		S11A	03	5082 48#	5082 48#	5082 48#	5082 48#	since 04/19, last log 06/19
		x	x				0930		E11	03	6923 27#	6923 27#	6923 27#	6923 27#	since 02/14, last log 06/19
	x			x			1000		E11	03	12397 30#	12397 30#	12397 30#	12397 30#	since 11/16, last log 06/19
x			x				1015		S11A	03	10210 47#	10210 47#	10210 47#	10210 47#	since 04/10, last log 06/19
	x			x			1020		S11A	03	6977 42#	6977 42#	6977 42#	6977 42#	since 02/10, last log 06/19
x		x					1045		E11	03	8545 69#	8545 69#	8545 69#	8545 69#	since 03/18, last log 06/19
		x		x			1100		S11A	03	5149 37#	5149 37#	5149 37#	5149 37#	since 02/14, last log 06/19
	x	x					1205		E11	03	6304 46#	6304 46#	6304 46#	6304 46#	since 03/10, last log 06/19 2nd transmission Mon 0450z
			x		x		1300		E11	03	11092 58#	11092 58#	11092 58#	11092 58#	since 02/16, last log 06/19
	x				x		1345		E11	03	15825>12984 91#	12984 91#	12984 91#	12984 91#	since 10/15, last log 06/19
x				x			1530		E11	03	5409 52#	5409 52#	5409 52#	5409 52#	since 05/15, last log 05/18 until 04/19 at 1225z
			x				1530		E11	03	10356 26#	10356 26#	10356 26#	10356 26#	since 06/14, last log 06/19 2nd transmission Mon 0745z
		x			x		1540		S11A	03	11092 56#	11092 56#	11092 56#	11092 56#	since 03/16, last log 06/19
	x				x		1605		E11	03	4783 23#	4783 23#	4783 23#	4783 23#	since 11/15, last log 06/19
		x			x		1625		E11	03	15795>7863 97#	7863 97#	7863 97#	7863 97#	since 02/15, last log 06/19
	x		x				1645		E11	03	14575 33#	14575 33#	14575 33#	14575 33#	since 06/17, last log 06/19
				x		x	1650		E11	03	14940 92#	14940 > 12229 92#	12229 92#	12229 92#	since 05/16, last log 06/19
		x			x		1705		E11	03	4783 39#	4783 39#	4783 39#	4783 39#	since 02/14, last log 06/19 until 02/19 at 1955z
		x			x		1730		E11	03	7984 40#	7984 40#	7984 40#	7984 40#	since 06/16, last log 06/19
			x				1730		E11	03	8088 41#	8088 41#	8088 41#	8088 41#	since 03/10, last log 06/19 2nd transmission Mon 0450z
x					x		1745		E11	03	14410 24#	14410 24#	14410 24#	14410 24#	since 04/18, last log 06/19
		x			x		1850		S11A	03	12457 28#	12457 28#	12457 28#	12457 28#	since 06/17, last log 06/19
x			x				1900		E11	03	7600 64#	7600 64#	7600 64#	7600 64#	since 05/16, last log 06/19
				x		x	1910		E11	03	9610 61#	9610 61#	9610 61#	9610 61#	since 04/17, last log 06/19
	x		x				1925 (1930?)		E11	03	12630 55#	12630 55#	12630 55#	12630 55#	since 07/15, last log 06/19
					x	x	1930		E11	03	5082 36#	5082 36#	5082 36#	5082 36#	since 03/14, last log 06/19 2nd transmission Thu 1530z

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...	Jul kHz, ID, ...	Aug kHz, ID, ...	Remarks
x							0800	1/3	G06	01A	7320 329	7320 329	7320 329	7320 329	since 07/10, last log 06/19 repeat at Thu 1300Z
	x						1200/1300	1/2	G06	01A	7525/ 6974 145	7525/ 6974 145	7525/ 6974 145	7525/ 6974 145	since 10/14, last log 06/19 yearly changing frequencies + id
		x					1300	1/3	G06	01A	5890 329	5890 329	5890 329	5890 329	since 09/11, last log 06/19 repeat from Mon 0800Z
x							1700/1800	1/2	G06	01A	5344, 5916 145	5344, 5916 145	5344, 5916 145	5344, 5916 145	since 04/10, last log 06/19 yearly changing frequencies + id
		x					1830	2/4	G06	01A	6887 842	6887 842	6887 842	6887 842	since 05/01, last log 06/19 repeat at Fri 1930Z
			x				1930	2/4	G06	01A	5935 218	5935 218	5935 218	5935 218	since 04/01, last log 06/19 repeat from Thu 1830Z

XPA and XPA2[Sched m, p, r] Russian Intelligence and/or Diplomatic Multitone Systems
[Radiogramma] Transmission Schedules.

Zulu >	XPA1 c Tuesday/Thursday H+10 H+30 H+50 0710 / 0810z			XPA2 Sched m Various Sun/Tue H 00 H+20 H+40 1300,1500,1800,2000,2100			XPA2 Sched p Monday/Wednesday H 00 H+20 H+40 0700 / 0800z			XPA2 Sched r Various Fri/Sat H 00 H+20 H+40 1400, 1900, 2100		
Month v												
Jan	12157	13462	14374	16138	14438	13438	11493	13393	14793	16167	14663	13923
Feb	13397	14413	15972	16338	14538	13538	12137	13937	14737	18667	17419	16212
Mar	12132	13453	14576	16138	14438	13438	12192	13892	14892	18667	17419	16212
Apr	10428	11431	13441	14538	13538	12138	11167	12167	13567	17462	16114	14824
May	11169	12179	13431	14538	13538	12138	11541	13441	14941	17462	16114	14824
June	11421	12151	13972	13427	12227	10827	10324	11524	13524	16167	14663	13923
July	10446	11474	12175	13394	12194	10794	11167	12167	13567	15967	13884	12217
Aug				14738	13438	12138	10278	12178	13478	16167	14663	13923
Sept				14538	13538	12138	10324	11524	13524	16167	14663	13923
Oct	12167	13437	14972	16338	14538	13538	12192	13892	14892	17462	16114	14828
Nov	13978	14859	15871	18328	16238	14438	13427	14627	15827	17462	16114	14828
Dec	11531	12137	13932	14538	13538	12138	10278	12178	13478	15967	13884	12217

Notes:

XPA Under construction due to change/end of old c schedule. Usually as strong as previous schedule.. [ID does not match freq 100kHz]

XPA2 m Change of Freqs from June 2019. Past freqs shown in italics

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

XPA2 p Schedule revised from 6 day to two day [Oct2017]. Sigs to UK variable.

Null Message: Long tones used in place of repeat character [15Hz below 0] whilst ending of 10140 is now variable. [First seen 11/12/2017 XPA2 t]

Updated: 03012019

SPECIAL MATTERS

Thanks to all our contributors:

Ary, Edd, BR, CC, CQ, Danix, DanAr, E, F5, HH, HJH, JkC, Jochen, KW, Malc, MaleAnon, PoSW, PLdn, RC, RNGB, Spectre,
Apologies to anyone missed.



MESSAGES:

E: Many tnks yr lttr, noisy at my QTH too. 73 you and yours P

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>

2019

Source: Vertex42.com

January

Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

February

Su	M	Tu	W	Th	F	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

March

Su	M	Tu	W	Th	F	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

April

Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

May

Su	M	Tu	W	Th	F	Sa
		1	2	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June

Su	M	Tu	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

July

Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

August

Su	M	Tu	W	Th	F	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September

Su	M	Tu	W	Th	F	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October

Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

November

Su	M	Tu	W	Th	F	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December

Su	M	Tu	W	Th	F	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Source: Vertex42.com

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