

ENIGMA 2000 NEWSLETTER



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ma200



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See last page also.

Editorial

A Happy New Year to our readers; sadly, frequency changes still occur with some monitored stations and my coverage of polytones has been somewhat poor since mid-July 2019 thanks to my taking up activities that occlude my early and daytime intercept duties.

In addition to that as you are all aware Yahoo Groups made yet another change meaning the system became little more than a steered email system so we dumped them before the idiots who dreamed this up could ruin our activities 'per internet.' Thank to work done by Brian we enjoy a decent service from Gaggle and whilst not free it really delivers.

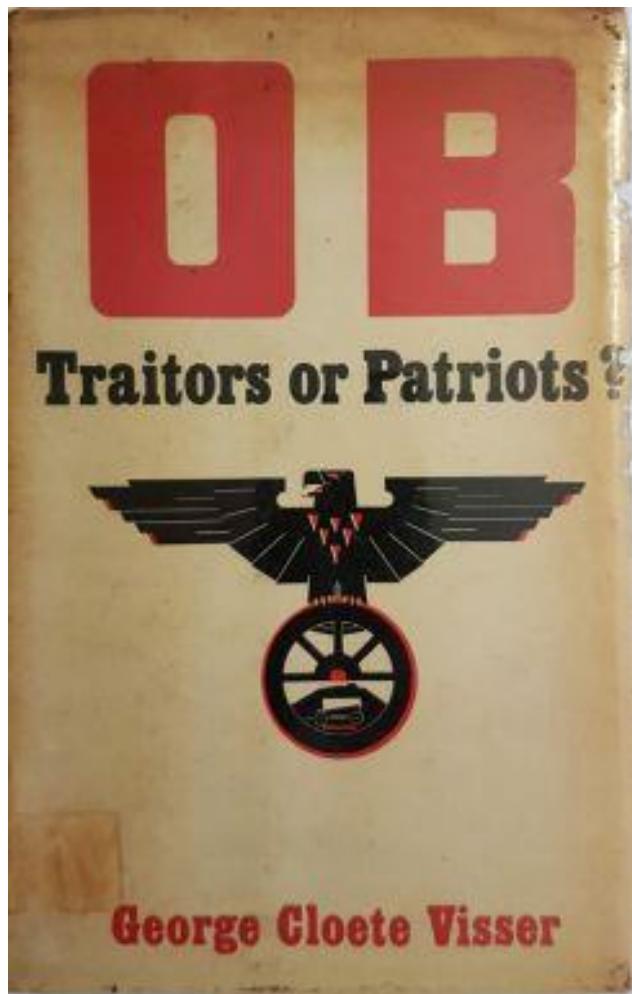
We think we have retained the right members at the moment; come the payment in a year's time I will be looking for deadwood to drop so that the effect on my pension remains the same. ☺

Short wave propagation continues to be subjected to the usual variations in the last two months of 2019, one bright spot was that the HM01 mixed mode station from Cuba was received with stronger signals than for some time on those days when 9065 kHz was used starting around 0800 UTC. Also, perhaps an indicator of improving propagation, the UVB-71 "buzzer" on 4625 was noted with a strong signal in daylight hours in December as early as 1330 UTC, 1.30 pm UK time. [PoSW].

Malc M8 wrote in to offer the important solar news:

'The Sun has ended 2019 exactly as it started without a single sunspot. The Sun has been completely blank for 281 days in 2019. To find a year with more blank suns you have to go back to 1930 (311 days). This means we are experiencing a Century Class Minimum. Forecasters expect these low sunspot counts to continue in 2020.'

Book Review



OB Traitors or Patriots? by George Cloete Visser

I purchased this book as the result of an article that appeared in the RSGB's RADCOM in the closing months of 2019.

The article itself covered the wireless aspect activities of one member of the Ossewabrandwag or OB from 1938 and through WW2. It was a pro-Nazi and an anti-British organization bent on preserving the culture and traditions of Afrikaaners but which degenerated into an underground paramilitary organization which became a menace to South Africa and her western allies that were at war with Germany.

At the end of the RSGB's interesting article where you could read about the development, building and use of the transmitter used by a certain member of the OB it stated if you want to know more then get the book.

The book published in 1976 [ISBN 0 86954 030 0] has plenty of elements of espionage, Special Branch, occasionally MI5 and the Dutch Secret Service and so on. Sadly it read like a policeman's memoirs, which this is.

It reads well and can engage the reader but I was perhaps expecting more than it could deliver due to the more technical nature of the piece in the RADCOM.

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

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

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 during this period)
Variant Format 4:	197 (R4m) 589 589 = 30 30 == 40728 58918 == 589 589 = 30 30 000	(Used six times in Nov/Dec)

November 2019:

4490	2000z	05 Nov	'197' 337 30 == 05018 ... 37003 ==	Good, fast. Good Morse. Grp16 83626666666 83626	BR/HFD	TUE
	1959z	07 Nov	'197' 675 30 == 05018 ... 37003 ==	Fair/Readable Via SDR Enschede.	MCW	E.SMITH
	2000z	12 Nov	'197' 621 = 30 == 45207 ==	Fair/Good, slow. Missed start of sched.	Format 4	BR
	2000z	14 Nov	'197' 412 30 == 37667 ... 01557 ==	Fair/Good, fast. Key set very fast. No errors	BR	THU
	2000z	19 Nov	'197' 215 30 == 61362 ... 91898 ==	Good, fast. Four errs – Three corrected	BR	TUE
	2000z	26 Nov	'197' 817 30 == 57539 ... 08599 ==	Good / Strong, fast. Hesitant & irregular in places.	BR	TUE
	2000z	28 Nov	'197' 643 30 == 97871 ... 81670 ==	Good, slow. Keying set very fast. No errors	BR	THU
5320	1800z	05 Nov	'197' 564 30 == 53037 ... 79919 ==	Good / QSB2	E.SMITH//HFD	TUE
	1800z	07 Nov	'197' 897 30 == 53037 ... 79919 ==	Fair/Weak, med-fast. Difficult copy. Msg as 05 Nov	BR	THU
	1800z	12 Nov	'197' 213 = 30 == 11699 ... 03896 ==	Good, slow. Good Morse – Key set fast	Format 4	BR
	1800z	14 Nov	'197'	Very weak – No useful copy	BR	THU
	1800z	19 Nov	'197' 30 30 ==	Weak with high noise – No useful copy	BR	TUE
	1800z	21 Nov	'197' 144 30 == 15904 ... 92967 ==	Fair/Good, fast. Good, brisk sending. Two errors noted	BR/E.SMITH	THU
	1800z	26 Nov	'197' 231 30 == 17278 ... 76570 ==	Weak / Fair, fast. Difficult copy due to QSB	BR	TUE
	1800z	28 Nov	'197' 221 30 == 06321 ... 30381 ==	Good / Strong, slow, but keying set fast. Errors grps26-27	BR	THU
5465	0659z	03 Nov	'197' 731 30 == 10993 ... 33893 ==	Good / QSB2	E.SMITH	SUN
	0700z	10 Nov	'197' 477 30 == 78596.... 31043 ==	Good/Clear	Via SDR Enschede	MCW
	0700z	17 Nov	'197' 627 30 == 39722 ... 25845 ==	Fair, fast. Good Morse, errors noted inc. 3x= at end	BR/E.SMITH	SUN
	0700z	24 Nov	'197' 185 30 == 98543 ... 93459 ==	Mostly good/clear	Via SDR Enschede	MCW
5810	1459z	02 Nov	'197' 236 30 == 18106 ... 77412 ==	Good, clear.	E.SMITH	SAT
	1500z	09 Nov	'197' 437 30 == 92908 50945...	Good signal under strong STANAG slightly HF	E.SMITH	SAT
	1500z	16 Nov	'197' 217 30 == 39502 ... 75320 ==	Good, very fast. Strong STANAG HF. Errors noted	BR/E.SMITH	SAT
	1500z	23 Nov	'197' 947 30 // 78321 ... 64290 ==	Fair/Good, Slow. Several errors. Note use of // at start	BR/E.SMITH/HFD	SAT
	1500z	30 Nov	'197' 483 30 == 65588 ... 59424 ==	Fair / Good, very fast. Hesitant at times. 31 grps sent	BR/E.SMITH	SAT

December 2019:

4490	2000z	03 Dec	'197' 901 30 == 61720 ... 20899 ==	Good, fast. Several errors including periods in starting DK	BR	TUE
	2000z	10 Dec	'197' 273 = 30 == 70354 ... 39692 ==	Good, slow. Errors in grps14 & 25.	Format 4	BR
	2000z	12 Dec	'197' 658 30 == 65563 ... 71042 ==	Good, slow. Single fig. error in grp09 repeat	BR	THU
	2000z	17 Dec	'197' 654 30 == 70354 ... 6 ...53 ==	Fair, fast. Strong local QRM.	BR	TUE
	2000z	19 Dec	'197' 354 30 == 41459 ... 26159 ==	Good, fast. Many errors inc. strings & incomplete grps	BR	THU
	2000z	24 Dec	'197' 233 30 == 63144 ... 53610 ==	Good, fast. Excellent Morse. No errors	BR	TUE
	2000z	26 Dec	'197' 279 30 == 55323 ... 85455 ==	Good, slow. Excellent Morse. No errors	BR	THU
5320	1800z	03 Dec	'197' 747 30 ==	Weak, fast. Very poor copy due to weak sigs & high noise	BR	TUE
	1800z	05 Dec	'197' 328 30 == 78321 ... 64290 ==	Fair/Good, fast. Several errors including incomplete grps.	BR	THU
	1800z	10 Dec	'197' 131 30 == 7964 ==	Weak / Fair, slow. Poor copy due to poor sigs & QSB	BR	TUE
	1800z	12 Dec	NRH		BR	THU
	1806z	17 Dec	Very weak. Late start at 1806z. Mostly unreadable but improved over course of msg.		BR	TUE
	1800z	19 Dec	'197' 381 30 == 20731 ... 24074 ==	Fair, fast. Numerous errors including incomplete grps.	BR	THU
	1800z	26 Dec	'197' 109 30 == 85065 ... 20842 ==	Fair, slow. Start DK sent as 091. Using long zeros	BR	THU
5465	0701z	01 Dec	'197' 431 = 30 == 28167 ... 74713 ==	Mostly clear with some fading. SDR Enschede	Format 4	E.SMITH
	0700z	08 Dec	'197' 291 30 == 26035 ... 96200 ==	Fair, fast. One error – Grp22, long zero sent on repeat	BR	SUN
	0700z	15 Dec	'197' 277 30 == 36686 ... 57462 ==	Fair, fast Irregular Morse. Two incomplete grps.	BR	SUN
	0701z	22 Dec	'197' 431 30 == 74410 ... 19384 ==	Good, fast. Perfect sending! No errors	BR	SUN
5810	1500z	07 Dec	'197' 564 30 85440 ... 16002 ==	Fair, fast. Missing == at start of msg.	BR	SAT
	1500z	14 Dec	'197' 107 = 30 == 12444 ... 04039 ==	Good, slow. Good Morse with no errors.	Format 4	BR
	1503z	21 Dec	'197' 845 30 == 75987 ... 63089 ==	Good, fast. Late start with VVV VVV. Error in grp30	BR	SAT
	1500z	28 Dec	'197' 195 = 30 == 55808 ... 03266 ==	Good, slow. Excellent Morse. No errors.	Format 4	SAT

On 26 December, the 1800z transmission was sent using long zeros throughout, an unusual event as M01 uses the short zero. Although there have been transmissions where a couple of long zeros were introduced – particularly with decode keys or group count - this is the first time to my knowledge that an entire transmission was sent using the long zero. The 2000z transmission was true to format, using short zeros.

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

Once again, Edd, E.SMITH, has done some sterling work on the M01a schedules. Here is his report & update on the latest schedule changes.

M01a Weekly Schedule Changes.

Not all frequencies will always transmit on any given day, although most days there is traffic on several which seems to be sent on an ad hoc basis. Traffic can usually be heard on the Enschede SDR in The Netherlands although during wintertime it is often NRH there, and only a Radio or Online Tuner in Russia or Eastern Europe receives a signal - bar 9421kHz which is almost always best received in Moscow/Russia.

This schedule uses the standard M01a format and is either machine, hand sent, or both, consisting usually of a 2 - 5 minute sending of the I.D. and a five fig group - then stopping and repeating again with another five fig group. When messages are sent they are given a serial number. The first one I logged was 9411kHz 10/10/2017 No 00013, the latest 9151kHz 31/12/2019 No 00255, except now the preceding zeros are no longer used.

A short Data Burst frequently precedes transmissions & details form part of a full report of M01a written and published by the ENIGMA Morse Team.

<http://www.signalshed.com/docs/M01notes.pdf>

There are couple of new frequencies and some I.D's have changed, they do from time to time;

Tuesdays and Fridays

Time (UTC)	Frequency (In kHz)	ID
0530z	9411	751/675
0540z	9051	809/216
0620z.	10233 or 10235	354
0630z	9447	143
0710z	10651	297
0720z	9151	728/297

Wednesdays and Thursdays.

Time (UTC)	Frequency (In kHz)	ID
0530z	9129 or 9192	498/893/173/958
0540z.	7692	958/498
0620z.	9421 (Received best in Russia)	135
0630z	8111	536
0710z	9175	146/208
0720z	8078	407

Very rarely another random frequency is used. This is the only one I've logged myself that was definitely part of the schedule and has only appeared twice, once on a Wednesday & Thursday in 2019.

Time (UTC)	Frequency (In kHz)	ID
0530z	9123	498/893

Logs:

November 2019:

M01a Training.

5082	0920 (IP) - 0921z	01 Nov	111 0 0 0 Good/Clear. Just caught the last few digits. (SDR Silec, Poland) Recorded until 1505z, a test tone was transmitted but no further traffic.	E.SMITH	FRI
5360	1011 - 1020z	01 Nov	747 (x3) 40383 (x2) 747 (x3) 40383 (x2) 747 (x3) 40535 (x2) E.T. at 1020z	F5JBR	FRI
4589	1021z	01 Nov	747 (x3) 41768 (x2) 111 999 623 12 = 01995 74069 17834 90158 00511 60415 95852 99536 6231 EEEEEEEE 111 62312 = 01995 74069 17834 90158 00521 60415 95852 99536 05492 01756 11 (probably error) 111 623 12 = 01995 74069 17834 90158 00521 60415 95852 99536 05492 01756 11813 39160 = 623 12 111 000	F5JBR	FRI
6752	0851z	30 Nov	843 333 29 333 30 333 31 111 999 310 40 = 92473 62428 25242 57012 71883 69243 29728 74675 20638 65363 97762 73229 84955 32747 26045 92255 53799 34444 15907 39893 26914 39769 50679 21469 29664 27291 23455 16568 68182 38477 25256 25858 58236 85434 53372 32245 04552 88613 54978 15634 06950 98412 48106 71035 46128 89527 48075 56739 99679 33554 = 310 40 111 000 <i>(Resumed at 0953z...)</i>	F5JBR	SAT

6752	0953z	30 Nov	843 (x3) 93992 (x2) 111 333 94787 (x2) 111 040 02 843 (x3) 111 999 206 50 = [Text Groups 5 figures] ... : ... 26004 05563 05991 25065 11748 70879 26419 07872 45478 59849 85286 34173 00259 = 206 50 111 66803 111 000	F5JBR	SAT	
7485	1301 (IP) – 1307z	20 Nov	273 (x3) 17807 (x2) (Rpt) 273 (x3) 17105 (x2) (Rpt)	(Via SDR Enschede)	E.SMITH	WED
			Good/Clear. Machine sent. No repeat the following Wednesday.			
9067	1313 (IP) - 1352z	20 Nov	273 (x3) 64032 (x2) (Rpt) 273 (x3) 040 01 273 (x5) 333 64248 64248 (Rpt) 273 27 111 64919 64919 (Rpt) 273 (x3) 111 65309 65309 (Rpt) 273 (x3) 111 65633 65633 (Rpt) 040 02 273 (x3) 333 00 040 01 273 090 333 00 040 03 ... 273 111 55562 535 62535 60924 60924 65307 6 HH 65307 63052 53052 111 02 111 111 999 124 36 91391 08729 25836 86118 50932 50487 73739 30473 42100 63225 34563 96997 02734 080 (Cuts machine off midway through character) HH 93281 28852 HH 28058 40181 22708 60023 50944 93929 50240 87519 20563 70575 27449 3742 85212 55856 06571 38659 97961 79895 90426 09120 4 12436 111 14 HH 124 36 = 111 0 0 0	(Via SDR Enschede)	E.SMITH	WED

Reception: Good/Clear. Mostly badly hand sent. Machine sent in sections followed by a note in parentheses.
No repeat the following Wednesday.

December 2019:

4591	0806z	04 Dec	517 (x3) 63093 (x2) [Repeated x 2] 517 (x3) 63373 (x2) [Repeated x 2] 333 00 [Repeated]	F5JBR	WED
4641	0823z	04 Dec	333 04110 333 111 = 85214 09840 63516 = 111 000	F5JBR	WED
4641	1415 - 1431z	04 Dec	333 57174 (x2) [Repeated] 333 57501 (x2) [Repeated] 333 57501 (x2) 333 55130 (x2) 333 55061 (x2) 111 000	F5JBR	WED

M01b November 2019:

2405//3180	2110z	01 Nov	'610' 121 33 = 82591 ... 83616 000	MCW	AB/HFD	FRI	
	2110z	29 Nov	'610' 121 33 = 82591 35954....	MCW	BR	FRI	
2425//3205	2015z	04 Nov	'375' 121 33 = 82591....	HFD	MON		
	2015z	11 Nov	'375' 121 33 = 82591 35954....	MCW	BR	MON	
2435//3520	1910z	04 Nov	'853' 121 33 = 82591....	HFD	MON		
	1910z	11 Nov	'853' 121 33 = 82591 35954....	MCW	BR	MON	
	1910z	18 Nov	'853' 121 33 = 82591 35954....	MCW	BR	MON	
2470//3545	1932z	07 Nov	'910' 121 33 = 82591 35954....	Weak//Strong	MCW	E.SMITH	THU
	1932z	14 Nov	NRH on both freqs	BR		THU	
	1932z	28 Nov	'910' 121 33 = 82591....	HFD		THU	
2485//3160	2042z	14 Nov	'382' 121 33 = 82591 35954....	Fair//Good	MCW	BR	THU
	2040z	21 Nov	'382' 121 33 = 82591....	3160kHz stronger		HFD	THU
	2042z	28 Nov	'382' 121 33 = 82591 35954....	Fair//Strong	MCW	BR	THU
2655//3195	2002z	01 Nov	'866' 121 33 = 82591 ... 21407 83616 000	MCW	AB//HFD	FRI	

December 2019:

2405//3180	2110z 2110z	06 Dec 13 Dec	'610' 361 31 = 14665 94079.... '610' 361 31 = 14665 94079....	Fair//Good Good//Strong	MCW MCW	BR BR	FRI FRI
2425//3205	2015z 2015z 2015z	02 Dec 09 Dec 16 Dec	'375' 361 31 = 14665 ... 84452 000 '375' 361 31 = 14665 ... 84452 000 '375' 361 31 = 14665 ... 84452 000	NRH (XJT)//Good NRH (XJT)//Strong NRH (XJT)//Good	MCW MCW MCW	BR BR BR	MON MON MON
2435//3520	1910z	16 Dec	'853' 361 31 = 14665 94079....	Fair//Good	MCW	BR	MON
2470//3545	1932 – 1949z	05 Dec	'910' 361 31 = 14665 ... 84452 000	Fair under QRM//Good	MCW	BR	THU
2485//3160	2042z	05 Dec	'382' 361 31 = 14665 94079....	Fair//Good-Strong	MCW	BR	THU
2655//3195	2002z 2002z	06 Dec 13 Dec	'866' 361 31 = 14665 94079.... '866' 361 31 = 14665 94079....	Fair//Good-Strong Fair//Good	MCW MCW	BR BR	FRI FRI

Ary, AB, reports an operator error on Friday, 20 December where the ID '866' was sent for both the 2002z & 2110z transmissions. The 2110z transmission should have used ID '610'. Did someone slip up & forget to change the ID ?

M01b 2655//3195kHz 2002z 01 November 2019	M01b 2470//3545kHz 1932z 05 December 2019
866 (R4m) 121 121 33 33 == 82591 35954 34675 66344 24339 56940 29763 38889 56009 25278 25335 54829 67131 24291 60396 50141 19991 12525 88506 01553 55779 51347 73920 94958 15823 88076 63658 47694 44544 80176 10709 21407 83616 == 121 121 33 33 000	910 (R4m) 361 361 31 31 == 14665 94079 96528 02573 94008 98759 92195 98556 74498 38997 59032 82481 13719 73315 71230 57306 69134 83805 08613 74122 08733 10317 81736 09641 37018 12397 13696 84564 84115 22467 84452 == 361 361 31 31 000

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 Scheds

14947/13447/12147	0010/0030/0050z	23 Dec	941 1 (674 18) 20486 16186 ... 91991 40828	(Via KiwiSDR Hawaii)	Danix	MON
			941 1 674 18 20486 16186 71621 92606 42916 27143 98898 81603 63666 09284 86815 84231 00114 74937 88537 47491 91991 40828			

European M12 Logs**November 2019: New scheds in bold type**

6859/7459/- -	2200/20/40z	08 Nov	849 000		BR/HFD	FRI
	2200/20/40z	09 Nov	849 000	Good/Clear	E.SMITH	SAT
	2200/20/40z	15 Nov	849 000		BR	FRI
	2200/20/40z	16 Nov	849 000		BR	SAT
	2200/20/40z	23 Nov	849 1 (409 120) 23975 18745....		BR	SAT
	2200/20/40z	29 Nov	849 1 (409 120) 23975 18745....		BR/E.SMITH	FRI
	2200/20/40z	30 Nov	849 1 (409 120) 23975 18745....		BR	SAT
6937/5737/4537	2210/30/50z	04 Nov	975 000		BR	MON
	2210/30/50z	07 Nov	975 000		BR	THU
	2210/30/50z	11 Nov	975 1 (5102 34) 26471 17125....		BR/E.SMITH	MON
	2210/30/50z	18 Nov	975 000		BR/E.SMITH	MON
	2210/30/50z	21 Nov	975 000		E.SMITH	THU
	2210/30/50z	25 Nov	975 000		BR	MON
	2210/30/50z	28 Nov	975 000		BR	THU
7536/6836/- -	2050/2110/2130z	06 Nov	581 000	Strong/Some distortion to signal	E.SMITH/HFD	WED
	2050/2110/2130z	08 Nov	581 000		BR	FRI
	2050/2110/2130z	13 Nov	581 000		BR	WED
	2050/2110/2130z	20 Nov	581 000		BR	WED
	2050/2110/2130z	27 Nov	581 000		BR/E.SMITH	WED
	2050/2110/2130z	29 Nov	581 000		BR	FRI

8047/6802/5788	2000/20/40z 1800/20/40z 2000/20/40z 1800/20/40z 2000/20/40z 1800/20/40z	02 Nov 04 Nov 09 Nov 18 Nov 23 Nov 25 Nov	463 1 (7725 99) 463 1 (3130 96) 463 1 (2625 94) 463 1 (4564 95) 463 1 (755 45) 463 1 (755 45)	16051 12242 ... 35954 28383 000 000 54767 38680.... 76844 73522 ... 69240 58234 000 000 45614 29799.... 03685 42402 ... 18270 11290 000 000 03685 42403....	Poor/Fair/Good BR/HFD E. SMITH BR E.SMITH BR	E.SMITH//HFD BR/HFD E. SMITH BR E.SMITH BR	SAT MON SAT MON SAT MON
8119/9119/10419	0600/20/40z 0600/20/40z 0600/20/40z 0600/20/40z 0600/20/40z 0600/20/40z 0600/20/40z 0600/20/40z	03 Nov 05 Nov 10 Nov 12 Nov 17 Nov 19 Nov 24 Nov 26 Nov	114 000 114 1 (5696 73) 114 1 (5696 73) 114 000 114 000 114 000 114 000 114 1 (8078 50)	40355 20192 ... 22517 73183 000 000 114 1 (5696 73) 40355 20192 ... 22517 73183 000 000	Good/Clear E. SMITH Good/Clear. Good/Clear Good/Clear Good/Clear Good/Clear Good/Clear	E. SMITH E.SMITH/F5JBR/HFD E.SMITH E.SMITH E.SMITH E.SMITH E.SMITH E. SMITH	SUN TUE SUN TUE SUN TUE SUN TUE
9317/10484/11552	0530/0550/0610z 0530/0550/0610z 0530/0550/0610z 0530/0550/0610z	05 Nov 12 Nov 19 Nov 26 Nov	135 1 (3281 108) 135 1 (1776 106) 135 1 (9673 113) 135 1 (3557 108)	51112 27352 ... 65423 20596 000 000 12889 90299 ... 49496 27159 000 000 62728 91999 ... 17322 10262 000 000 77788 44017 ... 57872 50865 000 000	Good/Clear Fair to bad/fading Weak/ Good Fair, readable	E.SMITH/HFD E.SMITH E.SMITH E.SMITH	TUE TUE TUE TUE
12162/11566/10711	1800/20/40z 1700/20/40z 1800/20/40z 1700/20/40z	07 Nov 14 Nov 14 Nov 21 Nov	546 1 546 1 546 1 546 1	12162kHz weak 12162kHz & 11566kHz NRH 10711kHz too weak to copy 12162kHz & 11566kHz NRH 10711kHz too weak to copy 12162kHz weak	(Via SDR Poland)	HFD E SMITH E SMITH HFD	THU THU THU THU
13936/12136/11536	1310/30/50z 1310/30/50z 1310/30/50z 1310/30/50z 1310/30/50z	06 Nov 15 Nov 20 Nov 22 Nov 27 Nov	915 1 (7051 140) 915 1 (7051 140) 915 000 915 000 915 000	56726 45447 ... 21294 56165 000 000 56726 45447 ... 21294 56165 000 000	Good/Str/Wk Good/QSB2	E.SMITH/HFD E.SMITH BR/E.SMITH E.SMITH BR/E.SMITH	WED FRI WED FRI WED
16296/14796/13396	1400/20/40z 1400/20/40z 1400/20/40z 1400/20/40z 1400/20/40z 1400/20/40z	04 Nov 06 Nov 11 Nov 18 Nov 20 Nov 25 Nov 27 Nov	273 000 273 000 273 1 (8521 181) 273 1 (8521 181) 273 1 (8521 181) 273 1 (2152 39) 273 1 (2152 39)	04942 12889.... 04942 12889.... 04942 12889.... 45081 59 .8.... 45081 59508....	Good/QSB3 BR BR BR/E.SMITH E.SMITH Weak sigs	E.SMITH/HFD BR BR BR BR BR	MON WED MON MON WED MON WED

December 2019:

5832/6832/7732	2200/20/40z 2200/20/40z 2200/20/40z 2200/20/40z	06 Dec 13 Dec 20 Dec 21 Dec	887 1 (2535 86) 887 1 (2535 86) 887 000 887 000	62344 51698.... 62344 51698....	BR BR/HFD BR BR	FRI FRI FRI SAT	
6908/5808/- - -	2050/2110/2130z 2050/2110/2130z 2050/2110/2130z 2050/2110/2130z 2050/2110/2130z 2050/2110/2130z	04 Dec 06 Dec 11 Dec 13 Dec 20 Dec 25 Dec	985 000 985 000 985 000 985 000 985 000 985 000		BR BR BR HFD BR BR	WED FRI WED FRI FRI WED	
6937/5737/4537	2210/30/50z 2210/30/50z 2210/30/50z 2210/30/50z 2210/30/50z 2210/30/50z	02 Dec 05 Dec 09 Dec 19 Dec 23 Dec 26 Dec	975 000 975 000 975 000 975 1 (6424 75) 975 000 975 000	10230 19157 ... 52281 50920 000 000	Gert Gert BR	MON THU MON THU MON THU	
6938/7738/- - -	0600/20/40z 0600/20/40z 0600/20/40z	01 Dec 03 Dec 31 Dec	972 1 (8078 50) 972 000 972 000	61821 ... 66424 58029 000 000	Good/Clear E.SMITH HFD	SUN TUE TUE	
8047/6802/5788	1800/20/40z 1800/20/40z 1800/20/40z 1800/20/40z	02 Dec 09 Dec 16 Dec 23 Dec	463 1 (3527 95) 463 1 (3036 94) 463 1 (6576 93) 463 1 (1951 98)	67885 80477.... 15026 33238.... 78596 54565.... 43985 41405 ... 59228 04572 000 000	BR BR BR Gert	MON MON MON MON	
9317/10484/11552	0530/0550/0610z	03 Dec	135 1 (4067 110)	99762 61728 ... 26925 43546 000 000	Fair/Poor	E. SMITH	TUE
11435/10598/9327	1800/20/40z	10 Dec	938 1		HFD		TUE
12162/11566/10711	1700/20/40z 1710/30/50z	12 Dec 25 Dec	546 1 (.. 56 112)	Very weak on all freqs	BR HFD	THU WED	
12217/6908/5832	1310/30/50z 1310/30/50z 1310/30/50z 1310/30/50z	04 Dec 06 Dec 11 Dec 13 Dec	253 1 (5181 180) 253 1 (5181 180) 253 1 (5181 180) 253 1 (5181 180)	85982 72534.... 74841 25859 000 000 85982 72534.... 85982 72534.... 85982 72534....	Good/Clear BR BR/HFD BR	WED FRI WED FRI	
12217	1310z 1310/30/50z	20 Dec 27 Dec	253 000 253 000		Gert Gert	FRI FRI	

13371/11571/10271	1400/20/40z	02 Dec	352 1 (1125 119) 89117 59965....	BR/HFD	MON
	1400/20/40z	04 Dec	352 1 (1125 119) 89117 59965....	BR	WED
	1400/20/40z	11 Dec	352 000	BR	WED
	1400/20/40z	16 Dec	352 1 (431 199) 04655 92015 ... 28934 84151 000 000	Gert	MON
	1400/20/40z	18 Dec	352 1 (431 199) 04655 92015....	BR	WED
	1400/20/40z	23 Dec	352 1 (431 199) 04655 92015 ... 28934 84151 000 000	Gert	MON
	1400/20/40z	30 Dec	352 000	BR	MON

14377/13461/12114 2000/20/40z **26 Dec** **317 1** (14377kHz & 13461kHz weak) **HFD** **THU**

M12 8047/6802/5788kHz 2000/2020/2040z 02 Nov 2019

463 463 463 1 (R2m) 7725 99 7725 99

16051 12242 25606 16222 73329 84040 83152 78666 73403 94978
 52075 62233 33484 41799 51145 85080 66956 47242 24001 85167
 20659 18400 17169 80335 86252 11606 05654 32317 49467 25535
 09656 97663 14687 24523 13888 60865 36355 42638 68943 78629
 94884 49231 12772 24914 60266 97988 91095 74973 96795 32522
 36464 05189 14339 96436 75209 59784 41914 77686 85689 28959
 75819 60758 79840 58107 83740 08785 53289 66422 21198 01141
 50233 30745 61094 66213 86979 35685 31553 50382 60015 83237
 27193 42642 23228 65709 49110 09396 59251 62909 43491 76116
 31326 00420 03515 44292 12911 14513 53522 35954 28383
 000 000

Courtesy E.SMITH

M12 8119/9119/10419kHz 0600/0620/0640z 05 Nov 2019

114 114 114 1 (R2m) 5696 73 5696 73

40355 20192 71274 86799 20032 64689 87578 57245 69518 76400
 52486 26664 72471 71351 73319 21375 60328 68857 13245 41865
 32520 80291 17505 70442 59262 36591 56683 63062 59839 45858
 22799 50937 13850 84698 82904 29343 64102 75834 48933 31309
 31934 27601 95940 52553 21051 91214 66861 68671 58929 95779
 90389 55214 51041 61866 45400 04950 44758 29073 06212 95707
 32419 87614 56827 95860 13608 79543 36614 16589 32757 86367
 01523 22517 73183 000 000

Courtesy F5JBR

M14 IA MCW / ICW Short 0

First we have this report from PoSW on the regular ID 239 schedule:

The first & third Wednesdays in the month - M14 MCW 1600 UTC schedule - still on in November & December:-

06-Nov-19, 5420 kHz, "239 239 239 00000", good signal, similar frequency used in the first two months of 2019.

20-Nov-19, 5432 kHz I made it, "239 239 239 00000", S6, strong STANAG noise-maker on close frequency.

04-Dec-19, 5420 kHz, "239 239 239 00000", strong signal, started about 15s before the hour.

18-Dec-19, 5420 kHz, "239 239 239 00000", S9.

M14 Logs

November 2019:

4443	1611 - 1615z	05 Nov	239 00000	Late start	Good/Clear	MCW	E.SMITH/HFD	TUE
4480	2000z	01 Nov	735 00000				ER/HFD	FRI
	2000z	15 Nov	735 00000		(SDR Poland)		ER	FRI
4636	1820z	12 Nov	186 (641 41) =		(SDR Poland)		ER/HFD	TUE
	1820z	26 Nov	186 (641 41) = 94815 ... 76266 = = 126 126 30 30 000			MCW	AB	TUE
4650	0900z	02 Nov	523 (721 36) 8 8			[Note 1]	AB/ER/HFD	SAT
	0900z	09 Nov	523 (423 23) = 74381 ... 89361 = 423 23 00000	Much better – Only one error		AB/ER		SAT
	0900z	16 Nov	523 00000 739 739 39 39 ==	77630 47197... First 9 groups repeated at end of msg.		ER		SAT
	0900z	23 Nov	523 (577 32) = 70045 ... 21213 = 577 32 00000	(SDR Poland)		ER		SAT
	0900z	30 Nov	523 (521 37) = 90164 ... 54720 = 521 37 00000	(SDR Poland)		ER		SAT
4730	0800z	02 Nov	523 00000				AB/ER/HFD	SAT
	0800z	09 Nov	523 (423 23) = 74381 ... 89361 = 423 23 00000			AB/ER		SAT
	0800z	16 Nov	523 00000 739 739 39 39 ==	77630 47197... First 9 groups repeated at end of msg.		ER		SAT
	0800z	23 Nov	523 (577 32) = 70045 ... 21213 = 577 32 00000	(SDR Poland)		ER		SAT
4813	1900 - 1904z	01 Nov	735 00000		[Note 2]	E.SMITH/ER/HFD	FRI	
	1900z	15 Nov	735 00000		(SDR Poland)	ER	FRI	
8165	0551 (IP) - 0601z	19 Nov	614 (577 32) = 70045 13213 ... 45567 21213 = 577 32 00000	Good/Clear	CW	E.SMITH		TUE
9073	1231 (IP) - 1246z	20 Nov	975 (864 51) = 39113 30147 ... 63170 65338 = 864 51 00000	52 grps sent	CW	E.SMITH		WED
10755	1203 (IP) - 1208z	30 Nov	975 (364 28) = 85610 59178 ... 59474 86794 = 364 28 00000	Good/Clear	CW	E.SMITH		SAT
15994	0930 - 0950z	11 Nov	617 (852 93) = 00793 76546 ... 88574 70130 = 852 93 00000	Good/Clear	CW	E.SMITH		MON
	0930z	26 Nov	617 (852 93) Repeat of 10 Nov 0930z on 17458kHz		[Note 3]	E.SMITH/ER		TUE
17458	0930z	10 Nov	617 (852 93) = 00793 ... 70130 = 852 852 93 93 00000	Unusually long message		AB/E.SMITH/HFD	SUN	
	0930z	25 Nov	617 (852 93) = 00793 76546 ... 88574 70130 = 852 93 00000		[Note 3]	E.SMITH/ER		MON

[Note 1] This was repeating same message as 19/10/19. Very much the same mess with many of the groups.
 The repeat had a one different figure, also long strings of figures.
 Ended 56790 41235 17236 21060 22060 84590 721 521 36 36 == 00000 ER

[Note 2] Thirty-five mins before the transmission there was testing by sending groups, switching sending on & off midway through digits. ER

[Note 3] An echo/delay effect was present, strong, and distorted the two transmissions on 25 & 26 November.
 The problem was less severe on the 26 November. E..SMITH

December 2019:

4636	1820z	24 Dec	186 (136 32 ==) 19288 ... 27182 = 136 136 32 332 00000	(SDR Poland)	ER	TUE
4650	0900z	07 Dec	(144 30) = 40166 ... 19031 Same msg as 0800z Sat. (No call-up)		ER	SAT
	0900z	14 Dec	523 (992 32) = 12381 ... 33890 = No errors	(SDR Poland)	ER	SAT
	0900z	21 Dec	523 (988 32) = 48821 ... 49310 = 998 998 32 32 00 00	(SDR Poland)	ER	SAT
	0900z	28 Dec	523 (999 32) = 98192 ... 16788 = 999 32 32 00000	[Note 3]	ER	SAT
4730	0801z	07 Dec	[Odd symbols] (144 30) = 40166 ... 19031 144 144 30 30 == (No 00000 sent)		ER	SAT
	0800z	14 Dec	523 (992 32) = 12381 ... 33890 = No errors	(SDR Poland)	ER	SAT
	0800z	21 Dec	523 (988 32) = 48821 ... 49310 = 998 998 32 32 No 00000 sent	(SDR Poland)	ER	SAT
	0800z	28 Dec	523 (999 32) = 98192 ... 16788 = 999 32 00000	[Note 3]	ER	SAT
4813	1900z	20 Dec	735 00000	(SDR Poland)	ER	FRI
17458	0930z	10 Dec	617 00000	(SDR Poland)	ER	TUE
	0930z	25 Dec	617 00000 Very weak signal on all SDR	(SDR Poland)	ER	WED
			[Note 3] Unusual number of groups with double figures 18 altogether.	ER		

M14 4730kHz 0800z 09 November 2019

523 (R4m) 423 423 23 23 ==
 74381 53290 84616 27453 47190 34178 64378 25179 64285 66361
 78152 36196 25860 17561 46209 77630 47197 56306 78936 45179
 74281 64709 89361

423 423 23 23 == 00000

Courtesy AB & ER

M14 4730kHz 0800 23 November 2019

523 (R4m) 577 577 32 32 ==
 70045 13213 67678 43122 76897 11223 44533 11554 90077 54123
 51122 44313 61455 80188 51432 88919 65122 77656 88911 65112
 43123 67677 87123 12356 98077 33221 55412 67789 09890 12433
 45567 21213 ==

577 577 32 32 00000

Courtesy ER

M14 17458kHz 0930z 10 November 2019

617 (R4m) 852 852 93 93 ==
 00793 76546 37316 59878 53065 85266 26277 59523 99293 36601
 78072 81238 86391 34281 42195 68494 55720 00283 99267 74879
 83111 47404 67108 25857 81755 67570 66059 27085 86660 88709
 10474 77591 64566 33538 42483 96027 05063 90810 29737 71587
 48705 74043 21449 27821 67594 02534 34527 98884 39009 54679
 80808 43263 20219 32132 81646 15775 12102 72429 28851 06223
 58861 83603 59510 86427 60380 82850 99594 64141 58410 03177
 15636 80217 08693 46626 96696 54016 07103 13172 75102 86225
 78668 94392 04271 14531 76372 49702 81210 06187 70058 00339
 37106 88574 70130 ==

852 852 93 93 00000

Courtesy AB

M23 O ICW

No reports

Morse Stations - Not Number Related

M51 XIX

3881//6825 100 grp 5-ltr messages with headers

No Reports

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

3881//6825

1230 - 1301z	19 Nov	Mardi-Leçon	02-2/1 Codé	02-2/2 Clair,	02-2/3 Codé,	02-2/4 Clair (600 grps/hr)	BR	TUE
1230 - 1358z	21 Nov	Jeudi- Leçon	04-2/1 Codé,	04-2/2 Clair,	04-2/3 Codé,	04-2/4 Clair (840 grps/hr)	BR	THU
1230 - 1304z	22 Nov	Vendredi- Leçon	05-2/1 Codé,	05-2/2 Clair,	05-2/3 Codé,	05-2/4 Clair (960 grps/hr)	BR	FRI
1230 - 1313z	25 Nov	Lundi-Leçon	11-2/1 Codé	11-2/2 Clair,	11-2/3 Codé,	11-2/4 Clair (420 grps/hr)	BR	MON
1230 - 1305z	27 Nov	Mercredi- Leçon	13-2/1 Codé,	13-2/2 Clair,	13-2/3 Codé,	13-2/4 Clair (720 grps/hr)	BR	WED

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

3881//6825

1152z (IP)	19 Nov	Non-stop 5-character groups composed of M51a messages	BR	TUE
1134z (IP)	21 Nov	Non-stop 5-character groups composed of M51a messages	BR	THU

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).

3121	4056	5023	6200	7077	8000	9327	10232
3178	4082	5070	6571	7596	8004		10321
3209	4166	5137	6636	7912	8059		10356
3232	4221	5144	6638				10563
3254	4222	5190	6810				
3285	4306	5510	6854				
3299	4570	5566	6971				
3333	4687	5724					
3344	4787	5789					
3345	4835						
3350	4866						
3360	4911						
3600	4973						
3643							
3684							
3716							
3831							
3844							

New Scheds for Nov Dec 2019:

From logs submitted from JPL & F5JBR

3156//3597//7397	New frequency for this Round Slip	First heard 05 Nov	V 3JWV (x3) DE QH4P (x2)
3205//NRH	New frequency for this Round Slip	First heard 28 Nov	V QWS1 (x3) DE 87DS (x2)
3842//4135	Sending different Round Slips	First heard 05 November	V K9S3 (x3) DE Q5R2 (x2) on 3842kHz
	Sending different Round Slips	First heard 05 November	V 3DAU (x3) DE GU5H (x2) on 4135kHz
		First heard 07 November	V 8FDH (x3) DE 5J9K (x2) on 3842kHz
		First heard 07 November	V 3D1U (x3) DE G25H (x2) on 4135kHz
3842//4952	Sending Different Round Slips	First heard 24 November	V 3JWV (x3) DE QH4P (x2) on 3842kHz
		First heard 24 November	V QWS1 (x3) DE 87DS (x2) on 4952kHz
4135//NRH	New Round Slip for this frequency pair	First heard 18 November	V 8FDH (x3) DE 5J9K (x2)
4952//NRH	Known Round Slip	First heard 22 November	V QWS1 (x3) DE 87DS (x2)
5177	New Round Slip for this frequency	First heard 04 Nov	Previously sent as QWS1 DE 8ZDS. Probably // to 5858kHz V 3DAU (x3) DE GU5H (x2)
5687//NRH	New frequency for this Round Slip	First heard 25 November	V 8FDH (x3) DE 5J9K (x2)
5858//10563	Sending different Round Slips	First heard 08 November	V 8FDH (x3) DE 5J9K (x2) on 5858kHz
		First heard 08 November	V 3D1U (x3) DE G25H (x2) on 10563kHz
6913//7397	New Round Slip for this frequency pair	First heard 08 November	V 8FDH (x3) DE QH4P (x2)
10563//NRH	New Round Slip for this frequency	First heard 25 December	3D1U de G25H V

DP91

8228//NRH

New frequency for this station

First heard 24 November

V DP91 (x3) DE CQ (x2)

Chart of M89 Freq & Call signs heard in Nov / Dec 2019**New Scheds shown in Bold Type****From logs submitted from JPL & F5JBR**

<u>Freq in KHz</u>	<u>Call Slip</u>	<u>Freq in kHz</u>	<u>Call Slip</u>
3156//3597	VVV (x3) 3JWV (x3) DE QH4P (x2)	4886//NRH	V JKDJ (x3) DE SLBC (x2)
3156//3597//6913	VVV (x3) 3JWV (x3) DE QH4P (x2)	4952//NRH	V QWS1 (x3) DE 87DS (x2)
3156//3597/6913//7397	VVV (x3) 3JWV (x3) DE QH4P (x2)	4952//3842	V QWS1 (x3) DE 87DS (x2) (Different R/Slip)
3156//3597/ 7397	VVV (x3) 3JWV (x3) DE QH4P (x2)	5177//NRH	V JKDJ (x3) DE SLBC (x2)
3205//NRH	V QWS1 (x3) DE 87DS (x2)	5177//NRH	V 3DAU (x3) DE GU5H (x2)
3597//NRH	V 3JWV (x3) DE QH4P (x2)	5687//NRH	V 8FDH (x3) DE 5J9K (x2)
3842//NRH	V K9S3 (x3) DE Q5R2 (x2)	5858//NRH	V 8FDH (x3) DE 5J9K (x2)
3842//4135	V K9S3 (x3) DE Q5R2 (x2) (Different R/Slip)	5858//10563	V 8FDH (x3) DE 5J9K (x2) (Different R/Slip)
3842//NRH	V 8FDH (x3) DE 5J9K (x2)	5858//NRH	V K9S3 (x3) DE Q5R2 (x2)
3842//4135	V 8FDH (x3) DE 5J9K (x2) (Different R/Slip)	5920//6840//10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?
3842//4952	V 3JWV (x3) DE QH4P (x2) (Different R/Slip)	5920//6840//8360//10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?
3850//4860//6840	Q2M (x3) DE NYZ (x2) (R5) QSA ? K (R5)	5920//6840//8290//8360//10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?
3850//4620//4860//5920//6840	Q2M (x3) DE NYZ (x2) (R5) QSA ? K (R5)	6913//7397	V 3JWV (x3) DE QH4P (x2)
4131//NRH	V JKDJ (x3) DE SLBC (x2)	6913//7397	V 8FDH (x3) DE QH4P (x2)
4131//4886	V JKDJ (x3) DE SLBC (x2)	7397//NRH	V 3JWV (x3) DE QH4P (x2)
4135//NRH	V 3DAU (x3) DE GU5H (x2)	7620//8350	V WNF(x3) DE FXM (x2) (R5) (Hand Sent)
4135//NRH	V 8FDH (x3) DE 5J9K (x2)	10383//5691	V 3D1U (x3) DE G25H (x2) (Different R/Slip)
4135//3842	V 3DAU (x3) DE GU5H (x2) (Different R/Slip)	10563//NRH	V 3D1U (x3) DE G25H (x2)
4135//3842	V 3DIU (x3) DE G25H (x2) (Different R/Slip)		
4720//NRH	VVV WNF (x3) DE FXM (x2)		
4720//5150	VVV WNF (x3) DE FXM (x2)		
4720//5150	V WNF(x3) DE FXM (x2) (R5) (Hand sent)		

3121	1545z (IP) 15 Dec	IEC BT 2383 AR K (Normally associated with exercise) IEC BT 7282 AR K (Both stations on this frequency)	(Remote tuner Novosibirsk)	JPL	SUN
3156//3597//7397	1119z 05 Nov	V 3JWV (x3) DE QH4P (x2) (IP - Cont'd) BT 056/9195/95.../28/50//..8/6 AR (From R/S - 1120z) /55/28/5082/528/6 AR (Return to R/S - 1121z)	(Remote tuner Khabarovsk)	JPL	TUE
3254	1430z (IP) 12 Nov 2232z (IP) 12 Nov	6NN5 NA45 7T4N 3NNT D64T (Cont'd.) NR 305 305 K MSG NR 141 CK 121 75 3113 E628 RMKS 0969 TO 0486 K	(Remote tuner Novosibirsk) (Remote tuner China)	JPL JPL	TUE TUE
3333	1201z (IP) 04 Dec	NR 02/EX 0.. BT 44BT BT A1D9/K7Y5 BT NR 03/EX TIME 1945 BT W2S6/G5S8 AR BT W2H6/G5S9 AR NR 04/EX TIME 1946 BT E3F6/T5S7 BT E3FB/T5H7 NR 05/EX TIME 1947 BT Z1A..BG9 BT Z1A7..BG8 AR K	(Remote tuner Hong Kong)	JPL	WED
3345	1210z (IP) 04 Dec	NR 9466/C 2007 RMKS 8617 TO 8640 BT AMC8/QJM3 NR 9.39 CK 400 41 1204 .000 RMKS 8650 TO 8617 BT	(Remote tuner Hong Kong)	JPL	WED
3684	Q1ZX	VV SWXR DE Q1ZX K NR 021 CK 99 76 1206 0200 RMKS 2867 TO 2574 BT	(Remote tuner India)	JPL	THU
3844	1711z (IP) 20 Nov	MSG NR 090 CK 99 48 1121 0100 BT	(Remote tuner Novosibirsk)	JPL	WED
3940	YI3U	V C6J6 DE YI3U (Message format indicates M95 family) NR 114/CCK CK 91 74 1123 2330 RMKS 6035 TO 6270 K	(Remote tuner Novosibirsk)	JPL	SAT
4221	1648z (IP) 07 Nov	MSG NR 8281 CK 100 21 1008 0030 RMKS 800 TO 8541 BT	(Remote tuner Khabarovsk)	JPL	THU
4222	1214z (IP) 07 Nov	MSG NR 02 CK 61 21 1107 1430 K R 61W K NR 175/EX NR 175/EX 2031 2031 BT 7BE3/EBT BT	(Remote tuner Khabarovsk)	JPL	THU
4261	1036z (IP) 14 Nov	NR 1573 CK 70 17 1114 1830 RMKS CQ BT	(Remote tuner Khabarovsk)	JPL	THU

4570	AKD3	0822z	25 Dec	NR 1560/EX 1621 = A8D7/G2A2 AR VVV QSY TO NR 18	(SDR:CHINA)	F5JBR	WED	
4787		0912z (IP) 08 Nov		NR 001 CK .. 044 1.. 08 ... RMKS 3.. TO ... (Mostly U/R)	(Remote tuner Novosibirsk)	JPL	FRI	
4911	7UYR	0759z	25 Dec	7UYR working 5DOM (QSO & msg) MSG NR 084 CK 91 21 23 25 1500 RMKS TO 0285 = 64T7 6754 T703 ... (In Duplex)	(SDR:CHINA)	F5JBR	WED	
5023	DVBH	1057z	04 Nov	VV WGHY DE DVBH K (IP – Machine sent – Cont'd - 1057z) IEC BT G2H8 AR K (Other station N/H on this frequency - 1103z) NR 003/EX 1904 RMKS 5320 TO 8742 BT YC4W/XNM9 AR AGN	(Remote tuner Novosibirsk)	JPL	MON	
5042		1024z (IP) 28 Nov		NR 097 CK 161 15 1128 1800 RMKS 2973 TO 7438 K	(Remote tuner Japan)	JPL	THU	
5137	P1QT	1043z (IP) 22 Nov		Calls to remote stations - Z2RZ, W9XG, 64KS, 6POQ, AC4I	(Remote tuner Novosibirsk)	JPL	FRI	
5190		1007z (IP) 14 Nov		NR 041 CK 99 43 1114 1800 RMKS 6239 TO 6238 6819 BT MSG NR 007 CK 99 43 1114 1800 RMKS 6819 TO 6239 K	(Remote tuner Novosibirsk)	JPL	THU	
5441		0917z (IP) 22 Dec		CBR0/CBDJ (x3) followed by msg. NR 1016 CK 79 65 1222 1724 RMKS BT 054.13.. TO 0544130 AR K	(Remote tuner Novosibirsk)	JPL	SUN	
5510	CWAD	0255z (IP) 28 Nov		Calls to remote station – PQAL	(Remote tuner Novosibirsk)	JPL	THU	
5789		0838z (IP) 16 Dec		IEC BT 9221 AR K (Normally associated with Exercise)	(Remote tuner Novosibirsk)	JPL	MON	
6200	DFK8	0739z	08 Nov	DFK8 Working JHYF NR 064/EX 1539 RMKS CQ = EI4H/AN5B AR NR 065/EX 1542 RMKS CQ = DJ4F/XXQS AR NR 066/EX 1545 RMKS CQ = SONF/A83R AR	(SDR:JAPAN)	F5JBR	FRI	
6571	C5SV	0722z	25 Dec	C5SV working O4ZK (QSO & MSG) NR 7591 / EX 1520 RMKS 9871 TO 9848 = K2T3N A3D5C K NR 8944/EX 1522 RMKS 9848 TO 9871 = S2D3/E5L9 AR K = (In Simplex)	(SDR:CHINA)	F5JBR	WED	
6638	NB1T	0850z	25 Dec	NB1T working 8FG2 XCXR 33RF (QSO & MSG) in Duplex	(SDR:CHINA)	F5JBR	WED	
6854	DDG5	0711z	25 Dec	DDG5 working GHNS (QSO & MSG) NR 06/EX 15 14 RMKS 0327 TO 7824 = DKRT3/GSUW1 K (In Duplex)	(SDR:CHINA)	F5JBR	WED	
6971		0313z (IP) 25 Nov		IEC BT 9486 AR K (Exercise associated) NR 1275 CK 35 86 1125 1118 RMKS 0328 TO 0441 K	(Remote tuner Novosibirsk)	JPL	MON	
7077	LAG2	0824z (IP) 03 Nov		JYA5/ZM5W AR (IP – Hand sent – 0824z) VV YAN7 YAN7 YAN7 DE LAG2 LAG2 LAG2 FF NR 200/EX 1626 BT R75E/HV7A AR NR 2308/EX 1626 (Silent - 826z)	(Remote tuner Khabarovsk)	JPL	SUN	
7596		0304z (IP) 25 Nov		IEC BT 64 AR (Exercise associated) NR 712/EX 1100 BT Y4D2F/G.F6S AR	IEC BT 20 AR K	(Remote tuner Novosibirsk)	JPL	MON
9327	HMTJ	0234z (IP) 15 Dec		ONQY DE HMTJ K		(Remote tuner Novosibirsk)	JPL	SUN
10321		0942z (IP) 28 Nov		NR 125 CK 99 93 1128 1700 BT		(Remote tuner India)	JPL	THU
10563	G25H	0423z	09 Nov	G25H Working 3D1U MSG NR 035 499 50 1109 1230 = 035CK 499 50 1109 1230 = 75U7 73A3 REPEAT MSG 2 TIMES – End Msg 0502z	(SDR:JAPAN)	F5JBR	SAT	

M89 5023kHz 1057 (IP) - 1128z 04 November 2019

V WGHY DE DVBH
 VV WGHY DE DVBH K (IP – Machine sent – Cont'd - 1057z)
 R QSA 2 IEC BT G2H8 AR K (Other station N/H on this frequency)
 R RPT K (1104z)
R HR F GA F NR 003/EX 1904 RMKS 5320 TO 8742 BT
YC4W/XNM9 AR AGN
F NR 003/EX 1904 RMKS 5320 TO 8742 BT
YC4W/XNM9 AR QSL ? K (1107z)
 R RPT 1W YC4W YC4W K
 R RPT 2W XNM9 XNM9 K (1108z)
 R RPT 2W XNM9 XNM9 K (1110z)
 R U F GA K (1111z)
 R RPT K
 R GA K (1112z)
 R GA (1113z)
 R QSL 1910 HR QRJ U QSY NR EEEE
 R HR QRJ U QSY NR 15 (1116z)
 R QSL 1910 HR QRJ U QSY NR 15 15 K (1117z)
VV WGHY DE DVBH K (Cont'd - 1118z)
737737737373737377 (1127z)
VV WGHY DE DVBH K (Unable to monitor any longer - 1128z)

Courtesy JPL

M89 7077kHz 0824 - 0826z 03 November 2019

JYA5/ZM5W AR (IP – Hand sent – 0824z)
 QSYU 60 Z QSY
 VVV 3ANZ EEEE
VV YAN7 YAN7 YAN7 DE LAG2 LAG2 LAG2
FF NR 200/EX 1626 BT
R75E/HV7A AR
NR 2308/EX 1626 (Silent - 826z)

6971kHz 0313 - 0321z 25 November 2019

R QSA 2 K (IP – Hand sent – 0313z)
R IEC BT 9486 AR K (Exercise associated)
 R GA (Other station N/H on this freq)
 R RPT NR K (0316z)
 R QSL 1117 K (0318z)
 R HR MSG GA K
 R QSL 1117 K (0319z)
 R HR 7G GA
7G NR 1275 CK 35 86 1125 1118 RMKS 0328 TO 0441 K (0320z)
 UA43 TN5D 73A4 (0321z)

Courtesy JPL

DP Stations

6554	1003 (IP) - 1003z 0204 (IP) - 0210z	28 Nov 29 Nov	V DP91 (x3) DE CQ (x2) V DP91 (x3) DE CQ (x2)	(Remote tuner Novosibirsk) (Remote tuner Novosibirsk)	JPL JPL	THU FRI
6554//8228	1000 – 1010z 0203 (IP) - 0110z 1000z 1000z 1000z	01 Dec 11 Dec 15 Dec 19 Dec 21 Dec	CQ (x3) DE DP91 (x2) V CQ (x3) DE DP91 (x2) V V DP91 (x3) DE CQ (x2) CQ (x3) DE DP91 (x2) V CQ (x3) DE DP91 (x2) V	(Remote tuner Novosibirsk) (Remote tuner Novosibirsk) (Remote tuner Novosibirsk) (Remote tuner India) (Remote tuner Novosibirsk)	JPL JPL JPL JPL JPL	SUN WED SUN THU SAT
7512	0302 - 0309z	28 Nov	DP3091 DE DP91	(Remote tuner Novosibirsk)	JPL	THU
	0300 – 0308z 0900 – 0907z 0908 - 0935z	15 Dec 16 Dec 21 Dec	DP3191 DE DP91 & DP2391 DE DP91 DP2291 DE DP91 & DP2391 DE DP91 DP3091 DE DP91	(Remote tuner Novosibirsk) (Remote tuner Novosibirsk) (Remote tuner Novosibirsk)	JPL JPL JPL	SUN MON SAT
	0908 - 0907z	22 Dec	N64U 6NT3 63DA 63NU 547D UN4T NAU7 UA65 (Cont'd – Sent about 10 grps & stopped - 0917z) DP91 calling DP2291, DP2391, 3091 & 3191	(Remote tuner Novosibirsk)	JPL	SUN
8228	1006 (IP) – 1010z 1000 - 1008z 0203z	24 Nov 28 Nov 29 Nov	V DP91 (x3) DE CQ (x2) V DP91 (x3) DE CQ (x2) V DP91 (x3) DE CQ (x2)	(Remote tuner Novosibirsk) (Remote tuner Novosibirsk) (Remote tuner Novosibirsk)	JPL JPL JPL	SUN THU FRI

M95 O XSV, XSV70, XSV85

M95 Morse Logs **(Bold type indicates new logging)**

3424//NRH	1150 (IP) - 1153z	10 Nov	V DL7T (x3) DE VML3 (x2) NR 143/CCK CK 299 31 1110 1950 RMKS CQ BT (Message format indicates M95 family)	(Remote tuner Novosibirsk)	JPL	SUN
3642//NRH	Call Sign 3A7D 1313z	(Active daily - only first marker log has been included) 03 Dec	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	TUE
3642//7602	Call Sign 3A7D 1800z 0030 - 0027z	(Active daily - only first marker log has been included) 05 Nov 22 Nov	V DKG6 (x3) DE 3A7D (x2) V DKG6 (x3) DE 3A7D (x2) NR 106 0830 RMKS 6354 TO 6808 BT CL/0900/ZBT/6354/6808 AR QSL ? NR 1056 CK 136 35 1122 0644 BT NR 1057 CK 21 35 1122 0650 BT NR 1058 CK 60 35 1122 0656 BT	(Remote tuner India) (Remote tuner Novosibirsk)	JPL JPL	TUE FRI
	0029 (IP) - 0030z	28 Nov	RMKS 6354 TO 8917BT CL/0900/ZBT/6354/8917 AR (Remote tuner Novosibirsk)	(Remote tuner Novosibirsk)	JPL	THU
	2024z	04 Dec	V DKG6 (x3) DE 3A7D (x2)	(Remote tuner Novosibirsk)	JPL	WED
3968//6936 2232z	Call Sign 3A7D 04 Nov	V DKG6 (x3) DE 3A7D (x2)	(Remote tuner Novosibirsk)	JPL	FRI	
4110//NRH	0136 (IP) - 0149z	29 Nov	Hand sent -) (Message format indicates M95 family)	(Remote tuner Novosibirsk)	JPL	FRI
	NR 067/CCK CK 91 88 1129 0935 RMKS 8376 TO 8616 BT					
4125//NRH	Call sign CBFG 1242 (IP) - 1249z	20 Dec	VVV UISD (x3) DE CBFG (x2) NR 052/CCK CK 31 54 1220 2045 RMKS 7483 TO 6358 6266 6265 9611 9793 BT (Message format indicates M95 family)	(Remote tuner Novosibirsk)	JPL	FRI
4243//NRH	Message number differs from current XSV70 and XSV85 message numbers.					
	1146 (IP) – 1151z	04 Nov	NR 16 CK 22 35 1104 1527 BT NR 08 CK 156 35 1104 1602 BT	(Remote tuner South Korea)	JPL	MON
	1151 (IP) – 1207z	19 Nov	NR 029 CK 51 35 1119 1548 BT NR 089 CK 21 35 1119 1616 BT	(Remote tuner Shenyang)	JPL	TUE
	1150 (IP - 1152z 1147 - 1154z	04 Dec 17 Dec	NR .. CK .8 5 35 1204 1535 BT NR 085 CK 51 35 1217 1504 BT NR 34 CK 185 35 1217 1612 BT	(Remote tuner Hong Kong) (Remote tuner Hong Kong)	JPL JPL	WED TUE
4243//9054	Message number differs from current XSV70 and XSV85 message numbers.					
	1146 (IP) - 1206z	07 Nov	NR 33 CK 19 35 1107 1555 BT	(Remote tuner Khabarovsk)	JPL	THU
	1145 (IP) - 1159z	15 Dec	NR 081 CK 35 35 1215 1520 BT NR 20 CK 178 35 1215 1530 BT	(Remote tuner Hong Kong)	JPL	SUN

4312	0100 (IP) - 0107z	28 Nov	ICE 2344 R K (Exercise associated) NR 105/CCK CK 81 17 1128 0900 RMKS 3195 TO 386. K	(Remote tuner Novosibirsk)	JPL	THU
4364//8073	Call Sign XSV85 1130 - 1145z 1130 - 1147z	04 Nov 19 Nov	NR 0943 CK 382 35 1104 1603 BT NR 1036 CK 296 35 0AA0 1544 BT	(Remote tuner Hong Kong) (Remote tuner New Zealand)	JPL JPL	MON TUE
	1136 (IP) - 1148z	04 Dec	Still having technical issues NR 1119 CK 46 35 1204 1615 BT NR 1220 CK UA6 35 1204 1620 BT	(Remote tuner Hong Kong)	JPL	WED
	1132 (IP) - 1146z	17 Dec	NR 1170 CK 374 35 1217 1714 BT	(Remote tuner Hong Kong)	JPL	TUE
4590	0922 (IP) - 0924z	08 Nov	0110/CCK CK 299 35 010241800 ...	(Remote tuner Novosibirsk)	JPL	FRI
5124	Call Sign 7EDG 0741z	23 Nov	7EDG working GW1G (See also entry for 5698kHz) NR 302/CCK CK 199 36 13 23 1300 RMKS 4363 TO 4783/4933/4973/56344883/4343/4304/4323/4990/4993/4383/4363/ = Also text : Groups 4 letters/Figures in Duplex. Ends QRU NIL SK	(SDR:JAPAN)	F5JBR	SAT
5128	1297 (IP) - 1212z	28 Nov	RMKS 0NR 18 (Too weak to copy)	(Remote tuner Novosibirsk)	JPL	THU
5198	Call Sign YGE2 0808z	20 Dec	YGE2 working RH85 (QSO & MSG) NR 328/CCK CK 199 78 12 20 1300 RMKS = 1808 TO 1978 / 5081 / 1698 / 1688 / 1878 / 1778 / 1668 / 1840 / 1831 / 1817 / 1663 TO 1808	(Via SDR Japan)	F5JBR	FRI
5198	Call Sign IY2G 0834z	20 Dec	IY2G working GD4W (VVV GD4W de IY2D & MSG) (Via SDR Japan) NR 328/CCK CK 199 78 12 20 1300 RMKS 1808 TO 1978 / 5081 / 1698 / 1688 / 1878 / 1778 / 1668 / 1840 / 1831 / 1817 / 1663 TO 1808	F5JBR	FRI	
5198	Call Sign GE5V 0853z	20 Dec	CW GE5V working IU5T (IU5T de GE5V VVV K & QSO) (Via SDR Japan) NR 328/CCK CK 199 78 12 20 1300 RMKS = 1808 TO 1978 / 5081 / 1698 / 1688 / 1878 / 1778 / 1668 / 1840 / 1831 / 1817 / 1663 TO 1808	F5JBR	FRI	
	The Net Station sends the same for the 3 networks: For the first: 5 outstations acknowledge receipt of the message For the 2nd: 2 outstations acknowledge receipt of the message For the 3rd: 1 outstations acknowledge receipt of the message					
5385	0818z (IP) 16 Dec		NR 047/CCK CK 91 74 1216 1600 RMKS 6644 TO 6035 K	(Remote tuner Novosibirsk)	JPL	MON
5396//5453	Call Sign 5IUI 0847z	08 Nov	5IUI Wkg outstations 3U3D de 5IUI V & QSO 7 Outstations. Exchange call signs	(SDR:JAPAN)	F5JBR	FRI
5396	Call Sign JKS1 0856z	08 Nov	5RWD de JKS1 MSG NR 287/CKK CK 199 63 1308 1300 RMKS 4263 TO 4003 =	(SDR:JAPAN)	F5JBR	FRI
5479//10722	Call Sign 3A7D					
5555	1537 (IP) - 1545z	28 Nov	NR 003/CCK 91 74 1128 2330 RMKS 6379 TO 6035 BT (Remote tuner Novosibirsk) CWOA DE YI3U R QSA 2 QSA ? K	JPL	THU	
5698	Call Sign 7EDG 0728z	23 Nov	7EDG working 5HFS QSO & Msgs in Duplex – Qsx 5124kHz (SDR:JAPAN)		F5JBR	SAT
5801//10180	Call Sign 3A7D 0808z 0254 - 0255z	03 Nov 22 Nov	(Active daily - only first marker log has been included) V DKG6 (x3) DE 3A7D (x2) NR 059/CCK CK 299 21 1122 1050 RMKS 6354 TO 6578 6894 6663 BT (Remote tuner Novosibirsk)	(Remote tuner Khabarovsk)	JPL	SUN
	1012 (IP) - 1013z	24 Nov	BT CL/1900/ZBT/6354/6664 AR QSL ? HR WK NR 170 (Remote tuner Novosibirsk)	(Remote tuner Novosibirsk)	JPL	FRI
	0840z 0150z 1225z	05 Dec 11 Dec 20 Dec	V DKG6 (x3) DE 3A7D (x2) NR 031 0930 RMKS 2096 TO 2388 BT COMM/1000/XZ654/48/2905/2388 AR QSL NR 084/CCK CK 99 21 1220 2025 RMKS CQ BT (Remote tuner Novosibirsk)	(Remote tuner Novosibirsk)	JPL JPL JPL	THU FRI
7846	1033 (IP) - 1051z	05 Nov	IEC BT 9228 BT K (Normally assocd. with exercise) MSG NR 03/CCK CK 30 10 1105 1835 RMKS 4064 TO 3564 K	Remote tuner Novosibirsk	JPL	TUE

<p>M95 4364//8073kHz 0011z 22 Nov 2019</p> <p>BNGC DE XSV85</p> <p>HR MSGS GA PSE CY (0012z) NR 1056 CK 136 35 1122 0644 BT TUU 3U4 3A4 TAU 773 353 4T3 (Cont'd - 0014z) AR (0021z) A HR MSG GA NR 1057 CK 21 35 1122 0650 BT TAA N5U TUU N53 TT6 N54 7TT TAU 746 7T5 77T 6TN 7AA 7AD DU4 7U4 46D U5U 7T5 6T7 7U5 AR A HR MSG GA NR 1058 CK 60 35 1122 0656 BT TAA N5U TUU N53 TT6 N54 7TT TT6 (Cont'd - 0024z) AR (0027z) A HR 12W K E (0027z)</p> <p>M95 3424kHz 1150z 10 Nov 2019</p> <p>V DL7T (x3) DE VML3 (x2) (IP - Cont'd - 1150z)</p> <p>HR 7G GA (1152z) NR 143/CCK CK 299 31 1110 1950 RMKS CQ BT (Message format indicates M95 family) 4DA6 54A3 A7T4 D5U7 U5N3 467D N3T6 A6T4 T6UD 7N5U (Cont'd - 1153z)</p> <p><i>Courtesy JPL</i></p>	<p>M95 4243//9054kHz 1230z 15 Dec 2019 In Chinese digital 4+4 QPSK 75/3000 – LSB Switched to CW – Hand sent (1148z)</p> <p>VV HR MSG TO YR PSE CY (Hand sent - 1150z) NR 081 CK 35 35 1215 1520 BT 5AA UTT TA5 3U6 3A4 5T7 5TD 75U 5AA 75U 354 365 4TD 445 3DA 4D3 N3D 4DU 5TN 75U 354 34T N3U 365 4TD 445 34T N3A 446 3DA N3D 3DA 4D3 N3D 4DU AR (1154z) MSG AGN NR 081 CK 35 35 1215 1520 BT (Repeats msg - 1155z) AR (1157z) A HR MSG GA NR 20 CK 178 35 1215 1530 BT UTU TA5 3U5 3A4 (Cont'd - 1159z)</p> <p>M95 5385kHz 0818z 16 Dec 2019</p> <p>VV R 7G GA (IP - Hand sent - 0818z) NR 047/CCK CK 91 74 1216 1600 RMKS 6644 TO 6035 K (0818z) 734D A3AD A74D 4D4N AN43 6UT7 6NT3 A66T A763 7367 UA34 (Cont'd - 0819z) AR QSL ? K (Message format indicates M95 family) (0825z) R N GA K (Other station N/H on this frequency - 0827z)</p> <p><i>Courtesy JPL</i></p>
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Marker Beacons (MX MXI)

5342kHz - CW Beacon

Edd Smith writes: I have monitored this marker briefly almost every day from 20 November 2019, & sometimes recorded it online for several hours to find the start & ending time. To the best of my knowledge it transmits daily between 0100z - 1400z. It is still transmitting as of 03 January 2020.

5342	1153 (IP) – 1400z	20 Nov	MXV CW Beacon "V"	Weak, becoming stronger after an hour.	E.SMITH	WED
5342	1202z (IP)	30 Nov	MXV CW Beacon "V"	QSA2 (SDR Balkhash, Kazakhstan)	E.SMITH	SAT
5342	0515z (IP)	15 Dec	MXV CW Beacon "V"	QSA4 QSB3 (SDR Balkhash, Kazakhstan)	E.SMITH	SUN
5342	0523z (IP)	31 Dec	MXV CW Beacon "V"	QSA3 QSB4 (SDR Moscow)	E.SMITH	TUE
5086	0939z	08 Nov	MX CW Beacon "P"	Kaliningrad Marker/Test Tones. Good/Clear Test tones and machine sending of the letter P, transmitted intermittently during the time monitored, both for approximately thirty seconds each time sent.	E.SMITH	FRI
8821	0934z	27 Nov	MX CW Beacon "P."	[S] Repeating for 4 - 5 minutes every 25 mins until 1105z.	E.SMITH	WED

Oddities

5292kHz Marker

5292	2341z	12 Dec	Marker – Sounding like poorly timed 'D'	BR	THU
	0906z	29 Dec	Marker - didada	chpa	SUN

S28 'The Buzzer'

Lots of interest in the Buzzer this time round, including some great long distance reports from Barry Williams. Logs as received:

18 Nov Monday, S28, the Buzzer, is active on 4625usb. As you know, this was a well-known frequency for this station. I checked 4810 nothing heard. Checked 9250, another well-known frequency for S28, again nothing heard. Still sending at the time of posting. – 1640z. Signal was good, with a definite "Echo" in the background. My QTH is near Cardiff, UK. My rig used was a Grundig satellit 750 with long wire aerial. *Gary HJH*

19 Nov Tuesday, S28, the Buzzer, is active on 4625usb. Time: 1552z: Nothing heard on 9250 or 4810:. Still sending at the time of posting. Signal today was much quieter, with the same "Echo" in the background. My QTH is near Cardiff, UK. My rig used was a Grundig satellit 750 with long wire aerial *Gary HJH*

19 Nov, 4625 usb. UVB-76, "The Buzzer". The weak signal was heard from a Japanese Perseus server on 1854utc. It had very good audio, but didn't quite show up on the waterfall display. There was some fading, but it was mostly propagating fairly well. *Barry Williams*

21 Nov, S28 The Buzzer 4625 kHz 1219z. The normal buzz 1220z USB good *chpa THU*

29 Nov / 30 Nov, 4625 usb, The Buzzer was heard clearly. 2215 utc, 29 Nov & 0015 etc, 30 Nov. Got this an hour or so before sundown on the 29th. Very good signal that is a bit unusual for this station. It was a good bit louder on 30 Nov but this was after dark.

Heard from my home at 32°39'13.63"N 85°23'28.60"W Alabama. I used a Wellbrook ALA1530+ positioned in the attic.

Barry Williams

30 Nov Apparently they've been working on The Buzzer/ S28. [From a posted recording] there is only audio hum, then the buzz restarts, and then two discrete audio tones are sent underneath it. Hugh Stegman

4625	1348z	02 Dec	S28	'The Buzzer' Marker	Usual buzz	Excellent	USB	chpa	MON
4625	1805z	03 Dec	S28	'The Buzzer' Marker	Usual buzz with background sound		USB	chpa	TUE
4625	1533z	04 Dec	S28	'The Buzzer' Marker	Usual buzz with some QRM		USB	chpa	WED
4625	0850z	29 Dec	S28	'The Buzzer' Marker	Usual buzz with some QRM		USB	chpa	SUN

31 Dec, S28, the Buzzer, is active on 4625usb. 1425z. Nothing heard on alternative frequencies 4810 or 9250. Still sending at the time of posting. Signal was good. No echo effect. My QTH is near Cardiff, UK. My rig used was a Grundig Satellit 750 with long wire aerial. Gary HJH

S30 'The Pip'

3756	1806z 1704z	03 Dec 04 Dec	S30 S30	'Pip' marker (Night freq) 'Pip' marker (Night freq)	USB USB		Good Good	chpa chpa	TUE WED
5448	0856z	29 Dec	S30	'Pip' marker (Day freq)	USB		Good	chpa	SUN

S32 'Squeaky Wheel'

3828	1702z	04 Dec	S32	'Squeaky Wheel' (Night Freq)	USB	Some QRM	Weak	chpa	WED
5474	0901z	29 Dec	S32	'Squeaky Wheel' (Day Freq)	USB	Some QRM	V.weak	chpa	SUN

Special thanks to all those who have contributed to the Morse column over 2019.

Contributors: AB, Barry Williams, BR, chpa, Danix, E.SMITH, ER, F5JBR, Gert, HFD, HJH, Hugh Stedman, JPL, PoSW Thank you all for your logs.

Voice, Polytone, Tones, Hybrids and FSK

E06 Nov/Dec log:

E06 Nov/Dec log:

	First /Third Thursday (repeats Friday)	0600z	18285kHz	0700z	20140kHz
07/11	'507' 498 61 49146 77263 58910 19735 73407 05645 07208 99739 25154 86936 99023 48386 30190 90953 62406 27388 63679 50947 25796 64864 70792 10599 71734 69198 46827 68371 77381 25386 87744 73919 15293 92667 47041 56226 12888 95607 59915 28178 94039 25822 20656 17242 51243 96537 24184 16955 21778 17173 07704 38888 66314 80123 53374 69800 73402 76938 37970 63644 38273 86087 40434 498 61 00000				

21/11	'507' 834 62 50237 95324 88155 16740 44169 40446 25750 37998 83568 36524 69019 06153 70404 36049 68678 91069 10406 24777 14017 16802 86910 09702 66556 98653 89887 82927 73109 77203 29821 09836 00414 60240 91146 15027 58543 08554 04927 64432 05268 26497 45451 67075 48564 43287 80450 44884 89456 95950 29611 44015 72375 49879 11074 86117 35225 17914 80620 82972 76346 63901 93207 62957 834 62 00000				
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	0600z	18241khz	0700z	17420kHz
05/12	'923' 167 50 06956 37627 12379 44444 22717 59057 26301 93971 33272 77880 83385 57809 62399 62580 48973 30082 14864 27580 23184 26401 18793 38875 37831 89996 86115 10004 05006 78359 64515 55524 53244 87868 79314 94213 12247 21092 88744 19153 32053 26456 01025 76891 47643 64963 26707 22892 24874 83645 64698 45420 167 50 00000			

19/12	'923' 648 51 45630 84473 48404 44444 94959 53727 81842 07112 48451 12745 60399 45642 11929 94711 45380 07522 12337 82574 67615 02338 49840 13264 67293 83747 31262 88645 67492 10865 45812 97904 04837 95308 69033 81040 65724 76068 05914 88162 01551 89400 09092 14271 21383 25923 33097 14222 85504 92108 10567 27544 48282 648 51 00000			
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	First/Third Thursday of month	2030z	4836kHz (frequency may vary slightly)
07/11	'321' 935 40 48153 45743 79677 85458 12496 55482 77233 95864 48376 22795 48538 34693 26852 26468 34579 34687 33529 23258 04468 46726 60964 69477 23295 27399 80453 17847 31125 11631 12253 13648 53178 61135 61345 79320 59385 58736 79383 23682 23392 23328 935 40 00000		

05/12	'321' 472 52 12265 to 95732 472 52 00000] 2043z		
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19/12	'321' 991 45 12435 76426 05698 65615 65790 43483 23453 83874 12453 16452 68716 08343 24102 88748 72657 03126 73561 61123 87122 83823 84774 61251 87891 23437 94526 13242 17964 43525 12121 21198 64265 42346 56781 44322 38765 32145 63451 22344 56944 13368 78265 14368 12346 73416 32442 991 45 00000 to 32445 991 45 00000] 2041z		
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Friday following First & Third Thursday **2130z** **4760kHz (frequency may vary slightly)**

08/11 '472' 935 40 48153 45743 79677 85458 12496 55482 77233 95864 48376 22795 48538 34693 26852 26468 34579 34687 33529 23258 04468 46726
60964 69477 23295 27399 80453 17847 31125 11631 12253 13648 53178 61135 61345 79320 59385 58736 79383 23682 23392 23328
935 40 00000

06/12 '472' 149 52 12265 10965 47839 38654 84677 93453 72217 84393 04673 97564 01824 75643 84221 95647 92112 94543 76577 43435 47322 84232
95674 87344 57438 45763 49325 57438 92190 96785 21244 05674 01765 76354 83645 21234 97564 82133 07564 83234 75312 71211
05674 65374 67321 94884 23483 82521 41212 57333 85331 53234 05124 95732 149 52 00000

20/12 '472' 991 45 12435 76426 05698 65615 65790 43483 23453 83874 12453 16452 68716 08343 24102 88748 72657 03126 73561 61123 87122 83823
84774 61251 87891 23437 94526 13242 17964 43525 12121 21198 64265 42346 56781 44322 38765 32145 63451 22344 56944 13368
78265 14368 12346 73416 32442 991 45 00000 to 32445 991 45 00000] 2041z

PoSW's observations:

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

7-Nov-19:- 4836 kHz, Calling "321", DK/GC "935 935 40 40", ended around 2040:30s UTC, computer shut-down sound heard just before 2043.

5-Dec-19:- 4836 kHz, call "321", DK/GC "472 472 52 52", strong signal, started about a minute before the half-hour. Ended before 2042z, carrier off after 2046, no computer shut-down heard.

19-Dec-19:- 4836 kHz, call "321", DK/GC "991 991 45 45", good signal, ended 2041 UTC, computer shut-down sound after about another 40 seconds.

Friday 2130 UTC Schedule Following First + Third Thursdays:-

8-Nov-19:- 4760 kHz, Calling "472", DK/GC "935 935 40 40", same as yesterday's 2030z sending, weak signal.

22-Nov-19:- 4760 kHz, Call "472", DK/GC "134 134 57 57", strong signal, ended 2143:30s UTC, computer shut-down sound at 2145.

20-Dec-19:- 4760 kHz, started well before the half-hour, call "472", DK/GC "991 991 45 45", same as the previous day's 2030z sending.

E07

Sunday/Wednesday

November 2019

1800z	7582kHz	1820z	6782kHz	1840z	5182kHz	
03/11	571 1 273 216 03277 ... 71073 000 000				[1800z QSB to nil]*	Weak
06/11	571 1 273 216 03277 ... 71073 000 000				[1800z BCQRM]*	Weak
	*Due to message length 24m Start times revised: 1829 and 1858z]					
10/11	571 1 273 216 03277 ... 71073 000 000*					Weak
13/11	NRH					
17/11	NRH					
20/11	NRH					
24/11	MISSED					
27/11	571 1 532 209 53800 ... 41243 000 000				Weak, QRM	

December 2019

1800z	6771kHz	1820z	5871kHz	1840z	4571kHz	
01/12	758 000				[1820z (Dutch SDR)]	Weak
04/12	785 000					Weak
08/12	785 000				[1800z Unworkable]	Strong
11/12	785 000				[1820z QRM]	Weak
15/12	785 1 7972 271 76967 ... 76380 000 000				[1835z QRM]	Weak
18/12	785 1 7972 271 76967 ... 76380 000 000				[1835z QRM, 1910z Fair]	Weak

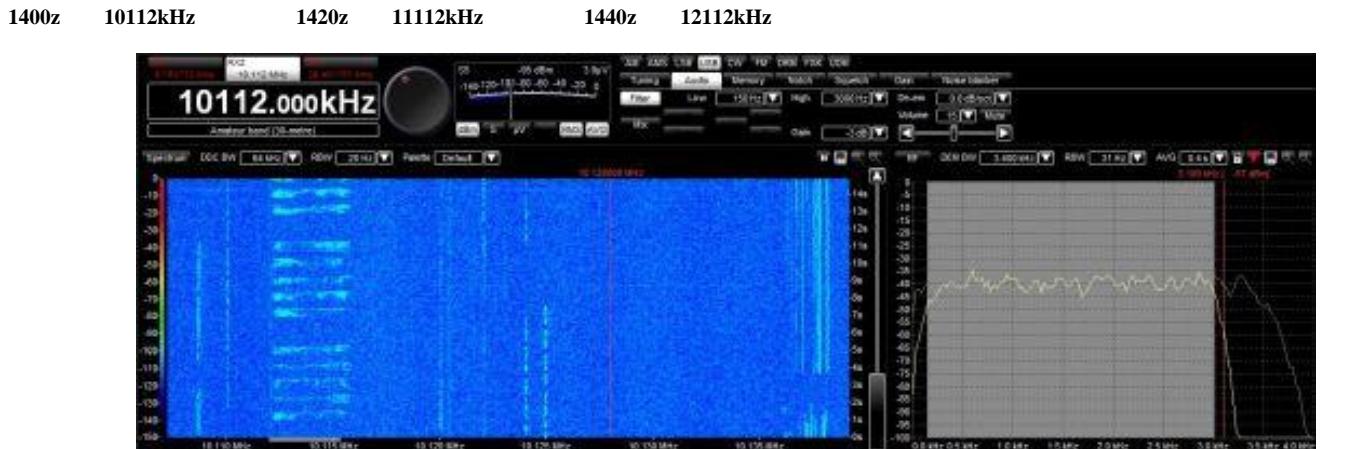
Sunday/Saturday

November 2019

	0700z 10112kHz	0720z 11112kHz	0740z 12112kHz	
02/11	111 1 736 79 61485 ... 33807 000 000			Fair
03/11	111 1 736 79 61485 ... 33807 000 000			Fair
09/11	111 1 736 79 61485 ... 33807 000 000			Very strong
10/11	111 1 736 79 61485 ... 33807 000 000			Weak
16/11	111 000			Strong
17/11	111 000			Strong
24/11	111 000			Weak, noisy
30/11	111 000			Weak, noisy

Sunday/Thursday/Saturday

November 2019



Excellent signals 02/11; note Morse and digital stuff nearby

02/11	111 1 736 79 61485 ... 33807 000 000		Fair
03/11	111 1 736 79 61485 ... 33807 000 000	[1400z Fair, 1440z Local VDSL QRM2]	Weak
09/11	111 1 736 79 61485 ... 33807 000 000		Strong
10/11	111 1 736 79 61485 ... 33807 000 000		Fair
16/11	111 000		Weak
17/11	111 000		Strong
24/11	111 000	[CWQRM2]	Fair
30/11	111 1 822 14 67853 ... 25830 000 000		Weak, QSB3

December 2019

	0700z 9236kHz	0720z 10426kHz	0740z 11526kHz	
01/12	345 1 822 14 67853 ... 25830 000 000			Ary SUN
	345 1 822 14 67853 13786 69092 87289 60192 77454 93037 96338 25303 79834 82683 10819 75920 25830 000 000 Courtesy Ary			
07/12	NRH			
08/12	345 1 755 nn 47052			Unworkable
15/12	345 1 795 97 47052 ... 83670 000 000		[0700z QRM2]	Weak
21/12	NRH			

Sunday/Thursday/Saturday**December 2019**

1400z	9236kHz	1420z	10426kHz	1440z	11526kHz	
07/12			NRH			
08/12			NRH			
08/12			Unworkable			
21/12			NRH			
1400z	9143kHz	1420z	8143kHz			
28/12			116 000			Strong

Monday/Wednesday**November 2019**

2000z	7616kHz	2020z	6816kHz	2040z	5216kHz	
04/11		682 1 729 130 61135 ... 62839 000 000			[2040z QRM]	Weak
06/11		682 1 729 130 61135 ... 62839 000 000			[2040z Fair, QRM at start]	Weak
11/11		682 1 729 130 61135 ... 62839 000 000			[2040z Strong, QRM]	Weak
13/11		682 1 729 130 61135 ... 62839 000 000			[2040z QRM]	Weak
27/11		682 000				Fair

December 2019

2000z	6823kHz	2020z	5823kHz	2040z	5123kHz	
02/12		881 1 862 140 72707 ... 96430 000 000				Weak
04/12		881 1 862 140 72707 ... 96430 000 000			[2040z Fair]	Weak
09/12		881 000				Weak
11/12		881 000			[2000z Strong]	Weak
16/12		881 000				Fair
23/12		881 000				Strong
25/12		881 000				Strong

Tuesday/Friday**November 2019**

0700z	15823kHz	0720z	16323kHz	0740z	18623kHz	
05/11		836 1 7017 98 15641 ... 96562 000 000				Weak
08/11		836 1 7017 98 15641 ... 96562 000 000			[0740z (Dutch SDR)]	Weak
12/11		836 000			[0700z NRH]	Weak
15/11		836 000			[0720z (Dutch SDR)]	Weak
29/11		836 000			[0720z(Dutch SDR)]	Weak

Tuesday/Friday**December 2019**

0700z	13464kHz	0720z	14964kHz	0740z	15964kHz	
03/12		399 1 9231 152 37297 ... 40639 000 000			[0720/0740z (Dutch SDR)]	Weak
10/12		399 000			[0700z NRH]	Weak
24/12		399 000			[0700z (DutchSDR)]	Weak

Tuesday/Friday**November 2019**

1100z	14884kHz	1120z	13384kHz	1140z	11584kHz	
01/11	835 1 302 66 93706 ... 80332 000 000				[1100z Fair]	Weak
05/11	835 1 302 66 93706 ... 80322 000 000					Weak
08/11	835 1 302 66 93706 ... 80332 000 000				[1100z Strong]	Weak
12/11	835 1 698 74 83224 ... 88669 000 000					Weak
15/11	835 1 698 74 83224 ... 88649 000 000				[0720z (DutchSDR)]	Weak

December 2019

1100z	11493kHz	1120z	10193kHz	1140z	8193kHz	
03/12	411 1 2289 177 86908 ... 86734 000 000					Weak
10/12	411 1 314 39 14549 ... 85320 000 000					Weak
13/12	411 1 314 39 14549 ... 85320 000 000					Weak
17/12	411 000					Weak
20/12	411 000					Weak
24/12	411 1 178 27 88355 ... 73467 000 000					Weak
27/12	411 1 178 27 88355 ... 73467 000 000					Weak

Thursday/Saturday**November 2019**

1410z	11574kHz	1430z	10274kHz	1450z	9274kHz	
02/11	327 000				[1410z NRH]	Weak
07/11	327 000					Weak
14/11	327 000				[1430z (Dutch SDR)]	Weak
16/11	327 000				[1430z (DutchSDR)]	Weak
30/11	327 000					Weak

December 2019

1410z	10226kHz	1430z	9226kHz	1450z	8126kHz	
12/12	Unworkable; 674 1				[1430/1450z NRH]	
26/12	674 000				[1430z (Dutch SDR)]	Weak
28/12	674 000					Weak

PoSW's Logs:**Saturday + Sunday Schedule, 0700 UTC Start:-**

2-Nov-19, Saturday:- 0700 UTC, 10112 kHz, “111 111 111 1”, full message, DK/GC “736 79” x 2, S6 to S7.
 0720 UTC, 11112 kHz, second sending, S8.
 0740 UTC, 12112 kHz, peaking over S9, strongest sending of the three.

3-Nov-19, Sunday:- 0700 UTC, 10112 kHz, “111” and “736 79” again, strong signal.
 0720 UTC, 11112 kHz, and 0740 UTC, 12112 kHz, repeats, both over S9.

9-Nov-19, Saturday:- 0700 UTC, 10112 kHz, “111” and “736 79” again.
 0720 UTC, 11112 kHz, and 0740 UTC, 12112 kHz, all transmissions strong signals.

16-Nov-19, Saturday:- 0700 UTC, 10112 kHz, “111 111 111 000”, S7.
 0720 UTC, 11112 kHz, stronger.

17-Nov-19, Sunday:- 0700 UTC, 10112 kHz, and 0720 UTC, 11112 kHz, both around S7, “111 111 111 000”.

23-Nov-19, Saturday:- 0700 UTC, 10112 kHz, “111 111 111 000”, S7.
0720 UTC, 11112 kHz, also S7.

30-Nov-19, Saturday:- 0700 UTC, 10112 kHz, and 0720 UTC, 11112 kHz, “111 111 111 000”.

No sign of this schedule on the predicted frequencies of 8123/9323/10423 kHz in December,
did not seem to be likely that propagation was to blame and that the reason was that this one had been discontinued or the frequencies had changed; it turned out that the second of these options was the case, although not found until late in the month:-

22-Dec-19, Sunday:- 0701 UTC, 9326 kHz, found in progress with “345 345 345 1”, just in time to catch the DK/GC “795 97” x 2. Weak signal.
0720 UTC, 10426 kHz, second sending, S4 to S5 at best.
0740 UTC, 11526 kHz, inside the 25 metre band, strong broadcast station on close frequency.

29-Dec-19, Sunday:- 0700 UTC, 9326 kHz, “345 345 345 000”, S5 to S6.
0720 UTC, 10426 kHz, stronger, first number station logging after being away for a few days over Christmas.

Sunday + Wednesday Schedule, 1800 UTC Start:-

3-Nov-19, Sunday:- 1800 UTC, 7582 kHz, “571 571 571 1”, DK/GC “273 216” x 2, long message, signal strength up and down, slight interference from broadcast stations on close frequency.

1829 UTC, 6782 kHz, running late due to the long message.

1858 UTC, 5182 kHz, third sending, strongest sending of the three.

This schedule has previous for transmitting long messages; in April 2018 group counts of 245, 266 and 293 were logged.

6-Nov-19, Wednesday:- 1800 UTC, 7582 kHz, “571” and “273 216” again, weak signal with broadcast station interference.

1829 UTC, 6782 kHz, stronger, around S8.

1858 UTC, 5182 kHz, also around an “8” on the S-meter.

13-Nov-19, Wednesday:- 1800 UTC, 7582 kHz, very weak, unreadable.

1831 UTC, 6782 kHz, “571” and “273 216” still. Much stronger than the first sending.

1901:30s UTC, 5182 kHz, third sending, weaker.

17-Nov-19, Sunday:- 1800 UTC, 7582 kHz, “571 571 571 1”, DK/GC “532 209” x 2, so another different long message, weak signal, broadcaster interference.

1828 UTC approx, 6782 kHz, stronger signal.

1856:40s UTC, S6 to S7.

24-Nov-19, Sunday:- 1800 UTC, 7582 kHz, still “571” and “532 209”, the broadcast station on close frequency very strong.

1828 UTC, just after, 6782 kHz, peaking S7.

1856:45s approx, third sending, up to S9.

1-Dec-19, Sunday:- 1800 UTC, 6771 kHz, “785 785 785 000”.

1820 UTC, 5871 kHz, weak, stronger “XJT” on close frequency.

4-Dec-19, Wednesday:- 1800 UTC, 6771 kHz, “785 785 785 000”, S7.

1820 UTC, 5871 kHz, also around S7, “XJT” weaker.

8-Sun-19, Sunday:- 1800 UTC, 6771 kHz, “785 785 785 000”, weak signal.

1820 UTC, 5871 kHz, much stronger, over-riding weaker “XJT”.

11-Dec-19, Wednesday:- 1800 UTC, 6771 kHz, “785 785 785 000”, S7 with QSB.

1820 UTC, 5871 kHz, over-riding “XJT”.

15-Dec-19, Sunday:- 1800 UTC, 6771 kHz, back with one of those exceptionally long messages this evening, “785 785 785 1”, DK/GC “7972 271” x 2, ended shortly before 1830 UTC.

1834 UTC, after, 5871 kHz, just about over-riding the noise-maker.

1909 UTC, just before, third sending, strong signal.

22-Dec-19, Sunday:- 1800 UTC, 6771 kHz, very weak signal, unreadable.

1820 UTC, 5871 kHz, stronger but with “XJT” for company, “785 785 785 1”, DK/GC “7539 139” x 2.

1840 UTC, 4571 kHz, strongest of the three transmissions.

Monday + Wednesday Schedule, 2000 UTC Start:-

4-Nov-19, Monday:- 2000 UTC, 7616 kHz, “682 682 682 1”, DK/GC “729 130” x 2, around 6 to 7 on the S-meter.

2020 UTC, 6816 kHz, stronger.

2040 UTC, 5216 kHz, over S9, over-riding an “XJT” noise maker

6-Nov-19, Wednesday:- 2000 UTC, 7616 kHz, “682” and “729 130” again, S6.

2020 UTC, 6816 kHz, second sending, stronger.

2040 UTC, 5216 kHz, over-riding “XJT”.

11-Nov-19, Monday:- 2000 UTC, 7616 kHz, “682” and “729 130” again.

2020 UTC, 6816 kHz, strong signal.

2040 UTC, 5216 kHz, the “XJT” still there.

18-Nov-19, Monday:- 2000 UTC, 7616 kHz, “682 682 682 000”, strong signal.

2020 UTC, 6816 kHz, also strong.

20-Nov-19, Wednesday:- 2000 UTC, 7616 kHz, weak, and 2020 UTC, 6816 kHz, much stronger, “682 682 682 000”.

2-Dec-19, Monday:- 2000 UTC, 6823 kHz, “881 881 881 1”, DK/GC “862 140” x 2, good signal, close to 6825 kHz on which M51 was sending fast CW with an unusually strong signal.

2020 UTC, 5823 kHz, S7 to S8.

2040 UTC, 5123 kHz, slightly weaker.

11-Dec-19, Wednesday:- 2000 UTC, 6823 kHz, “881 881 881 000”, strong signal.

2020 UTC, 5823 kHz, slightly weaker.

30-Dec-19, Monday:- 2000 UTC, 6823 kHz, and 2020 UTC, 5823 kHz, both strong signals, “881 881 881 000”.

E07a

We start with PoSW's intercepts and followed by others'

Friday Schedule, 1610 UTC Start:-

1-Nov-19:- 1610 UTC, 8138 kHz, “158 158 158 000”, S4 to S5, strong noise-maker “XJT” or similar on the HF side which obligingly went off at around 1611z.
1630 UTC, 7538 kHz, second sending, weak signal.

8-Nov-19:- 1610 UTC, 8138 kHz, “158 158 158 000”, S5. The “XJT” was churning away when this frequency was dialled up at approx 1605 UTC, but went off a couple of minutes before E07a started.
1630 UTC, 7538 kHz, much stronger, peaking S9.

22-Nov-19:- 1610 UTC, 8138 kHz, a “full message” the first for a few weeks, “158 158 158 1 61006”, DK/GC “7711 63” x 2.
1630 UTC, 7538 kHz, second sending.
1650 UTC, 6838 kHz, third sending, all three transmissions around a “7” on the S-meter.

6-Dec-19:- 1610 UTC, 5887 kHz, “830 830 830 000”, strong signal.
1630 UTC, 5387 kHz, also strong.

20-Dec-19:- 1610 UTC, 5887 kHz, and 1630 UTC, 5387 kHz, “830 830 830 000”.

Saturday Schedule, 0900 UTC Start:-

2-Nov-19:- 0900 UTC, 11553 kHz, “515 515 515 000”, S7.
0920 UTC, 12153 kHz, stronger, peaking S9 at times.

9-Nov-19:- 0900 UTC, 11553 kHz, and 0920 UTC, 12153 kHz, both S7 to S8, “515 515 515 000”.

16-Nov-19:- 0900 UTC, 11553 kHz, and 0920 UTC, 12153 kHz, both strong signals, S9, “515 515 515 000”.

23-Nov-19:- 0900 UTC, 11553 kHz, “515 515 515 1 61006”, full message, and as expected based on past form a repeat of that heard on the previous day's 1610z start transmission,
DK/GC “7711 63” x 2.
0920 UTC, 12153 kHz, strong signal.
0940 UTC, 13553 kHz, third sending, S7 with QSB.

30-Nov-19:- 0900 UTC, 11553 kHz, and 0920 UTC, 12153 kHz, “515 515 515 000”, back in the old routine.

7-Dec-19:- 0900 UTC, 11121 kHz, “124 124 124 000”, strength S5.
0920 UTC, 12221 kHz, stronger.

14-Dec-19:- 0900 UTC, 11121 kHz, and 0920 UTC, 12221 kHz, both good signals, “124 124 124 000”.

Wednesday Schedule, 2100 UTC Start:-

6-Nov-19:- 2100 UTC, 5877 kHz, “825 825 825 000”.
2120 UTC, 5277 kHz, even stronger.

13-Nov-19:- 2100 UTC, 5877 kHz, and 2120 UTC, 5277 kHz, both strong, “825 825 825 000”.

20-Nov-19:- 2100 UTC, 5877 kHz, over S9, and 2120 UTC, 5277 kHz, slightly weaker, “825 825 825 000”.

4-Dec-19:- 2100 UTC, 5877 kHz, full message this evening, “825 825 825 1 39086”, DK/GC “8746 58” x 2, good signal.
2120 UTC, 5277 kHz, very strong.
2140 UTC, 4577 kHz, weakest sending of the three.

11-Dec-19:- 2100 UTC, 5877 kHz, “825...39086” and “8746 58” again.
2120 UTC, 5277 kHz, and 2140 UTC 4577 kHz, repeats, all strong signals.

Others' Logs:**Wednesday****November 2019**

2100z	5877kHz	2120z	5277kHz	2140z	4577kHz	
06/11	825 000					Very strong
13/11	825 000				[2100z Fair]	Strong
20/11	825 000					Very strong
27/11	825 000					Very strong

December 2019

04/12	825 1 39086 8746 58 70677 ... 36850 000 000		Very strong
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825 825 825 1 39086 8746 58 8746 58
 70677 60670 27008 00716 94839 23865 80301 12232 64835 46462
 34770 60968 91972 21176 01010 41722 34135 46367 90369 03685
 79540 76868 93444 97498 84572 91252 51025 31349 78011 52041
 08295 58067 67376 54910 51012 37909 23503 82368 03161 24161
 88073 42669 30032 90082 50513 01731 80458 06539 04681 69893
 03459 98636 17866 87831 74959 41714 54799 36850 000 000
Courtesy Ary

11/12	825 1 39086 8746 58 70677 ... 36850 000 000	[2100z Very strong]	Strong
18/12	825 000		Very strong
25/12	825 000		Very strong

Thursday**November 2019**

0530z	5111kHz	0550z	5811kHz	0610z	6911kHz	
07/11	189 000					Very strong
14/11	189 000					Strong
21/11	189 000					Very strong
28/11	189 000					Very strong

December 2019

05/12	189 1 39086 8746 58 70677 ... 36850 000 000		Very strong
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189 189 189 1 39086 8746 58 8746 58
 70677 60670 27008 00716 94839 23865 80301 12232 64835 46462
 34770 60968 91972 21176 01010 41722 34135 46367 90369 03685
 79540 76868 93444 97498 84572 91252 51025 31349 78011 52041
 08295 58067 67376 54910 51012 37909 23503 82368 03161 24161
 88073 42669 30032 90082 50513 01731 80458 06539 04681 69893
 03459 98636 17866 87831 74959 41714 54799 36850 000 000
Courtesy Ary

19/12	189 000		Very strong
26/12	189 000		Very strong

Friday**November 2019**

1610z	8138kHz	1630z	7538kHz	1650z	6838kHz	
01/11	158 000					Weak, QRM
08/11	158 000				[1630z Fair]	Weak
15/11	158 000					Weak
22/11	158 1 61006 7711 63 10685 ... 79881 000 000				[1650z Fair]	Weak, noisy

December 2019

1610z	5887kHz	1630z	5387kHz	1650z	5087kHz	
06/12	830 000					Very strong
13/12	830 000					Weak
20/12	830 000					Weak(Dutch SDR)
27/12	830 000					Fair

Saturday

November 2019

0900z	11553kHz	0920z	12153kHz	0940z	13553kHz	
02/11	515 000					Fair
16/11	515 000					Strong
30/11	515 000				[0920z QRM4]	Fair

December 2019

0900z 11121kHz	0920z 12221kHz	0940z 13421kHz	
07/12	124 000		Fair
14/12	124 000		Weak
21/12	124 000	[0920z QRM3]	Fair
28/12	124 000	[0920z Strong]	Weak

E11 & E11a log Nov/Dec

3838Hz 2300z 02/12 [121/30 25630 12485 65214 78963 20125 48562 30014 58766 53214 78932 51012 54021 47989 30254 10215 84745 66320 12587
41025 96587 42010 36985 21478 50235 69852 01478 96354 02154 87521 22152]
The mystery world of 121 - nice catch Daniel

4505kHz	0710z	02/11 [492/00] Out 0713z S3	Malc	SAT
	1705z	02/11 [399/00] Out 1708z S4	Malc	SAT
	0710z	03/11 [498/00] Out 0713z S3	Malc	SUN
	1705z	06/11 [391/39 67889.....68790] Out 1716z S9	Malc	WED
	0710z	09/11 [497/34 61869.....01046] Out 0720z S5	Malc	SAT
	1705z	09/11 [391/39 67889.....etc] Repeat of Wednesday	Malc	SAT
	1705z	13/11 [390/00] Out 1708z S9	Malc	WED
	0710z	16/11 [498/00] Out 0713z S4	Malc	SAT
	1705z	16/11 [399/00] Out 1708z S8	Malc	SAT
	1705z	27/11 [392/00] Out S9	Malc	WED
	1705z	30/11 [396/00] Out 1708z S9	Malc, RNGB	SAT
	1705z	18/12 [390/00] Out 1708z S9	Malc	WED
	1705z	21/12 [396/00] Out 1708z S4	Malc	SAT
	1705z	28/12 [390/00] Out 1708z S5	Malc	SAT

4909kHz	1930z	02/11 [360/00]	Ary, Malc	SAT
	0805z	03/11 [314/00] Out 0808z S3	Malc	SUN
	1930z	03/11 [366/00] Out 1933z S2	Malc	SUN
	0805z	09/11 [313/39 06079..... 88240] Out 0816z S5	Malc	SAT
	1930z	09/11 [368/35 45758.....60021] Out 1940z S5	Malc	SAT
	0805z	10/11 [313/39 06079.....etc] Repeat of Saturday	Malc	SUN
	1930z	10/11 [368/35 45758.....etc] Repeat of Saturday	Malc	SUN
	1930z	16/11 [363/00] Out S4	Malc	SAT
	0805z	30/11 [310/00] Out 0808z S2	Malc	SAT
	1930z	30/11 [360/00] Out 1933z S3	Malc	SAT
	0805z	07/12 [310/36 58428 74992 80941 62887 43944 80558 02851 33699.....07980 38730]	RNGB	SAT
	1930z	08/12 [360/00] Out 1933z S6	Malc	SUN
	0805z	15/12 [311/00] Out 0808z S3	Malc	SUN
	1930z	21/12 [360/00] Out S7	Malc	SAT
	0805z	29/12 [312/00] Out 0808z S3	Malc	SUN
	1930z	29/12 [364/00] Out 1933z S4	Malc	SUN

5082kHz	1530z	01/11 [524/00]	Ary	FRI
	1530z	04/11 [522/00]	dmhz, Malc	MON
	1625z	06/11 [976/40 07895 57811 72568 59784 91823 74542 77335 47690.....40618 71416]	dmhz, Malc	WED
	1530z	08/11 [528/00] Out 1533z S4	Malc	FRI
	1625z	10/11 [976/40 07895.....71416] Out 1636z S6	Malc	SUN
	1530z	11/11 [524/30 61278.....34312] Out 1539z S4	Malc	MON
	1625z	13/11 [972/00] Out 1628z S8	Malc	WED
	1625z	27/11 [972/00] Out 1628z	Malc	WED
	1530z	29/11 [521/00] Out 1533z S5	Malc	FRI
	1625z	04/12 [975/38 60586.....74344] Out 1635z S2	Malc	WED
	1625z	08/12 [975/38 60586.....etc] Repeat of Wednesday	Malc	SUN
	1530z	09/12 [524/00] Out 1533z S2	Malc	MON
	1530z	13/12 [520/00] Out 1533z S2	Malc	FRI
	1625z	15/12 [977/00] Out 1628z S2	Malc	SUN
	1530z	16/12 [527/36 07765.....78663] Out 1533z S4 + QRM	Malc	MON
	1625z	18/12 [974/00] Out 1628z S7	Malc	WED
	1530z	20/12 [527/36 07765.....etc] Repeat of Monday	Malc	FRI
	1625z	29/12 [978/00] Out 1628z S9 QSB4	Malc	SUN
	1530z	30/12 [527/00] Out 1533z S7	Malc	MON
5149kHz	0820z	01/11 [436/00] Out 0823z S2	Malc	FRI
	0820z	07/11 [431/00] Out 0823z S3	Malc	THU
	0820z	08/11 [436/00] Out 0823z S3	Malc	FRI
	0820z	14/11 [431/00]	RNGB, Malc	THU
	0820z	15/11 [431/00]	RNGB	FRI
	0820z	28/11 [436/00] Out 0823z S4	Malc	THU
	0820z	29/11 [432/00] Out 0823z S2	Malc	FRI
	0820z	05/12 [432/36 47727 27499 65726 98462 68132 55644 57083 92688.....86487 66718] Out 0830z	RNGB, Malc	THU
	0820z	12/12 [439/00] Out 0823z S3	Malc, RNGB	THU
	0820z	19/12 [431/00] Out 0823z S4	Malc	THU
	0820z	20/12 [431/00] Out 0823z S2	Malc	FRI
	0820z	26/12 [430/00] Out 0823z S2	Malc	THU
	0820z	27/12 [435/00] Out S3	Malc, RNGB	FRI
5344kHz	1605z	05/11 [230/00] Out 1608z	Malc	TUE
	1605z	10/11 [232/00] Out 1608z S5	Malc	SUN
	1605z	12/11 [231/34 05752.....82752] Out 1614z S6	Malc	TUE
	1605z	26/11 [230/00] Out 1608z S4	Malc	TUE
	1605z	03/12 [238/00] Out 1608z S2	Malc, RNGB	TUE
	1605z	08/12 [233/00] Out 1608z S4	Malc	SUN
	1605z	10/12 [233/00] Out 1608z S4	Malc	TUE
	1605z	15/12 [230/00] Out 1608z S4	Malc	SUN
	1605z	17/12 [235/00] Out 1608z S5	Malc	TUE
	1605z	29/12 [238/32 62486.....44357] Out 1615z S7	Malc	SUN
	1605z	31/12 [233/00] Out 1608z S6	Malc	TUE
5409kHz	1530z	07/11 [268/00] Out 1533z S4	Malc	THU
	1530z	14/11 [268/37 64734.....59843] Out 1540z S7	Malc	THU
	1530z	28/11 [267/00] Out 1533z S3	Malc	THU
	1530z	05/12 [269/33 02487.....02903] Out 1540z S2	Malc	THU
	1530z	12/12 [267/00] Out 1533z S3	Malc	THU
	1530z	19/12 [268/00] Out 1533z S6 (Dutch SDR)	Malc	THU
	1530z	26/12 [267/00] Out 1533z S9	Malc	THU
5779kHz	1730z	07/11 [412/00] Out 1733z S3	Malc	THU
	1730z	14/11 [415/00] Out 1733z S4	Malc	THU
	1730z	28/11 [418/34 76748.....31051] Out 1740z S3	Malc	THU
	1730z	05/12 [410/00] Out 1733z S4 (Dutch SDR)	Malc	THU
	1730z	12/12 [414/00] Out 1733z S2	Malc	THU
	1730z	19/12 [411/00] Out 1733z S6 (Dutch SDR)	Malc	THU
	1730z	26/12 [416/33 14679.....67992] Out 1740z S4	Malc	THU
6433kHz	1205z	05/11 [469/00] Out 1208z S3	Malc	TUE
	1205z	06/11 [460/00] Out 1208z S2	Malc	WED
	1205z	12/11 [469/00] Out 1208z S2	Malc	TUE
	1205z	13/11 [462/00] Out 1208z S2	Malc	WED
	1205z	26/11 [464/32 53218.....30756] Out 1214z S2	Malc	TUE
	1205z	27/11 [464/32 53218.....etc] Repeat of Tuesday	Malc	WED
	1205z	03/12 [466/00] Out 1208z S2	Malc	TUE
	1205z	04/12 [464/00] Out 1208z S2	Malc	WED
	1205z	10/12 [462/00] Out 1208z S2	Malc	TUE

1205z	17/12 [465/00] Out 1208z S2		Malc	TUE	
1205z	18/12 [464/00] Out 1208z S2		Malc	WED	
1205z	24/12 [461/32 03398 to 65081] Out 1215z S2		Malc	TUE	
1205z	31/12 [460/00] Out 1208z S3		Malc	TUE	
6804kHz	0700z	05/11 [576/00] Out 0703z S3	Malc	TUE	
	0700z	12/11 [571/00] Out 0703z S4	Malc	TUE	
	0700z	29/11 [574/00] Out 0703z S3	Malc	FRI	
	0700z	03/12 [573/00] Out 0703z S2	Malc, RNGB	TUE	
	0700z	10/12 [571/31 03454.....43916] Out 0709z S4	Malc	TUE	
	0700z	17/12 [575/00]	RNGB	TUE	
	0700z	24/12 [579/00] Out 0703z S4	Malc	TUE	
6849kHz	1650z	03/11 [920/37 12075..... 46700] Out 1700z S2	?????? frequency	Malc	SUN
	1900z	04/11 [644/34 36737..... 24825] Out 1910z S7		Malc	MON
	1650z	08/11 [927/00] Out 1653z S2		Malc	FRI
	1650z	10/11 [927/00] Out 1653z S4		Malc	SUN
	1900z	11/11 [640/00] Out 1903z S9		Malc	MON
	1900z	14/11 [643/00] Out 1903z S2		Malc	THU
	1650z	29/11 [925/00] Out 1653z S2		Malc	FRI
	1900z	05/12 [644/36 85668.....02503] Out 1910z S2		Malc	THU
	1650z	08/12 [925/00] Out 1653z S2		Malc	SUN
	1900z	09/12 [647/00] Out 1903z S8		Malc	MON
	1900z	12/12 [641/00] Out 1903z S2		Malc	THU
	1650z	13/12 [924/00] Out 1653z S2		Malc	FRI
	1650z	15/12 [921/00] Out 1653z S4		Malc	SUN
	1900z	16/12 [646/00] Out 1933z S5		Malc	MON
	1900z	19/12 [643/00] Out 1903z S5		Malc	THU
	1650z	20/12 [920/38 67721 to.....etc] Out 1701z S4 (Dutch SDR)		Malc	FRI
	1900z	23/12 [646/00] Out 1903z S2 (Dutch SDR)		Malc	MON
	1900z	26/12 [646/00] Out 1903z S2 (Dutch SDR)		Malc	THU
	1650z	27/12 [921/00] Strong		RNGB, Malc	FRI
	1650z	29/12 [924/00] Out 1653z S2 (Dutch SDR)		Malc	SUN
	1900z	30/12 [649/00]Out 1903z S2		Malc	MON
7469kHz	0930z	07/11 [279/00] Out 0933z S4		Malc	THU
	0930z	14/11 [271/00]		RNGB, Malc	THU
	0930z	27/11 [270/00] Out 0933z S3		Malc	WED
	0930z	28/11 [275/00] Out 0933z S3		Malc, RNGB	THU
	0930z	04/12 [271/37 44704.....11706] Out 0940z S2		Malc	WED
	0930z	05/12 [271/37 44704....etc] Repeat of Wednesday		Malc	THU
	0930z	12/12 [279/00] Out 0933z S3		Malc	THU
	0930z	18/12 [277/00] Out 0933z S3		Malc	WED
	0930z	19/12 [276/00] Out 0933z S3		Malc	THU
	0930z	26/12 [277/00] Out S2		Malc	THU
7984kHz	1045z	04/11 [696/24 45917.....93530] Out 1053z S4		Malc	MON
	1045z	06/11 [696/24 45917.....etc] Repeat of Monday		Malc	WED
	1045z	11/11 [690/00] Out 1048z S3		Malc	MON
	1045z	13/11 [694/00] Out 1048z S5		Malc	WED
	1045z	27/11 [693/00]		RNGB, Malc	WED
	1045z	04/12 [692/00] Out 1048z S3		Malc	WED
	1045z	09/12 [693/00] Out 1048z S3		Malc	MON
	1045z	16/12 [697/28 98166.....86834] Out 1053z S2		Malc	MON
	1045z	18/12 [697/28 98166.....etc] Repeat of Monday		Malc	WED
	1045z	30/12 [692/00] Out 1048z S2		Malc	MON
8597kHz	1000z	04/11 [305/00] Out 0903z S3		Malc	MON
	1000z	05/11 [305/00] Out 1003z S3		Malc	TUE
	0900z	06/11 [538/00] Out 0903z S5		Malc	WED
	1000z	08/11 [302/00] Out 1003z S5		Malc	FRI
	0900z	11/11 [536/00] Out 0903z S3		Malc	MON
	1000z	12/11 [306 /35 12055 12988 39094 91260 91722 16499 56628 24009.....92870 60173]		RNGB, Malc	TUE
	0900z	13/11 [534/00] Out 0903z S6		Malc	WED
	0900z	25/11 [538/34 08136 80693 90163 31864 03067 61559 49874 69570.....48311 44543]		RNGB	MON
	0900z	27/11 [538/34 08136 80693 90163 31864 03067 61559 49874 69570.....48311 44543]		RNGB, Malc	WED
	1000z	29/11 [305/00] Out 1003z S4		Malc	FRI
	1000z	03/12 [305/00]		RNGB, Ed Smith	TUE
	0900z	04/12 [535/33 52890.....98692] Out 0909z S2		Malc	WED
	0900z	09/12 [536/00] Out 0903z S2		Malc	MON
	1000z	10/12 [302/32 42054.....79780] Out 1009z S4		Malc	TUE
	1000z	13/12 [302/32 42054.....etc] Repeat of Tuesday		Malc	FRI

0900z	16/12 [534/00] Out 0903z S2		Malc	MON
1000z	17/12 [307/00] Out 1003z S3		Malc	TUE
0900z	18/12 [533/00] Out 0903z S3		Malc, RNGB	WED
1000z	20/12 [304/00] Out 1003z S5		Malc	FRI
1000z	24/12 [306/00] Out 1003z S2		Malc	TUE
1000z	27/12 [305/00] S5		Malc	FRI
0900z	30/12 [530/00] Out 0903z S3		Malc	MON
1000z	31/12 [304/00] Out 1003z S2		Malc	TUE
9130kHz	01/11 [639/00] Out 0718z S3		Malc	FRI
	05/11 [634/00] Out 0718z S4		Malc	TUE
	08/11 [634/00] Out 0718z S3		Malc	FRI
	12/11 [630/00] Out 0718z S4		Malc	TUE
	29/11 [634/32 31764.....66882] Out 0725z S3		Malc	FRI
	03/12 [637/00] Out 0718z S4		Malc, RNGB	TUE
	10/12 [636/00] Out 0718z S3		Malc	TUE
	17/12 [631/37 32870 88363 35049 13484 49627 13750 70629 92801.....36784 19435]		RNGB, Malc	TUE
	20/12 [631/37 32870.....etc] Repeat of Tuesday		Malc	FRI
	24/12 [634/00] Out 0718z S3		Malc	TUE
	31/12 [630/00] Out 0718z S2		Malc	TUE
10213kHz	04/11 [260/00] Out 0748z S4		Malc	MON
	11/11 [268/37 64734.....59843] Out 0756z S6 + QRM		Malc	MON
	25/11 [267/00]		RNGB	MON
	02/12 [269/33 02487 58577 69744 49627 51320 87926 38022 69764.....10750 02903]		RNGB	MON
	09/12 [266/00] Out 0748z S6		Malc	MON
	16/12 [267/00] Out 0748z S3		Malc	MON
	30/12 [264/00] Out 09748z S2		Malc	MON
10487kHz	01/11 [614/39 26934 48462 26358 74406 90459 55385.....32165 23233] Finland SDR		Ary	FRI
	08/11 [617/00] Out 1913z S2 (Dutch SDR)		Malc	FRI
	08/12 [611/00] Out 1913z S2 (Dutch SDR)		Malc	SUN
	27/12 [611/40 too weak to copy msg due fading]1921z S1 (Dutch SDR)		Malc	FRI
	29/12 [611/00] Out 1913z S2 (Russian SDR)		Malc	SUN
10800kHz	14/11 [332/00] Out 1648z S2 (Finnish SDR)		Malc	THU
	03/12 [338/00] Out 1648z S4 (Dutch SDR)		Malc	TUE
	05/12 [330/00] Out 1648z S2 (Dutch SDR)		Malc	THU
	12/12 [33?/32 43125.....81715] Out 1654z S2 QSB1 (Russian SDR)		Malc	THU
	17/12 [330/00] Good (Polish SDR)		RNGB	TUE
	24/12 [334/00] Out 1648z S2 (Dutch SDR)		Malc	TUE
	26/12 [331/00] Out S4 (Russian SDR)		Malc	THU
	31/12 [338/00] 1648z S3 (Russian SDR)		Malc	TUE
11450kHz	18/11 [948/00]		RNGB	MON
	16/12 [941/00] Good (Qatar SDR)		RNGB	MON
12089kHz	05/11 [152/35 26045 19614 41789 77426 81158 61583 81043.....62316 94788]		Ary	TUE
	07/11 [152/35 26045.....etc] Repeat of Tuesday		Malc	THU
	12/11 [152/00]		RNGB	TUE
	14/11 [157/00] Out 0848z S3		Malc	THU
	28/11 [159/00] Out 0848z S2		Malc	THU
	03/12 [156/00]		RNGB	TUE
	05/12 [156/00] Out 0848z S7		Malc	THU
	10/12 [152/38 43991.....19627] Out 0856z S3		Malc	TUE
	12/12 [152/38 43991.....etc] Repeat of Tuesday		Malc	THU
	19/12 [152/00] Out 0848z S6		Malc	THU
	24/12 [150/00] Out S3		Malc	TUE
	26/12 [157/00] Out 0848z S2		Malc	THU
	31/12 [154/00] Out 0848z S2		Malc	TUE
12924kHz	09/12 [244/00] Out 1748z S1 (Dutch SDR)		Malc	MON
	23/12 [246/00] Out 1748z S2 (Hungarian SDR)		Malc	MON
13363kHz	05/11 [919/00] Out 1348z S2 (Dutch SDR)		Malc	TUE
	09/11 [912/00] Out S2 (Dutch SDR)		Malc	SAT
	1345z 16/11 [918/00] Out 1348z S2 (Dutch SDR)		Malc	SAT
	1345z 30/11 [910/39 88706.....16586] Out 1356z S3		Malc	SAT
	1345z 17/12 [914/00] Out 1348z S2		Malc	TUE
	1345z 21/12 [917/00] Out 1348z S1 (Dutch SDR)		Malc	SAT
	1345z 24/12 [912/00] Out 1348z S2 (Dutch SDR)		Malc	TUE

1345z	31/12 [912/00] Out 1348z S2	(Dutch SDR)	Malc	TUE
14611kHz 0820z	05/11 [130/00] Out 0823z S4		Malc	TUE
0820z	06/11 [134/00] Out 0823z S5		Malc	WED
0820z	12/11 [130/40 86069.....34929] Out 0831z S2		Malc	TUE
0820z	13/11 [130/40 86069....etc] Repeat of Tuesday		Malc	WED
0820z	27/11 [138/00] Good (Qatar SDR)		RNGB, Malc	WED
0820z	03/12 [136/00] Out 0823z S4		Malc, RNGB	TUE
0820z	04/12 [135/00] Good (Qatar SDR)		RNGB, Malc	WED
0820z	10/12 [133/00] Out 0823z S2 (Dutch SDR)		Malc	TUE
0820z	17/12 [138/37 00767 73482 38031 04681 70614 75942 59440.....20932 23831] (Qatar SDR)		RNGB, Malc	TUE
0820z	18/12 [138/37 00767....etc] Repeat of Tuesday		Malc	WED
0820z	24/12 [133/00] Out S2 (Dutch SDR)		Malc	TUE
0820z	31/12 [132/00] Out 0823z S2 (Dutch SDR)		Malc	TUE
17378kHz 0745z	01/11 [343/00] Out 0748z S2 (Dutch SDR)		Malc	FRI
0745z	06/11 [349/00] Out 0748z S2 (Dutch SDR)		Malc	WED
0745z	08/11 [342/00] Out 0748z S2 (Dutch SDR)		Malc	FRI
0745z	13/11 [347/33 70603.....42956] Out 0754z S2 (Dutch SDR)		Malc	WED
0745z	15/11 [347/33 70603 18824 93905 66557 32917 42574 154651....etc]		RNGB	FRI
0745z	20/11 [347/00] Very weak (Qatar SDR)		RNGB	WED
0745z	29/11 [343/00] Good (Siberian SDR)		RNGB	FRI
0745z	20/12 [346/00] Out 0748z S2 (Dutch SDR)		Malc	FRI

E17z

Before the usual logs we offer one training log:

5765kHz 1002z	06/12 [274 00000] 1003z	USB	[SDR Enschede]	E.SMITH	FRI
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Thursday

November 2019

0800z 11170kHz 0800z 9820kHz

07/11	217 403 5 75855 07443 51240 62434 35340 403 5 00000	[0800z (Dutch SDR)]	Weak Distorted 0810z
14/11	217 403 5 75855 07443 51240 62434 35340 403 5 00000		Weak, USB distorted (Dutch SDR)
28/11	217 834 5 24541 33941 56823 43884 85518 834 5 00000	[0800z (Dutch SDR)]	USB Weak

December 2019

05/12	217 906 5 11169 03439 43548 19152 23063 906 5 00000	Weak
12/12	217 906 5 11169 03439 43548 19152 23063 906 5 00000	Weak
19/12	217 853 6 46062 68672 97478 39685 30485 96632 853 6 00000	Weak (DutchSDR)
26/12	217 853 6 46062 68672 97478 39685 30485 96632 853 6 00000	Weak

E25

4Z5 writes "After a good 7 years, I have finally been able to identify an unidentified song that E25 used once. I do not recall making the recording public, but if you were one of the few individuals that received a CD from me, find the file, "E25-6140kHz0728z280412-OddMusic.wav". You'll hear an E25 xmt with its characteristic "ringing" sound at start-up followed by music that I described as "epic". This music was identified by using "Shazam" of all things - the song is from the 1996 movie "Nasser 56"... It can be heard here <https://www.youtube.com/watch?v=A8wdhC7giQQ> - imagine that."

Must say I don't recall this mx. but to myself and three others in E2k Nasser means more than a bit of Mx.

Well spotted, identified and thanks for posting

No Reports

G06

PoSW's intercepts lead us to others' observations:

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

4-Nov-19:- 1700 UTC, 3619 kHz, "145 145 145 00000", weak signal inside the 80 metre band.
1800 UTC, 4528 kHz, second sending, stronger, peaking S9.
Same frequencies as in January and February.

11-Nov-19:- 1800 UTC, 4528 kHz, audio tone when tuned in a second or two before the top of the hour, no voice heard until approx 1801:15s UTC, "145 145 145 00000", stopped around 1803:45s UTC, computer shut-down sounds at 1804:20s. Carrier did not hang around for long as is often the case, went off shortly before 1806. Missed the 1700z sending having lost track of the time, as you do.

2-Dec-19:- 1700 UTC, 3623 kHz, very weak signal, could just hear the "nulls" of a "no message" way down in the noise. Stopped after 1703z so probably started well before the hour.
1759 UTC, 4528 kHz, much better copy, "145 145 145 00000".

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

14-Nov-19:- 4519 kHz, call "271", DK/GC "228 228 39 39", good signal, ended 1840 UTC,
computer shut-down sounds at 1841:40s. Carrier went off shortly before 1845.

28-Nov-19:- 4519 kHz, "271", DK/GC "273 273 62 62", signal up and down, ended just before 1844 UTC with the now traditional computer shut-down at 1844:45s approx.

Friday 1930 UTC Schedule Following Second + Fourth Thursdays:-

15-Nov-19:- 4792 kHz, call "436", DK/GC "228 228 39 39", same as yesterday's transmission.

13-Dec-19:- 4792 kHz, DK/GC "992 992 45 45", good signal.

Others' Logs:

Monday

November 2019

0800z 5320kHz

04/11	329 00000	Weak
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December 2019

02/12	329 00000	Weak
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16/12	329 00000	Weak
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November 2019

1700z 3619kHz 1800z 4528kHz

04/11	145 00000	Weak
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11/11	145 00000	Weak
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09/12	145 00000	Weak
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December 2019

1700z 3623kHz 1800z 4528kHz

02/12	145 00000	Weak
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December 2019

0800z 5320kHz

1700z 3759kHz 1800z 4485kHz

1700z 3750kHz 1800z 4490kHz

Nil Reports

Wednesday**November 2019****1200z 4897kHz 1300z 4034kHz**

06/11	145 00000	[1300z (Ukraine SDR), Windows shut down sound]	Weak
13/11	145 00000	[1259z (Dutch SDR)]	Weak

December 2019**1159z 4897kHz 1259z 4034kHz**

04/12	145 00000	[(Russian SDR)]	Weak
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November 2019**Thursday****1300z 4460kHz**

07/11	329 00000	Weak
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1830z 4519kHz

14/11	271 228 39 25326 ... 23392 228 39 00000	Weak
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271 228 39
 25326 68373 90453 85458 12496
 55482 77233 95864 48736 22795
 48538 34693 26582 26468 34579
 34687 33529 23258 04468 46726
 60964 69477 23295 27399 80453
 17847 31125 11631 12253 13648
 53178 61135 61345 79320 59385
 58736 79383 23682 23392
 228 39 00000 *Courtesy M8*

28/11	271 273 62 64537 ... 76491 273 62 00000	Weak, QRM Windows Shut Down at 1844z
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December 2019**Thursday****1300z 4460kHz**

No reports

1830z 4519kHz

26/12	271 546 45 12435 ... 32442 546 45 00000	Weak
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Friday**November 2019****1929z 4792kHz**

Nil Reports

December 2019**1930z 4792kHz**

13/12	436 992 45 75432 ... 32452 992 45 00000	Weak
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S06

S06 log November 2019

Thursday	0830z	19875kHz	0930z	16067kHz
07/11	‘842’ No reports			
14/11	‘842’ 730 49 62316 68616 32206 15511 08363 26940 79821 11225 63283 24207 84066 44942 09079 12973 95485 83230 22810 74607 76268 88780 51589 88012 12602 25888 58769 54298 06795 64869 64755 94607 35139 15087 30887 63266 82422 41276 59819 43456 89042 42861 10854 17596 71654 00945 53641 29612 03292 22663 08701 730 49 00000			
28/11	‘842’ 379 40 71405 64633 53484 19530 24845 82524 29911 03996 96245 71917 73865 84005 73928 30828 32529 55976 17592 20817 04010 36999 20372 21011 26212 02887 67865 66993 90006 47822 05070 29234 50167 32756 47168 10770 32491 14775 95097 68799 60550 74608 379 40 00000			

Fridays (1st & 3rd)	2000z	7309khz	2100z	5091kHz
01/11	‘627’ 00000			
15/11	‘627’ 839 41 63154 26021 12260 41158 47950 38653 31417 36655 25356 90750 74510 54481 75964 14552 56125 47363 19189 46952 67740 96282 29965 83331 90330 76495 96475 89373 83775 76266 55867 02566 36706 24283 34583 74587 79368 95447 96726 04250 94012 17412 34585 839 41 00000] 2112z			

S06s November log:

Monday

4th/11th	0630/0640z	13470/16515	‘462’ 870 5 38433 25858 25573 64485 55554 ‘462’ 835 7 81235 32469 33311 37642 86212 43808 34237
18th/25th			‘764’ 290 5 74945 79303 44518 28216 04826
4th/11th	0830/0840z	8057/8530	‘764’ 891 5 99183 39237 75604 14597 72729
18th/25th			‘232’ 476 5 59477 27555 85055 45576 42114
4th/11th	0900/0910z	14675/12830	‘232’ 980 5 13621 26252 82057 44817 89106
18th/25th			‘149’ 286 5 37526 49559 52224 65178 54648
4th/11th	1300/1310z	8420/10635	‘149’ 263 5 21015 82225 23414 73599 34322
18th/25th			

Tuesday

5th/12th	0600/0610z	16145/14240	‘438’ 976 5 64752 69774 70102 59999 04454 ‘438’ 506 7 58837 42663 12416 36938 48900 18204 44817
19th/26th			‘452’ 978 6 93687 85148 54152 78855 01751 17077
5th/12th	0700/0710z	5250/6320	‘452’ 963 7 57217 91858 79674 37975 15826 46258 77093
19th/26th			‘427’ 816 5 33663 35358 41385 36362 43010
1st/8th	0730/0740z	7410/11532	‘427’ 968 5 13621 26252 82056 44817 89106
19th/26th			‘127’ 863 5 81235 32469 33311 37642 86212
5th/12th	0800/0810z	11945/13195	‘127’ 903 5 61881 70151 56499 48086 11887
19th/26th			‘427’ 518 6 07931 98755 84636 45752 64655 58202
5th/12th	1000/1010z	6440/5660	‘427’ 913 5 04537 87875 47152 23486 80331
19th/26th			‘265’ 908 7 59067 58855 48235 28222 37832 37313 45597
5th/12th	1100/1110z	5035/5975	‘265’ 804 7 83630 93731 58291 54212 67196 31960 56970
19th/26th			‘914’ 207 5 28548 59014 32424 75078 97520
5th/12th	1500/1510z	6845/9170	‘914’ 872 5 27448 67187 78872 79998 60403
19th/26th			

Wednesday

6th/13th	0830/0840z	11535/11830	‘172’ 403 5 22354 75544 21852 76565 43613 ‘172’ 406 5 76985 13766 95091 35527 04464
20th/27th			‘464’ 927 5 71358 71845 42656 01161 42780
6th/13th	0830/0840z	7062/10532	‘464’ 231 5 70543 62182 82464 49703 67712
20th/27th			‘276’ 419 5 62434 82152 91628 60152 38776
6th/13th	1000/1010z	12365/14280	‘276’ 493 5 44269 24798 59856 88469 89751
20th/27th			

Thursday

7th/14th (E17z)	0800/0810z	11170/9820	‘217’ 403 5 75855 07443 51240 62434 35340 ‘217’ 834 5 24541 33941 56823 43884 85518
21st/28th			‘698’ 201 5 51098 09497 28075 85052 82152
7th/14th	0930/0940z	8812/9540	‘698’ 247 5 11822 11998 40402 90284 37473
21st/28th			‘175’ 203 6 43613 47545 24535 49598 08142 42214
7th/14th	1200/1210z	12155/10920	‘175’ 823 6 96529 62487 57272 77315 17565 35820
21st/28th			

Friday

1st/8th	0630/0640z	11780/12570	‘156’ 428 7 38433 25858 25573 64485 59477 45575 42114 ‘156’ 482 7 31234 11325 40415 87022 99832 14077 53359
15th/22nd			‘239’ 867 5 94428 17454 24011 41584 68592
1st/8th	0900/0910z	5765/6315	‘239’ 471 5 43798 46937 33032 38334 44613
15th/22nd			

Saturday
2nd 0800/0810z 8680/8260 '132' 904 5 98058 55693 97628 61154 97511

With thanks to Ary, Daniel E, RNGB, M8, HfD

S06 log December 2019

Fridays (1st & 3rd) 1900z 7309kHz 2000z 5091kHz
06/12 '627' 00000

S06c December
13409kHz 1045z 10/12 I.P. '11064' 1049z USB E.SMITH WED SDR Enschede.

S06s December log:

Monday

2nd/9th	0630/0640z	13470/16515	'462' 805 7 91670 29257 69816 97314 15802 70076 29243
16th/23rd			'462' 859 7 33796 63919 92699 14600 74248 48754 65125
2nd/9th	0830/0840z	8057/8530	'764' 239 5 69856 82541 98423 79033 15452
16th/23rd			'764' 293 5 04475 31467 53368 83168 97998
2nd/9th	0900/0910z	14675/12830	'232' 468 5 19804 69845 22444 08373 98662
16th/23rd			'232' 486 5 10002 08894 65387 50801 40123
2nd/9th	1300/1310z	8420/10635	'149' 270 5 76985 13766 95091 35527 04464
16th/23rd			'149' 236 5 28765 39827 09086 01465 39895

Tuesday

3rd/10th	0600/0610z	16145/14240	'438' 579 6 02232 66286 90057 66740 28636 25349
17th/24th			'438' 517 6 25065 11748 70879 26419 07872 43478
3rd/10th	0700/0710z	5250/6320	'452' 937 6 40419 14663 65564 67269 74059 49847
17th/24th			'452' 936 7 02063 24122 22246 65232 02233 66287 90057
1st/8th	0730/0740z	7410/11532	'427' 530 6 69856 82541 98423 79033 15452 10002
17th/24th			'427' 891 5 04475 31467 53368 83168 97883
3rd/10th	0800/0810z	11945/13195	'127' 534 6 47154 25660 69885 96882 30034 19804
17th/24th			'127' 864 5 10002 08973 41716 50801 40123
3rd/10th	1000/1010z	6440/5660	'427' 918 5 08631 58082 36270 08989 92728
17th/24th			'427' 916 5 08153 15870 20136 51533 38142
3rd/10th	1100/1110z	5035/5975	'265' 409 7 20205 64336 95534 08445 87636 04475 31467
17th/24th			'265' 809 7 73687 04545 39895 19670 29257 69816 97314
3rd/10th	1500/1510z	6845/9170	'914' 203 6 07022 32734 34771 48591 47281 41127
17th/24th			'914' 807 5 81155 51870 20136 51533 38142

Wednesday

4th/11th	0830/0840z	11535/11830	'172' 460 5 07022 32734 34771 48591 87636
18th/25th			'172' 908 5 94427 99804 64215 56369 81918
4th/11th	0830/0840z	7062/10532	'464' 531 7 10002 08973 41716 50801 40123 69856 82641
18th/25th			'464' 210 5 92103 50754 67971 35571 71532
4th/11th	1000/1010z	12365/14280	'276' 439 5 69816 97314 15802 70076 29425
18th/25th			'276' 980 5 41678 68778 34059 94169 91744

Thursday

5th/12th (E17z)	0800/0810z	11170/9820	'217' 906 5 11169 03439 43548 19152 23063 '217' 853 6 46062 68672 97478 39685 30485 96632
19th/26th			'698' 210 5 04475 31467 53368 38168 97998
5th/12th	0930/0940z	8812/9540	'698' 401 5 21767 53672 11834 81022 36903
19th/26th			'175' 208 6 87636 04475 31467 53368 83168 97998
5th/12th	1200/1210z	12155/10920	'175' 804 6 88620 58069 61732 74537 57440 10597
19th/26th			

Friday

6th/13th	0630/0640z	11780/12570	'156' No reports '156' 239 7 52401 63919 92699 14600 74248 48754 65125
20th/27th			'239' 480 5 73687 04565 39895 91670 29257
6th/13th	0900/0910z	5765/6315	'239' 417 5 85766 34257 09067 20866 03109
20th/27th			

Saturday

7th	0800/0810z	8680/8260	'132' 846 5 73687 04565 39895 91670 29257
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With thanks to Daniel E, RNGB, Malc, Ary, HfD

PoSW's logs and observations:

S06, OM Voice

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

1-Nov-19:- 2000 UTC, 7309 kHz, "627 627 627 00000", not too strong, BC station on a close frequency causing a bit of interference. 2100 UTC, 5091 kHz, second sending, strong signal, pushing the S-meter over the "9".

In the last two months of the year using the same frequencies as in the first two.

15-Nov-19:- 2100 UTC, 5091 kHz, nothing heard of the 2000z sending on 7309, the broadcaster on close frequency very strong, second sending a reasonable S7, call "627", somewhat unusually a "full message" transmission, DK/GC "839 839 41 41", not too many like this, the last one – making the usual proviso that not every transmission has been monitored – appears to have been on 15-February of this year.

16-Nov-19, Saturday:- 2000 UTC, 7309 kHz, first sending of the expected "next day repeat", very weak, could just about hear the "627" call-up. The broadcast station started up on the hour, very strong, interference especially bad when playing music.

2100 UTC, 5091 kHz, peaking S9 with QSB.

6-Dec-19:- Nothing heard at 2000 UTC on 7309 kHz because in December this schedule has shifted by one hour – as it often does – back by one hour this time:-

2000 UTC, 5091 kHz, quickly tuning to the frequency for the second sending, "627 627 627 00000", weak signal.

20-Dec-19:- 1900 UTC, 7309 kHz, "627 627 627 00000", weak signal. 2000 UTC, 5091 kHz, much stronger, S9 at times.

S06a YL Voice:-

Monday 0830 + 0840 UTC Schedule, Call "764":-

4-Nov-19:- 0830 UTC, 8057 kHz, DK/GC "290 290 5 5", "74945 79303 44518 28216 04826". 0840 UTC, 8530 kHz, both transmissions S6 to S7.

25-Nov-19:- 0830 UTC, 8057 kHz, DK/GC "891 891 5 5", "99183 39237 75604 14597 72729", around a "5" on the S-meter at best. 0840 UTC, 8530 kHz, also around S5.

9-Dec-19:- 0830 UTC, 8057 kHz, DK/GC "239 239 5 5", "69856 82541 98423 79033 15452". 0840 UTC, 8530 kHz, both transmissions S7.

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

5-Nov-19:- 0730 UTC, 7410 kHz, DK/GC "816 816 5 5", strong signal, "33663 35358 41385 36362 43010", strong signal. 0740 UTC, 11532 kHz, also strong.

19-Nov-19:- 0730 UTC, 7410 kHz, DK/GC "968 968 5 5", "13621 26252 82056 44817 89106". 0740 UTC, 11532 kHz, good signal on both transmissions.

26-Nov-19:- 0730 UTC, 7410 kHz, very weak, could just about make out the "427" call. 0740 UTC, 11532 kHz, stronger, "968 968 5 5" and 5Fs as on the 19th.

3-Dec-19:- 0730 UTC, 7410 kHz, DK/GC "69856 82541 98423 79033 15452 10002", good signal, a distinct pause after 5F group No 5. 0740 UTC, 11532 kHz, very strong signal.

17-Dec-19:- 0730 UTC, 7410 kHz, DK/GC "891 891 5 5", voice stopped on the third 5F group, carrier stayed on. Came back with the "427" call for about a minute, then DK/GC "891 891 5 5" and 5Fs "04475 31467 53368 83168 97883", ended around 0738z. 0743 UTC, 11532 kHz, no problems here, strong signal.

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

5-Nov-19:- 0800 UTC, 11946 kHz – predicted frequency is 11945 but this was overlaid with a loud buzz and when tuned in for best reception in USB mode the displayed frequency was 1 kHz high. DK/GC "863 863 5 5", "81235 32469 33311 37642 86212". 0810 UTC, 13196 kHz, second sending, also with loud buzz and apparently 1 kHz high, weak signal.

19-Nov-19:- 0800 UTC, 11946 kHz, still showing high in frequency and with loud buzz, DK/GC "903 903 5 5", "61881 70151 56499 48086 11887". 0810 UTC, 13196 kHz with buzz.

26-Nov-19:- 0800 UTC, 11945 kHz, no buzz and frequency showed as predicted, "903 903 5 5" as on the 19th, weak signal. 0810 UTC, 13195 kHz, also weak.

3-Dec-19:- 0800 UTC, 11945 kHz, very weak, could just make out the “427” call.
0810 UTC, 13195 kHz, much stronger, DK/GC “534 534 6 6”, “47154 25660 69885 96882 30034 19804”.

17-Dec-19:- 0800 UTC, 11945 kHz, DK/GC “864 864 5 5”, peaking around S8, “10002 08973 41716 50801 40123”.
0810 UTC, 13195 kHz, weaker.

Wednesday 0830 UTC + 0840 UTC Schedule, Call “172”:-

6-Nov-19:- 0830 UTC, 11535 kHz, DK/GC “403 403 5 5”, strong signal, “22354 75544 21852 76565 43613”.
0840 UTC, 11830 kHz, second sending, also strong.

20-Nov-19:- 0830 UTC, 11535 kHz, DK/GC “406 406 5 5”, S8 with QSB, “76985 13766 95091 35527 04464”
0840 UTC, 11830 kHz, peaking over S9.

4-Dec-19:- 0830 UTC, 11535 kHz, DK/GC “460 460 5 5”, S5 at best, “07022 32734 34771 48591 87636”.
0840 UTC, 11830 kHz, also around S5.

18-Dec-19:- 0830 UTC, 11535 kHz, DK/GC “908 908 5 5”, very strong signal, “94427 99804 64215 56369 81918”.
0840 UTC, 11830 kHz, also very strong.

Wednesday 1000 + 1010 UTC Schedule, Call “276”:-

6-Nov-19:- 1000 UTC, 12365 kHz, DK/GC “419 419 5 5”, “62434 82152 91628 60152 38776”.
1010 UTC, 14280 kHz, both transmissions S7 to S8.

20-Nov-19:- 1000 UTC, 12365 kHz, over S9, “DK/GC “493 493 5 5”, “44269 24798 59856
88469 89751”.

1010 UTC, 14280 kHz, second sending, a couple of S-points weaker. Noted during the four minute call-up routine idly toying with the receiver's mode switch that the audio was readable in both LSB and USB modes, the lower side-band not fully suppressed as is usually the case with S06s transmissions.

4-Dec-19:- 1000 UTC, 12365 kHz, strong signal, DK/GC “439 439 5 5”, “69816 97314 15802 70076 29425”.
1010 UTC, 14280 kHz, weaker.

18-Dec-19:- 1000 UTC, 12365 kHz, DK/GC “980 980 5 5”, “41678 68778 34059 94169 91744”, S6.
1010 UTC, 14280 kHz, weak.

Friday Schedule, 0630 + 0640 UTC Schedule, Call “156”:-

8-Nov-19:- 0630 UTC, 11780 kHz, DK/GC “428 428 7 7”, “38433 25858 25573 64485 59477 45575 42114”, very strong S9+ signal.
0640 UTC, 12570 kHz, also very strong. This is the schedule which until a few months ago was heard at 0930 + 0940 UTC with the call “516”. Now on three hours earlier, half-past six in the morning UK time. Still the same frequencies as in November last year.

15-Nov-19:- 0630 UTC, 11780 kHz, very strong, DK/GC “482 482 7 7”, “31234 11325 40415 87022 99832 14077 53359”.
0640 UTC, 12570 kHz, weaker.

No sign of this one on Fridays 29-November, 6-December and 13-December, either propagation has been very bad indeed at half-past six on a Friday morning or this schedule has gone.

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

2-Nov-19:- 0800 UTC, 8680 kHz, DK/GC “904 904 5 5”, “98058 55693 97628 61154 97511”, around S6.
0810 UTC, 8260 kHz, slightly stronger.

7-Dec-19:- 0800 UTC, 8680 kHz, DK/GC “846 846 5 5”, “73687 04565 39895 91670 29257”, S6.
0810 UTC, 8260 kHz, stronger signal.

Thanks Peter!

S11a log Nov/Dec

4242kHz	0915z	04/11 [487/00]	Ary	MON
	0915z	08/11 [480/00] Konyetz 0918z S3	Malc	FRI
	0915z	11/11 [483/00] Konyetz 0918z S3	Malc, RRGB	MON
	0915z	15/11 [482/00]	RRGB	FRI
	0915z	18/11 [481/00]	RRGB	MON
	0915z	29/11 [483/35 06177 41616 58490 22181 49862 01285 94451 98464.....94981 73707]	RRGB, Malc	FRI
	0915z	06/12 [482/00]	RRGB	FRI
	0915z	09/12 [484/00] Konyetz 0918z S2 (Dutch SDR)	Malc	MON
	0915z	13/12 [484/00] Konyetz 0918z S2	Malc	FRI
	0915z	16/12 [482/00] Konyetz 0918z S3	Malc, RRGB	MON
	0915z	20/12 [485/00] Fair (Dutch SDR)	RRGB	FRI
	0915z	27/12 [483/31 07931.....22748] Konyetz 0926z S4	Malc	FRI
	0915z	30/12 [483/00] Konyetz 0918z S3	Malc	MON
5371kHz	1100z	06/11 [379/37 81910.....50600] Konyetz 1112z S3 + QRM	Malc	WED
	1100z	08/11 [379/37 81910....etc] Repeat of Wednesday	Malc	FRI
	1100z	13/11 [370/00] Konyetz 1103z S4	Malc	WED
	1100z	27/11 [372/00] Konyetz S4	Malc	WED
	1100z	29/11 [376/00] Konyetz 1103z S3	Malc	FRI
	1100z	04/12 [372/00] Konyetz 1103z S2	Malc	WED
	1100z	13/12 [370/00] Konyetz 1103z S3	Malc, RRGB	FRI
	1100z	20/12 [376/00] Strong (Dutch SDR)	RRGB, Malc	FRI
	1100z	27/12 [377/37 18578.....etc] Konyetz 1112z S3	Malc	FRI
7600kHz	1020z	01/11 [422/00] Konyetz 1023z S4	Malc	FRI
	1020z	05/11 [429/00] Konyetz 1023z S4	Malc	TUE
	1020z	12/11 [429/00] Konyetz 1023z S5	Malc	TUE
	1020z	26/11 [427/38 44877 68432 26875 77237 93432 18254 79983 76424.....01592 94365]	RRGB	TUE
	1020z	03/12 [424/31 64213 34195 59687 17925 43793 34285 23500.....39793 43814] Konyetz 1031z S3	RRGB, Malc	TUE
	1020z	10/12 [422/00] Konyetz 1023z S2	Malc	TUE
	1020z	13/12 [425/00] Konyetz 1023z S2	RRGB, Malc	FRI
	1020z	17/12 [429/00] Konyetz 1023z S3	Malc, RRGB	TUE
	1020z	20/12 [429/00] Konyetz 1023z S5	Malc	FRI
	1020z	24/12 [429/00] Konyetz 1023z S2	Malc	TUE
	1020z	27/12 [429/00] Konyetz 1023z S5	Malc	FRI
	1020z	31/12 [424/00] Konyetz 1023z S5	Malc	TUE
9050kHz	0700z	11/11 [476/00 КОНЕЦ 0702z (SDR Enschede)	Ed Smith	MON
	0700z	14/11 [472/00 КОНЕЦ 0702z (SDR Enschede)	Ed Smith	THU
	0700z	18/11 [479/31 05200 17585 60977 35897 21283 57638 54484 200823.....26713 98317]	RRGB	MON
	0700z	21/11 [479/31 05200 17585.....26713 98317] КОНЕЦ 0710z. Weak under static,	Ed Smith	THU
	0700z	25/11 [478/00] KOHEI 0702z. Fair to weak, QRM3 CW (SDR Enschede)	Ed Smith	MON
	0700z	28/11 [472/00] Konyetz 0703z S2	Malc	THU
	0700z	02/12 [476/00] KOHEI 0702z Weak (SDR Enschede)	Ed Smith	MON
	0700z	19/12 [470/38 16932 34732 05340 50940 73699 21163 00547 43644.....34942] Weak	RRGB	THU
	0700z	30/12 [479/00] KOHEI 0702z Fair under static. SDR	Ed Smith	MON
9057kHz	0510z	06/11 [651/00]	Ary	WED
	0510z	04/12 [650/00]	RRGB	WED
11486kHz	1850z	06/11 [286/00] Konyetz 1853z S2 (Dutch SDR)	Malc	WED
	1850z	13/11 [28?/31 79621.....14506] Konyetz 1900z S4 (Dutch SDR)	Malc	WED
	1850z	30/11 [287/00] Konyetz 1853z S3	Malc	SAT
	1850z	04/12 [287/00] Konyetz 1853z S2	Malc	WED
	1850z	21/12 [285/31 too weak to copy msg due fading] 1901z S2 QSB1 (Dutch SDR)	Malc	SAT
	1850z	28/12 [284/00] Konyetz 1953z S3 (Dutch SDR)	Malc	SAT

V02 a

No reports via E2k

V07

Sunday

November 2019

0100z	15946kHz	0120z	14846kHz	0140z	13486kHz	
10/11		984 1 3116 34 52352 ... 77095 000 000			[0100z Poor Audio]	Weak
984 984 984 1 3116 34 52352 35870 97634 30452 14352 15649 90853 70365 54040 14649 9950 81029 33337 25303 78286 76274 77701 82242 64113 71626 04456 07930 73352 63464 74023 66062 36179 64687 03366 22788 45596 17225 49538 77095 000 000	<i>Courtesy DanAr</i>					
24/11		984 1 8919 12 02313 46616 17644 ... 47481 35279 000 000				Weak

December 2019

0100z	11594kHz	0120z	10794kHz	0140z	10194kHz	
01/12		571 1 203 52 000 000]			[0140z Very strong]	Strong [Token]
08/12		571 1 302 62 000 000			[0100z Strong]	Very strong [Token]
15/12		571 1 194 64 69740 ... 33274 000 000			[0100z QRM1]	Weak [DanAr]
22/12		571 1 5966 90 17014 ... 49842 000 000				Weak, QRM [DanAr]

V13

9276kHz1338z	13/11	USB New Star Broadcasting i.p.	Ary	WED
7688kHz1330z	04/12	Flute tune followed by a message in Chinese	Ary	WED

V15 North Korean Intelligence via Radio Pyongyang

657, 3320, 6400kHz				
1445z	09/11	North Korean intelligence via PBS Pyongyang Pansong. Message in Korean via web sdr Japan, 6400kHz also heard in Netherlands	Ary	SAT

V24 South Korean Intelligence

4923kHz1430z	13/11	Dvorak's Slavonic Dances followed by a message in Korean	[via web sdr Japan]	Ary	WED
4925kHz1430z	15/11	Dvorak's Slavonic Dances followed by a message in Korean	[via web sdr Japan]	Ary	THU
6310kHz1530z	01/11	AM K-popsong followed by a message in Korean		Ary	FRI

V26

4243kHz1206z	07/11/19[(From M95 sked - USB - Chinese - Female - // 9054) (Remote tuner Khabarovosk)]	JPL	THU
2234z	12/11/19[(IP - USB - Chinese - Female - // N/H) (Remote tuner Novosibirsk)]	JPL	TUE
1207z	19/11/19[(IP - USB - Chinese - Female - // N/H) (Remote tuner Shanyang)]	JPL	TUE
9054kHz1206z	07/11/19[(From M95 sked - USB - Chinese - Female - // 4243) (Remote tuner Khabarovosk)]	JPL	THU

Polytones

XPA1 c

Tuesday/Thursday

November 2019

0810z	13978kHz	0830z	14859kHz	0850z	15871kHz	HFD	TUE
05/11	Msg						
07/11	587 000 02753 00001 00000 ... 36257				[0840z Fair]		Very strong
12/11	587 000 09686 00001 00000 ... 37271					Ary	TUE
14/11	587 000 07676 00001 00000 ... 37266						Strong
22/11	587 000 06903 00001 00000 ... 37256				[0810z monitored only]		Strong
28/11	587 000 04714 00001 00000 ... 36656						Very strong

December 2019

0810z	11531kHz	0830z	12137kHz	0850z	13932kHz		
05/12	395 1 00428 00150 44750 ... 13455				[0830/0850z Unworkable]		Weak
19/12	395 000 07945 00001 00000 ... 40263				[0810z Strong]		Very strong
24/12	395 000 06134 00001 00000 ... 33661				[0810z Weak, noisy]		Very strong
26/12	395 000 08983 00001 00000 ... 37270				[0810z Fair]		Strong

XPA2 m

NEW FREQS

Sunday/Tuesday

November 2019

1200z	14783kHz	1220z	13883kHz	1240z	12183kHz		
03/11	MISSED						
05/11	MISSED						
12/11	05342 00086 36785 ... 26076					Ary	TUE

05342 00086 36785 64005 25784 28635 09078 92846 58448 50708
 32505 07023 62380 83322 72823 07360 88044 08753 88550 88323
 36203 27360 45838 53008 52154 70396 73532 89024 06445 03182
 21784 36822 20416 73992 67280 03533 56228 36380 02883 82030
 25608 20838 54443 52200 50663 03730 35688 06208 66806 81350
 14060 66528 62063 00706 53306 62365 83366 05808 08040 38602
 59240 19210 55757 05559 83553 11924 47962 28384 98462 47459
 58737 26705 95769 03336 08786 38788 03076 23523 58113 34626
 86174 93921 70496 49327 04309 81108 53968 28685 26076

Courtesy Ary

17/11	00201 00070 25001 ... 52745						Strong
00201 00070 25001 60191 48101 08427 06310 96157 90077 81901 22383 79595 31028 90115 72772 74682 65241 90901 90177 02423 73263 38080 54621 59692 59417 48890 13588 55635 89690 17535 63017 91058 94016 41751 11378 68572 51563 99063 16197 85807 21860 60598 24211 52900 48064 92647 98032 10008 31113 71091 32936 86339 06531 02493 94589 50369 81601 59240 67031 44542 43235 82892 49208 58756 17025 26032 31741 73257 91944 89543 78806 19937 52745							
24/11	02667 00082 46402 ... 75043				[1220z Fair]		Strong

December 2018

1200z	10807kHz	1220z	12207kHz	1240z	13507kHz		
01/12	Msg						H-FD
03/12	MISSED						
08/12	00457 00040 11801 ... 34564						Fair

15/12	00222 00058 14498 ... 37671		Very strong
22/12	00373 00030 01440 ... 67514	[1240z Not Monitored]	Very strong
24/12	00373 00030 01440 ... 67514		Very strong

XPA2 p

NEW FREQS

Monday/Wednesday

November 2019

0800z 11529kHz 0820z 13429kHz 0840z 13929kHz

04/11 MISSED

06/11 00421 00130 13420 ... 33416 Very strong

00421 00130 13420 65599 85851 39948 35901 41111 86524 10055
 50279 87851 77011 99873 58088 18658 54089 03214 63855 99036
 87366 36142 19967 88671 08288 69151 82245 77901 85081 36646
 46741 62140 57649 45569 00632 64587 09871 74674 90730 99061
 13403 90589 49310 35766 88708 66093 25778 71491 84579 54766
 05152 68413 70905 10840 42701 71693 96779 46890 71386 02073
 30806 46791 98533 80460 14327 20108 45207 83765 32386 15672
 82100 24418 37144 09746 23164 34019 92993 16584 55102 89488
 57227 78171 69712 79439 59194 89177 70376 42189 70273 87489
 79227 96109 85815 29533 06925 72415 00484 12844 59772 63989
 55632 06645 06233 51309 78058 98487 17113 30993 51269 46940
 35586 12285 33851 70812 71989 34786 12575 26950 15332 08568
 52584 11647 57157 75930 42841 35065 70635 71071 75086 96376
 52991 46937 33416

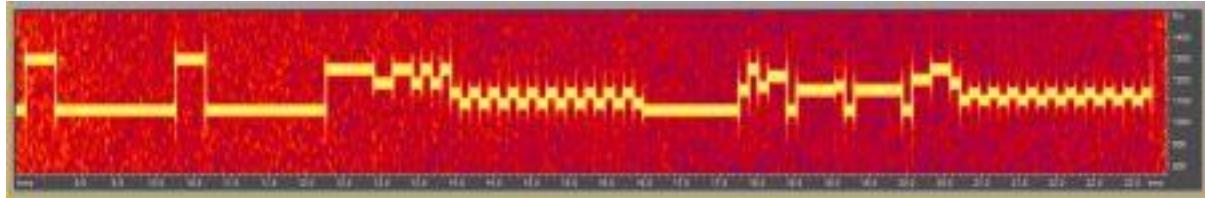
Courtesy PLdn

11/11 00281 00105 63240 ... 75370 Very strong

00281 00105 63240 30828 26782 43178 71411 38263 51150 59334
 84939 06877 04613 51784 18993 43993 63667 14850 38677 41488
 44460 86103 06992 66430 45409 39065 48520 68344 11111 73978
 10588 53185 42277 06095 19051 36682 94762 78419 57563 06557
 03278 80447 61922 01048 77945 02969 72685 59832 57567 41553
 03129 45166 01099 41269 62051 86438 06194 94542 58161 24922
 95356 13948 38113 21257 23841 03671 31519 52713 50714 79620
 19100 75239 78486 27972 09296 68773 78069 47560 38289 89376
 06943 21412 20612 38622 17454 02753 15101 88464 07469 39311
 97217 41098 89731 16339 41591 03744 46511 17054 70352 19203
 89972 03055 17853 90336 26319 77624 79548 75370

Courtesy PLdn

18/11 00287 00105 63240 ... 75370 [0840z Weak, QSB3] Fair



27/11 06144 00001 00000 ... 33662 [0820z Strong] Fair

December 2019

0800z 11493kHz 0820z 13393kHz 0840z 13993kHz

02/12	09526 00001 00000 ... 36663		Fair
09/12	00142 00133 85788 ... 06004	[0800z Strong]	Very strong
16/12	00142 00133 85788 ... 06004	[0820z Very strong]	Strong
23/12	00468 00087 95950 ... 10304	[0840z Not Monitored]	Fair
25/12	00468 00087 95950 ... 10304	[0800z Fair, noisy]	Strong

Other Polytones [XPA2]

From HFD

Tue 12.11.2019 1600Z 10223 msg
Tue 12.11.2019 1620Z 9223 msg
Tue 12.11.2019 1640Z 8123 msg

Wed 13.11.2019 0910Z 17413 msg
Wed 13.11.2019 0930Z 15852 msg
Wed 13.11.2019 0950Z 13363 msg

Sun 01.12.2019 1200Z 10807 msg
Sun 01.12.2019 1220Z 12207 msg
Sun 01.12.2019 1220Z 13507 msg

Mon 02.12.2019 1600Z 6984 msg
Mon 02.12.2019 1620Z 5984 msg
Mon 02.12.2019 1640Z 4784 msg

Fri 13.12.2019 1200Z 9389 msg
Fri 13.12.2019 1220Z 10289 msg
Fri 13.12.2019 1240Z 11589 msg

Sunday/Thursday Schedule from Danix

Sunday/Thursday

0800z	14531kHz	0820z	13391kHz	0840z	12217kHz	Ary	THU
28/11		00770 00548 72102 ... 03051					
00770 00548 72102 34115 77683 02387 49197 22028 66615 24097 11645 12511 51736 80139 14938 11530 62416 32645 96912 59247 12795 71364 07205 37573 54770 55712 18058 34458 19005 23868 83511 75090 14133 26711 92081 63717 17124 72931 74547 77763 56649 63695 38818 42885 97304 46614 86082 50638 45088 95452 49814 83604 06557 78993 45501 36424 82089 98943 13697 70510 16518 93790 18455 85658 89551 09623 31313 26900 50941 38039 13931 20997 97457 95322 16652 89138 18221 92091 27920 75362 75808 56303 29505 05237 74400 37345 26411 60236 28059 22869 23995 31795 73840 55399 03874 84818 18653 96567 53288 99553 78879 95247 92514 96311 90723 71984 88380 20954 34098 27039 36334 71632 85398 08701 87777 49731 90691 24933 14535 80007 39910 68659 73222 79476 68360 41419 49767 00485 48446 81318 86241 45216 43454 85652 65622 74802 28331 86242 47211 03808 25781 39023 06293 60146 13138 92411 36829 70417 86001 75374 02336 93402 14909 37096 55967 42110 48661 12550 36396 47008 94419 42761 62298 27288 12482 92093 72031 93577 85934 13314 64126 60690 12724 41989 82519 53140 58957 20864 97565 68689 03515 39021 38284 33151 32330 17853 76240 13704 30541 04622 26175 70113 60593 66882 06118 37829 60620 15582 11567 34614 46891 64092 02817 63292 10951 80534 81775 91613 64652 92391 92782 37282 69643 95067 46156 74332 66614 53851 29887 77123 31717 31125 93966 92597 56545 58378 92198 49441 42692 89217 42148 75262 48336 62972 08083 29616 56104 61610 86727 58326 60497 52315 89107 86399 45873 30717 45459 41228 47551 95758 95421 11753 54231 35512 64105 79253 83228 81137 34783 95148 49531 54374 29114 12952 13249 26275 17779 98902 47385 33532 75526 06149 82613 41425 33837 49495 81858 52508 26414 21250 19389 46242 02280 63037 26333 68785 2983 98063 89077 04607 80877 55942 69499 33340 83494 35553 11606 29108 48537 95184 61208 45894 90411 42327 31256 08129 73708 09612 60258 33323 61811 58638 54606 52350 46100 39672 65982 64690 23336 14292 10818 00807 61801 05770 06448 13748 96741 66702 56514 04325 66481 46336 62418 93485 38654 40297 70582 22937 03435 22434 70462 89937 33359 67586 73115 03391 26959 75864 22553 69938 56567 38311 46915 74852 18934 47578 14906 50276 81640 52406 10307 76122 53530 06959 72194 91438 23417 01938 88040 45349 93919 99468 52740 28469 97660 81689 38948 84327 17253 60538 61750 17200 72564 72352 52788 24124 76293 20436 11219 81606 36011 18968 76062 10522 67080 62089 07060 15082 31749 51688 85479 66114 88078 95351 59799 59585 55201 43374 43943 50060 07172 88474 60259 35053 61616 20264 49985 74473 68528 40340 90424 81000 85839 71402 91227 76332 16865 34647 53474 00220 36310 77256 17689 17276 24936 56477 73029 43657 52075 76682 37468 86054 02489 77494 80600 03178 80644 99330 72106 38287 02634 21468 45266 06949 83087 59537 21308 64201 85755 20546 68888 71768 35096 31179 54821 36534 53070 32411 56527 24891 09750 29575 16423 94382 07964 98658 87514 56568 47760 91387 81970 39110 32086 30387 39608 30355 85770 78800 64364 16897 88414 84987 26562 85389 41271 85057 62386 00621 29938 99736 63902 65705 34310 03792 78077 52991 97691 22359 42678 85827 61818 73227 46886 57497 89197 42398 93614 79504 99075 74702 01859 79834 49348 10748 62357 89440 05267 74127 80169 06693 77226 88270 75333 96661 69460 51667 13412 32909 81319 27729 39896 88260 71609 41200 66672 55377 83463 23644 06791 75325 03051	Courtesy Ary						

0800z	12192kHz	0820z	11486kHz	0840z	10631kHz		
05/12	05506 00001 00000 36655			Ary	THU		
0910z	15985kHz	0930z	14885kHz	0950z	13885kHz		
28/11	08345 00066 91543 ... 72111					Ary	THU
	08345 00066 91543 04489 91200 73619 35822 97267 36006 97083 04394 03735 73931 38946 57822 72079 21562 68359 58743 13529 34995 34093 81853 25756 54235 31241 40896 72298 59166 37137 17795 30331 36945 74436 85621 51512 99889 95855 72347 21498 66748 98027 43806 30235 41223 17165 69565 46422 57442 65018 66154 50830 72780 64267 42200 35544 47958 04726 88132 64836 41137 81955 12482 08467 58254 15837 89932 12833 72111 Courtesy Ary						
1000z	16261kHz	1020z	15819kHz	1040z	14551kHz		
28/11	00176 00001 00000 ... 34657					Ary, HFD	THU
1200z	15996kHz	1220z	14563kHz	1240z	13875kHz		
28/11	00109 00698 82457 ... 55013					Ary, HFD	THU
	00109 00698 82457 68508 87956 36624 41873 60837 98557 15529 24732 14253 53201 73711 60129 01485 81331 03451 17301 55539 78312 22541 90405 49981 48109 86114 46087 97219 77031 13347 56625 86323 51397 30625 67893 68887 53648 80739 34073 64068 17090 77689 07448 14918 22322 27167 27206 72730 04939 59581 24985 94877 06006 25480 97507 83936 22246 77446 34950 44876 95782 38907 65405 83549 41916 47992 44167 75423 97370 80902 08382 75518 58072 13828 39319 68218 48972 50349 19347 07548 51629 15285 93323 69357 09337 36939 92723 22781 08590 76000 14077 58345 46895 65091 42537 24429 75938 41048 38226 49633 15185 88605 14058 97500 55517 59272 28097 15079 55996 98647 64528 59919 86973 23076 46714 06648 73806 72811 24870 95253 58972 06378 93532 57915 05954 07015 44002 94075 19032 88544 26003 08331 26123 52503 17154 05535 22573 83062 01663 47796 63402 44553 42979 90495 21883 00510 27669 87448 38537 71963 33844 44562 49350 76280 25011 36516 81876 98124 31713 34420 08051 72720 89403 31580 85037 07887 96205 00268 61816 46779 28112 57680 03941 26443 38903 66972 40084 04080 13458 32494 82246 49175 99956 92091 75541 94400 31924 17610 03321 24888 01476 26817 04972 79715 16890 42328 46620 17252 59340 63504 37637 32562 05532 38660 97199 22484 06285 79257 82522 23016 77904 65734 18612 30684 45091 71867 82226 27249 11915 06338 26262 26987 37065 85359 67181 26930 08885 10594 67365 40257 42802 44339 66686 58204 89413 84538 13466 80751 76297 91599 58208 57774 08058 31928 51796 17433 78632 31370 02010 95614 81313 40246 73436 12724 27218 20687 51385 65498 28903 78749 78362 08231 34370 60570 67741 38171 33199 77655 72184 84207 63942 91858 17427 02473 83922 36903 86104 03760 59163 08803 50468 23619 22710 56387 65767 92292 57877 81421 67577 31967 34036 93788 01793 43031 41160 90994 83518 07508 53631 59533 00543 22326 93840 65502 78956 05855 94653 77086 83238 25134 94505 10083 64766 56202 94644 35574 53516 58502 76250 46562 52104 47062 54337 28601 61285 22130 70949 32471 77976 23977 50555 49351 26765 55844 04893 81512 83364 65395 38958 10210 65427 11616 24122 92018 02981 15301 79316 38082 59123 97639 90030 46615 68699 30069 11193 10751 48002 78012 62935 72120 86938 78198 39091 78571 50942 92836 88453 78615 96028 71917 87415 87519 49839 54464 91312 80654 73657 14304 93520 98623 26278 73286 81061 12268 01424 56112 03312 00960 71446 82908 66942 20203 02156 47830 03560 97056 27026 43991 80539 50871 04598 20333 21470 31892 18922 07174 99235 81043 30568 75835 31850 15278 48683 38111 11458 13245 49711 71633 29359 43625 84724 27379 82823 51576 22878 27863 76086 01568 98935 00013 38953 66932 49631 22053 35896 32428 17629 97450 41243 01613 80580 89999 31740 72432 47449 13456 26290 11821 07566 24745 87298 05088 54436 79848 64211 72776 75097 53209 51936 53199 35259 44071 88220 94451 46753 44856 30883 23403 02591 78726 08684 77724 96517 70388 60410 10835 67695 54945 45254 47413 74830 03482 69468 29552 30934 07976 46698 18284 19019 51562 41890 65599 24628 92487 37700 49839 92351 28791 53391 72829 26688 74795 66199 00116 15571 93782 11546 26463 70735 81301 61767 61979 47964 51627 36478 17122 79766 03970 06779 00199 74137 07075 80741 49204 11926 79677 16225 28495 23221 09365 08148 65860 00294 27598 55341 79715 76026 25738 70785 11279 24479 54630 77702 40921 70101 57499 66913 31231 78431 92650 12962 22364 79733 08578 28513 85781 21998 46390 18594 70090 17967 26823 64441 60859 35577 42665 75880 52215 88063 63078 72406 61192 09275 16645 38601 54931 12888 50813 40295 86201 96514 85481 12871 91380 18501 35743 91812 46649 96902 21587 72300 01500 28951 93656 24990 59589 10976 77811 30636 06482 85915 22495 15608 29194 15542 18620 84760 61723 42859 74544 15430 39494 46296 68091 02960 86944 62178 39357 66888 70982 94523 95821 60047 24503 65425 43172 87015 26849 71041 66406 24956 39379 54102 90885 56105 54019 79009 47552 22144 29011 58551 63890 99281 54008 15262 25663 64993 93493 09552 30238 88029 05928 17164 50252 19068 19739 22284 74692 34212 38907 37716 88348 18636 84317 14328 77945 30666 45115 81111 58943 84736 94429 18894 01061 32258 92112 98416 92397 01813 02170 48239 52146 62200 33635 77090 24017 70407 06110 71820 88800 66822 77227 11969 58129 71428 68782 46011 02180 23949 51235 55013 Courtesy Ary						

1400z	12217kHz	1420z	11114kHz	1440z	10229kHz		
28/11	00868 00612 69393 ... 52004					Ary	THU

00868 00612 69393 48082 67943 97588 28655 72266 99016 54663
 15831 87908 06871 82746 26412 66877 41846 79237 02175 21397
 26201 50615 18133 98303 89475 94669 52804 78731 63185 10846
 47358 32551 04019 80186 00097 58613 95294 89211 43210 13986
 18976 46483 46312 42071 97972 67885 18752 06430 15486 70195
 92267 49259 68521 68891 87760 32114 65836 85178 03933 30269
 92276 25563 18113 19153 17001 58437 30414 33064 39447 22792
 38638 22161 31299 04970 88519 12538 20403 54032 11440 27546
 82094 43437 06888 27154 53648 64017 36160 00469 19752 52568
 46990 55517 93363 34188 22462 66123 38422 66154 54389 86028
 01785 21364 94373 09036 63532 79564 95833 21570 53415 01558
 95752 66458 25624 45941 93331 29471 53084 47316 66087 97161
 51139 62439 71632 85880 61875 32552 57766 42697 23018 49658
 39368 33385 37814 04078 68808 21692 35968 54102 08734 55878
 98962 50283 27482 77128 63048 71563 62810 56243 51370 24906
 73581 68584 34646 99277 15693 50245 21495 36994 60309 04810
 32234 26656 65121 29692 29320 01603 01032 09153 60428 09187
 07988 38933 10525 45700 28156 15039 09732 32158 20711 64164
 52175 25326 87533 12202 13218 10039 63393 88070 79889 44480
 32143 29983 15939 43694 22495 14314 66235 41961 89148 10594
 08437 17181 86746 53574 34985 30013 18363 82854 79053 21683
 84841 69574 07059 92008 24937 33442 14174 79857 86013 99553
 01600 44578 34152 65211 93539 63897 37812 97169 34163 45586
 36443 75214 16595 55032 84518 51994 17934 73474 35028 68218
 85257 90258 56363 37257 11288 34321 79816 54355 60888 72494
 96636 62464 47041 68197 83601 03491 10482 12449 30610 90472
 80415 69625 38452 42110 44694 86591 08673 05226 15296 55186
 69278 43477 93705 41711 89958 81739 24635 06888 71556 88231
 38978 60699 36175 46454 83834 73399 09316 44948 09995 09891
 23783 99621 26799 32011 96963 83973 75377 62476 48735 42991
 89682 54055 69993 72022 17356 19519 54964 89552 21910 59808
 22679 16020 58850 19245 77509 07151 21537 37263 28346 33418
 56350 57689 34508 43486 47603 83035 63075 67922 50360 73252
 98544 89321 16223 94842 64250 33995 51416 77527 64701 98130
 34735 56931 49366 91165 28575 26141 41682 14160 17213 60041
 77588 58083 94516 23445 50453 45448 25623 76807 23231 62040
 35696 72943 94690 37278 65473 17246 24935 79766 56377 77317
 89354 80864 90571 44243 40613 91705 43077 21497 60117 51552
 35972 83224 63810 69798 20277 49537 75171 83249 99150 21901
 53679 33208 98846 02102 27308 38765 39422 39377 51269 11780
 09988 80586 55655 93523 08426 05607 10864 30633 23502 94710
 76549 25718 33514 47001 96180 73306 57500 55372 72550 88457
 24690 05641 92642 58509 83384 61571 89724 11599 08952 56034
 03358 81853 89933 04401 42519 94758 01221 55135 92050 09612
 12020 77169 43263 77627 42041 11909 08637 81923 73541 50423
 33447 91508 68178 57994 57489 06526 17666 74158 75936 92855
 71587 58547 25247 91401 15307 07020 88078 01880 89775 12567
 77743 27407 78339 45557 73503 28546 72443 00536 26712 05381
 57990 41701 31940 53808 49194 06473 64730 02549 82512 06206
 67397 65049 77975 94649 38410 14073 33307 90753 42041 13762
 60703 72296 15305 43805 87105 18009 76347 35279 68892 99086
 74703 89752 92198 42832 80108 09185 27131 39208 48740 46807
 70668 72613 97800 10875 59847 03794 30118 11554 03069 79649
 38041 72288 35670 85628 05335 29150 06300 50790 98670 46260
 12459 84799 81677 72664 88719 18630 56458 71712 03801 81893
 29521 35267 98383 16180 54443 59791 99608 50235 19143 29969
 10097 75186 38247 91308 14838 63011 60099 99720 09371 26664
 15988 72601 44079 37247 93197 20025 06379 01212 73616 69678
 53294 74006 61451 70279 24129 66921 23330 64422 60246 68108
 56985 01998 04793 28054 35052 12653 75935 64489 54531 23203
 88655 95454 74351 54337 83259 99630 79625 88486 00931 00026
 89935 46166 98056 88102 52004

Courtesy Ary

1800z	nnnnnkHz	1820z	nnnnnkHz	1840z	6834kHz		
28/11	02560 00001 00000 33660					Ary	THU

Monday/Wednesday

0910z	17413kHz	0930z	15852kHz	0950z	13363kHz		
13/11	00450 00178 52779 ... 03563			Repeat of 11/11		Ary	WED

Tuesdays/

1600z	10233kHz	1620z	9223kHz	1640z	8123kHz		
12/11	00504 00185 41780 ... 74413					Ary	TUE
00504 00185 41780 87224 64369 89420 67742 07283 36031 66820 99928 37265 22913 26104 24550 53732 97418 02876 22395 35152 91851 91895 48861 48580 13205 49907 53592 58606 42672 34348 13353 51674 90767 82955 47321 22257 15731 96778 60692 10546 33082 30542 01373 39891 84133 77602 84337 67975 23816 01464 79850 76475 59895 20537 19838 35228 18114 72069 00577 35017 97668 83232 13858 90506 73435 46759 76905 12360 43712 05837 32407 43531 11689 02940 66951 85893 13017 33373 92300 43819 42371 68527 25534 13478 12223 77318 89398 05628 78006 46376 41728 22554 82843 24394 71701 19028 10782 61104 72268 51351 65788 19715 71664 92963 87006 26975 16291 42419 80205 69901 84860 88667 94613 63752 57482 51065 72467 51224 37140 38909 82224 93633 66761 63630 93036 00408 82633 89950 66743 14195 28809 47095 31798 85119 44128 19480 35151 97153 07811 86524 32991 42377 97588 78873 76499 17852 87839 39534 69203 28395 17745 32563 33332 14148 18544 11021 94992 71119 95962 80517 67838 41114 92178 19129 66706 81809 67941 96301 67558 16269 76089 72140 78878 99533 75539 83511 55707 54808 20606 19691 14523 57746 01267 43333 01029 92652 66270 74413							

*Courtesy Ary***Wednesday**

0910z	15985kHz	0930z	0950z				
21/11	00357 00139 00006 ... 32207					dmhz	THU
00357 00139 00006 43306 33838 47133 83589 95123 85005 14693 63673 84047 32643 30827 39657 52331 44485 98920 94152 99884 51945 94441 42227 55274 36558 12811 58948 84334 64871 89211 38382 61049 45197 79130 48676 36082 86940 15007 97295 34881 40670 53252 78938 64302 73313 84732 30318 14958 36526 52709 23243 97441 73265 30830 95980 31714 52538 83711 75950 72720 67544 72467 48136 64651 06259 21616 95646 26460 12919 60683 10704 20328 09018 54705 09101 77848 70604 28319 63659 51462 47998 05824 05825 56133 38935 71800 77361 65268 19504 02062 95110 79537 87044 72244 97041 30137 56669 91381 04457 36591 45938 04992 97147 65745 55314 76437 45109 21392 76842 99746 11242 42803 46879 20184 76850 30574 31097 42186 17735 32683 75106 69417 49963 56977 04442 42994 98448 89630 91735 35626 23085 59827 59651 94625 76597 38339 60348 73259 41795 29702 65789 32207 <i>Courtesy dmhz</i>							

1200z	10968kHz	1220z	12168kHz	1240z	13368kHz		
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13/11	04464 00104 07221 ... 02564					Ary	WED
04464 00104 07221 33398 60229 70267 28927 68389 84122 15925 95064 97477 41591 44548 55934 03882 74781 57753 16683 39328 65470 13600 74112 01966 17887 58921 76185 17464 83397 29535 58874 93333 55868 29682 84194 33756 15711 64165 49824 00637 90666 30120 80513 84934 81347 11879 51085 64976 01543 82062 34512 82736 01470 21177 89298 01233 61740 44216 06961 48366 25982 47536 58447 84087 43626 84124 84704 38161 24055 02855 26481 53478 23231 37171 16214 28210 70800 46568 59129 30720 30227 15961 86485 95966 43874 51472 69523 07936 06003 92050 80657 46278 36889 42738 45872 25328 64120 24147 57675 14785 92368 47221 77422 21278 53854 74243 02564 <i>Courtesy Ary</i>							

1220z	1220z	10289kHz	1240z	11589kHz			
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04/12	02892 00040 93033 ... 52625					Ary	WED
02892 00040 93033 01265 84322 37075 22260 69323 23385 45989 01184 22793 67590 48800 21215 77118 88910 47503 38244 35233 13513 92125 33743 81332 59460 72504 16382 21070 36370 91647 48142 22297 68954 66851 70716 42240 55716 99787 58530 80016 35161 89980 52625 <i>Courtesy Ary</i>							

XPB

XPB1

[via HFD]

1B XPB1 Tue 05.11.2019 2000Z 7876 msg

Tue 05.11.2019 2010Z 7576 msg

Tue 05.11.2019 2020Z 6876 msg

Tue 05.11.2019 2030Z 5876 msg

Tue 05.11.2019 2040Z 5376 msg

Tue 05.11.2019 2050Z 4476 msg

Sat 09.11.2019 1100Z 13894 msg

Sat 09.11.2019 1110Z 13394 msg

Sat 09.11.2019 1120Z 12194 msg

Sat 09.11.2019 1130Z 11494 msg

Sat 09.11.2019 1140Z 11094 msg

Sat 09.11.2019 1150Z 10494 msg

Mon 02.12.2019 1100Z 14483 msg

Mon 02.12.2019 1110Z 13983 msg

Mon 02.12.2019 1120Z 13483 msg

Mon 02.12.2019 1130Z 12183 msg

Mon 02.12.2019 1140Z 11583 msg

Mon 02.12.2019 1150Z 10983 msg

Sun 08.12.2019 2000Z 8058 msg, 2:18

Sun 08.12.2019 2010Z 7558 msg

Sun 08.12.2019 2020Z 5858 msg

Sun 08.12.2019 2030Z 5158 msg

Sun 08.12.2019 2040Z 4858 ms

Sun 08.12.2019 2050Z 4458 msg

Hybrids and Tones

HM01

From PoSW:

The mixed mode station from Cuba had been a very poor signal throughout the summer months, often just about possible to tell it was there on those days when frequencies in the 9 MHz band are used in the UK morning time but not strong enough to be readable. A slight improvement noted as we moved towards winter:-

29-Nov-19, Friday:- 0832 UTC, 9065 kHz, starting up after the break, “77236 61724 01307 67503 26321 03484”, surprisingly strong, over S9 but with the deep fading up and down which has always been a feature of HM01.

2-Dec-19, Monday:- 0832 UTC, 9065 kHz, “77236 61724 01307 67503 26321 03484” again.
S9 with deep QSB, data sound at 0834 UTC.

4-Dec-19, Wednesday:- 0802 UTC, 9065 kHz, same 5Fs as on the 2nd, S7 with the usual fading, becoming stronger by 0810 UTC.

16-Dec-19, Monday:- 0836 UTC, 9065 kHz, transmission in progress, 5Fs heard “77236 61724 01307 67503 26321 03484” - still. Good signal when tuned in, became weaker after a few minutes.

18-Dec-19, Wednesday:- 0831 UTC, 9065 kHz, “77236 61724 01307 67503 26321 03484”
S9 with deep QSB.

20-Dec-19, Friday:- 0831 UTC, 9065 kHz, no change in the 5Fs, data sound just before 0834 UTC.

29-Dec-19, Sunday:- 0932 UTC, 9240 kHz, call-up in progress, peaking S9 with the usual deep fading at the most inopportune moments, “77236 61724 01307 67503 26321 03484”, so no change there.

DanAr logs:

10715kHz2200z	06/11 (77236 61724 01307 67503 26321 03484) QSA2	DanAR	WED
11635kHz2100z	27/11 (61724 01307 67503 26321 03484 77236) QSA2	DanAR	WED
16180kHz2100z	23/11 (61724 01307 67503 26321 03484 77236) QSA3	DanAR	SAT
2100z	28/11 (61724 01307 67503 26321 03484 77236) QSA2		THU
17480kHz2200z	05/11 (77236 61724 01307 67503 26321 03484) QSA3	DanAR	TUE
17480kHz2200z	05/12 (77236 61724 01307 67503 26321 03484) QSA2	DanAR	THU

X06 Mazielka

X06 Mazielka (1c) logs section

Date	Day UTC	Freq	Scale	Monitor	Comments
20191101	Fri 0918-0955	18950	1--6--	Edd Smith	X06b i. p. via SDR Enschede
20191101	Fri 1001-1002	12215	361245	Edd	I. p., TX to Copenhagen, G53 (SDR)
20191101	Fri 1120	13368	1--6--	Ary/NL, Schorsch	X06b before XPA2
20191101	Fri 1122	12168	1--6--	Ary	X06b before XPA2
20191106	Wed 0921-0925	14631	362154	Edd	I. p., TX to Athens, G32 (SDR)
20191115	Fri 1124	10968	61651-	Ary	X06b before XPA2
20191116	Sat 0951	13894	1--6--	Schorsch	X06b
20191117	Sun 1103	12183	1--6--	Ary	X06b before XPA2
20191117	Sun 1104	13883	1--6--	Ary	X06b before XPA2
20191117	Sun 1104	14783	1--6--	Ary	X06b before XPA2
20191117	Sun 1106	12183	1--6--	Ary	X06b before XPA2
20191117	Sun 1106	13883	1--6--	Ary	X06b before XPA2
20191117	Sun 1108	14783	1--6--	Ary	X06b before XPA2
20191117	Sun 1123	12183	1--6--	Ary	X06b before XPA2
20191117	Sun 1124	13887	1--6--	Ary	X06b before XPA2
20191117	Sun 1125	14783	1--6--	Ary	X06b before XPA2
20191119	Tue 0937	11085	154263	Ary	I. p., TX to Rome, G148(1)
20191119	Tue 0946	13411	165423	Ary	I.p., TX to Brussels, G151(1)
20191119	Tue 1143	14884	1--6--	Ary	X06b before XPA2
20191120	Wed 1300?	8320	1--6--	Edd	X06b around 1300 UTC
20191120	Wed 1315-1324	14944	621543	Edd	I. p., TX to Lisbon, R (SDR)
20191201	Sun 1707	6771	1--6--	Schorsch	X06b with S9 before E07
20191202	Mon 0907-0912	11438	532614	Ary	TX to Paris, G4
20191202	Mon 1107-1210	12320	1--6--	Edd	X06b i. p. via SDR Enschede
20191203	Tue 0954-0959	12149	154263	Edd	I. p., TX to Rome, G7 (SDR)
20191206	Fri 1516-1518	5087	1--6--	Ary	X06b before E07a
20191210	Tue 1046-1053	12320	1--6--	Edd	X06b i. p. via SDR Enschede
20191210	Tue 1058-1104	11320	1--6--	Edd	X06b i. p. via SDR Enschede
20191210	Tue 1106-1145	11230	1--6--	Edd	X06b i. p. via SDR Enschede
20191210	Tue 1107-1139	13320	1--6--	Edd	X06b i. p. via SDR Enschede
20191210	Tue 1149-1217	15320	1--6--	Edd	X06b i. p. via SDR Enschede
20191210	Tue 1220-1240	10320	1--6--	Edd	X06b i. p. via SDR Enschede
20191212	Thu 1246-1408	12539	6-----	Edd	X06b(2)
20191213	Fri 0912-0916	14922	124356	Danix	TX to Dusanbe, R
20191213	Fri 0925-0932	12177	356412	Danix	TX to Berlin, G126
20191216	Mon 1643-1652	8123	463125	Danix	Alert 3 (TX to Rabat, G146) 1
20191216	Mon 1652-1656	6870	463125	Danix	3.2
20191216	Mon 1656-1701	5838	463125	Danix	3.3
20191218	Wed 1720	4577	1--6--	Schorsch	X06b with S9

- 1) End time missing
- 2) Strange X06b with 2 tones switching into single tone variant - i. p. via SDR Enschede

Many thanks to all contributors as usual and a happy new year. Till next time

Jochen Numbers-, X06 Database and Teamkopf

PoSW writes:

X06 6-Tone Repeating:-

Finding these things is a matter of luck, the following were heard in the first week of November:-

5-Nov-19, Tuesday:- 0926 UTC, 13411 kHz, strong signal, went off after 0932 but found again lower down:- 0934 UTC, 13401 kHz, sounded like the same tones, went off after 0936 UTC.

6-Nov-19, Wednesday:- 0731 UTC, 12150 kHz, went QRT about a minute and a half after being tuned in.

One heard later in the month:-

29-Nov-19, Friday:- 1103 UTC, 13575 kHz, strong signal, peaking over S9 with QSB, tones stopped just before 1109, carrier remained on and was still up at 1125z.

Also one example of the two-tone variant heard:-

10-Dec-19, Tuesday:- 1107 UTC, 13320 kHz, strong signal, similar tones to those sometimes noted before an E07 transmission, did not go off until just after 1140 UTC.

Germany Re-united- 30 Years On!

HJH

The idea for this article has been in my mind for some time now. As Number One Son says, "Plenty of room in there for it then, Dad!" Our recent and very successful meeting of E2K in London brought it to the fore, as did a recent phone conversation with some very good German friends of mine. It is hard to believe that 30 years have passed since the wall was breached, and later demolished. Eventually, as we all now know, the two Germanies were re-united. Impossible as it seemed at that time, I have long wondered how easy or difficult it really had been. No-one saw it coming, even those professional people watchers among the various intelligence services on each side of the wall. As Herr Mielke was heard to say to his MfS operatives post the mini uprising in the 1950s in East Germany, "Genossen, wir müssen alles wissen!" ("Comrades, we must know everything!") If they, with all their technological surveillance and human agent resources, did not see it, what chance had we, on this side of the wall. Not that we, or our NATO colleagues, are short on technology, although the Humint side of things was a bit thin Dort D'rüben, or Over There. First, a dedication to two members of the NVA (Nationaler Volksarmee) Forum, both of whom died recently, suddenly, and after relatively short illnesses. They are Ritchie and Bernd, both of whom were former senior NCOs in the National Peoples Army of the GDR (East Germany.) They were also administrators of the NVA Forum, of which I was a member, but which now seems sadly defunct, due to Software problems. I formed good friendships with both, and am deeply saddened at their passing, also at the failure of the NVA Forum. Strange indeed that one can form friendships over the internet, but such has proved to be the case. After all, we in E2K have done it. I would also like to enclose a disclaimer. The opinions expressed, and conclusions drawn, in this article are mine, and in no way connected with any military, civil, or government body with which I am now, have in the past been, or with which I may in the future be, associated. Sources are given. Now, as they say in far better articles than this, read on!

Firstly, it is as well to remind ourselves how Germany became divided post war. (1939 to 1945.) Broadly, it was divided onto two main parts. West, or Federal Republic of Germany, and East, or German Democratic Republic of Germany. West Germany, formed in May 1949, was divided between, and initially garrisoned by, the French, British and American forces, and administered by the Allied Control Commission. Its capital was Bonn. The old capital of Berlin, which lies in the former Eastern or Soviet Zone, was likewise divided between the victorious Allies, who garrisoned their respective sectors. (i.e. French, British, American and Russian.) East Berlin, like East Germany, housed a large Russian garrison. The German Democratic Republic, formed in October 1949, was garrisoned by the Russians, and retained Berlin as its capital. At this time it was a one party Communist state. Until 1954, the Saarland, or Saar Protectorate, that part of West Germany which was garrisoned by the French and controlled by that nation. In that year, 1954, held a plebiscite, as a result of which it joined the Federal Republic of Germany. Both Germanies had their own armed forces, which were supplemented by para military border guard forces. NO West German Armed Forces were allowed to be stationed in West Berlin, which is why we Brits, the US Forces, and the French, were stationed there. So far, so good. However, there was additional territory which Germany lost under post war land arrangements. These were known as the lands beyond, and to the east of, the Oder–Neisse line. This was the name given to the line formed by those two rivers and which formed the international border between Germany (At that time GDR) and Poland. As the name suggests, it runs mainly along that line formed by the rivers Oder and Neisse. These run into the Baltic Sea, just west of the ports of Szczecin and Swinoujcie. (Had to spell check THOSE babies!) Previously, these were known by their German names of Stettin and Swinemünde respectively.

Of all pre war German territories east of the line, and within the 1937 German boundaries, most were ceded to Poland. The remainder, which had been the northern section of East Prussia, was allocated to the USSR. Almost all the Germans living in this area, which a 1944 estimate gives as 12,000,000, either left or were later expelled. Here, it is timely to mention a close family friend of mine, who lives near us here in UK, and who was amongst these. The family, of which our friend was then a young member, walked the length of Germany, leaving the old east Prussia, travelling via the Harz Mountains, and ended their 6 week journey in Herford, a West German town known to thousands of old British squaddies. Still alive today, and aged 91, she is a sharp as a razor! I mention this area in some detail, as it these lands which could have blocked the attempt at reunification which Helmut Kohl was soon to make.

So, fast forward to November 1989, and the events which led to the Berlin Wall being breached.

Following some large demonstrations in East German cities, including Dresden, the Communist East German government were anxious to placate the population. At about this time Mikhail Gorbachev attended East Germany as an honoured guest, and as part of national celebrations. Indeed, newsreels shot at this time show massive crowds demonstrating and shouting, "Gorbie, Hilf uns!" (Gorbie help us!) One piece of advice which he gave to the then current government, was that they should, under no circumstances, use heavy handed actions, or the armed forces, against the population. This could well have averted what may well have become a bloodbath, and resulted in the wall not falling so soon, and cost many lives. At a press conference held November 9, 1989, to placate the demonstrators, a speaker was Gunther Schabowski, then a member of the ruling GDR government. He gained world fame by announcing, mistakenly as it later transpired, that GDR citizens would be allowed unrestricted travel to nations OUTSIDE the GDR immediately. We have all witnessed the scenes of GDR citizens, queuing at border crossing points, and revelling in their newly granted freedom. As a footnote, Gunter Schabowski died in November, 2015, aged 86 years.

Obviously, this news soon reached the then West German government. Strangely enough, the man who would be a star player in the re-unification role, Helmut Kohl, then the West German chancellor, was in Poland at a celebration of that nations free elections. He wasted no time in returning to Bonn, where he set about planning to reunite the two Germanies. There, he formulated, in total secrecy, his plans to reunite the two Germanies. Almost no members of the West German government were advised of his intentions. He wrote out what would be, arguably, the most important speech of his career, regarding his reunification plans and intentions. Fast forward to November 28th 1989, one hour PRIOR to him making this speech. At this time, he sent copies to the main heads of government who were involved in these negotiations. They were, President George Bush Snr., USA, Prime Minister Margaret Thatcher, UK, and Francois Mitterrand, French president. These nations could, together with the USSR, in theory block any move to reunite Germany, having what was then known as "Reserved Rights." This was a big problem, but one that Helmut Kohl was well able to deal with. Copies of his speech reached the heads of state concerned ONE HOUR before delivery. This left no time to have them translated. What he said, in effect, was that Germany must be reunited NOW, and must act at once and not hesitate to act, and not indulge in protracted negotiations or planning. As we shall see, from his dealings with the heads of state concerned, had he chosen to quit politics, he would have made one hell of a good poker player! He agreed with the GDR that he would render all possible help to ease their struggling economy. He further offered help and advice to the then emerging pro unification political parties in the GDR. Here, it is well to quote an adviser of Helmut Kohl. Speaking to "Deutsche Welle" in a recorded interview, Horst Teltschik explained Herr Kohls actions in the following terms: " Helmut Kohl spoke on the phone to Presidents Bush and Mitterrand, Prime Minister Thatcher and First Secretary Gorbachev. All agreed that actions were to be controlled. We met a representative from Mr Gorbachev, who stressed that USSR wanted no violence. We later found this messenger to be a general in KGB, although we had suspected this. We knew from the start that PM Thatcher would be against reunification, so we did not tell her. We gave President Bush the speech one hour before it was made, so that he could not get a translation in sufficient time to object to it. Herr Kohl and Mr Mitterrand agreed from the start to cooperate, if Europe could be given a bigger role. The British were left in the dark. For Europe was envisaged, more European power, the introduction of a European currency, foreign policy, even a European Army. Gives a whole new meaning to Eurovision, don't it guys! Could have been a rehearsal for BREXIT/BRAUSGANG!) Helmut Kohl laid out his ten point speech. You sharp E2K dudes will note that that is the same number as the Commandments, and four less than Woodrow Wilson's 14 point plan to hasten the end of WW1! (That was the one that would end all those we have had since!)

As we have seen above, negotiations with Francois Mitterrand went well, and he had obviously done his homework in regard to this gentleman. Any map will show that Germany (united) is the largest nation in Europe, followed by France. Thus the two, as allies, would carry some serious clout in future negotiations. At this time, France and the Federal Republic of Germany were the main players in the EU. Mitterrand saw that, together, they could forge ahead with the plans which Mitterrand had in mind, even as far back as 1989. Which is, a larger role for EU in international politics for the EU, a common currency for Europe, and even a European army. And lo! It has come to pass, albeit with different players (or puppets/muppets, you guys decide!) Merkel, with her open door and wallet policies, has divided German politics as never seen for many years, and Macron, with similar policies and imposing tax on a struggling populace, has caused the biggest civil unrest in France since the student riots of the 1960s. But I digress, and that is always messy!

So, he had France onside. Margaret Thatcher was not such an enthusiast of his reunification plans, but no one was telling us Brits squat. But, he figured, if he could get France, USA and USSR onside, what the hell? The UK would go along with the other three. So, he met with George Bush, and got him to agree. The USA probably thought along these lines. The Atlantic ocean is conveniently between USA and Europe. (I often wish it was between UK and Europe!) The USA had no fear of a re-united Germany, especially if it remained in NATO. Additionally, this would place the Eastern Border much further east from NATOs boundaries, in addition to

putting NATO closer to the Warsaw Pact borders. (Great SIGINT possibilities, guys!) In the event, this counted for little, given the collapse of the USSR in two years time, along with, effectively, the collapse of Warsaw Pact forces and states. Also, at about this time, eastern European nations, several of whom were communist, were starting to make nationalistic noises about freedom and free elections, something which has never been a strong suite in communist policy. OK, move on to USSR/Russia, which would be no pushover. But Helmut Kohl knew the cards to play.

We must remember that the GDR had a very weak economy, which was largely supported by the USSR. Mikhail Gorbachev needed hard cash to finance his modernisation proposals for USSR. If he, in effect, sold East Germany, how much would he get? Also, a newly united Germany would be a potential ally to the USSR in future negotiations, even a gateway into Europe. He must have had severs misgivings, however. At the back of his mind, would have been the previously mentioned encroachment of NATO to the USSR borders. Also, he would lose a valuable ally (GDR.). Of all the Warsaw Pact nations, the armed forces of the GDR were amongst the most highly rated in professional ability and commitment. (Source: US Army Special Forces assessment paper.) Also, the Soviet made and supplied arms and equipment of the GDR would all be lost to NATO, along with any secrets which such kit would contain. (All Warsaw Pact nations are/were largely equipped with USSR/Russian kit.) So, he did the deal. Amongst the terms which he exacted were: No NATO bases in the former territory of the GDR. : Withdrawal of troops of the USSR NOT to be portrayed as a retreat. This pot was obviously sweetened by the huge sums which USSR got from the German delegation which visited Moscow to do these deals, when they agreed to lend USSR/Russia a vast sum of money. There were calls rom some hard line Russian generals for Russian troops to be deployed to intervene, after the wall had been opened. (Source: Vladimir Kondratev speaking to Deutsche Welle.) From the same source. "However, all decisions were made by Mikhail Gorbachev, and he ordered no intervention."

Helmut Kohl now went to Dresden, where he was given a tumultuous reception. In a speech made on TV, he said he would now push ahead with plans to reunite the two Germanies. This, as we all now know, is what in fact happened. It may be as well here to look at the cost to Germany, in financial terms. Helmut Kohl visited Russia to do the final deal. One of the quotes attributed to him at that time is "German reunification can be paid for out of petty cash." Hmmmm,lets see. The GDR was financially destitute at this time, and USSR was struggling to meet its various commitments. Lets hear from Horst Teltschik, (Helmut Kohls adviser) again. " By June 1990, the USSR would have been bankrupt. Helmut Kohl sent me to Moscow with the heads of two German banks. The message which I got from Gorbachev was that he wanted this agreement, and he wanted the loan previously agreed with Herr Kohl. I explained that this could be done as part of an overall solution. Mr Gorbachev accepted that a reunited Germany could, in principle, join NATO, subject to conditions some of which were mentioned earlier, viz. No NATO bases in the former territory of thee GDR. :(Well, that did not last long!) Withdrawal of troops of the USSR NOT to be portrayed as a retreat. Germany would loan USSR 4 Billion Deutschmarks (DMs). Should more be needed, it would be given. The European parliament made no objections. (Authors Insert: Why should they? It gave them more subjects and a larger cash cow to milk.) Herr Teltschik went on to say that Mr Gorbachev agreed to reunification to get the newly reunited Germany on side with the USSR. Had the USSR said to us, "You can have the GDR and it will cost you 100 Billion DMs," Germany would have agreed, as a lot of that was made up of loans.

Another cost estimate seen by the author, (Source: Deutsche Welle.) gives the spending incurred post reunification as 2 Trillion Euros. Most of this, 65%, has gone into social benefits. (Here, it is as well to mention that Germany has long had an excellent social security system.) Later, a tax was introduced, which I have heard described in two ways. 1: Solidarity Tax. This is how it has been described in various Deutsche Welle articles seen by the author. 2: The Reunification Tax. This is how it has been described to me by a friend who has recently returned from Germany, having worked there for twenty years. The rate is 7.5% (Source: Associated Press Archive) A further massive cost was the almost total rebuilding of the GDR economy and transport infrastructure.

On reunification, every former citizen of the GDR was given 100 DMs as a "Welcome Bonus." The exchange rate is given by one to one. However, an article seen by this author, immediately post reunification, gives the overall exchange rate as 3 Ostmarks (GDR, or East) to 1 Deutschmark (FRG or West) You guys do the math!

Land.

This is the one thing on which the ship of reunification could have come to grief. Helmut Kohls ambition was that ALL lands lost to Germany immediately post war, should be returned. This, as far as the USSR and other former allies were concerned, was out of the question. It would have meant the return of all those lands which had gone to Poland and the USSR,with the consequent disruption to the populations of those lands, and the consequent loss to the nations of Poland and Russia. In the event, negotiations almost stalled at Herr Kohls insistence on the return of these lands. It is as well to remember here, that it would include the land previously referred to as East Prussia, although Prussia had ceased to exist by decree of the Allied Control Commission, that multi national body which ruled Germany immediately post war, and helped to set up and jump start its governmental system. So, it came down to this: You can have East Germany as it stands, but the lands east of Oder-Neisse are a no-no. (Or should that be "Niet Niet! You guys decide, it is your newsletter!). Helmut carried out the gamblers old principle of "You gotta know when to hold, know when to fold ." Guess he was a Kenny Rogers fan as well. Helmut Kohl wisely took what was on offer. Still, one has to admit that he played a blinder. Joining two separated nations, albeit the same nation historically, in about a year is ,light speed in politics. As we all know, Herr Kohl died in June 2017. However, I think it fair to say that a reunited Germany is as good a monument as any man can have. Wonder if he would have taken three years to screw up Brexit/Brausgang? Bet your butt not! Answers on a postcard please.

HJH November 2019

Thanks Gary!

Gizza Job!



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PoSW's Items of Interest in the media:-

Japan becoming more assertive in military matters:- A short piece in the I newspaper of 6-December - an interesting date, one day before the anniversary of the attack on Pearl Harbor in 1941 - carried the headline, "Force will guard cargo ships in Middle East", written by one Chang-Ran Kim, Reuters correspondent in Tokyo, which says, "Japan plans to send 270 naval personnel to the Middle East to guard ships supplying Japan under a law that allows military deployments for research and intelligence gathering.

Prime minister Shinzo Abe is considering a visit to the Middle East, including Saudi Arabia and the United Arab Emirates, the Nikkei business newspaper added.

Japan maintains friendly ties with both the US and Iran, and has said it would not join in any US coalition to protect merchant vessels in the region. The publication said the government would propose deploying one escort ship and a patrol aircraft on a one year mission that could be renewed annually."

Turks upset over reminders of past slaughter of Armenian people in World War 1:- A little known incident from the First World War was the wholesale killings of large numbers of Armenians by the then Turkish forces. The Turks have always denied this and anyone who says otherwise in present day Turkey is likely to find themselves in serious trouble. These events are seldom if ever mentioned in the West, possibly because – according to some conspiracy theorists - western governments have put pressure on their own media not to draw attention to the facts because they do not wish to do anything to alienate Turkey from supporting ongoing western projects in the Middle East and neighbouring areas; Turkey is regarded as an important part of NATO, essential to the containment of Russian ambitions in the eastern Mediterranean, essential to western interests in the Middle East oilfields and Afghanistan.

Turkey is also a candidate nation for membership of the European Union, EU chiefs are particularly keen to integrate large parts of the Turkish armed forces into the new EU army; according to some who make a study of this kind of thing an important role of this new player on the international scene is to be the putting down of internal dissent in EU nations, and the Turkish army has more experience in that field than most. A short piece on the present day fallout from the Armenian massacre appeared in the *I* newspaper of 5-November with the headline "Erdogan visit to US on hold over genocide vote", written by Orhan Coskun in Ankara, which says, "The president of Turkey looks likely to cancel a trip to Washington next week after the lower house of Congress voted to recognise a mass killing of Armenians a century ago as genocide.

Recep Tayyip Erdogan is due in the US on 13 November at Donald Trump's invitation,

but he has now said the House of Representatives vote on the killings, and another on Turkey's actions in Syria, put a 'question mark' over the plans. 'These steps seriously overshadow ties between the two countries. Due to these decisions, Mr Erdogan's visit has been put on hold,' a senior Turkish official said, adding that a final decision had not been taken.

Turkish sources say the two leaders have a strong bond despite anger in Congress over Turkey's Syria offensive and its purchase of Russian air defences. Those ties could be crucial, given NATO member Turkey's purchase of Moscow's S-400 missile defence system, which under US law should trigger sanctions.

Turkey is already suspended from the F-35 fighter jet programme, and its offensive in north-east Syria has set the stage for further US retaliation."

And this triggered off something in my memory banks which had me reaching for my press-cutting books and for an item which appeared in the New York Times of 6-May-2004; the NYT is not a paper I usually buy and I did not purchase this issue; as I recall, I found it laying on a seat on the train home from Cambridge. No doubt it had been left behind by an American tourist doing the London, up to Cambridge, across to Oxford, on to Stratford-On-Avon and back to London package tour. What caught my eye and which I cut out and kept was an article on the Armenian mass killings, under the sign "advertisement", so a paid-for item rather than something by an NYT journalist, with the headline "Armenians Remember the Genocide and Seek Justice" and written by Ara Abramyan, President, World Armenian Congress, a long article, probably in an on-line NYT archive if anyone wants to read the whole thing, but the opening words of the first paragraph, "On April 24 Armenians around the world were commemorating the 89th anniversary of mass killings of Armenians in the Ottoman Empire..." tells us that the events of 1915 are not forgotten.

Point to ponder:- "Money can't buy friends, but you can get a better class of enemy" - Spike Milligan, British comic actor and author.

Chart Section Index

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4.Family III

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January 2020

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Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jan kHz, ID, ...	Feb kHz, ID, ...
		x	x				0315		E11	03	5779 25#	5779 25#
x	x	x	x	x	x	x	0400		V13	0	18040	18040
			x		x	x	0435		E11	03	6280 35#	6280 35#
x							0450		E11	03	4909 41#	4909 41#
x	x	x	x	x	x	x	0500		V13	0	11430	11430
x	x						0510		S11A	03	9057 65#	9057 65#
x	x		x		x	x	0455		HM01	18	10860	10860
x	x	x		x		x	0455		HM01	18	11462	11462
x			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					0530/0550/0610		E07A	01B	5111/ 5811/ 6911 189	5111/ 5811/ 6911 189
x	x						0540		M01A	14	7692 536	7692 536
x	x		x		x	x	0555		HM01	18	10345	10345
x	x	x		x		x	0555		HM01	18	14375	14375
x			x			x	0600		E11	03	10330 18#	10330 18#
x					x		0600/0620/0640		M12	01B	search	search
x	x	x	x	x	x	x	0600		V13	0	11430	11430
x							0600/0610		S06S	01A	16145/14240 438	16145/14240 438
x				x		x	0600/0620/0640		M12	01B	search	search
	x	x			x	x	0600/0700	1/3	E06	01B	13960/16350 139	17470/20085 702
x			x			x	0620		M01A	14	10233 or 10235 354/458	10233 or 10235 354/458
x	x	x				x	0620		M01A	14	9421 135	9421 135
x			x			x	0630		M01A	14	9447 143/796	9447 143/796
x	x	x			x	x	0630		M01A	14	8111 902/536	8111 902/536
			x			x	0630/0640		S06S	01A	11780/12570 156	11780/12570 156
x							0630/0640		S06S	01A	13470/16515 462	13470/16515 462
x	x						0640		E11	03	11450 94#	11450 94#
x	x	x				x	0645		E11	03	7840 51#	7840 51#
x	x	x	x	x	x	x	0655		HM01	18	9330	9330
x	x	x	x	x	x	x	0655		HM01	18	13435	13435
x	x	x	x	x	x	x	0700		S11A	03	9050 47#	9050 47#

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jan kHz, ID, ...	Feb kHz, ID, ...
	x			x			0700		E11	03	6804 57#	6804 57#
x	x	x	x	x	x	x	0700		V13	0	8169, 7502	8169, 7502
					x	0700		M01	01B	5465 197	5465 197	
x							0700/0710		S06S	01A	5250/ 6320 452	5250/ 6320 452
x			x				0700/0720/0740		E07	01B	14472/14972/16272 492	15823/16323/18623 836
					x	0700/0720/0740		E07	01B	8123/ 9323/10423 134, search	10112/11112/12112 111, search	
				x	x	0710		E11	03	4505 49#	4505 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			0715		E11	03	9130 63#	9130 63#	
x			x			0720		M01A	14	9151 728	9151 728	
x						0730/0740		S06S	01A	7410/11532 427	7410/11532 427	
x						0745		E11	03	10213 26#	10213 26#	
	x	x				0745		E11	03	17378 34#	17378 34#	
x	x	x		x		0755		HM01	18	9065	9065	
x	x	x	x			0755		HM01	18	11365	11365	
x	x	x	x	x	x	x	0800	V13	0	8169, 7502	8169, 7502	
x							0800	1/3	G06	01A	5320 329	5320 329
	x						0800/0810		E17Z	01A	11170, 9820 217	11170, 9820 217
x							0800/0810		S06S	01A	11945/13195 127	11945/13195 127
				x			0800/0810	1	S06S	01A	8680/ 8260 132	8680/ 8260 132
x	x						0800/0820/0840		XPA2	01B	11493/13393/14793 check	12137/13937/14737 check
				x			0800/0900		M14	01A	4730/ 4650 523	4730/ 4650 523
				x	x		0805		E11	03	4909 31#	4909 31#
x	x						0810/0830/0850		XPA1	01B	12157/13462/14374	13397/14413/15972
	x	x	x				0820		E11	03	5149 43#	5149 43#
x	x						0820		E11	03	14611 13#	14611 13#
x							0830/0840		S06S	01A	8057/ 8530 764	8057/ 8530 764
	x						0830/0840		S06S	01A	7062/10532 464	7062/10532 464
	x						0830/0840		S06S	01A	11535/11830 172	11535/11830 172

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jan kHz, ID, ...	Feb kHz, ID, ...
				x			0830/0840		S06S	01A	x11945/13195 352, search	x11945/13195 352, search
			x	x			0830/0930		S06	01A	16243/13469 842	17440/15614 842
x	x	x					0845		E11	03	12089 15#	12089 15#
x	x	x		x			0855		HM01	18	9240	9240
x	x	x		x			0855		HM01	18	11462	11462
x	x						0900		E11	03	8597 53#	8597 53#
x							0900/0910		S06S	01A	14675/12830 232	14675/12830 232
			x				0900/0910		S06S	01A	5765/ 6315 239	5765/ 6315 239
				x			0900/0920/0940		E07A	01B	11123/12123/13423 114	11053/12153/13553 015
x	x						0910/0930/0950		XPA2	01B	14977/13971/13371	16102/14951/13991
			x		x		0910/0930/0950		XPA2	01B	14794/13994/12194	16146/15846/14446
x			x				0915		S11A	03	4242 48#	4242 48#
x	x	x	x	x	x	x	0930		M14	01A	17458/15994 617, only 10., (11.), 25., (26)	17458/15994 617, only 10., (11.), 25., (26)
	x	x					0930		E11	03	7469 27#	7469 27#
		x					0930/0940		S06S	01A	8812/ 9540 698	8812/ 9540 698
x	x	x	x	x			0955		HM01	18	9155	9155
x	x	x	x	x			0955		HM01	18	12180	12180
x		x	x				1000		E11	03	8597 30#	8597 30#
x							1000/1010		S06S	01A	6440/ 5660 427	6440/ 5660 427
	x						1000/1010		S06S	01A	12365/14280 276	12365/14280 276
x			x				1020		S11A	03	7600 42#	7600 42#
x	x						1045		E11	03	7984 69#	7984 69#
	x	x	x				1100		S11A	03	5371 37#	5371 37#
x							1100/1110		S06S	01A	5035/5975 265	5035/5975 265
x				x			1100/1110/1110 1130/1140/1150		XPB1	01B	search	search
x			x				1100/1120/1140		E07	01B	13523/12123/10623 516	16161/14661/13361 163
x	x	x	x	x	x	x	1200		V13	0	9276	9276
	x						1200/1300	1/2	G06	01A	4897/ 4034 145	4897/ 4034 145
		x					1200/1210		S06S	01A	12155/10920 175	12155/10920 175

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jan kHz, ID, ...	Feb kHz, ID, ...
	x				x		1200/1220/1240		XPA2	01B	search	search
		x	x				1200/1220/1240		XPA2	01B	search	search
	x	x					1205		E11	03	6433 46#	6433 46#
		x					1300	1/3	G06	01A	4460 329	4460 329
x	x	x	x	x	x	x	1300		V13	0	9276	9276
x							1300/1310		S06S	01A	8420/10635 149	8420/10635 149
	x	x					1310/1330/1350		M12	01B	13932/13532/12132 951	14489/13489/12189 441
x			x				1345		E11	03	13363 91#	13363 91#
			x				1400/1420/1440		E07	01B	8123/ 9323/10423 134, search	10112/11112/12112 111, search
x	x	x	x	x	x	x	1400		M08A	18	8096	8096
x	x						1400/1420/1440		M12	01B	10547/ 9047/ 7547 505	13362/11562/10362 353
		x		x			1410/1430/1450		E07	01B	11593/10293/ 9293 916	13368/12168/11168 745
			x				1500		M01	14	5810 197	5810 197
x							1500/1510		S06S	01A	6845/ 9170 914	6845/ 9170 914
x			x				1530		E11	03	5082 52#	5082 52#
		x					1530		E11	03	5409 26#	5409 26#
x	x	x	x	x	x	x	1555		HM01	18	11435	11435
x	x						1600	1/3	M14	01A	4483 (tue) 5425 (wed) 239	4483 (tue) 5425 (wed) 239
x			x				1600/1620/1640		XPA2	01B	9317/ 8117/ 7517	11461/10261/ 9161
x	x						1600/1620/1640		XPA2	01B	10465/ 9165/ 8065	12173/1B373/ 9373
x				x			1605		E11	03	5344 23#	5344 23#
		x			x		1610/1630/1650		E07A	01B	7632/ 6832/ 5832 688	9347/ 8147/ 6847 318
	x				x		1625		E11	03	5082 97#	5082 97#
x	x						1645		E11	03	10800 33#	10800 33#
		x		x	x		1650		E11	03	6849 92#	6849 92#
x							1700/1800	1/2	G06	01A	3619/ 4528 145	3619/ 4528 145
x	x	x	x	x	x	x	1655		HM01	18	11530	11530
		x					1700/1720/1740		M12	01B	12162/11566/1B711 546	12162/11566/1B711 546
		x					1700/1720/1740		M12	01B	12162/11566/1B711 546	12162/11566/1B711 546
		x		x			1700/1800	1/3	M14	01A	5374/ 4975 382	5374/ 4975 382
	x			x			1705		E11	03	4505 39#	4505 39#

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jan kHz, ID, ...	Feb kHz, ID, ...
x							1710/1730/1750		M12	01B	11435/10598/ 9327 938	11435/10598/ 9327 938
	x						1710/1730/1750		M12	01B	12162/11566/10711 546	12162/11566/10711 546
	x						1730		E11	03	5779 41#	5779 41#
x					x		1745		E11	03	12924 24#	12924 24#
x x x x x x x							1755		HM01	18	11635	11635
x	x						1800		M01	14	5320 197	5320 197
	x				x		1800/1820/1840		E07	01B	6963/ 5863/ 4763 987	8144/ 6944/ 5744 197
x							1800/1820/1840		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
x							1800/1820/1840		M12	01B	11435/10598/ 9327 938	11435/10598/ 9327 938
	x						1800/1820/1840		M12	01B	12162/11566/10711 546	12162/11566/10711 546
x							1820	2/4	M14	01A	4636 186	4636 186
	x						1830	2/4	G06	01A	4519 271	4519 271
x		x		x			1850		S11A	03	11486 28#	11486 28#
x	x						1900		E11	03	6849 64#	6849 64#
x							1900/1920/1940		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
		x					1900/2000	1/3	M14	01A	4813/ 4480 735	4813/ 4480 735
		x					1900/2000	1/3	S06	01A		7309/ 5091 627
		x	x				1910		E11	03	10487 61#	10487 61#
x							1910		M01B	14	2435, 3520 853	2435, 3520 853
x							1920	2/4	M14	01A	4761 748	4761 748
		x					1930	2/4	G06	01A	4792 436	4792 436
		x	x				1930		E11	03	4909 36#	4909 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

Time UTC		Freq kHz			ID	M	T	W	T	F	S	S
July												
1400	1420	1440	15821	13921	12221	892	X		X			
1800	1820	1840	8047	6802	5788	463	X					
1950	2010	2030	16323	14923	- - -	395			X		X	
2000	2020	2040	10343	9264	8116	124	X					
2110	2130	2150	13381	12181	- - -	317	X			X		
Aug												
1400	1420	1440	15983	14683	13383	963	X		X			
1800	1820	1840	8047	6802	5788	463	X					
1950	2010	2030	16148	14748	13448	174			X		X	
2110	2130	2150	12214	11014	- - -	209	X			X		
Sep												
1400	1420	1440	16348	14848	13448	384	X		X			
1800	1820	1840	8047	6802	5788	463	X					
1950	2010	2030	13375	11575	- - -	174			X		X	
2110	2130	2150	9246	8146	- - -	218	X			X		
Oct												
1210	1230	1250	14416	13416	12216	442			X		X	
1400	1420	1440	18639	17439	15839	648	X		X			
1800	1820	1840	8047	6802	5788	463	X					
1950	2010	2030	10984	9384	8084	930			X		X	
2110	2130	2150	8164	6964	- - -	197	X			X		
Nov												
1310	1330	1350	13936	12136	- - -	915			X		X	
1400	1420	1440	16296	14796	13396	273	X		X			
1800	1820	1840	8047	6802	5788	463	X					
2050	2110	2130	7536	6836	5136	581			X		X	
2200	2220	2240	6859	7459	9959	849				X	X	
2210	2230	2250	6937	5837	- - -	975	X			X		
Dec												
1400	1420	1440	13371	11571	10271	352	X		X			
1800	1820	1840	8047	6802	5788	463	X					
2050	2110	2130	6908	5808	- - -	985			X		X	
2200	2220	2240	5832	6832	- - -	887				X	X	
2210	2230	2250	6937	5737	- - -	975	X			X		

Once again Mid-year repeats were severely reduced from April by the usual annual changes made to many of the regular schedules.

2016 saw the lowest activity from M12 seen for many years. Since then activity has increased considerably, although not to the levels seen previously.

However, this still bodes well for the future of M12 as Morse remains a major part of this groups output.

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jan kHz, ID, ...	Feb kHz, ID, ...	Nov kHz, ID, ...	Dec kHz, ID, ...	Remarks
	x	x					0315		E11	03	5779 25#	5779 25#	5779 25#	5779 25#	since 01/14, last log 08/19
			x	x	0435				E11	03	6280 35#	6280 35#	6280 35#	6280 35#	since 04/15, last log 10/19
x					0450				E11	03	4909 41#	4909 41#	4909 41#	4909 41#	since 02/10, last log 12/19 2nd transmission Thu 1730z
x	x				0510				S11A	03	9057 65#	9057 65#	9057 65#	9057 65#	since 08/19, last log 11/19
x			x		0600				E11	03	10330 18#	10330 18#	10330 18#	10330 18#	since 07/15, last log 11/19
x	x				0640				E11	03	11450 94#	11450 94#	11450 94#	11450 94#	since 07/17, last log 12/19
x	x				0645				E11	03	7840 51#	7840 51#	7840 51#	7840 51#	since 07/09, last log 12/19
x	x				0700				S11A	03	9050 47#	9050 47#	9050 47#	9050 47#	since 04/10, last log 12/19 until 09/19 at 1015z
x		x			0700				E11	03	6804 57#	6804 57#	6804 57#	6804 57#	since 01/12, last log 12/19
		x	x		0710				E11	03	4505 49#	4505 49#	4505 49#	4505 49#	since 07/15, last log 12/19
x		x			0715				E11	03	9130 63#	9130 63#	9130 63#	9130 63#	since 02/11, last log 12/19
x					0745				E11	03	10213 26#	10213 26#	10213 26#	10213 26#	since 03/14, last log 12/19 2nd transmission Thu 1530z
x	x	x			0745				E11	03	17378 34#	17378 34#	17378 34#	17378 34#	since 06/17, last log 11/19
		x	x		0805				E11	03	4909 31#	4909 31#	4909 31#	4909 31#	since 07/14, last log 12/19
	x	x			0820				E11	03	5149 43#	5149 43#	5149 43#	5149 43#	since 10/09, last log 12/19
x	x				0820				E11	03	14611 13#	14611 13#	14611 13#	14611 13#	since 12/18, last log 12/19
x	x				0845				E11	03	12089 15#	12089 15#	12089 15#	12089 15#	since 07/17, last log 12/19
x	x				0900				E11	03	8597 53#	8597 53#	8597 53#	8597 53#	since 10/05, last log 12/19
x		x			0915				S11A	03	4242 48#	4242 48#	4242 48#	4242 48#	since 04/19, last log 12/19
x	x	x			0930				E11	03	7469 27#	7469 27#	7469 27#	7469 27#	since 02/14, last log 12/19 until 02/19 at 1955z
x		x			1000				E11	03	8597 30#	8597 30#	8597 30#	8597 30#	since 11/16, last log 12/19
x		x			1020				S11A	03	7600 42#	7600 42#	7600 42#	7600 42#	since 02/10, last log 12/19
x	x				1045				E11	03	7984 69#	7984 69#	7984 69#	7984 69#	since 03/18, last log 12/19
x	x	x			1100				S11A	03	5371 37#	5371 37#	5371 37#	5371 37#	since 02/14, last log 12/19
x	x				1205				E11	03	6433 46#	6433 46#	6433 46#	6433 46#	since 03/10, last log 12/19 2nd transmission Mon 0450z
x			x		1345				E11	03	13363 91#	13363 91#	13363 91#	13363 91#	since 10/15, last log 12/19
x		x			1530				E11	03	5082 52#	5082 52#	5082 52#	5082 52#	since 05/15, last log 12/19
	x				1530				E11	03	5409 26#	5409 26#	5409 26#	5409 26#	since 06/14, last log 10/19 2nd transmission Mon 0745z
x		x			1605				E11	03	5344 23#	5344 23#	5344 23#	5344 23#	since 11/15, last log 12/19
x		x			1625				E11	03	5082 97#	5082 97#	5082 97#	5082 97#	since 02/15, last log 12/19
x	x				1645				E11	03	10800 33#	10800 33#	10800 33#	10800 33#	since 06/17, last log 12/19
		x	x		1650				E11	03	6849 92#	6849 92#	6849 92#	6849 92#	since 05/16, last log 12/19
x		x			1705				E11	03	4505 39#	4505 39#	4505 39#	4505 39#	since 02/14, last log 12/19 until 02/19 at 1955z
	x				1730				E11	03	5779 41#	5779 41#	5779 41#	5779 41#	since 03/10, last log 10/19 2nd transmission Mon 0450z
x			x		1745				E11	03	12924 24#	12924 24#	12924 24#	12924 24#	since 04/18, last log 12/19
x		x	x		1850				S11A	03	11486 28#	11486 28#	11486 28#	11486 28#	since 06/17, last log 12/19
x	x				1900				E11	03	6849 64#	6849 64#	6849 64#	6849 64#	since 05/16, last log 12/19
		x	x		1910				E11	03	10487 61#	10487 61#	10487 61#	10487 61#	since 04/17, last log 12/19
		x	x		1930				E11	03	4909 36#	4909 36#	4909 36#	4909 36#	since 03/14, last log 12/19 2nd transmission Thu 1530z

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jan kHz, ID, ...	Feb kHz, ID, ...	Nov kHz, ID, ...	Dec kHz, ID, ...	Remarks
x							0800	1/3	G06	01A	5320 329	5320 329	5320 329	5320 329	since 07/10, last log 11/19 repeat at Thu 1300Z
		x					1200/1300	1/2	G06	01A	4897/ 4034 145	4897/ 4034 145	4897/ 4034 145	4897/ 4034 145	since 10/14, last log 12/19 yearly changing frequencies + id
		x					1300	1/3	G06	01A	4460 329	4460 329	4460 329	4460 329	since 09/11, last log 12/19 repeat from Mon 0800Z
x							1700/1800	1/2	G06	01A	3619/ 4528 145	3619/ 4528 145	3619/ 4528 145	3619/ 4528 145	since 04/10, last log 11/19 yearly changing frequencies + id
		x					1830	2/4	G06	01A	4519 271	4519 271	4519 271	4519 271	since 05/01, last log 11/19 repeat at Fri 1930Z
		x					1930	2/4	G06	01A	4792 436	4792 436	4792 436	4792 436	since 04/01, last log 12/19 repeat from Thu 1830Z

SPECIAL MATTERS

Thanks to all our contributors:

Ary, BR, Cyp, DanAr, Danix, DG, E, Edd, HH, HJH, JkC, Jochen, JTR, KW, KoB, Malc, MaleAnon, PoSW, PLdn, RNGB, SloRoll, ,



Apologies to anyone missed.

Operation Jallaa: Now stood down.

MESSAGES:

E: A Happy New Year to you and yours!

RELEVANT WEBSITES

ENIGMA 2000 Website:

<http://www.enigma2000.org.uk>

Frequency Details can be downloaded from:

<http://www.cvni.net/radio/>

Time zone information:

<http://www.timeanddate.com/library/abbreviations/timezones/>

Encyclopedia of Espionage, Intelligence, and Security

<http://www.espionageinfo.com/>

EyeSpyMag!

<http://www.eyespymag.com>

2019

Source: Vertex42.com

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

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

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

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

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

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

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

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

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

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

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

December						
Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
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		

2020

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

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

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

April						
Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5