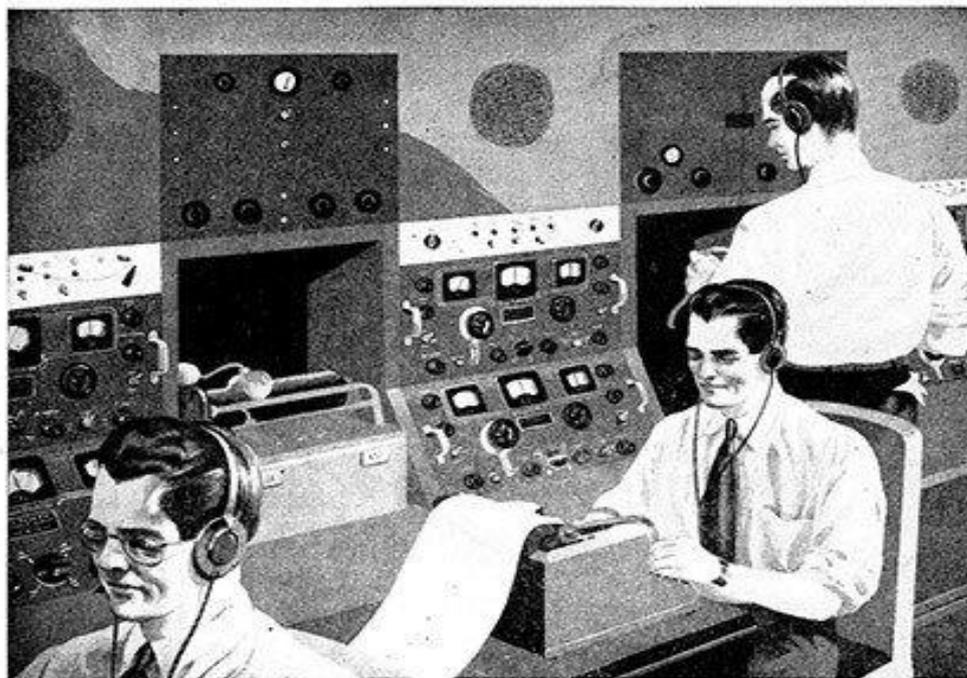


ENIGMA 2000 NEWSLETTER



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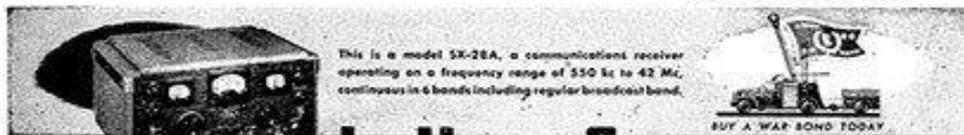


RID at work } HOW RADIO INTELLIGENCE DIVISION KEEPS WATCH...

• The radio amateur has distinguished himself outstandingly in the service of his country in time of war. One of his most important jobs is in the RID — Radio Intelligence Division of the Federal Communications Commission. Above you see sketches of typical hams at work in the intercept room of one of the RID's monitoring stations. With high powered, extraordinarily sensitive equipment like this, manned by experts, the RID patrols the ether, spots illegal transmitters, locates lost planes and keeps watch on the entire radio spectrum to guard home front

security. Vigilance like this has put more than 400 clandestine stations out of commission. About 70% of the personnel employed by RID consists of licensed amateur radio operators. For these exacting technicians Hallicrafters has developed the finest equipment that can be made. When the time comes Hallicrafters will be ready with a full line of HF, VHF and UHF communications equipment — designed specifically for the amateur and for all others who need the latest and best combined "in the radio man's radio."

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This is a model SX-28A, a communication receiver operating on a frequency range of 550 kc to 42 Mc, continuous in 4 bands including regular broadcast band.



hallicrafters RADIO

THE HALLIDAY CO., WORLD'S LARGEST EXCLUSIVE MANUFACTURERS OF SHORT WAVE RADIO COMMUNICATIONS EQUIPMENT, CHICAGO 18, U. S. A.

Thanks to sender.

ISSUE 118
May 2020

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See last page also.

Editorial

Shortwave propagation continues to be variable with differences in signal strengths of the regular number station schedules quite noticeable. The HM01 mixed mode station from Cuba which had been heard with reasonably strong signals in the winter and early spring months, at least on those days of the week when frequencies in the 9 MHz band are used, has become much weaker in April, presumably due to the seasonal change in propagation.

There were some unusually strong signals in the 27 MHz CB allocation in the last week of March, mostly Italian in both FM and SSB modes.

A number of pirate stations, or assumed to be such, playing music were noted on shortwave in April, most noticeably a very strong station on 3935 on the 2nd, OM voice making announcements in the Dutch language and accented English with the ident "Mike Radio", good audio, some traditional Dutch music, accordion and all that, also some rock, heard *Teach Your Children* by Crosby, Stills and Nash, hadn't heard that one for a long time, closed down before 2000z, some technical details heard including "inverted V antenna, 2 X 18 metres".

Heard again on the 6th, this time on 3920 kHz, must have a frequency synthesiser controlled TX or else an assortment of quartz crystals to hand.

Heard *Beautiful Noise* by Neil Diamond and *Heart of Glass* by Blondie, looked up the details of this one in my copy of *Collins Complete UK Hit Singles*, and saw that lead singer Debby Harry is 75 this year.

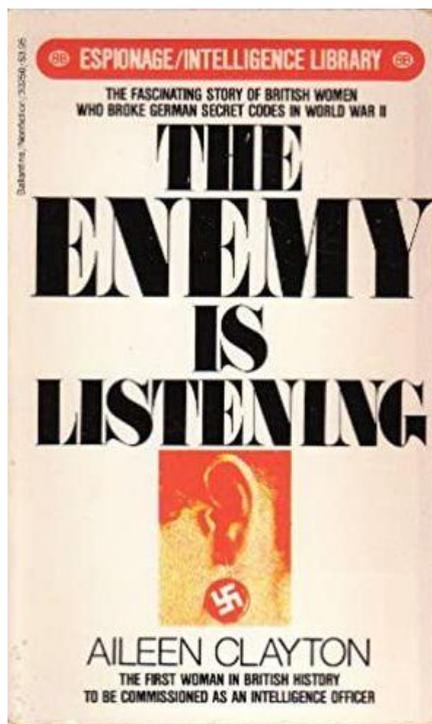
Another strong music station was logged on 4700 kHz with the ident "Mystery 21 Radio" and another on 4850, heard on the 10th with a strong signal and excellent modulation playing American country music with no break between songs but heard later with announcements in English with a Dutch accent.

Poor conditions rue the closing days of April with two or more monitors commenting on the effect.

The station G06 schedules have also reduced leaving only the Thursday and Friday schedules available for intercept – unless, of course, if anyone knows different?

XPA2 schedules [m and p] continue with the new frequencies with the Sunday/Tuesday [m] last sending at 1240z not always useable, or sometimes receivable in the UK and London in particular.

Recommended Read!



The Enemy is Listening

Aileen Clayton 1980 Pub: Hutchinson ISBN 0 09 142340 6

Unusually I had never heard of this book until I read the curator's reading list posted amongst stuff to do with the London Science Museum's GCHQ: Top Secret Exhibition where I was going to officiate for the duration.

Wanting something to read a trip to Amazon UK resulted in an acceptable pre-owned copy.

What a read; it puts the observer, because that is what the reader becomes next to the author who as a junior rank WAAF and natural German speaker employed her skills to the Morse signals sent by Axis airmen and others. Their destination? Bletchley Park and the decrypts. [The problem with the history of BP is the lack of promotion of where the material they broke actually came from; a sad miss in my opinion].

Its starts before the war, a short history of the author then straight into selection, training, the actual duties of intercept, signal analysis and finally promotion and travel.

Good descriptions abound of places and personalities. The enemy is spoken of with respect and some, who almost reached legend status with the intercept officers and whose passing at the hand of Spitfire and Hurricane pilots actually provoked tears at the loss of a known voice.

Fist recognition is given some travel here too.

Excellent read, which I have thoroughly enjoyed and thoroughly recommend.

Morse Stations

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

This is a representative sample of the logs received, giving an indication of station behaviour and the range of times/freqs heard. These need to be read in conjunction with any other articles/charts/comments appended to this issue.

Morse - Number Stations

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

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	(Not used at all so far in 2020)
Variant Format 4:	197 (R4m) 589 589 = 30 30 == 40728 58918 == = 589 589 = 30 30 000	(Used numerous times in March/April)

March 2020:

5020	2000z	10 Mar	'463' 382 30 == 87553 ... 91603	Good, fast. Excellent Morse. Ending == omitted	BR	TUE
	2000z	12 Mar	'463' 723 30 == 00883....		HFD	THU
	2000z	17 Mar	'463' 481 30 == 98031 ... 77846 ==	Good, fast. Numerous errors. Many shortened grps.	BR	TUE
	2000z	19 Mar	'463' 406 30 == 68689 ... 13306 ==	Good, fast. Excellent Morse No noted errors	BR	THU
	2000z	24 Mar	'463' 727 30 == 50488 ... 06322 ==	Good, fast. Excellent Morse. No noted errors	BR	TUE
	2000z	26 Mar	'463' 352 30 == 35140 ... 89508 ==	Strong, fast. Several errors inc. 7 fig grp & 6 fig grps	BR	THU
	2000z	31 Mar	'463' 129 30 == 88790 ... 98376 ==	Strong, fast. Excellent Morse. Error in grp22 repeat	BR	TUE
5475	1804z	03 Mar	'463' 603 = 30 == 91051 ... 39867 ==	Fair, Med-fast. Late start with 1min. call-up. Format 4	BR	TUE
	1800z	05 Mar	'463' 721 30 == 58297 ... 47137 ==	Good, fast. Multiple errors, mainly shortened repeat grps.	BR	THU
	1800z	10 Mar	'463' 229 30 == 64501 ... 20910 ==	Fair, fast. Mostly good. Two errors noted	AB/BR/HFD	TUE
	1800z	12 Mar	'463' 239 30 == 17210 ... 32421 ==	Good, fast. Good Morse. Missed == at end but corrected	BR	THU
	1800z	17 Mar	'463' 412 30 == 24941 ... 73860 ==	Good, fast. Multiple errors, strings & many shortened grps.	BR	TUE
	1800z	19 Mar	'463' 775 30 == 14958 ... 57132 ==	Good, med-fast. Three single figure repeat errors noted	BR	THU
	1800z	26 Mar	'463' 145 30 == 83015 ... 68616 ==	Fair, fast. QSB present. Several repeat errors noted	BR/E.SMITH	THU
	1800z	31 Mar	'463' 549 30 == 69857 ... 19824 ==	Good, fast. Starting sequence sent as DK GC DK GC	BR	TUE
6260	1500z	07 Mar	'463' 303 = 30 == 11360 ... 83751 ==	Good, slow. Error grp05. 95829 905280 Format 4	BR/E.SMITH/HFD	SAT
	1500z	14 Mar	'463' 692 30 == 61407 ... 55303 ==	Good, fast. Several errors mainly extra figs. In repeat grp	BR/E.SMITH	SAT
	1500z	21 Mar	'463' 117 30 == 51085 ... 0938 ==	Fair, fast. Numerous errors. Strings & shortened grps.	BR/E.SMITH	SAT
	1500z	28 Mar	'463' 247 = 30 == 50525 ... 08066 ==	Fair, slow. Two errors noted. Format 4	BR	SAT
6510	0701z (IP)	01 Mar	'463' 237 30 == 97209 ... 61230 ==	Good, QSB2. Standard Format	MCW	E.SMITH
	0704z	08 Mar	'463' 926 30 == 14381 ... 48223 ==	Fair, fast. Late start. Excellent Morse, no errors	Format 4	BR/E.SMITH
	0700z	15 Mar	'463' 808 30 == 31353 ... 05841 ==	Fair, slow. Hesitant at times. Errors noted		BR/E.SMITH
	0700z	22 Mar	'463' 119 30 == 53646 ... 49326 ==	Good, QSB2. Standard Format.	MCW	E.SMITH/HFD

April 2020:

5020	2000z	02 Apr	'463' 728 30 == 75876 ... 84930	Strong, fast. Grp28 6673 6673. Ending == omitted	BR	THU
	2000z	07 Apr	'463' 115 30 == 73882 ... 85001 ==	Good, fast. Several errors noted	BR	TUE
	2000z	09 Apr	'463' 377 = 30 == 17742 ... 81608 ==	Strong, slow. Excellent Morse. No errors	BR	THU
	2000z	14 Apr	'463' 717 30 == 05279 ... 71042 ==	Strong, slow. One single figure error on grp23 repeat	BR	TUE
	2000z	21 Apr	'463' 251 = 30 == 64450 ... 55782 ==	Strong, slow. Two errors noted, grps13 & 28. Format 4	BR	TUE
	2000z	28 Apr	'463' 525 30 == 75477 ... 70137 ==	Strong, med-fast. Hesitant at times. No errors	BR	TUE
	2000z	30 Apr	'463' 728 30 == 11936 ... 48053 ==	Good, fast. Several errors noted.	BR	THU
5475	1800z	02 Apr	'463' 715 30 == 35467 ... 36286	Good, fast. Several errors noted. Ending == omitted	BR	THU
	1800z	07 Apr	'463' 377 30 == 65608 ... 31664 ==	Good, fast. Two errors noted including grp01	BR	TUE
	1800z	09 Apr	'463' 249 = 30 == 77242 ... 44048 ==	Fair, slow. Excellent Morse. No errors. Format 4	BR	THU
	1800z	14 Apr	'463' 731 30 == 95759 ... 35263 ==	Strong, slow. One single figure error on grp19 repeat	BR	TUE
	1800z	16 Apr	'463' 320 30 == 74620 ... 88042 ==	Good, slow. Excellent Morse. No errors	BR	THU
	1800z	21 Apr	'463' 117 = 30 == 78355 ... 72244 ==	Strong, slow. Grp16 30547 30574. Format 4	BR	TUE
	1800z	23 Apr	'463' 365 30 == 36635 ... 75635 ==	Fair, fast. Several errors noted	BR	THU
	1800z	28 Apr	'463' 812 30 == 40351 ... 33629 ==	Good, med-fast. Error grp24 76300 7630	BR/Gert	TUE
	1800z	30 Apr	'463' 711 30 == 83473 ... 88260 ==	Good, fast. 7 . . sent at end of msg. then correct DK twice	BR	THU
6260	1503z	04 Apr	'463' 408 30 == 17245 ... 0370 ==	Good under strong pirate BC. [Note 1]	BR	SAT
	1500z	11 Apr	'463' 374 30 == 58560 ... 22517 ==	Good, fast. Only 20 grps. sent!	AB/BR	SAT
	1500z	18 Apr	'463' 471 30 == 61191 ... 17154 ==	Fair, fast. Brisk delivery. Grp21 17841 178841	BR	SAT
	1500z	25 Apr	'463' 121 = 30 == 64468 ... 16427 ==	Good, slow. Grp09 44045 4405	Format 4	BR
6510	0659z	19 Apr	'463' 412 30 == 10932 ... 51194 ==	Fair, fast. Excellent Morse. Two errors noted	BR	SUN

[Note 1] The station was heard in progress at 1500z with a series of 5 fig groups ending with a number of 408408 groups, (the DK), then 463 463, (the ID), before starting the full transmission at 1503z.

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

A number of regular schedules have been reported & Logged by Edd Smith – See ENIGMA 2000 Newsletter 116 for details.

The following log from André, F5JBR, is a good example of one type of traffic sent by M01a. Here we have a message sent of 10 groups, followed by what appears to be the repeating of several of the groups contained in the message.

The operator would seem to be repeating these groups at the request of a remote station. However, no other station has been heard on the primary frequency or through band searches.

4824	1426 - 1429z	17 Mar	111 999	<i>[Msg follows?]</i>	F5JBR	TUE
			298 10 = 45407 94534 89797 40521 34894 06121 46545 89845 65804 65679 = 298 10			
			111 4005 21 06121	<i>[Repeat of grp04 –with error? & repeat of grp06]</i>		
			111 = 34894	<i>[Repeat of grp05]</i>		
			111 000	<i>[End of Traffic?]</i>		

Logs are shown as continuous. In practice there are often pauses between lines – Often quite lengthy pauses.

Logs from André, F5JBR:

March 2020:

6916	0930z	16 Mar	125 (x3) 62621 (x2)		F5JBR	MON
6767	0933z	16 Mar	125 (x3) 95255 (x2) 125 (x3) 95046 (x2)		F5JBR	MON
6852	0948z	16 Mar	134 (x3) 69204 (x2) 134 (x3) 60300 (x2) 134 (x3) 69204 (x2)		F5JBR	MON
4049	0720z	17 Mar	523 (x3) 91916 (x2) 523 (x3) 12236 (x2)		F5JBR	TUE
5854	0745z	17 Mar	832 (x3) 96516 (x2) 832 (x3) 6 (x2)		F5JBR	TUE
4961	0924z	17 Mar	732 (x3) 65403 (x2) 333 65203 333 66723 (x2) 333 66823 (x2) 333 66023 (x2) 333 65563 (x2) 111 111 333 65363 (x2)		F5JBR	TUE
4049	0947z	17 Mar	523 (x3) 12247 (x2) 111 000		F5JBR	TUE
6892	1000z	17 Mar	231 (x3) 49835 (x2) 231 (x3) 48431 (x2)		F5JBR	TUE
4824	1426 - 1429z	17 Mar	111 999 298 10 = 45407 94534 89797 40521 34894 06121 46545 89845 65804 65679 = 298 10 111 4005 21 06121 111 = 34894 111 000		F5JBR	TUE
4050	1525z	17 Mar	427 (x3) 16589 (2) 427 (x3) 15285 (2) 427 000		F5JBR	TUE
4681	1902z	17 Mar	830 (x3) 45808 (x2) 000		F5JBR	TUE
8111	0633z	26 Mar	536 (x3) 34572 (x2)		F5JBR	THU
9175	0711z	26 Mar	146 (x3) 46238 146 (x3) 47691 (x2)		F5JBR	THU
8078	0723z	26 Mar	407 (x3) 50624 (x2)		F5JBR	THU
5315	1022z	27 Mar	923 (x3) 45191 (x2) 111 999 613 40 = 40314 01118 41449 09383 42163 34520 111 111 44 072 111 44072 333 45315 111 999 613 40 = 40314 01118 41449 09383 42163 34520 54987 38071 13632 23597 49407 54345 16914 56823 92816 89495 78566 91946 42858 56318 25559 73405 84806 94448 23071 07691 81811 33184 60765 35549 34330 16668 38139 29938 13840 30879 51573 88637 54148 92973 = 613 40 000 (E.T. at 1041z		F5JBR	FRI

3794	1604z	27 Mar	264 (x3) 34220 (x2) 264 (x3) 32960 (x2)	F5JBR	FRI
3798	0709z	28 Mar	424 (x3) 76400 (x2)	F5JBR	SAT
3117	0410z	29 Mar	207 (x3) 14423 (x2) 207 (x3) 14138 (x2)	F5JBR	SUN
9151	0721z	31 Mar	297 (x3) 43504 (x2) 297 (x3) 46440 (x2) 000 29 000 29 = = 401141 61574 58621 27168 74591 91271 14432 77458 47540 93863 26491 65211 23926 01600 31094 86194 32539 21881 88321 75534 94720 50556 47982 66157 08843 39127 19809 = = 00029 00029 00000 <i>(This 9151kHz log is part of the morning schedule – E.SMITH)</i>	F5JBR	TUE
3870	0742z	31 Mar	742 (x3) 28070 (x2) 742 (x3) 27708 (x2) 333 111 333 27246 (x2) 333 27246 (x2) 111 802 (x3) 13666 (x2)	F5JBR	TUE

April 2020:

10233	0623z	14 Apr	354 (x3) 78505 (x2) 354 (x3) 79326 (x2)	F5JBR	TUE
9447	0628 - 0636z	14 Apr	354 (x3) 88058 (x2) 354 (x3) 81996 (x2)	F5JBR	TUE
4197	0703z	14 Apr	337 (x3) 87400 (x2) 337 (x3) 81002 (x2)	F5JBR	TUE
4151.2	0729z	14 Apr	982 (x3) 26819 (x2)	F5JBR	TUE
4894	1158z	14 Apr	333 19008 (x2) 111 999 132 10 = 14156 15154 01354 30012 98755 41258 14487 63201 42136 46985 = 132 10 111 15154 111 000	F5JBR	TUE
4894	0840z	16 Apr	657 (x3) 19087 (x2) 657 (x3) 333 19087 (x2) 111 999 807 10 = 51327 49854 12354 79869 45602 13576 84510 32786 45213 14789 = 807 10 333 111 000	F5JBR	THU
5211	0848z	16 Apr	895 (x3) 23444 (x2) 895 (x3) 22744 (x2)	F5JBR	THU
9047	1310z	17 Apr	198 (x3) 36680 (x2) 111 000	F5JBR	FRI
6847	0733z	20 Apr	875 (x3) 79222 (x2)	F5JBR	MON
9051	0743z	21 Apr	751 (x3) 67267 (x2)	F5JBR	TUE
5852	0800z	21 Apr	768 (x3) 64523 (x2) 768 (x3) 65657	F5JBR	TUE
5847	1144z	21 Apr	278 (x3) 86805 (2) 278 (x3) 87463 (x2)	F5JBR	TUE
5867	1215z	21 Apr	893 (x3) 45123 (x2)	F5JBR	TUE
4934	0717z	22 Apr	839 (x3) 43322 (x2) 111 000	F5JBR	WED

M01b

March 2020:

3510//4605	1932z	05 Mar	'201' 137 32 = 91790 18585....	Good//Strong	MCW	BR/HFD	THU
	1932z	19 Mar	'201' 137 32 = 91790 18585....	Strong//Strong	MCW	BR	THU
3520//4585	210z	06 Mar	'582' 137 32 = 91790....			HFD	FRI
	2110z	27 Mar	'582' 137 32 = 91790 18585....	Good//Strong	MCW	BR	FRI
3535//4590	1910 – 1928z	02 Mar	'420' 137 32 = 91790 ... 97379 000	Good//Strong	MCW	BR	MON
	1910z	16 Mar	'420' 137 32 = 91790....			HFD	MON

3625//4940	2002z 2002z	13 Mar 20 Mar	'153' 137 32 = 91790 18585.... '153' 137 32 = 91790 18585....	Strong/Strong Good/Strong	MCW MCW	BR/HFD BR	FRI FRI
3645//4455	2015 – 2034z	02 Mar	'771' 137 32 = 91790 ... 97379 000	Strong//Strong	MCW	BR/HFD	MON
3715//4570	2040z 2040z	05 Mar 18 Mar	'477' 137 32 = 91790 18585.... '477' 137 32 = 91790....	Good//Strong	MCW	BR HFD	THU THU
April 2020:							
3510//4605	1830z 1832z 1832z	02 Apr 09 Apr 16 Apr	'201' 342 32 = 84937 ... 29343 000 '201' 342 32 = 84937.... '201' 342 32 = 84937 47638....	Fair//Good	MCW MCW	AB HFD BR	THU THU THU
3520//4585	2010z 2010z 2010z	03 Apr 10 Apr 24 Apr	'582' 707 34 = 87238 71711.... '582' 342 32 = 84937.... '582' 707 34 = 84937 47638....	[Note 2] Fair//Strong	MCW MCW	AB/BR/HFD HFD BR	FRI FRI FRI
3535//4590	1810z 1810z 1810z	06 Apr 13 Apr 27 Apr	'420' 342 32 = 84937 47638.... '420' 342 32 = 84937 ... 29343 000 '420' 342 32 = 84937 47638....	Good//Strong Fair//Good	MCW MCW MCW	BR/HFD AB/JPL BR	MON MON MON
3625 3625//4940	1902z 1902z 1902z	03 Apr 10 Apr 24 Apr	'153' 707 34 = 87238 71711.... (4940kHz NRH) '153' 342 32 = 84937.... '153' 707 34 = 84937 47638....	[Note 1] Good//Strong	MCW MCW	AB/BR HFD BR	FRI FRI FRI
3645//4455	1915z 1915z 1915z	06 Apr 13 Apr 27 Apr	'771' 342 32 = 84937 47638.... '771' 342 32 = 84937 47638.... '771' 342 32 = 84937 47638.... (4455kHz NRH)	Good//Good Strong//Good	MCW MCW MCW	BR/HFD BR BR	MON MON MON
3715//4570	1940z	09 Apr	'477' 342 32 = 84937 47638....	Good//Strong	MCW	BR/HFD	THU

[Note 1] The message sent on Friday, 03 April was sent for one day only. This is unusual, as normally only one message is sent per month.

At start of transmission carriers present with no modulation which was found 2.2kHz higher on both frequencies using CW.
By 2020z both frequencies were sending the correct MCW signals.

Was an operator error responsible for both problems? A wrong message & incorrectly set modulation, perhaps?

[Note 2] The message sent on Friday, 03 April was sent for one day only. MCW modulation was fully present on this transmission.

M01b 3535//4590kHz 1910z 02 March 2020 420 (R4m) 137 137 32 32 == 91790 18585 96729 98089 93236 18317 57325 51031 25502 29716 80821 17786 99903 18554 78148 41810 65999 40126 60539 30547 00322 70771 65362 09919 33579 69442 23366 97429 54771 28895 46985 97379 == 137 137 32 32 000 <i>Courtesy BR</i>	M01b 3510//4605kHz 1830z 02 April 2020 201 (R4m) 342 342 32 32 == 84937 47638 09958 47382 47839 47638 84031 21436 93847 90361 66478 34201 38729 94873 04709 31352 84264 03764 38722 53772 10026 73878 53920 48399 00488 27368 22315 36280 26154 27693 27665 29343 == 342 342 32 32 000 <i>Courtesy AB</i>
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M08a XVIII ICW / CW, some MCW
No reports

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

16284/15984/14784	0010/0030/0050z 0010/0030/0050z 0010/0030/0050z	13 Mar 20 Mar 23 Mar	297 1 (9290 118) 29400 96493 ... 51586 95397 297 1 (5720 126) 95018 54495 ... 14121 96058 297 000	(Via SDR Khabarovsk) (Via SDR Khabarovsk) (Via SDR Khabarovsk)	Danix Danix Danix/HFD	FRI FRI MON
17463/16263/15863	0100/0120/0140z 0100/0120/0140z 0100/0120/0140z	12 Mar 24 Mar 31 Mar	428 1 (8460 96) 84725 18204 ... 14125 76805 428 1 (510 104) 06680 51332 ... 78785 05435 428 1 (9251 126) 60867 94360 ... 11584 42678	(Via SDR Khabarovsk) (Via SDR Khabarovsk) (Via SDR Khabarovsk)	Danix Danix/HFD Danix	THU TUE TUE
14837/13937/12137	0010/0030/0050z 0010/0030/0050z 0010/0030/0050z 0010/0030/0050z 0010/0030/0050z	03 Apr 06 Apr 13 Apr 20 Apr 27 Apr	891 000 891 1 (7012 16) 29592 85103 67002 28621 891 1 (5392 40) 15389 67117 ... 34495 40372 891 1 (6649 36) 41419 46335 ... 05469 66711 891 891 891 000	(Via SDR Khabarovsk) (Via SDR Khabarovsk) (Via SDR Khabarovsk) (Via SDR Khabarovsk) (Via SDR Khabarovsk)	Danix Danix Danix/HFD Danix Danix	FRI MON MON MON MON

European M12 Logs

March 2020:

New scheds in bold type

5863/7463/---	0030/0050/0110z	10 Mar	841 000	Same I.D. as 0800/20/40z TUE/WED		Good	E.SMITH	TUE
	0030/0050/0110z	13 Mar	841 000			Good/Clear	E.SMITH	FRI
	0030/0050/0110z	20 Mar	841 000			Good/Clear	E.SMITH	FRI
	0030/0050/0110z	24 Mar	841 1 (345 107)	25339 94554 ...	01325 05271 000 000	Good/Poor/Weak	E.SMITH	TUE
8126/7526/6826	2200/20/40z	06 Mar	178 1 (6910 112)	02337 28765 ...	77214 62569 000 000		E.SMITH/ Gert/HFD	FRI
	2200/20/40z	07 Mar	178 1 (6910 112)	02337 28765 ...	77214 62569 000 000	Weak/Poor/Good	E.SMITH	SAT
	2200/20/40z	14 Mar	178 1 (7858 78)	80596 98163 ...	40771 83841 000 000		BR/E.SMITH	SAT
	2200/20/40z	20 Mar	178 1 (7858 78)	80596 98163 ...	40771 83841 000 000	Weak/Good/Good	E.SMITH	FRI
	2200/20/40z	21 Mar	178 1 (7858 78)	80596 98163 ...	40771 83841 000 000		BR/E.SMITH	SAT
	2200/20/40z	27 Mar	178 000				BR	FRI
	2200/20/40z	28 Mar	178 000				BR	SAT
8164/6964/5764	2210/30/50z	02 Mar	197 1 (6494 121)	46480 16794 ...	42471 87958 000 000		E.SMITH	MON
	2210/30/50z	05 Mar	197 1 (6494 121)	46480 16794....			BR/E.SMITH	THU
	2210/30/50z	09 Mar	197 000			Good/Clear	E.SMITH	MON
	2210/30/50z	16 Mar	197 1				HFD	MON
	2210/30/50z	19 Mar	197 000			Poor/Good	E.SMITH	THU
	2210/30/50z	23 Mar	197 1 (561 87)	39124 15630 ...	58085 78670 000 000		BR/E.SMITH	MON
	2210/30/50z	26 Mar	197 1 (561 87)	39124 15630....			BR	THU
2210/30/50z	30 Mar	197 000				BR	MON	
9317/10484/11552	0530/0550/0610z	03 Mar	135 1 (9412 104)	33538 87696 ...	48695 15723 000 000		E.SMITH/HFD	TUE
	0530/0550/0610z	10 Mar	135 1 (2494 107)	20131 50932 ...	30447 30945 000 000	Fair/Good/Good	E.SMITH	TUE
	0530/0550/0610z	17 Mar	135 1 (1037 104)	37501 02386 ...	76693 67171 000 000	Good/Good/Fair	E.SMITH	TUE
	0530/0550/0610z	24 Mar	135 1 (9011 104)	63624 90114 ...	38097 26732 000 000	Good	E.SMITH	TUE
9367/10467/12167	0600/20/40z	01 Mar	341 1 (239 123)	51727 20871 ...	08582 83852 000 000	Good, QSB2	E.SMITH	SUN
	0600/20/40z	03 Mar	341 000				E.SMITH/HFD	TUE
	0600/20/40z	08 Mar	341 000				E.SMITH	SUN
	0600/20/40z	10 Mar	341 1 (5816 143)	98435 48832 ...	56945 97369 000 000	Good/Clear	E.SMITH	TUE
	0600/20/40z	15 Mar	341 1 (5816 143)	98435 48832 ...	56945 97369 000 000	Good/Clear	E.SMITH	SUN
	0600/20/40z	17 Mar	341 1 (171 84)	12208 08857 ...	81692 85324 000 000	Good/Clear	E.SMITH	TUE
	0600/20/40z	22 Mar	341 1 (171 84)	12208 08857 ...	81692 85324 000 000	Good/Clear	E.SMITH	SUN
	0600/20/40z	24 Mar	341 1 (259 111)	72693 48050 ...	86122 17434 000 000	Good	E.SMITH	TUE
	0600z	29 Mar	341 1 (259 111)	72693 48050 ...	86122 17434 000 000		F5JBR	SUN
10172/9072/---	2050/2110/2130z	04 Mar	105 000				E.SMITH	WED
	2050/2110/2130z	11 Mar	105 000	10172kHz NRH.	9072kHz Very weak		BR/E.SMITH	WED
	2050/2110/2130z	13 Mar	105 000				HFD	FRI
	2050/2110/2130z	18 Mar	105 000				BR	WED
	2050/2110/2130z	20 Mar	105 000			Weak/Weak	E.SMITH	FRI
	2050/2110/2130z	25 Mar	105 000				BR/E.SMITH	WED
	2050/2110/2130z	27 Mar	105 000				BR	FRI
10267/9267/8067	0110/30/50z	05 Mar	229 1 (6988 98)	03870 97300 ...	59211 59694 000 000	Weak/Poor/Poor	E.SMITH	THU
	0110/30/50z	08 Mar	229 1 (6988 98)	03870 97300 ...	59211 59694 000 000	Weak/Fair/Fair	E.SMITH	SUN
	0110/30/50z	12 Mar	229 1 (7577 68)	72800 58140 ...	99177 48482 000 000	Weak	E.SMITH	THU
	0110/30/50z	15 Mar	229 1 (7577 68)	72800 58140 ...	99177 48482 000 000	Poor/Fair/Good	E.SMITH	SUN
	0110/30/50z	19 Mar	229 1 (6270 70)	47509 44293 ...	03460 64032 000 000	Poor	E.SMITH	THU
	0110/30/50z	22 Mar	229 1 (6270 70)	47509 44293 ...	03460 64032 (Only 8067kHz audible)		E.SMITH	SUN
	0110/30/50z	26 Mar	229 000			Poor	E.SMITH	THU
12205/13559/14728	1530/1550/1610z	11 Mar	973 1 (1162 83)	93281 15317 ...	10272 14501 000 000	Good	E.SMITH	WED
12162/11566/10711	1710/30/50z	04 Mar	546 1 (8917 109)	04204 58951....			BR	WED
	1800/20/40z	05 Mar	546 1 (5436 105) 6447	Very weak		BR/HFD	THU
	1710/30/50z	11 Mar	546 1 (2840 107)	9267 97789 ...	63082 92259 000 000		BR/E.SMITH	WED
	1700/20/40z	12 Mar	546 1 (9837 110)	96544 38295....			BR	THU
	1800/20/40z	12 Mar	546 1 (2926 106)	95376 23119....			BR/ER	THU
	1710/30/50z	18 Mar	546 1 (6452 110)	61784 22221....			BR/HFD	WED
	1700z	19 Mar	546 1 (5157 108)	64624 81282 ...	47773 11964 000 000		Gert	THU
	1800/20/40z	19 Mar	546 1 (6161 111)	43988 2 ...9....	Weak		BR	THU
	1710/30/50z	25 Mar	546 1 (8844 109)	98317 59803 ...	91510 72186 000 000		BR/E.SMITH	WED
	1700/20/40z	26 Mar	546 1 (3828 108)	22733 73033....			BR	THU
1800/20/40z	26 Mar	546 1 (6702 112)	43976 59311....			BR	THU	
13952/13452/12152	1310/30/50z	04 Mar	941 000				E.SMITH	WED
	1310z	06 Mar	941 000				Gert/HFD	FRI
	1310/30/50z	13 Mar	941 1 (275 109)	88340 04013 ...	04995 88493 000 000		BR/E.SMITH	FRI
	1310/30/50z	18 Mar	941 1 (275 109)	88340 04013 ...	04995 88493 000 000		BR/E.SMITH	WED
	1310/30/50z	20 Mar	941 1 (275 109)	88340 04013 ...	04995 88493 000 000	Good/Strong/Good	E.SMITH	FRI
1310/30/50z	25 Mar	941 000				BR/E.SMITH	WED	
14377/13461/12114	2000/20/40z	12 Mar	317 1			(Via SDR Russia)	HFD	THU

15848/17448/19148	0800/20/40z	01 Mar	841 000				AB/E.SMITH/HFD	SUN
	0800/20/40z	04 Mar	841 000			Weak/Good	E.SMITH	WED
	0800/20/40z	08 Mar	841 000			Poor/Poor	E.SMITH	SUN
	0800/20/40z	11 Mar	841 1 (374 110)	43197 13568 ... 95241 98501 000 000		Fair/Poor/Weak	E.SMITH	WED
	0800/20/40z	15 Mar	841 1 (374 110)	43197 13568 ... 95241 98501 000 000		Fair/Poor/Weak	E.SMITH	SUN
	0800/20/40z	18 Mar	841 000			Fair/Fair	E.SMITH	WED
	0800/20/40z	22 Mar	841 000			Poor/Fair	E.SMITH	SUN
	0800/20/40z	25 Mar	841 000			Fair/Readable	E.SMITH	WED
16276/14876/13376	1400/20/40z	02 Mar	283 000			Weak/Fair	E.SMITH	MON
	1400/20/40z	04 Mar	283 000				BR/E.SMITH	WED
	1400/20/40z	09 Mar	283 1 (4968 69)	65324 21919 ... 65934 70701 000 000			BR/E.SMITH	MON
	1400/20/40z	11 Mar	283 1 (4968 69)	65324 21919 ... 65934 70701 000 000			BR/E.SMITH	WED
	1400/20/40z	16 Mar	283 1 (4968 69)	65324 21919 ... 65934 70701 000 000		Weak/Weak/Good	E.SMITH	MON
	1400/20/40z	18 Mar	283 1 (4968 69)	65324 21919 ... 65934 70701 000 000			BR/E.SMITH/HFD	WED
	1400/20/40z	23 Mar	283 000				BR/E.SMITH	MON
	1400/20/40z	25 Mar	283 000				BR/E.SMITH	WED
April 2020:								
6854/8154/---	0030/0050/0110z	17 Apr	813 000				Gert	FRI
7575/8175/9175	2100/20/40z	03 Apr	511 000				BR	FRI
	2100/20/40z	04 Apr	511 000				HFD	SAT
	2100/20/40z	10 Apr	511 1 (2325 67)	70031 63337....			BR	FRI
	2100/20/40z	11 Apr	511 1 (2325 67)	70031 63337....			BR	SAT
	2110/30/50z	17 Apr	511 1 (2325 67)	70031 63337....			BR	FRI
	2110/30/50z	24 Apr	511 000				BR	FRI
	2110/30/50z	25 Apr	511 000				BR	SAT
7807/9207/10507	000/20/40z	14 Apr	825 1 (304 93)	60841 17635 ... 34692 54058 000 000			Gert/HFD	TUE
9207/10507	0520/40z	26 Apr	825 1 (4638 109)	20518 49677 ... 60753 55361 000 000			F5JBR	SUN
10572/9372/8172	2110/30/50z	06 Apr	531 000				BR/HFD	MON
	2110/30/50z	09 Apr	531 000				BR	THU
	2110/30/50z	13 Apr	531 1 (567 74)	24587 18625....			BR	MON
	2110/30/50z	16 Apr	531 1 (567 74)	24587 18625....			BR	THU
	2110/30/50z	27 Apr	531 1 (4522 89)	82897 38921....			BR	MON
	2110/30/50z	30 Apr	531 1 (4522 89)	82897 38921....			BR	THU
10904/10204/9304	0700/20/40z	02 Apr	923 1				HFD	THU
11566	1730z	01 Apr	546 1 (6781 108)			(SDR Utwente)	ER	WED
12162/11566/12162	1700/20/40z	02 Apr	546 1 (5300 108)	45997 43050....			BR/ER	THU
12162	1800z	02 Apr	546 1 (9194 109)			(SDR Utwente)	ER	THU
	1710/30/50z	08 Apr	546 1 (1344 110)	26178 93391....			BR	WED
	1700/20/40z	09 Apr	546 1 (2374 111)	60280 74437 ... 97733 67043 000 000			Gert	THU
	1800/20/40z	09 Apr	546 1 (9427 104)	93440 19488....			BR	THU
	1700/20/40z	16 Apr	546 1 (2869 112)	00204 60773....			BR	THU
	1800/20/40z	16 Apr	546 1 (5661 105)	45584 31069 ... 49565 37823 000 000			Gert	THU
	1710/30/50z	22 Apr	546 1 (5199 110)	70314 05381 ... 74346 22011 000 000			BR/Gert	WED
	1700/20/40z	23 Apr	546 1 (1882 106)	34999 57970....			BR	THU
	1800/20/40z	23 Apr	546 1 (3862 108)	66204 808 .1....			BR	THU
11566	1730z	29 Apr	546 1 (1819 113)	84278 18745 ... 41684 45004 000 000			Gert	WED
	1700/20/40z	30 Apr	546 1 (4697 111)	92843 37790....			BR	THU
	1800/20/40z	30 Apr	546 1 (8153 105)	34067 10938....			BR	THU
12174/11474/10974	1210/30/50z	03 Apr	149 000				BR/HFD	FRI
	1210/30/50z	08 Apr	149 1 (155 134)	08546 47227 ... 12980 16108 000 000			Gert	WED
11474	1230z	10 Apr	149 1 (155 134)	08546 47227 ... 12980 16108 000 000			Gert	FRI
	1210/30/50z	15 Apr	149 1 (155 134)	08546 47227....			BR	WED
	1210/30/50z	17 Apr	149 1 (155 134)	08546 47227 ... 12980 16108 000 000			Gert	FRI
12174	1210z	22 Apr	149 000				Gert	WED
	1210/30/50z	29 Apr	149 000				BR	WED
13453/12153/---	1950/2010/2030z	01 Apr	414 000				HFD	WED
	1950/2010/2030z	03 Apr	414 000				BR	FRI
	1950/2010/2030z	08 Apr	414 000				BR	WED
	1950/2010/2030z	15 Apr	414 000				BR	WED
	1950/2010/2030z	22 Apr	414 000			V.weak	BR	WED
	1950/2010/2030z	24 Apr	414 000			Strong	BR	FRI
	1950/2010/2030z	29 Apr	414 000				BR	WED
18524/17424/15824	1400/20/40z	01 Apr	548 1 (5599 110)	76607 98471....		18524kHz NRH	BR	WED
	1400/20/40z	06 Apr	548 1				HFD	MON
	1400/20/40z	08 Apr	548 1			Only audible on 15824kHz – V.Weak	BR	WED
	1400/20/40z	15 Apr	548 1			Only audible on 15824kHz – V.Weak	BR	WED
	1400/20/40z	20 Apr	548 1			Audible on 17424kHz & 15824kHz – V.Weak	BR	MON
	1400/20/40z	22 Apr				NRH on all three freqs.	BR	WED
	1400/20/40z	27 Apr				NRH on all three freqs.	BR	MON
	1400/20/40z	29 Apr	548 1 (253 42)	95855 32266....		Only audible on 15824kHz – Weak	BR	WED

M12 17463/16263/15863kHz 0100/0120/0140z 12 Mar 2020
428 428 428 1 (R2m) 8460 96 8460 96
84725 18204 59114 40989 66676 29547 93690 13301 19158 13419 89291 38208 26027 78006 49087 74896 89277 43141 44605 42608 08423 23852 18912 31508 19613 67485 25310 86850 27074 55140 20023 84750 59844 29341 39577 20316 00509 69807 65633 92799 46901 82866 94426 51349 43138 75203 10106 85311 63306 01349 78676 28693 06881 06813 16759 67319 23684 44866 57387 70191 78202 62907 26662 31163 04778 55190 90105 54802 73226 12499 00938 73866 16228 67009 84799 70611 91697 94925 83507 63099 40795 25604 50979 83994 54253 41075 18156 58584 15331 57544 98364 39671 14543 91036 14125 76805 000 000
<i>Courtesy Danix</i>

M12 10267/9267/8067kHz 0110/0130/0150z 05 Mar 2020
229 229 229 1 (R2m) 6988 98 6988 98
03870 97300 47077 00264 01264 72726 06379 77129 72457 79972 16194 80245 44975 24372 78471 06231 65472 51038 49242 20574 96937 42662 81059 76505 91382 65206 99302 06962 95622 03933 87048 94215 66638 83972 47065 85041 52164 26934 19194 06771 88745 94087 80805 52516 78036 24927 65578 20254 44585 22485 64509 60565 20689 24350 11833 52270 85883 09608 00351 69058 43912 13926 17245 66794 15599 03025 47103 18407 68511 27615 54758 05708 63895 86928 72204 80268 69844 01354 47226 55058 97560 33331 37055 21286 13914 26745 06251 85876 43384 12377 89254 30663 19002 13215 73637 70877 59211 59694 000 000
<i>Courtesy E.SMITH</i>

M14 IA MCW / ICW Short 0

March 2020:

4650	0900z	07 Mar	523 (200 33) = 62314 55562 ... 60803 45231 200 33 = 00000	[Note 1]	MCW	AB/ER/HFD	SAT
	0900z	14 Mar	523 (200 33) = 62314 55562 ... 60803 45231 200 33 = 00000 (SDR Poland)		MCW	ER	SAT
	0900z	21 Mar	523 (200 33) = 62314 55562 ... 60803 45231 = 200 33 00000		MCW	AB	SAT
4730	0800z	07 Mar	523 (200 33) = 62314 55562 ... 60803 45231 200 33 = 00000		MCW	AB/ER/HFD	SAT
	0800z	14 Mar	523 (200 33) = 62314 55562 ... 60803 45231 200 33 = 00000 (SDR Poland)		MCW	ER	SAT
	0800z	21 Mar	523 (200 33) = 62314 55562 ... 60803 45231 = 200 33 00000	[Note 2]	MCW	AB	SAT
	0800z	28 Mar	523 (200 33) = ????? 45890 ... 54546 12213 = 200 33 00000	Same DK different msg.	ER		SAT
5474	1920z	25 Mar	537 (144 33) = 12579 45890 ... 54546 12213 = 144 33 00000		MCW	AB/HFD	WED
5940	0820z	24 Mar	346 (144 33) = 12579 45890 ... 54546 12213 = 144 33 00000		MCW	AB	TUE
5960	1822z	10 Mar	346 (144 33) = 12579 45890 ... 54546 12213 = 144 33 00000	[Note 3]	MCW	AB/HFD	TUE
12153	0635z	16 Mar	441 (962 41) = 94169 94035 ... 54537 70265 = 962 41 00000		CW	AB	MON
15994	0945 (IP) - 1016z	26 Mar	(In Progress) 26193 16274 40687 395 238 00000	Strong/Clear	CW	E.SMITH	THU
17458	0930 - 0934z	10 Mar	617 00000	Mostly good/Readable (SDR Enschede)	CW	E.SMITH	TUE
	0930z	25 Mar	617 (395 238) = 25378 00381 ... 16274 40687 = 395 238 00000		CW	AB/E.SMITH/HFD	WED

[Note 1] Shifts to letters after the ID and back to figures halfway the message.
Stutter or stuck character on grp22 sending figure 7 repeatedly 83 times before continuing. *AB*
The M14 Signal has become very rough *ER*

[Note 2] Stutter or stuck character again – this time on both grps14 & 23, again multiple 7s sent.
(19 & 64 x 7s respectively). The repeat at 0900z also with errors – but no multiple 7s. *AB*

[Note 3] Test at 1815z on 5947kHz. Single 5FGs then changed freq to 5960 kHz *AB*

April 2020:

4650	0900z	18 Apr	523 (200 33) = 62314 55562 ... 60803 45231 200 33 = 00000		MCW	AB/ER	SAT
	0900z	25 Apr	523 (200 33) = 60945 70231 ... 47800 81362 200 33 = 00000		MCW	AB	SAT
4730	0800z	04 Apr	523 (200 33) = Repeat of 28/03/20 (SDR Poland)		MCW	ER	SAT
	0800z	18 Apr	523 <i>Pause</i> 22222222 0000000000 0333 033 = 8 = 60989 06945 ... 47800 81362 = = Very rough CW tone, slower Morse.		ER		SAT
	0800z	25 Apr	523 (200 33) = 60945 70231 ... 47800 81362 200 33 = 00000		MCW	AB	SAT
10545	1231z	16 Apr	458 00000			F5JBR	THU
17458	0930z	25 Apr	617 (204 198) = 72831 02592 ... 86408 40630 = 204 198 00000			AB	SAT

M14 5960kHz 1822z 10 March 2020
346 (R4m) 144 144 33 33 = =
12579 45890 32157 35231 24680 87431 13579 53467 21457 87641 67676 12457 08642 12560 09764 34670 87542 43432 14146 07411 12367 09876 54321 12890 09216 34670 01928 88347 14570 56900 76678 54546 12213 = =
144 144 33 33 00000
<i>Courtesy AB</i>

M14 4730kHz 0800z 14 March 2020
523 (R4m) 200 200 33 33 = =
62314 55562 90987 85244 89073 31254 66687 99922 33331 70723 88003 70707 22890 40467 68790 20341 53124 64523 64123 56654 09602 70975 30687 24806 85213 57235 03451 20783 40238 45123 80931 60803 45231 = =
200 200 33 33 00000
<i>Courtesy AB</i>

M23 O ICW
No reports

Morse Stations - Not Number Related

M51 XIX

3881//6825 100 grp 5-ltr messages with headers
No reports – (M51b currently in use).

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

3881//6825
1130 - 1213z 27 Apr Lundi-Leçon 11-2/1 Codé 11-2/2 Clair, 11-2/3 Codé, 11-2/4 Clair (420 grps/hr) BR MON
1130 - 1157z 30 Apr Jeudi-Leçon 14-2/1 Codé, 14-2/2 Clair, 14-2/3 Codé, 14-2/4 Clair (840 grps/hr) BR THU

M51b Non-stop 5-character groups composed of M51a messages on 3881//6825kHz

3881//6825

The French M51 CW station has remained busy during March and April despite the Coronavirus lockdown which, apparently, has been even more extreme in France than in the UK. The two frequencies used by this station, 3881 and 6825, have been noted with fast CW at most times of the day with the lower frequency much the stronger signal of the two with only one or two exceptions. (Thanks to PoSW)

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).

2978	3346	4062	5120	6616	7125	8282	9012
	3362	4106	5159	6667	7354	8537	9067
	3366	4119	5253	6688	7676	8866	
	3521	4123	5381	6740	7878	8888	
	3531	4513	5468	6856			
	3545	4860	5501				
	3659		5525				
	3784		5656				
			5666				
			5688				
			5714				
			5751				
			5782				
			5811				

New Schedules for Mar / Apr 2020:

From logs submitted from JPL & F5JBR

5691//7653	Sending different Round Slips	First heard 24 April	V HFL2 (x3) DE M6NY (x2) on 5691kHz V 7TEF (x3) DE BCK4 (x2) on 7653kHz
5858	New Round Slip for this frequency	First heard 08 March	V 3D1U (x3) DE G25H (x2)
7653	New Round Slip for this frequency	First heard 16 March	V 7TEF (x3) DE 8R4F (x2)
	New Round Slip for this frequency	First heard 20 April	V 7TEF (x3) DE BCK4 (x2)
	New Round Slip for this frequency	First heard 24 April	V 8UFV (x3) DE CV4K (x2)
8156	New frequency for this Round Slip	First heard 19 April	V JKDJ (x3) DE SLBC (x2)

(Following a message monitored by JPL SLBC will from May 2020 be reclassified as message format suggests M95)

Freq in KHz	Call Slip
2984//NRH	V QWS1 (x3) DE 87DS (x2)
3238//4870	V M8JF (x3) DE RIS9 (x2)
3238//4870//6874//8157	V M8JF (x3) DE RIS9 (x2)
3842//NRH	V 8FBH (x3) DE 5J9K (x2)
3842//NRH	V 8FDH (x3) DE 5J9K (x2)
3842//NRH	V 3D1U (x3) DE G25H (x2)
3842//4135	V 3D1U (x3) DE G25H (x2)
3850//4860//6840	Q2M (x3) DE NYZ (x2) (R5) QSA ? K (R5)
4131//NRH	V JKDJ (x3) DE SLBC (x2)
4131//4886	V JKDJ (x3) DE SLBC (x2)
4131// 4886.6	V JKDJ (x3) DE SLBC (x2)
4192//NRH	V 2B7D (x3) DE 3GR1 (x2)
4192//4489	V 2B7D (x3) DE 3GR1 (x2) (Different R/Slip)
4489//NRH	V HFL2 (x3) DE M6NY (x2)
4489//4192	V HFL2 (x3) DE M6NY (x2) (Different R/Slip)
4620//NRH	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
4720//NRH	VVV WNF (x3) DE FXM (x2)
4720//5150	VVV WNF (x3) DE FXM (x2)
4860// NRH	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?
4860// 6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?
4860// 6840//8240	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?
4860// 6840//8240//8390	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?
4870//NRH	V M8JF (x3) DE RIS9 (x2)
4870//6874//8157	V M8JF (x3) DE RIS9 (x2)
4870//8157	V M8JF (x3) DE RIS9 (x2)

Freq in kHz	Call Slip
4886//NRH	V JKDJ (x3) DE SLBC (x2)
4898//NRH	V QWS1 (x3) DE 87DS (x2)
5177//NRH	V JKDJ (x3) DE SLBC (x2)
5588//NRH	V 3D1U (x3) DE G25H (x2)
5691//NRH	V HFL2 (x3) DE M6NY (x2)
5691//7653	V HFL2 (x3) DE M6NY (x2) (Different R/Slip)
5858//NRH	V 8FDH (x3) DE 5J9K (x2)
5858//NRH	V 3D1U (x3) DE G25H (x2)
5858//10563	V 8FDH (x3) DE 5J9K (x2) (Different R/Slip)
5858//10563	V 3D1U (x3) DE G25H (x2) (R/S 10563 faulty)
6840//8290	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
6840//8290//8390//10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
6874//8157	V M8JF (x3) DE RIS9 (x2)
7620//8350	V WNF(x3) DE FXM (x2) (R5) (Hand Sent)
7653//NRH	V 8RVF (x3) DE CV4K (x2)
7653//NRH	V 8UFV (x3) DE CV4K (x2)
7653//NRH	V 7TEF (x3) DE 8R4F (x2)
7653//NRH	V 7TEF (x3) DE BCK4 (x2)
7653//5691	V 7TEF (x3) DE BCK4 (x2) (Different R/Slip)
8157//NRH	V M8JF (x3) DE RIS9 (x2)
8360//NRH	Q2M de NYZ VVV
10563//NRH	V 3D1U (x3) DE G25H (x2)
10563//5858	V 3D1U (x3) DE G25H (x2) (Different R/Slip)

2978	JGHD	1407z	16 Mar	Various calls – Many error corrections JGHD DE JU4L, KJMT DE SBFR, R QSA 3 IEC BT A EEEE	(Remote tuner Novosibirsk) (Exercise related)	JPL	MON
3238	RIS9	1707z	03 Mar	RIS9 Wkg M8JF msg in Broadcast & M8JF de RIS9 V NR0304 CK 94 04 03 04 0105 RMKS 6545 TO 6895 8675 6175	Via SDR Japan (Repeat Message 2 times)	F5JBR	TUE
3346		1433z (IP)	07 Mar	IEC SJU7 AR K (Exercise related) NR 066/EX CK 91 68 0308 RMKS 0547 TO 0539 K	(Remote tuner Novosibirsk)	JPL	SAT
3362	OI8Y	1038z	03 Mar	NR0328/EX 1700 = WX2F/3WKQ AR QSY 2	Via SDR Japan	F5JBR	TUE
	KYU4	1041z	03 Mar	NR 4187/EX 1704 = ABF3/4FWK AR			
	1M9B	1043z	03 Mar	1M9B Wkg A0DF in simplex NR 05 CK 291 98 03031340 RMKS 1081 TO 9737	Via SDR Japan	F5JBR	TUE
	OI8Y	1049z	03 Mar	NR0328/EX 1700 = WX2F/3WKQ AR K QSY 12 AR	Via SDR Japan	F5JBR	TUE
3784	4UE8	1008z	03 Mar	4UE8 Wkg HNTL (QSO and MSG) in simplex NR88/EX 18 10 RMKS CQ = Y5K3/R3A4 AR	Via SDR Japan	F5JBR	TUE
4062	TBZ3	0023z	07 Mar	DFPA (x3) DE TBZ3 (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	SAT
4119	H7VL	1413z (IP)	07 Mar	Calls to J1RS, K5YS, Q5QH & Msg IEC BT 2538 AR K IEC BT 2521 AR K (Exercise related) IEC BT 2536 AR K NR 7424/EX 2217 RMKS CQ BT TBK/WSF AR K NR 7425 CK 200 46 0307 2200 RMKS CQ K	(Remote tuner Novosibirsk)	JPL	SAT
4123		1400z	19 Apr	DE 8RVC K R GI40 DE V3JV R QSA 2 QSA ? K IEC BT 8135 AR K (Normally associated with exercise) NR 148/EX 2200 RMKS 9520 TO 9976 BT AMJ2/CKW4 AR NR 141/EX 2202 RMKS 9976 TO 9520 BT WAU0/I3IS AR NR 149/EX CK 99 16 0419 2206 RMKS 9520 TO 9976 K NR 142/EX CK 99 16 0419 2220 RMKS 9976 TO 9520 K (Note: Logged as M95 as I suspect this to be associated with SLBC)	(Remote tuner Novosibirsk)	JPL	SUN
5120	G1JY	1001z	11 Mar	G1JY Wkg DXGI EGRT 1J9W 279B T8D6 5AUH (QSO and MSG) (The outstations respond using call signs X2C4 65IO B4BX 47D2 4X8U) in Simplex NR 0324 CK85 ... 03 11 1800 RMKS CQ TEXT groups 4 letters/figures	(SDR JAPAN)	F5JBR	WED

5381		1114z (IP) 19 Mar	OS/PJ BT (Hand sent) 1224/EX 1914 BT 51OS/PJ.. AR	(Remote tuner Novosibirsk)	JPL	THU
5468		1132z (IP) 09 Apr	B2H3/N4C1 AR (IP – Machine sent – 1132z) SF F F NR 1259/EX 2032 BT B2H3/N4C1 AR	(Remote tuner Hebei)	JPL	THU
5666	QWB2	0700z 04 Mar	QWB2 Wkg L7DA (QSO and MSG) in simplex NR 13 CK91 63 03 04 1646 RMKS VIAJ TO VITV	Via SDR Japan	F5JBR	WED
5751		1108z (IP) 28 Mar	NR 0009/EX CK 21 24 0328 1914 13IBX TO XIHQ BT	(Remote tuner Novosibirsk)	JPL	SAT
7676k		0810z (IP) 23 Apr	NR 0025 NR 0020 NR 0020 CK 15 .. 11 0423 1605 NR 102. CK 50 11 0423 1605	(Remote tuner Hong Kong)	JPL	THU
8156	SLBC	0700z 19 Apr	V JKDJ (x3) DE SLBC (x2) NR 033/CCK CK 19. 10 0419 1500 RMKS 9702 TO 9842 9865 9867 9810 9836 9962 996. BT Note: Message format indicates M95 family. Extremely rare for this Round Slip to send a message.	(Remote tuner Novosibirsk)	JPL	SUN
8537		0755z (IP) 30 Mar	7 1555 RMKS 2966 TO 2482 (IP – Hand sent – 0755z) RMKS 2966 TO 2482 BT COMM/1610/W1994/2966/2482 AR QSL ? HR WK NR 1260 HR WK NR 1260 SK SK	(Remote tuner Novosibirsk)	JPL	MON
9012		0846z (IP) 06 Mar	4616 TO 4996 K (Hand sent) AT5U D3D3 5.AU 4757 (Cont'd)	(RemoteNovosibirsk)	JPL	FRI

M89 4119kHz 1413 (IP) - 1421z 07 March 2020

R IEC BT 2538 AR K (IP – Hand sent – 1413z)
R KP
VV J1RS DE H7VL K (Other stns N/H on this freq)
R QSA ? K (1414z)
IEC BT 2521 AR K (Exercise related)
R KP
VV K5YS DE H7VL K (1415z)
R QSA ? K
R
IEC BT 2536 AR K
R KP
VV Q5QH DE H7VL K
QSA 1 QSA 2 KP HR F GA K
R F NR 7424/EX 2217 RMKS CQ BT
T6K BT EEEEE BT TBK/WSF AR BT
TBK/WSF AR K (1418z)
R HR MSG GA K
MSG NR 7425 CK 200 46 02 EEEEE
MSG NR 7425 CK 200 46 0307 2200 RMKS CQ K (1420z)
MSG IP BT BT
3.D4 A5T3 UTA7 64UD N5UT DT4A 3U7N A65T DU5N 4N36
(Cont'd – 1421z)
Courtesy JPL

M89 4860kHz 1054 (IP) - 1147z 20 March 2020

75DT T3UT 3AD7 55D7 N37D II BT BT BT
(IP – Machine sent – Very fast - 1054z)

T7N4 A74A N3NT N745 (Cont'd – 1055z)
II BT BT BT BT 3NN7 7AA5 UDA3 3D6U 6NTT (Cont'd – 1059z)
II BT BT BT BT 6N43 UTA6 34D5 7D73 DT4T (Cont'd – 1103z)
II BT BT BT 547D T3T7 5N4D U63T 7DDU (Cont'd – 1107z)
II BT BT BT AA76 7D54 A3N7 367A (Cont'd – 1112z)
II BT BT II BT BT 77DN 4336 37D3 5DAT (Cont'd – 1116z)
II BT BT BT 4A4T UU5U AAT4 (Cont'd – 1120z)
III BT BT BT D43A A3D5 47A4 6A46 T67A (Cont'd – 1125z)
III BT BT BT 4TD5 DAUT TTT6U (Cont'd – 1129z)
III BT BT BT N II 465NNA 77DU A3T6 4NT4 7735 (Cont'd – 1133z)
III BT BT BT TUDT 6ATT UAN5 D4AU UU5A (Cont'd – 1138z)
III BT BT BT TUU5 554A N5 ? N5DD T4N7 TNU3 (Cont'd – 1142z)
III BT BT BT 3555 A353 ADT3 46D7 UA7A 673D (Cont'd – 1146z)

(Suddenly stopped 1147z) (Monitored until 1220z)

NYZ 1220z sked now active - much weak than previous station
Courtesy JPL

DP Stations

4832	1631 - 1638z	27 Mar	CQ DE DP91 U	CQ de DP91 U DP91 (x3) de CQ de DP91	F5JBR	FRI
6212//7832	1002 - 1010z	11 Mar	CQ (x3) DE DP91 (x2) V	HR NIL SK GB (Remote tuner Novosibirsk)	JPL	WED
	1005z	16 Mar	CQ (x3) DE DP91 (x2) V	(Remote tuner Novosibirsk)	JPL	MON
	1000z	27 Mar	CQ (x3) DE DP91 (x2) V	HR NIL SK GB (Remote tuner Novosibirsk)	JPL	FRI

M95 O XSV, XSV70, XSV85

M95 Morse Logs (Bold type indicates new logging)

3968//NRH	Call Sign SAQC (Previously 3A7D) Suspect change in frequency and Round Slip for DKG6 DE 3A7D	1753z 03 Mar	V YHxD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	TUE
3968//6936	Call Sign SAQC (Previously 3A7D) Suspect change in frequency and Round Slip for DKG6 DE 3A7D	02 Mar	V YHxD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	MON
1808z		1741z 05 Mar	V YHxD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Khabarovsk)	JPL	THU
		1446z 15 Mar	V YHxD (x3) DE SAQC (x2) (IP - Cont'd)		F5JBR	SUN
		2313z 06 Apr	V YHxD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	MON
4110		1210 (IP) - 1229z 06 Apr	NR 002/CCK CK 99 27 (Format indicates M95 family) (Remote tuner Novosibirsk) VVV BT 05 05 05 H0 05 05 (Cont'd – long zero – 1217z) NR 02/CCK CK 99 27 04.. 2200 RMKS CQ CQ BT (Seems almost like operator was practicing not knowing he was live...) (Monitored until 1235z)		JPL	MON

4243//NRH	Message number differs from current XSV70 and XSV85 message numbers.					
1148z	03 Mar	NR 06 CK 216 35 0303 1538 BT	(Remote tuner ShangHai)	JPL	TUE	
1143 (IP) - 1154z	06 Mar	NR 046 CK 24 35 0306 1518 BT NR 079 CK 18 35 0306 1613 BT NR 12 CK 267 35 0306 1716 BT	(Remote tuner Japan)	JPL	FRI	
1145 (IP) - 1155z	28 Mar	NR 090 CK 45 35 0328 1541 BT NR 56 CK 117 35 0328 1545 BT	(Remote tuner New Zealand)	JPL	SAT	
1143 (IP) - 1151z	29 Mar	NR 092 CK 28 35 0329 1514 BT NR 58 CK 122 35 0329 1537 BT	(Remote tuner New Zealand)	JPL	SUN	
1142 (IP) - 1203z	03 Apr	NR 003 CK 76 35 0403 1532 BT NR 06 CK 223 35 0403 1610 BT	(Remote tuner TaiZhou)	JPL	FRI	
1147 (IP) - 1159z	06 Apr	NR 009 CK 68 35 0406 1556 BT NR 12 CK 175 35 0406 1620 BT	(Remote tuner Shanghai)	JPL	MON	
2342 (IP) - 2359z	06 Apr	NR 094 CK 22 35 0407 0628 BT NR 010 CK 57 35 0407 0657 BT NR 13 CK 091 35 0407 0725 BT	(Remote tuner South Korea)	JPL	MON	
1143 (IP) - 1204z	09 Apr	NR 014 CK 56 35 0409 1545 BT NR 003 CK 15 35 0409 1610 BT NR 18 CK 165 35 0409 1657 BT	(Remote tuner Hebei)	JPL	THU	
1145 (IP) - 1204z	13 Apr	NR 023 CK 36 35 0413 1538 BT NR 015 CK 17 35 0413 1611 BT NR 26 CK 116 35 0413 1635 BT	(Remote tuner Shanghai)	JPL	MON	
1147 (IP) - 1205z	27 Apr	NR 051 CK 54 35 0427 1546 BT NR 074 CK 19 35 0427 1604 BT NR 54 CK 175 35 0427 1616 BT	(Remote tuner South Korea)	JPL	MON	
4243//9054	Message number differs from current XSV70 and XSV85 message numbers.					
1142 (IP) - 1159z	07 Apr	NR 011 CK 35 35 0407 1548 BT NR 096 CK 1535 0407 164 BT NR 14 CK 158 35 0407 1625 BT	(Remote tuner Hong Kong)	JPL	TUE	
1140 (IP) - 1155z	14 Apr	NR 025 CK 26 35 0414 1545 BT NR 28 CK 164 35 0414 1553 BT	(Remote tuner TaiZhou)	JPL	TUE	
1147 (IP) - 1200z	25 Apr	NR 047 CK 50 35 0425 1535 BT NR 50 CK 174 35 0425 1555 BT	(Remote tuner Hong Kong)	JPL	SAT	
4364//NRH	Call Sign XSV85 0002 - 0006z	07 Apr	NR 0289 CK .. 35 0407 0702 BT	(Remote tuner Nanning)	JPL	TUE
4364//8073	Call Sign XSV85		Still having technical issues			
1135 - 1144z	28 Mar	NR 02.0 CK 301 35 0328 1608 BT	(Remote tuner New Zealand)	JPL	SAT	
1130 - 1143z	29 Mar	NR 0272 CK 258 35 0329 1557 BT	(Remote tuner New Zealand)	JPL	SUN	
1135 - 1143z	06 Apr	NR 0288 CK 339 35 0406 1652 BT	(Remote tuner Philippines)	JPL	MON	
1131 - 1142z	07 Apr	NR 0290 CK 329 35 0407 1619 BT	(Remote tuner Hong Kong)	JPL	TUE	
1136 - 1142z	09 Apr	NR 0294 CK 334 35 0409 1634 BT	(Remote tuner Hong Kong)	JPL	THU	
1132 - 1143z	13 Apr	NR 0309 CK 207 35 0413 1552 BT	(Remote tuner Nanning)	JPL	MON	
1135 - 1137z	14 Apr	NR 0313 CK 218 35 0414 1634 BT	(Remote tuner Hong Kong)	JPL	TUE	
1139 - 1158z	21 Apr	NR 0329 CK 3.. 35 0421 1638 BT	(Remote tuner Hong Kong)	JPL	TUE	
1131 - 1145z	25 Apr	NR 0345 CK 477 35 0425 1659 BT	(Remote tuner Hong Kong)	JPL	SAT	
1132 - 1145z	27 Apr	NR 0350 CK 397 35 04U7 A6A7 BT	(Remote tuner Hong Kong)	JPL	MON	
5033	1608 (IP) - 1611z	23 Apr	BT ABC1/BMF3 AR K (Exercise related message)	(Remote tuner Novosibirsk)	JPL	THU
5393	1025z (IP)	11 Mar	R HR WK NR 14 K R OK R NIL SK K (Both stns on freq)	(Remote Novosibirsk)	JPL	WED
5479//10722	Call Sign 3A7D 0745z	30 Mar	V YHxD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	MON
	0801 - 0903z	23 Apr	V YHxD (x3) DE SAQC (x2) (IP - Cont'd) NR 002 1700 RMKS 9315 TO 4102 BT ACD3/HJB4 AGN	(Remote tuner Novosibirsk)	JPL	THU
			Note: 1st time I've seen this normally associated with exercise message sent on this circuit.			
5479//NRH	Call Sign SAQC 1359z	07 Mar	V YHxD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	SAT
	1031z	11 Mar	V YHxD (x3) DE SAQC (x2) (IP - Cont'd) NR 076 1830 RMKS 9684 TO 9897 BT CL/1900/ZBT/9684/9897 AR QSL ? HR WK NR 120 K	(Remote tuner Novosibirsk)	JPL	WED
	1455z	03 Apr	V YHxD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	FRI
5479//10722	Call Sign SAQC 1100z	03 Mar	V YHxD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	TUE
	0928z	05 Mar	V YHxD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	THU
	0801z	30 Mar	V YHxD (x3) DE SAQC (x2) (IP - Cont'd) SVC GA NR 089 1600 RMKS 9684 TO 7322 BT (From R/S - 0801z) COMM/1630/XZ413/35/9681/7322 AR QSL ? HR WK NR 34 K (Return to R/S -0802z)	(Remote tuner Novosibirsk)	JPL	MON

	1201z	06 Apr	V YHxD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	MON
	1024 (IP) - 1103z	27 Apr	V YHxD (x3) DE SAQC (x2) (IP - Cont'd) NR 186 1830 RMKS 9315 TO 9958 BT CRT/1930/ZBT/9315/9958 AR QSL ? HR WK NR 41 (Silent – Normally returns to Round Slip 1031z) 1834 RMKS 9315 TO 9958 BT (Normally only sends one service message) CRT SVC 186 TIME 1830 AR QSL EEEEE HR WK NR 41 (Silent - 1034z)	(Remote tuner Novosibirsk)	JPL	MON
5656	05 05 05					
	1114z	03 Mar	05 05 05 (IP – Cont'd – Long zero) + 5 char grps	(Remote tuner Novosibirsk)	JPL	TUE
7553//9153	Call sign XSV70					
	0936 (IP) - 0949z	16 Mar	NR 7 CK 29 49 0316 1700 NR 226 CK 125 35 0316 0707	(Remote tuner South Korea)	JPL	MON
	0934 (IP) - 0946z	27 Apr	NR 358 CK 97 35 0429 0647	(Remote tuner Hong Kong)	JPL	WED
8072	F9OX	0818z	06 Mar	F9OX Wkg CH9S (QSO and MSG) in Duplex (Via SDR Japan) NR 045/CCK CK 99 49 0306 1625 RMKS CQ = 40TD 4G5 543N H5TU	F5JBR	FRI
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)					
	1130 - 1140z	03 Apr	NR 0282 CK 257 35 0403 1602 BT	(Remote tuner Philippines)	JPL	FRI
8707	BJ9X DBMD	1024 (IP) - 1042z	27 Mar	Various call to outstations & 4-character msgs. (Remote tuner Novosibirsk) VV J5CY DE BJ9X K DBMD DE NDCB R QSA 2 QSA ? K NR 676/CCK CK 99 08 0327 1800 RMKS CQ K (1028z) VV 5GIK DE BJ9X K DBMD DE NPH. QSA 2 QSA ? K HGK DE BJ9X K VV TV6K DE BJ9X K DBMD DE L2YC R QSA 2 QSA ? K QSL 2 IEC BT 1469 AR K (Exercise related) VVV UYV8 DE BJ9X K VVV FD0. DE BJ9X K VV 0G4J DE BJ9X K VV GXB4 DE BJ9X K V UYV8 DE BJ9X K	JPL	FRI
10180	Call Sign 3A7D	(Active daily - only first marker log has been included)				

M95 4243kHz 1143z 06 March 2020
 Chinese digital 4+4 QPSK 75/3000 LSB 1143z
 Switched to CW 1152z – Hand sent

VV HR 7G TO YR PSE CY
 (1148z)

NR 046 CK 24 35 0306 1518 BT
 5AA UTT TT6 3U6 3A4 5T7 5TD N445 N44 5AA
 75U 354 373 4TN 446 3DU 346 N3U 445 3DA
 4D6 N3D 4D3 AR
 A HR 7G GA

NR 079 CK 18 35 0306 1613 BT (1151z)
 UT5 TT6 3U6 3A4 TTA TTU TT3 773 354 37U
 36U 4AD 446 33U 34T 445 4D4 3DA AR
 A HR 7G GA

NR 12 CK 267 35 0306 1716 BT
 UTU TT6 3U6 3A4 TTU 773 354 373N3D 353 (Cont'd
 – 1154z)

M95 9054kHz 1140z 14 April 2020
 Into Voice - USB - Female - 1140z
 Switched to Chinese digital 4+4 QPSK 75/3000 - LSB –
 1142z
 Switched to CW – Hand sent – 1150z

VV HR MSG TO YR PSE CY (1150z)

NR 025 CK 26 35 0414 1545 BT
 5AA UTT TA4 3U6 3A4 5T7 5TD N44 5TN 75U
 357 4TTN 445 3DA 4D3 N3D 4DU 5AA 75U
 357 4AA 4.5 3DA 4D3 N3D 4DU AR (1152z)

NR 28 CK 164 35 0414 1553 BT
 UTU TA4 3U6 3A4 TTU 773 356 4TN 446 4DT
 (Cont'd – 1155z)

Courtesy JPL

M95 8073kHz 1130z 03 April 2020
 Into Voice - USB - Chinese - Male 1130z
 Switched to Chinese digital 4+4 QPSK 75/3000 – LSB
 1132z
 (Still having technical issues)
 Switched to CW Hand sent 1140z

V BNGC (x3) DE XSV85 (x2) (Mostly U/R - 1138z)
 HR MSG GA PSE CY (1139z)

NR 0282 CK 257 35 0403 1602 BT
 TT3 3U6 3AN 3U7 TAU 773 (Cont'd – 1140z)

M95 4364kHz 1132z 13 April 2020
 (IP) In Chinese digital 4+4 QPSK 75/3000 – LSB 1132z
 (Still having technical issues)
 Switched to CW Hand sent 1139z

V BNGC (x3) DE XSV85 (x2) (1139z)
 HR MSGS GA PSE CY (1141z)

NR 0309 CK 207 35 0413 1552 BT
 TA3 3U6 3AN 3U7 TAU 773 356 4T3 NN3 446 (Cont'd
 – 1143z)

M95 8073kHz 1139z 21 April 2020
 (IP) In Chinese digital 4+4 QPSK 75/3000 – LSB
 1139z
 (Still having technical issues)
 Switched to CW Hand sent 1141z

V BNGC (x3) DE XSV85 (x2) (1141z)
 HR MSGS GA PSE CY (1143z)

NR 0329 CK 3.. 35 0421 1638 BT
 TUA 3U6 3AN 3U7 TAU 773 354 373 4T3 NN3 (Cont'd
 – 1144z) (Monitored until 1158z)

Courtesy JPL

Marker Beacons (MX MXI)

4557.7	2243z	21 Apr	MXI	CW	Beacon "D"	Sevastopol		BR	TUE
4557.9	2208z	17 Apr	MXI	CW	Beacon "S"	Severomorsk		BR	FRI
5153.7	2209z	17 Apr	MXI	CW	Beacon "D"	Sevastopol		BR	FRI
5153.8	2207z	29 Apr	MXI	CW	Beacon "P"	Kaliningrad	Fast	BR	WED
5154.1	2209z	17 Apr	MXI	CW	Beacon "A"	Astrakhan		BR	FRI
5156.9	0905z	02 Mar	MX	CW	Beacon "L"	'L' with minor QSB	Good	chpa	MON
	2246z	21 Apr	MX	CW	Beacon "L"	St Petersburg (Fast)		BR	TUE
	1333z	27 Apr	MX	CW	Beacon "L"	Normal signal "L" with minor QSB	Good	chpa	MON
5292.9	1332z	27 Apr	MX	CW	Beacon "D"	Normal signal "D" with QRM & QSB	Good	chpa	MON
	2214z	29 Apr	MX	CW	Beacon "D"	Faulty – sending series of four 'D's followed by one 'N'		BR	WED
5590	1314z	02 Mar	MXV	CW	Beacon "V"	QSA4	(Via SDR Novosibirsk, Russia)	E.SMITH	MON
	0500z	03 Mar	MXV	CW	Beacon "V"	QSA3	(Via SDR Novosibirsk, Russia)	E.SMITH	TUE
	0759z	08 Mar	MXV	CW	Beacon "V"	QSA2	(Via SDR Novosibirsk, Russia)	E.SMITH	TUE
	0600z	19 Mar	MXV	CW	Beacon "V"	QSA3	(Via SDR Novosibirsk, Russia)	E.SMITH	THU
	0706z	30 Mar	NRH.				(Via SDR Novosibirsk, Russia)	E.SMITH	MON
7508.7	1422z	21 May	MXI	CW	Beacon "D"	Sevastopol	Weak	BR	WED
7727	0759z	08 Mar	MXV	CW	Beacon "V"	QSA3	(Via SDR Novosibirsk, Russia)	E.SMITH	TUE
	0600z	19 Mar	MXV	CW	Beacon "V"	QSA3	(Via SDR Novosibirsk, Russia)	E.SMITH	THU
	0707z	30 Mar	MXV	CW	Beacon "V"	QSA4	(Via SDR Novosibirsk, Russia)	E.SMITH	MON
10871.8	1419z	29 Apr	MXI	CW	Beacon "P"	Faulty – sending series of four 'P's followed by two 'J's		BR	WED
10872	1416z	29 Apr	MXI	CW	Beacon "C"	Moscow		BR	WED
13527.7	1410z	29 Apr	MXI	CW	Beacon "D"	Sevastopol		BR	WED
13527.8	1411z	29 Apr	MXI	CW	Beacon "P"	Faulty – sending series of four 'P's followed by two 'J's		BR	WED
13527.9	1415z	29 Apr	MXI	CW	Beacon "S"	Severomorsk		BR	WED

Oddities

3510kHz 'The Airhorn'

From September 2019 the IARU, the amateur radio 'Intruder Watch' group has been reporting the presence of this marker as it falls within the 80 metre amateur band, which is a band shared by other users.

The marker was first reported on 25 September 2019 and has been reported as active since that date, although reports seem to suggest it has not been continuous in operation.

The location was reported in 2019 as Smolensk, Russia and in February 2020 as Orsha, Belarus or Voronezh. These locations have been obtained by direction finding attempts and are why several locations are suggested, although many are in the same directional area.

The marker has been active and heard during the evenings in March and is described as a 'Chirp' sound with 450Hz spacing and a bandwidth of 3kHz.

The above information was gathered from the IARU monthly Newsletters. <https://www.iaru-rl.org/spectrum/monitoring-system/iarums-rl-newsletters/>

The 'Airhorn' was previously using the frequency of 4020kHz & was operational from 03 February 2017 before moving to 3510kHz in September 2019.

Thanks to Daniel & Ary for this additional information.

4183kHz Marker

First reported in ENIGMA Newsletter 111 this Russian Marker continues as logged by chpa, sending a dash 40 times a minute;

4183	1406z	27 Apr		Marker "T"	Good		chpa	MON
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4310kHz Marker

4310	1351z	27 Apr		'The Goose' (Day freq)	Normal signal	Good	USB	chpa	MON
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5292kHz Marker

5292	0906z	02 Mar		Normal signal with strong QRM from CW station on 5293 kHz				chpa	MON
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S28 'The Buzzer'

4625	0900z	02 Mar	S28	'The Buzzer' Marker	Normal buzz with minor QRM	Good	USB	chpa	MON
	1421z	19 Apr	S28	'The Buzzer' Marker	Not the normal sound	Good	USB	chpa	SUN
	1323z	27 Apr	S28	Normal BUZZ with minor QRM and QSB		Excellent	USB	chpa	MON

4810	1643z	27 Apr	S28	'The Buzzer' (Alternative. Freq)	Minor QRM from CW	Weak	USB	chpa	MON
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S30 'The Pip'

3756	2251z	27 Apr	S30	'Pip' marker (Night freq)			USB	BR	MON
5448	0915z	02 Mar	S30	'Pip' Marker (Day freq)			USB	chpa	MON
	1327z	27 Apr	S30	Normal PIP with minor QRM		Good	USB	chpa	MON

S32 'Squeaky Wheel'

3828	2252z	27 Apr	S32	'Squeaky Wheel' marker (Night freq)			USB	BR	MON
5474	0917z	02 Mar	S32	'Squeaky Wheel' marker (Day freq)	Moderate		USB	chpa	MON
	1330z	27 Apr	S32	Normal signal with QRM and QSB	Good		USB	chpa	MON

XSL 'Slot Machine'

8588	1311z	02 Mar		QSA4	(Via SDR Novosibirsk, Russia)		USB	E.SMITH	MON
	0659z	09 Mar		QSA3	(Via SDR Novosibirsk, Russia)		USB	E.SMITH	MON

Contributors: AB, BR, chpa, Danix, ER, E.SMITH, F5JBR, Gert, HFD, JPL, PoSW. *Thank you all for your logs.*

Friday 2130 UTC Following First + Third Fridays:-

6-Mar-20:- 5197 kHz, call "634", DK/GC "502 502 42 42", weak signal, difficult copy.

20-Mar-20:- 5197 kHz, call "634", DK/GC "547 547 44 44", started well before the half-hour, ended after 2140z, computer shut-down heard after 2141.

3-Apr-20:- 5197 kHz, call "634", DK/GC "503 503 44 44", ended 2141 UTC, computer shut-down heard at 2141:40s.

E07

We start, as always, with PoSW's excellent logs and analysis:

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

4-Mar-20, Wednesday:- 1800 UTC, 10321 kHz, "318 318 318 000", good signal, peaking S9.
1820 UTC, 9121 kHz, second sending, weaker.

8-Mar-20, Sunday:- 1800 UTC, 10321 kHz, "318 318 318 1" for a full message, DK/GC "385 78" x 2, strong signal.
1820 UTC, 9121 kHz, weaker.
1840 UTC, 7821 kHz, back up to a strong signal.

11-Mar-20, Wednesday:- 1800 UTC, 10321 kHz, "318" and "385 78" again, strong.
1820 UTC, 9121 kHz, S7.
1840 UTC, 7821 kHz, weak.

18-Mar-20, Wednesday:- 1800 UTC, 10321 kHz, "318 318 318 000", strong signal.
1820 UTC, 9121 kHz, weaker.

22-Mar-20, Sunday:- 1800 UTC, 10321 kHz, "318 318 318 000", S6.
Missed second sending.

25-Mar-20, Wednesday:- 1800 UTC, 10321 kHz, S4, and 1820 UTC, 9121 kHz, stronger, "318 318 318 000".

1-Apr-20, Wednesday:- 1700 UTC, 13417 kHz, "417 417 417 1", DK/GC "6990 204" x 2, one of those long messages for which this schedule has previous form, did not end until a bit before 1723 UTC, strong signal.
1727:50s UTC, 12117 kHz, second sending, over S9.
1759 UTC, 10717 kHz, missed start, third sending in progress, weak signal.

5-Apr-20, Sunday:- 1700 UTC, 13417 kHz, "417 417 417 000", strong.
1720 UTC, 12117 kHz, also strong.

8-Apr-20, Wednesday:- 1700 UTC, 13417 kHz, "417 417 417 1", DK/GC "280 197", another one of those long messages, ended around 1722 UTC, weak signal.
1827 UTC, just after, 12117 kHz, running late, second sending, S5 to S6.
1859 UTC, 10717 kHz, missed the start, third sending in progress.

19-Apr-20, Sunday:- 1700 UTC, 13417 kHz, "417" and "280 197" again, strong signal.
1727 UTC, 12117 kHz, slightly weaker.
1754 UTC, 10717 kHz, S7.

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

2-Mar-20, Monday:- 2000 UTC, 10651 kHz, very weak signal, could just make out the "616" call.
2020 UTC, 9151 kHz, a bit stronger, clear enough, "616 616 616 000".

4-Mar-20, Wednesday:- 2000 UTC, 10651 kHz, much stronger than on Monday, peaking S8,
"616 616 616 000".
2020 UTC, 9151 kHz, also around S8.

9-Mar-20, Monday:- 2000 UTC, 10651 kHz, and 2020 UTC, 9151 kHz, both good signals,
"616 616 616 000".

18-Mar-20, Wednesday:- 2000 UTC, 10651 kHz, very weak signal, could just about hear the "000" of a "no message" transmission.
2020 UTC, 9151 kHz, much stronger, over S9, "616 616 616 000".

25-Mar-20, Wednesday:- 2000 UTC, 10651 kHz, "616 616 616 1" for a full message, DK/GC "562 95" x 2, around a "4" on the S-meter.
2020 UTC, 9151 kHz, stronger, peaking S9.
2040 UTC, 7651 kHz, much weaker.

8-Apr-20, Wednesday:- 1900 UTC, 15819 kHz, "842 842 842 000", S4 to S5.
1920 UTC, 14419 kHz, weak but clear.

20-Apr-20, Monday:- 1900 UTC, nothing readable heard on 15819.
1920 UTC, 14419 kHz, very weak signal, could just make out, "842 842 842 1".
1940 UTC, 12219 kHz, good signal, DK/GC "472 105" x 2.

22-Apr-20, Wednesday:- nothing readable on the first and second transmissions, third sending better:-
1940 UTC, 12219 kHz, "842" and "472 105" again, weak but clear.

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

This schedule appeared to begin towards the end of 2019, had been using the same frequencies in January and February but changed in March:-

1-Mar-20:- 0721 UTC, 11068 kHz, found about one minute in, "201 201 201 000", good signal, second sending, unable to find the first at 0700z, probably on 10268.

8-Mar-20:- 0700 UTC, 10268 kHz – well there we are, then - "201 201 201 000", S5 to S6.
0720 UTC, 11068 kHz, weak.

15-Mar-20:- 0700 UTC, 10268 kHz and 0720 UTC, 11068 kHz, "201 201 201 000".

21-Mar-20:- 0700 UTC, 10268 kHz, "201 201 201 000", weak signal.
0720 UTC, 11068 kHz, also weak.

Not found in April until the second Sunday of the month:-

12-Apr-20:- 0601 UTC, 9261 kHz, in progress with, "224 224 224 000".
0620 UTC, 10261 kHz, second sending, both S5 to S6.

19-Apr-20:- 0600 UTC, 9261 kHz and 0620 UTC, 10261 kHz, "224 224 224 000".

26-Apr-20:- 0600 UTC, 9261 kHz and 0620 UTC, 10261 kHz, both around S5 to S6, "224 224 224 000".

Saturday Schedule, 1300 UTC Start:-

18-Apr-20:- 1302 UTC, just before, 12176 kHz, "152 152 152 000", strong signal, last few seconds, found while idly tuning around - as you do.
1320 UTC, 11576 kHz, slightly weaker signal.

25-Apr-20:- 1300 UTC, 12176 kHz, "152 152 152 000", S9 signal with a weaker "XJT" for company, not noticed last time.
1320 UTC, 11576 kHz, S8.

Now onto others' logs with duplication.

Sunday/Wednesday

March 2020

1800z	10321kHz	1820z	9121kHz	1840z	7821kHz	
01/03	318 000					[1800z (Dutch SDR)] Weak
04/03	318 000					Weak
08/03	318 1 385 75 42501 ... 14575 000 000					[1800z Fair] Strong (Dutch SDR)
11/03	318 1 385 78 42501 ... 15475 000 000					Weak
15/03	318 000					Weak
18/03	318 000					Fair
22/03	318 000					Weak
25/03	318 000					Weak
29/03	318 1 6990 204 84359 ... 11507 000 000					[1856z Strong] Weak

April 2020

1700z	13417kHz	1720z	12117kHz	1740z	10717kHz	
01/04	417 1 6990 204 84359 ... 11507 000 000					Weak
05/04	417 000					1700z Strong/1720z Fair
08/04	417 1 280 197 81475 ... 94740 000 000					[1700z Weak] Strong
	Msg length dictates new start times: 1700z, 1727 and 1753z. Duration ~22m					
12/04	417 1 280 197 81475 ... 94740 000 000					Weak, QRM
	Revised start times: 1722z 1755z					
15/04	417 1 280 197 81475 ... 94740 000 000					Weak
22/04	417 1 9954 122 52379 ... 22997 000 000					Strong
26/04	417 1 9954 122 52389 ... 22997 000 000					[1740z Fair] Strong
29/04	417 1 9954 122 52379 ... 22997 000 000					[1700z Weak] Fair

Sunday/Saturday

March 2020

0700z	10268kHz	0720z	11068kHz	0740z	10168kHz		
01/03	201 000					Ary	SUN

Monday/Wednesday

March 2020

2000z	10651kHz	2020z	9151kHz	2040z	7651kHz		
02/03	616 000				[2000z Unworkable]	Weak	
04/03	616 000					Weak	
09/03	616 000					Weak	
16/03	616 000					Fair	
18/03	616 000				[2000z NRH]	Fair	
23/03	616 1 562 95 10056 ... 61329 000 000 [Also audible in Argentine Tnx DanAr]				[2000z NRH]	Fair	
25/03	616 1 562 95 10056 ... 61329 000 000				[2000z QSB3]	Fair	
30/03	616 000					2000z Weak, 2020z Strong	

April 2020

1900z	15819kHz	1920z	14419kHz	1940z	12219kHz		
04/04	842 000					Weak	
06/04	NRH						
08/04	842 000					Weak	
13/04	842 000				[1900z NRH]	Weak	
15/04	842 000					Weak	
20/04	842 1 472 105 06623 ... 02700 000 000				[1900z Unworkable]	Weak	
22/04	842 1 472 105 06623 ... 02700 000 000					Weak (Dutch SDR)	
27/04	842 000				[1900z NRH]	Weak (DutchSDR)	
29/04	842 000				[1900z Weak]	Fair	

Tuesday/Friday

March 2020

0700z	14942kHz	0720z	16142kHz	0740z	18042kHz		
14/03	910 000				[0720z only]	Weak (Dutch SDR)	
31/03	910 Unworkable, 0740z NRH						

April 2020

0700z	17453kHz	0720z	18453kHz	0740z	19653kHz		
07/04	NRH						
10/04	NRH						
14/04	NRH						
17/04	NRH						
28/04	NRH						

Tuesday/Friday

March 2020

1100z	19118kHz	1120z	17418kHz	1140z	15918kHz	
03/03	149 1 252 180 09106 ... 41185 000 000					[1100z NRH] Weak
06/03	149 1 252 180 09106 to 41185 000 000					[1100z NRH, 1120z DutchSDR] Weak
20/03	149 000					[1100z DutchSDR] Weak
24/03	149 1 9085 89 24541 ... 96062 000 000					[1140z Fair] Weak
27/03	149 9085 89 24541 ... 96962 000 000					[1100z NRH] Weak
31/03	149 1 9085 89 24541 ... 96062 000 000					[1100z (Dutch SDR)] Weak

April 2020

1100z	20574kHz	1120z	19074kHz	1140z	17474kHz	
03/04	504 1 9085 89 24541 ... 96062 000 000					1100z NRH, 1120z Unworkable 1140z Weak
07/04	NRH					
10/04	NRH					
14/04	NRH					
17/04	NRH					
21/04	504 1 411 78 20631 ... 25459 000 000					[1100z Unworkable] Weak (Dutch SDR)
24/04	504 1 411 78 20631 ... 25459 000 000					[1100/1120z NRH] Weak
28/04	504 000					Weak (Dutch SDR)

Thursday/Saturday

March 2020

1410z	16284kHz	1430z	14854kHz	1450z	kHz	
05/03	328 000					[1410z Weak] Strong
07/03	328 000					Weak
19/03	328 1 9876 81 55788 ... 90755 000 000					Weak
21/03	328					Weak, unworkable
26/03	328 000					Weak
28/03	328 000					Weak(Dutch SDR)

Thursday/Saturday

April 2020

1410z	16331kHz	1430z	15831kHz	1450z	kHz	
02/04	893 000					Weak
04/04	893 000					Weak
09/04	893 000					Weak
11/04	NRH					
16/04	NRH					
18/04	893 1 364 64 61065 ... 03??4 000 000					[1410z NRH] Weak, not workable
23/04	893 000					Weak (DutchSDR)
25/04	893 000					Weak

Saturday

March 2020

1400z	12143kHz	1420z	11143kHz	1440z	
21/03	114 000				Weak
28/03	114 000				Weak
1300z	12176kHz	1320z	11576kHz	1340z	
04/04	152 000				Weak
11/04	152 000				Weak
18/04	152 000				Weak
25/04	152 000				Weak

E07a

PoSW's logs to start followed by others' logs

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

4-Mar-20:- 2100 UTC, 5877 kHz, "825 825 825 000", strong signal.
2120 UTC, 5277 kHz, even stronger.

11-Mar-20:- 2100 UTC, 5877 kHz and 2120 UTC, 5277 kHz, both very strong, "825 825 825 000".

18-Mar-20:- 2100 UTC, 5877 kHz, a full message this evening, "825 825 825 1 19255", DK/GC "6508 54" x 2, very strong signal.
2120 UTC, 5277 kHz, very strong.
2140 UTC, 4577 kHz, also very strong.

25-Mar-20:- 2100 UTC, 5877 kHz, "825 1 19255...6508 54" again, strong signal.
2120 UTC, 5277 kHz, 5277 kHz, over S9.
2140 UTC, 4577 kHz, S9+.

1-Apr-20:- 2000 UTC, 8144 kHz, "197 197 197 000", very strong signal.
2020 UTC, 6944 kHz, also very strong.

8-Apr-20:- 2000 UTC, 8144 kHz and 2020 UTC, 6944 kHz, both very strong, "197 197 197 000".

22-Apr-20:- 2000 UTC, 8144kHz and 2020 UTC, 6944 kHz, the usual very strong signals, "197 197 197 000".

Friday Schedule, 1610 UTC Start in March, 1510 UTC in April:-

6-Mar-20:- 1610 UTC, 11473 kHz, "413 413 413 000", good signal.
1630 UTC, 10173 kHz, weak.

13-Mar-20:- 1610 UTC, 11473 kHz, "413 413 413 000", S6 to S7.
1630 UTC, 10173 kHz, weaker.

20-Mar-20:- 1610 UTC, 11473 kHz, "413 413 413 1 68447" for a full message. DK/GC
"251 61" x 2, weak at first but became stronger by 1613.
1630 UTC, 10173 kHz, weak signal plus interference from a strong pulse/buzz extending from about 10158 to 10180.
1650 UTC, 9373 kHz, strongest of the three transmissions.

3-Apr-20:- 1510 UTC, 12174 kHz, "102 102 102 000".
1530 UTC, 11074 kHz, second sending, both S6 to S7.

10-Apr-20:- 1510 UTC, 12174 kHz and 1530 UTC, 11074 kHz, "102 102 102 000".

17-Apr-20:- 1510 UTC, 12174 kHz, "102 102 102 000", strong signal.
1530 UTC, 11074 kHz, weaker.

24-Apr-20:- 1510 UTC, 12174 kHz, good signal and 1530 UTC, 11074 kHz, much weaker, "102 102 102 000".

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

7-Mar-20:- 0900 UTC, 11133 kHz, "114 114 114 000".
0920 UTC, 12133 kHz, second sending.

14-Mar-20:- 0900 UTC, 11133 kHz and 0920 UTC, 12133 kHz, "114 114 114 000".

21-Mar-20:- 0900 UTC, 11133 kHz, "114 114 114 1 68447", DK/GC "251 61" x 2, since this Saturday schedule is always a repeat of that transmitted on the previous day it was no surprise to hear the same message as heard on the 20th.
0920 UTC, 12133 kHz, not too strong.
0940 UTC, 13433 kHz, third sending, strongest of the three.

28-Mar-20:- 0900 UTC, 11133 kHz, "114 1 68447" and "251 61" again.
0920 UTC, 12133 kHz and 0940 UTC, 13433 kHz, repeats.

4-Apr-20:- 0800 UTC, 12218 kHz, "244 244 244 000", strong signal.
0820 UTC, 13418 kHz, slightly weaker.

18-Apr-20:- 0800 UTC, 12218 kHz, "244 244 244 000", strong.
0820 UTC, 13418 kHz, weaker.

25-Apr-20:- 0800 UTC, 12218 kHz, "244 244 244 000".
0820 UTC, 13418 kHz, strong FSK/RTTY signal on close frequency.

Others' logs

Wednesday

March 2020

2100z	5877kHz	2120z	5277kHz	2140z	4577kHz	
04/03	825 000					Fair
11/03	825 000				[2100z Missed]	Strong
18/03	825 1 19255 6508 54 27372 ... 13554 000 000				[2100z Missed]	Very strong
25/03	825 1 19255 6508 54 27372 ... 13554 000 000					Very strong

April 2020

2000z	8144kHz	2020z	6944kHz	2040z	5744kHz	
01/04	197 000					Very strong
08/04	197 000					Strong
15/04	197 000					Weak
22/04	197 000					Very strong
29/04	197 000					Fair, 2020z strong

Thursday

March 2020

0530z	6922kHz	0550z	8122kHz	0610z	9322kHz	
05/03	913 000				[0530z Noisy]	Strong
12/03	913 000					Very strong
19/03	913 1 19255 6508 54 27372 ... 13554 000 000				[0530z Very strong, 0550z DataQRM2]	Fair
26/03	913 1 19255 6508 54 27372 ... 13554 000 000				[0530z Very strong]	Weak, QRM3

April 2020

0430z	6788kHz	0450z	7488kHz	0510z	8188kHz	
02/04	Lost due to corrupt sound file					
09/04	741 000				[0450z QRM5]	Very strong
16/04	741 000					Very strong
23/04	741 000					Very strong
30/04	741 000					Very strong

Friday

March 2020

1610z	11473kHz	1630z	10173kHz	1650z	9373kHz	
06/03	413 000					Weak
20/03	413 1 68447 251 61 69580 ... 19105 000 000					Weak
27/03	413 1 68447 251 61 69580 ... 19105 000 000					Weak

April 2020

1510z	12174kHz	1530z	11074kHz	1550z	10274kHz	
03/04	102 000					Weak
10/04	102 000					Weak
17/04	102 000					Weak
24/04	102 000					Weak

Saturday

March 2020

0900z	11133kHz	0920z	12133kHz	0940z	13433kHz	
07/03	114 000					Weak
21/03	114 1 68447 251 61 69580 ... 19105 000 000					Weak
28/03	114 1 68447 251 61 69580 ... 19105 000 000					Weak

April 2020

0800z	12218kHz	0820z	13418kHz	0840z	14418kHz	
04/04	244 000					Weak
11/04	244 000					Weak
18/04	244 000					Weak
25/04	244 000					Weak

E11 log March/April

4181kHz	1705z	07/03 [393/00] Out 1708z S7	Malc	SAT
	1705z	11/03 [39?/33 87003 64002 40919 42773.....16413 58379]	RNGB	WED
	1705z	18/03 [395/00] Out 1708z S9	Malc	WED
	1705x	21/03 [394/00]	Gary H, Malc	SAT
	1705z	25/03 [39?/00] Out 1708z S5	Malc	WED
	1705z	28/03 [395/00] Out 1708z S7	Malc	SAT
	1705z	01/04 [394/00] Out 1708z S5	Malc	WED
	1705z	04/04 [395/00] Out 1708z S5	Malc	SAT
	1705z	08/04 [395/00] Out 1708z S6	Malc	WED
	1705z	11/04 [390/00] Out 1708z S9	Malc	SAT
	1705z	15/04 [390/35 49934.....58957] Out 1714z S5	Malc	WED
	1705z	18/04 [390/35 49334.....etc] Repeat of Wednesday	Malc	SAT
	1705z	22/04 [395/00] Out 1708z S3	Malc	WED
	1705z	29/04 [392/00] Out 1708z S3	Malc	WED
4505kHz	1705z	01/01 [391/35 36507.....36591] Out 1715z S3	Malc	WED
	1930z	07/03 [368/00] Out 1933z S7	Malc	SAT
	1930z	08/03 [367/00] Out 1933z S9	Malc	SUN
	1930z	21/03 [369/36 13727.....97268] Out 1941z S6	Malc	SAT
	1930z	28/03 [365/00] Out 1933z S5 + QRM	Malc	SAT
	1930z	29/03 [366/00] Out 1933z S3 + QRM	Malc	SUN
	1930z	04/04 [368/33 79201.....56590] Out 1940z S5	Malc	SAT
	1930z	05/04 [368/33 79201.....etc] Repeat of Saturday	Malc	SUN
	1930z	11/04 [360/00] Out 1933z S3 + QRM	Malc, RNGB	SAT
	1930z	12/04 [367/00] Out 1933z S7	Malc	SUN
	1930z	18/04 [365/00] Out 1933z S5	Malc	SAT
	1930z	19/04 [366/00] Out 1933z S5	Malc	SUN

5082kHz	1605z	03/03 [236/39 86327.....20630] Out 1616z S4	Malc	TUE
	1605z	24/03 [230/00]	Gary H, Malc, RNGB	TUE
	1605z	29/03 [230/00] Out 1608z S3	Malc, RNGB	SUN
	1605z	31/03 [230/00] Out 1608z S3	Malc	TUE
	1605z	07/04 [232/39 24158.....71283] Out 1615z S3	Malc	TUE
	1605z	12/04 [232/38 24158 02494 93541 59285 43476 11898 94628 10135.....87004 71283]	Gary H, Malc	SAT
	1605z	14/04 [231/00] Out 1603z S2	Malc	TUE
	1605z	19/04 [230/00] Out 1608z S3	Malc	SUN
	1605z	21/04 [232/00] Out 1608z S2	Malc	TUE
	1605z	28/04 [232/00]	RNGB	TUE
5371kHz	0805z	07/03 [313/34 47919 26825 05827 70085 93192 09665 12411.....21200 67852] Out 0815z S2	RNGB, Malc	SAT
	0805z	08/03 [313/34 47919.....etc] Repeat of Saturday	Malc	SUN
	0805z	21/03 [319/00] Out 0808z S2	Malc	SAT
	0805z	28/03 [316/00] Out 0808z S3	Malc, RNGB	SAT
	0805z	04/04 [313/00] Out 0808z S2	Malc	SAT
	0805z	05/04 [311/00] Out 0808z S2	Malc	SUN
	0805z	11/04 [316/38 89250.....28976] Out 0815z S3	Malc	SAT
	0805z	12/04 [316/38 89250.....etc] Repeat of Saturday	Malc	SUN
	0805z	18/04 [319/00] Out 0808z S2	Malc, RNGB	SAT
	0805z	19/04 [311/00] Out 0808z S2 (Dutch SDR)	Malc	SUN
0805z	25/04 [316/00]	RNGB	SAT	
5737kHz	1530z	02/03 [521/32 91169.....69589] Out 1540z S3	Malc	MON
	1530z	06/03 [521/32 91169.....etc] Repeat of Monday	Malc	FRI
	1530z	20/03 [528/00] Out 1533z S3	Malc	FRI
	1530z	27/03 [520/00] Out 1533z S3	Malc	FRI
	1530z	30/03 [521/00] Out 1533z S3	Malc, RNGB	MON
	1530z	03/04 [524/00] Out 1533z S3	Malc	FRI
	1530z	06/04 [522/00] Out 1533z S2	Malc	MON
	1530z	10/04 [520/00] Out 1533z S4	Malc	FRI
	1530z	17/04 [521/00] Out 1533z S2	Malc	FRI
	1530z	20/04 [528/33 98296.....03216] Out 1539z S3	Malc	MON
1530z	24/04 [528/33 98296.....etc] S2 Repeat of Monday	Malc	FRI	
1530z	27/04 [525/00] Out 1533z S2	Malc	MON	
5941kHz	0820z	05/03 [438/00]	RNGB	THU
	0820z	06/03 [434/00]	RNGB	FRI
	0820z	20/03 [436/39 95666.....74488] Out 0831z S3	Malc	FRI
	0820z	27/03 [430/00] Out 0823z S4	Malc	FRI
	0820z	03/04 [439/00] Out 0823z S3	Malc	FRI
	0820z	19/03 [436/39 95666 27194 00693 12026 57988 27482 99403 48777.....41920 74488]	RNGB	THU
	0820z	02/04 [436/00]	RNGB	THU
	0820z	10/04 [431/00] Out 0823z S3	Malc	FRI
	0820z	16/04 [436/00] Out 0823z S4	Malc	THU
	0820z	17/04 [438/00] Out 0823z S2	Malc	FRI
0820z	23/04 [438/39 45333.....93720] Out 0830z S2	Malc	THU	
0820z	24/04 [439/39 45333 6629291656 61400 37936 88413 21700.....93720] Repeat of Thursday	RNGB, Malc	FRI	
0820z	30/04 [439/00] Out 0823z S3	Malc	THU	
6923kHz	1205z	03/03 [463/00] Out 1208z S2	Malc	TUE
	1625z	08/03 [970/35 99904.....67852] Out 1636z S5 (Dutch SDR)	Malc	SUN
	1625z	11/03 [972/00]	RNGB	WED
	1625z	15/03 [977/00]	RNGB	SUN
	1205z	18/03 [464/00] Out 1208z S3	Malc	WED
	1205z	24/03 [462/00] Out 1208z S2	Malc	TUE
	1205z	25/03 [379/00] Out 1208z S2	Malc	WED
	1625z	25/03 [975/00] Out 1638z S5	Malc	WED
	1625z	29/03 [974/00] Out 1628z S4	Malc	SUN
	1205z	31/03 [465/00] Out 1208z S2	Malc, RNGB	TUE
	1205z	01/04 [462/00] Out 1208z S2	Malc	WED
	1625z	01/04 [974/00] Out 1628z S4	Malc	WED
	1625z	05/04 [970/00] Out 1628z S4	Malc	SUN
	1205z	07/04 [461/34 51285.....32593] Out 1215z S2	Malc	TUE
	1205z	08/04 [461/34 51285.....etc] Repeat of Tuesday	Malc	WED
	1625z	08/04 [974/00] Out 1628z S2	Malc	WED
	1625z	12/04 [978/00] Out 1628z S4	Malc	SUN
	1205z	14/04 [460/00] Out 1208z S2	Malc	TUE
	1205z	15/04 [465/00] Out 1208z S3	Malc	WED
	1625z	15/04 [972/00] Out 1728z S2	Malc	WED
	1625z	19/04 [978/00] Out 1628z S2	Malc	SUN
	1205z	21/04 [464/00] Out 1208z S2	Malc	TUE
	1205z	22/04 [463/00] Out 1208z S2	Malc, RNGB	WED
	1625z	22/04 [978/32 42478.....53304] Out 1635z S3	Malc	WED
	1205z	28/04 [463/00] Out 1208z S2	Malc	TUE
	1205z	29/04 [461/00] Out 1208z S2	Malc	WED
	1625z	29/04 [972/00] Out 1628z S3	Malc	WED

6940kHz	0930z	04/03 [278/00]		RNGB	WED
	0930z	05/03 [278/00]		RNGB	THU
	0930z	12/03 [277/00]		RNGB	THU
	0930z	19/03 [270/37 12555 58792 94955 38756 53814 57201 63446 06749.....95946 29106]		RNGB, Malc	THU
	0933z	25/03 [276/00] Out 0936z S3 (Started Late)		Malc	WED
	0930z	26/03 [277/00]		RNGB	THU
	0930z	01/04 [275/32 99069.....90205] Out 0939z S3		Malc	WED
	0930z	02/04 [275/32 99069 35302 24168 22713 67218 47635 23332 43521.....02544 90205]		RNGB	THU
	0930z	08/04 [273/00] Out 0933z S2		Malc	WED
	0930z	09/04 [276/00]		RNGB	THU
	0930z	15/04 [275/00] Out 0933z S2		Malc	WED
	0930z	16/04 [276/00] Out 0933z S4 (KSDR)]		Malc	THU
	0930z	22/04 [277/00] Out 0933z S2		Malc, RNGB	WED
	0930z	23/04 [278/00] Out 0933z S4		Malc	THU
	0930z	29/04 [277/00] Out 0933z S2		Malc	WED
	0930z	30/04 [273/00] Out 0933z S4		Malc	THU
7317kHz	1045z	02/03 [691/23 00424.....34195] Out 1053z S3		Malc	MON
	1900z	02/03 [648/00] Out 1903z S1 + QRM (Dutch SDR)		Malc	MON
	1000z	03/03 [305/33 88193 72587 58742 39976 53376 23421 54022 64711.....03652 96267]		RNGB, Malc	TUE
	1900z	05/03 [641/00] Out 1903z S3		Malc	WED
	1000z	06/03 [305/33 88193.....96267] Out 1010z S3		Malc	FRI
	1900z	09/03 [649/00]		RNGB	MON
	1000z	10/03 [305/00]		RNGB	TUE
	1000z	17/03 [308/00]		RNGB	TUE
	1900z	19/03 [464/00] Out 1903z S3		Malc	THU
	1000z	20/03 [306/00] Out 1003z S4		Malc	FRI
	1045z	23/03 [691/00] Out 1048z S2		Malc	MON
	1900z	23/03 [646/36 77925.....35426] Out 1911z S9 + S6 QRM		Malc	MON
	1000z	24/03 [300/00] Out 1003z S2		Malc	TUE
	1045z	25/03 [692/00] Out 1048z S3		Malc	WED
	1000z	27/03 [305/00] Out 1003z S3		Malc	FRI
	1045z	30/03 [696/00] Out 1048z S3		Malc	MON
	1000z	31/03 [304/00] Out 1003z S2		Malc	TUE
	1045z	01/04 [690/00] Out 1003z S2		Malc, RNGB	WED
	1000z	03/04 [300/00] Out 1003z S3		Malc	FRI
	1045z	06/04 [697/00] Out 1048z S3		Malc	MON
	1900z	06/04 [644/00] Out 1903z S4		Malc	MON
	1000z	07/04 [309/00] Out 1003z S2		Malc	TUE
	1045z	08/04 [692/00] Out 1048z S2		Malc	WED
	1900z	09/04 [646/00] Out 1903z S6		Malc	THU
	1000z	10/04 [309/00] Out 1003z S3		Malc	FRI
	1900z	13/04 [641/00]		RNGB	MON
	1000z	14/04 [304/33 73687.....60546] Out 1010z S2		Malc	TUE
	1045z	15/04 [693/00] Out 1048z S2		Malc	WED
	1900z	16/04 [648/00] Out 1903z S4		Malc	THU
	1000z	17/04 [304/33 73687 85853 92453 28040 39110 50508 33588.....81656 60546] Out 1010z S2		RNGB, Malc	FRI
	1045z	20/04 [691/00] Out 1048z S3 + QRM		Malc	MON
	1900z	20/04 [648/36 38243.....17116] Out 1910z S3 + QRM		Malc	MON
	1000z	21/04 [306/00] Out 1003z S3		Malc, RNGB	TUE
	1045z	22/04 [277/00] Out 1045z S2		Malc	WED
	1900z	23/04 [648/39 38243.....17116] Out 1910z S3		Malc	THU
	1000z	24/04 [304/00] Out 1003z S2		Malc	FRI
	1045z	27/04 [692/28 78358.....27184] Out 1054z S3		Malc	MON
	1900z	27/04 [649/00] Out 1903z S4		Malc	MON
	1000z	28/04 [306/00] Out 1003z S2		Malc	TUE
	1045z	29/04 [692/28 78358.....27184] Out 1054z S2		Malc	WED
	1900z	30/04 [640/00] Out 1903z S4		Malc	THU
7864kHz	1730z	05/03 [413/00]		RNGB	THU
	1730z	19/03 [414/00] Out 1733z S3		Malc	THU
	1730z	09/04 [412/00] Out 1733z S8		Malc	THU
	1730z	16/04 [412/00] Out 1733z S4		Malc	THU
	1730z	23/04 [412/00] Out 1733z S2 + QRM		Malc	THU
	1730z	30/04 [413/33 40368.....97336] Out 1740z S3		Malc	THU
8102kHz	0710z	07/03 [495/00] Out 0713z S4		Malc	SAT
	0710z	28/03 [490/00] Out 0713z S3		Malc	SAT
	0710z	04/04 [491/00] Out 0713z S4		Malc	SAT
	0710z	05/04 [491/00] Out 0713z S2		Malc	SUN
	0710z	11/04 [498/35 19331.....20457] Out 0720z S4		Malc	SAT
	0710z	12/04 [498/35 19331.....etc] Repeat of Saturday		Malc	SUN
	0710z	18/04 [497/00] Out 0713z S2		Malc, RNGB	SAT
	0710z	19/04 [496/00] Out 0713z S2		Malc	SUN
8180kHz	0900z	02/03 [533/00] Out 0903z S3		Malc, RNGB	MON
	0700z	03/03 [579/00]		RNGB	TUE
	0900z	04/03 [532/00]		RNGB	WED
	0900z	16/03 [537/00]		RNGB	MON
	0700z	17/03 [579/00]		RNGB	TUE
	0900z	18/03 [537/00]		RNGB	WED
	0900z	23/03 [532/37 09461.....14730] Out 0910z S3		Malc	MON
	0700z	24/03 [573/31 74719 05626 94749 34889 08368 63439 06272.....48707 02619] Out 0709z S3		RNGB, Malc	TUE

	0900z	25/03 [532/37 09461.....etc] Repeat of Monday	Malc	WED
	0900z	30/03 [538/00] Out 0903z S2	Malc	MON
	0700z	31/03 [573/00] Out 0703z S3	Malc	TUE
	0900z	01/04 [537/00] Out 0903z S2	Malc	WED
	0700z	03/04 [574/00] Out 0703z S3	Malc	FRI
	0700z	07/04 [573/00] Out 0703z S3	Malc, RNGB	TUE
	0900z	08/04 [530/00] Out 0903z S2	Malc	WED
	0700z	10/04 [570/00] Out 0703z S4	Malc, RNGB	FRI
	0700z	14/04 [571/00] Out 0703z S3	Malc	TUE
	0900z	15/04 [538/32 19837.....82153] Out 0909z S2	Malc	WED
	0700z	17/04 [579/00] Out 0703z S2	Malc, RNGB	FRI
	0900z	20/04 [530/00] Out 0903z S2	Malc	MON
	0700z	21/04 [574/38 89659 03161 56314 43005 81834 72856.....74713 23386] Out 0711z S3	RNGN, Malc	TUE
	0900z	22/04 [530/00] Out 0903z S2	Malc, RNGB	WED
	0700z	24/04 [574/38 89659 03161.....23386] Out 0710z S3	RNGB, Malc	FRI
	0900z	27/04 [535/00] Out 0903z S2	Malc	MON
	0700z	28/04 [573/00] Out 0703z S2	Malc	TUE
	0900z	29/04 [537/00] Out 0903z S3	Malc	WED
8530kHz	1910z	08/03 [614/00] Out 1913z S3 (Dutch SDR)	Malc	SUN
	1910z	20/03 [611/00] Out 1913z S5	Malc	FRI
	1910z	27/03 [611/00] Out 1913z S2	Malc	FRI
	1910z	29/03 [610/00] Out 1913z S6	Malc	SUN
	1910z	03/04 [614/00] Out 1913z S4	Malc	FRI
	1910z	05/04 [614/00] Out 1913z S3	Malc	SUN
	1910z	10/04 [611/00] Out 1913z S9	Malc	FRI
	1910z	12/04 [618/00] Out 1913z S3	Malc	SUN
	1910z	17/04 [616/33 34465.....23401] Out 1920z S5	Malc	FRI
	1910z	19/04 [616/33 34465.....etc] Repeat of Friday	Malc	SUN
	1910z	24/04 [617/00] Out 1913z S3	Malc	FRI
9240kHz	1700z	05/03 [338/00]	RNGB	THU
	1700z	19/03 [338/00] Out 1703z S4	Malc	THU
	1700z	24/03 [331/00] Out 1703z S4	Malc	TUE
	1700z	31/03 [330/00] Out 1703z S3	Malc	TUE
	1700z	07/04 [335/00] Out 1703z S4	Malc	TUE
	1700z	09/04 [335/00] Out 1703z S9	Malc	THU
	1700z	14/04 [334/33 06640.....28717] Out 1709z S4	Malc	TUE
	1700z	16/04 [334/33 06640.....etc] Repeat of Tuesday	Malc	THU
	1700z	21/04 [333/00] Out 1703z S3	Malc	TUE
	1700z	23/04 [331/00] Out 1703z S4	Malc	THU
	1700z	28/04 [332/00] Out 1703z S2	Malc	TUE
	1700z	30/04 [333/00] Out 1703z S3	Malc	THU
9963kHz	0715z	03/03 [633/00] Heavy QRM	RNGB	TUE
	0715z	13/03 [636/00]	RNGB	FRI
	0715z	17/03 [631/35 61955 24326 56905 64743 79032 39556 45326 19506.....79840 83342]	RNGB	TUE
	0715z	20/03 [631/35 61955.....etc] S4 Repeat of Tuesday	Malc	FRI
	0715z	24/03 [634/00]	RNGB	TUE
	0715z	27/03 [630/00] Out 0718z S3	Malc	FRI
	0715z	31/03 [639/00] Out 0718z S4	Malc	TUE
	0715z	03/04 [631/00] Out 0718z S7	Malc	FRI
	0715z	07/04 [636/31 30022 65852 48590 00443 39257 86759 84816.....26570 93213] Out 0724z S5	RNGB, Malc	TUE
	0715z	10/04 [636/31 30022.....etc] Repeat of Tuesday	Malc	FRI
	0715z	14/04 [633/00] Out 1718z S4	Malc	TUE
	0715z	17/04 [633/00] Out 0718z S4	Malc	FRI
	0715z	21/04 [637/00] Out 0718z S2	Malc	TUE
	0715z	24/04 [630/00] Out 0718z S2	Malc	FRI
	0715z	28/04 [635/00] Out 0718z S2	Malc	TUE
10213kHz	0745z	02/03 [261/00] Out 0748z S7	Malc, RNGB	MON
	0745z	23/03 [261/33 48245..... 17458] Out 0755z S4	Malc	MON
	0745z	30/03 [261/00] Out 0748z S2	Malc	MON
	0745z	06/04 [260/00] Out 0748z S7	Malc, RNGB	MON
	1850z	11/04 [281/34 84643.....25939] Konyetz 1900z S2	Malc	SAT
	0745z	20/04 [267/35 41110..... 41761] Out 0755z S3	Malc	MON
	0745z	27/04 [264/00] Out 0748z S4	Malc	MON
10330kHz	1530z	06/03 [262/00]	RNGB	THU
	1530z	19/03 [267/00] Out 1533z S6	Malc	THU
	1530z	02/04 [269/00]	Gary H	THU
	1530z	09/04 [264/00]	Gary H, Malc	THU
	1530z	16/04 [260/00] Out 1533z S4	Malc	THU
	1530z	23/04 [267/35 41110 26879 46275 61161 20541 31245 95488 44314.....24931 41761]	Gary H	THU
	1530z	30/04 [267/00]	Gary H	THU
10800kHz	0645z	03/03 [515/00]	RNGB	TUE
	0645z	17/03 [518/00]	RNGB	TUE
	0645z	31/03 [518/00] Out 0648z S2	Malc	TUE
	0645z	02/04 [512/00]	RNGB	THU
	0645z	07/04 [518/00] Out 0648z S2	Malc, RNGB	TUE
	0645z	09/04 [514/00] Out 0648z S2	Malc	THU
	0645z	14/04 [515/31 58566.....73317] Out 0654z S4	Malc	TUE

	0645z	16/04 [515/31 58566.....etc] Repeat of Tuesday		Malc	THU
	0645z	21/04 [518/00] Out 0648z S4		Malc, RNGB	TUE
	0645z	23/04 [511/00] Out 0648z S5		Malc	THU
	0645z	28/04 [512/00] Out 0648z S3		Malc	TUE
	0645z	30/04 [512/00] Out 0648z S3		Malc	THU
11116kHz	1650z	06/03 [921/38 05048..... 80006] Out 1701z S2		Malc	FRI
	1650z	13/03 [921/00]		Gary H	FRI
	1650z	15/03 [921/00]		RNGB	SUN
	1650z	20/03 [924/00] Out 1653z S5		Malc	FRI
	1650z	22/03 [921/00]		Gary H	SUN
	1650z	27/03 [920/00] Out 1653z S2		Malc	FRI
	1650z	29/03 [926/00] Out 1653z S5		Malc	SUN
	1650z	03/04 [927/00] Out 1653z S5		Malc	FRI
	1650z	05/04 [925/00] Out 1653z S5		Malc	SUN
	1650z	10/04 [927/00]		Gary H	FRI
	1650z	12/04 [927/00] Out 1653z S4		Malc	SUN
	1650z	17/04 [927/00] Out 1653z S2		Malc	FRI
	1650z	19/04 [925/00] Out 1653z S4		Malc	SUN
12153kHz	0640z	02/03 [941/00]		RNGB	MON
	0830z	02/03 [183/00]		Ary	MON
	0830z	06/03 [189/00]		RNGB	FRI
	0640z	16/03 [944/00]		RNGB	MON
	0830z	20/03 [180/00]		RNGB	FRI
	0830z	27/03 [185/35 02203.....19976] Out 0840z S3		Malc	FRI
	0830z	30/03 [183/00] Out 0833z S3		Malc	MON
	0640z	01/04 [940/00] Out 0643z S2		Malc	WED
	0830z	03/04 [184/00] Out 0833z S3		Malc	FRI
	0640z	06/04 [948/00] Out 0643z S2 (Dutch SDR)		Malc, RNGB	MON
	0830z	06/04 [180/00] Out 0833z S4		Malc, RNGB	MON
	0640z	08/04 [946/00] Out 0643z S2 (Dutch SDR)		Malc	WED
	0845z	10/04 [188/00] Out 0848z S5		Malc	FRI
	0830z	13/04 [189/23 29355 02005 33124 99820 38082 67211 57057 54646.....14170 86733]		RNGB	MON
	0640z	15/04 [945/24 06220..... 61906] Out 0648z S2		Malc	WED
	0830z	17/04 [189/23 29355.....86733] Out 0837z S2		Malc	FRI
	0640z	20/04 [949/00] Out 0643z S2		Malc, RNGB	MON
	0640z	22/04 [940/00] Out 0643z S2		Malc	WED
	0830z	24/04 [182/00] Out 0833z S3		Malc	FRI
	0640z	27/04 [940/00] Out 0643z S4		Malc	MON
	0830z	27/04 [188/00] Out 0833z S4 + QRM		Malc	MON
	0640z	29/04 [945/00] Out 0643z S3		Malc, RNGB	WED
12202kHz	0845z	03/03 [156/00]		RNGB	TUE
	0845z	05/03 [154/00]		RNGB	THU
	0845z	10/03 [155/00]		RNGB	TUE
	0845z	17/03 [155/35 82700 69080 78086 39824 18151 40553 86555 14013.....94264 65424]		RNGB	TUE
	0845z	19/03 [155/35 82700.....etc] Repeat of Tuesday		Malc	THU
	0845z	24/03 [157/00] Out 0848z S2		Malc	TUE
	0845z	31/03 [155/00] Out 0748z S3		Malc	TUE
	0845z	07/04 [154/00] Out 0848z S3		Malc	TUE
	0845z	09/04 [152/00] Out 0848z S5		Malc	THU
	0845z	14/04 [151/36 24950.....77061] Out 0855z S5		Malc	TUE
	0845z	16/04 [151/36 24950.....etc] Repeat of Tuesday		Malc	THU
	0845z	21/04 [159/00] Out 0848z S2		Malc	TUE
	0845z	23/04 [150/00] Out 0848z S3		Malc	THU
	0845z	28/04 [152/00] Out 0848z S3		Malc	TUE
	0845z	30/04 [152/00] Out 0848z S4		Malc	THU
13470kHz	1745z	30/03 [249/00] Out 1748z S2 (Dutch SDR)		Malc	MON
	1745z	05/04 [248/00] Out 1748z S3 (Dutch SDR)		Malc	SUN
	1745z	06/04 [245/00] Out 1748z S2 (Dutch SDR)		Malc	MON
	1745z	19/04 [242/40 65481.....86095] Out 1756z S2 (Dutch SDR)		Malc	SUN
	1745z	20/04 [246/00] Out 1748z S2 (Dutch SDR)		Malc	MON
	1745z	27/04 [242/00] Out 1748z S2 (Dutch SDR)		Malc	MON
14865kHz	0745z	03/03 [225/33 58451 06020 54878 39227 08329 64100 34171.....93552 49054]		Ary	TUE
	0745z	05/03 [225/33 58451.....etc] Repeat of Tuesday		RNGB	THU
	0745z	10/03 [220/00]		RNGB	TUE
	0745z	19/03 [229/00] Out 0748z S2 (Dutch SDR)		Malc	THU
	0745z	31/03 [223/00] Out 0748z S3		Malc	TUE
	0745z	07/04 [223/00] Out 0748z S2 (Dutch SDR)		Malc, RNGB	TUE
	0745z	21/04 [220/00] Out 0748z S2		Malc, RNGB	TUE
	0745z	23/04 [220/00] Out 0748z S2 (Dutch SDR)		Malc	THU
	0745z	28/04 [229/37 61617.....86157] Out 0756z S2		Malc	TUE
	0745z	30/04 [229/36 61617.....etc] Repeat of Tuesday		Malc	THU
14972kHz	1345z	24/03 [917/00] Out 1348z S3		Malc	TUE
	1345z	28/03 [911/00] Out 1348z S2		Malc	SAT
	1345z	31/03 [917/00] Out 1348z S2		Malc	TUE
	1345z	04/04 [915/00] Out 1348z S2 (Dutch SDR)		Malc	SAT
	1345z	11/04 [919/00] Out 1348z S3 (KSDR)		Malc	SAT

17410kHz	0745z	25/03 [343/00]	Out 0748z S1	(Dutch SDR)		Malc	WED
	0745z	01/04 [346/00]				RNGB	WED
	0745z	08/04 [349/00]	Out 0748z S1	(Dutch SDR)		Malc	WED
	0745z	29/04 [340/00]	Out 0748z S2			Malc	WED
19184kHz	0820z	03/03 [138/00]	Out 0823z			RNGB	TUE
	0820z	17/03 [133/00]		(Polish SDR)		RNGB	TUE
	0820z	18/03 [135/00]		(Polish SDR)		RNGB	WED
	0820z	01/04 [138/00]		(Polish SDR)		RNGB	WED
	0820z	21/04 [130/33 38873 78327 66240 39700 51518 25223 78972 76962.....93692 91159]				RNGB	TUE
	0820z	29/04 [138/00]	Out 0823z S2			Malc	WED

E17z

March 2020

Thursday

0800z	14260kHz	0810z	12930kHz		
05/03		217 508 6 66990 41333 29381 40334 11187 71705 508 5 00000		[0800z NRH]	Weak
19/03		217 409 5 47665 94092 48521 63888 92060 409 5 00000	(an old message)	[0800z WarsawSDR]	Fair
26/03		217 409 5 47665 94092 48521 63888 92060 409 5 00000		[0800z NRH]	Weak

April 2020

02/04	217 846 846 5 5 88620 58069 61732 74537 54440 846 846 5 5	(SDR Horndean) Near Portsmouth, Edd	THU
09/04	217 846 5 88620 58069 61732 74537 54440 846 5 00000	[0800z (Kiwi SDR)]	Weak
16/04	217 439 5 14663 65564 67269 47059 49848 439 5 00000	[0800z NRH, poor condx]	Weak
23/04	217 439 5 14663 65564 67269 47059 49848 439 5 00000	[0800z KSDR, 0810z DutchSDR]	Weak

E25

No Reports

G06

Peter starts the G06 files, then onto those sent in by M8:

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

12-Mar-20:- 5938 kHz, weak signal, strong broadcast station on close frequency, could just about hear the "579" call, largely unreadable, gave up since - unusually - there was something on TV worth watching, *The Odessa File* on Film 4.

9-Apr-20:- 5934 kHz, no broadcast interference, "579", DK/GC "902 902 45 45", strong signal.

23-Apr-20:- 5937 kHz I made it, "579" and "902 902 45 45" again, strong signal, started over a minute before the half-hour, ended after 1840 UTC, computer shut-down after 1841.

Friday 1930 UTC Schedule Following Second + Fourth Thursdays:-

13-Mar-20:- 5442 kHz, started well before the half-hour, call "947", DK/GC "901 901 44 44". Strong signal, ended 1940:40s UTC, computer shut-down sounds after 1941.

27-Mar-20:- 5442 kHz, very strong "XJT" noise-maker sitting on this frequency this evening, G06 difficult copy, call "947", DK/GC "582 582 44 44" (?).

10-Apr-20:- 5442 kHz, no "XJT" this evening, call "947", DK/GC "902 902 45 45", as heard on the previous day at 1830z, ended after 1941 followed by computer shut-down.

24-Apr-20:- 5442 kHz, early start, "947" and "902 902 45 45", weak signal. Carrier was up when checked at 1842z and was considerably stronger.

Thursday

March 2020

1830z 5934kHz

26/03 579 Unworkable due to heavy BCQRM

April 2020

09/04 579 902 45 12435 to 32442 902 45 00000 Weak

1830z 5937kHz

23/04 579 902 45 12435 ... 32442 902 45 00000 Fair

Friday

March 2020

1930z 5442kHz

27/03 947 580 44 31352 ... 38780 580 44 000000 Weak, QRM

April 2020

10/04 947 902 45 12435 ... 32442 902 45 00000 Very strong

24/04 947 902 45 12435 ... 32442 902 45 00000 Weak

S06

Some analysis in PoSW logs to start then onto RNGB's splendid logs:

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

6-Mar-20:- 2001 UTC, found in progress with, "452 452 452 00000", close to a strong "XJT" noise-maker.
2104 UTC, just before, 5876 kHz, second sending, found just as about to end.

This schedule, not entirely unexpectedly, moved by one hour in April, clean forgot to listen for it on the 3-April cracking up due to the ongoing "lock-down", but caught it on the next occasion:-

17-Apr-20:- 1900 UTC, 8171 kHz, "452 452 452 00000", strong "XJT" churning away but S06 clear copy.
2000 UTC, 5881 kHz, strong signal.

Other S06:- A schedule on Saturdays at 1300 UTC with a repeat at 1330 noted in March:-

7-Mar-20:- 1306 UTC, 10755 kHz, S06 in progress with 5F groups, weak signal, difficult copy, only just detectable, appeared to end after 1312z. This frequency often active with number stations of S06 and relatives in the past. No repeat found an hour later, it turned out that the repeat goes out at half an hour later:-

14-Mar-20:- 1300 UTC, 10755 kHz, calling "480", much stronger than last time, DK/GC "753 753 42 42", ended just before 1312 UTC.
S06 with 480 call has been heard before, one example being in January and February of 2016, was heard on several days at 1700 UTC on a frequency in the 8MHz band with a repeat at 1730 on a lower frequency. Today's repeat:-
1331 UTC, 9073 kHz, second sending found in progress, weak signal at first but came up to S8 by end of transmission.

28-Mar-20:- 1300 UTC, 10755 kHz, very weak signal, unreadable, could just about hear that it was the S06 OM.
1330 UTC, 9073 kHz, stronger although not by much, call "480", DK/GC sounded like "725 725 44 44".

This schedule appears to have ended with the last Saturday in March, not found in April.

S06s, YL Voice:-

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

3-Mar-20:- 0730 UTC, 7425 kHz, DK/GC "813 813 5 5", very strong signal, "88620 58069 61732 74627 57440".
0740 UTC, 11560 kHz, second sending, also very strong.

10-Mar-20:- 0730 UTC, 7425 kHz, "813 813 5 5" and 5Fs as on the 3rd, very strong.
0740 UTC, 11560 kHz, also very strong.

24-Mar-20:- 0730 UTC, 7425 kHz, DK/GC "589 589 6 6", over S9, "19066 92918 83981 68909 77159 79302".
0740 UTC, 11560 kHz, very strong.

Tuesday 0800 + 0810 UTC Schedule, Call "127":-

3-Mar-20:- 0800 UTC, 11635 kHz, DK/GC "483 483 5 5", S7, "39534 17228 15636 47891 23247".
0810 UTC, 10420 kHz, second sending, S5 to S6 at the start but rapidly became weak and sank into the noise.

24-Mar-20:- 0800 UTC, 11635 kHz, DK/GC "986 986 5 5", weak signal, "59632 13580 45147 24227 61736".
0810 UTC, 10420 kHz, very weak, unreadable.

Wednesday 0830 + 0840 UTC, Call "127":-

4-Mar-20:- 0830 UTC, 11530 kHz, strong signal, DK/GC "463 463 5 5", "25668 32316 79706 80436 36005".
0840 UTC, 12140 kHz, very strong.

18-Mar-20:- 0830 UTC, 11530 kHz, DK/GC "834 834 6 6", good signal, weaker broadcast station underneath, "10597 23521 47660 92883 69901 14636".
0840 UTC, 12140 kHz, over S9.

1-Apr-20:- 0830 UTC, 11530 kHz, DK/GC "984 984 5 5", "39534 17228 15636 47891 23247", strong signal, over-riding the weaker broadcast station, a distinct low frequency beat note between the two carriers.
0840 UTC, 12140 kHz, very strong.

22-Apr-20:- 0830 UTC, 11530 kHz, weak signal and over-ridden by stronger broadcast station, unreadable. Second sending much better:-
0840 UTC, 12140 kHz, DK/GC "409 409 5 5", "25668 32316 79706 80436 36005".

Wednesday 1000 + 1010 UTC Schedule, Call "276":-

4-Mar-20:- 1003 UTC, after – no voice heard until then, plain carrier only, 13365 kHz DK/GC "413 413 5 5", strong signal, "81202 60891 72807 71010 47373".
1010 UTC, 14505 kHz, started off S5 to S6 and rapidly became weaker.

25-Mar-20:- 1000 UTC, 13365 kHz, DK/GC "940 940 5 5", S5 at best, "01405 15003 24357 60583 54545". The repetitive nature of the last 5F group drew attention to itself, it has appeared before as had the entire message, was heard on Wednesday 5-Sept-18 with a DK of "813" and the same five 5Fs formed part of a message of six groups in a transmission on Saturday 7-July-18.
1000 UTC, 14505 kHz, S4 to S5.

1-Apr-20:- 1000 UTC, 13365 kHz, DK/GC "837 837 5 5", weak signal, difficult copy
1010 UTC, 14505 kHz, stronger, "40614 77249 40678 17976 21816"

15-Apr-20:- 1000 UTC, 13365 kHz, DK/GC "435 435 8 8", a higher group count than most, weak signal, "80113 13680 24519 33226 36362 37632 40047 32696".
1010 UTC, 14505 kHz, very weak, unreadable.

Friday 0830 + 0840 UTC Schedule, Call "156":-

6-Mar-20:- 0830 UTC, 12140 kHz, DK/GC "402 402 7 7", "42913 43496 72446 49973 33181 65644 54298". Very strong signal, massive S9+ carrier had been noted at 0820 UTC.
0840 UTC, 13515 kHz, weaker.

The timing of this schedule has moved around over the past year; in March of 2019 was heard on these same frequencies but at 0930 + 0940 with call "516". In September and October, also on these frequencies, was heard at 0630 + 0640 UTC, the call having changed to "156".

13-Mar-20:- 0830 UTC, 12140 kHz, "402 402 7 7" and 5Fs as on the 6th, nowhere near as strong, S7 with QSB.
0840 UTC, 13515 kHz, weak.

20-Mar-20:- 0833:35s UTC approx, 12140 kHz, late start, short call-up, DK/GC "204 204 7 7", "46062 68672 97478 39685 30485 96632 52537", very strong signal.
0840 UTC, 13515 kHz, started off strong but became weaker by 0843z.

27-Mar-20:- 0830 UTC, 12140 kHz, "204 204 7 7" and 5Fs as on the 20th, S9+.
0840 UTC, 13515 kHz, weaker.

3-Apr-20:- 0830 UTC, 12140 kHz, "208 208 7 7", very strong signal, "65132 02232 66286 90057 66740 28636 25349"
0840 UTC, 13515 kHz, also very strong.

17-Apr-20:- 0830 UTC, 12140 kHz, DK/GC "943 943 7 7", strong signal, "80113 13680 24519 33226 36362 37632 40047".
0840 UTC, 13515 kHz, weaker.

24-Apr-20:- 0830 UTC, 12140 kHz, "943 943 7 7" and 5Fs as on the 17th, strong signal, well over S9.
0840 UTC, 13515 kHz, slightly weaker.

First Saturday in the Month 0800 + 0810 UTC Schedule, Call "132":-

7-Mar-20:- 0800 UTC, 10350 kHz, DK/GC "860 860 7 7", signal strength up and down, "52401 63919 92699 14600 74248 48754 65125".
0810 UTC, 8520 kHz, S7, strong FSK/RTTY signal on LF side, removed by using RX in USB mode.

4-Apr-20:- 0800 UTC, 10350 kHz, DK/GC "468 468 5 5", weak signal, "42676 03732 96319 30647 67269".
0810 UTC, 8520 kHz, also weak, the FSK still strong.

Wednesday

4th/11th	0830/0840z	9082/9952	'464' 208 5 56401 68858 17106 77456 65018
18th/25th			'464' 897 5 88620 58069 61732 74537 57440
4th/11th	0830/0840z	11530/12140	'172' 463 5 25668 32316 79706 80436 36005
18th/25th			'172' 834 6 10597 23521 47660 92883 69901 14636
4th/11th	1000/1010z	13365/14505	'276' 413 5 81202 60891 72807 71010 47373
18th/25th			'276' 940 5 01405 15003 24357 60583 54545

Thursday

5th/12th (E17z)	0800/0810z	14260/12930	'217' 508 6 66990 45366 29281 40334 11187 71705
19th/26th			'217' 409 5 47665 94092 48521 63888 92060
5th/12th	0930/0940z	9081/10514	'698' 231 5 50913 02804 82959 48840 51623
19th/26th			'698' 237 5 88146 57856 98835 46186 16945
5th/12th	1200/1210z	12415/13515	'175' 423 6 99804 94427 56396 81918 65606 79598
19th/26th			'175' 249 6 88146 57856 98836 46186 16945 80744

Friday

6th/13th	0830/0840z	12140/13515	'156' 402 7 42913 43496 72446 49973 33181 65644 54298
20th/27th			'156' 204 7 46062 68672 97478 39685 30485 96632 52537
6th/13th	0900/0910z	5744/6524	'239' 407 5 65656 65872 79598 75009 14760
20th/27th			'239' 410 5 52401 63919 92699 14600 74248

Saturday

7th	0800/0810z	10350/8520	'132' 860 7 52401 63919 92699 14600 74248 48754 65125
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With thanks to Daniel E, RRGB, Malc, Ary, HfD

S06 log April 2020**Thursdays**

	0830z	19078kHz	0930z	16318kHz
02/04	'842' 507 41 68446.....to 20709 507 41 00000]	0941z S2	Weak	
09/04	'842' 916 42 75612 90384 34355 52148 92763 88768 31908 80467 99140 54628 81372 80109 16262 21414 54283 05105 71089 82981 90207 79734 92230 93390 89491 30997 16019 16017 52584 53982 57133 95421 33130 46091 23462 50415 97023 71048 79887 11740 04604 38629 90693 52833 916 42 00000			

Fridays (1st & 3rd)

	2000z	8171khz	2100z	5876kHz
03/04	'452' 00000			
17/04	'452' 00000	(used 5881kHz)		

Other:

	0930z	13945kHz	1000z	11128kHz
05/04	'480' 369 41 36926 77384 32258 43795 81190 22191 26184 16869 81013 09636 67421 97700 61483 28452 43208 78646 87173 43262 04309 72604 46472 76509 47464 91755 34140 31170 87099 87476 50135 80378 80378 72604 93390 46472 76509 47464 91755 34140 31170 87099 87476 369 41 00000			
12/04	'480' 571 42 50440 33147 78759 64791 17214 63791 24926 79009 37644 43254 61188 95369 50048 29275 46166 33523 55941 82452 21222 19101 00621 22894 94543 02359 17202 33903 47724 14863 70931 67461 57923 15689 38290 64137 99288 71561 84703 48826 40681 18838 93248 06973 571 42 00000]	0942z		
19/04	'480' 269 43 89817 46338.....18411 269 43 00000			
04/04	'480' 369 41 36926 77384.....97476 369 41 00000]	1311z	1330z	9412kHz
11/04	'480' 571 42 50440 33147.....06973 571 42 00000]			
18/04	'480' 269 43 89817 46338 63102 37871 29829 19860 90023 39302 58963 10418 99625 71339 69531 12708 92028 19160 26665 57696 44576 21605 38872 29052 63405 35848 23128 89060 02032 02521 55044 77254 46472 76509 47464 91755 34140 31170 87099 87476 74804 95315 02032 01790 18411 269 43 00000]	1312z		
25/04	'480' 731 44 84385 02233 32666 02585 01921 66086 88729 54680 04965 79335 64950 21574 35374 12860 46909 92803 54055 87690 92227 73725 26084 47466 34377 10233 10401 79513 57755 49501 13643 28472 25984 41166 70541 92449 13303 85017 16590 36384 51092 13958 34818 96901 72436 47109 731 44 00000		(used 9408kHz)	

S06c

29/04	1020/1030z	16283/12183 kHz:	'11214' repeated
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S06s April log:**Monday**

6th/13th	0630/0640z	22185/20050	'462' 591 7 56041 68858 17106 77456 65018
20th/27th			'462' 978 5 88620 58060 61732 47537 57440
6th/13th	0830/0840z	9220/8270	'764' 921 5 25668 32316 69606 80426 36005
20th/27th			'764' 208 5 82045 36717 24042 75956 31670
6th/13th	0900/0910z	14580/13165	'232' 854 6 69229 27128 29545 37007 41751 29683
20th/27th			'232' 947 5 10597 23512 47660 92883 69901
6th/13th	1200/1210z	9145/11460	'149' 273 5 81202 60891 72807 71010 47272
20th/27th			'149' 280 5 52343 79628 42432 56075 46281

Tuesday			
7th/14th	0600/0610z	15855/16485	'438' NRH
21st/28th			'438' 526 7 17301 88554 82045 36717 24042 75956 31670
7th/14th	0700/0710z	5760/6930	'452' 801 6 13680 36362 37632 40047 32696 07060
21st/28th			'452' 903 6 46062 68672 97478 39685 30485 96632
7th/14th	0730/0740z	7425/11560	'427' 801 5 77258 32000 84382 52293 08251
21st/28th			'427' 831 5 21767 53672 11834 81022 36903
7th/14th	0800/0810z	11635/10420	'127' NRH
21st/28th			'127' 406 5 52401 63919 92699 14600 74248
7th/14th	1000/1010z	6410/7340	'427' 801 5 10059 60969 44343 04910 80189
21st/28th			'427' 815 6 33796 13577 74526 46647 79302 53516
7th/14th	1100/1110z	6190/7230	'265' 813 7 71010 47373 31096 21140 34716 34169 52225
21st/28th			'265' 941 7 88620 58069 61732 74537 57440 10597 23521
7th/14th	1500/1510z	6464/7242	'914' 863 5 45478 69849 85286 34173 00259
21st/28th			'914' 263 5 01405 15003 24357 60583 54545
Wednesday			
1st/8th	0830/0840z	9082/9952	'464' 971 5 52401 63919 92699 14600 74248
15th/22nd			'464' 872 5 56401 68858 17106 77465 56018
1st/8th	0830/0840z	11530/12140	'172' 984 5 39534 17228 15636 47891 23247
15th/22nd			'172' 409 5 25668 32316 79706 80436 36005
1st/8th	1000/1010z	13365/14505	'276' 839 5 40614 77249 40678 17976 21816
15th/22nd			'276' 435 8 80113 13680 24519 33226 35362 37632 40047 32696
Thursday			
2nd/9th (E17z)	0800/0810z	14260/12930	'217' 846 5 88620 58069 61732 74537 54440
16th/23rd			'217' 439 5 14663 65564 67269 47059 49848
2nd/9th	0930/0940z	9081/10514	'698' 402 5 29534 17228 15636 47891 23347
16th/23rd			'698' 203 5 62903 62480 62264 89123 87844
2nd/9th	1200/1210z	12415/13515	'175' 894 6 77146 57856 98835 56186 16945 80644
16th/23rd			'175' 294 6 61719 58159 87629 92294 17231 44269
Friday			
3rd/10th	0830/0840z	12140/13515	'156' 208 7 65132 02232 66286 90057 66740 28636 25349
17th/24th			'156' 943 7 80113 13680 24519 33226 36362 37632 40047
3rd/10th	0900/0910z	5744/6524	'239' 806 5 76985 13766 95091 35527 04464
17th/24th			'239' 857 6 46062 68672 97478 39685 30485 96632
Saturday			
4th	0800/0810z	10350/8520	'132' 468 5 42676 03732 96319 30647 67269

With thanks to Daniel E, RNGB, Malc, Ary, HfD

S11a log March/April

4505kHz	0915z	02/03 [484/00]	RNGB	MON
	0915z	06/03 [482/00]	RNGB	FRI
	0915z	16/03 [484/00]	RNGB	MON
	0915z	20/03 [481/00] Konyetz 0918z S2	Malc, RNGB	FRI
	0915z	23/03 [480/37 VNIMANIE too weak to copy msg]	Malc	MON
	0915z	27/03 [480/37 34196 04052 44449 78331 57318 32843 86868.....80481] Konyetz 0927z S3	RNGB, Malc	FRI
	0915z	30/03 [485/00] Konyetz 0918z S3 + QRM	Malc, RNGB	MON
	0915z	06/04 [481/00] Konyetz 0918z S3	Malc, RNGB	MON
0915z	20/04 [480/37.....] too weak to copy message	Malc	MON	
6433kHz	1100z	04/03 [378/37 87737 69482 18114 76850 45595 42172 43826 72980.....55914 21450]	RNGB	WED
	1100z	06/03 [378/37 87737.....etc] Repeat of Wednesday	Malc	FRI
	1100z	13/03 [373/00] Konyetz 1103z Good/Clear. (SDR Enschede)	Ed Smith	FRI
	1100z	20/03 [376/00] Konyetz 1103z S4	Malc	FRI
	1100z	25/03 [469/00] Konyetz 1103z S2	Malc	WED
	1100z	01/04 [376/00] Konyetz 1103z S3	Malc, RNGB	WED
	1100z	03/04 [377/00] Konyetz 1103z S3	Malc	FRI
	1100z	08/04 [378/00] Konyetz 1103z S4	Malc	WED
	1100z	10/04 [371/00] Konyetz 1103z S4	Malc	FRI
	1100z	15/04 [379/40 90371.....00147] Konyetz 1112z S4	Malc	WED
	1100z	17/04 [379/40 90371 63526 10530 49618 13506 78851.....41200 00147] Konyetz 1112z S3	RNGB, Malc	FRI
	1100z	22/04 [373/00] Konyetz 1103z S3	Malc	WED
	1100z	24/04 [370/00] Konyetz 1103z S7	Malc	FRI
	1100z	29/04 [370/00] Konyetz 1103z S2	Malc	WED
7469kHz	1020z	03/03 [426/00] Konyetz 1023z S2	RNGB, Malc	TUE
	1020z	06/03 [421/00] Konyetz 1023z S3	Malc	FRI
	1020z	10/03 [421/00]	RNGB, Ed Smith	TUE
	1020z	20/03 [425/00] Konyetz 1023z S2	Malc	FRI
	1020z	24/03 [424/38 71523.....84005] Out 1031z S4	Malc	TUE
	1020z	27/03 [426/38 71523 11637 45322 31847 03917 95736 75321..... to 84005] Konyetz 1031z S5	RNGB, Malc	FRI
	1020z	31/03 [469/00] Konyetz 1023z S2	Malc	TUE
	1020z	03/04 [420/00] Konyetz 1023z S2	Malc	FRI

15/03 868 1 386 88 57481 ... 92124 000 000 Weak

868 868 868 1
386 88
57481 46205 67157 10130 30435
86019 79885 31739 19274 20857
87165 34025 32703 89161 27869
88019 47917 67499 86627 84143
04274 95495 36668 37716 84511
39210 75101 00512 14695 81895
54839 45572 35307 90461 35738
64342 20214 17306 49946 37999
16844 54345 86315 22704 69187
04455 57465 99491 17969 16692
76861 93228 90914 56331 73224
44768 85630 66193 27894 65106
40114 97016 24993 62463 40437
05164 82139 76312 87721 64371
37920 25713 71667 77374 97385
61015 67744 84087 81628 68219
52204 72057 32579 90022 99568
75283 82809 92124
000 000 Courtesy DanAr

22/03 868 868 868 1 Weak, unworkable
You Tube courtesy Original Token <https://www.youtube.com/watch?v=4amZDGm7ht0>

29/03 868 1 8351 24 94276 ... 82734 000 000 Weak

April 2019

0300z	12218kHz	0320z	kHz	0340z	kHz			
12218kHz0300z	05/04	254 1 110 95	11287 ... 12762			Weak [SDR-USA]	DanAr	SUN
12/04		254 1 3215 109	27695 ... 79450 000			Weak	DanAr	SUN

254 1 3215 109
27695 11059 65391 47807 93614
24959 00651 80603 58864 51173
97119 49064 90919 67623 30171
05413 88450 57796 22869 03604
43281 95587 26962 88844 95119
40039 84248 06559 80891 54325
16786 13266 03886 84209 33807
06449 84500 16870 71369 98851
88938 64331 08175 30375 83574
49320 56023 45235 19177 66313
80367 07240 36074 23862 51075
80621 73268 00874 93049 95206
74485 36908 41342 99193 80611
53438 27178 65043 54504 87228
88828 36193 07548 41456 89977
47293 91243 26839 67649 66186
46633 63251 64464 12140 66568
40232 31056 17661 06351 67315
27878 22173 69919 32402 10785
20544 11801 17722 12417 83781
82792 67507 11470 64921 84484
26715 05103 05914 79450 000
Courtesy DanAr

V15 North Korean Intelligence via Radio Pyongyang

657//3320 kHz

1445z	07/03	Message in Korean. Ary notes, "It has been a while!"	Ary	SAT
1545z	12/03	Message in Korean Heard via web sdr Japan	Ary	THU

V24

Token comments, "So far this month V24 has hit every known schedule, that is the first time it has done so in a long time, possibly over a year."

4925kHz1430z	11/03 AM	Dvorak's Slavonic Dances followed by a message in Korean	Ary	WED
4925kHz1430z	13/03 AM	Dvorak's Slavonic Dances followed by a message in Korean	Ary	FRI
4925kHz1430z	15/03	Dvorak's Slavonic Dances followed by a message in Korean	Ary	SUN
5115kHz1600z	13/03 AM	K-popsong followed by a message in Korean	Ary	FRI

5715 kHz1501z	19/03 AM	K-popsong followed by a message in Korean	Ary	THU
5150kHz1400z	18/04 AM	K-popsong followed by a message in Korean	Ary	SAT
5150kHz1400z	21/04 AM	K-popsong followed by a message in Korean	Ary	TUE
5150kHz1400z	25/04 AM	K-popsong followed by a message in Korean	Ary	SAT
5150kHz1600z	18/04 AM	K-popsong followed by a message in Korean	Ary	SAT
5900kHz1600z	15/04	K-popsong followed by a message in Korean*	Ary	WED

*From Token!:

Just as an FYI, this is the first, and so far only, transmission of V24 this month, it has missed every other schedule this month.

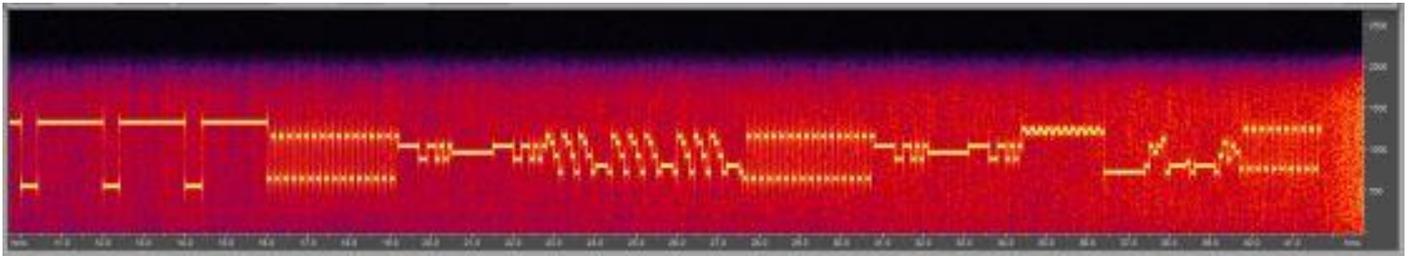
About once a year V24 appears to do this, miss most or all of the schedules in the first half of the month, and then make most of the schedules in the last half. If it follows true to form V24 should make 8 to 11 more transmissions this month. The remaining two on 5900 kHz, the three on 5715 kHz, the three on 4900 kHz, and possibly the three on 5150 kHz.

V26

Nil Reports this time.

Polytones

XPA1



0810z 03/03/2020

Tuesday/Thursday

March 2020

0810z	12132kHz	0830z	13453kHz	0850z	14576kHz	
03/03	973 000 06468 00001 00000 ... 37264					Very strong
05/03	973 000 08545 00001 00000 ... 36264					Very strong
10/03	973 1 00365 00055 15098 ... 63240					Fair
12/03	973 1 00365 00055 15098 ... 63240					Fair
973 973 973 1 973 973 973 1 973 973 973 1						
00365 00055 15098 74473 88992 95390 62229 36879 05520 79887 87664 07345 89261 38856 57341 72523 78741 75836 83427 16444 20163 75458 61001 81469 40553 25380 88369 35898 40689 62948 55770 91413 33238 10698 04253 93858 81494 93998 21795 88819 58562 50762 79457 21998 35282 99874 48305 61717 94609 31565 53913 12451 94242 99725 09120 32221 79087 63240						
<i>Courtesy PLdn</i>						
17/03	973 1 00365 00055 15098 ... 63240					Strong
19/03	973 1 00365 00055 15098 ... 63240			[0810z Fair]		Strong
24/03	973 000 02590 00001 00000 ... 33663			[0810z Strong]		Very strong
26/03	973 1 00365 00055 15098 ... 63240			[0810z Fair]		Very strong
31/03	Lost due to corrupt sound file					

April 2020

0710z 10428kHz 0730z 11431kHz 0750z 13441kHz

02/04 Lost due to corrupt sound file

07/04 486 1 00111 00112 39100 ... 40613 [0730z QSB3 to nil] Fair

486 486 486 1 486 486 486 1 486 486 486 1

00111 00112 39100 36064 43180 60812 18994 50816 82220 34990
 52942 74650 52763 07284 65727 64125 87056 78865 37367 15705
 34078 31502 35928 81423 36723 02911 75764 54530 11632 81422
 64300 30382 78264 77639 66108 72179 42900 05963 75099 94955
 99305 70433 24160 41739 23329 00964 25790 26555 37053 74207
 56524 39648 73230 54320 71070 45905 68650 88416 31129 15720
 67688 62847 25446 10018

60852 31455 05768 07282 75181 95638 82647 74251 17480 39797
 64561 79114 86381 02332 78527 03443 75706 98759 30990 70602
 63629 20626 47931 09965 29342 26974 83709 29972 88111 04037
 18346 15035 39930 53137 10122 59840 96565 78308 13060 47494
 30507 32354 01061 20076 90646 61182 31074 46739 64379 48010
 40613 *Courtesy PLdn*

09/04 486 1 00111 00112 39100 ... 4063 [0710z Fair, QSB3] Strong

14/04 486 1 00111 00112 39100 ... 40613 [0710z Missed] Weak

16/04 486 1 00111 00112 39100 ... 40613 [0750z Fair] Weak

21/04 486 000 02275 00001 00000 ... 34661 [0710z Weak, noisy] Very strong

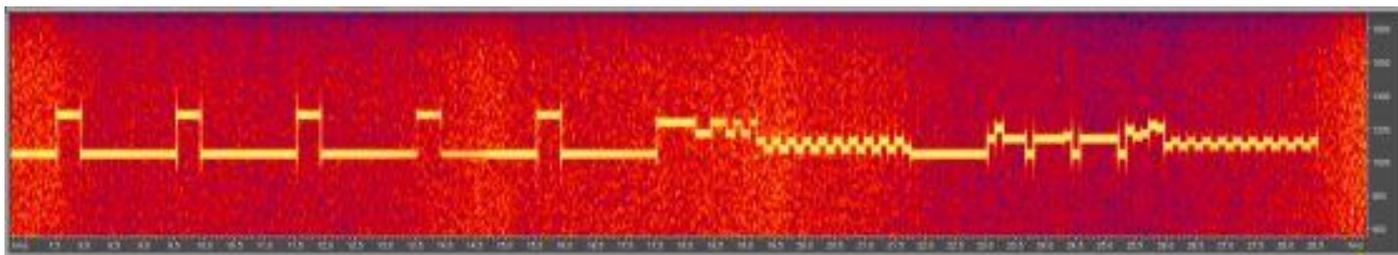
23/04 486 000 06357 00001 00000 ... 36263 [0710z Fair, noisy] Very strong

28/04 486 000 02618 00001 00000 ... 40253 Fair, noisy

30/04 486 000 06091 00001 00000 ... 31667 Strong

XPA2 m

NEW FREQS



1200z 03/03/2020

Sunday/Tuesday

March 2020

1200z 13384kHz 1220z 13984kHz 1240z 14984kHz

03/03 04000 00001 00000 ... 31254 Very strong

08/03 07049 00001 00000 ... 35663 Very strong

10/03 07937 00001 00000 ... 41262 Fair

15/03 05693 00001 00000 ... 35666 Very strong

17/03 00351 00048 66638 ... 26222 Fair

22/03 00358 00048 66638 ... 26222 Fair

00351 00048 66638 90181 99550 17708 98490 03523 58335 46658
 11531 78942 77299 35676 28501 53261 70174 74614 32290 32095
 68930 56570 48744 66621 68508 09458 74989 95625 82740 96190
 84059 90170 95346 34516 37773 17121 96594 33064 77385 27151
 73383 02250 32026 60382 72222 90120 33272 30135 16407 11404
 26222 *Courtesy Gert*

24/03 01688 00080 08130 ... 76510 Very strong

29/03 01688 00080 08130 ... 76540

Gert

SUN

01688 00080 08130 39870 66775 84655 51027 36227 39950 91708
89809 16428 17652 56694 10615 34085 04242 21619 29481 15756
76133 27969 76935 26063 48476 61760 89314 50092 81597 87672
35039 82013 88624 13033 99004 27914 61188 86835 04111 99348
14708 78843 28048 40580 08194 11819 23024 36530 35486 74479
05545 43997 08582 05821 49060 51979 64627 89548 67320 77022
84259 04415 22902 36548 81461 87472 68170 16449 15211 24099
42436 26856 13392 91475 15975 97190 82470 63904 84642 38047
48854 27215 76540
Courtesy Gert

31/03 Lost due to corrupt sound file

April 2020

1200z 14442kHz 1220z 15842kHz 1240z 16342kHz

05/04 Missed, computer maintenance

07/04 00566 00218 30747 ... 07322

[1240z Weak]

Strong

00566 00218 30747 30708 56808 98053 08683 05477 21593 02573
03155 26179 42803 76390 66631 66678 75839 88536 93783 15275
89329 07710 21065 08770 23963 01019 15269 45450 62744 98261
27888 71129 12339 23598 96559 98308 88403 85186 39294 03722
88569 16282 41389 70861 72840 34064 26507 83613 68193 76904
23542 18685 02184 39796 63960 38187 14964 10538 44329 10952
76718 65312 09110 82810 17366 15335 41323 92160 20373 26100
00790 33351 21515 99986 08605 27897 77759 62735 01088 81080
43798 92376 38164 77385 29491 79929 86686 94744 67258 68843
04689 33439 72328 41346 88644 44224 19074 37408 61746 66442
80601 11064 62651 55018 78310 76259 88354 75286 09452 89430
55078 60877 50595 64149 93952 85871 78361 67211 58731 41986
75347 80708 17086 41676 73117 66758 79036 11389 67749 85756
64643 69611 28142 01608 48876 88476 50238 30763 79654 54859
96678 06905 97309 21988 60553 34486 64555 76558 42019 90419
38162 46610 09854 56557 38791 75104 74729 47676 11611 51144
30696 55556 96961 23207 82890 29553 97958 32488 16576 45253
45065 48389 38249 34723 98338 78688 46019 84318 27878 32123
70796 55470 32986 83495 87127 13729 94564 68747 24423 64834
56466 57596 17530 35889 94838 29091 03553 73475 15158 31435
41059 99659 77017 62291 39084 12305 53090 85327 19038 22649
28583 97640 62734 45080 65258 89588 53325 14677 80454 51882
07322
Courtesy PLdn

12/04 00566 00218 30747 ... 07322

[1200z QSB3, 1240z Weak]

Fair

14/04 00452 00218 00611 ... 50563

[1240z Unworkable]

Weak

19/04 00452 00218 00611 ...

1220/1240z Unworkable; 1200z Weak, QSB4 last group

21/04 00221 00222 81001 ... 72162

Very strong

00221 00222 81001 30382 46581 87678 41102 82130 50866 83682
40459 36885 68524 98382 33717 35797 20164 17986 24037 78487
20264 20634 68495 54507 72219 65218 41548 41068 71152 61402
93154 79316 32261 55520 09697 61267 29296 53883 97849 88612
97485 77140 28967 12234 03880 39957 71136 17953 32484 62825
14909 25721 67377 24300 32626 42716 52929 00787 18440 45527
79096 21650 91091 88409 43524 45714 25645 70274 52500 26775
03171 92869 40762 77992 02539 69587 09745 96455 01370 87724
81166 89044 17419 10555 62688 00760 96695 61358 90438 10454
71184 32172 90590 41554 42116 16111 40599 85644 41924 42731
00783 90883 42662 25588 02401 21112 15115 16469 98621 66726
28461 97264 15212 95742 50980 34631 00866 72456 06053 37532
61830 31538 37389 81695 50381 93327 39367 03349 06696 26568
23442 83477 25932 09499 36027 23558 12714 39085 30492 25886
94167 08211 24004 34818 75375 85374 41111 83026 42187 77818
57838 40669 14854 62167 36392 16680 77622 08310 12688 81109
54623 52730 03507 86158 14523 84028 03617 55392 84856 47802
22519 16875 36153 94852 95010 94398 17106 09449 22006 23924
71922 12962 20550 29210 87136 82266 63224 37914 26492 49720
59245 32237 26069 11947 64164 36663 61923 08790 90005 29635
98298 52262 65184 64687 56461 29019 99455 32895 44481 62809
86454 16894 77545 14884 28814 88811 99118 56080 54449 52933
21109 41788 92398 44216 72162
Courtesy PLdn

26/04 00221 00222 81001 ... 72062

With correction

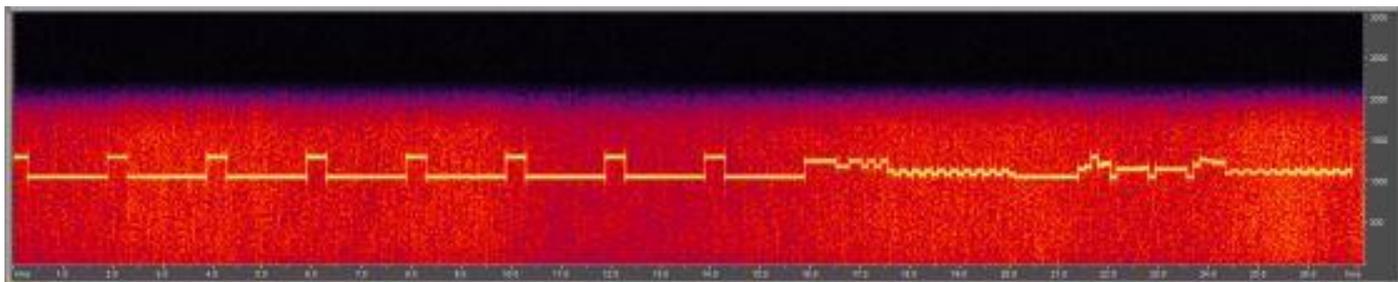
[1240z Weak]

Fair

00221 00222 81001 30382 46581 87678 41102 82130 50866 83682
40459 36885 68524 98382 33717 35797 20164 17986 24037 78487
20264 20634 68495 54507 72219 65218 41548 41068 71152 61402
93154 79316 32261 55520 09697 61267 29296 53883 97849 88612
97485 77140 28967 12234 03880 39957 71136 17953 32484 62825
14909 25721 67377 24300 32626 42716 52929 00787 18440 45527
79096 21650 91091 88409 43524 45714 25645 70274 52500 26775
03171 92869 40762 77992 02539 69587 09745 96455 01370 87724
81166 89044 17419 10555 62688 00760 96695 61358 90438 10454
71184 32172 90590 41554 42116 16111 40599 85644 41924 42731
00783 90883 42662 25588 02401 21112 15115 16469 98621 66726
28461 97264 15212 95742 50980 34631 00866 72456 06053 37532
61830 31538 37389 81695 50381 93327 39367 03349 06696 26568
23442 83477 25932 09499 36027 23558 12714 39085 30492 25886
94167 08211 24004 34818 75375 85374 41111 83026 42187 77818
57838 40669 14854 62167 36392 16680 77622 08310 12688 81109
54623 52730 03507 86158 14523 84028 03617 55392 84856 47802
22519 16875 36153 94852 95010 94398 17106 09449 22006 23924
71922 12962 20550 29210 87136 82266 63224 37914 26492 49720
59245 32237 26069 11947 64164 36663 61923 08790 90005 29635
98298 52262 65184 64687 56461 29019 99455 32895 44481 62809
86454 16894 77545 14884 28814 88811 99118 56080 54449 52933
21109 41788 92398 44216 72062
Courtesy PLdn

XPA2 p

NEW FREQS



0820z 02/03/2020

Monday/Wednesday

March 2020

0800z 13931kHz 0820z 14831kHz 0840z 16131kHz
Third freq not found 02/03 and 03/03; notified courtesy of Dannix.

02/03	02934 00001 00000 ... 37655		[0800z Very strong]	Strong
04/03	04424 00001 00000 ... 35256			Very strong
09/03	06844 00001 00000 ... 37262		[0840z NRH]	Strong
11/03	02884 00001 00000 ... 37262		[0840z Fair]	Very strong
16/03	01077 00001 00000 ... 34660		[0840z Unworkable]	Very strong
18/03	07060 00001 00000 ... 34660		[0840z Unworkable]	Strong
23/03	06176 00001 00000 ... 34665		[0840z Unworkable]	Very strong
25/03	08033 00001 00000 ... 32663			Very strong
30/03	Lost due to corrupt sound file			

April 2020

0800z 11409kHz 0820z 12209kHz 0840z 13409kHz

06/04	Message			H-FD	MON
08/04	00277 00111 87876 ... 44011		[3m19s lg]	[0700/0720z LocalQRM3]	Fair
13/04	00277 00111 87876 ... 44011			[0740z Weak]	Fair
15/04	00277 00111 87876 ... 44011			[0700z Weak]	Fair
20/04	03775 00089 70730 ... 21253			[0700z Weak]	Very strong
22/04	Unworkable, poor condx Ary confirms repeat message:			[3m19s lg as previous transmission]	
<p>03775 00089 70730 55637 48595 51179 54127 02982 51375 17228 31319 95242 95946 45849 48964 58898 25208 14248 05377 32930 46417 38821 02501 95713 42352 78794 71572 35878 75430 13559 55656 86313 22122 59089 26742 52266 37351 70988 55172 21203 11705 98502 30048 36291 97333 14324 81405 03659 66942 40366 41087 93811 78236 70275 99554 56305 68173 96136 08004 57018 45076 29208 94435 07668 24751 91951 90491 26793 16089 40735 04370 15374 48687 80083 06743 04533 72053 51549 96803 10246 33620 20842 90488 20056 58911 54655 16001 41532 72602 56659 51841 21253</p> <p style="text-align: right;"><i>Courtesy Ary</i></p>					
27/04	03775 00089 70730 ... 21253			[0700/0740z Weak, QSB3/4]	Fair, poor condx
29/04	03775 00089 70730 ... 21253			[0740z Weak]	Fair

XPA2 others

H-FD:

Mon 02.03.2020 1600Z 12163 msg
Mon 02.03.2020 1620Z 10863 msg
Mon 02.03.2020 1640Z 9363 msg

Thu 05.03.2020 0910Z 16261 msg
Thu 05.03.2020 0930Z 15961 msg
Thu 05.03.2020 0950Z 14861 msg
Thu 05.03.2020 1600Z 13994 msg
Thu 05.03.2020 1620Z 13494 msg
Thu 05.03.2020 1640Z 12194 msg

Wed 15.04.2020 0910Z 18038 msg via KiwiSDR RUS
Wed 15.04.2020 0930Z 17474 msg via KiwiSDR RUS
Wed 15.04.2020 0950Z 16286 msg via KiwiSDR RUS

Wed 22.04.2020 1200Z 14377 msg
Wed 22.04.2020 1220Z 14977 msg
Wed 22.04.2020 1240Z 15977 msg

Thu 02.04.2020 0910Z 15859 msg
Thu 02.04.2020 0930Z 14659 msg
Thu 02.04.2020 0950Z 13459 msg

Thu 09.04.2020 1600Z 15819 msg
Thu 09.04.2020 1620Z 14919 msg
Thu 09.04.2020 1640Z 13919 msg

Sat 04.04.2020 1500Z 15881 msg
Sat 04.04.2020 1520Z 14481 msg
Sat 04.04.2020 1540Z 13381 msg

Wed/Fri

April 2020

1200 z 14377kHz 1220z 14977kHz 1240z 15977kHz

01/04 00500 00168 12068 ... 10611

Ary

WED

00500 00168 12068 17759 92915 77005 96380 36846 76996 48580
58958 44403 48213 59865 27892 71903 59092 68046 13940 90670
27217 65978 76759 05874 46655 76454 83340 27032 84604 86110
47804 75350 42645 85449 17675 57664 07478 45291 45814 43547
15132 90311 30731 91620 34618 56263 45386 35912 36646 14396
08027 51532 05276 43092 00819 02459 71950 09467 47449 64211
40777 37808 79520 80675 03186 07385 20312 77881 08205 07196
07109 39790 77658 51886 82721 49800 54571 05899 12715 16403
98465 26917 56105 95647 92399 56092 34358 52871 78293 53499
26594 16843 10781 82597 91063 22744 41531 21433 64551 69133
13370 95495 85004 51627 76285 24439 32145 61171 00657 57639
80729 19292 35780 26552 31007 59346 12696 29917 85157 29745
90766 71049 70464 33995 77720 51487 25079 46556 06498 11433
36085 19445 29132 56214 49994 86009 43325 30701 86512 82322
30083 27448 47922 56582 24741 11648 89977 43038 97318 47067
55954 37818 52518 17615 12151 17683 37778 30989 40834 30263
08385 46596 89440 97611 04605 84556 04805 78617 13596 29638
10611
Courtesy Ary

17/04 03970 00202 04772 ... 41755 Gert FRI

03970 00202 04772 44531 35913 38422 80474 64274 77651 20658
72735 59766 10311 86148 82449 13357 55338 97066 05818 37277
37276 11833 97788 95594 49268 44688 53980 25483 05002 69492
00964 32603 33041 08590 48223 44455 22256 25429 46422 73098
44386 42157 88821 54115 78060 52959 90007 41164 39497 65072
31116 44427 88733 73306 09388 20027 16110 07439 06827 82778
88495 18555 80082 38273 48324 87391 52709 91559 62518 09649
02220 22413 81396 90948 66277 32664 57762 52861 00000 16680
77663 88493 57249 27594 61932 02913 66930 39777 20213 66850
62093 48117 52008 22715 42927 57263 70872 65494 52962 68499
50385 06670 20843 62100 55440 66380 95811 69654 11462 69766
47752 25877 02427 80351 76071 87747 48659 46338 10535 88505
73966 13361 81162 46632 76377 72198 00483 72139 04381 61884
10652 95355 10258 33541 20204 53806 07709 19102 99886 81722
88851 78828 40441 59761 82617 75094 99882 88449 46550 61775
98074 16258 95339 07544 33847 47531 61308 38506 53339 19704
39115 83052 00577 42836 29777 58035 72288 44418 91638 86918
57477 90297 59877 15768 66060 77355 58049 93810 55519 94002
64813 97104 85114 55316 51103 71782 65497 82788 59803 22114
86144 55282 41625 88552 25541 35044 65552 83537 33214 66624
94446 76105 35908 02095 41755 Courtesy Gert

22/04 00578 00208 82915 ... 20757 Gert WED

00578 00208 82915 28322 61496 60213 86955 63529 31703 85892
92748 32933 56890 35661 37015 92859 58463 34473 61515 48786
11514 15628 55388 12682 75788 54992 74659 85035 10059 01380
16017 07032 90003 57531 74172 68941 49788 77180 80754 59150
32905 39327 57759 59547 46076 62802 83481 55928 96760 76974
61140 35417 46096 49330 45331 67245 84537 24981 27302 19516
56256 70872 76556 09930 26902 49761 73169 14727 61712 43922
20125 96260 63541 17981 30639 49717 07179 43805 33306 24390
84913 82113 38245 71917 99094 50900 22591 50617 06250 37436
29455 08981 33365 01758 68961 73877 07274 71298 62972 23658
08313 94687 44884 79730 10778 19831 09109 32742 07539 21951
13932 51499 10283 42040 27592 70292 83433 54148 06717 62134
09845 78346 41458 55387 10656 87203 98610 26804 71978 80735
24240 68046 36188 12280 10388 54320 18759 00007 72320 68910
73926 12741 10296 32409 48583 39324 44311 65026 32684 01470
80752 26248 13379 83022 84973 33169 11952 28322 50377 41723
97721 97092 53894 49169 72782 11832 82281 20288 54272 19285
80841 74397 69376 79582 54056 76351 62528 06396 37489 84242
32052 38178 54835 00855 12635 46626 47297 13818 37223 53380
28387 86223 09972 65446 19106 98018 64973 46377 82774 81885
52989 30487 08713 49223 27516 89534 68059 43506 56972 68301
20757 Courtesy Gert

Wed/Sat

April 2020

0910z 15859kHz 0930z 14659kHz 0950z 13459kHz

14659kHz0930z 11/04 [08497 00001 00000 36671] Gert SAT

22/04 00415 00066 31618 ... 31343 Gert WED

00415 00066 31618
95474 38208 69463 99407 16936 46334 59282 87350 87117 74888
70541 74599 67951 44413 80761 64844 06605 26746 36659 02898
43027 14196 47360 94774 82463 75309 26063 01833 41758 78583
05633 96871 94738 94291 65617 72560 07022 08635 51333 73320
14684 68345 30444 64288 96193 70422 37975 54538 06179 18576
78486 57665 88395 20955 27111 41702 52930 44589 01140 48288
10861 60516 68546 85011 17913 31343 Courtesy Gert

XPA2 15881kHz

1500z	15881kHz	1520z	14481kHz	1540z	13381kHz		
13/04	00191 00273 80474 65623 .. 18769 65533						Gert MON
18/04	00191 00273 80474 ... 65533			[5m40s long]	Fair	PLdn, HJH, Ary	SAT

00191 00273 80474 65623 72949 44924 64428 62236 32030 56113
05744 88312 20319 33501 10013 07952 24831 67887 81536 46665
72463 99037 41561 52031 26948 62346 82966 69843 03476 00161
38017 33240 78366 43811 90707 53035 23133 25865 96543 13851
16722 17358 94875 30077 36742 28337 95985 66966 30532 91102
69645 72097 73589 26488 92497 31100 85668 06526 69194 35752
51513 18816 40182 06847 27378 28583 05160 63573 24054 59159
52262 44687 55918 14905 57522 72514 82020 65941 68100 54828
84434 31794 59084 14071 50062 68524 84981 34808 81272 66646
36487 40431 68981 50778 88313 89497 59145 43533 70803 90504
77813 05981 83033 28764 56047 50501 56404 62051 63284 15448
51985 50679 98094 40988 88951 97855 27006 58436 77276 00276
55282 12501 54742 00880 67608 94133 36337 08841 20290 45350
03235 15857 94146 83843 42112 56978 55375 77249 01162 51381
44957 03103 66064 48570 72210 82114 82434 48378 31889 85452
05404 95967 92845 18171 37498 57250 82434 12240 74906 77175
83582 75899 08303 77403 28024 09510 33349 15644 15061 12943
02059 36960 33557 21883 80455 39890 10306 03707 52062 92868
37943 21653 06026 14557 55463 90528 66781 41774 53004 95178
47918 44701 81366 37988 06743 26012 38550 63940 46565 81297
31668 95971 35060 42831 71493 41023 94139 62516 25670 97161
03575 07953 22701 96964 64922 31565 45140 87798 84599 80100
53688 55923 34061 14178 30798 19956 69000 62121 58065 33769
12579 27690 29958 89276 81133 40943 99935 09527 21648 40238
49758 30950 64842 88993 54454 37184 60862 90553 24081 73299
45459 21269 78759 45919 54538 49782 17228 70079 40109 64022
52639 61140 48881 61548 09646 76317 62898 91607 47502 08713
91850 12039 48583 71821 18769 65533 *Courtesy Ary*

1B XPB1

H-FD:

Sun 01.03.2020 2000Z 9181 msg, 4:30
Sun 01.03.2020 2010Z 7881 msg
Sun 01.03.2020 2020Z 6881 msg
Sun 01.03.2020 2030Z 5881 msg
Sun 01.03.2020 2040Z 5181 msg
Sun 01.03.2020 2050Z 4581 msg

Sat 14.03.2020 1100Z 18253 msg
Sat 14.03.2020 1110Z 17453 msg
Sat 14.03.2020 1120Z 15953 msg
Sat 14.03.2020 1130Z 14953 msg
Sat 14.03.2020 1140Z 14353 msg
Sat 14.03.2020 1150Z 13553 msg

Sun 05.04.2020 1900Z 13447 msg
Sun 05.04.2020 1910Z 12147 msg
Sun 05.04.2020 1920Z 11547 msg 2:16
Sun 05.04.2020 1930Z 10447 msg
Sun 05.04.2020 1940Z 9347 msg
Sun 05.04.2020 1950Z 8147 msg

Sat 18/04 1240z 14374kHz Msg Strong PLdn
Sat 18/04 1250z 13874kHz Msg Strong PLdn

Tones, Hybrids and FSK

X06 Mazielka (1c) logs section

Date	Day UTC	Freq	Scale	Monitor	Comments
20200317	Tue 0857-0900	12157	165423	Ary/NL	TX to Brussels, G151
20200325	Wed 0722-0728	14935	435621	Danix/PL	TX to Maputo, G244
20200326	Thu 0808-0815	12126	521634	Ary	In progress, TX to Bucharest, G261
20200331	Tue 0725/0726	12132	1--6--	Ary	X06b before XPA1
20200404	Sat 0649/0655	13418	1--6--	Ary	X06b before E07a
20200405	Sun 0700-0705	13481	452163	Edd Smith	I. p., TX to Kabul, G66 (SDR)
20200406	Mon 1417	15881	1--6--	Ary	X06b before XPA2
20200407	Tue 0758-0803	12157	165423	Edd	I. p., TX to Brussels, G12 (SDR)
20200407	Tue 0759-0802	14615	125643	Edd	I. p., TX to Ulanbatar, G317 (SDR)
20200419	Sun 1024/1028	14442	1--6--	LU5EMM	Fair X06b before XPA2m
20200419	Sun 1030	14442	1--6--	LU5EMM	Weak X06b before XPA2m
20200421	Tue 0756-0759	12157	165423	Ary	TX to Brussels, G151(1)
20200421	Tue 1520	15819	1--6--	Schorschi	Fair X06b before XPA2
20200423	Thu 0704-0708	12126	521634	Ary	TX to Bucharest, G261
20200426	Sun 1039	16342	1--6--	LU5EMM	Fair X06b before XPA2
20200426	Sun 1041	16342	1--6--	LU5EMM	Fair X06b before XPA2
20200426	Sun 1042	16342	1--6--	LU5EMM	Fair X06b before XPA2
20200426	Sun 1047	16342	1--6--	LU5EMM	Fair X06b before XPA2
20200426	Sun 1051	16342	1--6--	LU5EMM	Weak X06b before XPA2
20200426	Sun 1651	13417	1--6--	Ary	X06b before E07
20200426	Sun 1653	10717	1--6--	Schorschi	Strong X06b before E07

1) Harmonic on 12105 kHz

Many thanks as usual to all contributors. Till next EN edition I say good-bye - and stay healthy

Jochen Schäfer, Numbers-, X06 Database and Teamkopf

HM01

UK intercepts detailed by PoSW, then onto coverage from Daniel in the Argentine:

1-Mar-20, Sunday:- 0836 UTC, 9065 kHz, transmission in progress, "53574 75408 42577 06684 25545 85154", 5Fs first noted in the last week of February, peaking S8 with the usual deep fading.

2-Mar-20, Monday:- 0834 UTC, 9065 kHz, in progress, "53574 75408 42577 06684 25545 85154", S9 with deep QSB. 0900 UTC, just before, 9240 kHz, starting up, same 5Fs, S9 with deep fading, data sounds at 0903:20s UTC.

4-Mar-20, Wednesday:- 0845 UTC, 9065 kHz, last few minutes, same 5Fs as earlier in the week.

8-Mar-20, Sunday:- 0830 UTC, 9065 kHz, starting up after the break, "53574 75408 42577 06684 25545 85154", data sounds at 0833:15s.

11-Mar-20, Wednesday:- 0830 UTC, 9330 kHz, on the wrong frequency, same 5Fs, peaking over S9 with deep fading up and down.

15-Mar-20, Sunday:- 0800 UTC, -10s approx, 9065 kHz, "53574 75408 42577 06684 25545 85154", S9 with QSB, data sounds at 0803:10s.

20-Mar-20, Friday:- 0800 UTC -12s, 9330 kHz, on the wrong frequency, same 5F groups as throughout March, over S9 with the usual deep fading. Had gone when checked again at approx 0814z, was found on the correct frequency 9065, someone had realised their mistake.

29-Mar-20, Sunday:- 0800 UTC, just before, 9065 kHz, best signal from HM01 for over a week, "53574 75408 42577 06684 25545 85154", no change there.

30-Mar-20, Monday:- 0800 UTC, 9065 kHz, same 5F groups, data sounds at 0803:5s.

In the month of April HM01 has been consistently weak and unreadable.

10715kHz2200z	22/03 (53574 75408 42577 06684 25545 85154) QSA2	DanAr	SUN
2200z	25/03 (53574 75408 42577 06684 25545 85154) QSA2	DanAr	WED
2200z	05/04 (01441 68532 35731 30038 48409 70208) QSA2	DanAR	SUN
2200z	12/04 (01441 68532 35731 30038 48409 70208) QSA2	DanAR	SUN
2200z	15/04 (01441 68532 35731 30038 48409 70208) QSA3	DanAR	WED

16180kHz2100z	10/03 (53574 75408 42577 06684 25545 85154) QSA3	DanAr	TUE
17480kHz2200z	24/03 (53574 75408 42577 06684 25545 85154) QSA2	DanAr	TUE
2200z	04/04 (01441 68532 35731 30038 48409 70208) QSA2	DanAR	SAT
2200z	11/04 (01441 68532 35731 30038 48409 70208) QSA3	DanAR	SAT
2200z	14/04 (01441 68532 35731 30038 48409 70208) QSA2	DanAR	TUE

[Many thanks to the members who supported us by sending logs]

Gizza Job





PoSW's Items of Interest in the Media:-

Russian spy radio dug up in Germany:- The *Daily Mail* on line of 10-March carried an unusual news item about a piece of Russian made radio equipment which had been dug up by some archaeologists investigating a Roman site in Germany, "Its factory fresh. Soviet spy radio buried in a former forest in Germany 30 years ago is discovered in mint condition by stunned archaeologists" is the headline, something a bit out of the ordinary for the *Mail*, their main interest these days being reporting on the busy social lives of the younger members of the Royal Family, and upon reading the article it emerged that the story had, in effect, been lifted from a more serious news website called *Live Science*, so taking a look at them they reported the following:- "Sophisticated Soviet spy radio discovered buried in former forest in Germany" by Tom Metcalfe, Live Science Contributor, which goes on to say, "Archaeologists digging for the remains of a Roman villa near the German city of Cologne have found a sophisticated Soviet spy radio that was buried there shortly before the fall of the Iron Curtain.

The spy radio was buried inside a large metal box that was hermetically sealed with a rubber ring and metal screws. Although the radio's batteries had run down after almost 30 years in the ground, the box hissed with inrushing air when it was opened.

'Everything in the box was carefully encased in wrapping paper - it is a factory fresh radio,' said archaeologist Erich Classen from the Rhineland Regional Association (LVR).

The buried box and the hidden radio were found in August 2019 by a team of archaeologists digging near what was once a path through the Hambach Forest, about 20 miles (30 kilometres) west of Cologne, in an area earmarked for an open cast lignite mine and now cleared of trees. They expected to find fragments from a Roman-age settlement thought to have been built in the area, and so they were surprised when they instead unearthed a pit and the metal box.

'We think the radio will work if a new battery is available, but we didn't try' Classen said. 'Restoration work was not necessary.'

The radio has been identified as a model R-394KM transmitter and receiver code-named 'Strizh' meaning 'Swift' - that was manufactured in the Soviet Union in 1987. It was carried by agents into Western Europe shortly after that, and only a few years before the fall between 1989 and 1991 of the 'Iron Curtain' of communism that divided Eastern and Western Europe.

The scientists suspect that agents would have used the spy radio to send secret reports back to the Soviet Union about observation of the Jülich Nuclear Research Centre, about 6 miles (10km) west of where it was found; or of the military air base at Norvenich, about the same distance south east, where US Pershing nuclear missiles were based until 1995.

It is possible that 'Stasi' or State Security Service agents from the Soviet controlled German Democratic Republic in the east of the country buried the spy radio in West Germany for future use, Classen said.

It may also have been a back-up in case a spy's other radios were damaged or seized.

The high frequency or short wave radio was capable of transmitting and receiving messages as far as 750 miles (1,200 km) - far enough to reach Warsaw in Poland, which was then part of the Soviet bloc.

But the pristine condition of the radio suggests that it was never used and it was probably forgotten and left in the ground soon after the fall of the Iron Curtain, Classen said.

Some features of the Soviet spy radio hint at who might have used it.

Unlike most other radios of the same model, which are labelled in Russian using the Cyrillic alphabet, the controls of the radio found in the Hambach Forest area are labelled in English.

That suggests it was designed to be used by a German or English speaker rather than a Russian; but it may have been a form of camouflage to hide the true origins of the radio in the Soviet Union.

The paper wrapped around the radio, however, had sequences of numbers in Russian handwriting giving positions of the dials on the radio that could be used - similar number sequences have been found on Soviet check-lists, Classen said.

It's unlikely that further details of the mystery of the Hambach Forest spy radio will be found, given that it's been so long since it was buried. But the spy radio itself is now part of the LVR collection, and it is on display at the LVR-Landes Museum in Bonn until March 29, Classen said."

Secrets from the past see the light of day again:- An interesting story in *The Times* of 11-March was something out of the ordinary. "Secret D-Day documents found in hoarder's home" is the headline over a piece by Mark Bridge, History Correspondent, which says:- Secret Second World War documents that describe the D-Day landings have been found amid the clutter of a hoarder's home 75 years after they were given to a secretary at Allied high command.

Two reports, amounting to more than 200 typed pages marked as 'secret' and illustrated with coloured maps were prepared by officers at the joint US-British Supreme Headquarters Allied Expeditionary Force (SHAEF). They were given by members of the US Air Force working at SHAEF to a secretary called Ella, and acquired by Mike Frith, an RAF veteran and collector who lives in Lincoln.

Mr Frith, 73, said: 'I like military history and many years ago a woman showed me the documents. I couldn't resist and acquired them off her.' He did not realise the significance of the documents until he showed them to a local antiques dealer, Mark Hebblewhite who said: 'I realised I was holding history in my hands.'

The first despatch, from Air chief Marshal Sir Trafford Leigh-Mallory, Air Commander-in-Chief, Allied Expeditionary Force, to General Dwight D Eisenhower, the Supreme Allied Commander, describes operations from November 1943 to September 1944. It bears the handwritten dedication: 'To Ella, in grateful appreciation of all her hard work on this production & with thanks for her loyal services to Ops. Records, R. Douglas Paul...April 1945'

The other describes Allied air operations from October 1944 to May 7 1945, the day before VE Day. Pencil markings indicate that it belonged to a Corporal Clayton, who worked at SHAEF under the command of Douglas Paul.

The documents are to be auctioned at Bonhams in Knightsbridge and are expected to fetch up to £1,200.

Point to ponder:- “There are many here among us who feel that life is but a joke” from *All Along the Watchtower*, written by Bob Dylan, recorded by Jimi Hendrix available on compact disc *Experience Hendrix*, MCA records.

Thanks PoSW!

The Spectre's News articles

Japan Times 25-02-2020

Top Australian intelligence official warns of 'unprecedented' foreign espionage threat

Australia is under an “unprecedented” threat of foreign espionage and interference, one of the country’s most senior intelligence chiefs said in a rare speech, citing the case of a “sleeper agent” who spent years building business links.

Australian Security Intelligence Organization Director-General Mike Burgess said several nations were working hard to influence lawmakers, government officials, media figures, business leaders and academics.

“The level of threat we face from foreign espionage and interference activities is currently unprecedented,” Burgess said at ASIO headquarters in Canberra on Monday evening as he unveiled the agency’s annual threat assessment.

“It is higher now, than it was at the height of the Cold War.”

Burgess did not identify the countries infiltrating Australia, a staunch ally of the United States, though analysts said it was a thinly veiled outing of China.

“It’s very reasonable to assume that China was the country in question,” said Rory Medcalf, head of the National Security College, Australian National University.

ASIO is Australia’s domestic intelligence agency.

Reuters reported in September that Australia’s intelligence agencies concluded China was responsible for a cyberattack on the Australian Parliament and its three largest political parties just months before a general election in May 2019.

China, which is Australia’s largest trading partner, has denied responsibility for the attack. Australia decided not to reveal the identity of the attackers in order to protect its trading relationship with China, sources familiar with the decision said in September.

“I don’t care what country it is we’re talking about, whether it’s China or Russia or Iran, if people pose a threat to our country, they will be dealt with according to the level of that threat,” Home Affairs Minister Peter Dutton told reporters in Canberra on Tuesday when asked about China.

Burgess said Australia was being targeted in part because of its strategic position and alliances and its leadership in science and technology.

He said the sleeper agent from an unnamed country laid dormant for several years, building business and community links before he started to supply information about expatriate dissidents. That information, Burgess said, was used to harass the dissidents in Australia and their relatives overseas.

Visiting academics and scientists had been infiltrating universities to collect intelligence, while foreign spies had entered Australia with the intention of setting up sophisticated hacking infrastructure, he added.

“The intent is to engineer fundamental shifts in Australia’s position in the world, not just to collect intelligence or use us as a potential ‘back-door’ into our allies and partners,” he said.

Australia’s leading universities last year agreed to more transparency in financial dealings with other countries and to share cyberintelligence with security agencies in a bid to curb foreign interference.

Burgess said the threat of home-grown right-wing extremists had also increased.

“In suburbs around Australia, small cells regularly meet to salute Nazi flags, inspect weapons, train in combat and share their hateful ideology,” he said.

Japan Times 28-02-2020

Chinese scientist sentenced to prison in U.S. for tech theft

A Chinese scientist was sentenced to two years in prison on Thursday for stealing next-generation battery technology from the American petroleum company where he worked.

Hongjin Tan, 36, a Chinese national and permanent legal resident of the United States, was arrested in December 2018 and pleaded guilty in November of last year to stealing trade secrets.

U.S. District Court Judge Gregory Frizzell of the Northern District of Oklahoma sentenced Tan to 24 months in federal prison and ordered him to pay \$150,000 in restitution to his former employer.

The market value of the next-generation battery technology Tan was accused of stealing was more than \$1 billion, the Justice Department said in a statement.

“This investigation and prosecution uncovered another instance of China’s persistent attempts to steal American intellectual property,” assistant attorney general John Demers said.

FBI special agent Melissa Godbold said “American companies invest heavily in advanced research and cutting-edge technology.

“Trade secret theft is detrimental to our national security and free-market economy,” Godbold said. “It takes profits away from companies and jobs away from hard-working Americans.”

Tan worked as an associate scientist for the U.S. petroleum company from June 2017 until his arrest, the Justice Department said.

The department did not name the company but a LinkedIn page for Hongjin Tan identifies him as a staff scientist with the disruptive technologies team at Phillips 66 in Oklahoma.

He previously worked as a research assistant and visiting scientist at the California Institute of Technology, where he earned his doctorate.

Japan Times 15-03-2020

Israel spy agency joins anti-virus fight

Israel’s internal security agency Shin Bet said Tuesday it has been mandated to collect information about citizens to fight the spread of the deadly coronavirus, a task it was undertaking with “immediate” effect.

Involvement of the spy agency in tackling the pandemic has raised concerns about adherence to democratic norms, with one legal expert fearing it harms “trust and legitimacy” and an analyst describing it as a “dangerous precedent”.

The measure was approved by the government under emergency regulations, overriding a parliamentary committee that on Monday had withheld final approval, saying it needed more time to ensure proper safeguarding.

The government “authorised the Shin Bet to put its advanced technologies in the service of the national effort to reduce the spread of coronavirus,” a Shin Bet statement said Tuesday.

A Shin Bet spokesperson separately said that the policy has taken “immediate” effect.

“The Shin Bet is aware this is a task that goes beyond its routine anti-terror activities,” Shin Bet chief Nadav Argaman said in the agency’s statement, adding that “oversight and regulating mechanisms” had been established.

Prime Minister Benjamin Netanyahu’s office refused to provide details about the monitoring techniques to be used.

But copies of the emergency regulations leaked to Israeli media showed that police would be able to retrieve location data of coronavirus carriers — as well as quarantined people — from phone companies, without a court order.

The Shin Bet would also be able to use the location data of coronavirus carriers for the 14 days preceding their diagnosis “to identify their routes and the people with whom they came in contact with,” the leaked material said.

Argaman said the information would be given to the health ministry and not stored by the Shin Bet.

Gabi Ashkenazi, who heads the parliamentary committee that withheld approval, said Tuesday that using Shin Bet against the virus was not appropriate “without parliamentary and public supervision.”

Ashkenazi, a member of the Blue and White coalition that rivals Netanyahu’s Likud party, called for a new foreign and defense committee to “implement the supervision necessary by law.”

Netanyahu’s Cabinet had approved the move at his behest Sunday, before it moved to parliament for consideration.

Netanyahu defended his later emergency move, saying that “even an hour’s delay using these tools could lead to the death of many Israelis”.

In a statement, the premier’s office also claimed parliamentary deliberations could have taken “many days.”

He and his attorney general therefore “swiftly” approved the emergency measures that are valid for 14 days, during which time lawmakers can express their reservations.

Michael Birnhack, a law professor at Tel Aviv University, said the coronavirus crisis has been steered into a security issue.

“Instead of trust and solidarity (‘do you agree we check your location?’) we’ve gone into cloak and dagger, suspicion lack of trust,” he wrote on Twitter.

“It might be efficient but it harms trust and legitimacy,” he said.

“The intentions here are good, but the path is problematic. The fear is this will remain long after the crisis is over.”

Speaking before the emergency regulations, Tehilla Shwartz Altshuler of the Israel Democracy Institute (IDI) said involving Shin Bet would set “a dangerous precedent” that risked being a precursor to interventions in other sectors.

A security official said Monday the Shin Bet would not conduct “active penetration into phones” and “there won’t be cyberattacks.”

Netanyahu’s continued tenure as premier is uncertain, with President Reuven Rivlin on Monday formally handing centrist rival Benny Gantz a mandate to try to form a new government.

Gantz has been given 28 days to put together a coalition, after he garnered recommendations from 61 out of 120 lawmakers Sunday, in the wake of an election held on March 2 — Israel’s third national polls within a year”

U.S. spies unclear on COVID-19 spread in China, North Korea and Russia

U.S. spy agencies seek to assemble a precise picture of the world's coronavirus outbreaks, they are finding serious gaps in their ability to assess the situation in China, Russia and North Korea, according to five U.S. government sources familiar with the intelligence reporting.

The agencies also have limited insight into the full impact of the pandemic in Iran, although information on infections and deaths among the ruling class and public is becoming more available on official and social media, two sources said.

The four countries are known by U.S. spy agencies as "hard targets" because of the heavy state controls on information and the difficulty, even in normal times, of collecting intelligence from within their closed leadership circles.

An accurate assessment of those countries' outbreaks would aid U.S. and international efforts to limit the human and economic tolls from COVID-19, the disease caused by the coronavirus, experts say.

The agencies are not just looking for accurate numbers, but also for any signs of the political ramifications of how the crisis is being handled.

"We want to have as close an accurate, real-time understanding of where the global hotspots are and where they are evolving," said Jeremy Konyndyk, an expert at the Center for Global Development thinktank, who led the Office of U.S. Foreign Disaster Assistance from 2013 to 2017, including the U.S. response to the Ebola outbreak. "The world is not going to get rid of this thing until we get rid of it everywhere."

U.S. intelligence agencies first began reporting on the coronavirus in January and provided early warnings to lawmakers on the outbreak in China, where it originated in the city of Wuhan late last year, said the sources, who asked not to be named in order to speak freely about intelligence matters.

The pandemic has grown to nearly 740,000 cases in some 200 countries and territories, Reuters figures show, with the United States now reporting the most cases at more than 152,000.

The Office of the Director of National Intelligence, which oversees the 17 U.S. intelligence agencies, declined to comment.

North Korea claims to have not had a single case even though it borders China, but has asked international aid agencies for supplies like masks and testing kits.

One U.S. source said, "we don't know" anything about the scale of the problem in the hermetic country.

"It's a nuclear-armed country where things that could destabilize the government would be of great interest to the United States," said Konyndyk, who also led the U.S. response to the humanitarian crisis in Syria.

Russian authorities are considering a nationwide lockdown after recording the biggest one-day rise in coronavirus cases for the sixth day in a row, for a total of 1,836 cases and nine deaths.

Knowing the full extent of Russia's coronavirus spread could be critical as it shares borders with 14 other countries and is a hub of trade and travel.

U.S. Secretary of State Mike Pompeo alluded last week to the dearth of accurate information on Russia and Iran, and accused China of a disinformation campaign, which Beijing denies.

China, which has reported more than 81,000 cases and more than 3,300 deaths, says no new cases are originating at home. It remains wary of travelers returning from abroad.

The U.S. view of the Chinese claim of no new domestic cases is that "some of it may be true," according to one source. U.S. agencies remain skeptical that the Chinese have the virus under control, the source said.

Konyndyk said while Beijing concealed the severity of the initial outbreak, it does not appear to be doctoring numbers now, however.

China "seems to be the most successful country in terms of taking very large-scale growth and rapidly extinguishing it," he said. "If their case numbers are real, it's really important to understand their approach and adapt it."

Chart Section Index

1. Prediction Chart

2. M01 Schedule

3. Family III

May 2020

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Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
		x	x				0315		E11	03	8565 25#	8565 25#
x	x	x	x	x	x	x	0400		V13	0	9725	15388
			x				0430/0450/0510		E07A	01B	7933/ 9133/10233 741	7933/ 9133/10233 741
				x		x	0435		E11	03	6849 35#	6849 35#
x							0450		E11	03	7469 41#	7469 41#
x	x	x	x	x	x	x	0500		V13	0	9725, 18040	11430
x		x					0510		S11A	03	13537 65#	13537 65#
x		x		x		x	0455		HM01	18	10860	10860
	x		x		x		0455		HM01	18	11462	11462
	x				x		0500/0520/0540		M12	01B	search	search
			x	x			0500/0600	1/3	E06	01A	14565/16125 460	13985/15830 328
	x			x			0530		M01A	14	9441 751	9441 751
		x	x				0530		M01A	14	9129 or 9192 498	9129 or 9192 498
	x						0530/0550/0610		M12	01B	9317/10484/11552 135	9317/10484/11552 135
		x	x				0540		M01A	14	7692 536	7692 536
x		x		x		x	0555		HM01	18	10345	10345
	x		x		x		0555		HM01	18	14375	14375
x	x	x	x	x	x	x	0600		V13	0	11430	11430
	x						0600/0610		S06S	01A	15945/16945 438	15945/16945 438
						x	0600/0620/0640		E07	01B	9064/10264/11464 024, search	9064/10264/11464 024, search
	x			x			0620		M01A	14	10233 or 10235 354/458	10233 or 10235 354/458
		x	x				0620		M01A	14	9421 135	9421 135
	x			x			0630		M01A	14	9447 143/796	9447 143/796
		x	x				0630		M01A	14	8111 902/536	8111 902/536
x							0630/0640		S06S	01A	16320/14875 462	16320/14875 462
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		S11A	03	search	search
	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	May kHz, ID, ...	Jun kHz, ID, ...
						x	0700		M01	01B	6780 025	6780 025
	x						0700/0710		S06S	01A	5430/ 6780 452	5430/ 6780 452
	x			x			0700/0720/0740		E07	01B	16246/18446/19246 242	16331/18731/19331 373
	x		x				0700/0720/0740		M12	01B	13423/12123/11123 411	14581/13481/12181 541
x		x					0700/0720/0740		XPA2	01B	11541/13441/14941 check	10324/11524/13524 check
					x	x	0710		E11	03	6480 49#	6480 49#
	x			x			0710		M01A	14	10651 297/358	10651 297/358
		x	x				0710		M01A	14	9175 146/208	9175 146/208
x		x					0710/0730/0750		XPA1	01B	11169/12179/13431	11421/12151/13972
	x			x			0715		E11	03	10429 63#	10429 63#
	x			x			0720		M01A	14	9151 728	9151 728
	x						0730/0740		S06S	01A	7365/11655 427	7365/11655 427
		x					0730/0740		S06S	01A	11530/14977 172, check	11530/14977 172
x							0745		E11	03	9610 26#	9610 26#
	x		x				0745		E11	03	search	search
		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				0800/0810		E17Z	01A	16780/12850/ 217	16780/12850/ 217
	x						0800/0810		S06S	01A	14373/12935 127	14373/12935 127
					x		0800/0810	1	S06S	01A	12460/10250 132	12460/10250 132
					x		0800/0820/0840		E07A	01B	12177/13477/14877 148	13373/14373/14873 338
					x		0800/0900		M14	01A	4730/ 4650 523	4730/ 4650 523
					x	x	0805		E11	03	5737 31#	5737 31#
			x	x			0820		E11	03	4909 43#	4909 43#
	x	x					0820		E11	03	17378 13#	17378 13#
x				x			0830		E11	03	x11559 18#, search	x11559 18#
x							0830/0840		S06S	01A	8221/ 9353 764	8221/ 9353 764

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
		x					0830/0840		S06S	01A	11565/12560 464	11565/12560 464
				x			0830/0840		S06S	01A	x10290/ 9655 156, search	x10290/ 9655 156
			x	x			0830/0930		S06	01A	17475/14736 842	16022/13925 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	7449 53#	7449 53#
x							0900/0910		S06S	01A	16380/14835 232	16380/14835 232
				x			0900/0910		S06S	01A	6844/ 7161 239	6844/ 7161 239
x		x					0910/0930/0950		XPA2	01B	17431/15841/13934	17417/15812/14504
			x		x		0910/0930/0950		XPA2	01B	14794/13994/12194	13527/12227/11427
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 698	9255/10325 698
x		x		x		x	0955		HM01	18	9155	9155
	x		x		x		0955		HM01	18	12180	12180
	x			x			1000		E11	03	8180 30#	8180 30#
	x						1000/1010		S06S	01A	4820/ 5660 427	4820/ 5660 427
		x					1000/1010		S06S	01A	14580/16020 276	14580/16020 276
x	x	x	x	x			1015/1025/1035		F01	01A	11414/ 9317/ 7572	search
	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 265	6810/ 7560 265
	x			x			1100/1120/1140		E07	01B	19659/17459/16159 641	18637/17437/15837 648
x	x	x	x	x	x	x	1200		V13	0	9725	9725
x							1200/1210		S06S	01A	10230/12165 149	10230/12165 149
			x				1200/1210		S06S	01A	13145/14535 175	13145/14535 175

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
x					x		1200/1210/1210 1230/1240/1250		XPB1	01B	search	search
		x	x				1200/1220/1240		XPA2	01B	search	search
	x	x					1205		E11	03	6304 46#	6304 46#
		x	x				1210/1230/1250		M12	01B	12187/10987/ 9287 192	13384/12184/11484 314
x	x	x	x	x	x	x	1300		V13	0	13974	9725
					x		1300/1320/1340		E07	01B	9064/10264/11464 024, search	9064/10264/11464 024, search
	x				x		1345		E11	03	12984 91#	12984 91#
x		x					1400/1420/1440		M12	01B	17451/15951/14451 494	16117/14717/13417 174
			x		x		1410/1430/1450		E07	01B	15836/14536/13536 157	13417/14717/15817 603
	x	x	x				1500/1600		S06	01A		13944;11496 387
					x		1500		M01	14	6435 025	6435 025
	x						1500/1510		S06S	01A	6766/ 7744 914	6766/ 7744 914
x					x		1500/1520/1540		XPA2	01B	15938/14538/13438	14892/13492/12192
				x			1510/1530/1550		E07A	01B	12182/11082/10182 101	12182/11082/10182 101
x				x			1530		E11	03	5409 52#	5409 52#
			x				1530		E11	03	10356 26#	10356 26#
x	x	x	x	x	x	x	1555		HM01	18	11435	11435
	x						1600	1/3	M14	01A	x6953 i n a c t i v e ? 654, search	x6953 i n a c t i v e ? 654, search
		x					1600	1/3	M14	01A	x7390 i n a c t i v e ? 654, search	x7390 i n a c t i v e ? 654, search
	x		x				1600/1620/1640		XPA2	01B	13538/14438/14938	13417/14817/15917
	x					x	1605		E11	03	5371 23#	5371 23#
				x			1610/1630/1650		E07A	01B	11435	11435
		x				x	1625		E11	03	7863 97#, check	7863 97#
				x		x	1650		E11	03	12229 92#	12229 92#
x	x	x	x	x	x	x	1655		HM01	18	11530	11530
	x		x				1700		E11	03	x14575 33#, search	14575 33#
		x				x	1700/1720/1740		E07	01B	13934/12134/10934 919	13368/11568/10468 354
			x				1700/1720/1740		M12	01B	12162/11566/18711 546	12162/11566/18711 546

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
				x			1700/1800	1/3	M14	01A	7485/ 6891 382	7485/ 6891 382
		x			x		1705		E11	03	4783 39#	4783 39#
		x					1710/1730/1750		M12	01B	12162/11566/10711 546	12162/11566/10711 546
			x				1730		E11	03	8088 41#	8088 41#
x						x	1745		E11	03	14410 24#	14410 24#
x	x	x	x	x	x	x	1755		HM01	18	11635	11635
	x		x				1800		M01	14	5280 025	5280 025
x							1800/1820/1840		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
			x				1800/1820/1840		M12	01B	12162/11566/10711 546	12162/11566/10711 546
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	14363/12189/10346	14621/12206/10465
		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	14852/13952/12152 11152/10352/ 9252 check	15863/14963/13963 12163/11163/10463 check
x		x					1900/1920/1940		E07	01B	17472/15872/14372 483	16328/14828/13428 384
		x					1900/1920/1940		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
				x			1900/2000	1/3	M14	01A	7605/ 6876 735	7605/ 6876 735
				x			1900/2000	1/3	S06	01A	x9336/x7314 452, search	
				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			1930	2/4	G06	01A	5935 218	5935 218
					x	x	1930		E11	03	5082 36#	5082 36#

M01 FREQUENCY LIST

Frequencies may vary by a few kHz

JAN FEB NOV DEC

M01/1

197

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

MAR APRIL SEPT OCT

M01/2

463

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

MAY JUNE JULY AUG

M01/3

025

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

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Mar kHz, ID, ...	Apr kHz, ID, ...	May kHz, ID, ...	Jun kHz, ID, ...	Remarks
	x	x					0315		E11	03	7850 25#	7850 25#	8565 25#	8565 25#	since 01/14, last log 04/20
			x		x		0435		E11	03	5779 35#	5779 35#	6849 35#	6849 35#	since 04/15, last log 03/20
x							0450		E11	03	5371 41#	5371 41#	7469 41#	7469 41#	since 02/10, last log 04/20 2nd transmission Thu 1730z
x	x						0510		S11A	03	11116 65#	11116 65#	13537 65#	13537 65#	since 08/19, last log 04/20
x		x					0640		E11	03	12153 94#	12153 94#	15800 94#	15800 94#	since 07/17, last log 04/20
	x		x				0645		E11	03	10800 51#	10800 51#	13424 51#	13424 51#	since 07/09, last log 04/20
x			x				0700		S11A	03	8597 47#	8597 47#	search	search	since 04/10, last log 04/20 until 09/19 at 1015z
	x			x			0700		E11	03	8180 57#	8180 57#	8680 57#	8680 57#	since 01/12, last log 04/20
				x	x		0710		E11	03	8102 49#	8102 49#	6480 49#	6480 49#	since 07/15, last log 02/20
	x			x			0715		E11	03	9963 63#	9963 63#	10429 63#	10429 63#	since 02/11, last log 04/20
x							0745		E11	03	10213 26#	10213 26#	9610 26#	9610 26#	since 03/14, last log 04/20 2nd transmission Thu 1530z
	x		x				0745		E11	03	14865 22#	14865 22#	search	search	since 01/20, last log 04/20
		x	x				0745		E11	03	17410 34#	17410 34#	15720 34#	15720 34#	since 06/17, last log 04/20
				x	x		0805		E11	03	5371 31#	5371 31#	5737 31#	5737 31#	since 07/14, last log 04/20
			x	x			0820		E11	03	5941 43#	5941 43#	4909 43#	4909 43#	since 10/09, last log 04/20
	x	x					0820		E11	03	19184 13#	19184 13#	17378 13#	17378 13#	since 12/18, last log 04/20
x				x			0830		E11	03	12153 18#	12153 18#	x11559 18#, search	x11559 18#	since 07/15, last log 04/20 until 12/19 0600z
	x		x				0845		E11	03	12202 15#	12202 15#	12153 15#	12153 15#	since 07/17, last log 04/20
x		x					0900		E11	03	8180 53#	8180 53#	7449 53#	7449 53#	since 10/05, last log 04/20
x				x			0915		S11A	03	4505 48#	4505 48#	5082 48#	5082 48#	since 04/19, last log 04/20
		x	x				0930		E11	03	6940 27#	6940 27#	6923 27#	6923 27#	since 02/14, last log 04/20
	x			x			1000		E11	03	7317 30#	7317 30#	8180 30#	8180 30#	since 11/16, last log 04/20
	x			x			1020		S11A	03	7469 42#	7469 42#	6977 42#	6977 42#	since 02/10, last log 04/20 2nd transmission Thu 1730z
x		x					1045		E11	03	7317 69#	7317 69#	8545 69#	8545 69#	since 03/18, last log 04/20
			x	x			1100		S11A	03	6433 37#	6433 37#	5149 37#	5149 37#	since 02/14, last log 04/20
	x	x					1205		E11	03	6923 46#	6923 46#	6304 46#	6304 46#	since 03/10, last log 04/20
	x				x		1345		E11	03	14972 91#	14972 91#	12984 91#	12984 91#	since 10/15, last log 04/20
x				x			1530		E11	03	5737 52#	5737 52#	5409 52#	5409 52#	since 05/15, last log 04/20
			x				1530		E11	03	10330 26#	10330 26#	10356 26#	10356 26#	since 06/14, last log 04/20 2nd transmission Mon 0745z
	x				x		1605		E11	03	5082 23#	5082 23#	5371 23#	5371 23#	since 11/15, last log 04/20
		x			x		1625		E11	03	6923 97#	6923 97#	7863 97#, check	7863 97#	since 02/15, last log 04/20
				x	x		1650		E11	03	11116 92#	11116 92#	12229 92#	12229 92#	since 05/16, last log 04/20
	x		x				1700		E11	03	9240 33#	9240 33#	x14575 33#, search	14575 33#	since 06/17, last log 04/20
		x			x		1705		E11	03	4181 39#	4181 39#	4783 39#	4783 39#	since 02/14, last log 04/20
			x				1730		E11	03	7864 41#	7864 41#	8088 41#	8088 41#	since 03/10, last log 04/20 2nd transmission Mon 0450z
x					x		1745		E11	03	13470 24#	13470 24#	14410 24#	14410 24#	since 04/18, last log 04/20
		x			x		1850		S11A	03	10213 28#	10213 28#	12457 28#	12457 28#	since 06/17, last log 03/20
x			x				1900		E11	03	7317 64#	7317 64#	7600 64#	7600 64#	since 05/16, last log 03/20
				x	x		1910		E11	03	8530 61#	8530 61#	9610 61#	9610 61#	since 04/17, last log 03/20
				x	x		1930		E11	03	4505 36#	4505 36#	5082 36#	5082 36#	since 03/14, last log 03/20 2nd transmission Thu 1530z

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, RNGB, Spectre,

E: Tnx your input. Wish you well; this COVID-19 is a pain indeed. No hospital/drs visits is now the norm for keeping FFL. Avoid SK status at all costs. 1:9 Bleach rinse for stuff that comes in house and doorhandles is best practice. Strange times where the only thing not affected is the Numbers! Thanks for Logs and newpieces. My scanner bugged thanks to Win10 updates Best 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>

2020

January	February	March
S M T W T F S 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	S M T W T F S 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	S M T W T F S 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	May	June
S M T W T F S 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	S M T W T F S 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	S M T W T F S 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	August	September
S M T W T F S 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	S M T W T F S 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	S M T W T F S 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	November	December
S M T W T F S 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	S M T W T F S 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	S M T W T F S 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

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