ENIGMA 2000 NEWSLETTER

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See ‘Interesting Snippet’ inside [after logs]

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The last month [and the start of May too] have been beset by poor propagation as out sun decides to become more active; at least one fade out and much attenuation of signals above 10MHz being noticed.

That said, Peter in Saffron Waldron has managed his usual observations and comments thus: Several interesting developments in the Number Station world in recent weeks. Some unusual behaviour from the Thursday and Friday evenings E06 and G06 schedules in the month of March; the first + third Thursdays in the month 2030 UTC E06 failed to show up on 3-March, and there was no sign of the Friday 2130 UTC on the 4th. It turned out later in the month that these two had moved to Saturday and Sunday slots in March, appearing at the same times as would have been expected to be used on Thursday and Friday and on the frequencies used in March of past years. A similar situation noted with the expected 1830 UTC G06 German language on the second Thursday in the month, the 10th, and also no sign of a G06 at 1930 UTC on Friday the 11th. However, on Sunday 13-March found a G06 in "full message" mode at 1935 UTC on 5,442 kHz, the frequency expected to be used for the Friday transmission. Also showed up again on Sunday 27-March. No doubt the Thursday 1830 UTC sending would have moved to Saturdays the 12th and 26th of March on 5,934 kHz. Likewise the Thursday E06 expected on the 17th at 2030 UTC on 5,186 kHz showed up on Saturday the 19th, and the Friday 2130 UTC on 5,197 kHz moved to Sunday the 20th. Group counts for these transmissions were higher than usual, sixty or ninety instead of twenty or fifteen 5Fs which have been the norm for some time. However, in April these schedules have moved back to their usual Thursday and Friday slots, and still with the higher group counts.

Some M14 MCW activity, possibly connected with the above observations noted in March:-
10 March-16, Thursday:- 1820 UTC, 5,947 or 5,948 kHz - forgot to log the frequency until it had gone off - strong carrier noted a few minutes earlier, assumed this was going to be the expected G06 warming up on a frequency a bit higher than the usual 5,934 but realised shortly after 1820Z that an M14 style call-up had begun, call "346", constant carrier keyed audio tone MCW. Inside the 49 metre band but competing well with broadcasters on close frequencies. DK/GC "190 190 15 15", the usual M14 5Fs as doubles but no "break" symbols at the start and finish. Ended with the usual DKDK GCGC and 5-dash "00000".
Something similar noted on the following day:-
11-Mar-16, Friday:- 1923 UTC, 5,463 kHz, strong M14 MCW in progress calling, "537", then DK/GC "569 569 15 15", again no "break" symbols, ended 1928 UTC, carrier stayed on until after 1931 UTC.

The S06 with call "480" heard on most Sundays and Tuesdays at 1700 and 1730 UTC for the first three months of 2016 now appears to have gone or at least I have not been able to find it in April. So not much S06 activity now, the only two regular schedules remaining at a time when a decent God-fearing Englishman is near a radio seem to be first + third Saturdays, call "614", and first + third Fridays, call "761".

The HM01 Mixed-Mode station from Cuba still active, but signals strengths somewhat variable in the UK which would not be a problem if the audio levels were not so low which makes trying to copy the 5Fs such hard work. Someone is not paying attention to the meter on the transmitter control panel labelled with the Spanish equivalent of, "Percent Modulation".

Unusual station in the 49 metre broadcast band; not a number station as such although numbers feature prominently in its output; noted for several months now a station on 5,905 kHz in the German language with a short broadcast of weather information for the Baltic and North Sea areas. Starts a few minutes past 1200 UTC with a short announcement by YL voice than a male voice with weather reports and forecast. Something like a longer and much more detailed version of the "Shipping Forecast" which goes out on the BBC's Radio 4 several times a day, mainly because the long-wave transmitter on 198 kHz can be received well in British coastal waters, something which goes back a long way to a time when the only radio which might be carried by small vessels would be a domestic portable but considered something of an anachronism these days when even the smallest leisure craft carries VHF marine radio and can obtain weather information by that means. Interesting that the German Weather Service goes to the trouble of broadcasting on short-wave. The mode of transmission is similar to that used by some of the number stations with which we are familiar; it uses the AM with lower side-band suppressed or upper side-band with carrier.

Morse Stations

All frequencies listed in kHz. Freqs are generally +- 1k
This is a representative sample of the logs received, giving an indication of station behaviour and the range of times/freqs heard. These need to be read in conjunction with any other articles/charts/comments appended to this issue.

Morse - Number Stations

UNID CW

Another good teaser found by Jean-Paul (JPL). This closely resembles M14 / M24 in format, but with the exception of the use of // in place of = =. We have seen // used in M01 transmissions occasionally - but not previously with M14.

8140 1054z 12 Apr 352 (323 31) 90125 16269....44060 00000 (Remote tuner Siberia) JPL TUE

352 (IP – Cont'd – 1054z)
323 323 31 31 // (1055z)
90125 16269 72325 63399 37715 69303 22356 75942 78176 63135 869 (Into carrier – 1057z) (QSZ) (T = 0)

352 352 (1201z)
74152 95852 84215 73046 84606 46192 53170 90876 44060
// 323 323 31 31
00000 (1203z – Sent all together and very quickly)

352 (Cont'd – 1203z) (Into carrier briefly – Silent) (Monitored until 1221z)

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

March 2016:

5020	2000z	01 Mar	'463' 596 30 = =	20321...	...LG 65165 = = 000	Strong, slow. Corrected error in grp30	BR/HFD	TUE
	2000z	03 Mar	'463' 803 30 = =	89129...	...LG 50662 = = 000	Good. Numerous errors Ends 2008z	JkC	THU
	2000z	08 Mar	'463' 219 30 = =	78988...	...LG 12563 = = 000	Strong, Slow. Errors in grps12 & 14	BR	TUE
	2000z	10 Mar	'463' 164 30 = =	09944...	...LG 01071 = = 000	Good. Ends 2013z Errors noted	JkC	THU
	2000z	15 Mar	'463' 319 30 = =	13348...	...LG 13749 = = 000	V.strong/Fair. Ends 2011z. Error grp04	CB/JkC	TUE
	20**01**z	17 Mar	'463' 547 30 = =	18730...	...LG 00515 = = 000	Strong/Fair. Slow. Corrected error grp13	CB/JkC	THU
	2000z	22 Mar	'463' 147 30 = =	77538...	...LG 43589 = = 000	Strong, slow Corrected error grp18	CB	TUE
	2000z	24 Mar	'463' 218 30 = =	47566...	...LG 03123 = = 000	Good/Strong, fast. Error in grp06	CB	THU
	2000z	29 Mar	'463' 988 30 = =	99981...	...LG 65488 = = 000	Good, med-fast. Excellent CW. No errors	BR	TUE
	2005z	31 Mar	'463' 314 30 = =	53113...	...LG 47148 = = 000	Weak, fast & irregular. Numerous errors	BR/CB	THU
5475	1800z	01 Mar	'463' 255 30 = =	8 . . 77...	...LG 02463 = = 000	Good, fast. Period in grp01 as sent.	BR/HFD	TUE
	1800z	03 Mar	'463' 618 30 = =	12776...	...LG 11939 = = 000	Good. Repeat of 24 Dec 2015	JkC	THU
	1800z	08 Mar	'463' 303 30 = =	87964...	...LG 30654 = = 000	Fair. Ends 1811z	JkC	TUE
	1800z	10 Mar	'463' 146 30 = =	72974...	...LG 58759 = = 000	Good. Ends 1808z. Noted errors	JkC	THU
	1800z	15Mar	'463' 271 30 = =	72954...	...LG 02392 = = 000	Strong/Good Ends 1809z Errors noted	CB/JkC	TUE
	1800z	17Mar	'463' 183 30 = =	54789...	...LG 78549 = = 000	Strong/Fair. Slow. Ends 1814	CB	THU
	1800z	22Mar	'463' 174 30 = =	99663...	...LG 20398 = = 000	Fair, fast. Freq 5476kHz	BR/CB	TUE
	1800z	24 Mar	Swamped by heavy data QRM				CB	THU
	1800	29 Mar	'463' 122 30 = =	47566...	...LG 06165 = = 000	Fair, med-fast. Excellent CW. No errors	BR/CB	TUE
	1800z	31 Mar	'463' 801 30 = =	98565....	...LG 62410 = = 000	Started by sending 2000z msg [Note 1]	BR/CB	THU
6260	1500z	05 Mar	NRH - Strong pirate BC stn on 6260kHz. Very unlikely to hear M01 unless strong signal				BR	SAT
	1500z	12 Mar	'463' 174 30 = =	79587...	...LG 35642 = = 000	Good, fast. With noted errors	BR/HFD	SAT
	1500z	19 Mar	'463' 412 **39** = =	23147...	...LG 20014 = = 000	Weak, fast. Many errors. 39 grps [Note 2]	BR	SAT
6510	0700z	06 Mar	'463' 684 30 = =	78458...	...LG 01248 = = 000	Weak, fast. With noted errors	BR	SUN
	0700z	13 Mar	'463' 211 30 = =	98547...	...LG 56973 = = 000	Fair. fast. QRM from French QSO	BR	SUN
	0700z	20 Mar	'463' 291 **39** = =	98789...	...LG 99176 = = 000	Weak, fast. No errors. 39 grps [Note 2]	BR/CB	SUN
	0700z	27 Mar	'463' 147 30 = =	22835...	...LG 48415 = = 000	Weak, fast. Numerous errors	BR	SUN

[Note 1] On Thursday 31 March, the 1800z transmission started immediately with no call-up, sent the first sixteen groups of a message before sending two error characters. The '463' call-up was then commenced, following which the correct message was sent. Examination of the intercept showed that the partial message sent in error was used for the later 2000z schedule.

[Note 2] The station sent messages of 39 groups during the weekend of 19 - 20 March.

April 2016:

5020	2000z	05 Apr	'463' 608 30 = =	03136...	...LG 55056 = = 000	Strong. Excellent CW. No errors	CB/RT	TUE
	2000z	07 Apr	'463' 714 30 = =	62730...	...LG 97430 = = 000	Fair. Extremely fast. Numerous errors	BR	THU
	1959z	12 Apr	'463' 512 30 = =	31710...	...LG 93040 = = 000	Strong, fast. Good CW. Several errors	BR/CB	TUE
	2000z	14 Apr	'463' 504 30 = =	06582...	...LG 65411 = = 000	Weak, med-fast. Errors noted	BR/CB	THU
	2000z	19 Apr	'463' 707 30 = =	89129...	...LG 35397 = = 000	Weak, slow. Difficult copy at times	BR	TUE
	2000z	21 Apr	'463' 504 30 = =	06582...	...LG 65411 = = 000	Strong/Fair. Errors noted	CB/JkC	THU
	2000z	26 Apr	'463' 313 30 = =	41 .60...	...LG 24188 = = 000	Weak, med-fast. Two corrected errors	BR/CB	TUE
	2000z	29 Apr	'463' 891 30 = =	69980...	...LG 85422 = = 000	Strong, fast. Errors noted [Note 3]	CB/JkC	THU
5475	1800z	05 Apr	'463' 960 30 = =	85387...	...LG 01195 = = 000	Strong. Good CW. Corrected error grp04	CB	TUE
	1800z	07 Apr	'463' 147 30 = =	09504...	...LG 36122 000	Fair, v.fast. Good CW. Errors noted.	BR/CB	THU
	1800z	12 Apr	'463' 706 30 = =	01564...	...LG 81933 = = 000	Fair, med-fast. Steady but hesitant CW	BR/CB	TUE
	1800z	14 Apr	'463' 504 30 = =	06582...	...LG 65441 = = 000	V.weak, med-fast. Poor copy with errors	BR/CB	THU
	1800z	19 Apr	'463' Very weak - No useful copy				BR	TUE
	1800z	21 Apr	'463' 165 30 = =	98495...	...LG 49110 = = 000	Strong/Fair. Error in grp05	CB/JkC	THU
	1800z	26 Apr	'463' 137 30 = =	52145...	...LG 37055 = = 000	Strong, slow. Error in grp11	CB	TUE
	1800z	29 Apr	'Very weak - No useful copy				BR/CB	THU
6260	1500z	02 Apr	NRH into S.W. France (No reception of the Sat M01 logged in SW France for April)				CB	SAT
	1500z	09 Apr	'463' 713 30 = =	46 .20...	...LG 45191 = = 000	Weak, med-fast. Poor copy. 39 grps?	BR	SAT
	1500z	16 Apr	'463' 235 30 = =	85387...	...LG 00119 = = 000	Good. Error noted grp11	E.SMITH	SAT
6510	0700z	10 Apr	'463' 460 30 = =	44278...	...LG 61780 = = 000	Good, med-fast. No errors	BR/HFD	SUN
	0700z	17 Apr	'463' 341 30 = =	64726...	...LG 18308 = = 000	Good, fast. Errors in grps12 & 20	BR	SUN
	0700z	24 Apr	'463' 183 30 = =	09564...	...LG 18308 = = 000	Strong, slow/med-fast. [Note 4]	BR/CB	SUN

[Note 3] Appears to be the same message, with different DK, as M01 1800z 06 Jan 2015 - (full transcript not available), but first 3 & last 2 groups are identical in both messages.

[Note 4] Groups 22 -30 as sent on previous Sunday (17 Apr), with slight change made to grp23. Chris (CB) notes that there was a pause between groups 22 & 23 which may have been due to the Op. changing over his pad, (or whatever is used), to the previously used message.

M01 5475kHz 1800z 08 Mar16

463 (R4m) 303 303 30 30 = =

87964 02546 03652 01569 02547
85467 36245 00336 85469 02541
87963 03254 36252 36146 96547
02314 00378 68425 96420 03156
54565 85258 75753 95912 35411
22698 77566 02154 45210 30654
= =

303 303 30 30 000

Courtesy JkC

M01 5020kHz 2000z 10 Mar16

463 (R4m) 164 164 30 30 = =

09944 05372 77435 27801 39430
91342 41582 35581 82466 04919
02669 18917 71327 54387 68484
65313 79315 86409 23643 04598
60996 39989 37968 73124 35907
90644 50118 29124 69362 01071
= =

164 164 30 30 000

Courtesy JkC

M01 6510kHz 0700z 20 Mar16

463 (R4m) 291 291 39 39 = =

98789 03524 61564 57672 00635
64314 00028 56516 65165 98146
21656 94871 20665 15314 65154
79898 21969 44504 64568 01654
65914 61646 00213 65651 79811
54554 20321 87917 46047 96961
32220 63224 98547 46513 32087
53486 87871 21648 99176 = =

291 291 39 39 000

Courtesy BR

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

Two great intercepts from Jean-Paul (JPL) of typical M01a activity in March, one a full log - both captured through the Siberian SDR. Followed by another fine example of M01a from Uascan. Good work guys!

M01a 5258kHz 1817z 22 Mar16

(IP – Hand sent – 1817z)

458 458 458 45278 45278 (1818z)
458 458 458 45278 45278 (1819z)
458 458 458 45278 45278 (1820z)
458 458 458 45278 45278 (1820z)
458 458 458 45648 45648 (1821z)
458 458 458 45648 45648 (1821z)
458 458 458 45648 45648 (1822z)
458 458 458 45648 45648 (1823z)
458 458 458 45648 45648 (1823z)
458 458 458 45648 45648 (1824z)
458 458 458 44648 44648 (1825z)
458 458 458 44648 44648 (1825z)

111 (1827z)

111 000 (1827z - Silent)

(Via Remote tuner Siberia)]

Courtesy JPL

M01a 4642 2047z 23 Mar16

75112 (2047z) (Beginning of sked)

240 240 240 75112 75112 (2048z)
240 240 240 75112 75112 (2048z)
240 240 240 75112 75112 (2049z)
240 240 240 240 75112 75112 (2050z)
240 240 240 75112 75112 (2050z)
240 240 240 75372 75372 (2051z)
240 240 240 75372 75372 (2051z)

111 (2052z)
111 (2053z)

111 000 (2054z – Silent)

(Via Remote tuner Siberia)

Courtesy JPL

M01a 4591 0912z 24 Apr16

517 517 (0912z)

53644 53644
53644 53644
53644 53644

36445 36445 (0920z)

336 45553 45553 (0925z)
336 45553 45553
336 45553 45553

333 333 64655 64655
333 64655 64655
333 64655 64655

(0940z)
999...5...2...49... 79162 ...9... 66079
...9715 ... 55614 63629 80794 71518 05469
36...50 1... 72520

Courtesy uascan

M01b

March 2016:

3510/4605	1932 - 2000z	03 Mar	'201' 435 63 = 85705 ... 60867 000 Weak//Weak. Repeat of 25 Feb 2015	JkC	THU
	1932 - 2000z	10 Mar	'201' 435 63 = 85705 ... 60867 000 Weak//Fair	HFD/JkC	THU
	1932 - 2001z	17 Mar	'201' 435 63 = 85705 ... 60867 000 Fair//Fair	JkC	THU
3520//4585	2110 - 2138z	11 Mar	'582' 435 63 = 85705 ... 60867 000 Fair//Weak	HFD/JkC	FRI
3535//4590	1910 - 1938z	07 Mar	'420' 435 63 = 85705 ... 60867 000 Weak//Weak	HFD/JkC	MON
	19**09** - 1938z	21 Mar	'420' 435 63 = 85705 ... 60867 000 Fair//Weak Up early	JkC	MON
3625//4940	2002 - 2031z	11 Mar	'153' 435 63 = 85705 ... 60867 000 Fair//FAir	JkC	FRI
3645//4455	2015 - 2043z	07 Mar	'771' 435 63 = 85705 ... 60867 000 Weak//Fair	HFD/JkC	MON
3715//4570	2040 - 2109z	03 Mar	'774' 435 63 = 85705 ... 60867 000 Weak//Fair	HFD/JkC	THU
	2042 - 2110z	10 Mar	'477' 435 63 = 85705 ... 60867 000 Fair//Fair	JkC	THU
	2042 - 2111z	17 Mar	'477' 435 63 = 85705 ... 60867 000 Fair//Weak	JkC	THU

April 2016:

3510/4605	1832z	07 Apr	'201' 549 39 = 49887...	HFD	THU
	1832 - 1847z	28 Apr	'201' 317 32 = 33463 ... 80566 000 Fair	JkC	THU
3520//4585	2009z	01 Apr	'582' 549 39 = 49887...	HFD	FRI
	1910 - 1925z	29 Apr	'582' 317 32 = 33463 ... 80566 000 Weak/Fair	JkC	FRI
3535//4590	**1815z**	04 Apr	'420' 549 39 = 49887.... Start at 1815, not 1810!	HFD	MON
3625//4941	1902z	01 Apr	'153' 549 39 = 49887...	HFD	FRI

3715//4570	1942z	07 Apr	'477' 549 39 = 49887...	HFD	THU
	1942 - 1957z	28 Apr	'477' 317 32 = 33463 ... 80566 000 Weak	JkC/uascan	THU
			Signal disappeared on 4570kHz during last group of 1942z sending. 3715kHz ended normally. *JkC*		
4454	1915z	03 Apr	'771' 549 39 = 49887.... (//3535kHz NRH)	HFD	SUN

M03 III ICW, some CW

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

M08a XVIII ICW / CW, some MCW

M08a continued with the usual schedules in place however no transmissions were heard after 26 April, although a brief transmitter check was heard at 1345z on 30 April. The M08a transmissions resumed on 02 May. As reported in the last newsletter transmissions were beginning 5 minutes before the start of the hour although around 10 March the transmissions started appearing on the hour, and as of the end of April this has continued. Computer problems were experienced on our end resulting in approximately 3 weeks of lost transmissions in March

Of note, on 09 March and 21 April all three call-ups ended in 1.

March 2016:

7554	2000z	01 Mar	[40481 53722 76142]		AnonUS	TUE
	2000z	10 Mar	[65282 88611 02042]	Came up at 2000z not 1955z	AnonUS	THU
	2000z	12 Mar	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SAT
8009	2300z	02 Mar	Already in progress 2300z		AnonUS	WED
	2300z	09 Mar	[70301 83631 07641]		AnonUS	WED
	2300z	12 Mar	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SAT
8096	1400z	01 Mar	[42651 55182 68411]		AnonUS	TUE
	1400z	02 Mar	[41021 53352 66671]		AnonUS	WED
	1400z	04 Mar	[45721 58242 62571]		AnonUS	FRI
	1400z	10 Mar	[67551 71871 84312]		AnonUS	THU
	1400z	11 Mar	Came up in progress at 1400z		AnonUS	FRI
	1400z	12 Mar	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SAT
	1400z	13 Mar	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SUN
8135	2300z	01 Mar	[- - - - 00532 23862]	Up at 2258z in progress	AnonUS	TUE
	2300z	03 Mar	[77162 81401 14722]		AnonUS	THU
	2300z	04 Mar	[82061 05382 18621]		AnonUS	FRI
	2300z	11 Mar	[68871 82301 04632]	Came up at 2300z not 2255z	AnonUS	FRI

April 2016:

7554	2000z	07 Apr	[51811 62541 75062]		AnonUS	THU
	2000z	08 Apr	[23472 35812 48231]		AnonUS	FRI
	2000z	10 Apr	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SUN
	2000z	12 Apr	[17432 20761 33202]		AnonUS	TUE
	2000z	13 Apr	[17432 20761 33202]		AnonUS	WED
	2000z	14 Apr	[24142 37471 51702]		AnonUS	THU
	2000z	21 Apr	[31751 43581 55821]		AnonUS	THU
	2000z	26 Apr	[43071 56312 60632]		AnonUS	TUE
8009	2300z	06 Apr	Strong hum at 2258z but no Morse followed		AnonUS	WED
	2300z	11 Apr	[62402 75731 88252]		AnonUS	MON
	2300z	20 Apr	[52521 64041 77372]		AnonUS	WED
	2300z	25 Apr	[44561 57801 61222]		AnonUS	MON
8096	1400z	05 Apr	[50602 62342 74761]		AnonUS	TUE
	1400z	06 Apr	[77852 81281 03612]		AnonUS	WED
	1400z	07 Apr	[43272 56501 60832]		AnonUS	THU
	1400z	10 Apr	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SUN
	1400z	11 Apr	[18541 22072 35301]		AnonUS	MON
	1400z	12 Apr	[10701 21441 34762]		AnonUS	TUE
	1400z	13 Apr	[38042 52371 65602]		AnonUS	WED
	1400z	14 Apr	[38042 52371 65602]		AnonUS	THU
	1400z	15 Apr	[81342 04661 17002]		AnonUS	FRI
	1400z	17 Apr	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SUN
	1400z	20 Apr	[21171 33512 46832]		AnonUS	WED
	1400z	21 Apr	[26411 30742 43162]		AnonUS	THU
	1400z	22 Apr	[45741 57162 61502]		AnonUS	FRI
	1400z	22 Apr	[45741 57162 61502]		AnonUS	FRI
	1400z	26 Apr	[36842 40361 53602]		AnonUS	TUE

8135	2300z	07 Apr	[63872 76311 88631]		AnonUS	THU
	2300z	10 Apr	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SUN
	2300z	12 Apr	[57542 61861 74302]		AnonUS	TUE
	2300z	13 Apr	[57542 61861 74302]		AnonUS	WED
	2300z	14 Apr	[46121 58441 62872]		AnonUS	THU
	2300z	15 Apr	[37481 41812 54242]		AnonUS	FRI
	2300z	17 Apr	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SUN
	2300z	22 Apr	[08602 11032 24351]		AnonUS	FRI
	2300z	26 Apr	[05722 18241 22572]		AnonUS	TUE

Call-up Number Sequence Analysis

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

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

42651 55182 68411 11 33 43 32	51811 62541 75062 11 13 64 32	81342 04661 17002 11 33 33 23
40481 53722 76142 12 33 33 32	63872 76311 88631 11 32 43 32	37481 41812 54242 11 33 43 23
- - - - - 00532 23862 ?2 ?3 ?3 ?3	23472 35812 48231 11 23 13 32	21171 33512 46832 11 23 43 32
41021 53352 66671 11 23 33 32	18541 22072 35301 11 33 43 32	52521 64041 77372 11 23 43 23
77162 81401 14722 12 33 33 32	62402 75731 88252 11 33 34 32	26411 30742 43162 11 33 33 32
45721 58242 62571 11 33 43 23	10701 21441 34762 11 13 63 42	31751 43581 55821 11 22 73 33
82061 05382 18621 11 33 33 23	17432 20761 33202 11 23 34 33	45741 57162 61502 11 23 34 23
70301 83631 07641 11 34 30 31	57542 61861 74302 11 33 44 23	08602 11032 24351 11 23 33 32
67551 71871 84312 11 33 34 23	38042 52371 65602 21 33 33 32	44561 57801 61222 11 33 33 32
65282 88611 02042 21 33 43 32	17432 20761 33202 11 23 34 33	36842 40361 53602 11 33 43 23
68871 82301 04632 21 32 33 23	57542 61861 74302 11 33 34 23	43071 56312 60632 11 33 33 32
50602 62342 74761 11 22 64 42	38042 52371 65602 21 33 33 32	05722 18241 22572 11 33 43 23
77852 81281 03612 11 32 34 32	24142 37471 51702 12 33 33 32	
43272 56501 60832 11 33 33 23	46121 58441 62872 11 23 34 23	*Courtesy AnonUS*

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.

As noted by at the very end of February, some schedules were changing. This has continued into March with the Monday 1800z schedule changing from ID '463' to ID '257' & the replacing of the Thursday ID '124' schedule with a '938'.

We also saw a new schedule appear from ID 124 on Monday with an 1810/30/50z slot. This is a most unusual time slot for this call, having previously only been logged on the hour or H+30 time slots. It used to be fairly common that where two scheds were sent, two transmitters would be in use at the same time, say – for example, 1800z with both 124 & 257. This practice seems to have ceased, making us wonder if they no longer have the use of a second transmitter? This would explain the unusual time slot for the 124 schedule.

Repeat of Message - Different IDs
The Saturday 0600z transmission is a repeat of the Wednesday 2000z, despite the IDs being different. This is another example of the apparent random selection of the ID numbers, which is certainly not tied to a particular recipient. This pairing occurs in all months with the IDs changing monthly.

5763/5163/4463	2200/20/40z	09 Mar	714 1 (7931 117) 19711 81115....	BR	WED
8158/9258/ 10658	0600/20/40z	12 Mar	126 1 (7931 117) 19711 81115....	BR	SAT

Asiatic M12 Scheds

18576/17436/----	0020/0040/0100z	02 Mar	548 000	Strong via Hong Kong Remote	BR	WED
	0020/0040/0100z	05 Mar	548 000	Strong via Hong Kong Remote	BR	SAT
	0020/0040/0100z	09 Mar	548 1 (137 77) 92237 70491....	Strong via Hong Kong Remote	BR	WED
	0020/0040/0100z	12 Mar	548 1 (137 77) 92237 70491....	Strong via Hong Kong Remote	BR	SAT
	0020/0040/0100z	16 Mar	548 000	Weak via Sydney SDR	BR	WED
	0100z	23 Mar	548 1 (110 103)	Weak via Hong Kong	BR	WED
	0040z	26 Mar	548 1 (110 103) 12729 88225....	Strong via Hong Kong	BR	SAT

European M12 Logs

March 2016: **New scheds in bold type**

5763/5163/4463	2200/20/40z	02 Mar	714 000	BR	WED
	2200/20/40z	09 Mar	714 1 (7931 117) 19711 81115....	BR	WED
	2200/20/40z	16 Mar	714 000 Fair	JkC	WED
	2200/20/40z	23 Mar	714 000	HFD	WED
	2200/20/40z	30 Mar	714 000	BR	WED
5792/6992/---	0530/0550/0610z	07 Mar	796 000	BR	MON
	0530/0550/0610z	14Mar	796 000	BR	MON
	0530/0550/0610z	21 Mar	796 000 Fair	HFD/JkC	MON
	0530/0550/0610z	28 Mar	796 000	BR	MON

6784/7684/---	0730/0750/0810z	03 Mar	761 000	E.SMITH/HFD	THU
	0730/0750/0810z	10 Mar	761 000	E.SMITH	THU
	0730/0750/0810z	17 Mar	761 000	BR	THU
8047/6802/5788	1900/20/40z	02 Mar	463 1 (5655 137) 26944 14990....	BR/HFD	WED
	1900/20/40z	09 Mar	463 1 (2536 136) 77144 05320 ... 45810 86154 000 Good	JkC	WED
	1900/20/40z	16 Mar	463 1 (8808 130) 40290 36167 ... 38814 24450 000 Fair	JkC	WED
	1900/20/40z	23 Mar	463 1 (5589 138) 47118 38373.... 65992 08717 000 000	Gert	WED
	1900z	30 Mar	463 1 (2420 144) 77093 80723… 22396 88116 000 000	Gert	WED
8158/9258/ 10658	0600/20/40z	05 Mar	126 000	BR	SAT
	0600/20/40z	12 Mar	126 1 (7931 117) 19711 81115....	BR	SAT
	0600/20/40z	19 Mar	126 000	BR	SAT
	0600/20/40z	26 Mar	126 000	BR	SAT
9176/7931/6904	1800/20/40z	02 Mar	257 1 (1551 143) 98641 22661 ... 44229 30591 000 Good	HFD/JkC	WED
	1900/20/40z	03 Mar	257 1 (5385 52) 36485 53414 ... 43531 50496 000 Good	JkC	THU
	1800/20/40z	07 Mar	257 1 (4554 147) 75963 91861 ... 39177 54720 000 Fair	HFD/JkC	MON
	1900/20/40z	07 Mar	257 1 (6373 80) 99390 07176 ... 37165 86672 000 Fair	HFD/JkC	MON
	1800/20/40z	09 Mar	257 1 (4234 140) 08985 07513 ... 44812 19635 000 Good	JkC	WED
	1900/20/40z	10 Mar	257 1 (2444 59) 69225 96887 ... 31292 51192 000 Good	JkC	THU
	1800/20/40z	14 Mar	257 1 (2598 148) 27664 86104 ... 25616 94512 000 Good	JkC	MON
	1900/20/40	14 Mar	257 1 (1867 82) 29170 32465....	BR	MON
	1800/20/40z	16 Mar	257 1 (3305 133) 32509 42458 ... 42919 63909 000 Fair	JkC	WED
	1900/20/40z	17 Mar	257 1 (9955 58) 77850 48598 ... 61918 56893 000 Fair	JkC	THU
	1800/20/40z	21 Mar	257 1 (6703 145) 79666 78519 ... 25128 21215 000 Good	JkC	MON
	1900/20/40z	21 Mar	257 1 (6158 88) 17915 78190 ... 49485 66743 000 Good	JkC	MON
	1900/20/40z	23 Mar	257 1 (3321 144) 49719 78111....	BR	WED
	1900/20/40z	24 Mar	257 1 (7650 51) 40416 78296 …90940 11259 000	Gert	THU
	1800/20/40z	28 Mar	257 1 (5081 141) 38537 20643....	BR	WED
	1900/20/40z	28 Mar	257 1 (3259 81) 71825 30720....	BR	MON
	1800/20/40z	30 Mar	257 1 (3738 142) 95142 00156....	BR	WED
	1900/20/40z	31 Mar	257 1 (1320 65) 24649 71688	BR	THU
10343/9264/8116	1930/1950/1810z	01 Mar	124 1 (6148 98) 84923 42372 ... 65411 58182 000 Good	HFD/JkC	TUE
	1810/30/50z	**07 Mar**	**124 1 (1758 53) 81377 60196....**	BR	MON
	1930/1950/1810z	08 Mar	124 1 (9462 100) 20029 24708....	BR	TUE
	1810/30/50z	14 Mar	124 1 (8028 51) 86505 42695....	BR	MON
	1930/1950/2010z	15 Mar	124 1 (1035 93) 28688 24767 ... 14145 21332 000 Weak/Weak/Fair	JkC	TUE
	1810/30/50z	21 Mar	124 1 (2193 50) 03045 06971....	BR	MON
	1930/1950/2010z	22 Mar	124 1 (2421 108) 16400 48271....	BR	TUE
	1810/30/50z	28 Mar	124 1 (9030 58) 76091 83001....	BR	MON
	1930/1950/2010z	29 Mar	124 1 (3669 94) 66935 12336... 85919 41913 000 Fair	JkC	TUE
11435/10597/9327	**1800/20/40z**	**03 Mar**	**938 1 (6780 145) 72902 18672 ... 32526 50864 000 Good**	JkC	THU
	1800/20/40z	10 Mar	938 1 (5485 146) 03923 66156 ... 84374 30612 000 Good	JkC	THU
	1800/20/40z	17 Mar	938 1 (5278 150) 12238 63036 ... 92885 94760 000 Fair	JkC	THU
	1800/20/40z	24 Mar	938 1 (1966 147) 79171 16300....	BR	THU
	1800/20/40z	31 Mar	938 1 (3475 141) 22485 49216....	BR	THU
12162/11566/10711	1700/20/40z	03 Mar	546 1 (9268 88) 81543 19289 ... 93255 32431 000 Good	HFD/JkC	THU
	1700/20/40z	10 Mar	546 1 (5653 86) 32173 63695 ... 12476 84530 000 Good	JkC	THU
	1700/20/40z	17 Mar	546 1 (4267 90) 66703 57889 ... 96067 68633 000 Weak	JkC	THU
	1700/20/40z	31 Mar	546 1 (7073 88) 09686 14165. ...	BR	THU
12205/13559/14728	1100/20/40z	07 Mar	973 1 (7821 145) 96731 48653....	BR/HFD	MON
	1100/20/40z	14 Mar	973 1 (7149 134) 27455 97489 ... 43018 42433 000] Fair/Fair/Good	JkC	MON
	1100/20/40z	21 Mar	973 1 (2013 118) 29788 10158 ... 30644 85798 000	BR/Gert	MON
12214/10814/9214	1310/30/50z	03 Mar	282 1 (1264 127) 14366 99829....	BR	THU
	1310/30/50z	05 Mar	282 000	HFD	SAT
	1310/30/50z	10 Mar	282 000	Topol	THU
	1310/30/50z	12 Mar	282 000	BR	SAT
	1310/30/50z	17 Mar	282 000	BR	THU
	1310/30/50z	19 Mar	282 000	BR	SAT
	1310/30/50z	24 Mar	282 1 (1741 101) 14394 00014....	BR	THU
	1310/30/50z	26 Mar	282 1 (1741 101) 14394 00014... 54081 85656 000 000	AB	SAT
	1310/30/50z	31 Mar	282 000 (W/band radar QRM on 12214)	BR	THU
14769/16269/18169	1010/30/50z	03 Mar	721 1 (8656 133) 19816 27075 ... 82708 11758 000 000	E.SMITH/HFD	THU
	1010/30/50z	10 Mar	721 000	E.SMITH	THU
	1010/30/50z	13 Mar	721 000	BR	SUN
	1010/30/50z	20 Mar	721 000	BR	SUN
17472	**0710z**	**02 Mar**	**438 000**	E.SMITH	WED
17472/**19372**/---	0710/30/50z	09 Mar	438 000	E.SMITH	WED
	0710/30/50z	16 Mar	438 000	BR	WED
	0710/30/50z	23 Mar	438 000	BR	WED
20936/19436/---	**1500/20/40z**	**11 Mar**	**944 000 Fair**	JkC	FRI
	1500/20/40z	18 Mar	944 000	BR	FRI

April 2016:

5792/6992/---	0430/0450/0510z	04 Apr	796 000	BR	MON
	0430/0450/0510z	11 Apr	796 000	BR	MON
	0430/0450/0510z	18 Apr	796 000	E.SMITH	MON
	0430/0450/0510z	25 Apr	796 000	E.SMITH	MON
6793/5893/---	2100/20/40z	06 Apr	785 000	BR	WED
	2100/20/40z	13 Apr	785 000	HFD	WED
	2100/20/40z	20 Apr	785 000	BR	WED
	2100/20/40z	27 Apr	785 1 (3084 83) 70623 36161 ... 84301 11379 000 Fair	JkC	WED
7484/8084/---	0630/0650/0710z	07 Apr	402 000	HFD	THU
	0630/0650/0710z	14 Apr	402 000	E.SMITH	THU
	0630/0650/0710z	21 Apr	402 000	E.SMITH	THU
	0630/0650/0710z	28 Apr	402 000	E.SMITH	THU
8047/6802/5788	1900/20/40z	06 Apr	463 1 (4548 137) 37073 40776....	BR	WED
	1900/20/40z	13 Apr	463 1 (7219 134) 66303 90528....	BR	WED
	1900/20/40z	20 Apr	463 1 (4520 137) 82257 87936....	BR	WED
	1900/20/40z	27 Apr	463 1 (1974 139) 57039 25816....	BR	WED
8176/9376/10476	0500/20/40z	02 Apr	134 000	BR	SAT
	0500/20/40z	09 Apr	134 000	BR	SAT
	0500/20/40z	16 Apr	134 000	E.SMITH	SAT
	0500/20/40z	23 Apr	134 000	E.SMITH	SAT
	0500/20/40z	30 Apr	134 1 (3084 83) 70623 36161....	BR	SAT
9176/7931/6904	1800/20/40z	04 Apr	257 1 (6163 140) 25739 98020....	BR	MON
	1900/20/40z	04 Apr	257 1 (4211 52) 48320 47341....	BR	MON
	1800/20/40z	06 Apr	257 1 (1209 133) 10504 82714....	BR	WED
	1900/20/40z	07 Apr	257 1 (2971 70) 10121 08434....	BR	THU
	1800/20/40z	11 Apr	257 1 (2383 144) 15726 19574 ... 24204 95475 000 Good	JkC	MON
	1900/20/40z	11 Apr	257 1 (6004 88) 54199 80320....	BR	MON
	1800/20/40z	13 Apr	257 1 (1633 132) 13031 41872....	BR	WED
	1900/20/40z	14 Apr	257 1 (3338 89) 39689 55145....	BR	THU
	1800/20/40z	18 Apr	257 1 (3329 140) 05870 67825....	BR	MON
	1900/20/40z	18 Apr	257 1 (3327 89) 13994 20158....	BR	MON
	1800/20/40z	20 Apr	257 1 (184 135) 95265 58781....	BR	WED
	1900/20/40z	21 Apr	257 1 (1339 87) 19449 23945....	BR	THU
	1800/20/40z	25 Apr	257 1 (5184 143) 45315 96948....	BR	MON
	1900/20/40z	25 Apr	257 1 (4448 88) 61875 84466....	BR	MON
	1800/20/40z	27 Apr	257 1 (213 100) 53923 45454 ... 55598 53709 000 Fair	JkC	WED
	1900/20/40z	28 Apr	257 1 (9323 95) 66068 78689 ... 22351 36552 000 Fair	JkC	THU
10343/9264/8116	1810/30/50z	04 Apr	124 1 (8066 68) 03088 40420....	BR	MON
	1930/1950/2010z	05 Apr	124 1 (6583 93) 10504 82714....	BR/RT	TUE
	1810/30/50z	11 Apr	124 1 (7240 94) 57235 92698....	BR	MON
	1930/1950/2010z	12 Apr	124 1 (1402 107) 41630 70320....	BR	TUE
	1810/30/50z	18 Apr	124 1 (8692 91) 56588 49781....	BR	MON
	1930/1950/2010z	19 Apr	124 1 (8196 104) 00845 00468....	BR	TUE
	1810/30/50z	18 Apr	124 1 (4651 87) 42587 18431....	BR	MON
	1930/1950/2010z	26 Apr	NRH	BR	TUE
11435/10598/9327	1800/20/40z	07 Apr	938 1 (7778 142) 92072 07346....	BR	THU
	1800/20/40z	14 Apr	938 1 (4542 147) 34032 23637....	BR	THU
	1800/20/40z	21 Apr	938 1 (6222 140) 64036 14319....	BR	THU
	1800/20/40z	28 Apr	938 1 (3181 150) 35771 40010 ... 03561 13516 000 Fair	JkC	THU
11469/10469/---	2110/30/50z	02 Apr	442 000	HFD	SAT
	2110/30/50z	16 Apr	441 000	E.SMITH	SAT
	2110/30/50z	23 Apr	441 1 (9191 115) 21942 81681 ..... 98757 37881 000 000	E.SMITH	SAT
	2110/30/50z	27 Apr	441 000 Fair	JkC	WED
	2110/30/50z	30 Apr	441 000	BR	SAT
12162/11566/10711	1700/20/40z	07 Apr	546 1 (9529 90) 75479 55070....	BR/HFD	THU
	1700/20/40z	14 Apr	546 1 (2361 86) 34032 23637....	BR	THU
	1700/20/40z	21 Apr	546 1 (2549 86) 50488 93565....	BR	THU
	1700/20/40z	28 Apr	546 1 (1404 86) 66972 66065 ... 63635 93000 000 Fair	JkC	THU
12205/13559/14728	1100/20/40z	04 Apr	973 1 (6153 146) 05047 53741....	BR	MON
	1100/20/40z	11 Apr	973 1 (4556 132) 08031 73200....	BR	MON
	1100/20/40z	18 Apr	973 1 (7233 146) 91846 87513..... 97008 15046 000 000	E.SMITH	MON
	1100/20/40z	25 Apr	973 1 (1975 143) 21770 85308 .....97469 04496 000 000	E.SMITH	MON
14468/13568/12178	1310/30/50z	02 Apr	451 000	BR	SAT
	1310/30/50z	07 Apr	451 1 (6156 167) 85340 94785....	BR	THU
	1310/30/50z	09 Apr	451 1 (6156 167) 85340 94785 ..... 18530 14339 000 000 Good/Fair	E.SMITH	SAT
	1310/30/50z	14 Apr	451 1 (5807 121) 56338 68005 ..... 96098 49113 000 000 Fair/Weak	E.SMITH	THU
	1310/30/50z	16 Apr	451 1 (5807 121) 56338 68005....	BR	SAT
	1310/30/50z	21 Apr	451 000	E.SMITH	THU
	1310/30/50z	23 Apr	451 000	BR	SAT
	1310/30/50z	28 Apr	451 1 (8351 145) 29583 99578 ..... 12403 93305 000 000	AB/E.SMITH	THU

16353	**0730z**	**13 Apr**	**834 000**	**Weak**		E.SMITH	WED
15853/16353/---	0710/30/50z	20 Apr	834 000			E.SMITH	WED
	0710/30/50z	27 Apr	834 000			E.SMITH	WED
19041	**1520z**	**08 Apr**	**404 000**	**Weak**		BR	FRI
20441/19041/---	1500/20/40z	15 Apr	404 000	Good/Strong		BR	FRI
	1500/20/40z	22 Apr	404 000			BR	FRI
	1500/20/40z	29 Apr	404 000			BR	FRI

M14 IA MCW / ICW Short 0

March 2016:

PoSW reports some unusual activity with G06 & E06 schedules & also this from M14, which may be associated with this.

10 March-16, Thursday:- 1820 UTC, 5947 or 5948 kHz - forgot to log the frequency until it had gone off - strong carrier noted a few minutes earlier, assumed this was going to be the expected G06 warming up on a frequency a bit higher than the usual 5934 but realised shortly after 1820Z that an M14 style call-up had begun, call "346", constant carrier keyed audio tone MCW. Inside the 49 metre band but competing well with broadcasters on close frequencies. DK/GC "190 190 15 15", the usual M14 5Fs as doubles but no "break" symbols at the start and finish. Ended with the usual DKDK GCGC and 5-dash "00000".

Something similar noted on the following day:-
11-Mar-16, Friday:- 1923 UTC, 5,463 kHz, strong M14 MCW in progress calling, "537", then DK/GC "569 569 15 15", again no "break" symbols, ended 1928 UTC, carrier stayed on until after 1931 UTC.

4826	1600 - 1637z	15 Mar	361 (528 158) = 93901 ... 09600 00000	JkC	TUE
4827	1600z	01 Mar	475 (820 128) = 37613 01355.....45543 26589 00000 (Repeat of 16 Feb16)	JkC/RNGB	TUE
5478	1800z	04 Mar	382 00000	HFD	FRI
5477	1800z	18 Mar	382 00000 Strong MCW	Jan/RNGB	FRI
5944	1700z	04 Mar	382 00000	HFD	FRI
5949	1700z	18 Mar	382 00000 Strong MCW	RNGB	FRI
17458	0930 - 0934z	10 Mar	617 00000	E.SMITH	THU

April 2016:

Richard (RNGB) reports that after the layoff of the Family 1a training schedules during March, a mammoth 157 group message sent on Tuesday 12 April using M14. Maybe it's an end of term exam?
A block of 45 groups followed by a block of 65 groups of which the first 47 were repeated, giving 157. Note the DK group of 007 (James Bond!)

Thanks Richard - Also note the use of obviously fake groups, very similar to those used in the M14 message of Tuesday 23 February on 4636kHz .

This transmission was also logged by Hans-Friedrich (HFD) who also logged a repeat of the transmission the following day, Wednesday, 13 April on 5464kHz.

5430	0800z	02 Apr	171 (230 65) = 12345...	HFD	SAT
5464	1920z	13 Apr	537 (R5) [pause] 0000000 1115 [pause] 537 007 157=12345	HFD	WED
5561	0900z	02 Apr	171	HFD	SAT
5560	0900z	16 Apr	Weak - Unable to read MCW	E.SMITH	SAT
5947	1820z	12 Apr	346 (007 157) 12345 54321 65432 16161 23456 34344... 56123 78456 00000 MCW		TUE
6824	0600z	10 Apr	382 00000	HFD	SUN

M23 O ICW
No reports

M24 IA MCW / ICW / MCWCC (high speed version of M14), short 0
No reports

M76 Irregularly heard. Schedule on 3280kHz (Changes to 3820kHz or 3293kHz over the year).

In mid-March a member of UXDF reported daily CW scheds of an unknown station at 0500z & 1750z on 3280kHz, which Ary (AB) identified as M76. Ary then alerted ENIGMA 2000 that M76 was back. Reception was quite poor in the UK, with the 1750z schedule the better of the two. Ary was achieving better results at his Netherlands QTH & indeed, the reception through the Twente on-line SDR was far superior to that achieved in S.E. England.

As Ary has pointed out, this station appears periodically – usually in the spring for a short time before it disappears for maybe two or three years. This may be due to propagation – but we don't really know enough about this station to be sure. 3280kHz is the known frequency from March to October, with 3820kHz used from November to February. The station was reported till late 2002, then re-appeared in 2006 and was first heard again in March 2010. Ary tells us that in recent years it was heard till 16 Apr2010, then between 06 Jan 2011& 18 Mar 2011, between 09 Mar & 20 Mar 2012 with no reports after that.

Guy (GD) has provided some historical notes & also the other known frequencies used by the station over the year. Thanks GD for trawling through the old newsletters to find some of this information & also for the additional logs submitted for this section.

This description of the station format adapted from notes supplied by Ary:

Format:

- 4 character call sign DE 4 character call sign (3x) then QTC nnn (serial nr) nn (group count) = 5FGs
- Both call signs change daily & may contain accented letters - (Most probably Cyrillic characters)
- The whole sequence is sent twice.
- Transmissions are usually 40-50 mins long, although the number of messages sent varies daily. (From 5 up to 12 messages reported in this period).

First Message:

- The first message always starts with 26310. Messages consist of 5-figure groups but also 5-letters are used (D, R, W, X).
- The last group of the first message is always NNNNN

Additional Messages:

- There are always more messages. They start with nnn nn = followed by 5FGs. Mostly repeats of old messages
- The last group sometimes contains the letter X.
- The first group is always 40545 and the second mostly starts with 79.
- The last 3 figures of the message are always 437. Where the last group is 7XXXX, then the previous group will end with a 43.

Final Message

- The final message currently logged is prefixed with a 000 serial & the first group is 13094

Unusual Message Structure

The structure of the groups is decidedly unusual. On a cursory inspection it can be seen that there are a number of common sequences throughout the different messages, also that many of the first seven groups are often either identical - or vary by one or two figures. We are not looking at messages constructed using the one-time pad.

There are an unusual number of 99 or 999 sequences in the groups plus the addition of a number of groups consisting solely of repeated figures, (DDDDD, RRRRR, WWWWW). These appear to be only in the first or primary message, & as the preceding group is usually padded with Xs, these could be a form of separator between sections of the message. Where a sequence of numbers terminates, the remaining spaces are padded with Xs to complete the group. NNNNN is standard for end of message would appear to denote the same here, ending the primary message

One suggestion is that the groups are made up of trinomes (3- digit units). Many 3-fig sequences are frequently repeated, for example, the trinome "199" repeats very often and, as noted format description, the trinome "437" are often the last 3 digits. The end of a message, where the number of digits is not divisible by 3, are padded with X's. This is also true within those messages containing RRRRR and WWWWW - where the groups between the RRRRR and WWWWW are padded with X's to complete the final 5 figure group. About 120 trinomes can be identified so far, which seems too many for alphabet + digits + punctuation (though a simple substitution cipher would have been too much to hope for).

Another suggestion that has been offered is that the transmissions are some form of weather or aviation//maritime warning. The construction of both messages & groups could well be suited to this form of data. The repetition of older messages would appear to exclude the possibility of weather data, but would be relevant to ongoing navigation warnings.

Comparison of Groups

Primary Messages - Comparison of first nine groups over different days

Date & Time	Serial / GC	Grp01	Grp02	Grp03	Grp04	Grp05	Grp06	Grp07	Grp08	Grp09
Wed 23 Mar 1750z	223 34 =	26310	15214	90080	40925	53483	02644	18317	86000	11209
Thu 24 Mar 1750z	227 32 =	26310	15224	90080	30030	26442	23509	18317	86010	11209
Fri 25 Mar 1750z	230 28 =	26310	15234	90080	30164	11831	78601	01120	92763	85649
Tue 29 Mar 0440z	243 29 =	26310	05274	92080	41564	11831	78599	02120	92763	85649

Secondary Messages - Comparison of first nine groups between messages sent on the same day. (Note that the 000 message has different format)

Date & Time	Serial/GC	Grp01	Grp02	Grp03	Grp04	Grp05	Grp06	Grp07	Grp08	Grp09
Wed 23 Mar 1750z	214 41 =	40545	79885	05949	33694	60926	61901	93119	99603	55154
	213 45 =	40545	79875	05949	33694	60926	61901	93319	99383	55165
	200 50 =	40545	79825	05945	33694	60922	35282	91053	20426	59901
	197 18 =	40545	79815	05946	99266	19019	41199	94135	51539	89199
	189 20 =	40545	79775	05942	93394	60927	91901	94119	91999	31935
	000 24 =	13094	11991	99946	94119	99489	36199	95193	81999	59931

Serial Numbers

It has already been established that the message headers consist of an ascending serial number & the group count (GC). From the limited number of intercepts we have been able to obtain, it would appear that there are some missing numbers between the known schedules, indicating that there may be further transmissions that have not so far been found. On 23, 24 & 25 March the serial numbers logged from the 1750z schedule were 223, 227 & 230. This would indicate that there should be at least one more schedule, possibly two. Could M76 have day & night time frequencies?

Repeated Sequences

What is apparent is the repetition of sequences. It has already been shown that the first nine groups have many identical - or near identical groups where there may be a single number or two changed. Many sequences of numbers also repeat throughout the messages, some in complete groups, others where the sequence is split between one group & the next. For example;

55154 appears three times in 238 39 = and twice in the following 235 43 = and again in the following 064 50 =
55900 appears three times in 235 43 = and three times in 064 50 =
31999 appears one as a full grp and twice as a split grp in 241 50 = and so on...

If we take this secondary message from Tuesday 29 March (0440z) as a sample, it is easy to identify several sequences of numbers

241 50 =
04545 79369 37505 95833 69460 92043 16666 19019 42355 94319
99347 10153 98335 59331 99710 90194 29531 99936 71015 39823
55951 19993 17109 01942 35594 77101 53932 35594 31999 33720
90194 23559 36199 93971 01539 82355 98519 99397 10369 93191
15059 39199 96013 99451 99960 86506 30484 82183 53243 7xxxx

7101539 occurs four times in this short message...

241 50 =
04545 79369 37505 95833 69460 92043 16666 19019 42355 94319
99347 10153 98335 59331 99710 90194 29531 99936 71015 39823
55951 19993 17109 01942 35594 77101 53932 35594 31999 33720
90194 23559 36199 93971 01539 82355 98519 99397 10369 93191
15059 39199 96013 99451 99960 86506 30484 82183 53243 7xxxx

... and 23559 occurs no less than six times in the same message.

M76 Logs

Early Sched

3280	0500z	23 Mar	Sig present -unreadable. Adjacent XJT QRM.	V.Weak	WED
	Changed to Daylight Saving Sun 27 March		**Sched now 0400z**		
	0440z (Rpt of msg)	29 Mar	TENG de 26VA QTC 243 29 = 26310 05274 92080...	Good via Sweden SDR	TUE
	0440z (IP) - 0507z	31 Mar	Msg in progress. Ends 0507z AR	Weak	THU

Late Sched

3280	1750z	17 Mar	Sig present - unreadable	V.Weak	THU
	1750z	18 Mar	largely unreadable QTC 211 119 18 =	Weak	FRI
	1750z	20 Mar	NRH		SUN
	1750z	21 Mar	.6CY de KDRS QTC 219 38 = 2633 .	Weak	MON
	1750z	22 Mar	DQVD de . . . . QTC 2 ..	Weak	TUE
	1750z	23 Mar	EY9A de I4B0 QTC 223 34 = 26310 15214 90080 ...		WED
	1750 - 1818z	24 Mar	A7PQ de 22G6 QTC 227 32 = 26310 15224 90080...		THU
	Changed to Daylight Saving Sun 27 March		**Sched now 1650z**		
3280	**1654** (IP)z	27 Mar	2K8F de M6EK QTC 239 27 = 2. .10 15254 90080...4156 41183 1 .860	Poor copy	SUN
	1650 - 1729z	28 Mar	Sig present - Weak, unreadable		MON
	1650 - 1758z	30 Mar	Q4OO de DV6L QTC 248 41 = 26310 05284 92080 15640 86402... = AR sent at 1758z		WED
	1650 - 1714z	01 Apr	YS4A de RHOP QTC 259 30 = 26310 14984... 1714z	Good via Swedish SDR	FRI
	1650z	03 Apr	Sig present - Mostly unreadable. QRM from Russian Air Defence & UNID stn	Weak via Siberian SDR	MON
	1650z	05 Apr	Sig good - Mostly unreadable due to QRM from another Morse stn & 8-chan data	Via Swedish SDR	TUE
	1655z	09 Apr	Sig present - Too weak to copy		SAT
	1650 - 1735z	19 Apr	ERÄW de ÄEMF QTC . . 3 32 = 26310 15174... 1735z	Fair via Swedish SDR	TUE
			Other msgs: 331 20 321 45 320 46 319 26 314 33 000 27		
	1650z	21 Apr	5TPÙ DE M2HA QTC 344 32 = Msgs 342 35 337 34 331 27 314 33 000 27	Via Swedish SDR	THU
	1650z	22 Apr	6GE6 DE FAKD QTC 348 = Msgs 342 36 337 34 000 27	Via Swedish SDR	FRI
	1650z	23 Apr	ÀÀ1S DE 98S6 QTC ??? 29 = QRM blotted out QTC but should be 356	Via Swedish SDR	MON
			Other msgs: 355 48 354 38 353 36 352 28 350 39 343 28 342 36 337 34 000 27		
	1650z	28 Apr	VÙVJ DE 3T4G QTC 375 34 = Msgs 366 36 3?? 39 349 28 342 36 337 34 000 27		THU
	1650z	29 Apr	QHHH DE PGNR QTC 379 35 = Msgs 366 36 000 30 [Note: New 000 msg]		FRI
			000 13094 11991 99946 93419 36199 99489 95194 81999 59931 19996		
			89301 99968 93619 99699 37199 97093 21999 70933 19993 51999		
			45199 95919 99691 99966 19997 71999 81199 94293 41999 41936 = *(Courtesy GD)*		
			[Interesting that 999 appears 8 times and 19 16 times]		
	1650z	30 Apr	14K1 DE JÀ3K QTC 381 29 = Msgs 366 36 000 30		SAT

M76 3280kHz 1750z Wed 23 Mar16

EY9A EY9A EY9A DE I4BO I4BO QTC **223 34 =**
26310 15214 90080 40925 53483 02644 18317 86000 11209 13529
50300 64385 25664 02556 49158 36217 26061 71646 36361 3089X
RRRRR 25624 72552 02XXX WWWWW 73255 17375 69739 55577
05074 91915 49991 694XX NNNNN =
214 41 =
40545 79885 05949 33694 60926 61901 93119 99603 55154 94119
99703 55901 15494 61999 39355 90198 51549 46199 93936 59009
83154 94019 99503 55900 98919 99703 55154 90419 99503 55187
50593 71399 43199 97586 50633 89953 21895 43369 46092 18543
7XXXX =
213 45 =
40545 79875 05949 33694 60926 61901 93319 99383 55165 93119
99343 55901 93119 99333 55154 94119 99343 55900 98919 99343
55154 94019 99503 55900 98315 49401 99950 35590 09801 99960
35515 49311 99970 35518 75059 37139 94319 99858 65063 36995
32189 54336 94609 21854 37XXX =
200 50 =
40545 79825 05945 33694 60922 35282 91053 20426 59901 97419
99323 55154 96419 99373 55901 97235 51569 45355 90094 23551
54987 35589 99893 55154 93219 99313 55218 90197 41999 32355
15496 41999 37355 90197 41999 32355 15498 48999 89154 94889
99891 54932 19993 13551 87505 94933 61399 60336 94609 2437X =
197 18 =
40545 79815 05946 99266 19019 41199 94135 51539 89199 93893
93552 18644 93125 11611 85199 20521 85456 31437 =
189 20 =
40545 79775 05942 93394 60927 91901 94119 91999 31935 15398
91999 39355 56873 91780 29838 69117 86076 97528
93571 0437X =
000 24 =
13094 11991 99946 94119 99489 36199 95193 81999 59931 19996
89301 99968 93619 99699 37199 97093 21999 70933 19993 51999
45199 95919 99601 99966
(Repeat message)
AR

Courtesy AB

M76 3280kHz 1750z Fri 25 Mar16

L1H4 L1H4 L1H4 DE ÜB59 ÜB59 QTC **230 28 =**
26310 15234 90080 30164 11831 78601 01120 92763 85649 15835
93621 72639 17161 00893 63613 089XX RRRRR 206XX WWWWW
72351 17119 35738 562XX 77050 75109 15506 913XX NNNNN =
229 27 =
40545 79369 31505 95533 69460 92661 90095 31999 30153 97921
88449 80930 93034 71875 05936 19996 01399 39199 96986 50633
69959 21896 03369 36092 16106 41854 37XXXX =
200 50 =
40545 79825 05945 33694 60922 35282 91053 20426 59901 97419
99323 55154 96419 99373 55901 97235 51569 45355 90094 23551
54987 35589 99893 55154 93219 99313 55218 90197 41999 32355
15496 41999 37355 90197 41999 32355 15498 48999 89154 94889
99891 54932 19993 13551 87505 94933 61399 60336 94609 2437X =
197 18 =
40545 79815 05946 99266 19019 41199 94135 51539 89199 93893
93552 18644 93125 11611 85199 20521 85456 31437 =
189 20 =
40545 79775 05942 93394 60927 91901 94119 91999 31935 15398
91999 39355 56873 91780 29838 69117 86076 97528 93571 0437X =
000 24 =
13094 11991 99946 94119 99489 36199 95193 81999 59931 19996
89301 99968 93619 99699 37199 97093 21999 70933 19993 51999
45199 95919 99601 99966
(Repeat message)
AR

Courtesy AB

M76 3280kHz 1750z-1817z Thu 24Mar16

A7PQ A7PQ A7PQ de 22G6 22G6 QTC **227 32 =**
26310 15224 90080 30030 26442 23509 18317 86010 11209 25816
73856 49043 60015 83621 72640 17164 60853 63612 089XX RRRRR
207XX WWWWW 74450 17415 20738 553XX 77030 74879 15501
1691 3XXXX NNNNN
= 200 50 =
40545 79825 05945 33694 60922 35282 91053 20426 59901 97419
99323 55154 96419 99373 55901 97235 51569 45355 90094 23551
54987 35589 99893 55154 93219 99313 55218 90197 41999 32355
15496 41999 37355 90197 41999 32355 15498 48999 89154 94889
99891 54932 19993 13551 87505 94933 61399 60336 94699 2437X
= 197 18 =
40545 79815 05946 09266 19019 41199 94135 51539 89199 93893
93552 18644 93125 11611 85199 20521 85456 31437
= 189 20 =
40545 79775 05942 93394 60927 91901 94119 91999 31355 15398
91999 39355 56873 91780 29838 69117 86076 97528 93571 0437X
= 000 24 =
13094 11991 99946 93419 99489 36199 95493 81999 59931 19996
89301 99968 93619 99699 37199 97093 21999 70933 19993 51999
45199 95919 99601 99966
(1803z) (Repeat message)
AR (1817z)

Courtesy JkC

M76 3280kHz 0440z (Rpt of msg) Tue 29 Mar16

TENG TENG TENG de 26VA 26VA QTC **243 29** =
(Could be 0ENG perhaps with short zero?)

26310 05274 92080 41564 11831 78599 02120 92763 85649 36217
16211 72641 36361 4089X RRRRR 202XX WWWWW 74651 17465
44746 55577 05075 12915 50691 6015 x DDDDD 23764 0089X
NNNNN =
241 50 =
04545 79369 37505 95833 69460 92043 16666 19019 42355 94319
99347 10153 98335 59331 99710 90194 29531 99936 71015 39823
55951 19993 17109 01942 35594 77101 53932 35594 31999 33720
90194 23559 36199 93971 01539 82355 98519 99397 10369 93191
15059 39199 96013 99451 99960 86506 30484 82183 53243 7XXXX =
238 39 =
40545 79369 36505 95609 26619 01951 35515 49421 99937 35590
19513 55154 94719 99343 55901 94819 99353 55154 94719 99343
55901 94919 99353 55154 94219 99373 55187 50593 61999 80139
94186 50633 69961 33621 89310 11946 09216 10641 85437 =
235 43 =
40545 79369 35505 95633 69460 92661 90193 01999 30154 93199
99803 55900 98719 99303 55154 94029 99603 55900 98419 99383
55958 94019 99603 55900 98219 99303 55154 93019 99803 55187
50593 81999 80139 93119 99608 65063 36996 02189 61336 94609
21610 64185 437XX =
064 50 =
40545 79369 34305 95633 69460 92661 90193 12999 60355 15495
11999 70355 90193 01999 30154 94619 99393 55900 58519 99305
55154 94619 99393 55900 98419 99303 55958 94019 99503 55900
98919 99703 55154 94019 99503 55187 50593 61999 30139 94019
99308 65063 36996 02189 61336 94609 21610 64482 18353 2437X =
233 50 =
40547 79369 33505 95633 69460 92661 90193 31999 38355 15493...
232 43 =
40547 79369 32505... etc
229 27 =
40545 79369 31505... etc.
200 50 =
40545 79825 05945... etc
197 18 =
40545 79815 05946... etc.
189 20 =
40545 79775 05942....etc
000 24 =
13094 11991 99946....etc

Courtesy BR

Special thanks for the efforts of the Morse Team for the logging & analysis of this station AB, BR, CB, E.SMITH, GD, JkC, JPL, Manolis, Topol - Thanks Guys!

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

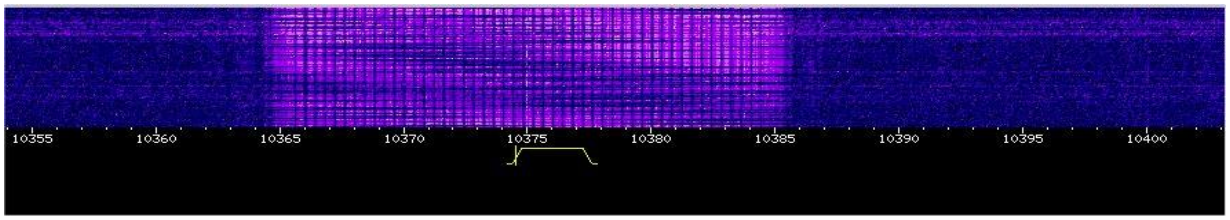
Due to the poor reception of this signal in both the UK and Canada, GlobalTuners receivers at Hong Kong, Mojave Desert & Sydney - as well as the Twente SDR, were used frequently to confirm the msg detail. Reception in S.E. England is weak to fair at present.

M97 re-appeared today at the usual time (+- 5m) on the usual freq after an absence of 10 moths, almost to the day. Last heard on 07 May 2015, the station has not been reported since. It is STILL sending the same SD84 msg it has sent from Aug 2013.

10375	1500 (IP) - 1515z	08 Mar	SD84 SN58	Sent 3 times	Strong Via Hong Kong, weak into S.E. England	BR	TUE
	1500 (IP) - 1515z	09 Mar	SD84 SN58	Sent 3 times		AB/BR	WED
	1500 (IP) - 1515z	17 Mar	SD84 SN58	Sent 3 times		AB/BR	THU
	1500 (IP) - 1515z	18 Mar	SD84 SN58	Sent 3 times	Severe QRM due to wideband radar signal	AB/BR	FRI
	1500 (IP) - 1515z	24 Mar	SD84 SN58	Sent 3 times		AB/BR	THU
	1454 - 1515z	25 Mar	SD84 SN58	Sent 3 times		AB	FRI
	1454 - 1515z	31 Mar	SD84 SN58	Sent 3 times	Good	AB	THU
	1454 - 1515z	01 Apr	SD84 SN58	Sent 3 times	Fair via Twente	BR	FRI
	1454 - 1515z	14 Apr	SD84 SN58	Sent 3 times	Fair via Twente under strong wideband radar	BR	THU
	1454 - 1515z	15 Apr	SD84 SN58	Sent 3 times	Weak via Twente	AB/BR	FRI
	1454 - 1515z	21 Apr	SD84 SN58	Sent 3 times	Weak via Twente	BR	THU
	1454 - 1515z	22 Apr	SD84 SN58	Sent 3 times	Fair via Twente	BR	FRI
	1454 - 1515z	28 Apr	SD84 SN58	Sent 3 times	Fair via Twente	BR	THU
	1454 - 1515z	28 Apr	SD84 SN58	Sent 3 times	Weak via Twente	BR	FRI

It goes to show - certainly with this station, that you should never assume it has gone inactive.

Both Ary (AB) & Jim (JkC) also noted the return of V30 at its regular time & frequency - 1554z on 10255kHz. As has been the reported before, if M97 appears, it is also likely that V30 will also be present on the same day.



Thu 14 Apr - 10375kHz **M97 under strong wideband radar signal** ***Courtesy BR***

M97 10375kHz 1454z 31 Mar16

SO DIEN: 84 SO DIEN: 84 SO DIEN: 84

DK: HT HT HT

SO NHOM: 58 SO NHOM: 58 SO NHOM: 58

AAAAAAAAAAAAAAAAAAAAAAAAA

99324 20677 08739 99636 96965 54484 33165 73144 79429 78620
39915 66546 27757 88700 97238 14506 06185 28529 91347 58476
97654 04920 77677 68494 68775 93995 42047 83420 12029 65119
62117 53236 17108 82136 93364 29498 76417 98320 89878 18024
87216 10241 89350 23597 51616 09230 40880 03965 97942 45682
02439 57570 98181 13039 13354 64933 37670 27264

KKKKKKKKKKKKKKKKKKKKKKKKK

(Msg including full headers Sent three times)

Courtesy AB

Morse Stations - Not Number Related

M51 XlX & **M51a** (FAV22) Daily Mon - Fri, Sun & some Sats. See NL 72 for details

PoSW reports;

The M51a French Morse station on 6825 and 3881 kHz remains busy, identifying from time to time with, "VVV DE FAV22"; not strictly speaking a number station but interesting nonetheless. No observer of public holidays, in much the same way as it was noted active on the early morning of Christmas Day last year it was also noted on Easter Sunday, 27-March, at around 1525 UTC.

A couple of observations concerning the 6825 frequency, nothing to do with the Morse station itself but interesting all the same; on Sunday 27-March at around 0905 UTC I noted a weak SSB station on the HF side on 6826, M51a was not transmitting at the time. On tuning in the SSB it turned out to be the voice of the Irish lady of Shannon VOLMET with the met info for Atlantic air traffic.

A bit strange, I thought, Shannon is usually a good signal on 5505 and a few other frequencies but I had never heard it on 6826 before. The signal was weak and somewhat distorted and I thought that perhaps some clown with an SSB transceiver had recorded some Shannon info and was transmitting it just for the pure devilment. A check with another receiver showed that it was actually in real time, it was the info that was going out on 5505. Not a problem in the front end of the receiver, it could be heard with several different radios including one of 1940's vintage.

It was also there at various times in the UK morning, around 0900 – 0930 UTC, on the 28th and 29th of March but was not heard after that. It was several days into April before I came up with a possible explanation for this; one of the frequencies used by Shannon is 3413 kHz. 6826 is twice this frequency so the most likely scenario here is that there was a fault in the 3413 transmitter producing a second harmonic which was strong enough to be propagated across the Irish Sea and over to this side of England.

And 6825 has recently received another occupant besides M51a; this frequency has been generally free from other signals but on Thursday 7-April at 1550 UTC there was a strong "XJT", STANAG whatever, churning away. I had never noticed one of these things on 6825 before and it has been there, off and on, on most days since, strong enough at times to over-ride M51a.

3881//6825

1130 - 1219z	04 Apr	Lundi-Leçon	01-2/1 Codé	01-2/2 Clair,	01-2/3 Codé,	01-2/4 Clair (420 grps/hr)	BR	MON
1130 - 1204z	05 Apr	Mardi-Leçon	02-2/1 Codé	02-2/2 Clair,	02-2/3 Codé,	02-2/4 Clair (600 grps/hr)	BR	TUE
1130 - 1158z	14 Apr	Jeudi- Leçon	14-1/1 Codé,	14-1/2 Clair,	14-1/3 Codé,	14-1/4 Clair (840 grps/hr)	BR	THU
1130 - 1204z	15 Apr	Vendredi- Leçon	15-1/1 Codé,	15-1/2 Clair,	15-1/3 Codé,	15-2/4 Clair (960 grps/hr)	BR	FRI

The 6825kHz transmissions on 14 & 15 April were under a strong XJT transmission that appears to have recently taken up occupation on the frequency.

M89 O

This is a summary of activity from the M89 stations.

Operator Chat from M89

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

3210 3300 3563 3572 3664 3741 3747 3767 3870 3883	4121 4225 4328 4364 4375 4577 4635 4638 4639 4640	5070 5123 5126 5191 5212 5270 5321 5383 5441 5477 5515 5544 5555 5566 5588 5678	6411 6450 6553 6644 6657 6666 6985 6987 6710 6768 6781 6845 6983	7777 7952	8161 8847 8888	10123

New Scheds for Mar/Apr 2016: **From logs submitted from JPL**

4131//**5177**	New pairing for SLBC	First heard 19 Mar	V JKDJ (x3) DE SLBC (x2)
5177//11460	New freq pair for this Round Slip	First heard 20 Mar	V JKDJ (x3) DE SLBC (x2)
4322//NRH	New frequency & Round Slip	First heard 22 Mar	V B9GJ (x3) DE FSC8 (x2)
4990//NRH	New frequency & Round Slip	First heard 22 Mar	V YS5D (x3) DE IMNS (x2)
4990//NRH	New call signs for this frequency	First heard 06 Apr First heard 07 Apr	**V J3SU (x3) DE RTIB (x2)** V J3S**W** (x3) DE RTIB (x2)
4991//NRH	Change to frequency & Round Slip	First hears 26 Apr Previous on 4990kHz using J3SU DE RTIB from 06 - 12 Apr 16.	V **W3SU** (x3) DE RTIB (x2)

On 27 April the reappearance of 2SLC on 5588kHz was noted - This has not been heard on this frequency since 16 January.

Chart of M89 Freq & Call signs heard in Mar/Apr 2016 **New Scheds shown in Bold Type**

Freq in KHz	Call Slip
3330//NRH	V MW3D (x3) DE 2SLC (x2)
3642//NRH	V DKG6 (x3) DE 3A7D (x2)
3642//7602	V DKG6 (x3) DE 3A7D (x2)
4131//NRH	V JKDJ (x3) DE SLBC (x2)
4131//**5177**	**V JKDJ (x3) DE SLBC (x2)**
4322//NRH	**V B9GJ (x3) DE FSC8 (x2)**
4720//NRH	VVV WNF (x3) DE FXM (x2)
4860// 6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?
4990//NRH	**V YS5D (x3) DE IMNS (x2)**
4990//NRH	**V J3SU (x3) DE RTIB (x2)**
4990//NRH	**V J3SW (x3) DE RTIB (x2)**

Freq in kHz	Call Slip
5177//NRH	V JKDJ (x3) DE SLBC (x2)
5177//11460	**V JKDJ (x3) DE SLBC (x2)**
5588//NRH	V MW3D (x3) DE 2SLC (x2)
5801//NRH	V DKG6 (x3) DE 3A7D (x2)
5801//10180	V DKG6 (x3) DE 3A7D (x2)
6840//NRH	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
6840//10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
10180//NRH	V DKG6 (x3) DE 3A7D (x2)
10640//NRH	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
11460//NRH	**V JKDJ (x3) DE SLBC (x2)**

Courtesy JPL

M98 6768kHz 1228 - 1235z 10 Mar16

CGX9 (Remote tuner Siberia)

QSL 2028 QSA 2 AR (IP – Hand sent - 1228z)
VVV CGX9 (x3) QSL 2029 QSA 2 AR (1229z)
VVV CGX9 (x3) QSL 2030 QSA 2 AR (1330z)
VVV CGX9 (x3) QSL 2032 QSA 2 AR (1332z)
HR HR WK NR 911 K K (1334z)
HR WK 911 K (1235z)
SK (1235z - Silent)

M89 3642//7602kHz 1422 - 1432z 24 Mar16

V DKG6 (x3) DE 3A7D (x2) (IP)(Remote tuner Siberia)

4UDA NDA7 NA7D DAUT UT4N DDT6
(IP – Handsent – Cont'd – 1422z)
III BT TDU7 ANTU 5T54 645A (Cont'd – 1427z)
(Silent – 1432z)
? T36T 6T45 5NTN D76D (Cont'd – 1432z)
III BT A7UN NAUD D4A6 3U6A (Cont'd – 1434z)
QSL ? HR WK NR 310 (1440z – Return to R/S)

M89 8161kHz 1242 - 1245z 10 Apr16
(IP) (Remote tuner Siberia)
TN5T 747N 6A65 5D67 D765 (Cont'd Hand sent - 1242z)
AR K (1244z)
R QSL ? K
R U 7G GA K
R GA (1245z)

Courtesy JPL

M89 4364kHz 2032 - 2054z 30Mar16

C3RF (Remote tuner Siberia)

V 7RTE DE C3RF K (2032z) R QSA 2 IEC BT ZSSL AR K (2033z)
(Normally associated with exercise traffic)
R HR WK NR 16192299 K (2033z)
R HR F GA
FFF NR 1605/EX 0435 RMKS CQ BT
MZ0/C3U AR (2035z)
NR 1605/EX 0435 RMKS CQ BT
MZ0/C3U AR
NR 1605/EX 0435 RMKS CQ BT
MZ0/C3U AR
V KX5J DE C3RF K (2036z)
R KP
V 7RTE DE C3RF K
R HR MSG GA
NR 1606 CK 61 97 0331 0430 RMKS CQ BT (2038z)
A3TN 76UA 4U5D 4TNA D67T 6UN7 334T 3N5T 4NTN 3UN6
T3ND 6AN5 U43D 6DAN U45D 43UT 4D3A 75UN U7DN TA34
6543 A5DU 36DU TN7D 67ND T7N6 D7TU 47NA 3D5A 36TD
5NDT 4TD5 7AT6 TAD7 4UD3 7D6A .AN. 5UN3 A456 3ND5
DNN5 5N4A N64T NTU3 5N7U U573 36TN T4A3 AD57 3ATD
A7D5 U734 NA7T 654A TU67 T53A TD7N UT43 3674 N356
3756 AR (2043z)
V KX5J DE C3RF K (2044z)
R KP
V 7RTE DE C3RF K (2044z)
R OK SK SK (2045z)

Courtesy JPL

DP Stations

3516	1601z (IP)	24 Mar	DP7391 QSA2 NIL SK	(Remote tuner Siberia)	JPL	THU
3894	1558 - 1603z	06 Mar	DP91 - Appears to be a regular sked Calls to stns DP7391, DP7491, DP7591, DP7691, DP7791 (Out-stations normally on 3516kHz)	(Remote tuner Siberia)	JPL	SUN
	1601 - 1603z	07 Mar	DP91 Calls to stns DP7391, DP7491, DP7791	(Remote tuner Siberia)	JPL	MON
	1559 - 1603z	09 Mar	DP91 Calls to various DP stns DP7091, DP7391, DP7491, DP7591, DP7691, DP7991 All Nil msgs(Outstations normally on 3516)	(Remote tuner Siberia)	JPL	WED
	1608 (IP) - 1609z	25 Mar	DP91 - Calls to DP7491,DP7691	(Remote tuner Siberia)	JPL	FRI
4375	1356 IP) - 1410z	25 Mar	DP4091 - CQ (x3) DE DP4091 (x2) V HR NIL SK GB (x3)	(Remote Siberia)	JPL	FRI
6632	0810 (IP) - 0839z	20 Mar	Probably DP91 - Calls to various stns DP7091, DP7391, DP7491, DP7591, DP7791	(Remote tuner Siberia)	JPL	SUN

6845//8858 **New frequency and // for this call sign**

1008 - 1011z	05 Apr	DP91 - CQ (x3) DE DP91 (x2) V PSE ALL TO HR PSE ALL LL TO HR LSN ALL LL IT HR	(Remote tuner Siberia)	JPL	TUE
1000z	08 Apr	S E E CQ DP91 V CQ (x3) DE DP91 (x2) V	(Remote tuner Siberia)	JPL	FRI
0957 - 1006z	20 Apr	CQ (x3) DE DP91 (x2) V HR NIL SK GB (x 15)	(Remote tuner Siberia)	JPL	WED
0958 - 1008z	28 Apr	CQ (x3) DE DP91 (x2) V HR NIL SK GB (x4)	(Remote tuner Siberia)	JPL	THU
1001 - 1006z	29 Apr	DP91 (x3) DE CQ (x2) V HR NIL SK GB (x 11)	(Remote tuner Siberia)	JPL	FRI

M95 O XSV, XSV70, XSV85

M95 Morse Logs

4243//9054 **This appears to be a new M95 station, as message number differs from current XSV70 and XSV85 message numbers**
All logged via Remote tuner Hong Kong unless stated.

1142 (IP) - 1212z	02 Mar	NR 017 CK 19 35 0302 1520 BT NR 04 CK 095 35 0302 1634 BT NR 026 CK 16 35 0302 1652 BT		JPL	WED
2341 (IP) - 2354z	02 Mar	NR 027 CK 14 35 0303 0559 BT NR 018 CK 29 35 0303 0634 BT NR 05 CK 036 35 0303 073D BT		JPL	WED
1140 (IP) - 1200z	03 Mar	NR 019 CK 18 35 0303 1520 BT NR 06 CK 130 35 0303 1555 BT NR 029 CK 1 . 35 0303 1615		JPL JPL	THU THU
2354 (IP) - 2359z	03 Mar	NR 07 CK 065 35 0304 0735 BT		JPL	THU
1138 (IP) - 1200z	04 Mar	NR 01 CK 30 35 0304 1513 BT NR 032 CK 25 35 0304 1546 BT NR 08 CK 156 35 0304 1615 BT	(Failed to switch to voice for V26 sked,)	JPL	FRI
1140 (IP) - 1153z	06 Mar	NR 025 CK 20 035 0306 1502 BT NR 12 CK 155 35 0306 1604 BT		JPL	SUN
1143 (IP) - 1206z	07 Mar	NR 027 CK 28 35 0307 1506 BT NR 14 CK 174 35 0307 1610 BT NR 004 CK 2035 0307 1619 BT		JPL	MON
1150 (IP) - 1153z	08 Mar	NR 16 CK 115 35 0308 1613 BT		JPL	TUE
1146 (IP) - 1157z	09 Mar	NR . 8 CK 103 35 0309 1630 BT NR 047 CK 15 35 0309 1637	(In Chinese digital 4+4 QPSK 75/3000 at 1141z)	JPL	WED
1144 (IP) - 1201z	10 Mar	NR 033 CK 29 35 0310 1456 BT NR 050 CK 15 35 0310 1513 BT NR 20 CK 159 35 0310 1616 BT		JPL	THU
1143 (IP) - 1155z	14 Mar	NR 041 19 35 0314 1518 BT NR 28 CK 101 35 0314 1601 BT		JPL	MON
1142 (IP) - 1146z	19 Mar	NR 38 CK 135 35 0319 1 .46 BT		JPL	SAT
1138 - 1155z	20 Mar	NR 03 CK 17 35 0320 01515 BT NR 05. CK 17 35 0302 .. 515 BT NR 40 CK 131 35 0320 1557 BT		JPL	SUN
1147 (IP) - 1208z	22 Mar	NR 057 CK 32 35 0322 1 . 3.BT NR 44 CK 1 .. 35 0322 1 .47 BT NR 08. CK 21 35 0322 .602 BT NR 086 CK 21 35 0322 1602 BT		JPL	TUE
1146 (IP) - 1159z	24 Mar	NR 092 CK 13 35 0324 1522 BT NR 061 17 35 0324 1555 NR 48 110 35 0324 1... BT		JPL	TUE
1144 (IP) - 1220z	26 Mar	NR 065 CK 19 35 0326 1514 BT NR 098 CK 13 35 0326 1623 BT NR 52 CK 114 35 0326 1623 BT		JPL	SAT
1142 IP) - 1157z	31 Mar	NR 62 CK 166 35 0331 01616 BT		JPL	THU
1147 (IP) - 1228z	01 Apr	NR 077 CK 34 35 0401 1518 BT NR 02 CK 148 35 0401 1600 BT NR 017 CK 39 35 040A A636 BT	(Remote tuner Siberia)	JPL	FRI
1141 (IP) - 1207z	05 Apr	NR 085 CK 19 35 0405 1500 BT NR 085 CK 19 35 0405 1500 BT NR 029 CK 17 35 0405 1556 BT		JPL	TUE
1146 (IP) - 1154z	07 Apr	NR 089 CK 26 35 0407 15 . . BT NR 14 CK 155 35 0407 1558 BT		JPL	THU
1150 (IP) - 1225z	10 Apr	NR 095 CK 25 35 0410 1518 BT NR 20 CK 186 35 0410 1634 BT NR 044 CK 31 35 04A0 1636 BT	(Remote tuner Siberia)	JPL	SUN
1142 (IP) - 1155z	12 Apr	NR 24 CK 141 35 0412 1531 BT	(Remote tuner Siberia)	JPL	TUE
1141 (IP) - 1153z	14 Apr	NR 003 CK 32 35 0414 1453 BT NR 28 CK 161 35 0414 1613 BT	(Remote tuner Siberia)	JPL	THU
1154 (IP) - 1202z	20 Apr	NR 40 CK 142 35 0420 1608 BT		JPL	WED

	1139 (IP) - 1146z	21 Apr	NR 42 CK 148 35 0421 1608 BT		JPL	THU
	1144 (IP) - 1148z	27 Apr	NR 029 CK 17 35 0427 1518 BT		JPL	WED
	1142 (IP) - 1208z	29 Apr	NR 033 CK 23 35 0429 1516 BT		JPL	WED
			NR 002 CK 20 35 0429 1636 BT			
			NR 58 CK 12 . 35 0429 1707 BT			
4283//7553	Call sign XSV70					
	0919 (IP) - 0940z	09 Mar	NR 206 CK 114 35 0309 1520	(Remote tuner Hong Kong)	JPL	WED
			NR 207 CK 190 35 0309 1520			
	1142(IP) - 1150z	21 Mar	NR 055 CK 24 35 0321 1510 BT	(Remote tuner Hong Kong)	JPL	MON
			NR 42 CK 106 35 0321 1551 BT			
4284						
	1300 - 1338z	21 Mar	NR 242 CK 96 35 0321 1556 BT	(Remote tuner Hong Kong)	JPL	MON
			NR 243 CK 157 35 0321 1556 BT	Did not switch to voice/V26		
	1302 - 1315z	26 Mar	NR 2 .7 CK 104 35 0326 1545 BT	(Remote tuner Hong Kong)	JPL	SAT
4284//7554	Call sign XSV70					
	1325 (IP) - 1342z	25 Mar	NR 255 CK 184 35 0325 1605	(Remote tuner Siberia)	JPL	FRI
4444	(Message header format suggests QV5B family)					
	1153 (IP) - 1217z	13 Mar	Traffic mostly confirming grps	(Remote tuner Hong Kong)	JPL	SUN
			Msg headers 7G NR 1456, 7G NR 14567G, NR 14567M BT, MG NR 112456 7G			
5500	2157z	01 Apr	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd)	(Remote tuner Hong Kong)	JPL	FRI
	1940z	03 Apr	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd)	(Remote tuner Siberia)	JPL	SUN
5197	05 05 05					
	1220 (IP) - 1227z	07 Apr	III III III 05 05 05 05 3U6A T4D7 NU65 43A5...etc.	(Remote tuner Siberia)	JPL	THU
5555	Usually XSV85		**Note lack of originality in call-signs in both call-up & message header**			
	1537 - 1600z	07 Mar	VVV **WXYZ** DE **ABCD** K K	(Remote Hong Kong)	JPL	MON
			NR 0002 CK 99 24 0307 2325 RMKS **1234** TO **5678** CY HW ? K			
	1117 (IP) - 1124z	05 Apr	05 05 05 etc... Hand sent – Long zeros	(Remote tuner Hong Kong)	JPL	TUE
6666	Call sign XSV85					
	0057 (IP) - 0134z	09 Mar	05 05 05 (Definitely confirms that XSV85 and 05 are linked)	(Remote Hong Kong)	JPL	WED
			NR 0002 CK 99 3I			
			NR 0002 CK 99 24 0307 2325 RMKS 1234 TO 5678 BT (Interesting From and To address)			
			(Note: Identical message sent 5555kHz 1537z 07Mar16)			
7163	05 05 05					
	1212 (IP) - 1233z	02 Apr	7G NR ..0 /CCK CK ...02 20000 RMKS 02.. TO ..9..	(Remote tuner Siberia)	JPL	SAT
7777	Call sign XSV85	Messages contain 35 in the message header like M95 stations				
	0948 (IP) - 1020z	09 Mar	NR 268 CK 50 35 0309 1745	(Remote tuner Hong Kong)	JPL	WED
			NR 4571 CK 50 35 0409 1801			
			NR 269 CK 50 35 0309 1808			
			NR 4573 CK 50 35 0309 1814			
7788	Message format suggests QV5B family					
	1100 (IP) - 1112z	12 Mar	NR 01/CCK CK 91 57 0312 1900 RMKS BAHX TO MIIM BT	(Remote Hong Kong)	JPL	SAT
			(Normally uses numbers in RMKS)			
8073	Usual format is Initial call-up in voice USB, then to digital 4+4 mode LSB, finally, switching to CW					
	CW call-up is **V BNGC (x3) DE XSV85 (x2)** All logged via Remote tuner Hong Kong unless stated.					
	1129 - 1142z	02 Mar	NR 0199 CK 25 35 0302 1542 BT		JPL	WED
			NR 0200 CK 163 35 0302 1546 BT			
	0009z (IP)	03 Mar	Extremely weak signal - Mostly unreadable		JPL	THU
	0007 (IP) 0013z	04 Mar	BT BT TT4 3U4 3A4 TAU 773 353 (Just missed the message number!)		JPL	FRI
	1130 - 1138z	04 Mar	NR 0204 CK 120 35 0404 1522 BT		JPL	FRI
	1128 - 1138z	06 Mar	NR 0208 CK 189 35 0306 0550 BT		JPL	SUN
	0009 (IP) - 0015z	07 Mar	NR 0209 CK 115 35 0307 0711 BT		JPL	MON
	1130 - 1142z	07 Mar	NR 0210 CK 274 35 0307 1631 BT		JPL	MON
	1130 - 1149z	08 Mar	NR 0213 CK 42 35 0308 1454 BT		JPL	TUE
			NR 0214 CK 344 35 0308 1602 BT			
	1129 - 1214z	09 Mar	NR 0217 CK 328 35 0309 1615 BT		JPL	WED
			NR 0218 CK 47 35 0309 1615 BT			
	0006 - 0026z	10 Mar	NR 0219 CK 124 35 0310 0714 BT		JPL	THU
			NR 0220 CK 35 35 0310 0717 BT			
	1144 (IP) - 1203z	10 Mar	Traffic 3 fig grps - No msg headers logged		JPL	THU
	0001 (IP) - 0009z	11 Mar	NR 0223 CK 162 35 0311 0710 BT Signal badly distorted/Weak/Fading		JPL	FRI

	0001 (IP) - 0033z	12 Mar	NR 0227 CK 145 35 0312 0722 BT	JPL	SAT
			NR 0228 CK 22 35 0312 0722 BT		
	1130 - 1140z	12 Mar	NR 0229 CK 300 35 0312 1612 BT	JPL	SAT
	1130 - 1142z	13 Mar	NR 0231 CK 209 35 0313 1650 BT	JPL	SUN
	1129 -1142z	14 Mar	NR 0233 CK 214 35 0314 1555 BT	JPL	MON
	0001 - 0016z	19 Mar	NR 0242 CK 142 35 0319 0700 BT	JPL	SAT
	1131 - 1138z	19 Mar	NR 0243 CK 301 35 0319 1621 BT	JPL	SAT
	0001 - 0021z	20 Mar	NR 0244 CK 125 35 0320 0711 BT	JPL	SUN
	1129 - 1138z	20 Mar	NR 0245 CK 288 35 0320 1523 BT (Remote tuner Siberia)	JPL	SUN
	1130 - 1215z	21 Mar	Mainly Chinese digital 4+4 QPSK 75/3000 Brief CW traffic 3 fig grps	JPL	MON
	0030 (IP) - 0035z	22 Mar	TUA 773 TUU 773 356 (hand sent)	JPL	TUE
	1129 - 1225z	22 Mar	NR 0250 CK 49 35 0322 1604 BT	JPL	TUE
			NR 0251 CK 269 35 0322 1605 BT		
	1129 - 1144z	24 Mar	NR 0259 CK 36 35 0324 1525 BT	JPL	THU
			NR 0260 CK 170 35 0324 1533 BT		
	1140z (IP)	25 Mar	NR 0253 CK ..35 0325 15.. BT PSE CY (Very weak – 1140z)	JPL	FRI
	0001 - 0021z	26 Mar	NR 0265 CK 110 35 0326 0709 BT	JPL	SAT
	1130 - 1205z	26 Mar	NR 0267 CK 263 35 0326 1605 BT	JPL	SAT
			NR 0268 CK 30 35 0326 1611 BT		
	1129 - 1136z	29 Mar	NR 0279 CK 123 35 0329 1... BT (Very Weak sig - Normally quite strong)	JPL	TUE
	0017 (IP) - 0020z	31 Mar	773 TUU 773 TU6 773 TU7 773 356	JPL	THU
	1132 - 1140z	31 Mar	NR 0283 CK 95 35 0331 1525 BT	JPL	THU
	1144 (IP) - 1145z	01 Apr	NR 028. CK 16. 35 0401 1516 BT (Remote tuner Siberia)	JPL	FRI
	1134 (IP) - 1139z	02 Apr	NR 0287 CK 165 35 0402 1538 BT (Remote tuner Siberia)	JPL	SAT
	0001 - 0018z	05 Apr	NR 0292 CK 123 35 0405 0719 BT	JPL	TUE
	1127 - 1138z	05 Apr	NR 0293 CK 203 35 0405 1548 BT	JPL	TUE
	0008 (IP) - 0020z	05 Apr	NR 294 CK 124 35 0406 0714 BT	JPL	WED
	1131 - 1137z	06 Apr	0295 CK 140 35 0406 1542 BT	JPL	WED
	0001 - 0004z	08 Apr	V BNGC (x3) DE XSV85 (x2) (Remote tuner Siberia)	JPL	FRI
	1147z (IP)	10 Apr	Too weak to copy (Remote tuner Siberia)	JPL	SUN
	1130 - 1141z	12 Apr	NR 00307 CK 241 35 0412 1616 BT (Remote tuner Siberia)	JPL	TUE
	1130 - 1153z	20 Apr	NR 0424 CK . 20 35 0420 1542 BT (unsure about message number - very weak)	JPL	WED
	1129 - 1139z	21 Apr	NR 0325 CK 223 35 0421 1550 BT NK3 UNI 3AN 3U7 TAU 773 TA7 773	JPL	THU
	1140 (IP) - 1143z	27 Apr	773 353 374	JPL	WED
	1130 - 1141z	29 Apr	NR 0341 CK 274 35 0429 1620 BT	JPL	FRI
8507	2218 IP) - 2224z	19 Mar	05 05 05 05 05 BT Cut numbers - mainly run together (Remote tuner Hong Kong)	JPL	SAT
8888	Call Sign XSV85				
	1124 (IP) - 1127z	06 Mar	05 05 05 (Cont'd – Long zero) Traffic 3 fig grps (Remote tuner Hong Kong)	JPL	SUN
	1339 (IP) - 1356z	24 Mar	NR 0260 CK 170 35 0324 1533 BT **(This msg sent by XSV85 on 8073 at 1144z)**	JPL	THU
			NR 0257 CK 108 35 0324 0714 BT		
8889	1210 (IP) - 1216z	07 Mar	05 05 05 777777 Traffic 4 fig grps (Remote tuner Hong Kong)	JPL	MON
	1155z (IP)	08 Mar	05 7G GA (1155z - Silent, monitored until 1215z) (Remote tuner Hong Kong)	JPL	TUE
9054	Call sign XSV85	All logged via Remote tuner Hong Kong unless stated			
	0001 (IP) - 0006z	04 Mar	NR 07 CK 065 35 0304 0725 BT 9054kHz	JPL	FRI
	2338 - 2359z	06 Mar	NR 025 CK 35 35 0307 0625 BT	JPL	SUN
	0001 - 0023z	07 Mar	NR 039 CK 31 35 0307 0644 BT	JPL	MON
			NR 139 CK .09 35 0307 073. BT	JPL	MON
	2356 (IP) - 0004z	09 Mar	NR 19 CK 041 35 0310 0714 BT	JPL	WED
	2157 IP) - 2159z	10 Mar	Traffic 3 fig grps - No msg headers logged	JPL	THU
	2340 (IP) - 2355z	11 Mar	NR .04 CK 17 35 0312 0.210 BT	JPL	FRI
			NR 036 CK 18 35 0312 00.40 BT		
			NR 23 CK 041 35 0312 0072 BT		
	1140 (IP) - 1153z	12 Mar	NR 037 CK 23 35 0312 1512 BT	JPL	SAT
	1142 (IP) - 1148z	13 Mar	NR 039 CK 17 35 0314 1505 BT	JPL	SUN
			NR 266 CK 154 35 0313 1611 BT		
	2339 (IP) - 2359z	18 Mar	NR 050 CK 20 35 0319 0615 BT	JPL	FRI
			NR 075 CK 22 35 0319 0627 BT		
			NR 37 CK 069 35 0319 0730 BT		
	2338 (IP) - 2359z	19 Mar	NR 078 29 35 0320 0621 BT	JPL	SAT
			NR 052 18 35 0320 0642 BT		
			NR 039 CK 039 35 0320 0723 BT		
	2346 (IP) - 2355z	25 Mar	NR 096 CK 13 35 0326 061. BT (Remote tuner Siberia)	JPL	FRI
			NR 51 CK 0.9 35 0326 0 .2. BT		
	1128 (IP) - 1148z	29 Mar	HR MSG TOYR GA PSE CY	JPL	TUE
	2351 (IP) - 2359z	30 Mar	NR 074 CK 32 35 0331 0625 BT	JPL	WED
			NR 051 CK 070 35 0331 0626 BT		
	0001 (IP) - 0011z	31 Mar	NR 61 CK 078 35 0331 0729 BT	JPL	THU

2339 (IP) - 2359z	31 Mar	NR 015 39 35 0401 063 . BT NR 076 28 35 0401 064 . BT NR 010 .4 35 0401 0626 BT	(Very weak – fading)	JPL	THU
2338 (IP) - 2359z	05 Apr	NR 040 CK 21 35 0406 0623 BT NR 086 CK 20 35 0406 0635 BT NR 01 CK 083 35 0406 0721 BT		JPL	TUE
2342 (IP) - 2352z	07 Apr	NR 136 . . 9 3 . 0408 0556 BT NR 9 . CK 21 35 0408 062 . BT NR 15 CK 078 35 0408 . .6. BT	(Very weak – fading)	JPL	THU
2350 (IP) - 2359z	08 Apr	NR 03 CK 26 00747 BT NR 092 CK 23 040409 0047 NR 108 CK 005 435 0409 0.27 BT	(Remote tuner Siberia)	JPL	FRI
0001 (IP) - 0015z	12 Apr	NR 23 CK 096 35 0412 0524 BT	(Remote tuner Siberia)	JPL	TUE
1145 (IP) - 1200z	15 Apr	NR 30 CK 17. 35 0415 1516 BT	(Remote tuner Siberia)	JPL	FRI
1200 (IP) - 1224z	16 Apr	773 354 373 N3D 353 Weak/fading – Hand sent	(Remote tuner Siberia)	JPL	SAT
1142 (IP)z	17 Apr	(Noise level too strong to copy CW)	(Remote tuner Siberia)	JPL	SUN
1143 (IP) - 1148z	18 Apr	NR 36 CK .6. 35 0418 1623 BT	(Remote tuner Siberia)	JPL	MON
1152 (IP)z	19 Apr	(Too weak to copy)	(Remote tuner Siberia)	JPL	TUE

(See also 4243//9054kHz listing)

M95 8073kHz 1130 - 11149z 08 Mar16

V BNGC (x3) DE XSV85 (x2) (Remote tuner Hong Kong)

Initial callup in voice USB - 1130z - Male operator
Chinese digital 4+4 QPSK 75/3000 - LSB - 1131z
Switched to CW - Cont'd – Hand sent - 1142z

HR MSGS GA PSE CY (1143z)
NR 0213 CK 42 35 0308 1454 BT BT
TT3 N5U TTD N53 TAD N54 7TT TTU 746 7T5
7TA 4TA N7D N35 7T5 4TN NAN 74D 33U 336
N3U 7A3 777 TAU 773 TA7 773 TAD 773 TAN
773 TUT 773 7NN D3A N56 4TN 777 7AD N47
3AN 7U5 AR (1145z)
MSG AGN
NR 0213 CK 42 35 0308 1454 BT BT
TT3 N5U TTD N53 TAD N54 7TT TTU 746 7T5
(Cont'd repeat message – 1147z)
AR AR
A HR MSG GA
NR 0214 CK 344 35 0308 1602 BT BT
TTD 3U6 3AN 3U7 TAU 773 (Cont'd)

(1149z – Switched to 9054 M95 Sked)

Courtesy JPL

M95 4243//9054kHz 1150 - 1225z 10 Apr16

Hand sent (In progress) (Remote tuner Siberia)

..434 3DA TTU TT3 773 446 3D3 4D3 75D 4DU AR (Cont'd)
7G AGN
NR 095 CK 25 35 0410 1518 BT
5TD UTT TAT 3U6 7T3 7TA N44 3A4 356 35D (Cont'd – 1152z)
AR
A HR 7G GA
NR 20 CK 186 35 0410 1634 BT
UTU TAT 3U5 3A4 TTU 773 5AN 3D3 534 T33 (Cont'd – 1155z)
AR (1208z)
7G AGN
NR 20 CK 186 35 0410 1634 BT
UTU TAT 3U6 3A4 TT3 773 5AN 3D3 534 T33 (Cont'd – 1210z)
AR (1221z)
A HR 7G GA
NR 044 CK 31 35 04A0 1636 BT
UT5 TAT 3U6 3U4 TTA TTU TT3 773 35U (Cont'd – 1224z)
AR (1225z)
7G AGN
NR 044 CK 31 35 0410 1636 BT
UT5 TAT 3U6 3U4 TTA TTU TT3 773 35U (Cont'd – 1225z)

Courtesy JPL

Oddities

More on the 'W' Marker

In the last newsletter we carried a brief report from one of our regular contributors of an irregular 'W' marker, heard on 8112kHz over 11 - 12 February. Our contributor's comment - that it was difficult to see that it had any purpose, resulted in responses from both Ary (AB) & Tony (Topol), both of whom have a good deal of expertise in the area of Russian military communications - the source of this marker.

First a brief explanation from Ary;

> This is not a new marker but one that has been on the air for a couple of years. It is a marker of the Russian Air Force Tu-Bear net. The marker indicates that traffic will follow on the channel. If traffic is to follow, then the marker is sent at hh+00, hh+20, hh+40 for two minutes. There are a number of markers but the most active one is W. The marker indicates which station will be on the air. W is most likely Moscow.
>
> So far heard are W, R, N, G, C, K, Z, L, V, Ü Freqs include 5620, 5835, 8029, 8112, 8162, 8895 kHz *Thanks Ary*

Tony has a particular interest in monitoring the Russian military & has provided us with follow-up logs of activity on 8112 & 8131kHz as well as a good deal of extra information;

> Oh, it has a lot of purpose ? This is the Russian Strategic Air force, presumed Moscow.
>
> These marker frequencies only become active when there is a "Bear" mission, by "Bear" this could be Tu-95 or Tu-160's. The Ground station send's a "W" every 20 minutes (H+00, H+20, H+40) and they last for two minutes as you describe, ending in K.
>
> When they communicate with the Bears it is in Duplex in a coded format, containing groups of three numbers, though these days they tend to use the USB frequencies more (in Simplex mode).

Here's an excerpt from the 17 Feb16 - If only the author had waited a couple of days ;-)

CW Log 8112kHz 17 Feb 2016		
0800z W Markers	1059z IWV4 QRV	1600z [Nil broadcast]
0820z W Markers	1100z IWV4 = 689 119 746 691 =W Markers	1620z W Markers
0830z [message sent, missed]	1120z W Markers	1640z W Markers
0840z W Markers	1140z W Markers	1700z W Markers
0900z W Markers	1200z W Markers	1720z W Markers
0903z 4YMA DE IV4M [error] 4YMA DE IWV4 QSA?	1205z 4YMA DE IWV4 IWV4 QSA3	1740z W Markers
0920z [nil heard]	1221z 4YMA DE IWV4 IWV4 QRV	1800z W Markers
0922z [tone starts]	1222z IWV4 = 188 909 796 953	1820z W Markers
0930z [tone ends, into data, analyse later]	1240z W Markers	1840z W Markers
0943z [data ends]	1300z W Markers	1900z W Markers
1000z 4YMA DE IWV4	1320z W Markers	
1001z IWV4 QSA3	1340z W Markers	
1002z W Markers	1400z W Markers	
1020z W Markers	1420z W Markers	
1038z 4YMA DE IWV4	1440z W Markers	
1039z IWV4 QSA3	1500z W Markers	
1040z W Markers	1520z W Markers	
1058z 4YMA DE IWV4	1540z W Markers	*Courtesy Topol*

USB Log 8131 Bear Net	
1216z 44732 calls KATOLIK	1510z 44732 calls BALANS with msg 502 549 447 360 981 848 842 366 215 492 481
1217z 44732 calls KATOLIK [KATOLIK very faint]	1551z 44732 calls BALANS with msg 502 956 447 339 822 532 842 942 563 592 339
1218z 44732 calls KATOLIK, BALANS replies	1612z 44732 calls BALANS with msg 502 411 447 132 196 010 565 564 978
1220z BALANS passes message 130 525	1641z 44732 calls BALANS with msg 926 429 564 695 525 447
1222z BALANS calls 44731 numerous times	1745z 44731 called by BALANS
1226z 44732 answers, BALANS passes message 130 525	1750z BALANS calls 44731 with msg 861 408 850
1232z 44732 calls BALANS with message [too faint to copy]	1826z 44732 calls BALANS with msg 976 170 408 953 525 055
[messages continue until 1245z, all too faint, multiple callsigns]	
1302z 44732 calls BALANS with msg 157 133 796 290 525 853	
1306z BALANS and 60991[?] 532 598 757 706 057 162 363 395	
1318z BALANS passes message 727 to 44732	
1356z 44732 calls BALANS with msg 197 077 950 525 305	

Bear Net Frequencies

Season	Dates	Ground(CW)	Air(CW)	USB	Bear Callsigns	IL-78 Callsigns?
Spring: NABOR, SHAPORA	1/3 - 5/5	5620	8170	8090(p)	6PLS D2WD	MMWD MGTH QDIH
NCS: W = TRL5		8029(p)		5305?		
Z = ?						
G = ?						
Summer: OCHITSKA, PROCELKA	6/5 - 31/8	8895	9128	8909(p)	P7YR W6SY	QYYI
NCS: W = TV6P IZ2J KFE4				5635?		
Autumn	1/9 - 31/10	5312	9027	8033		
NCS: W = 4ASU PTK8		5835				
		8162(p)				
Winter: BALANS, KATOLIK	1/11 - 28/2	8112(p)	8990(P)	5827	NXY8 4YMA	
NCS: W = IWV4		11318		8131(P)		
Ü or ЮMarker = F76Y ??				11200		
L = NGA5						
S = ?						
UNIDS:						
AKUSTIK						
GAZELLE						
GEOLOG (Winter??)						
GLINOZEM						
MASKA						
SAKSOFON						
SHLAGATA						

They use a seasonal system and we're currently in Spring. Above is a breakdown of frequencies & call signs.

There's plenty more information on Tony's blog:

https://planesandstuff.wordpress.com/2015/01/31/bear-hunting/
https://planesandstuff.wordpress.com/2015/02/20/bear-hunting-part-two/ *Thanks Tony*

Marker Beacons (MX MXI)

Still on the subject of marker beacons, Edd (E.SMITH) heard this 'S' marker on 8821kHz.

MX 8821kHz 0300z - 0305z 27 April 'S' MARKER E.SMITH WED

Repeated every h, and h + 30 min, for 5 min each time, last checked 0900z 27 April, still transmitting. As he had heard nothing on the frequency since, Edd wondered if this was a regular Sevoromorsk beacon or something else.

Ary confirms this is not a regular beacon & was probably connected to ballistic missile launches or activity from those troops. He adds that often traffic can be heard once the S marker is on the air.

Dave (uascan) adds that the "S" beacon might be connected to Iskander and Scarab units. There is occasional CW on the freq. Fixed call signs on ncs, outstation not heard. "S" is active :00-05 and :30-35 when it's on.

Dave also reports that 8821 seems to be the most common freq with // transmissions on 9363.5 and 6754. 9363.5 might be connected specifically to regiments in MD S. Freqs seem to be the same all year.

Contributors: AB, AnonUS, BR, CB, E.SMITH, Gert, GD, HFD, Jan O, JkC, Manolis, RNGB, RT, Token, Topol, uascan *Thank you all for your logs.*

Voice Stations

E06

The first + third Thursdays in the month 2030 UTC schedule failed to put in an appearance on 3-March on a frequency of 5,186 kHz, used in the month of March for, well, ages. The same was true of the following day 2130 UTC transmission which was expected to show up on 5,197 kHz. It transpired that, as was the case with the related G06 German language schedules, they made a move to Saturdays and Sundays:-

19-Mar-16, Saturday:- 2030 UTC, 5,186 kHz, calling "891", DK/GC "237 237 60 60".
The first twenty 5F groups were the sequence beginning with, "06132 75514 79681 … ",
used in the past. S9 signal, ended 2044 UTC.

20-Mar-16, Sunday:- 2130 UTC, 5,197 kHz, call "634", DK/GC "391 391 60 60", "56327 21940 73218 … ". No doubt these schedules also appeared on Saturday the 5th and Sunday
the 6th of March. No sign of E06 on Saturday the 2nd and Sunday the 3rd of April.

However, in April these schedules returned to their long-established Thursday and Friday slots:-
7-Apr-16, Thursday:- 2030 UTC, 5,186 kHz, call "891", DK/GC "317 317 60 60", sixty 5F groups the first twenty of which have been used before, more frequently perhaps by the German language G06, starting with "37839" to "04594", many of the 5Fs repeated in the remaining forty. S9 signal on a clear frequency, carrier had been noted warming up on 5,186 at 1940 UTC.

8-Apr-16, Friday:- 2130 UTC, 5,197 kHz, call "634", DK/GC "391 391 60 60", looks like the same 5F groups as on Sunday 20-March.

21-Apr-16, Thursday:- 2129 UTC and a few seconds, started early, 5,186 kHz, "891" and "317 317 60 60", S9+ signal.

22-Apr-16, Friday:- 2130 UTC, 5,197 kHz, call-up in progress when tuned in just before the half hour, "634", DK/GC "019 019 43 43". Not 15, 20, 60 or 90 groups but 43; at least that's something different, and on the face of it there appears to be no obvious connection to any previous message. Starts, "70024 87741... ", finishes with, "11607 02817".
Ended just after 2140 UTC.
[Thanks Peter]

E06 March/April log:

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

03/03 & 17/03 '864' 375 102 65640 03033 46544 14827 74865 17990 22428 84411 96942 15839 32477 56182 50818 97336 85640 75642 42791 62906 03622 24328 20660 27097 11983 69096 88900 38239 57136 40805 70818 32952 97640 84574 28609 80204 43263 48819 77273 94618 40222 05238 53307 23689 26070 16947 24122 38623 02628 96943 49119 83486 00440 24097 28372 62321 33159 08833 99829 68957 65315 25725 71005 89173 41896 55162 96067 29920 53189 01289 34280 55270 33308 78396 50731 33803 15850 82965 45281 27101 95120 93536 20673 74040 66367 65605 25733 50581 43438 13714 34624 09723 77341 97948 48047 31327 24105 57017 27377 36494 35393 55086 97628 46173 375 102 00000] 0621z

0600z 15650kHz 0700z 17470kHz

07/04 & 21/04 '951' 247 103 20297 35180 72041 43219 33196 68326 89135 26121 36507 44557 34582 04392 31002 72491 50273 56611 29179 90082 78302 29840 24324 28678 74993 78628 28811 23269 55893 58711 86326 92360 88903 61424 87708 35921 77745 99783 45087 24828 02947 82163 04011 80251 12530 34501 98247 66428 79605 56985 76957 45242 69035 26147 58906 66061 80371 78301 93420 89269 59255 35276 32773 66921 94451 58356 45672 28968 42726 41397 26563 48485 48730 79027 80408 84344 52106 70897 87648 24759 98976 47884 79025 80151 00019 31227 74955 98768 02312 60489 69140 03499 67135 51324 61110 73301 70916 68952 67366 17724 71509 28301 65842 17900 06992 247 103 00000

First/Third Thursday of month 2030z 5186kHz
Nothing heard in March on Thurs. Appeared on Saturday
19/03 '891' 237 60 06132 75514 79681….. tks (PoSW)

07/04 & 21/04 '891' 317 60 37839 35787 98273 60187 16202 95625 31691 52538 61025 22567 93296 67423 40968 16891 63781 34820 04842 60491 75924 04594 77878 46766 09098 78643 09548 46677 90906 89898 56566 67677 76748 84848 84877 **16891 63781 34820 04842** 87874 78788 78888 **93296 67423 40968 16891 63781 34820 04842** 60491 75924 56784 09548 **46677 90906 89898 56566 67677** 23445 34344 45454 34344 317 60 00000 (Repeated groups in **bold**)

Friday following First & Third Thursday 2130z 5197kHz
Nothing heard in March on Fridays. Appeared on Sunday!
20/03 '634' 391 60 56327 21940 73218 … … tks (PoSW)

08/04 '634' 391 60 56327 21940 73218….etc

22/04 '634' 019 43 70024 87741 02068 68595 95778 56367 34653 60559 82570 45156 24438 72154 22719 41168 33808 69825 13283 16649 48363 68257 83043 81107 08179 98658 81074 65458 70521 25914 67241 68767 53266 59398 50908 42570 41839 92042 70318 24895 40534 04271 31782 11607 02817 019 43 00000 (same as Thursday evening G06 message)

Other transmissions:

1430z 12202kHz 1530z 8022kHz
15/03 '158' 403 61 24843.....15171 403 61 00000] 1545z QSA4 QRM1 QSB1 JkC TUE See transcript
'158' 403 61 24843 23102 91796 97272 72012 47149 23292 35831 12832 61214 23739 83108 57067 54341 12710 62514 16208 07369 98354 62701 17585 82124 46785 57152 83280 69892 08727 34321 60924 19751 40354 01325 96703 32723 19380 38517 53731 03741 47268 89391 97515 93580 18465 81043 42459 05851 97856 89102 72625 12518 98507 05846 89602 45809 70734 49192 47265 64792 63835 87651 15171 403 61 00000 (Repeated next day)

1430z ? 1530z 9048khz
27/04 '158' 396 2 11111 00079 396 2 158 037 62 76273.....38983 037 62 00000] 1546z JkC WED See transcript
'158' 037 62 76273 44478 75835 74941 60325 52744 48510 51583 92587 72889 11280 14992 54209 87784 39111 18103 75376 50868 86778 47654 29102 98866 71180 29521 26681 72801 95164 41583 50742 26999 11286 26286 86831 30763 48953 20106 39469 92419 53390 42090 43622 60410 09840 08676 07518 81119 51475 66954 47746 18137 74432 63589 02583 62618 08405 91564 34472 89466 16253 81946 57614 38983 037 62 00000

28/04 '158' 396 2 11111 00079 396 2 00000 (No repeat of 2nd message) **E06a**

1700z 13473kHz 1800z 11040kHz
15/03 [I/P ... LG 11451 268 41 00000] 1712z QSA3 QRM1 QSB1 JkC TUE See transcript
I/P ... 80951 76455 71998 78807 78280 27503 81573 59981 58751 43399 31405 74086 19933 32183 37645 56644 88239 44943 25829 60797 31693 08379 37438 08858 11451 268 41 00000
16/03 '351' 970 43 39869 71847 56745 35406 70207 29831 71794 04570 26911 74325 31843 56276 60617 08091 73619 63787 60758 68890 13941 26210 72939 10124 21635 71833 34386 71790 41114 19769 00886 0?980 03555 79579 63677 70057 86602 93579 79724 41754 08562 51504 63789 03338 67985 970 43 00000

15/03 1710z 18436kHz [I/P…….ended with 48375 29258 69501 286 54 00000] TUE RNGB

1700z 13473kHz 1800z 11028kHz
18/03 '351' 790 42 79306 97547 36750 87630 15705 46137 82129 73841 79176 04778 77745 43965 89915 58594 45001 58900 96826 49160 51990 35258 38703 24122 80382 73552 53934 29506 05694 53290 24691 74383 39367 37136 66517 22588 06115 51351 99274 91171 54940 34691 60366 60286 790 42 00000

E06a 12119kHz 1443z 16/03 [I/P ... 346 712 40 52032 ... 764628 712 40 346 590 2 11111 00090 590 2 00000] 1453z JkC WED See transcript
'346' 712 40 52032 85967 69370 16925 29676 61246 47631 94608 91716 07076 31508 96573 34260 21028 56730 20473 17480 24824 90513 73418 20926 84206 96392 60326 56951 42938 02653 52382 93172 64591 17848 84018 34630 91782 31282 71696 15376 40250 67156 74628 712 40 (1451z) 346 (R2m) 590 2 11111 00090 590 2 00000 (1453z)
Repeated next day with only '346' 590 2 11111 00090 590 2 00000

Thanks: RNGB, Ed Smith, JkC, Topol, PoSW

E07

Not much new here, schedules show up on the frequencies used for the past several years,
low audio remains a problem as it has done for many years. As expected moved by one hour in April to appear at the same clock time in the UK. [*See comment in 'Others' Logs re the BC station that comes up on repeated E07 freqs*]

Sunday + Wednesday Schedule, 1800 UTC start, 1700 UTC in April:-
2-Mar-16, Wednesday:- 1800 UTC, 13,439 kHz, "417 417 417 000", peaking S9 with QSB, audio low but readable.
1820 UTC, 12,139 kHz, second sending, S9+ over riding a BC station on 12,140 - this is, after all, the 25 metre broadcast band.

6-Mar-16, Sunday:- 1820 UTC, 13,439 kHz, "417 417 417 000", over S9, audio better than usual.
1820 UTC, 12,139 kHz, second sending, competing well with the station on 12,140.

9-Mar-16, Wednesday:- 1800 UTC, 13,439 kHz, “417 417 417 000”, S9+ with good audio.
1820 UTC, 12,139 kHz, second sending, copy best with the receiver in LSB mode.

13-Mar-16, Sunday:- 1800 UTC, 13,439 kHz, “417 417 417 1” for a “full message”, DK/GC
“697 47” x 2, over S9 with good audio.
1820 UTC, 12,139 kHz, second sending, over riding the broadcaster on 12,140 most of the time.
1840 UTC, 10,739 kHz, third sending, S9 with deep QSB.

23-Mar-16, Wednesday:- 1800 UTC, 13,439 kHz, “417 417 417 1”, DK/GC “365 61” x 2, over S9 with good audio.
1820 UTC, 12,139 kHz, second sending with the usual interference from the BC station 1 kHz higher.
1840 UTC, 10,739 kHz, S9+ with good audio.

3-Apr-16, Sunday:- 1700 UTC, 14,603 kHz, “641 641 641 000”. Went off and on a couple of times for a few seconds as soon as it started, S7 with good audio.
1720 UTC, 13,403 kHz, second sending, S9+ with good audio.

6-Apr-16, Wednesday:- 1700 UTC, 14,603 kHz, “641 641 641 000”, S9 with good audio.
Carrier stayed on until 1703Z before going QRT.
1720 UTC, 13,403 kHz, second sending, over S9, carrier went off just before 1722:30s UTC.

17-Apr-16, Sunday:- 1700 UTC, 14,603 kHz, “641 641 641 000”, over S9, audio low but readable.

24-Apr-16, Sunday:- 1700 UTC, 14,603 kHz, and 1720 UTC, 13,403 kHz, both over S9 with reasonable audio, “641 641 641 000”.

Monday + Wednesday Schedule, 2000 UTC Start, 1900 UTC in April:-
2-Mar-16, Wednesday:- 2000 UTC, 9,273 kHz, weak signal with low audio, “full message”
largely unreadable.
2020 UTC, 7,873 kHz, second sending, low audio again, could just hear the “288” call.
2040 UTC, 6,873 kHz, third sending, low audio, DK/GC “325 33” (?).

7-Mar-16, Monday:- 2000 UTC, 9,273 kHz, weak signal, low audio, carrier went off just before 2002:30s UTC, must be “no message”.
2020 UTC, 7,873 kHz, weak signal with low audio. Signals for this schedule were weak and with low audio whenever I attempted to monitor them in March.

6-Apr-16, Wednesday:- 1900 UTC, 12,108 kHz, “172 172 172 1” for a full message, DK/GC “651 71” x 2, over S9, audio low but readable.
1920 UTC, 10,708 kHz, second sending, S9, audio low.
1940 UTC, 9,208 kHz, third sending, S9+, audio low but readable.

11-Apr-16, Monday:- 1900 UTC, 12,108 kHz, “172 172 172 000”, over S9, audio better than usual.
1920 UTC, 10,708 kHz, second sending, also over S9.

20-Apr-16, Wednesday:- 1900 UTC, 12,108 kHz, and 1920 UTC, 10,708 kHz, both over S9 with low audio, “172 172 172 000”.

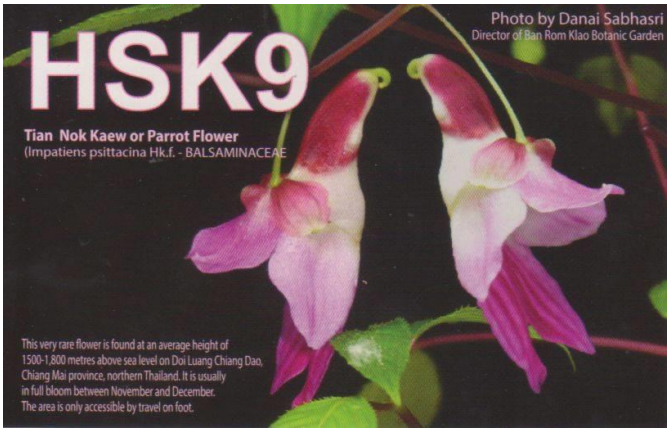
Thursday Schedule, 2110 UTC Start, 2010 UTC in April:-
3-Mar-16:- 2110 UTC, 7,516 kHz, “584 584 584 000”, S8 with reasonable audio.
2113 UTC, 5,836 kHz, second sending, S9 with good audio.

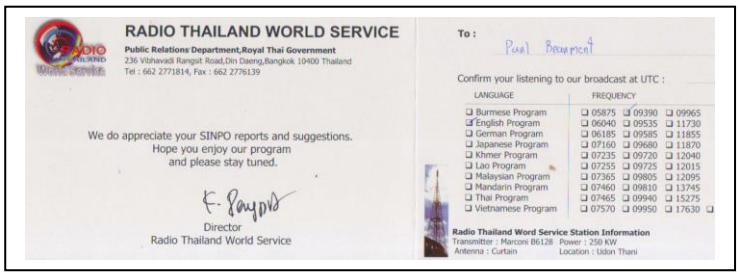
10-Mar-16:- 2110 UTC, 7,516 kHz, “584 584 584 000”, S9+ with reasonable audio.
2130 UTC, 5,836 kHz, second sending, S9.

24-Mar-16:- 2110 UTC, 7,516 kHz, “584 584 584 000”, S9, audio low.

7-Apr-16:- 2010 UTC, 9,387 kHz, very low audio, difficult copy not helped a a strong broadcast station on 9,390. Tuned in at approx 2000Z just in time to hear the identifier,
“This is HSK9, Thailand's World Service broadcasting from the Public Relations Department
in Bangkok.” E07 carrier went off just before 2012:30s UTC which means, “no message”.
2030 UTC, 7,526 kHz, “358 358 358 000”, S9 carrier, audio low but readable.

21-Apr-16:- 2010 UTC, 9,387 kHz, unreadable due to low audio and the broadcaster on 9,390, carrier off just before 2012:30s UTC.
2030 UTC, 7,526 kHz, “358 358 358 000”, audio low.





Others' Logs

Sunday/Wednesday

March 2016

1800z	**13439kHz**	**1820z**	**12139kHz**	**1840z**	**10739kHz**	
02/03	417 000					Strong
06/03	417 000					Very strong
09/03	417 000					Very strong
13/03	417 1 697 47 81315 ... 15362 000 000					Strong

417 1 697 47
81315 18038 26828 13857 86354 12043 34737 78017 73542 83504
60099 75930 88797 10139 43153 32292 22885 05312 46978 18517
51248 86073 09858 99658 85926 24927 59955 82396 38517 97984
50244 86777 28224 03117 27119 81196 09909 73932 38234 83667
85099 57246 85752 67810 38243 78323 15362
000 000 *Courtesy JkC*

16/03	417 1 697 47 81315 ... 15362 000 000					Fair to Strong
20/03	417 000					Very strong
23/03	417 1 365 61 00893 ... 62044 000 000					Strong
27/03	417 2 168 70 85446 ... 31546 417 2 365 61 00893 ... 22044 000 000					

417 2 168 70
85446 74917 99997 14620 12421 98893 56347 20553 47150 36979
54736 91204 78375 00432 83521 71065 00333 79415 56379 74326
56451 36079 83173 45988 36891 64053 93379 33670 02257 47841
10105 23112 33875 16967 73351 24276 84684 02277 26058 91455
30773 00772 37975 49440 77237 17540 31611 66741 03414 48584
07566 16486 03898 67260 05132 98849 18353 86234 45562 42519
11601 17161 87750 66585 01869 71787 06177 96920 78724 31546

417 2 365 61
00893 56735 10373 84898 73950 84980 11815 22623 25444 35339
20367 02698 19684 14924 20968 63541 69665 60412 14734 02790
40969 01415 87525 33334 12698 79346 11308 61399 62760 74067
82000 25238 62889 65648 84954 76647 05043 37991 49252 70204
90994 96679 32133 75530 69630 45633 33738 30092 42695 64559
91888 15685 92985 47003 52645 56476 69457 89701 80146 29348
22044
000 000 *Courtesy Ary*

April 2016

1700z	**14603kHz**	**1720z**	**13403kHz**	**1740z**	**12103kHz**	
06/04	641 000					Extremely strong
10/04	641 000					Very strong
13/04	641 000					Very strong
17/04	641 000					Fair
20/04	641 000					Very strong
27/04	641 000					Strong

Monday/Wednesday

March 2016

2000z	**9273kHz**	**2020z**	**7873kHz**	**2040z**	**6873kHz**	
02/03	?88 1 rest unworkable					Very weak
07/03	Weak carrier only, no discernible audio					
09/03	288 000					Very strong
14/03	288 1 850 33 82210 ... 61710 000 000					Very strong

288 1 850 33
82210 67565 22929 64658 88850 68374 65565 47683 57639 80781
30360 57917 72088 74123 19681 87486 10633 08697 81257 16224
14503 30425 76865 22835 72416 28351 36408 31404 94473 57475
44934 05781 61710
000 000 *Courtesy JkC*

16/03	288 1 850 33			[Unworkable across schedule]		Weak

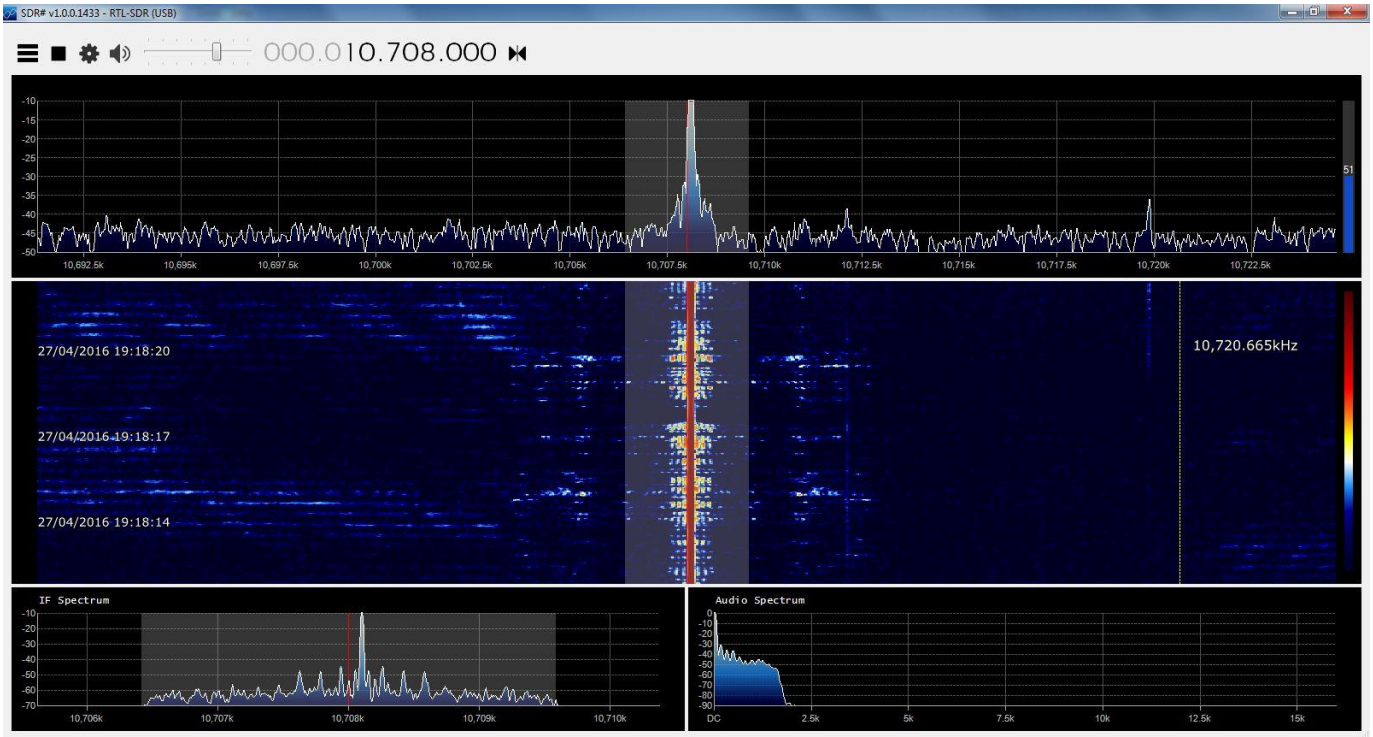
21/03	288 1 304 35 61526 ... 00190 000 000	Fair

288 1 304 35
61526 29422 79247 89441 23537 99448 29951 80781 37114 11436
76606 14724 28551 51948 19745 76240 73743 85120 76722 05457
87459 58850 78671 53162 43571 91875 46782 93902 89439 26220
96546 71126 65931 30623 00190
000 000 *Courtesy JkL*

23/03	[Unworkable across schedule]	Very weak

April 2016

1900z	**12108kHz**	**1920z**	**10708kHz**	**1940z**	**9208kHz**	
04/04	172 1 652 71 762 9? ... 08134 000 000					Weak audio, QSB3
06/04	172 1 651 71 76269 ... .08134 000 000					Very strong
11/04	172 000					Very strong
13/04	172 000					Very strong
18/04	172 000					Very strong



BC Station, only audible with carrier, from start to finish. Training messages? [Also prevalent on May's 2000z freqs]

25/04	1721 9323 59 39896 ... 49727 000 000 BCQRM went with E07 transmission closure suggesting this is a training transmission [see above image].	Strong BCQRM3
27/04	172 1 9323 59 39896 ... 49727 000 000	Strong, BCQRM3

Sunday/Saturday

March 2016

0700z	**10112kHz**	**0720z**	**11112kHz**	**0740z**	**12112kHz**	
02/03	111 000					Very strong
05/03	111 000		[0700z started 1m46s late]			Very strong
12/03	111 000					Very strong
16/03	NRH					
19/03	111 000					Strong
23/03	NRH					
26/03	111 000					Strong

April 2016

0600z	**9064kHz**	**0620z**	**10264kHz**	**0640z**	**11464kHz**	
02/04	024 000					Fair
09/04	024 000					Fair
10/04	024 000					Very strong
16/04	024 1 973 95 68803 ... 16559 000 000					Very strong
17/04	024 1 973 95 68803 ... 16559 000 000					Fair, QSB3

024 024 024 1 973 95 973 95
68803 76201 42520 50924 53493 15039 69785 23176 89376 78699
58759 96033 65717 95994 67085 09852 17379 15230 27019 60854
02119 25481 65728 90551 35770 44495 10681 83440 71403 02886
43691 86508 82378 04295 73108 69480 13090 55690 70177 94166
40799 44541 49982 44889 16548 47565 18365 38613 08492 18290
55268 91154 37682 93003 88542 38799 34232 26708 94499 93048
77592 82730 73543 63984 12284 44635 16251 63024 58565 40742
51223 75736 53917 07877 64489 90447 85097 74436 20068 42227
52594 00534 59555 64896 42105 09022 31832 90404 78602 50245
60145 06895 47107 60589 16559
000 000 *Courtesy Ary*

23/04	024 1 973 95 68803 ... 16559 000 000				[0640z Weak]	Strong
24/04	024 1 973 95 68803 ... 16559 000 000					Very strong
30/04	024 000					Strong

Thursday

March 2016

2110z	**7516kHz**	**2130z**	**5836kHz**	**2150z**	**4497kHz**	
03/03	584 000					Strong
10/03	584 000					Fair, noisy
17/03	Carrier only					Fair

April 2016

2010z	**9387kHz**	**2030z**	**7526kHz**	**2050z**	**5884kHz**	
21/04	358 000					Fair
28/04	358 000					Fair

E07a

Wednesday

March 2016

2100z	**5877kHz**	**2120z**	**5277kHz**	**2140z**	**4577kHz**	
02/03	825 000					Very strong
09/03	825 000					Very strong
16/03	825 000					Very strong
23/03	825 1 62410 7159 73 67182 ... 38233 000 000					Very strong
30/03	825 000					Very strong

April 2016

2000z	**8144kHz**	**2020z**	**6944kHz**	**2040z**	**5744kHz**	
06/04	197 000					Very strong
13/04	197 1 62410 7159 73 67182 ... 38233 000 000					Very strong
20/04	197 1 33936 6769 61 99503 ... 75726 000 000					Very strong
27/04	197 000					Very strong

Thursday

March 2016

0530z	**6922kHz**	**0550z**	**8122kHz**	**0610z**	**9322kHz**	
03/03	913 000					Very strong
10/03	913 000					Very strong
17/03	913 000		[0530z Very weak]			Very strong
24/03	913 1 62410 7159 73 67182 ... 38233 000 000					Very strong
31/03	Not Monitored, PC failure					

April 2016

0430z	**6922kHz**	**0450z**	**8122kHz**	**0510z**	**9322kHz**	
07/04	741 000					Very strong
14/04	741 1 62410 7159 73 67182 ... 38233 000 000					Very strong
21/04	741 1 33936 6769 61 99503 ... 75726 000 000					Very strong
28/04	741 000					Very strong

Friday

March 2016

1610z	**11473kHz**	**1630z**	**10173kHz**	**1650z**	**9373kHz**	
04/03	413 000					Very strong
11/03	413 000					Very strong
18/03	413 1 10197 7285 71 05645 ... 93370 000 000					Very strong
25/03	413 000					Very strong

April 2016

1510z	**12174kHz**	**1530z**	**11074kHz**	**1550z**	**10274kHz**	
01/04	102 000					Strong
08/04	102 000		[1510z weak]			Strong
15/04	102 1 62016 1292 95 40502 ... 61995 000 000					Strong
22/04	102 000					Weak
29/04	102 000					Very strong

Saturday

March 2016

0900z	**11133kHz**	**0920z**	**12133kHz**	**0940z**	**13433kHz**	
05/03	413 000					Strong
12/03	114 000					Fair
19/03	114 1 10197 7285 71 05645 ... 93370 000 000					Fair

114 1 10197 7285 71
05645 77079 11816 55429 64845 55317 01287
76121 52659 72479 79158 00308 10721 36515
84245 01042 84215 14206 61691 34436 07585
42096 06235 36990 35159 32325 08552 22078
38013 18789 50467 42384 69172 36645 36979
67088 47565 64744 54184 10567 49146 44755
93826 26572 75841 94346 21428 33451 90632
47678 08090 08099 87014 79552 96164 78163
92497 84355 97033 43093 45579 87837 79804
73719 10257 86770 14917 38608 42012 05435
93770
000 000 *Courtesy Ary/JO/PLdn*

26/03	114 000					Fair/Strong

April 2016

0800z	**12218kHz**	**0820z**	**13418kHz**	**0840z**	**14418kHz**	
02/04	244 000			[0800z DigiQRM4]		Weak
09/04	244 000					Strong
16/04	244 1 62016 1292 95 40502 ... 61995 000 000					Strong

244 1 62016 1292 95
40502 55508 95593 28252 55195 36751 07647 16559 48610 43833
84132 92390 09152 80389 27970 75837 84150 48435 73048 96179
70310 22592 93734 66284 70272 28492 75805 72457 79212 64372
04421 29273 78278 87438 34691 71080 46846 98270 79201 67052
91319 44813 47578 07471 56195 12544 68101 54844 05548 45177
85747 72999 64138 75381 81774 41871 19082 69252 28659 04938
58585 44423 32998 30739 93008 14592 90800 21329 18328 60079
10216 16116 95904 62560 71658 46452 98752 02994 43319 71401
67803 66303 56830 32804 55697 44360 14437 99448 68445 19859
25059 17458 75954 12744 61995 000 000 *Courtesy Edd*

23/04	244 000	Very strong
30/04	244 000	Strong

PoSW's findings much the same for those recorded above:

Wednesday Schedule 2100 UTC Start, 2000 UTC in April:-
2-Mar-16:- 2100 UTC, 5,877 kHz, "825 825 825 000", S9+, very strong signal.
2120 UTC, 5,277 kHz, second sending, also S9+.

9-Mar-16:- 2100 UTC, 5,877 kHz, and 2120 UTC, 5,277 kHz, both strong signals, "825 825 825 000".

23-Mar-16:- 2100 UTC, 5,877 kHz, a "full message" this evening, "825 825 825 1 62410",
DK/GC "7159 73" x 2, S9+.
2120 UTC, 5,277 kHz, second sending, S9+.
2140 UTC, 4,577 kHz, also S9+.

6-Apr-16:- 2000 UTC, 8,144 kHz, change of frequencies, "197 197 197 000", S9+ signal.
2020 UTC, 6,944 kHz, second sending, also S9+.

13-Apr-16:- 2000 UTC, 8,144 kHz, and its eyes down for a "full message", "197 197 197 1
62410", DK/GC "7159 73" x 2, same as heard on 23-March. S9+ SSB signal.
2020 UTC, 6,944 kHz, second sending.
2040 UTC, 5,744 kHz, third sending, weakest signal of the three transmissions.

20-Apr-16:- 2000 UTC, 8,144 kHz, "full message" again, not the same as last time, "197 197 197 1 33936", DK/GC "6769 61" x 2, S9+.
2020 UTC, 6,944 kHz, S9+.
2040 UTC, 5,744 kHz, third sending, also S9+.

Saturday Schedule, 0900 UTC Start, 0800 UTC in April:-
5-Mar-16:- 0900 UTC, 11,133 kHz, "114 114 114 000", peaking S9. About one minute into the transmission the signal vanished; came back after about 15 seconds and carried on until after 0903:15s UTC.
0920 UTC, 12,133 kHz, second sending, S8 to S9, no breaks here!

12-Mar-16:- 0900 UTC, 11,133 kHz, and 0920 UTC, 12,133 kHz, "114 114 114 000".

19-Mar-16:- 0920 UTC, 12,133 kHz, missed the 0900Z sending, "full message" this morning,
"114 114 114 1 10197", DK/GC "7285 71" x 2, unusually strong signal, well over S9.
0940 UTC, 13,433 kHz, third sending, somewhat weaker signal, S7 to S8.

2-Apr-16:- 0800 UTC, expected to find E07a on 12,218 kHz with call "244", as in April of years past; nothing heard because of an S9+ wide-band "buzz" extending from approx 12,200 to 12,230 kHz, someone's Over The Horizon Radar, no doubt. Better luck with the second sending:-
0820 UTC, 13,418 kHz, "244 244 244 000", S5 at best.

9-Apr-16:- 0800 UTC, 12,218 kHz, and 0820 UTC, 13,418 kHz, both S7, "244 244 244 000".

16-Apr-16:- 0820 UTC, 13,418 kHz, second sending of a "full message", "244 244 244 1 62016", DK/GC "1292 95" x 2, S7 to S8.
0840 UTC, 14,418 kHz, third sending, also peaking S8.

E11 log March/April

6304kHz	0450z	18/04 [416/00] Out 0453z	Ed Smith	MON
	0450z	25/04 [416/00] Out 0453z	Ed Smith	MON
6397kHz	1605z	01/03 [232/00]	RNGB	TUE
	1605z	06/03 [232/00] Out 1608z S9	Malc	SUN
	1605z	08/03 [232/00] Out 1608z S8	Malc, JkC	TUE
	1605z	13/03 [232/00] Out 1608z S9	Malc	SUN
	1605z	27/03 [232/00] Out 1608z S6	Malc	SUN
	1605z	29/03 [232/00] Out 1608z S9	Malc	TUE
	1605z	05/04 [232/00] Good	RNGB	TUE
	1605z	10/04 [232/00] Out 1608z S8	Malc	SUN
	1605z	19/04 [232/00] Out 1708z S8	Malc	TUE
	1605z	26/04 [232/00] Out 1608z S8	Malc	TUE
6923kHz	0820z	03/03 [438/00]	RNGB	THU
	0820z	07/03 [438/00] Fair	RNGB	MON
	0820z	10/03 [438/00] Out 0823z	Ed Smith, Topol	THU
	0820z	14/03 [438/00] Tx Ended 0821z S8	Malc	MON
	0820z	17/03 [438/00] Out 0823z S2	Malc	THU
	0820z	28/03 [438/00] Out 0823z S5	Malc	MON
	0820z	04/04 [438/00] Out 0823z S4	Malc	MON
	0820z	07/04 [438/00] Out 0723z S5	Malc	THU
	0820z	18/04 [438/00]	RNGB	MON
	0820z	21/04 [438/00] Out 0823z S5	Malc	THU
	0820z	25/04 [438/00] Out 0823z S7	Malc	MON
	0820z	28/04 [438/00] Out 0823z S9	Malc	THU
7377kHz	2000z	01/04 [576/00] Out 2003z S9	Malc	FRI
	2000z	08/04 [576/00] Out 2003z S9	Malc	FRI
	2000z	15/04 [576/00] Out 2003z S9	Malc	FRI
	2000z	29/04 [576/00] Good	RNGB	FRI
7850kHz	0315z	10/03 [253/00] Out 0318z	Ed Smith	THU
8102kHz	1045z	01/03 [576/00] Out 1048z S7	Malc	TUE
	1045z	08/03 [576/00]	RNGB	TUE
	1045z	15/03 [576/00] Out 1048z S6	Malc	TUE
	1045z	29/03 [576/001 Out 048z S3	Malc	TUE
	1045z	05/04 [576/00] Out 1048z S3	Malc	TUE
	1045z	26/04 [576/001 Out 1048z S2	Malc	TUE
8186kHz	2005z	12/03 [363/00] Out 2008z S2	Malc	SAT
	2005z	13/03 [363/00] Out 2008z S2	Malc	SUN
	2005z	19/03 [363/00] Out 2008z S7	Malc	SAT
	2005z	26/03 [363/00] Out 2008z	Ed Smith	SAT
	2005z	27/03 [363/00]	Malc	SUN
	2005z	02/04 [363/00] Out 2008z S9	Malc	SAT
	2005z	10/04 [363/00] Out 2008z S9	Malc	SUN
	2000z	23/04 [363/00] Out 2003z S9	Malc	SAT
	2005z	24/04 [363/00] Out 2008z S9	Malc	SUN
	2005z	30/04 [363/00] Out 2008z S9	Malc	SAT
8803kHz	0930z	02/03 [270/00] Good	RNGB	WED
	0930z	09/03 [270/00] Out 0933z S6	Malc	WED
	0930z	10/03 [270/00] Out 0933z S4	Malc	THU
	0930z	16/03 [270/000 Out 0933z S4	Malc	WED
	0930z	17/03 [270/00] Out 0933z S2	Malc	THU
	0930z	30/03 [270/00] Out 0933z S3	Malc	WED
	0930z	06/04 [270/00] Out 0933z S5	Malc	WED
	0930z	07/04 [270/00] Out 0933z S5	Malc	THU
	0930z	13/04 [270/00] Out 0933z S5	Malc , Ed Smith	WED
	0930z	27/04 [270/00] Out 0933z S2	Malc	WED
	0930z	28/04 [270/00] Out 0933z S4	Malc	THU
9371kHz	1730z	03/03 [416/00]	RNGB	THU
	1730z	10/03 [416/00] Out 1628z S9	Malc	THU
	1730z	24/03 [416/00] Out 1733z S8	Malc	THU
	1730z	07/04 [416/00] Out 1733z S9	Malc	THU
	1730z	21/04 [416/00] Out 1733z QSA4 QRM1 QSB1	JkC	THU

9399kHz	0900z	02/03 [534/00] Fair with QRM	RNGB, Malc	WED
	0900z	14/03 [534/00] Out 0903z S2	Malc	MON
	0900z	16/03 [534/00] Out 0903z S8	Malc	WED
	0900z	21/03 [534/00] Out 0903z S2	Malc	MON
	0900z	23/03 [534/00] Out 0903z S4	Malc	WED
	0900z	28/03 [534/00] Out 0903z S2	Malc	MON
	0900z	30/03 [534/00] Out 0903z S2	Malc	WED
	0900z	11/04 [534/00] Out 0933z S2	Malc	MON
	0900z	13/04 [534/00] Out 0903z S3	Malc , Ed Smith	WED
	0900z	18/04 [534/00] Out 0903z S3	Malc	MON
	0900z	25/04 [534/00] Out 0903z S3	Malc	MON
	0900z	27/04 [534/00] Out 0903z S3	Malc	WED
9443kHz	1205z	01/03 [469/00] Out 1208z S4	Malc	TUE
	1205z	09/03 [469/00] Out1208z S6	Malc	WED
	1205z	15/03 [469/00] Out 1208z S3	Malc	TUE
	1205z	16/03 [649/00] Out 1208z S4	Malc	WED
	1205z	22/03 [469/00] Out 1208z S4	Malc	TUE
	1205z	23/03 [469/00] Out 1208z S5	Malc	WED
	1205z	05/04 [469/00] Out 1208z S3	Malc	TUE
	1205z	06/04 [469/00] Out 1208z S3	Malc	WED
	1205z	26/04 [469/00] Out 1208z S2	Malc	TUE
	1205z	27/04 [469/00] Out 1208z S2	Malc	WED
10213kHz	0745z	07/03 [262/00] Out 0748z S7	Malc	MON
	1705z	12/03 [392/00] Out 1708z S9+10	Malc	SAT
	0745z	14/03 [262/00] Out 0748z S8	Malc	MON
	1705z	16/03 [392/00] Out 1708z S9+10	Malc	WED
	1705z	19/03 [392/00] Out 1708z S9+10	Malc	SAT
	0710z	22/03 [633/00] Out 0713z S4	Malc	TUE
	1705z	23/03 [392/00] Out 1708z S9+10	Malc	WED
	1705z	26/03 [392/00] Out 1708z S9+10	Malc	SAT
	1705z	30/03 [392/00] Out 1708z S9+10	Malc	WED
	1705z	02/04 [392/00] Out 1708z S9+10	Malc	SAT
	0745z	04/04 [262/00] Out 0748z S2	Malc	MON
	1705z	13/04 [392/00] Out 1708z S9	Malc	WED
	1705z	16/04 [352/00] Out 1708z S9+15	Malc	SAT
	0745z	18/04 [262/00] Out 0748z S5	Malc	MON
	0745z	25/04 [262/00] Out 0748z S9	Malc	MON
	1705z	27/04 [392/00] Out1708z QSA4 QRM2 QSB1	JkC	WED
	1705z	30/04 [392/00] Out 1708z S5 QRM	Malc	SAT
10221kHz	0710z	18/03 [633/00] Out 0713z S3	Malc	FRI
	0710z	25/03 [633/00] Out 0713z S6	Malc	FRI
	0710z	29/03 [633/00] Out 0713z S4	Malc	TUE
	0710z	01/04 [633/00] Out 0713z S3	Malc	FRI
	0710z	08/04 [633/00] Out 0713z S2	Malc	FRI
	0710z	15/04 [633/00] Out 0713z	Ed Smith, Malc	FRI
	0710z	19/04 [633/00] Out 0713z S4	Malc, RNGB	TUE
10330kHz	1530z	10/03 [262/00] Out 1533z S9+5	Malc	THU
	1530z	17/03 [262/00] Out 1530z S9+10	Malc	THU
	1530z	07/04 [262/00] Out 1533z S9	Malc	THU
10448kHz	1625z	06/03 [972/00] Out 16298z S7	Malc	SUN
	1625z	09/03 [972/00] Strong	RNGB	WED
	1625z	13/03 [972/00] Out 1628z S7	Malc	SUN
	1625z	16/03 [972/00] Out 1628z S2	Malc	WED
	1625z	30/03 [972/00] Out 1628z S5	Malc	WED
	1625z	06/04 [972/00]	Gary H	WED
	1625z	10/04 [972/00] Out 1628z S9	Malc	SUN
	1625z	27/04 [972/00] Out 1628z QSA4 QRM1 QSB1	JkC	WED
10620kHz	1925z	01/03 [551/00] Out 1928z S9+10	Malc	TUE
	1925z	03/03 [551/00] Out 1928z S9	Malc	THU
	1925z	24/03 [551/00] Out 1928z S9	Malc	THU
	1925z	29/03 [551/00] Out 1928z QSA2 QRM2 QSB1	JkC	TUE
	1925z	05/04 [551/00]	RNGB	TUE
	1925z	19/04 [551/00] Out 1928z S8	Malc	TUE
	1925z	21/04 [416/00] Out 1928z QSA2 QRM2 QSB1	JkC	THU

10641kHz	1450z	08/03 [441/00] Out 1453z S9	Malc, JkC	TUE
	1450z	10/03 [441/00] out 1453z S5	Malc	THU
	1450z	15/03 [441/00] Out 1453z S5	Malc	TUE
	1450z	17/03 [441/00] Out 1453z S9	Malc	THU
	1450z	05/04 [441/00] Out 1453z S8	Malc	TUE
	1450z	26/04 [441/00] Out 1453z S9	Malc	TUE
10690kHz	0830z	04/03 [649/00] Good	RNGB	FRI
	0830z	07/03 [649/00] Out 0833z S3	Malc	MON
	0830z	11/03 [649/00] Out 0833z S9	Malc	FRI
	0830z	21/03 [649/00] Out 0833z S9	Malc	MON
	0830z	25/03 [649/00] Out 0833z S9	Malc	FRI
	0830z	28/03 [649/00] Out 0833z S8	Malc	MON
	0830z	11/04 [649/00] Out 0903z S8	Malc	MON
10800kHz	0645z	03/03 [517/00]	RNGB	THU
	0645z	29/03 [517/00] Out 0648z S7	Malc	TUE
	0645z	05/04 [517/00]	RNGB	TUE
	0645z	12/04 [517/00]	RNGB	TUE
	0645z	14/04 [517/00] Out 0748z S5	Malc, Ed Smith	THU
	0645z	19/04 [517/00] Out 0648z S7	Malc	TUE
	0645z	21/04 [517/00]	RNGB	THU
11450kHz	0805z	02/03 [311/00] Strong	RNGB	WED
	0805z	06/03 [311/00] Out 0808z S9	Malc	SUN
	0805z	09/03 [311/00] Out 0808z	Ed Smith, Malc	WED
	0805z	13/03 [311/00] Out 0808z S9+10	Malc	SUN
	0805z	16/03 [311/00] Out 0808z S4	Malc	WED
	0805z	30/03 [311/00] Out 0808z S9	Malc	WED
	0805z	06/04 [311/00]	RNGB	WED
	0805z	10/04 [311/00] Out 0808z S7	Malc	SUN
	0805z	13/04 [311/00] Out 0808z	Ed Smith	WED
	0805z	17/04 [311/00] Out 0808z S5	Malc	SUN
	0805z	27/04 [311/00] Out 0808z S9	Malc	WED
13046kHz	1345z	08/03 [911/00] Out 1348z S9	Malc, JkC	TUE
	1345z	12/03 [911/00] Out 1348z S5	Malc	SAT
	1345z	15/03 [911/00] Out 1348z S5	Malc	TUE
	1345z	26/03 [911/00] Out 1348z S9+10	Malc	SAT
	1345z	29/03 [911/00] Out 1348z S7	Malc	TUE
	1345z	02/04 [911/00] Good	RNGB	SAT
	1345z	16/04 [911/00] Out 1348z	EdSmith	SAT
	1345z	19/04 [911/00] Out 1348z S2	Malc	TUE
	1345z	23/04 [911/00] Out 1348z	Ed Smith	SAT
	1345z	26/04 [911/00] Out 1348z S7	Malc	TUE
	1345z	30/04 [911/00] Out 1348z S9	Malc	SAT
14575kHz	0745z	01/03 [335/00] Out 0748z S9	Malc	TUE
	0745z	03/03 [335/00] Out 0748z S9	Malc	THU
	0745z	10/03 [335/00] Out 0748z	Ed Smith, Malc	THU
	0745z	22/03 [335/00] Out 0748z S8	Malc	TUE
	0745z	24/03 [335/00] Out 0748z S9	Malc	THU
	0745z	19/04 [335/00] Out 0748z S2	Malc	TUE
	0745z	26/04 [335/00] Out 0748z S2	Malc	TUE
	0745z	28/04 [335/00] Out 0748z S2	Malc	THU
14769kHz	0710z	09/04 [491/00] Out 0713z S2	Malc	SAT
	0710z	21/04 [491/00] Out 0713z S2	Malc	THU
	0710z	28/04 [491/00] Out 0713z S2	Malc	THU
15632kHz	1300z	01/03 [133/00] Out 1303z S5	Malc	TUE
	1300z	02/03 [133/00]	RNGB, Malc	WED
	1300z	15/03 [133/00] Out 1303z S4	Malc	TUE
	1300z	23/03 [133/00] out 1303z S2	Malc	WED
	1300z	05/04 [133/00] Out 1303z S2	Malc	TUE
	1300z	19/04 [133/00] Out 1303z S2	Malc	TUE
	1300z	26/04 [133/00] Out 1303z S4	Malc	TUE
	1300z	27/04 [133/00] Out 1303z S3	Malc	WED

15825kHz	0730z	20/03 [352/00]	RNGB	SUN
	0730z	25/03 [352/00] Out 0733z S2	Malc	FRI
	0730z	10/04 [352/00] Out 0733z S2	Malc	SUN
	0730z	15/04 [352/00] Out 0733z	Ed Smith	FRI
	0730z	22/04 [352/00] Out 0733z S1	Malc	FRI
	0730z	24/04 [352/00] Out 0733z S3	Malc	SUN
15915kHz	1540z	06/03 [228/00] Out 1543z S3	Malc	SUN
	1540z	13/03 [228/00] Out 1543z QSA3 QRM1 QSB1	JkC	SUN
	1540z	14/03 [228/00] Out S2	Malc	MON
	1540z	28/03 [228/00] Out 1543z S2	Malc	MON
20286kHz	1225z	18/03 [521/00] Out 228z S4	Malc	FRI
	1225z	21/03 [521/00] Very weak	RNGB	MON
	1225z	11/04 [521/00] Very weak	RNGB	MON

E11a log March/April

5082kHz	1730z	25/02 [413/39 24786 05660 702172 72733 19232 26078 42858…… 49603 21929] Out 1730z	Ed Smith	THU
6397kHz	1605z	12/04 [231/34 45315 59561 17525 69774 96858 32544 05329.....09847 47245] Out 1614z	JkC	TUE
6923kHz	0820z	21/03 [434/37 65208…….59369] Out 0830z S3	Malc	MON
	0820z	24/03 [434/37 65208……etc] Repeat of Monday	Malc	THU
	0820z	11/04 [438/30 34453……18069]	Malc	MON
	0820z	14/04 [438/30 34453 25097 52989 64538 47310 67037 05727…….87435 18069] Out 0828z S2	Ed Smith, Malc	THU
7377kHz	2000z	22/04 [577/38 73196.....95958] Out 2010z S9	Malc	FRI
7850kHz	0315z	27/04 [255/38 62997 80589 38485 91794 59476 26500 92976…… 55391 19197] Out 0325z	Ed Smith	WED
8102kHz	1045z	22/03 [576/33 94829…….15393]	Malc	TUE
	1045z	19/04 [577/38 72196…….95958] Out 1054z S6	Malc	TUE
8186kHz	2005z	06/03 [366/32 64947 73903 92939 74495 945395 25368 82807……29369 46024] Out 2014z	RNGB	SAT
	2005z	07/03 [366/32 64947…..etc] S9 +10 db Repeat of Saturday	Malc	SUN
	2005z	16/04 [369/38 79981 20483 26744 38769 14595 36948 56366……13115 41325] Good	RNGB	SAT
	2005z	17/04 [369/38 79981……..…41325] Out 2015z S5	Malc	SUN
8803kHz	0930z	23/03 [275/40 90782…….00744] Out 0940z S9	Malc	WED
	0930z	21/04 [275/39 62935 44887 30523 42455 97590 30939 90564….75707 68191] Out 0940z S5	Ed Smith, Malc	THU
9371kHz	1730z	17/03 [415/34 67059…….52736] Out 1739z S9+10	Malc	THU
	1730z	14/04 [416/36 55360…….16763] Out 1740z S8 QSB3	Malc	THU
9399kHz	0900z	07/03 [535/34 26200……..01849] Out 0903z S7	Malc	MON
	0900z	09/03 [535/34 26200 64386 36135.....29860 10711 01849] S5 Repeat of Monday S5	Manolis, Malc	WED
	0900z	04/04 [533/38 06798 23655 13124 77083 66705 17771 23403……89241 49193] Out 0910z S2	RNGB, Malc	MON
	0900z	06/04 [533/38 06798….etc] Repeat of Monday	Malc	WED
9443kHz	1205z	30/03 [469/35 30202……..97907] Out 1214z S5	Malc	WED
	1205z	19/04 [460/30 87890……..28233] Out 1213z S4	Malc	TUE
10213kHz	1705z	02/03 [395/32 51527 65183 68702 40323 21446 71266 34011……32017 30357]	JkC, Malc	WED
	1705z	05/03 [395/32 51527…..etc} Repeat of Wednesday S9	Malc	SAT
	0745z	21/03 [267/34 49130…….80281] Out 0854z S9	Malc	MON
	1705z	08/04 [393/35 76773 92533 14980 42162 62228 69163 78752 76863……65283 46532] Out 1709z	Ed Smith	SAT
	0745z	11/04 [226/39 51344……..69864] Out 0755z S8	Malc	MON
10221kHz	0710z	08/03 [630/37 38158…….69694] Out 0719z S3	Malc	TUE
	0710z	11/03 [630/37 38158……etc] Repeat of Tuesday S4	Malc	FRI
	0710z	26/04 [631/30 09996 06934 64783 90402 33143 54326 99115……..20099 43261] Out 0718z S4	Ed Smith, Malc	TUE
10330kHz	1530z	14/04 [266/39 51344…….69864] Out 1540z S9	Malc	THU
10448kHz	1625z	23/03 [978/34 88251……74853] Out 1628z S8 QSB3	Malc	WED
	1625z	27/03 [978/34 88251……etc} Repeat of Wednesday	Malc	SUN
10620kHz	1925z	15/03 [523/31 75221……..26250] Out 1934z S9	Malc	TUE
	1925z	26/04 [526/32 48440……..…02391] Out 1934z S8	Malc	TUE
	1925z	28/04 [552/32 48440……etc] Repeat of Tuesday S9	Malc	THU

10641kHz	1450z	29/03 [440/39 76081…….80966] Out 1500z S6	Malc	TUE
	1450z	19/04 [442/35 21293…….53769] Out 1459z S9	Malc	TUE
10690kHz	0830z	14/03 [647/37 32376……..70161]	Malc	MON
	0830z	18/03 [647/37…..etc] Out 0833z Repeat of Monday S9+10	Malc	FRI
	0830z	04/04 [646/30 15540 07809 42719 67680 03626 47444……92121 65762] Out 0838z S4	RNGB, Malc	MON
	0830z	08/04 [646/30 15540…..etc] Repeat of Monday	Malc	FRI
10800kHz	0645z	26/04 [510/32 96622 07137 88101 46019 68753 49538 63798……79222 04684] Out 0653z S6	Ed Smith, Malc	TUE
	0645z	28/04 [510/32 96622…etc] Repeat of Tuesday S3	Malc	THU
11450kHz	0805z	27/03 [319/31 90296 40685 94136 22813 91544 63420 38434……21892 48704] Out 0814z S9+10	Gert, Malc	SUN
	0805z	24/04 [315/32 03508……..79897] Out 0813z S9	Malc	SUN
13046kHz	1345z	05/03 [918/40 68471……..76974] Out 1355z S9	Malc	SAT
	1345z	05/04 [914/38 64790……..72204]	Malc	TUE
	1345z	09/04 [914/38 64790…..etc] Out 1354z Repeat of Tuesday S9	Malc	SAT
14769kHz	0710z	10/03 [498/31 13189…….25750] Out 0714z S8	Malc	THU
15632kHz	1300z	08/03 [134/33 50755…….86869] Out 1309z S5	Malc	TUE
	1300z	09/03 [134/33 50755 47067 92306 77472 58551 13528 15054 58635.....09883 86869] Out 1310z	Ed Smith, Malc	WED
15825kHz	0730z	11/03 [353/36 too weak to copy msg] S1 QSB1	Malc	FRI
	0730z	13/03 [353/36 16707 55314 36607 82460 30757 15224 53967…..65846 33004] Weak	RNGB	SUN
	0730z	01/04 [353/35…..] too weak to copy message	RNGB	FRI
15915kHz	0545z	02/03 [343/38 57361 31664 56177 24895 62943 52751 39551……79263 03744] Out 0555z	Ed Smith	WED
	1540z	21/03 [229/33 61588 84312 09578 03935 67468 05188 06493……62958 09767] Out 1549z	JkC, Malc	MON
	1540z	27/03 [229/33 71588…….....?] Out 1549z S2 QSB1	Malc	SUN
20286kHz	1225z	18/04 [52?/31 61636……90522] Out 1233z S9	Malc	MON

E17z

Thursday

March 2016

0800z	**14260kHz**	**0810z**	**12930kHz**	
03/03		674 339 5 46062 65672 97478 39685 30485 339 5 00000 Part same msg as S06s 745 Wed 02/03		Fair
10/03		674 239 5 46062 68072 77478 39685 30485 239 5 00000		Fair
31/03		674 00000		Weak

April 2016

0800z	**14260kHz**	**0810z**	**12930kHz**	
07/04		674 953 8 88630 58069 61723 74537 57440 10597 33525 47660 953 8 00000 [0810z unworkable]		Weak
14/04		674 952 8 88620 58069 69723 74537 57444 90597 23523 47660 952 8 00000 [0800z Unworkable]		Weak
21/04		674 290 5 57954 99237 16046 11393 02359 290 5 00000		Fair
28/04		674 290 5 57914 99337 16046 11393 02359 290 5 00000		Weak

E25

6140kHz0803z	06/03[END OF TRANSMISSION, END OF MESSAGE] 0809z AM Very strong	Edd	SUN
6140kHz0809z	06/03[116 MESSAGE 1080 5739 4540 7313 7445 7971 9944 8028 REBEAT 1080 573X 4540 7313 7225 7971 9944 8028 END OF MESSAGE, END OF TRANSMISSION] 0811z AM	Edd	SUN

116 116 Msg Msg Msg
1080 5739 4540 7313 7445
7971 9944 8028
Rbt Rbt Rbt
1080 5739 4540 7313 7445
7971 9944 8028
EoM EoT
CARRIER UP 0952z

6140kHz 0956z	06/03[570 MESSAGE 1073 9073 1614 8626 1432 9887 3948 REBEAT 1073 9073 1614 8626 1432 9887 3948 END OF MESSAGE, END OF TRANSMISSION / 570 MESSAGE 1073 9073 1614 8626 1432 9887 3948 REBEAT 1073 9073 1614 8626 1432 9887 3948 END OF MESSAGE, END OF TRANSMISSION] 1006z AM	Edd, MG	SUN
6140kHz0947z	08/03[333 1080 5321 9468 4876 4732 8606 6437 5321] Mx2 during call, no EOM EOT,	MG	TUE

E25a

6140kHz0759z	07/03[117 1] 0803z session repeated twice, AM QSA3 QSB2 low audio towards end,	MG	MON
6140kHz0745z	27/03[255 3 MESSAGE, REBEAT, END OF MESSAGE, END OF TRANSMISSION] 0748z USB	Edd	SUN
9450kHz1214z	06/03 [830 6] 1218z YL ended with M rptd, EOM EOT 830 6,	MG	SUN
9450kHz1211z	16/03[830 3] 1222z weak carrier up 1207z, "Inte Omri" musical intro, YL ended with Mx3, Windows OS chime, QSA5 QSB3	MG	WED

Suppressed carrier, signal ~ S1...2 in AM mode when no audio, peaking to S9...+20dB while the YL was talking.
Transmission audible at Twente SDR.

G06

Some unexpected changes to G06 schedules in March; the second + fourth Thursdays in the month 1830 UTC failed to show up on the 10th, was expected to make a seasonal change of frequency to 5,934 kHz inside the 49 metre broadcast band but not found. One of those number station schedules which has been around for years. Likewise the following day Friday 1930 UTC G06, expected to be on 5,442 kHz.
However, it turns out that the Friday schedule has moved to a Sunday and with messages with a higher group count than the twenty or fifteen 5Fs which have been the norm for the past couple of years. There was a return to Thursdays and Fridays in April.

13-Mar-16, Sunday:- 1935 UTC, 5,442 kHz, surprised to find the G06 in progress on the frequency associated with a *Friday* 1930 UTC slot. S9 signal with a message which was obviously going the be more than 20 5Fs. Ended after 1949 UTC with, "317 317 90 90 00000". The carrier stayed up for a long time afterwards, was still on when checked at 2000, 2015 and 2030 UTC, had gone when checked again at 2055 UTC.
Noted also that the related first + third Thursdays and following Fridays E06 schedules have also taken up residence at the weekend.

27-Mar-16:- 1929 and 15 seconds UTC, 5,442 kHz, started well before the half hour, calling "947", DK/GC "317 317 90 90". The first twenty 5Fs were the sequence which has been used many times in the past, starting with "37839 35787", with groups nineteen and twenty "75924 04594", and of the further seventy 5f groups this evening there was much repetition of groups from this first twenty. An S9+ signal on a clear frequency although about an hour earlier there was a very strong "XJT" roaring away on 5,442 which would have made copy of G06 difficult, but it had gone when checked again just after 1900Z.

Back to Thursday 1830Z and Friday 1930Z in April:-
14-Apr-16, Thursday:- 1830 UTC, 5,934 kHz, started about 30s early, call "579", DK/GC
"317 317 90 90". An unusually weak signal for G06, suffering side-band splash from a strong BC station on 5,930. First 5Fs, "37839 35787 98273", difficult copy at times.

15-Apr-16, Friday:- 1930 UTC – minus 30s again -, 5,442 kHz, call "947", DK/GC "317 317 90 90", looks like the same 5Fs as yesterday's 1830Z transmission, and on Sunday 27-March. Over S9, overcoming all sorts of noises on frequency.

First + Second Mondays in the Month 1700 + 1800 UTC Schedule:-
14-Mar-16:- 1700 UTC, 4,767 kHz, very low audio which coupled with local QRM made it impossible to hear but fairly sure the G06 YL was in there somewhere.
1800 UTC, 4,953 kHz, second sending, no problem here, had started when tuned in a few seconds before the hour, call "574" for a full message, DK/GC "614 614 107 107", ended after 1830 UTC. Over S9 with QSB.

4-Apr-16:- 1700 UTC, 4,767 kHz, "574 574 574 00000", no problem with the audio here. Had started when tuned in approx 30 seconds before the hour and stopped just after 1703 UTC.
1759 UTC, 4,953 kHz, second sending, S9 signal but audio low as was the case with the 1700Z sending on 14-March.

11-Apr-16:- 1659:15s UTC, 4,767 kHz, early start, "574 574 574 00000", peaking S9. Stopped 1703:20s UTC.
1759:15s UTC, 4,953 kHz, also started well before the hour, second sending, over S9 for most of the transmission.

Thanks Peter

Others' Logs

Monday

March 2016

0758z 6810kHz

07/03	329 00000	Fair
21/03	329 00000	Weak

1700z 4767kHz 1800z 4953kHz

14/03	574 614 107 20948 ... 23015 614 107 00000	Strong

574 614 107
20948 14637 98118 24502 87217 74419 22099 75988 11627 25738
14814 57817 44253 89100 14604 61721 76983 77954 45302 32503
71667 23796 88719 73055 29274 73847 89852 45743 94355 78754
88338 53701 94284 94298 24817 64227 06574 16963 42780 55285
00741 11433 10090 69565 40501 05314 00044 44711 88682 36069
32190 63114 86045 36175 20225 56136 14329 56482 71715 97462
23717 89495 25800 66597 49662 55099 47644 63311 31179 59828
35779 71032 33387 65390 79458 07767 25050 01295 22144 74234
00672 65305 72902 83062 42580 49657 51668 00604 93675 68939
47552 59717 76171 71069 14675 58795 13782 66541 42842 54275
81262 44387 30216 24608 64429 91634 23015
614 107 00000 *Courtesy JkC, AB*

April 2016

Monday

0800z 6810kHz

04/04	329 00000 [started 0759z]	Weak
18/04	329 00000	Weak

1700z 4767kHz 1800z 4953kHz

04/04	574 00000 [started nn59z]	Weak to Fair
11/04	574 00000 [started nn59z]	Very strong

Wednesday

March 2016

1300z 5436kHz

09/03	248 00000

April 2016

1200z 5186kHz

13/04	574 00000

Thursday

April 2016

1830z 5934kHz

14/04	579 317 90 37839 ... 84784 317 90 00000	Weak
28/04	579 019 43 70024 ... 02817 019 43 00000	Strong

579 019 43
70024 87741 02068 68595 95778 56367 34653 60559 82570 45156
24438 72154 22719 41168 33808 69825 13283 16649 48363 68257
83043 81107 08179 98658 81074 65458 70521 25914 67241 68767
53266 59398 50908 42570 41839 92042 70318 24895 40534 04271
31782 11607 02817
019 43 00000 *Courtesy JkD*

Friday

April 2016

1930z 5442kHz

15/04 947 317 90 37839 … 84784 317 90 00000

947 947 947
317 90
37839 35787 98273 60187 16202 95625 31691 52538 61025 22567
93296 67423 40968 16891 63781 34820 04842 60491 75924 04594
77878 46766 09098 78643 09548 46677 90906 89898 56566 67677
76748 84848 84877 16891 63781 34820 04842 87874 78788 78888
93296 67423 40968 16891 63781 34820 04842 60491 75924 56784
09548 46677 90906 89898 56566 67677 23445 34344 45454 34344
35787 98273 60187 16202 95625 46565 43434 89798 54546 78788
76748 84848 84877 16891 34567 34820 04842 87874 78788 78888
68768 76876 58746 58764 87564 85764 87567 64848 85748 84784
317 90 00000 *Courtesy Gert*

29/04 947 019 43 70024 ... 02817 019 43 00000 Very strong

S06 log March 2016

Daily Mon- Fri 0400z 15721kHz
No reports

Thursdays (Repeats following day) 0830z 19415kHz 0930zkHz 16268kHz (frequencies may vary slightly)
03/03 '842' 170 45 34584 46263 99505 84874 57259 20522 36811 09580 12199 54923 20544 52790 80559 06222 64230 05936 13506 75317 72841 71191 83512 07572 63099 56761 29529 62357 29981 03120 56922 56527 82836 57392 78149 11513 99588 38068 05077 58705 72426 57244 28917 82836 43445 92558 48676 170 45 00000

10/03 '842' 395 46 61631 23880 10906 15605 65182 59722 71852 85554 23750 10221 80528 49199 40064 66156 51452 57227 33081 24816 58637 92567 56769 27709 42907 00726 20571 06582 60721 27647 47445 17420 72938 57281 30456 67125 96955 66045 73833 62559 70668 36368 29438 36636 01687 96498 64579 31150 395 46 00000

Fridays (1st & 3rd) 2000z 9496kHz 2100z 6924kHz (frequencies may vary slightly)
04/03 '761' 00000
18/03

Saturdays (1st & 3rd) 2000z 4756kHz 2100z 4059kHz (frequencies may vary slightly)
05/03 '614' 00000
19/03 '614' 00000

Tuesday/Sunday Training schedule? (may repeat other days) 1700z 10376kHz 1730z 7421kHz (may vary slightly)
13/03 '480' 972 40 34507.....94752 972 40 00000] 1711z QSA4 QRM1 QSB1 JkC SUN Repeat of 29/03/2015 with different DK.
15/03 '480' 635 42 98472 56009 61612 32882 66922 09444 32084 68156 93716 75140 80939 82960 24283 85906 67011 92711 84220 02044 85796 79127 01365 91883 34722 11922 39634 27120 73397 67790 68444 71952 26964 64582 635 42 00000
22/03 '480' 593 40 56799…….84703 593 40 00000] 1711z
29/03 '480' 931 45 50135……..…56318 931 45 00000] 1712z

Non- scheduled
1500z 14913kHz 1600z 10387kHz
15/03 '387' 506 47 12946.....41458 506 47 00000] 1512z QSA4 QRM1 QSB1 JkC TUE See transcript
12946 24614 73240 79406 20469 45732 97260 98707 20840 56214 32732 19072 21963 79734 46795 06352 10297 21245 54276 71947 53164 45958 43658 26841 16482 35690 93401 75032 52498 96702 57315 14123 51780 93503 25954 46194 73020 64121 79098 51387 72792 16928 03604 26467 62012 59657 41458 506 47 00000

1615z 7887kHz
15/03 '409' 372 58 05437 69317 06209 n37982 09754 46395 98203 29857 68056 53020 53615 78731 80497 02436 04746 39761 59047 35930 45258 54561 49206 28094 39715 38719 19560 97406 83180 01329 96290 06393 29283 10259 95839 92598 07482 56397 01209 27626 19843 67374 78937 06784 75870 53871 15652 38628 78618 02650 61017 57904 62528 86309 32191 39747 09724 52724 19089 21217 372 58 00000] 1630z

12165kHz 1438z 16/03 [I/P ... LG 60248 472 56 00000] 1439z QSA3 QRM1 QSB1 JkC WED

S06s March log:
Sunday

6th/13th	0630/40	22185/20050	'524' 938 6 46062 67672 47478 39685 30485 96632
20th/27th			'524' No reports

Monday

7th/14th	0830/40	9220/8270	'371' 804 5 38549 86184 47321 89603 37671
15th/22nd			'371' No reports
7th/14th	0900/10	14580/13165	'872' 415 6 39834 56231 23187 47661 43090 84663
15th/22nd			'872' No reports
7th/14th	1200/10	9145/11460	'831' 205 6 37184 36129 33983 83321 85246 32993
15th/22nd			'831' No reports

Tuesday

1st/8th	0600/10	15855/16485	'438' 902 5 38453 48324 33885 31830 34645
15th/22nd			'438' 567 9 01405 15003 24357 60583 54545 50128 99477 83574 48874
1st/8th	0700/15	5760/6930	'374' 920 5 32543 36892 45331 43796 86234
15th/22nd			'374' 902 5 65906 11171 20336 17301 88554
1st/8th	0730/40	7425/11560	'427' 516 8 46062 68672 97478 39685 30485 96632 52537 53317
15th/22nd			'427' 509 6 33796 13577 74526 46647 79302 53516
1st/8th	0800/10	11635/10420	'352' 879 6 47665 94092 48521 63888 92060 11749
15th/22nd			'352' 894 6 52401 63919 92699 14600 74248 48754
1st/8th	1000/10	6410/7340	'893' 216 5 88620 58069 62732 74537 57440
15th/22nd			'893' 241 5 96632 52537 53317 06674 41736
1st/8th	1100/10	6190/7230	'754' 289 6 49294 38064 31724 37324 39316 35660
15th/22nd			'754' 208 6 95051 76911 75155 92918 97067 65432
1st/8th	1500/10	6464/7242	'537' 248 6 37947 39747 31323 31829 47694 45680
15th/22nd			'537' 209 6 95051 13808 71909 83981 48115

Wednesday

2nd/9th	0530/40	9296/10365	'464' 812 5 38034 37823 38230 48235 38702
16th/23rd			'464' No reports
2nd/9th	0820/30	8630/9255	'471' 582 6 88620 58069 51732 74537 57440 10597
16th/23rd			'471' 926 5 10597 23521 47660 92883 69901
2nd/9th	0830/40	11530/12140	'745' 921 6 46062 68672 97478 39685 30485 52553
16th/23rd			'745' 208 6 74526 46647 79302 53516 25616 11171
2nd/9th	1000/10	13365/14505	'729' 564 8 47665 94092 48521 63888 92060 11749 70552 56936
16th/23rd			'729' 804 5 60583 54545 60128 99477 83574

Thursday

3rd/10th(E17z)	0800/10	14260/12930	'674' 239 5 46062 68672 97478 39685 30485
17th/24th			'674' 235 8 34031 33430 48536 84906 39698 45454 35803 47332
3rd/10th	0900/10	5744/6524	'624' 970 5 33796 13577 74526 46647 79302
17th/24th			'624' 507 8 92325 36615 36491 49588 41061 83354 43309 35736
3rd/10th	0900/10	12952/13565	'167' 284 5 88620 58069 61732 74537 57440
17th/24th			'167' 504 8 36444 37144 96123 84434 39808 43033 49330 37711
3rd/10th	0930/40	9081/10514	'314' No reports
17th/24th			'314' 256 7 37545 30989 41691 43753 32543 40936 36892
3rd/10th	1200/10	12415/14212	'425' 980 6 47550 10597 23521 47600 92883 69901
17th/24th			'425' 910 6 48995 40333 43389 40419 30412 48343

Friday

4th/11th	0930/40	12140/13515	'516' 923 7 01405 15003 24357 60583 53535 50128 99477
18th/25th			'516' 237 8 35861 33423 89319 32414 37142 32842 50003 98328

Saturday

5th	1200/10	10350/8520	'254' NRH

Thanks to RNGB, JkC, Malc,

S06 log April 2016

Daily Mon- Fri 0400z 15721kHz
No reports

Thursdays (Repeats following day) 0830z 19078kHz 0930zkHz 16318kHz (frequencies may vary slightly)

07/04 '842' 693 50 77813 65581 35517 29972 97525 93760 02542 85872 31614 90538 85212 28579 69149 84450 17099 55402 19019 06625 62312 04253 32575 97781 19258 16164 34977 58695 41678 84232 88662 61291 62910 18681 37382 62583 34312 82707 04243 88628 13775 78840 42188 80685 65283 90455 60362 20771 55442 08165 74783 78798 693 50 00000

28/04 '842' 175 32 96948 01108 02448 61325 88762 77187 30286 49722 36845 48364 41465 89419 90967 80274 23034 84975 95487 77490 86786 15061 17268 16883 04851 54156 72919 77574 28187 08797 28795 34659 23937 48065 175 32 00000

Fridays (1st & 3rd) 2000z 9486kHz 2100z 6924kHz (frequencies may vary slightly)

01/04 '761' 00000
15/04 '761' 00000

Saturdays (1st/3rd) 1900z 4756kHz 2000z 4059kHz (frequencies may vary slightly)

02/04 '614' 00000
16/04 '614' 00000

Non- scheduled
S906g **7353kHz** 1730z 21/04 ‘801’ 98765 975 12 37676 92941 22808 15957 29138 32978 93296 67052 1924 [Tx breaks - 1735z]
‘801’ (R1m)
(continues from GR 5) 29138 32978 93296 67052 19249 92546 61440 74356 975 12 00000 00000 (note repeated 00000)

9300kHz 1454z 27/04 ‘801’ 444 3 41483 38174 42826 444 3 00000] 1504z JkC WED Tx broke off numerous times, returned to call up, then repeated message

9300kHz 1505z 27/04 ‘801’ 311 15 41483 ... [Tx stopped 1508z] JkC WED Tx broke off and did not continue. Monitored until 1530z. See transcript

8140kHz 1510z 27/04 ‘801’ 123 49 10350 91580 80192...[Tx stopped 1504z] JkC WED Tx broke off and did not continue. Monitored until 1530z.

7353kHz 1520z 27/04 ‘801’ 239 12 76924 ... 78241 239 12 00000] 1527z JkC WED Tx broke off at GR4, returned to call up, then repeated whole message. See transcript

9300kHz 1505z 27/04 ‘801’ 311 15 41483 38174 42826 75280 92205 62465 36997 92833 51868 8619 [Tx stopped]

7353kHz 1520z 27/04 ‘801’ 239 12 76924 26402 84457 41842 28481 93595 50831 95164 47571 79408 27861 78241 239 12 00000

9123kHz 2130z 28/04 ‘726’ 901 53 72562 ... 14256 901 53 00000]2143z QSA4 QRM1 QSB1 JkC THU See transcript
5918kHz 2230z 28/04 ‘726’ 901 53 72562 ... 14256 901 53 00000]2243z QSA4 QRM1 QSB1 JkC THU

‘726’ 901 53 72562 56770 32258 35463 73039 57185 26715 80903 22163 93164 62237 55679 77091 49111 28878 25275 16290 47608 65793 91688 55886 74921 07521 18602 44238 97625 85830 34372 45672 25022 60578 80052 49311 97045 78000 94613 63948 02352 79887 54559 84878 56265 12074 10132 43654 93276 05683 85276 76678 53782 29557 33571 14256 901 53 00000
Repeated next day

S06s April log:

Sunday

3rd/10th	0630/40	22185/20050	‘524’ No reports
17th/24th			‘524’ 930 6 47461 36461 46965 35478 36583 32387

Monday

4th/11th	0830/40	9220/8270	‘371’ 259 6 46062 68672 97478 39685 30485 96632
18th/25th			‘371’ 952 6 36489 48648 33138 43886 45494 81397
4th/11th	0900/10	14580/13165	‘872’ 430 5 21767 53672 11834 81022 36903
18th/25th			‘872’ 960 5 77588 43576 37780 41033 38499
4th/11th	1200/10	9145/11460	‘831’ 269 5 26634 14690 95590 60386 03009
18th/25th			‘831’ 907 5 38110 33279 44878 41528 87887

Tuesday

5th/12th	0600/10	15855/16485	‘438’ 596 7 47665 94092 48521 63888 92060 11749 70552
19th/26th			‘438’ 965 6 80144 33965 43871 43498 34654 89083 ?
5th/12th	0700/15	5760/6930	‘374’ 295 6 52401 63919 92699 33796 13577 74526
19th/26th			‘374’ 508 6 81630 73263 37109 29903 89159 53203
5th/12th	0730/40	7425/11560	‘427’ 913 5 40614 77249 40678 17976 21816
19th/26th			‘427’ 513 6 19244 10276 97774 18538 98832 47769
5th/12th	0800/10	11635/10420	‘352’ 406 7 68090 45279 43828 55581 20044 52985 52006
19th/26th			‘352’ 460 7 11909 44056 83104 55996 85756 99566 57801
5th/12th	1000/10	6410/7340	‘893’ 274 5 17099 94961 35826 65906 77233
19th/26th			‘893’ 217 5 57914 99227 16046 11393 00359
5th/12th	1100/10	6190/7230	‘754’ No reports
19th/26th			‘754’ 231 6 34970 89469 37229 87436 43383 30042
5th/12th	1500/10	6464/7242	‘537’ 820 6 45494 81983 98333 98121 46644 32443
19th/26th			‘537’ 802 6 38702 78959 98931 42086 88475 34075

Wednesday

6th/13th	0530/40	9296/10365	‘464’ 290 5 45547 38082 39581 44356 37676
20th/27th			‘464’ 807 5 44831 37114 36448 43554 84584
6th/13th	0820/30	8630/9255	‘471’ 850 6 39534 17228 15636 47891 23247 17099
20th/27th			‘471’ 906 5 40680 34932 82235 33617 36923
6th/13th	0830/40	11530/12140	‘745’ 218 6 33796 13577 74526 46647 79302 53516
20th/27th			‘745’ 983 6 33630 37559 38013 36676 42630 42630
6th/13th	1000/10	13365/14505	‘729’ 546 8 65906 66610 20336 17301 88554 42045 84706 42227
20th/27th			‘729’ 560 8 30720 43259 33366 46044 36844 87363 32219 44865

Thursday

7th/14th (E17z)	0800/10	1426012930	‘674’ 952 8 88620 58069 61723 74537 57440 10597 23521 47660
21st/28th			‘674’ 290 5 57914 99227 16046 11393 02359
7th/14th	0900/10	5744/6524	‘624’ 570 8 52611 62856 45425 93561 04725 74516 83011 63812
21st/28th			‘624’ 971 5 12866 14986 92499 69320 85039
7th/14th	0900/10	12952/13565	‘167’ 540 8 11161 64385 82707 06123 22536 88280 84116 53718
21st/28th			‘167’ 409 5 82395 58825 32037 89622 40831
7th/14th	0930/40	9081/10514	‘314’ 506 7 73815 63662 41940 42715 62901 53622 52711
21st/28th			‘314’ 950 6 83465 46018 37387 84234 98769 46721

7th/14th	1200/10	12415/14212	'425' 879 6 73611 24186 04637 52649 52144 42618
21st/28th			'425' 891 6 33185 40015 40452 33411 33849 43302

Friday

1st/8th	0930/40	12140/13515	'516' 290 7 88620 58069 61732 74537 57440 10597 23521
15th/22nd			'516' 982 7 39746 37407 42648 82321 40945 49080 31476

Saturday

2nd	1200/10	10350/8520	'254' NRH

Thanks to RNGB, JkC, Malc,

S06 and S06s RUSSIAN

The Sunday + Tuesday 1700 + 1730 UTC S06 schedule with call "480" re-appeared on the last Sunday in February; I had been tracking it since the middle of January and it had never failed to show up on Sun and Tues until Sunday 21-Feb when it was conspicuous by its absence and it seemed like it had come to an end. Not only did it return but it also made it into March, moving up to higher frequencies:-

28-Feb-16, Sunday:- 1711 UTC, 8,187 kHz, just caught the very end of a transmission while casually tuning around - as you do. It had gone before I had time to note any details so made sure of logging the second sending which showed up on the frequency which had been used in February:-
1730 UTC, 6,779 kHz, call "480" as always, DK/GC "219 219 43 43", "07833 86229 49643 ….. ". S9+ signal transmitted in USB carrier suppressed mode
This schedule also ran in the early months of 2015 and is recycling messages from a year ago, albeit with a different Decode Key. The above sequence was logged on 22-Mar-15 with a DK of "261".

1-Mar-16, Tuesday:- moving higher in frequency in the new month:-
1700 UTC, 10,376 kHz, a search when nothing heard on 8,187 found the "480" call about two minutes in. DK/GC "356 356 40 40", peaking S9, with carrier. "18917 65670 07835... "
The same 5F message was used last year on 24-Mar-15 with DK "379"
The second sending proved difficult to find; expected it to be perhaps between one or two MHz lower, turned out to be further down than that:-
1737 UTC, 7,425 kHz, the best part of three MHz lower then, the second sending inside the 41 metre broadcast band, over-riding a German language YL broadcaster.

Couldn't find it on Sunday the 6th or on Tuesday the 8th, but returned on the second Sunday in March:-
13-Mar-16, Sunday:- 1700 UTC, 10,376 kHz, DK/GC "972 972 40 40". Carrier suppressed mode. "34507 52090 24544 …. "; this 5F message was used last year on 29-Mar-15 with a DK of "521".
1730 UTC, 7,421 kHz, second sending 4 kHz lower than last time, gets it clear of the broadcast station on 7,425, I think it is the German language service from Iran.

15-Mar-16, Tuesday:- 1700 UTC, 10,376 kHz, DK/GC "635 635 42 42", "70589 82923 26824 …. ", was also used on 31-Mar-15 with a DK of "796". Transmitted in "with carrier" mode. The voice of the E06 "English Man" could be heard very faintly underneath the S06 voice which suggested that an E06 transmission might be on the air at the same time with some kind of interaction between the two taking place but a search up and down the band during the S06 call-up proved fruitless.
1730 UTC, 7,426 kHz, second sending positioned just on the HF side of the strong broadcaster on 7,425 which meant that it could be effectively removed by using the receiver in USB mode.

20-Mar-16, Sunday:- 1700 UTC, 10,376 kHz, DK/GC "217 217 43 43", "02603 75046 63126 … ", and in keeping with the principal of "why go to the trouble of dreaming up new 5F groups when you can use some from last year", this message appeared on 5-April-2015 with a DK of "215".

22-Mar-16, Tuesday:- 1700 UTC, 10,376 kHz, DK/GC "593 593 40 40", "56799 23172 12538 ….. ", S9, in "with carrier" mode.
1730 UTC, 7,421 kHz, second sending.

27-Mar-16, Sunday:- 1700 UTC, 10,376 kHz, DK/GC "276 276 41 41", S9+ in carrier suppressed mode. "68128 53518 23246..... ". Same message as on 12-April-2015 with a DK of "259". First day of British summer Time today, this schedule has stayed on UTC and now appears at 6 PM in the UK.
1730 UTC, 7,421 kHz, second sending, also S9+; and the broadcast station on 7,425 has gone, presumably a seasonal change.

29-Mar-16, Tuesday:- 1700 UTC, 10,376 kHz, DK/GC "931 931 45 45", carrier suppressed mode, "50135 80378 77662 ….. ", same 5Fs were used on 14-April-2015 with a DK of "376". Stand up the boy who said, "Sad anorak".
1730 UTC, 7,421 kHz, second sending, S9+ signal.

Unable to find this one on Sunday 3-April, would presumably have moved to higher frequencies in the new month but nothing found at either 1700 or 1730 UTC. Not found on any Sunday or Tuesday in April so may have come to an end after running for the first three months of 2016 unless both transmissions are hidden away inside the broadcast bands.

First + Third Saturdays in the Month 2000 + 2100 UTC Schedule:-
19-Mar-16:- 2000 UTC, 4,756 kHz, "614 614 614 00000", over S9 on a clear frequency.
2100 UTC, 4,059 kHz, second sending, also over S9, difficult copy in AM mode due to a strong "XJT" roaring away on the LF side, effectively removed by using the receiver in USB.
An expected seasonal change of frequency from 4,031 + 3,513 used in January and February.

This schedule moved by one hour in April so still appears at 8PM and 9PM in the UK.
2-Apr-16:- 1900 UTC, 4,756 kHz, "614 614 614 00000", over S9.
2000 UTC, 4,059 kHz, second sending, good copy with the receiver in USB mode to cut out the "XJT" on the LF side.

First + Third Fridays in the Month 2000 + 2100 UTC - or 1900 + 2000 UTC – Schedule:-
18-Mar-16:- 2100 UTC, 6,924 kHz, "761 761 761 00000", presumably the second sending, no problem in finding although unable to find a possible sending at 2000Z, is likely to be between one and two MHz higher in frequency.

This schedule moved by an hour in April:-
1-Apr-16:- 2000 UTC, 6,924 kHz, "761 761 761 00000". Still unable to find the first transmission, on the expectation that this would move I had done a search at 1900Z but nothing found, strange because this sending was clear enough, peaking an indicated S9.

15-Apr-16:- 2000 UTC, 9 PM in the UK, 6,924 kHz, "761 761 761 00000", still unable to find a sending at 1900Z despite a lot of tuning around. No problem with this transmission, mostly over S9.

S06s YL Some of the schedules which are heard with stronger signals in the UK:-

Monday 0900 + 0910 UTC Schedule, Call "872":-
21-Mar-16:- 0910 kHz, 13,165 kHz, missed 0900Z sending, should be on 14,580, DK/GC "463 463 5 5", "88620 58069 61732 74537 57440", S7 signal.

28-Mar-16:- 0900 UTC, 14,580 kHz, very weak signal, unreadable.
0910 UTC, 13,165 kHz, second sending much better at S7, "463 463 5 5" and same 5Fs as last week.

11-Apr-16:- 0900 UTC, 14,580 kHz, DK/GC "430 430 5 5", "21767 53672 11734 81022 36903", not too strong, S5 at best.
0910 UTC, 13,165 kHz, weak signal, difficult copy.

Monday 1200 + 1210 UTC Schedule, Call "831":-
21-Mar-16:- 1200 UTC, 9,145 kHz, very weak signal, could just make out the "831".
1210 UTC, 11,460 kHz, started about 30 seconds late instead of the ten seconds or so which is not uncommon for S06s, DK/GC "267 267 5 5", "39783 35468 35208 35868 49131", much better signal than the first sending although only S5 at best.

28-Mar-16:- 1200 UTC, 9,145 kHz, the first sending very weak again, unreadable.
1210 UTC, 11,460 kHz, second sending, S6, DK/GC and 5Fs the same as last time.

4-Apr-16:- Nothing readable on 9,145 at 1200 UTC and the second sending only slightly better:-
1210 UTC, 11,460 kHz, DK/GC "269 269 5 5", sank into noise, 5Fs "14690" and "95590"
in there somewhere.

Tuesday 0730 + 0740 UTC Schedule, Call "427":-
15-Mar-16:- 0730 UTC, 7,425 kHz, DK/GC "509 509 6 6", "33796 13577 74526 46647 79302 53516", peaking over S9.
0740 UTC, 11,560 kHz, second sending, also over S9.

22-Mar-16:- 0730 UTC, 7,425 kHz, DK/GC "509 509 6 6", 5Fs same as last week. S9 signal.
0740 UTC, 11,560 kHz, second sending, over S9.

29-Mar-16:- 0730 UTC, 7,425 kHz, "427 427 427 00000", no message, S9.
0739 UTC, or a few seconds after, 11,560 kHz, second sending, over S9.

5-Apr-16:- 0730 UTC, 7,425 kHz, DK/GC "913 913 5 5", "40614 77249 40678 17976 21816", S9.
0740 UTC, 11,560 kHz, second sending with a very strong S9+ signal.

Tuesday 0800 + 0810 UTC Schedule, Call "352":-
8-Mar-16:- 0800 UTC, 11,635 kHz, DK/GC "879 879 6 6", deep fading on a noisy frequency, probably an HM01 starting up amongst all the crud, "47665 94092 48521 63888 92060 11749". Second sending should be at 0810 UTC on 10,420 kHz, very weak signal of some kind unable to copy.

15-Mar-16:- 0800 UTC, 11,635 kHz, DK/GC "894 894 6 6", "52401 63919 92699 14600 74248 48754", weak at first but stronger by 0804 UTC. Second sending on 10,420 very weak and unreadable.

22-Mar-16:- 0800 UTC, 11,635 kHz, DK/GC "894 894 6 6", 5Fs as on the 15th. Second sending on 10,420 as always too weak to copy.

29-Mar-16:- 0800 UTC, 11,635 kHz, "352 352 352 00000".

Wednesday 1000 + 1010 UTC Schedule, Call "729":-
2-Mar-16:- 1000 UTC, 13,365 kHz, DK/GC "564 564 8 8", "47665 94092 48521 63888 92060 11749 70552 56936"
1010 UTC, 14,505 kHz, second sending, S8 to S9.

9-Mar-16:- 1000 UTC, 13,365 kHz, very weak signal, sank into noise.
1010 UTC, 14,505 kHz, second sending with a much stronger signal, S8. DK/GC "564 564 8 8", 5Fs same as last Tuesday.

16-Mar-16:- 1000 UTC, 13,365 kHz, DK/GC "804 804 5 5", "60583 54545 60128 99477 83574", signal strength S5 at best.
1010 UTC, 14,505 kHz, second sending, stronger, S7.

30-Mar-16:- 1000 UTC, 13,365 kHz, "729 729 729 00000", S9.
1009 UTC, 14,505 kHz, second sending, started about one minute early.

6-Apr-16:- 1000 UTC, 13,365 kHz, DK/GC "546 546 8 8", "65906 66610 20336 17301 88554 82045 84706 42227", S7.
1010 UTC, 14,505 kHz, second sending, S8.

Thursday 0900 + 0910 UTC Schedule, Call "167":-
10-Mar-16:- 0900 UTC, 12,952 kHz, DK/GC "284 284 5 5", "88620 58069 61732 74537 57440". S9+, very strong signal.
0910 UTC, 13,565 kHz, second sending, also S9+.

17-Mar-16:- 0900 UTC, 12,952 kHz, DK/GC "504 504 8 8", "36444 37144 96123 84434 39808 43033 49330 37711". Over S9.
0911 UTC – started about one minute late – 13,565 kHz, second sending, S9.

31-Mar-16:- 0900 UTC, 12,952 kHz, "167 167 167 00000", no message, S9+.
0909 UTC, started early, 13,565 kHz, second sending, also S9+.

Thursday 1200 + 1210 UTC Schedule, Call "425":-
10-Mar-16:- 1200 UTC, 12,415 kHz, DK/GC "980 980 6 6", "47550 10597 23521 47600 92883 69901", over S9.
1210 UTC, 14,212 kHz, second sending, S9+, very strong.

24-Mar-16:- 1200 UTC, 12,415 kHz, DK/GC "910 910 6 6", "48995 40333 43389 40419 30412 48343", over S9.
1210 UTC, 14,212 kHz, second sending, S9+.

Friday 0930 + 0940 UTC Schedule, Call "516":-
4-Mar-16:- 0930 UTC, 12,140 kHz, DK/GC "923 923 7 7", "01405 15003 24357 60583 53535 50128 99477", S7.
0940 UTC, 13,515 kHz, second sending, S6, interference from a rapidly swept carrier which lives in this part of the short-wave spectrum.

11-Mar-16:- 0930 UTC, 12,140 kHz, same DK/GC and 5Fs as on the 4th. S7 signal.
0940 UTC, 13,515 kHz, second sending, peaking S9 with the swept carrier for company.

25-Mar-16:- 0930 UTC, 12,140 kHz, DK/GC "237 237 8 8", "35861 33423 89319 32494 37142 32842 50003 98328", peaking S9.
0940 UTC, 13,515 kHz, second sending S9+ and winning the struggle with the swept carrier this morning.

1-Apr-16:- 0930 UTC, 12,140 kHz, DK/GC "290 290 7 7", "88620 58069 61732 74537 57440 10597 23521", S9 signal.
0940 UTC, 13,515 kHz, second sending, S9 with the swept carrier still in business.

15-Apr-16:- 0930 UTC, 12,140 kHz, DK/GC "982 982 7 7", "39746 37407 42648 82321 40945 49080 31476", peaking S9.
0940 UTC, 13,515 kHz, second sending, over S9 with the swept carrier as always.

S11a log March/April

4016kHz	1955z	09/03 [371/00]	RNGB	WED
	1955z	11/03 [371/00] КОНЕЦ 1958z QSA4 QRM1 QSB1	JkC	FRI
	1955z	16/03 [371/00] Strong	RNGB	WED
	1955z	25/03 [372/35 36582……..22181] 2009z S9+10	Malc	FRI
	1955z	30/03 [371/00] Konyetz 1958z S9	Malc	WED
	1955z	01/04 [371/00] Konyetz 1958z S9	Malc	FRI
	1955z	06/04 [370/37 14089…….22641]	Malc	WED
	1955z	08/04 [370/37 14089….etc] Repeat of Wednesday	Malc	FRI
	1955z	13/04 [371/00]	RNGB	WED
	1955z	15/04 [371/00] Konyetz 1958z S9+20	Malc	FRI
	1955z	22/04 [371/00]	Gary H	FRI
	1955z	27/04 [371/00] Strong	RNGB	WED
	1955z	29/04 [371/00] Strong	RNGB, JkC	FRI
5358kHz	0455z	15/04 [321/00] КОНЕЦ 0458z	Ed Smith	FRI
7317kHz	0915z	01/03 [484/00] Konyetz 0918z S5	Malc	TUE
	0915z	08/03 [487/38 52204 81822 94161 55398 64767 50473 67734 52221……98316 68917]	RNGB	TUE
	0915z	11/03 [487/38……VNIMANIE 52204…etc] Repeat of Tuesday S4	Malc	FRI
	0915z	18/03 [484/00] Konyetz 0918z S2	Malc, Thomas	FRI
	0915z	22/03 [484/00] Konyetz 0918z S3	Malc	TUE
	0915z	25/03 [484/00] Konyetz 0918z S3	Malc	FRI
	0915z	05/04 [484/00] Weak	RNGB	TUE
	0915z	08/04 [484/00] Konyetz 0918z S5	Malc	FRI
	0915z	15/04 [484/00] КОНЕЦ 0918z	Ed Smith	FRI
	0915z	19/04 [484/00] Very weak	RNGB	TUE
	0915z	26/04 [482/40 61609 44276 20059 20190 21368 68660 25758…….93716 69568] Konyetz 0927z	Ed Smith, Malc	TUE
9960kHz	1020z	01/03 [426/00] 1023z S4	Malc	TUE
	1020z	11/03 [426/00] 1023z S5	Malc	FRI
	1020z	18/03 [426/00]	Malc	FRI
	1020z	25/03 [426/39 32829……..] Faded out 1031z S3	Malc	FRI
	1020z	29/03 [426/00] Konyetz 1023z S2	Malc	TUE
	1020z	08/04 [426/00] Konyetz 1023z S3	Malc	FRI
	1020z	15/04 [426/00] КОНЕЦ 1023z	Ed Smith	FRI
	1020z	19/04 [424/31 02927 52842 54118 16357 42991 87623 04128……55543 32204] Konyetz 1030z	Malc, Ed Smith	TUE
	1020z	22/04 [424/31 02927……..etc] Repeat of Tuesday S3	Malc	FRI
10800kHz	1540z	02/04 [563/00] Strong	RNGB	SAT
	1540z	09/04 [563/001Konyetz 1543z S8 QSB2	Malc, Ed Smith	SAT
	1540z	16/04 [392/00] Konyetz 1543z S9	Malc, Ed Smith	SAT
	1540z	30/04 [563/00] Konyetz 1543z S7	Malc	SAT

16112kHz	1015z	03/03 [475/00] Good	RNGB	THU
	1015z	10/03 [475/00] Konyetz 1018z	Ed Smith	THU
	1015z	14/03 [475/00] Konyetz 1018z S2	Malc	MON
	1015z	21/03 [475/00] Konyetz 1028z S2	Malc	MON
	1015z	11/04 [475/00] Konyetz 1018z S2	Malc	MON
	1015z	14/04 [475/00] КОНЕЦ 1018z	Ed Smith	THU
	1015z	18/04 [475/00] Konyetz 1018z S7	Malc	MON
	1015z	28/04 [478/34 14416 31481 83876 67505 13746 84190 02171……91158 77406] КОНЕЦ 1025z	Ed Smith	THU

V02a

V02a continued to make its rare appearances with one heard at the beginning of March, Computer problems for most of March mean that there may have been additional transmissions not heard. As usual the transmission was in LSB mode and appeared only in the 2000z time slot.

7554kHz	2000z	03/03[A28512 32841 45362]		THU
9065kHz	0802z	13/03	E	SUN

V07

Sunday

March 2016

0100z	**18074kHz**	**0120z**	**15874kHz**	**0140z**	**14374kHz**	
06/03	883 000					Fair, with hum
13/03	883 000					Weak
20/03	883 1 133 63 87403 ... 82032 000 000					Very weak

April 2016

0300z	**14823kHz**	**0320z**	**13423kHz**	**0340z**	
03/04	845 000				Weak
10/04	845 1 576 49 17688 ... 96948 000 000			[fm Token, Poor into Argentine , tnx Dan]	Very strong

V21

The Babbler continues to be mostly weak and difficult to copy. As expected, the transmissions switched to 1300z when the clocks were turned forward. The 5637kHz transmission heard on 6/3 stopped and restarted at lower numbers a few times. The transmission also started with “zero zero” which is also what is heard when coordinates are passed and would seem to indicate that a new sequence of numbers is starting.

5637kHz	1400z	05/03[22, 14, 100, 100, 100, 100, 100, 40....continues]	SAT
5637kHz	1400z	06/03[00 58, restarts at 51 counting to 60, restarts at 50 counting to 99, 01, 01, 48 END] Lots of pauses, always repeating the number he paused on when restarting the count.	SUN
6529kHz	1302z	02/04 Found in progress, one count to 50 heard. Weak signal.	SAT
6529kHz	1302z	230/4[50 END] Weak signal.	SAT

V24

Based on observations since V24 re-started transmissions on February 14 I have put together a prediction chart. For the first couple of months V24 appeared to be trying new things and has only settled into relatively stable operation for the last 6 weeks or so.

V24 appears to have narrowed its times of operation, repeated transmissions appear to only happen with start times from 1430z to 1600z. There have been some transmissions before 1430z, however those appear to have been before V24 started using a repeating schedule.

V24 has changed the cycle that it operates on. In the past it operated two days in a row with the same message at the same time on the same frequency. So on day 5 of the month at 1500z on 5715 kHz a transmission would occur, and the next day, the 6th day of the month, the same message would be sent at the same time on the same frequency. However now it no longer does this. Instead now it waits a day between transmissions. So that on the 5th day of the month at 1500z on 6215 kHz a transmission occurs, it skips the 6th day, and on the 7th day of the month at 1500z on 6215 kHz the same transmission is sent again.

My newest prediction chart can be found at the same place it is always at:
http://www.tokenradio.net/Radio/SharedFiles/NumbersTfer/V24_M94_latest_sched.JPG

Past schedules for comparison can be found here:
http://www.tokenradio.net/Radio/SharedFiles/NSTfer.htm

V24 Schedule, first quarter, 2016 **V24 Schedule Version 12.0, Token**

Day	1300	1330	1400	1430	1500	1530	1600	1630
1						6310		
2								
3				5290		6310		
4								
5				5290	6215			
6								
7					6215			
8								
9								
10								
11						6310		
12								
13				5290		6310		
14								
15				5290	6215		5900*	
16								
17					6215			
18							5900*	
19					5715			
20								
21					5715			
22							5900*	
23						4900		
24								
25						4900	5900*	
26				5715				
27								
28				5715				
29								
30								
31								

Based on observations from February 14, 2016 (when V24 returned to operation), to April 26, 2016.

*** May not transmit, 1600 UTC time slot somewhat less regular than other time periods.**

Transmit site potentially identified as Gongneung, Seoul, South Korea, 37.638548, 127.110523, by bclman, a South Korean listener who drove there and listened during at least 2 transmissions. This also supports the Echo of Hope an jammer crosstalk previously heard.

Note the change in transmission habits, from previous two days in a row to same message sent two days with one inactive day between them except in the 1600 UTC time slot.

Note hours of operation change, now appear to only be active from 1430 to 1600 UTC.

Thanks Token!

V26

March 2016

8073kHz1154z	03/03(switched from Chinese digital 4+4 QPSK 75/3000 to voice USB Chinese - Female) (Remote tuner Hong Kong)]	JPL	THU
9054kHz1202z	03/03(switched from M95 Sked - To voice USB Chinese - Female) (// Not checked) (Remote tuner Hong Kong)]	JPL	THU
8073kHz0013z	04/03[(switched from M95 Sked - To voice USB Chinese - Female)(Remote tuner Hong Kong)]	JPL	FRI
8073kHz1152z	04/03[(switched from M95 Sked - To voice USB Chinese - Male)(Remote tuner Hong Kong)]	JPL	FRI
9054kHz0006z	04/03[(switched from M95 Sked - To voice USB Chinese - Female)(Remote tuner Hong Kong]	JPL	FRI
9054kHz0023z	07/03[(Switched from M95 - Voice USB Chinese - Female)(Remote tuner Hong Kong]	JPL	MON
9054kHz1206z	07/03[(Switched from M95 - Voice USB Chinese - Female)(// 4243) (Remote tuner Hong Kong]	JPL	MON
9054kHz0002z	11/03/16[(From M95 sked - Voice USB Chinese - Female) (// Not checked) (Remote tuner Hong Kong)]	JPL	FRI
9054kHz2355z	11/03/16[(From M95 sked - Voice USB Chinese - Female) (// N/H) (Remote tuner Hong Kong)]	JPL	FRI
8073kHz0033z	12/03[(From M95 sked - Voice USB Chinese - Male) (Remote tuner Hong Kong)]	JPL	SAT
4243kHz1201z	19/03/16[(IP - Voice USB Chinese - Female - Cont'd - // 9054) (Remote tuner Hong Kong)]	JPL	SAT
8073kHz1200z	19/03/16[(Switched from M95 Sked - Voice USB Chinese - Female) (Remote tuner Hong Kong)]	JPL	SAT
9054kHz0008z	19/03/16[(IP - Voice USB Chinese - Female - Cont'd) (Remote tuner Hong Kong)]	JPL	SAT
9054kHz1201z	19/03/16[(IP - Voice USB Chinese - Female - Cont'd - // 4243) (Remote tuner Hong Kong)]	JPL	SAT
4243kHz1215z	20/03/16[(IP - Voice USB Chinese - Female - Cont'd - // 9054) (Remote tuner Hong Kong)]	JPL	SUN
8073kHz0022z	20/03/16[(From M95 sked - Voice USB Chinese - Male - Cont'd) (Remote tuner Hong Kong)]	JPL	SUN
8073kHz1206z	20/03/16[(From M95 sked - Voice USB Chinese - Male - Cont'd) (Remote tuner Hong Kong)]	JPL	SUN
9054kHz0010z	20/03/16[(IP - Voice USB Chinese - Female - Cont'd) (Remote tuner Hong Kong)]	JPL	SUN
9054kHz1215z	20/03/16[(IP - Voice USB Chinese - Female - Cont'd - // 4243) (Remote tuner Hong Kong)]	JPL	SUN
4243kHz1205z	22/03/16[(From M95 Sked - Voice USB Chinese - Female - Cont'd - // 9054) (Remote tuner Hong Kong)]	JPL	TUE
8073kHz0035z	22/03/16[(From M95 sked - Voice USB Chinese - Female - Cont'd) (Remote tuner Hong Kong)]	JPL	TUE
8073kHz1222z	22/03/16[(From M95 sked - Voice USB Chinese - Male - Cont'd) (Remote tuner Hong Kong)]	JPL	TUE
9054kHz1205z	22/03/16[(From M95 Sked - Voice USB Chinese - Female - Cont'd - // 4243) (Remote tuner Hong Kong)]	JPL	TUE
4243kHz1220z	26/03/16[(From M95 Sked - Voice - USB - Chinese - Female - // 9054) (Remote tuner Hong Kong)]	JPL	SAT
8073kHz1204z	26/03/16[(From M95 Sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)]	JPL	SAT
9054kHz1220z	26/03/16[(From M95 Sked - Voice - USB - Chinese - Female - // 4243) (Remote tuner Hong Kong)]	JPL	SAT
7553kHz1000z	29/03/16[(Voice - USB - Chinese - Female - // 9151) (Remote tuner Hong Kong)]	JPL	TUE
9151kHz1000z	29/03/16[(Voice - USB - Chinese - Female - // 7553) (Remote tuner Hong Kong)]	JPL	TUE
4243kHz1157z	31/03/16[(IP - Voice - USB - Chinese - Female - // 9054) (Remote tuner Hong Kong)]	JPL	THU
8073kHz0020z	31/03/16[(FM M95 Sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)]	JPL	THU
8073kHz1148z	31/03/16[(FM M95 Sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)]	JPL	THU
9054kHz0023z	31/03/16[(IP - Voice - USB - Chinese - Female) (Remote tuner Hong Kong)]	JPL	THU
9054kHz1157z	31/03/16[(IP - Voice - USB - Chinese - Female - // 4243) (Remote tuner Hong Kong)]	JPL	THU

April 2016

4243kHz1230z	01/04/16[(From M95 Sked - Voice - USB - Chinese - Female - // 9054) (Remote tuner Siberia)]	JPL	FRI
9054kHz0003z	01/04/16[(From M95 Sked - Voice - USB - Chinese - Female) (Remote tuner Hong Kong)]	JPL	FRI
9054kHz1230z	01/04/16[(From M95 Sked - Voice - USB - Chinese - Female - // 4243) (Remote tuner Siberia)]	JPL	FRI
7553kHz1023z	03/04/16[(IP - Voice - USB - Chinese - Female) (Remote tuner Siberia)]	JPL	SAT
4243kHz1209z	05/04/16[(From M95 Sked - Voice - USB - Chinese - Female - // 9054) (Remote tuner Hong Kong)]	JPL	TUE

8073kHz0019z	05/04/16[(From M95 Sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)]	JPL	TUE
8073kHz1150z	05/04/16[(IP - From M95 Sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)]	JPL	TUE
9054kHz1209z	05/04/16[(From M95 Sked - Voice - USB - Chinese - Female - // 4243) (Remote tuner Hong Kong)]	JPL	TUE
7553kHz1205z	06/04/16[(IP - Voice - USB - Chinese - Female) (Remote tuner Siberia)]	JPL	WED
8073kHz0020z	06/04/16[(From M95 Sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)]	JPL	WED
9054kHz0015z	06/04/16[(From M95 Sked - Voice - USB - Chinese - Female) (Remote tuner Hong Kong)]	JPL	WED
9054kHz2353z	07/04/16[(From M95 Sked - Voice - USB - Chinese - Female) (Remote tuner Hong Kong)]	JPL	THU
4243kHz1228z	10/04/16[(From M95 Sked - Voice - USB - Chinese - Female - // 9054) (Remote tuner Siberia)]	JPL	SUN
9054kHz1228z	10/04/16[(From M95 Sked - Voice - USB - Chinese - Female - // 4243) (Remote tuner Siberia)]	JPL	SUN
4243kHz1155z	12/04/16[(From M95 Sked - Voice - USB - Chinese - Female - //9054) (Remote tuner Siberia)]	PL	TUE
8073kHz1156z	12/04/16[(IP - From M95 Sked - Voice - USB - Chinese - Male) (Remote tuner Siberia)]	JPL	TUE
9054kHz0015z	12/04/16[(From M95 Sked - Voice - USB - Chinese - Female) (Remote tuner Siberia)]	JPL	TUE
9054kHz1155z	12/04/16[(From M95 Sked - Voice - USB - Chinese - Female - //4243) (Remote tuner Siberia)]	JPL	TUE
9054kHz1200z	15/04/16[(From M95 Sked - Voice - USB - Chinese - Female) (Remote tuner Siberia)]	JPL	FRI
8073kHz1153z	20/04/16[(From M95 Sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)]	JPL	WED
4283kHz1402z	29/04/16[(IP - Voice - USB - Chinese - Female) (Remote tuner Hong Kong)]	JPL	FRI
9054kHz1209z	29/04/16[(From M95 Sked - Voice - USB - Chinese - Female) (Remote tuner Hong Kong)]	JPL	FRI

V30

10255kHz1555z	08/03 i/p	End after 1610z			Token	TUE
10255kHz1554z	17/03	i/p		Fair [Holland]	Ary	THU

XPA c

Wednesday/Saturday

March 2016

0700z	**11409kHz**	**0720z**	**13509kHz**	**0740z**	**14609kHz**	
02/03	456 000 05518 00001 00000 10140					Very strong
05/03	456 000 03787 00001 00000 10140					Very strong
09/03	456 1 02379 00187 48158 35542					Very strong
12/03	456 1 02379 00187 48158 35542					Very strong
16/03	456 000 06127 00001 00000 10140					Very strong
19/03	456 000 08994 00001 00000 10140					Very strong
23/03	456 1 04775 00175 36827 74351			[0700/0720z Weak, QSB3/4]		Strong

26/03	456 1 04775 00175 36827 74351	Very strong

YYYYYYYYYRRRRYYYYYYYYYYYYYYYY
S9S9S9S9S9S9S9S9S9S9S9S9S9S9S9
4444444444
456 456 456 1 456 456 456 1 456 456 456 1
S939S9S9S9S9S9S9S9S9S9S9S9S9S9
4444444444
4MMMMMMMMMMMMMMMMMMM
04775 00175 36827 60272 21524 39443 01454 93524 37874 00247
95772 88423 09557 87768 93612 01736 91779 71754 14520 18705
93432 50172 85625 91370 88222 28987 98757 55486 57652 47940
10033 24120 42899 13079 06806 89021 97922 34709 57292 68713
36919 79991 28353 61473 07385 75220 13759 62473 57859 20886
77879 15391 57565 51752 74412 39963 31895 20081 09631 60016
47141 09484 67538 80745

39727 83080 80058 37802 70315 02356 09513 25649 95504 96165
47925 27393 11649 20590 69357 72390 56992 02832 11160 27568
70789 11044 61748 32020 25346 68204 62037 60445 85446 75239
76570 79539 36679 36298 59855 91487 34163 04046 87196 79445
80726 40819 10245 39862 53259 43993 00184 56034 03105 50277
27296 18298 34884 45635 74149 87587 90687 20663 35663 20223
91946 74428 36949 37660

04466 99036 31300 45343 11006 93774 18349 14139 35077 14980
50029 69975 04810 13087 71786 46568 42259 86616 04099 92973
50695 97786 40150 85778 66093 15480 71073 77975 57588 91023
49292 76880 33094 84426 85243 13445 64949 84571 59650 68209
31835 31413 46507 51192 55544 18554 14272 11134 92754 74351
++++++++++++++++++++ *Courtesy PLdn*

30/03	456 1 04775 00175 36827 74351	[0700z Strong, QSB2]	Very strong

April 2016

0600z	**10359kHz**	**0620z**	**11559kHz**	**0640z**	**13559kHz**	
02/04		355 000 01361 00001 00000 10140		[0640z Strong]		Weak
06/04		355 000 03067 00001 00000 10140				Very strong
09/04		355 000 02226 00001 00000 10140		[0600z weak]		Strong
13/04		355 1 07981 00113 78136 41404		[0640z V.Weak, signalQRM4]		Very strong
16/04		355 1 07981 00113 78136 41404				Strong
20/04		355 000 07228 00001 00000 10140				Fair
23/04		355 000 07921 00001 00000 10140				Fair
27/04		355 1 02741 00171 92181 35441		[0600z Fair]		Very strong
30/04		355 000 02607 00001 00000 10140				Strong

XPA e

Tuesday/Thursday

March 2016

1900z	**9362kHz**	**1920z**	**8062kHz**	**1940z**	**7462kHz**	
01/03		304 000 03484 00001 00000 10140				Very strong
03/03		304 000 02586 00001 00000 10140				Fair to strong
08/03		304 1 02297 00225 66594 33704				Fair, QSB3
10/03		304 1 02297 00225 66594 33704				Fair, QSB3
15/03		304 000 07343 00001 00000 10140				Strong
17/03		304 000 06652 00001 00000 10140				Weak, noisy
22/03		304 1 05759 00287 83432 27756				Strong
24/03		304 000 04647 00001 00000 10140				Fair
29/03		304 1 07018 00261 59557 05122				Very strong
31/03		304 1 07018 00261 59557 05122		[1940z Fair]		Very strong

April 2016

1900z	**10943kHz**	**1920z**	**10243kHz**	**1940z**	**9243kHz**	
05/04	922 1 05212 00175 65919 64017		[1900zXJTQRM3]			Fair
07/04	922 1 05212 00175 65919 64017		[1900zXJTQRM3 1920z Weak]			Strong
12/04	922 000 01724 00001 00000 10140					Strong
14/04	922 000 04141 00001 00000 10140		[1900/1920z unworkable]			Weak
19/04	922 1 04244 00253 61187 44415					Strong
21/04	922 1 04224 00253 61187 44415					Fair, QSB
26/04	922 000 07250 00001 00000 10140		[1900z Very weak]			Fair
28/04	922 000 09296 00001 00000 10140					Very strong

XPA2 m

Sunday/Tuesday

March 2016

1500z	**16138kHz**	**1520z**	**14438kHz**	**1540z**	**13438kHz**	
01/03	01127 00089 48085 63305		[1520z Weak]			Strong
06/03	09457 00001 00000 10140					Very strong
08/03	02654 00001 00000 10140					Fair to strong
13/03	04585 00061 15140 60557					Very strong
15/03	04585 00061 15140 60557					Fair
20/03	01003 00001 00000 10140					Very strong
22/03	01007 00001 00000 10140					Weak
27/03	04536 00095 61869 51300					Very strong
29/03	04536 00095 61869 51300		Poor condx,			1500z NRH, 1520z V Weak, 1540z Fair

April 2016

1800z	**14538kHz**	**1820z**	**13538kHz**	**1840z**	**12138kHz**	
03/04	02141 00001 00000 10140					Very strong
05/04	02392 00001 00000 10140					Strong
10/04	09465 00077 37724 37272					Very strong
12/04	09465 00077 37724 37272					Very strong
17/04	01661 00001 00000 10140					Strong
19/04	04151 00001 00000 10140					Very strong
24/04	09140 00053 23600 66477					Very strong
26/04	09140 00053 23600 66477		[1800/1820z Very weak, unworkable]			Weak

XPA2 p

Monday/Wednesday

March 2016

0800z	**15956kHz**	**0820z**	**14956kHz**	**0840z**	**13956kHz**	
02/03	04219 00001 00000 10140		[0820z noisy]			Strong
07/03	00212 00173 96349 70643		[0800/0820z Very weak]			Very strong
09/03	00212 00173 96349 70643					Very strong

14/03	04507 00001 00000 10140	[0840z Fair, QSB2] Very strong
16/03	04438 00001 00000 10140	[0800/0820z NRH] Fair
21/03	05853 00001 00000 10140	[0840z Weak] Very strong
23/03	08206 00001 00000 10140	Very strong
28/03	01614 00058 09808 37157	Very strong

Sunday/Friday

April 2016

1500z	**16147kHz**	**1520z**	**14947kHz**	**1540z**	**14447kHz**	
03/04	08815 00189 44337 53603			[1500/1520z NRH poor condx]		Strong
08/04	03520 00001 00000 10140					Very strong
10/04	06298 00001 00000 10140					Very strong
15/04	00621 00197 50544 42020					Very strong
17/04	07672 00001 00000 10140					Very strong
22/04	07071 00001 00000 10140					Very strong
24/04	06815 00001 00000 10140	[1500z Very weak u/w]				Very strong

XPA2 r

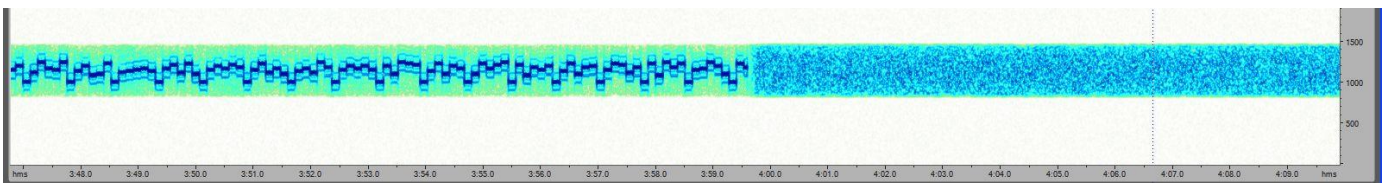
Friday/Saturday

March 2016

1400z	**18667kHz**	**1420z**	**17419kHz**	**1440z**	**16212kHz**	
04/03	07871 00001 00000 10140					Very strong
05/03	08521 00001 00000 10140					Very strong
11/03	06843 00095 33589 42250			[1400/1420z weak]		Strong
12/03	06483 00095 33589 42250					Very strong
18/03	04301 00001 00000 10140			[1400/1420z weak]		Very strong
19/03	03993 00001 00000 10140					Very strong
25/03	03493 00109 24202 16503					Very strong
26/03	09939 00001 00000 10140					Very strong

April 2016

1900z	**17462kHz**	**1920z**	**16114kHz**	**1940z**	**14828kHz**	
01/04	05932 00093 22934 15267			[1900zNRH]		Very strong
02/04	05932 00093 22934 15267			[1900/1920z NRH]		Strong
08/04	04339 00001 00000 10140			[1900z Very Weak, 1920z Weak]		1940z Strong
09/04	05983 00001 00000 10140					Very strong
15/04	04007 00001 00000 10140					Very strong
16/04	07659 00001 00000 10140					Very strong



XPA2 r 1900z 22/04/2016. Sending fails at 4m00s

22/04	09364 00201 27063 56000	[1900z failed 4m00s]	Very strong
23/04	09364 00201 27063 56000		Very strong
29/04	05923 00001 00000 10140		Very strong
30/04	09067 00001 00000 10140		Very strong

XPA2 t

Tuesday/Friday

March 2016

0700z 13431kHz	**0720z 14631kHz**	**0740z 15931kHz**	
02/03	05274 00117 55906 37050		Very strong[Twente]
04/03	05274 00117 55906 37050		Very strong[Twente]
08/03	01141 00001 00000 10140		Very strong[Twente]
11/03	02330 00001 00000 10140		Very strong[Twente]
15/03	09403 00001 00000 10140		Very strong[Twente]
18/03	01684 00001 00000 10140		Weak, noisy[Twente]
22/03	05725 00133 02994 41571		Very strong[Twente]
25/03	05725 00133 02994 41571		Very strong[Twente]
29/03	03961 00001 00000 10140	[0740zWeak]	Fair

April 2016

0700z 16347kHz	**0720z 17447kHz**	**0740z 18747kHz**	
01/04	03879 00001 00000 10140	[0700z Strong]	Fair
05/04	08093 00101 50184 11n54		0700z Very weak, rest unworkable
08/04	08093 00101 50184 11354		0700z Fair, 0720/0740z Very weak
12/04	02880 00085 55158 35647		Very weak
15/04	02880 00085 55158 35647	[0700z Weak]	Very strong
19/04	04114 00127 02996 52442		Very strong
22/04	04114 00127 02996 52442	[0740z weak]	Strong
26/04	09456 00001 00000 10140		0700z Fair, 0720/0740z Very weak unworkable
29/04	03041 00001 00000 10140		0700z Strong, 0720z Fair, 0740z Weak

HYBRID TRANSMISSIONS

HM01

HM01 continues on the usual schedules. Unfortunately, computer issues were experienced in March leading to almost three weeks of lost data.

Of the schedules heard, not much of consequence occurred other that the previous day's callups appearing several times at the beginning of the 1600z transmissions.

Most file extensions transmitted were .TXT files but five .F1* files were transmitted. 50115774.F1C, 50751276.F1C, 50063588.F1C, 50682823.F1C, 50685654.F1C all of these were .F1C files and consequently all file names started with 50.

On 29/4 new callup 76591 appeared, this contains a 9 and the last digit incremented +1 the following day. This likely indicates that this callup first appeared at 2100z on 28/4.

HM01 11435kHz 1600z 1/3 [15721 51329 40534 36262 54426 34412] TUE

HM01 11435kHz 1600z 2/3 [15722 36151 40535 36263 54427 34413] New callup position 2, 36151 = 53313615.TXT WED

HM01 11435kHz 1600z 3/3 [15723 36151 40536 36264 57741 34414] New callup position 5, 57741 = 50115774.F1C THU

HM01 11435kHz 1600z 4/3 [15724 36152 40537 36265 57741 34415] FRI

HM01 11435kHz 1600z 5/3 [15725 36153 32311 36266 57742 34416] New callup position 3, 32311 = 57133231.TXT. SAT

HM01 11435kHz 1600z 6/3 [15726 36154 32311 36267 57743 34417] SUN

HM01 11435kHz 1600z 7/3 [15727 36155 32312 30151 57744 34418] New callup position 4, 30151 = 24583015.TXT. MON

HM01 11435kHz 1600z 8/3 [47771 36156 32313 30151 57745 34419] New callup position 1, 47771 = 68254777.TXT. TUE

HM01 11435kHz 1600z 9/3 [47771 36157 32314 30152 57746 28721] New callup position 6, 28721 = 78412872.TXT. WED

HM01 11435kHz 1600z 10/3 [47772 36158 32315 30153 57747 28721] THU

HM01 11435kHz 1600z 11/3 [47773 36159 32316 30154 63511 28722] New callup position ,5 63511 = 04836351.TXT. FRI

HM01 11435kHz 1600z 12/3 [47774 22151 32317 30155 63511 28723] Started with yesterday's callups before switching to the correct ones. New callup position 2, 22151 = 01082215.TXT. SAT

HM01 11435kHz 1600z 2/4 [37272 57585 13523 88022 73387 87001] 37272 = 35383727.TXT, 57585 = 36475758.TXT, 13523 = 77321352.TXT, 88022 = 30148802.TXT, 73387 = 73807338.TXT, 87001 = 50018700.TXT. SAT

HM01 11435kHz 1600z 3/4 [37273 57586 13524 88023 73388 87002] SUN

HM01 11435kHz 1600z 4/4 [37274 57587 13525 88024 35881 87003] New callup position 5, 35881 = 50063588.F1C. MON

HM01 11435kHz 1600z 5/4 [37275 57588 13526 88025 35881 87004] Started with yesterday's callups before switching to the correct ones. TUE

HM01 11435kHz 1600z 6/4 [37276 57589 13527 88026 35882 87005] WED

HM01 11435kHz 1600z 7/4 [37277 56541 13528 88027 35883 87006] Started with yesterday's callups before switching to the correct ones. New callup position 2, 56541 = 50685654.F1C. THU

HM01 11435kHz 1600z 8/4 [01801 56541 86431 88028 35884 87007] Started with yesterday's callups before switching to the correct ones. New callups positions 1 and 3, 01801 = 27230180.TXT, 86431 = 02608643.TXT. FRI

HM01 11435kHz 1600z 9/4 [01801 56542 86431 88029 35885 43101] Started with yesterday's callups before switching to the correct ones. New callup position 6, 43101 = 82834310.TXT. SAT

HM01 11435kHz 1600z 10/4 [01802 56543 86432 68421 35886 43101] Started with yesterday's callups before switching to the correct ones. New callup position 4, 68421 = 30006842.TXT. SUN

HM01 11435kHz 1600z 11/4 [01803 56544 86433 68421 35887 43102] MON

HM01 11435kHz 1600z 12/4 [01804 56545 86434 68422 35888 43103] TUE

HM01 11435kHz 1600z 13/4 [01805 56546 86435 68423 35889 43104] WED

HM01 11435kHz 1600z 14/4 [01806 56547 86436 68424 58061 43104] New callup position 5, 58 061 = 38715806.TXT. THU

HM01 11435kHz 1600z 15/4 [01807 56548 86437 68425 58061 43106] FRI

HM01 11435kHz 1600z 16/4 [01808 56549 86438 68426 58062 43107] SAT

HM01 11435kHz 1600z 17/4 [28231 85461 02551 68427 58063 78881] New callups positions 1,2,3 and 6, 28231 = 50682823.F1C, 85461 = 34208546.TXT, 02551 = 30500255.TXT, 78881 = 61777888.TXT SUN

HM01 11435kHz 1600z 18/4 [28231 85461 02551 68428 58064 78881] MON

HM01 11435kHz 1600z 19/4 [28232 85462 02552 51451 58065 78882] TUE

HM01 11435kHz 1600z 20/4 [28233 85463 02553 51451 58066 78883] New callup position 4, 51451 = 83635145.TXT. WED

HM01 11435kHz 1600z 21/4 [28234 85464 02554 51452 58067 78884] THU

HM01 11435kHz 1600z 22/4 [28235 85465 02555 51453 58068 78885] FRI

HM01 11435kHz 1600z 23/4 [28236 85466 02556 51454 12761 78886] New callup position 5, 12761 = 50751276.F1C SAT

HM01 11435kHz 1600z 24/4 [28237 85467 02557 51455 12761 78887] SUN

HM01 11435kHz 1600z 25/4 [11661 85468 51841 51456 12762 78888] New callups positions 1 and 3, 11661 = 52681166.TXT, 51841 = 64765184.TXT. MON

HM01 11435kHz 1600z 26/4 [11661 28601 51841 51457 12763 88471] New callups positions 2 and 5, 28601 = 88422860.TXT, 88471 = 75828847.TXT. TUE

HM01 11435kHz 1600z 27/4 [11662 28601 51842 43041 12764 88471] New callup position 4, 43041 = 01034304.TXT. WED

HM01 11435kHz 1600z 28/4 [11663 28602 51843 43041 12765 88472] THU

HM01 11435kHz 1600z 29/4 [11664 28603 51844 43042 76591 88473] New callup position 5, 76591 = 38717659.TXT. FRI

HM01 11435kHz 1600z 30/4 [11665 28604 51845 43043 76592 88474] SAT

Others' Logs:

March2016

6260kHz0540z	21/03Data followed by FSK Morse 0557z Good		BR	MON

0542z Carrier up
0547z Data transmission
0548z FSK Morse 667 47 = 68019 90966....87381 = 667 47
0553z FSK Morse (Repeated msg) 000 (0557z)

0558z Carrier off

April2016

17480kHz2200z	12/04[01804 56545 86434 68422 35888 43103] QSA1	DanAR	TUE
2200z	14/04[01806 56547 86436 68424 58061 43105] QSA1	DanAR	THU
2200z	19/04[28232 85462 02552 51451 58065 78882] QSA3	DanAR	TUE

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

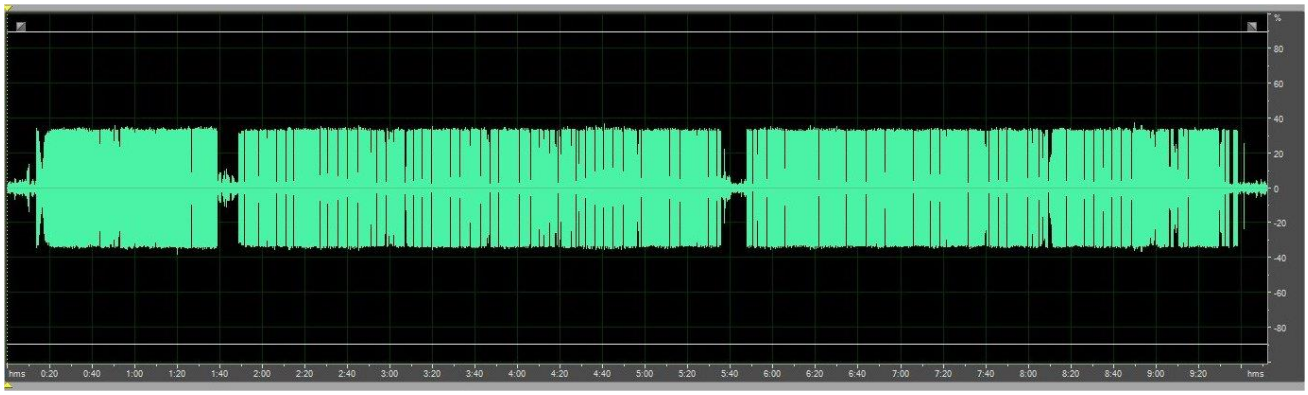
We were alerted to the reappearance of HM02 by Ary (AB) on 18 March, the station having been reported first on 12 March on the UDXF forum. The station was found to be using the previously unknown frequency of 6261kHz.

The time slot was at first thought to be the same, 0540 - 0600z (variable) until on 29 March the transmissions changed to 0440z with Daylight Saving. This was not the case in 2015 as the transmissions were still appearing at 0550z daily during April & May.

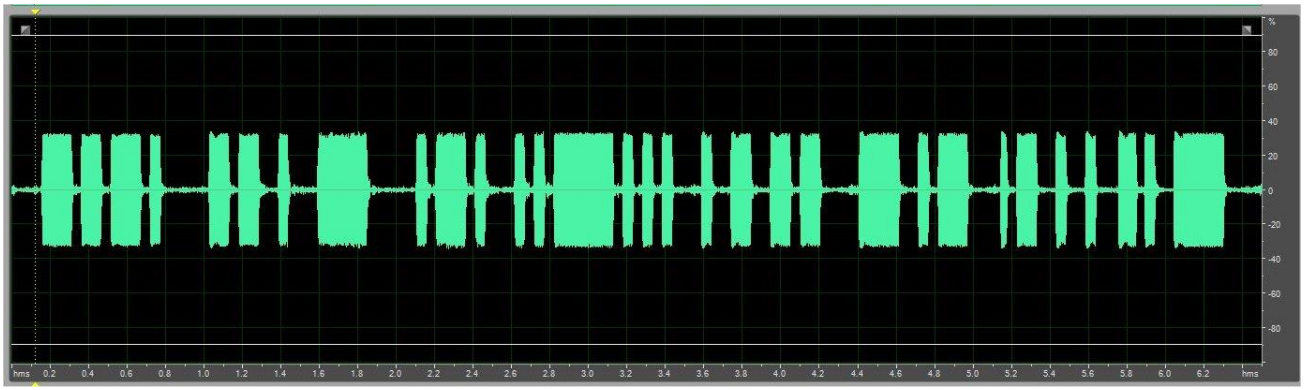
Transmission times are variable with the carrier often appearing some time before the transmissions start. The transmission has been observed to start as early as 0435z & as late as 0457z. It seems strange that a schedule with such a formal format has such a relaxed approach to transmission time.

Previous schedule: (Apr / May 2015):	Daily.	7351kHz	0500 - 0530z changed to 0540 - 0600z (Variable - can start up to 10 minutes earlier)
Current schedule:	Daily.	6261kHz	0540 - 0600z (Variable) 0440 - 0500z (Variable) From 29 March change due to Daylight Saving adjustment.
		7351kHz	0440 - 0500z (Variable) From 14 April.

The station is still using the basic format of FSK followed by a Morse message, although there has been some variations to this on a few occasions.



Sat 02 April - 6261kHz 0440z HM02 - Full transmission showing data transmission followed by the Morse message x 2 ***Courtesy BR***



Sat 02 April - 6261kHz 0440z HM02 - Section of data transmission showing one full sequence ***Courtesy BR***

The data transmission appears to consist of a short sequence repeated for between 20 seconds to over 1 minute The sequence can be clearly heard by ear.

Morse msg Logs:

Mar 2016

6261	0535 - 0552z	20 Mar	567 44 = 42629 40063 ... 37817 000	Good		JkC	SUN
	0540 - 0557z	21 Mar	667 47 = 68019 90966.... 87381 000	Good		BR/JkC	MON
	0537 - 0554z	22 Mar	418 50 = 59999 13955.... 21409 000	Good		BR	TUE
	0541 - 0556z	23 Mar	184 48 = 61272 48598.... 37099 000	Good	[Note 1]	BR	WED
	0540 - 0546z	24 Mar	FSK Morse using inverted mode?	Good		BR	FRI
	Changed to 0440z schedule with Daylight Saving						
	0440 - 0449z	28 Mar	295 44 = 64146 15259....13153 000	Good		BR	MON
	0440 - 0502z	29 Mar	427 46 = 88619 66245....96708 000	Good / Fair	[Note 2]	BR	TUE
	0440 - 0455z	30 Mar	568 49 = 00101 43603....64457 000	Fair		BR	WED
	0440 - 0450z	31 Mar	231 44 = 92613 57106....82402 000	Fair		BR	THU

Apr 2016

6261	0435 - 0446z	01 Apr	398 50 = 07368 52681....15057 000	Good		BR	FRI
	0440z	02 Apr	174 49 = 04674 56330....61565 000	Strong		BR	SAT
	0443z	03 Apr	915 50 = 47238 27467....06831 000		[Note 3]	AB	SUN
	0446 - 0455z	04 Apr	127 47 = 62337 07920....16100 000	Fair with QSB		AB/BR	MON
	0445 - 0455z	05 Apr	256 48 = 12649 08179....50613 000	Good		AB/BR	TUE
	0445 - 0455z	06 Apr	382 48 = 56941 71474....70935 000	Fair		BR	WED
	0439z	07 Apr	419 50 = 01922 05085....78466 000	Groups 42, 49, 50 poorly formed in both messages		AB	THU
	0449 - 0500z	08 Apr	536 64 = 11259 72810....84560 000	Good - Fair		AB/BR	FRI
	0457z	09 Apr	671 74 = 95400 07361....50655 000	Strong		AB/BR	SAT
	0451 - 0502z	10 Apr	762 71 = 09529 24164....24830 000	Good. Carrier up at 0439z - data not sent until 0451z		BR	SUN
	0439 - 0452z	11 Apr	721 71 = 42726 32208....66803 000	Fair/Good.		AB/BR	MON
	0451 - 0509z	12 Apr	692 71 = 44641 59205....29498 000	Good	[Note 4]	BR	TUE
	0543 - 0455z	13 Apr	543 71 = 09488 56817....89664 000	Fair		AB/BR	WED
	HM02 failed to appear on 6261kHz on Thu 14 April - but was discovered using the previously used frequency of 7351kHz.						
7351	0455 (IP) - 0504z	14 Apr	414 67 = 98834 99631....63585 000	Good with some QSB		BR	THU
	0445 - 0456z	15 Apr	524 72 = 04644 18618....82666 000			AB/BR	FRI
	0450 - 0503z	16 Apr	613 75 = 47738 42170....87360 000			AB/BR	SAT
	0455 (IP) - 0500z	17 Apr	792 64 000	(Only end of transmission monitored)		BR	SUN
	0444 - 0456z	18 Apr	721 64 = 19737 59440....12127 000			AB/BR	MON
	0446 - 0457z	19 Apr	632 73 = 65815 67160....35037 000	Fair/Good		AB/BR	TUE
	0445z	20 Apr	523 68 = 30825 96076....81288 000			AB	WED
	0445z	21 Apr	494 69 = 65338 50490....12011 000	Weak with QSB		AB/BR	THU
	0446 - 0459z	22 Apr	485 70 = 66194 54169....45275 000	Good		AB/BR	FRI
	0448z	23 Apr	256 72 = 69711 22331....65691 000	Good		AB/BR	SAT
	0451z	24 Apr	167 72 = 48542 57194....76982 000			AB	SUN
	0446 - 0457z	25 Apr	216 70 = 38479 09571....23001 / 33001 ? 000	Fair signal with QSB -Difficult copy		AB/BR	MON
	0452 - 0454z	26 Apr	393 75 = 19492 51428....69413 000	Fair with QSB Sent 5 999 prior to CW - Testing?		AB/BR	TUE
	0437 - 0445z	27 Apr	385 50 = 06946 97525....27268 000	Good Early start to transmission today		BR	WED
	0438 - 0446z	28 Apr	414 46 = 45619 05459....71254 000	Fair .. another early start		AB/BR	THU
	0438 - 0447z	29 Apr	523 49 = 82247 76594....30462 000	Good ..& another early start		AB/BR	FRI
	0447 - 0459z	30 Apr	622 69 = 55075 06114....00735 000	Good Back to a later start time		AB/BR	SAT

[Note 1] The 23 March transmission had a second data transmission sent just before the Morse at 0542z. This was a faster data stream and was preceded with AW84 in CW just prior to the start of the data stream, which was faster than the previous data sent. On the repeat of the Morse message, the speed increased noticeably from grp09.

[Note 2] For some reason the complete transmission was sent twice on Tuesday 29 March. Following the repeat of the msg, the expected 000 was not sent, instead after a short pause, the data sequence was repeated followed again by the Morse and its repeat. At the end of this the 000 was then sent & the carrier cut.

[Note 3] The FSK data message was sent twice - at 0443z & again at 0453z.

[Note 4] Message was sent three times (instead of the usual two). Unusual, but seemed planned not an error as the DK GC end/start was sent between.

HM02 6261kHz 0535z 20 Mar16

805Hz idle tone (0535z-0542z)

UI slow FSK, 125Hz shift (0542z-0544z)

567 44 = (FSK Morse)

42629 40063 85621 45182 86003
29495 61571 43406 89375 41235
98240 51330 41587 45944 81237
69683 81892 47588 83817 68082
42419 01957 93586 75907 13020
11317 35641 82777 18776 94374
35895 93422 67099 83698 62932
23306 43119 31613 77874 60903
02487 21077 35532 37817 =

567 44

567 44 = (repeat of msg) =

567 44 000

Courtesy JkC

HM02 6261kHz 0540z 21 Mar16

805Hz idle tone (0541z-0547z)

UI slow FSK, 125Hz shift (0547z-0548z)

667 47 = (FSK Morse)

68019 90966 60535 45329 97657
60820 91440 46752 68946 72705
80225 62998 19483 60054 79043
61186 19247 69463 77940 94107
46889 12517 14761 61788 42714
99532 57528 24666 60289 85237
07703 42626 70161 37805 93802
02148 57808 15088 24677 29719
49639 61689 69041 39215 11911
76692 87381 =

667 47

667 47 = (repeat of msg) =

667 47 0 0 0

Courtesy JkC

HM02 6261kHz 0537z 22 Mar16

0537z Carrier up

0543z Data transmission

418 50 = (FSK Morse) (0544z)

59999 13955 11399 28648 89776
8979 18552 09384 74297 38981
81796 67155 05813 92014 35925
91452 53845 27430 84814 93719
56547 16151 81534 41924 24932
53138 16592 69591 75123 80524
03973 54261 02180 12805 11582
59576 18937 34187 51690 58290
64687 94690 77314 99433 02114
51219 57815 20253 21106 21409
= 418 50

418 50 = (Repeat of msg)

418 50 000 (0557z - Carrier off 0558z)

Courtesy BR

HM02 6261kHz 0538z 23 Mar16

0538z Carrier up

0541z Data transmission Slow

0542z **AW84** (In FSK Morse) Fast data

184 48 = (FSK Morse) (0545z)

61272 48598 18278 43858 26477
07981 59032 61421 60475 12040
10911 42097 32100 40361 85434
18612 46051 91942 41154 89971
81561 46446 19045 58032 49699
73935 56003 49638 33517 56181
32473 31674 14735 84502 60472
56789 12098 44258 66022 81007
63543 02259 26958 31303 36144
14485 83434 37099
= 184 48

184 48 = (Repeat of msg)

184 48 000 (0556z)

Courtesy BR

HM02 6261kHz 0440z 28 Mar16

Changed with Daylight Saving

0440z Carrier (IP)

0440z Data transmission

295 44 = (FSK Morse) (0441z)

64146 15259 80337 66893 91250
06988 69458 93089 46240 93598
52812 42874 69450 68666 78031
13288 15337 80282 29889 92869
86672 15313 50735 69204 12113
06575 58771 81393 38325 89478
81232 43105 72550 46196 26490
80531 75381 42472 53581 76286
13741 66860 00287 13153
= 295 44

295 44 = (Repeat of msg)

295 44 000 (0449z)

Courtesy BR

HM02 6261kHz 0443z 03 Apr16

0433z Carrier (IP)

0443z Data Transmission

0453z Data transmission (Repeat)

915 50 915 50 = (FSK Morse) (0455z)

47238 27467 88395 05129 07764
36991 93649 87888 33185 02180
22886 91205 20726 10168 92700
77428 36986 73532 39188 76312
81815 60812 11333 05597 27863
59079 23567 85873 37843 09605
82579 36145 53218 42243 41596
76260 65981 67513 09643 90069
96823 93046 13758 46737 62287
34672 69937 89905 69826 06831
= 915 50

915 50 = (Repeat of msg)

915 50 000

Courtesy AB

Data

One of the few errors made by this station occurred today. The 0630 UTC transmission was a null message, which is correct.
The 0635 UTC transmission should be the same as 0630 but was instead a repeat of the message sent on 22 and 24-03.
The associated E11 transmission was also a null message: 517/00 sent on 10800 kHz at 0645 UTC.

POL-FSK, 10728 kHz, 31-03, 0630 UTC, FSK 100/625
0574 0574 0574 0574 0574
00000 00000 00000 00000 000000 00000 00000 00000 00000 00000

POL-FSK, 10728 kHz, 31-03, 0635 UTC, FSK 100/625
0574 0574 0574 0574 0574
88888 88888 67011 07518 67919 01264 21922 89366 36211 75611
26249 38494 65385 74555 32118 93497 76329 86754 36840 72656
09391 92192 79453 88634 59083 31121 57280 99937 88570 90270
08074 15794 10960 93156 34768 88888 88888
00037 00037

X06 Mazielka (1c) logs section

Date	Day	UTC	Freq	Scale	Monitor	Comments
20160301	Tue	0758-0804	13524	125643	Danix/PL	G317
20160301	Tue	0910	12157	165423	Schorschi	S9, G12
20160301	Tue	1300	14942	325614	André/FR	Tail end (only 37 secs), G392
20160302	Wed	0730-0733	10684	256341	Antonio/IT	G311
20160302	Wed	1800-1802	7975	612534	RNGB	Monitored i. p., G406 (new group)
20160304	Fri	0633-0643	14720	241563	Danix	G50
20160304	Fri	0920-0926	16219	324615	Antonio, André,Peter	G52
20160304	Fri	0934-0938	20837	645321	Peter/UK	G57
20160304	Fri	1004-1006	12215	361245	Peter, Schorschi	S9 in DE, G53
20160304	Fri	1327&1343	18667	1--6--	Schorschi	X06b before XPA2 with S9
20160309	Wed	0731-0735	18591	435621	Peter	G98
20160309	Wed	0830-0858	16116	134265	Antonio, Peter	G90
20160309	Wed	0845-0848	10814	412356	Peter	G97
20160310	Thu	1520-1528	10214	263145	Danix, Jim	Alert 2 (G111) 1
20160310	Thu	1530-1546	14812	263145	Danix	2.2
20160310	Thu	1627-1643	10535	564213	Jim, Peter	I. p., QSA4, G118
20160311	Fri	1736-1737	12118	325614	Danix,Linkz	R
20160313	Sun	1401	16138	1--6--	Ary/NL	X06b before XPA2
20160313	Sun	1402	13438	1--6--	Ary	X06b before XPA2
20160313	Sun	1403	14438	1--6--	Ary	X06b before XPA2
20160314	Mon	0938-0940	12224	463125	Peter	Alert 2 (G77) 1
20160314	Mon	0942-0945	16117	463125	Peter	2.2
20160314	Mon	1003	10127	421635	Peter	G74
20160218	Fri	0951-0958	16219	324615	Peter, André,Danix	Weak start improving to good, G189
20160318	Fri	1013-1020	12215	361245	Peter,André	Weak start improving to good, G190
20160319	Sat	1327&1330	18667	1--6--	Schorschi	X06b before XPA2 with S9
20160320	Sun	1430	16138	1--6--	Schorschi	X06b before XPA2 with S9
20160321	Mon	0746-0752	18750	641523	Peter	Barely audible, just visible, G337
20160322	Tue	0804-0811	13420	534216	Peter	Fair to poor, G232
20160322	Tue	0810-0813	16257	542136	Peter	Alert 1 (G88) 1 Good
20160322	Tue	0814-0816	16257	542136	Peter, Antonio	1.2 Weaker than above (in UK)
20160322	Tue	0817	16257	542136	Peter	1.3 Strong, only 1 tone set
20160322	Tue	1018-1020	13510	612534	Peter	Alert 7 (G234) 1 Weak
20160322	Tue	1029-1030	16317	612534	Peter	7.2 Weak
20160322	Tue	1033-1044	16317	612534	Peter	7.3 Strong
20160323	Wed	0800-0803	18177	164253	Peter	Good, G402
20160323	Wed	0904-0905	11153	465132	Peter	Strong, G246
20160323	Wed	0932-0936	16116	134265	Peter	S9+, G90 (0949: CROWD36 for 5 Secs)
20160324	Thu	0757-0759	14419	521634	Peter	Weak, G248
20160324	Thu	0806-0807	16153	153624	Peter	Strong, G249
20160324	Thu	0948-0950	13506	164532	Peter, Antonio	Strong in UK, G252
20160324	Thu	1608-1625	10535	564213	Peter	Strong, G263
20160325	Fri	0950-0953	19611	256134	Antonio	I. p., G270
20160325	Fri	1110-1114	14863	615243	Schorschi	S9, G305
20160327	Sun	0845-0856	14947	351264	Peter	Fair, G398
20160327	Sun	1747-1750	10115	145632	Kopf	Good, G284
20160328	Mon	0820-0822	13423	421635	Peter	S1, G220
20160328	Mon	1316-1322	14683	364152	Antonio	Alert 2 (G73) 1
20160328	Mon	1334-1336	15656	364152	Peter	2.2
20160401	Fri	0828-0841	16219	324615	Peter	Good, G52
20160401	Fri	1001-1032	14501	361245	Peter	Alert 2 (G53) 1 Varying (S9+ to S1)
20160401	Fri	1106-1108	12215	361245	Peter	2.2 Good
20160406	Wed	0646-0656	13838	256341	Peter	S1 (only just audible), G311
20160406	Wed	0904-0906	14631	362154	Peter	Fair, G32

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20160406 Wed 1120-1123 16103 215346 Peter       Weak, G25
20160407 Thu 0735-0739 17468 436512 Peter       S1 (only just visible), G44
20160407 Thu 0952-1000 17468 436512 Peter       Strong comeback, G44
20160407 Thu 1229      19405 352416 Peter       Alert 2 (G43) 1 S1 (only audible)
20160407 Thu 1236-1238 16132 352416 Peter       2.2 Good
20160407 Thu 1412-1423 17468 436512 Peter       3rd TX of the day, strong, G44
20160408 Fri 1001-1006 14863 615243 Peter       Good and clear, G127
20160409 Sat 1821      16114 1-6-1- LU5EMM,
                                    Peter       X06b before XPA2r (4 times)
20160410 Sun 1714&1718 12138 1--6-- Schorschi   X06b before XPA2m with S9
20160410 Sun 1715      14538 1--6-- LU5EMM      Weak X06b before XPA2m
20160411 Mon 0805-0807 13423 421635 Peter       S1, G74 (CROWD36 at 0810)
20160411 Mon 0931-0939 16117 463125 Peter       Alert 2 (G77 and S9) 1
20160411 Mon 0940-1004 13517 463125 Peter       2.2
20160412 Tue 0803-0807 13420 534216 Peter       Weak, G87
20160412 Tue 1017      11025 612534 Peter       Poor to S1, G89
20160412 Tue 1020      14970 216354 Peter       S1, G388
20160413 Wed 0740-0747 13369 412356 André       G97
20160413 Wed 0847      13985 124365 Peter       New scale and freq (error?), R
20160413 Wed 0900-0901 13985 134265 Peter       Probable error correction, G90
20160414 Thu 0804-0807 12126 521634 Peter       Fair, G116
20160414 Thu 0937      13506 164532 Peter       Good, G106
20160414 Thu 1407-1414 12200 263145 Schorschi   Alert 2 (G111) 1 QSA2
20160414 Thu 1424-1441 14812 263145 Peter       2.2 Good
20160414 Thu 1525-1526 10535 564213 Peter       Good, G118
20160415 Fri 0546-0551 12168 213546 Peter       Alert 1 (G390) 1 Very good
20160415 Fri 0552-0556 12168 213546 Peter       1.2 Considerable weaker
20160415 Fri 0557      12168 213546 Peter       1.3 Shortie (6 secs), stronger
20160415 Fri 0819-0827 16219 324615 Peter       Alert 1 (G189) 1 Very good
20160415 Fri 0828-0830 16219 324615 Peter       1.2 Considerable weaker
20160415 Fri 0930-0932 18197 645321 Peter       Fair, G194
20160415 Fri 0958-1006 12215 361245 Peter       Weak, G190
20160417 Sun 1410-1422 10181 452163 Peter       Good, G403
20160418 Mon 0749-0752 12142 432516 Peter       S1 (only just visible), G341
20160418 Mon 1509-1512 14825 641523 Peter       Fair, G337
20160418 Mon 1555-1559 13395 532614 Peter       Good, G147
20160419 Tue 0751-0803 11462 165423 Peter       Weak to fair, G151
20160419 Tue 0839-0845 15687 154263 Peter       Good, G148
20160419 Tue 1150      16188 325614 Peter       Good (only 1 tone set), G400
20160420 Wed 1012-1018 14547 645321 Peter       Good, G407 (new group)
20160420 Wed 1035-1046 17430 362154 Peter       G394
20160420 Wed 1104-1107 16115 215346 Peter       Good, G167
20160422 Fri 0827-0840 10653 356412 Schorschi   I. p., S9+20, G271
20160422 Fri 0849-0852 20665 325614 Schorschi   Alert 3 (G408 [new], i. p.) 1 QSA2
20160422 Fri 0855-0912 19145 325614 Schorschi   3.2 S1
20160422 Fri 0914-0927 16188 325614 Schorschi,
                                    André       3.3 S9
20160424 Sun 1147-1148 13530 261453 Schorschi   I. p., S9, G285
20160426 Tue 1706      14538 1--6-- LU5EMM      X06b before XPA2, QSA2 (4 times)
20160427 Wed 1741-1743 12108 1--6-- Schorschi   Strong X06b before XPA2
20160428 Thu 1432-1438 13441 263145 Jim/US      I. p., new freq, QSA4, G256
20160428 Thu 1530      12161 564213 Schorschi   S9, G263
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Thanks to all our contributors:

Ary, Edd, BR, DanAr, DoK, E, HJH, JkC, Jochen, KW, Malc, MaleAnon, MSNDB, PoSW, PLdn, RNGB, Schorshi, T!, tING,

Apologies to anyone missed.

Interesting Snippet

Founding member Gert kindly sent in the URL for a site embracing the Morse Code.

Gert writes, 'There's an interesting reference to a US listening post in Germany that I was not aware of:

"Did you know that Johnny Cash began his singing career in the Air Force! He enlisted in 1950 and became a Morse Code Intercept Operator for Soviet Army transmissions in Landsberg, Germany. While most people waited to be drafted for the required two years, Cash wanted more and stayed for a total of four years. Because of his Morse code intercept work, Johnny Cash was the first American to learn about Joseph Stalin's death - even before US president Dwight Eisenhower knew!"

That is why Johnny Cash is the NL front page picture.

The URL sent is: http://www.rogerwendell.com/morsecode.html

Thanks Gert!

Gizza Job

MI5 it seems has a use for skilled men; reading the late Peter Wright's Spycatcher [For five years we bugged and burgled our way across London at the State's bequest ….] and his description of the bugging of certain embassies, 'A small pinhole was drilled using a number 60 size bit. ' or 'MI5 had, at the time, an agent who worked as an occasional decorator and odd-job man for the nnnnnnn. His name was Nutikin ……..'

Well, either 'Squirrel' Nutkin has croaked, walked out or there's more work to be done since 1955:

Imagine knocking up a chest of drawers in the ruins of a Palmyra holiday chalet; you're in the middle of running your gauge down a job piece to knock out a desired secret dovetail joint and two protagonists enter carrying Kalashnikovs. With one lightening move your arm sweeps an arc, your hand releasing a perfectly balanced Firmer Chisel at the right moment.

As the twice bevelled and recently oilstone sharpened tool reaches its target, embedding itself in the chest of the first assailant, you reach into your dark brown canvas bap [proper tool bag used by carpentersand plumbers] and grasping your Glock 17 put two rounds into the body mass of second man.
Readying yourself with a 12" Pall-Mall' design cabinet makers No8 'screwturn' you prepare to silently despatch any follow on protagonists silently.

The extra vigilance necessary means the secret dovetail joint gives way to the standard 90º corner butt. The environment and job being a million miles away from the cross-halving and through and secret mortar joints and mortise locks of the class room ……. 'Screw turn' is the old fashioned term for a screwdriver BTW.

Thanks to the tentacles of 'E' we have two very interesting adverts to share:

Thanks 'E'

PoSW's Items of Interest in the Media:-

Uncle Sam's snoopers keeping busy:- The *I* newspaper of 21-March carried a short item by Tom Bawden with the headline, "US to build giant intelligence centre in UK", which said, "The Pentagon will announce a major new £200m intelligence centre in Britain this week, which would act as the headquarters for all US military data in Europe and Africa, according to US media reports.

Known as the Joint Intelligence Analysis Centre, the facility will be located at RAF Croughton, near Milton Keynes, which already processes about a third of US military communications in Europe.
The proposed ultra-secure data centre would be the US headquarters for European and African military communications, employing up to 1,250 staff analysing intelligence from more than 50 countries. It is due to be completed next year.
Many of these functions are currently carried out at RAF Molesworth, the Cambridgeshire air base under the control of the US Air Force, which is being closed down.
The decision to create the UK centre will be controversial in the US, where there has been a Republican-led campaign to set up a headquarters in the Portuguese-controlled Azores islands in the north Atlantic."

Continuing on an American theme, a piece in the *I* of 29-March suggests that old Fidel remains unimpressed with Uncle Sam in spite of the recent visit by President Obama.
"Fidel Castro hits back at Obama after thawing of relations" says the headline over a piece by Andrew Buncombe in New York which says, "Just when the world thought the old Cold War enemies, Cuba and the US, were behaving like the best of friends, Fidel Castro has used his pen to denounce Barack Obama and his recent historic visit to the nation.
In a 1,500 word letter published in the state media, the 89 year-old leader of the Cuban revolution and brother of the current President, declared, 'We don't need the empire to give us any presents.'

Mr Obama was the first sitting president in 88 years to travel to the Caribbean nation. The two-day visit, on which he was accompanied by a large delegation of politicians, business leaders and journalists, was the latest stage in a dramatic realignment of the two countries' relationship which started at the end of 2014.
During the visit, Mr Obama met President Raul Castro and urged the government to relax restrictions on free speech, saying it was time to 'bury the last remnants of the Cold War in the Americas'. But the Associated Press claimed that this had not gone down well with some at the centre of the stand-off.
Mr Castro, the subject of repeated assassination attempts by the US, recounted decades of hostility in his essay in the official Communist Party newspaper, *Granma*."

Which probably explains why the HM01 Mixed Mode number station from Cuba is still in business - although not being well received in the UK at the moment. Or perhaps Fidel is still in a bad mood because he couldn't get tickets for the recent Rolling Stones concert in Havana.

Some "muscle flexing" by America in another part of the world; from *The Times* of 11-March a couple of column-inches with the headline, "US stealth bombers sent to Indian Ocean which says, "Washington - The US has sent three nuclear-capable B2 stealth bombers to boost its presence in the Asia-Pacific region at a time or rising concern over North Korea and the 'militarisation' of the area by China.
The bat-winged, radar-evading bombers landed at Diego Garcia, the British territory leased to the US military. The Indian Ocean has been used for bombing missions in Iraq and Afghanistan.
The B2s will take part in training exercises with Australian forces. The US has also been engaged in discussions about basing long-range bombers in northern Australia, although no decision has been made."

"Be afraid, be very afraid", seems to be the underlying theme in an article seen on the *Breitbart London* website of 20-March:- "The Metropolitan Police and special forces troops from the SAS regiment have been told to prepare their response for up to 10 simultaneous attacks on the streets of the British capital. It is understood that the security services are concerned that Islamist terrorists returning from Syria with military training could attempt to execute multiple attacks across London, similar to those seen in Paris in 2015. In doing so, the attackers would force authorities to spread resources across the city.
The *Sunday Times* reports that army regiments from outside London are now readying themselves to be deployed to assist the SAS and Metropolitan Police in the event of a Paris-style multiple target attack. A minister said that preparations are now in place for such an eventuality explaining: 'We used to plan for three simultaneous attacks but Paris has shown that you need to be ready for more than that. We are ready if someone tries with seven, eight, nine, ten."
In another part of the coordinated response, the National Crime Agency has been instructed to prioritise a crackdown on illegal firearms to limit the availability for use in a Paris-style terrorist attack by trained jihadists.
It is also reported that the army's counter-terrorist bomb disposal unit is building a team tasked with combating a chemical or biological 'dirty bomb'. One recent SAS training exercise involved soldiers tackling improvised explosive devices containing such weapons of mass destruction.

Islamist extremists in British prisons are also facing an increased clampdown. This relates to concerns that terrorist prisoners plan to use smuggled mobile phones to film an attack on non-Muslim prison guards for it later to be posted on-line."

One of the comments on this story from *Breitbart London* suggested that it should be given the codename operation "Headless Chicken".

Point to Ponder:- "And ye shall know the truth, and the truth shall make you free", (The Gospel According to St. John, Chapter 8 Verse 32)

Thanks Peter!.

British diplomats 'caught spying' by Russians

Tom Parfitt Moscow
March 15 2016

http://www.thetimes.co.uk/tto/news/uk/defence/article4713788.ece

The British defence attaché in Moscow was apprehended after he allegedly took photographs and recorded video of an air base used by strategic bombers that fired cruise missiles into Syria.

According to Russian security services, Air Commodore Carl Scott and Ryan Coatalen-Hodgson, the assistant naval attaché, were stopped near the Mozdok airbase, close to Chechnya in southern Russia.

The pair attempted "to illegally receive information about the Russian Aerospace Defence Forces", a security source told the media yesterday. One pro-Kremlin TV channel broadcast surveillance footage under the headline "British spies detained" of the two diplomats being pulled over in a black jeep.

The security source said that this month the diplomats had visited the Mozdok district of the North Ossetia-Alania republic, an area with restricted access for foreign nationals. "During their journey, the British diplomats were caught covertly surveilling the Mozdok military airfield using special photo and video equipment," the source told Tass news agency.

"The UK citizens admitted photographing certain facilities of the military airfield but refused to hand over the footage and photos under diplomatic immunity," Tass said.

The Federal Security Service said it had passed documents to the foreign ministry so that it could make an official complaint to the British embassy.

A squadron of Tu-22M3 strategic bombers operating from Mozdok flew more than 1,250 miles to launch cruise missile strikes in Syria in November. Russian federal forces operated helicopters and planes from the base during the wars in Chechnya in the 1990s and early 2000s.

Mr Scott held up an identity card showing the rank brigadier-general in the surveillance video, while Mr Coatalen-Hodgson's card showed that he was a captain. The diplomats, based at the British embassy in Moscow, were ordered to leave the area after police recorded an administrative offence.

Parts of North Ossetia are off limits to foreigners under a law that restricts access to some border and military areas.

Mr Scott was said to have been stopped in 2012 for entering another restricted area of the republic along with a technical officer from the British embassy in Moscow.

A spokesman for the embassy said: "It is routine for defence attachés to travel around their host countries in the course of their diplomatic duties. This is no different in Russia. The defence attachés from the British embassy in Moscow submitted to all relevant checks requested by the Russian authorities." The embassy declined to say what the men were doing.

Russia's security services also said that Paul Brian Filmer, a US citizen, was detained this month while photographing military and "special-task" aircraft at the Chkalovsky airport outside Moscow. Mr Filmer, who was travelling on a tourist visa, was said to be using a radio scanner to follow aircraft movements. He was given a warning and released.

http://www.thetimes.co.uk/tto/news/uk/defence/article4713788.ece

The fall of Edward Lin, the Navy officer accused of espionage and patronizing a prostitute
By Dan Lamothe April 11 at 2:44 PM
https://www.washingtonpost.com/news/checkpoint/wp/2016/04/11/the-fall-of-edward-lin-the-navy-pilot-accused-of-espionage-and-patronizing-a-prostitute/

Then-Lt. Edward Lin, a native of Taiwan, discusses his journey to American citizenship at a naturalization ceremony in 2008. (Photo by Mass Communication Specialist 1st class Sarah Murphy/ Navy)

When Edward C. Lin was a Navy lieutenant, he was selected to speak to a group of people who were about to be naturalized as U.S. citizens along with him at a ceremony in Honolulu. He and his family left Taiwan for the United States when he was 14, he recalled, and he needed a translator to help him register for school when he arrived.

"I always dreamt about coming to America, the 'promised land,'" Lin said, according to a Navy account of the December 2008 ceremony. "I grew up believing that all the roads in America lead to Disneyland."

More than seven years later, Lin faces charges of espionage, attempted espionage and patronizing a prostitute in a rare spying case involving an active-duty member of the U.S. military. It's a steep fall for a lieutenant commander who has served on some of the Navy's most advanced maritime surveillance aircraft. An espionage conviction can carry the death penalty, although no American has been executed for spying since 1953, when the married couple Julius and Ethel Rosenberg were put to death in a case that originated with atomic bomb secrets being sent to the Soviet Union.

A layer of secrecy shrouds Lin's case: The Navy examined charges against him Friday during a preliminary hearing in Norfolk, Va., but provided little advance notice about it — aside from notice on a docket temporarily posted on a Navy website. The proceeding, known as an "Article 32" hearing, examines the facts of the case and is open to the public, but Navy officials have declined to comment on the case or identify Lin before or afterward, citing concerns about his privacy, said Lt. Cmdr. Timothy Hawkins, a service spokesman.

A heavily redacted three-page charge sheet released by the Navy states that the officer faces two specifications of espionage and three specifications of attempted espionage. He is accused of communicating secret information "with intent or reason to believe it would be used to the advantage of a foreign nation," hiring a prostitute for sex, committing adultery by having sex with a woman who was not his wife, and falsifying federal records about where he traveled abroad.
A U.S. official confirmed Lin's identity to The Washington Post on the condition of anonymity, citing the sensitivity of the case. The Naval Criminal Investigative Service and the FBI are investigating whether Lin passed classified information to both China and Taiwan, the official said. Lin's identity was first reported Sunday by USNI News, a website overseen by the U.S. Naval Institute. His legal representation was not disclosed in charging documents.

A U.S. Navy P-3C Orion maritime patrol aircraft is shown here at work. (Photo by Mass Communications Specialist 2nd Class John Herman/ Navy)
The convening authority for Lin's case is the four-star commander of U.S. Fleet Forces Command, Adm. Philip S. Davidson, underscoring the seriousness with which the Navy is treating the matter. He could elect to send Lin to court-martial for some or all of the charges he faces.
Lin's service record states that he enlisted in the Navy in late 1999 and was commissioned in May 2002 as a naval flight officer, a position that specializes in operating airborne weapons and sensors. His last duty station before being arrested was with Special Projects Patrol Squadron 2 in Kaneohe Bay, Hawaii, from February 2014 to March 2016. The unit flies the P-3C Orion maritime patrol aircraft, searching for enemy submarines and performing reconnaissance and intelligence-gathering operations in the Pacific.

White House confirms espionage charges against officer

A U.S. Navy officer is in custody at a military prison under charges of espionage, White House spokesman Josh Earnest said on Monday. The officer is being held at the Navy Consolidated Brig in Chesapeake, Va., Earnest said. (Reuters)
Lin is now assigned to the headquarters unit of the Navy's Patrol and Reconnaissance Group, a holding position while he is confined at the Naval Consolidated Brig in Chesapeake, Va. Newsweek reported that he was secretly arrested about eight months ago, but his service record states only that he has been held in Chesapeake for an "unknown" period of time.

Prior to his assignment with Special Projects Patrol Squadron 2 in Hawaii, Lin filled a Navy staff job in Washington from February 2012 to November 2013 and was a student at the Naval War College in Newport, R.I., from December 2010 to February 2012.
Only a handful of active-duty service members have faced espionage charges in the past few decades. One of the most significant cases, prosecuted in the 1980s, involved a spy ring in which Navy Chief Warrant Officer John A. Walker Jr. and other members of his family provided information to the Soviet Union. Prosecution resulted in the convictions of Walker, his son Michael, his brother Arthur and former Navy radioman Jerry A. Whitworth.
[John A. Walker Jr., who led Navy family spy ring, dies at 77]

Checkpoint newsletter
Military, defense and security at home and abroad.
More recently, Pvt. Chelsea Manning, then known as Bradley Manning, was sentenced in 2013 to 35 years of confinement for leaking military secrets to the anti-secrecy website WikiLeaks.
Also in 2013, an Army military police officer, Spec. William Colton Millay, 24, was sentenced to 16 years of confinement after trying to sell military secrets two years earlier to an FBI agent he met in Alaska. He thought the agent worked for the Russian government.

https://www.washingtonpost.com/news/checkpoint/wp/2016/04/11/the-fall-of-edward-lin-the-navy-pilot-accused-of-espionage-and-patronizing-a-prostitute/

From ‘E’:

Tiny village hid wartime US spy base
Simon de Bruxelles
April 5 2016, 1:01am, The Times
http://www.thetimes.co.uk/article/tiny-village-hid-wartime-us-spy-base-cbnx3tts8

Hurley was home to 200 personnel working for US intelligence

Even to those who have lived there all their lives, the vital role played by a tiny Thames village in the defeat of Hitler has been completely unknown.

Station Victor was where radio messages from and to America’s undercover agents in occupied Europe were received and transmitted. It was the main communications centre for the Office of Strategic Services (OSS), the predecessor to the CIA. Yet residents of Hurley in Berkshire remained in the dark about it — believing it to be a simple radar station on a nearby hill.

That the true story can now be told for the first time is thanks to the dogged detective work of a local historian, Philip Williams. His discovery provides a new chapter in the history of a village previously known only for its 12th-century coaching inn, The Olde Bell, and a brief reference in Jerome K Jerome’s novel *Three Men in a Boat*.

Mr Williams’s late father-in-law, a local boatbuilder called Peter Freebody, told him how as a boy he remembered seeing US Navy sailors walking along the high street. Mr Freebody’s cottage had been requisitioned as a “blanket store” and wooden huts were hurriedly constructed at a nearby farm.

In the build up to D-Day, US servicemen were a familiar sight in the south of England. Hurley was different. When the invasion force left for Normandy in June 1944, Hurley’s Americans stayed.

“When anyone asked they just said they were ‘training’. They were naval radio operators who had been brought in because they were skilled in Morse code,” Mr Williams said. “Other historians who had tried to find out what they were doing there hit a dead end because there was no record in this country.”

Mr Williams pieced the story together by searching declassified archives in America. In a project that took almost as long as the war itself, he also found previously unseen photographs of Hurley and its American occupiers.

The village’s contribution to the war effort began when Commander George L Graveson, head of communications for the OSS, was driving out of London looking for somewhere with a good radio signal when he came upon Hurley. Soon after the centre was constructed, dozens of messages were being sent back and forth from the Continent by OSS agents in Europe, each of whom was equipped with a battery-powered radio concealed in a suitcase.

In September 1945 the OSS was abruptly disbanded and the 200 US personnel abandoned Hurley, leaving the huts behind, some of which were taken over by an agricultural research institute. As no locals knew what the Americans had been up to, the story of Hurley’s role in the defeat of Germany took three quarters of a century to be revealed.

OSS Station Victor: Hurley’s Secret War is published by Amberley and costs £14.99.

http://www.thetimes.co.uk/article/tiny-village-hid-wartime-us-spy-base-cbnx3tts8

Spectre's Newspieces

Nbcnews 02/03/2016
Former Spooks Criticize CIA Director John Brennan for Spying Comments
Former CIA officers are expressing exasperation over CIA director John Brennan's recent remark that "we don't steal secrets."

"Is he joking?" John Sipher, who spent decades spying in sensitive overseas posts and retired in 2014 as a senior manager, wrote in a column published Wednesday on a national security web site, the Cipher Brief.

In fact, Sipher and other former CIA officers say, stealing secrets is the CIA's "job one" overseas.

Brennan told National Public Radio last week that he objects to the idea that the CIA engages in theft.

"We uncover. We discover. We reveal. We obtain. We elicit. We solicit — all of that," he said.

John Maguire, a retired CIA officer who led operations in Baghdad, told NBC News that Brennan's comments "make the U.S. look dumb."

"Every aspect of what the CIA does overseas is illegal," he said. "We don't 'solicit' secrets — we steal them. What does he call breaking into an embassy? It's absurd on its face."

In the interview, Brennan appeared to be trying to push back against a term that implied lawlessness, noting that everything the CIA does is legal under U.S. law. But his remarks are likely to chill agency officers and their sources who are risking their lives to break the laws of other countries to protect U.S. national security, Sipher and other former officers told NBC News.

Sipher wrote that Brennan avoids the term "espionage," and "does not view the CIA as an espionage service. Wow."
The former officers worry that that Brennan's worldview is corrosive to the CIA. They say his recent re-organization of the agency is weakening the operations arm, which does the spying. It recruits sources, collects intelligence and runs covert operations abroad.

Sipher, the recipient of the Distinguished Career Intelligence Medal, went to work after retirement for a consulting firm run by Gen. Stanley McCrystal, the former top U.S. commander in Afghanistan.

Sipher told NBC News he was "shocked" to hear Brennan's comments, noting that CIA informants regularly risk prison or death to help the agency steal information.

"He is well aware that it feeds a long-held narrative that he doesn't fully support the collection side of the house," Sipher said.

Sipher and Maguire's views are shared by many former CIA operations officers, most of whom spoke to NBC News on condition of anonymity. Sipher's decision to go public — and Maguire's to support him — are unusual in the intelligence world, whose inhabitants typically like to hash out disputes among themselves.

CIA spokesman Dean Boyd said Brennan was only trying to rebut the pejorative term "steal," but that he fully supports "human intelligence operations."

Traditionally, CIA operations officers tend to work separately from the analysts who interpret the intelligence and publish it for review by the president and others.

Under the reorganization, Brennan created 10 "mission centers" in which analysts and operators will be working together, reporting to the same bosses. Many have praised the set-up, which is modeled after the agency's Counterterrorism Center. But Sipher and others say it has put more layers of management between top officials and field operatives, feeding the CIA's penchant for bureaucratic lethargy and risk aversion.

Frank Archibald, who was head of what then was called the National Clandestine Service and has since been renamed the Directorate of Operations, resigned last year in part over his misgivings about the reorganization, several former officers who have spoken to him told NBC News. Archibald did not respond to requests for comment.

Brennan's comment "confirms the fears of many CIA employees and alumni that Brennan's recent efforts to restructure and change CIA culture were a furtive means of weakening the clandestine service, and empowering the analytical side of the agency," Sipher wrote.

Brennan spent a career at CIA as an analyst, and in the 1990's he won a plum appointment normally reserved for operators — station chief in Saudi Arabia. Some CIA case officers — the spies — have long been suspicious of him.

"Brennan is not a case officer and has resented case officers since the day he joined the organization," Maguire said.

Agency spokesman Boyd responded by saying "it is absurd to turn a simple statement about complying with U.S. law into a plot to undermine CIA's clandestine operators.

"CIA Director Brennan is fully committed to ensuring that CIA's clandestine operators remain the world's preeminent collectors of human intelligence."

Popular Science 14/03/2016

MEET CHINA'S NEW SPY PLANE (WITH AN AUSTRIAN BODY)
IT'S OUTFITTED FOR ELECTRONIC WARFARE

The CSA-003 is China's newest Electronic Intelligence (ELINT) aircraft. Built by the China Electronic Technology Corporation's Avionics division, the CSA-003 is a family of special mission aircraft that include maritime patrol and oil spill response.

ELINT is a vital part of today's military activities and future battlefield. In addition to collecting intelligence on potential enemies' electronic activity, in a battlefield situation, it enables electronic and cyber attacks against enemy electronics through pinpointing their location and vulnerabilities.

CETCS builds the mission avionics for a family of light surveillance planes using the Diamond DA42, the CSA-003 Scout is the ELINT variant. It has electronic signal gathering pods, processing systems, satellite uplinks and options for a nose-mounted infrared/EO camera turret.

The CSA-003 is China's newest Electronic Intelligence (ELINT) aircraft. Built by the China Electronic Technology Corporation's Avionics division, the CSA-003 is a family of special mission aircraft that include maritime patrol and oil spill response.

Also using the same Diamond DA42 airframe, the CSA004 Aerial Star uses digital cameras and LIDAR in its forward to conduct survey missions, disaster monitoring, cartography, and mineral exploration.

ELINT is a vital part of today's military activities and future battlefield. In addition to collecting intelligence on potential enemies' electronic activity, in a battlefield situation, it enables electronic and cyber attacks against enemy electronics through pinpointing their location and vulnerabilities.

The Diamond DA42 is a lightweight, 4-person aircraft capable of taking off from rough runways. Its toughness and small size makes it ideal for use as a light militarized support aircraft in COIN environments, as the CSA-003 is intended for.
Built by CETCS off of an Austrian designed Diamond DA42 utility plane, the CSA-003 is a twin turboprop engined, 1.7 ton plane with heavy composite usage in its fuselage. The website states that the CSSA-003's crew consists of 1-2 pilots and 1 sensor operator. The sensor payload, carried in a pod under the fuselage, consists of a modern, digital ELINT and signals processing suite that can detect, track and analyze enemy electronic activities, such as communications, weapons guidance and radars.
The CSA-003 also has the capability for installing an electro optical/infrared sensor turret, which can detect enemy regular and irregular forces like infantry under all weather conditions. The CSA-003 can count on satellite links and processing support from ground stations to act as part of a larger network of integrated electronic attack assets.

The CSA-003 will join larger Chinese ELINT platforms, such as the medium Y-9 aircraft. Its parallel may more be smaller ELINT airplanes like the U.S. Army's RC-12 Huron, which are also twin engined turboprop aircraft modified for gathering battlefield intelligence in counterinsurgency environments like Afghanistan and Iraq. The usage of a European airframe, subject to EU arms restrictions, suggests that the CSA-003 may initially be geared to paramilitary missions like border patrol.
Thanks to Andreas Rupprecht for pointing out the usage of the Diamond DA42.

Independent 26/03/2016

Nato commander calls for return to service of U-2 spy plane to help conduct surveillance on a resurgent Russia

Exclusive: General Philip Breedlove said the iconic jet was among ‘additional intelligence collection platforms’ needed to effectively counter an increased threat posed by Moscow

The U-2 spy plane, one of the most emblematic aircraft of the Cold War, should return to Europe to conduct surveillance on a resurgent and aggressive Russia, a top American general has warned.

General Philip Breedlove, the head of US forces in Europe and Nato’s supreme allied commander, said the iconic jet was among “additional intelligence collection platforms” needed to effectively counter an increased threat posed by Moscow after decades of downgrading of American military assets in the region. The officer, who is due to step down this spring, said Russia poses a “long-term existential threat” to the United States.

With sensors that can spot a landmine from a height of 13 miles and scoop up vast amounts of communications data, the U-2 would prove a potent tool in monitoring any build-up or sudden movement of Russian forces on the border of the Baltic states or the Ukraine.

But the suggested return to European skies of the slender espionage plane, which first flew six decades ago and has survived several attempts to force its retirement, could also risk provoking Russian ire by resurrecting memories of the U-2’s role in the most incendiary moments of the Cold War.

In 1960, a U-2 on a spy mission over Russia was downed by a surface-to-air missile and its CIA pilot, Gary Powers, held captive for two years as Moscow successfully embarrassed Washington over its claims that the plane had been on a mission monitoring weather patterns.

In reality, Powers had been sent to spy on military installations and his capture undermined a major peace summit as well as causing the withdrawal of an invitation for then President Dwight Eisenhower to visit Moscow.

The potential restoration of a relic from that era to active service in the same military arena is further evidence of an increasingly muscular response from Washington to the deteriorating relations between the West and Russia following its annexation of Crimea and involvement in the conflict in eastern Ukraine.

In unreported remarks from a little-noticed annual summary of US strategy in Europe, General Breedlove said assets such as the U-2, along with another longstanding surveillance aircraft known as the RC-135 “Rivet Joint”, were needed to bolster the intelligence-gathering capabilities of America’s European command, known as EUCOM.

The general, a former US Air Force fighter pilot, said: “EUCOM finds itself in a shifted paradigm where the strategic threat presented by [Vladimir] Putin’s Russia requires we… provide a credible assurance against what remains the only nation capable of strategic warfare against the homeland.

“EUCOM needs additional intelligence collection platforms, such as the U-2 or the RC-135, to assist the increased collection requirements in the theatre.”
Military experts said it was highly unlikely that any U-2s deployed in Europe would seek to overfly Russia. Instead the planes would remain in the airspace of Nato allies, using their powerful cameras and sensor arrays to “peer” into hostile territory from an operating altitude of 70,000ft.

The Pentagon did not respond to requests from The Independent for comment on whether it was acceding to General Breedlove’s request, but Washington last month announced a quadrupling of funding for its European Reassurance Initiative (ERI) to rebuild America’s military presence on the Continent after decades of running it down.

The number of US soldiers based in Europe fell from 200,000 during the 1980s to 33,000 in 2015, prompting a military think-tank to warn recently that heavily-armed Russian battalions would overwhelm their lightly-armed Nato opponents in just three days in any attack on Latvia or Estonia.
The latest $3.4bn (£2.4bn) ERI budget for 2017 includes $22m to be spent on increased airborne intelligence and reconnaissance. Although it falls outside the ERI, Washington is also spending £200m on a new intelligence hub at RAF Croughton in Northamptonshire - the largest outside the US - which will house a joint Nato intelligence centre assessing threats to the alliance.

Known as the “Dragon Lady”, the U-2 is widely regarded as one of the most successful spy planes ever built and has been deployed to gaze down on hostile territory from Afghanistan to Cuba since it entered operation.

But while maker Lockheed insists the glider-like jet can fly until 2045, it is currently slated for retirement in 2019 as part of proposals to equip the Global Hawk unmanned drone with similar sensors.
Analysts said the fact that Russian forces were now much closer to Nato’s borders in places like the Baltics meant there was a pressing need for early warning of any deployments in the region by Moscow as well as ongoing to work to monitor the Isis terror group.

Lisa Samp, an international security specialist at the Washington-based Centre for Strategic and International Studies, told The Independent: “I know EUCOM is seeking to increase its [intelligence] collection capabilities in recognition of the increased threat from Russia/Isis and the importance of adequate warnings to give [Nato] as much notice as possible. Such efforts are vital and should be supported.”

One source with knowledge of US military programmes in Europe added: “There is no information in the public domain about a U-2 deployment for Russia. But that doesn’t mean it isn’t happening.”

Shot down over Russia: The story of Gary Powers

When Gary Powers' U-2 took off from an American base in Pakistan on a top secret mission to traverse the Soviet Union in May 1960, he did so in the belief that the USSR possessed nothing which could touch his spy plane at its cruising height of 70,000ft.

It did not take long for him to be proved wrong. Shortly after he entered Soviet air space, military commanders unleashed five surface-to-air missiles, the first of which hit the CIA jet, severing one of its wings and forcing its pilot to stage a perilous parachute jump to safety - and captivity.

The downing of the U-2, whose mission had been personally endorsed by President Dwight Eisenhower, sparked an immediate crisis in Soviet-American relations.

The ill-feeling was deepened by Washington's initial insistence that Powers had been collecting weather data for Nasa and accidentally entered Soviet territory. Unbeknown to Washington, the USSR had recovered Powers' U-2 and its photos of military installations intact.

The pilot was sentenced to 10 years' imprisonment at a show trial in Moscow but was then released two years later in a prisoner exchange which is the subject of the Steven Spielberg film, Bridge of Spies.

Once home, Powers faced a hostile reception from some who suggested he had in effect defected to the Russians. A Senate committee later exonerated him - and awarded him $50,000 in back pay for his time in Soviet prison.

The Mirror 26/03/2016

Whistleblower Edward Snowden claims Belgian spies could have stopped Brussels attacks

The former US National Security Agency worker said Turkey warned Belgium that some of the men behind the attacks were involved in terrorist activities

Spy whistleblower Edward Snowden claims the terror attacks in Brussels could have been stopped because Turkey shared information about the killers with Belgian security forces.

The former US National Security Agency worker, who is described as a traitor by British and American intelligence services after leaking huge amounts of data relating to mass surveillance, was referring to reports that Turkey warned Belgium that some of the men behind the attacks were involved in terrorist activities.

Snowden, speaking from an undisclosed location in Russia at a video conference hosted in Tucson, Arizona by the University of Arizona College of Behavioral Sciences, also cited news stories that Russia warned the US about the Tsarnaev brothers, who were behind the Boston Marathon bombing, but the authorities did not take any action, reports Sabah.

A total of 31 people died and hundreds more were injured in the terror attacks on the Belgian capital, with ISIS later claiming responsibility.

The Hill 30/03/2016

Former Intelligence chairman: More foreign spies in US than ever

There are currently more foreign intelligence operatives in the United States than at any point in the country's history, the former head of the House Intelligence Committee claimed on Wednesday.

"There are more spies in the United States today from foreign nation states that at any time in our history — including the Cold War," former Rep. Mike Rogers (R-Mich.) said in an address at the Heritage Foundation.

"And they're stealing everything. If it's not bolted down, it's gone," Rogers added. "And if it's bolted down, give them about an hour — they'll figure out how to get that, too."
When asked for the source of his claim, Rogers appeared to credit American intelligence agencies.

"That's what the intelligence business is designed to do, is determine that we have individuals here who are engaged in espionage activities," he said.

"It's massive, it's huge. And the numbers are overwhelming."

Rogers's keynote address examined the role of American intelligence agencies in an era of heightened scrutiny following leaks from Edward Snowden and others.

Rogers claimed that the proliferation of foreign intelligence operatives in the U.S. ought to serve as a warning to privacy and civil liberties advocates who have called for the Obama administration to rein in federal spying powers.

"I'm not sure we have adjusted, quite correctly, to the way we are going to respond to those activities here in the United States."

In 2012, the former head of the CIA's secretive National Resources Division made a similar claim to CBS News. China, in particular, Hank Crumpton said, had "very aggressive" spying efforts focused on the U.S.

On Wednesday, Rogers attempted to distinguish China's spying efforts from those of Russia, another long-term U.S. adversary.

Russia tends to send professional intelligence officers to scout the U.S., he claimed, while China instead turns to people who are "not necessarily trained intelligence agents and officers."

Those Chinese agents are "sent for a very specific goal of stealing a very specific piece of intellectual property," he added, which makes them harder to detect.

Rogers retired from Congress last year.

The Mirror 04/04/2016

British double agent Kim Philby reveals spy secrets of MI6 and KGB in undiscovered video

Philby was a top MI6 officer, rising high in the secret service while spilling secrets to his Soviet paymasters.

Britain's most notorious spy reveals the secrets of his double life as a communist agent in a previously unseen video.

Kim Philby was a top MI6 officer, rising high in the secret service while spilling secrets to his Soviet paymasters.

The traitor finally defected to Russia in 1963 when he was on the brink of being uncovered.

The archive footage shows the double agent giving a lecture to the Stasi - the East German secret police - in 1981.

It is the first time the notorious KGB infiltrator has been seen describing his shadowy career.

In the speech, Philby talks about his progression through to MI6 ranks whilst passing top secret information to Moscow.

Before the hour long speech, shown in grainy footage uncovered by the BBC in Berlin, Philby is introduced by East German super spy Markus Wolf - a man so shrouded in mystery he was known as 'the man without a face'.
Opening with the salutation "Dear Comrades", Philby delivers a expert guide on betrayal to a select audience of East German agents.

"I must warn you that I am no public speaker," he says.

"I've spent most of my life trying to avoid publicity of any kind."

Philby goes onto to describe his "30 years in the enemy camp" after being drawn to communism while studying at Cambridge.

He was recruited by Russian intelligence after returning from his work helping the victims of the Nazis in Austria.

At the time he had no job or prospects, but spent years trying to worm his way into the establishment.

Finally he was given a job at MI6, where he says it was remarkably easy to leak confidential documents.

He made friends with the archivists looking after the files and took them out for drinks.

This allowed him access to files that had nothing to do with his position.

"If there had been proper discipline in the handling of papers in SIS that would have been quite impossible," he said in the speech.

"But there was, in fact, no discipline."

"Every evening I left the office with a big briefcase full of reports that I had written myself, full of files and actual documents from the archive.

"I used to hand them to my Soviet contact in the evening.

"The next morning I would get the files back, the contents having been photographed and early the next morning I would put them back in their place.

"That I did regularly year in year out."

Ironically Philby was given a position as number two in a new MI6 section devoted to countering Soviet espionage.

His KGB mission was to get rid of his boss Felix Cowgill.

"So I set about the business of removing my own chief.

"You oughtn't to listen to this," he tells the audience, causing much hilarity among the communist spies.

"It's a very, very dirty story, but after all our work does imply getting dirty hands from time to time," he added.

Philby ends his talk by describing his escape to Moscow.

In 1963, after fellow soviet spies Guy Burgess and Donald Maclean had defected, Philby was feeling the heat.

He says he bluffed and stalled, then an MI6 officer was appointed to watch over him.

But the man was an keen skier and left his post to indulge his past time following a fresh snowfall in the Lebanese mountatins.

At that point, Philby got the nod from the KGB and slipped away.

The video ends with Philby answering a number of questions from East German spies, during which he advises them to never confess during interrogation.

The Guardian 11/04/2016

UK special forces and MI6 involved in Yemen bombing, report reveals

Investigation appears to contradict official UK claims

Britain’s MI6 and special forces have played a crucial and sustained role in covert US-led counter terrorism operations in Yemen. Their role has included identifying targets for drone strikes, according to a detailed, in-depth, investigation.

Drone strikes are particularly controversial because they have been responsible for civilian deaths in Yemen.

The disclosures are not entirely surprising. Britain has had a long and close diplomatic and intelligence relationship with Yemen, which borders on Britain's chief ally in the region, Saud Arabia.

What is significant - and for British parliamentarians and journalists, frustrating - is that the detailed disclosures are the result of report by a US-based current affairs channel, Vice News.

It would have been much more difficult to get British officials to talk here, given the official blanket ban on comments about special forces operations or intelligence matters.

"The British have been in Gulf states for decades. They have a reservoir of knowledge, contacts, and expertise that is very important," a former senior CIA official, responsible for operations in Yemen, told Vice News. "If you look at what capabilities each side has, that starts to tell you something about precisely where the actionable intelligence is coming from."

Once the official secret was outed, some Britons were apparently encouraged to talk. "Our station people were pretty shit-hott", said one.

British personnel serving in Yemen said the Special Reconnaissance Regiment (a special forces unit), seconded to MI6, were responsible for training Yemen forces fighting al-Qaida in the Arabian Peninsular (AQAP).

Secondment also allowed British military personnel to help with the drone strikes, but under the aegis of intelligence operations controlled by the Foreign Office, which is responsible for MI6, according to the Vice News report.

All this made their presence deniable by the UK Ministry of Defence which in 2014 told human rights group Reprieve: "The UK does not provide any military support to the US campaign of Remotely Piloted Aircraft System (RPAS) strikes on Yemen."

Reprieve said the investigation appeared to contradict years of denials by the UK about involvement in US operations in Yemen. "Even more disturbing", said Jen Gibson, a Reprieve lawyer, "the UK has copied wholesale the US model of outsourcing the military to the intelligence agencies in order to hide their involvement and avoid any accountability."

The Vice News report appears to contradict David Cameron's comment in the Commons in January that British "personnel are not involved in carrying out strikes, directing or conducting operations in Yemen or selecting targets and we're not involved in the Saudi targeting decision-making process."

Unless, of course, by "are not involved" he, or those drafting his parliamentary answers, meant "not at that very moment" and that the denial referred specifically and only to anti-Houthi operations, not anti-AQAP ones.

On a trip to London in January, the Saudi foreign minister said British and American military officials were in the command and control centre for Saudi air strikes on Yemen, and had access to lists of targets. However, he said they do not play any role in choosing them.

What is clear in all this fog is that British spooks and special forces have been very active in Yemen, without our knowledge.

Meanwhile, Human Rights Watch warned in a report on Monday of the need to maintain human control over weapons systems and ban fully autonomous weapons, known as "killer robots".

The Guardian 20/04/2016

Beware of 'Dangerous Love' with foreign spies, China tells its women

Dashing foreigner 'David' tempts hapless state worker 'Little Li' into handing over state secrets in cartoon posters put on display by government

China has marked "National Security Education Day" with a poster warning young female government workers about dating handsome foreigners who could turn out to be spies.

A 16-panel cartoon poster entitled Dangerous Love, tells the story of an attractive young Chinese civil servant nicknamed Xiao Li, or Little Li, who meets a red-headed foreign man at a dinner party and starts a relationship.

The man, David, claims to be a visiting scholar but actually is a foreign spy who butters Xiao Li up with compliments on her beauty, bouquets of roses, fancy dinners and romantic walks in the park.

After Xiao Li provides David with secret internal documents from her job at a government propaganda office, the two are arrested. In one of the poster's final panels, Xiao Li is shown sitting handcuffed before two policemen, who tell her that she has a "shallow understanding of secrecy for a state employee".

The poster has appeared on local governments' public bulletin boards, targeting mainly rank-and-file state employees.

A Beijing district government said in a statement that it would display the poster to educate its employees about keeping classified information confidential and reporting to state security agencies if they spot any spying activity. It said it would familiarize employees with ways to counter espionage.

The central government's inaugural "National Security Education Day" was meant to make people aware about security problems in China, and was marked by speeches and the distribution of materials.

The Guardian 28/04/2016

Murder conviction of Chinese MI6 informant referred to appeal court

Move to review 2009 conviction of Wang Yam comes after Guardian uncovered new evidence over murder of Allan Chappelow
The murder conviction of a leading Chinese dissident and MI6 informant has been referred to the court of appeal after the Guardian uncovered evidence that was withheld by the police.

Wang Yam was convicted at the Old Bailey in 2009 of killing the reclusive author Allan Chappelow, 86, in his home in Hampstead, north London, after a trial during which his entire defence was heard in secret on the grounds of national security.

The Criminal Cases Review Commission (CCRC) announced on Thursday that the murder conviction was being referred back to the courts because of new evidence "relating to the failure by police to reveal material which might have assisted the defence and undermined the prosecution case".

The material relates to an incident which "first came to light as a result of an article that appeared in the Guardian newspaper in January 2014", said the CCRC's statement. "The incident arguably could have formed the basis for the defence to propose the existence of an alternative suspect."

The case against Yam was that he had gained access to Chappelow's letterbox from the street and had been defrauding him by stealing his bank details. The prosecution suggested Yam was confronted by Chappelow and had then killed him. He was jailed for life with a recommendation that he serve a minimum of 20 years.

Yam, who is in Whitemoor prison, Cambridgeshire, contacted the Guardian in 2013 with a letter that stated: "I believe the only way to my freedom is [to] let public … know what is my defence and what I had done in full picture. No cover-up … I was convicted for murder without even police have evidence that I know the deceased or ever met each other. There is no evidence to link me with the deceased ... and there are unknown DNA fingerprint footprint, all not belong to me."

Part of Yam's legal argument was that because his trial had not been reported fully, potential witnesses had not come forward. After the Guardian report on the case in January 2014, two witnesses did come forward.

One, a former close neighbour of Chappelow, told the Guardian that in 2007, when Yam was in custody, he was in his house when he heard a rustling on the porch. "I opened the door to find a man with a knife going through our post. He pointed the knife at me and I shut the door. He then shouted through the door that he had been watching our house and knew that I had a wife and baby.

"He said if I called the police he would kill them. He waited in the porch for half an hour. I hid in the house but did not call the police until he had left. The police showed a strange lack of interest and just told me to change all my bank accounts … It is clear to me that there was a violent person or gang operating in the street and the lack of police interest was very bizarre."

The neighbour's statement was passed to Yam's legal team and formed part of their application to the CCRC.

"This case remains the only murder trial in the UK where the defence and other evidence was heard in secret – away from the scrutiny of the public and the press," Yam's solicitor, James Mullion, said.

"For the past nine years Mr Yam has been fighting to show his innocence, but has been restricted by court order to doing so behind locked doors. I and the rest of Wang Yam's legal team are hugely grateful to the Guardian for staying with this case and uncovering the important new evidence."

Yam's barrister, Kirsty Brimelow QC, said she was delighted the case would be reconsidered.

The body of Chappelow, who had written two biographies of George Bernard Shaw, was found under a metre-high pile of papers in a room filled with rotting furniture in June 2006. It was unclear exactly when he had been killed.

Yam, who also lived in Hampstead, came to the attention of the police investigating the murder because, prior to and just after the death of Chappelow, use of stolen credit cards had been traced to him.

Wang had recently left the country for Switzerland, where he was arrested in Zug at the end of 2006. He was charged with murder and other offences. In a first trial, for which the jury all had to receive security clearance, he was convicted of the theft and fraud offences and jailed for four and a half years, but the jury could not agree on the murder charge. At a second trial he was convicted and jailed for life.

Wang had been a research assistant in the Chinese nuclear weapons research institute from 1984-87 and an associate professor at a university in Beijing. His grandfather had been Mao's third in command, and his father was a Red Army general. He said he had been involved in the 1989 demonstrations in Tiananmen Square and, supposedly fearful of reprisals, left the country and travelled via Hong Kong to London, where he was swiftly granted refugee status in 1992.

He worked initially as a researcher at Imperial College London, and ran his own computer company, Quantum Electronics Corporation, from 1997 until it folded in 1999. At the time of the murder, he was deeply in debt and being evicted from his flat because of rent arrears.

The trial was remarkable in that the media were not allowed to hear the defence case. Jacqui Smith, the then Labour home secretary, and subsequently William Hague, then foreign secretary, signed "public interest immunity (PII) certificates" – demands for court gagging orders.

Hague claimed there would be "a real risk of serious harm to an important public interest" if Yam was allowed to disclose evidence heard in secret. Before the PIIs were granted it was reported that MI6 had requested secrecy, that Yam was a "low-level informant" for the intelligence services and that "part of his defence rested on his activities in that role".

In 2014, one of Britain's most senior legal figures entered the debate in an unconventional way. In an article for the London Review of Books, Lord Phillips, the first president of the supreme court, wrote that his daily cycle ride took him past Chappelow's house. He recalled the murder and trial, adding: "Very unusually, a large part of his trial was held in camera, because apparently Wang Yam had some link with the security services, which he wished to rely on by way of defence."

Phillips noted that Yam had applied to the European court of human rights, claiming that holding part of his trial in secret had infringed his right to a fair trial.

Yam's lawyers tried to have the ban lifted by the ECHR. However, the original trial judge, Mr Justice Ouseley, ruled last year: "[The ECHR's] judges and staff owe no allegiance to the crown. They do not apply UK domestic law. The various protected interests cannot be explained without risk of harm to those interests." In December, the supreme court dismissed Yam's appeal against this decision.

It also emerged last year that the prison service banned communications between Yam and Guardian reporters. Yam was told by Whitemoor prison authorities last year that a letter he wrote to the Guardian would not be sent. He was given a "correspondence memo", stating: "Dear Mr Yam, unfortunately this correspondence cannot be sent as you are not permitted to correspond with journalists." The Ministry of Justice said later that such a ban no longer exists.

Chart Section Index

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7. XPA2 p Schedule

May 2016

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
		x	x				0315		E11	03	8565 253/00	8565 253/00
x	x	x	x	x			0400		S06	01A	15721 480	15721 480
			x				0430/0450/0510		E07A	01B	7933/ 9133/10233 741	7933/ 9133/10233 741
x							0430/0450/0510		M12	01B	6857/ 7557 850	6857/ 7557 850
x							0450		E11	03	10800 416/00	10800 416/00
	x			x			0455		S11A	03	5149 321/00	5149 321/00
x		x		x		x	0500		HM01	18	5855	5855
	x		x		x		0500		HM01	18	11462	11462
					x		0500/0520/0540		M12	01B	9167/10267/11567 125	9282/10982/12182 291
						x	0500/0520/0540		V07	01B	...../12182/..... 511, search	
			x	x			0500/0600	1/3	E06	01A	14565/16125 460	13985/15830 328
		x					0530/0540		S06S	01A	11565/12560 464	11565/12560 464
		x		x			0545		E11	03	13424 348/00	13424 348/00
x		x		x		x	0600		HM01	18	10345	10345
	x		x		x		0600		HM01	18	14375	14375
x				x			0600/0610		E11	03	13908 181/00	13908 181/00
	x						0600/0610		S06S	01A	15945/16945 438	15945/16945 438
		x			x		0600/0620/0640		E07	01B	9064/10264/11464 024	9064/10264/11464 024
		x			x		0600/0620/0640		XPAc	01B	10868/12168/13368	11409/13509/14609
						x	0600/0700		M14	01A	7590/ 8162 382	7590/ 8162 382
						x	0630/0640		S06S	01A	16320/14875 524	16320/14875 524
			x				0630/0650/0710		M12	01B	7984/ 9184/ 911, search	7984/ 9184/ 911, search
	x		x				0645		E11	03	13424 517/00	13424 517/00
x		x		x		x	0700		HM01	18	9330	9330
	x		x		x		0700		HM01	18	13435	13435
						x	0700		M01	01B	6780 025	6780 025
	x						0700/0710(15)		S06S	01A	5430/ 6780 374	5430/ 6780 374
	x			x			0700/0720/0740		XPAt	01B	19667/18767/17467	19514/18214/16314
	x			x			0710		E11	03	14753 633/00	14753 633/00
			x		x		0710		E11	03	15905 491/00	15905 491/00
x		x					0715		S11A	03	18511 382/00, **check**	18511 382/00, **check**

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
				x		x	0730		E11	03	17120 352/00	17120 352/00
	x						0730/0740		S06S	01A	7245/12080 7365/11655 427	7245/12080 7365/11655 427
		x					0730/0740		S06S	01A	12110/14977 745	12110/14977 745
x							0745		E11	03	9610 262/00	9610 262/00
	x		x				0745		E11	03	15632 335/00	15632 335/00
x							0800	1/3	G06	01A	7320 329	7320 329
x		x		x		x	0800		HM01	18	9065	9065
	x		x		x		0800		HM01	18	10635	10635
			x				0800/0810		E17Z	01A	16780/12850/ 674	16780/12850/ 674
	x						0800/0810		S06S	01A	14373/12935 352	14373/12935 352
					x		0800/0820/0840		E07A	01B	12177/13477/14877 148	13373/14373/14873 338
		x				x	0805		E11	03	14975 311/00	14975 311/00
x			x				0820		E11	03	9150 438/00, **check**	9150 438/00, **check**
		x					0820/0830		S06S	01A	9485/11085 471, check!	9485/11085 471, check!
x				x			0830		E11	03	12924 649/00	12924 649/00
x							0830/0840		S06S	01A	8221/ 9353 371	8221/ 9353 371
			x	x			0830/0930		S06	01A	17475/14736 842	 842, search
x		x					0900		E11	03	13427 534/00	13427 534/00
x		x		x		x	0900		HM01	18	9240	9240
	x		x		x		0900		HM01	18	11462	11462
x							0900/0910		S06S	01A	16830/14835 872	16830/14835 872
			x				0900/0910		S06S	01A	12952/13565 167	12952/13565 167
			x				0900/0910		S06S	01A	6844/ 7161 624	6844/ 7161 624
	x			x			0915		S11A	03	8530 484/00	8530 484/00
		x	x				0930		E11	03	10213 270/00	10213 270/00
			x				0930/0940		S06S	01A	9255/10325 314	9255/10325 314
				x			0930/0940		S06S	01A	10290/ 9655 516	10290/ 9655 516
x		x		x		x	1000		HM01	18	5855/ 9155	5855/ 9155
	x		x		x		1000		HM01	18	12180	12180
	x						1000/1010		S06S	01A	6440/ 5660 893	6440/ 5660 893

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
		x					1000/1010		S06S	01A	14580/16020 729	14580/16020 729
x			x				1015		S11A	03	16530 475/00	16530 475/00
	x			x			1020		S11A	03	11581 426/00	11581 426/00
	x						1045		E11	03	13873 576/00	13873 576/00
	x						1100/1110		S06S	01A	6810/ 7560 754	6810/ 7560 754
x							1100/1120/1140		M12	01B	12205/13559/14728 973	12205/13559/14728 973
		x					1200	?	G06	01A	**x6933** **574, search**	**x6933** **574, search**
x							1200/1210		S06S	01A	10230/12165 831	10230/12165 831
			x				1200/1210		S06S	01A	13145/14535 425	13145/14535 425
					x		1200/1210		S06S	01A	12460/10250 254	12460/10250 254
					x		1200/1210/1220		M42C	01C	17431/15827/13376	17496/15932/13481
	x	x					1205		E11	03	x10302 469/00, search	x10302 469/00, search
x				x			1225		E11	03	13537 521/00	13537 521/00
	x	x					1300		E11	03	15803 133/00	15803 133/00
		x					1300	?	G06	01A	**x7411** **574, search**	**x7411** **574, search**
			x				1300		G06	01A	5890 329	5890 329
			x		x		1310/1330/1350		M12	01B	13926/12126/10926 919	13873/13373/11473 834
x		x					1320		M03	03	7727 543/00	7727 543/00
			x			x	1320		M03	03	7837 437/00	7837 437/00
	x				**x**		1345		E11	03	911/00, search	911/00, search
					x		1500		M01	14	6435 025	6435 025
	x						1500/1510		S06S	01A	6666/ 7744 537, search	6666/ 7744 537, search
			x				1500/1520/1540		M12	01B	13386/12189/11491 725	13386/12189/11491 725
				x		x	1500/1520/1540		XPA2p	01B	16314/15814/14514	
				x			1510/1530/1550		E07A	01B	12182/11082/10182 101	12182/11082/10182 101
			x				1530		E11	03	10356 262/00	10356 262/00
x						**x**	1540		E11	03	16335 228/00	16335 228/00
x	x	x	x	x	x	**x**	1600		HM01	18	11435	11435

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
	x					**x**	**1605**		**E11**	**03**	11530	11530
				x			1610/1630/1650		E07A	01B	11435	11435
		x				x	1625		E11	03	11530	11530
x							1700	1/2	G06	01A	11435	11435
x	x	x	x	x	x	**x**	1700		HM01	18	11530	11530
		x				x	1700/1720/1740		E07	01B	14763/13363/12163 731	14842/13442/12142 841
			x				1700/1720/1740		M12	01B	12162/11566/10711 546	12162/11566/10711 546
				x			1700/1800	1/3	M14	01A	7485/ 6891 382	7485/ 6891 382
		x			x		1705		E11	03	14865 392/00	14865 392/00
			x				1725/1730		E11	03	8088 416/00	8088 416/00
	x		x				1730/1750/1810		XPAe	01B	10438/ 9938/ 9138	10438/ 9938/ 9138
x							1800	1/2	G06	01A	**x4892 574, search**	**x4892 574, search**
x	x	x	x	x	x	**x**	1800		HM01	18	11635	11635
	x		x				1800		M01	14	5280 025	5280 025
x		x					1800/1820/1840		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
		x					1800/1820/1840		M12	01B	9176/ 7931/ 6904 257	9176/ 7931/ 6904 257
			x				1800/1820/1840		M12	01B	10343/ 9264/ 8116 124	10343/ 9264/ 8116 124
x							1810		M01B	14	5125, 5735 364	5125, 5735 364
					x		1810/1820/1830		M42C	01C	15806/13512/11131	16322/14804/12207
	x						1820	2/4	M14	01A	6856 163	6856 163
			x				1830	2/4	G06	01A	6887 842	6887 842
			x				1832		M01B	14	5095, 5760 815	5095, 5760 815
x		x					1900/1920/1940		E07	01B	14812/13412/11512 845	15824/14624/13524 865
x							1900/1920/1940		M12	01B	9176/ 7931/ 6904 257	9176/ 7931/ 6904 257
		x					1900/1920/1940		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
	x		x				1900/1920/1940		XPA2p	01B		15884/14984/14384
				x	x		1900/1920/1940		XPA2r	01B	17462/16114/14828	
				x			1900/2000	1/3	S06	01A	11.../ 9... 761, search	
					x		1900/2000	1/3	S06	01A	x7321/ 6768 614, search	x7321/ 6768 614, search
				x			1902		M01B	14	5075, 5465 336	5075, 5465 336

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
x							1915		M01B	14	5150, 5475 858	5150, 5475 858
		x					1920	2/4	M14	01A	5938 417	5938 417
	x		x				1925		E11	03	11581 551/00	11581 551/00
				x			1930	2/4	G06	01A	5943 218	5943 218
	x						1930/1950/2010		M12	01B	10343/ 9264/ 8116 124	10343/ 9264/ 8116 124
		x		x			1955		S11A	03	4870 371/00	4870 371/00
				x			2000		E11	03	8530 576/00	8530 576/00
	x		x				2000		M01	14	4905 025	4905 025
		x					2000/2020/2040		E07A	01A	12166/10766/ 9266 172	12166/10766/ 9266 172
	x					x	2000/2020/2040		XPA2m	01B	14538/13538/12138	
				x			2000/2100	1/3	S06	01A		11.../ 9... 761, search
					x	x	2005		E11	03	9130 363/00	9130 363/00
				x			2010		M01B	14	4895, 5340 467	4895, 5340 467
			x				2010/2030/2050		E07	01B	11539/10547/ 9388 553	12213/10714/ 9347 273
			x				2030	1/3	E06	01A	5948 724	5948 724
x		x		x		x	2100		HM01	18	11635	11635
	x		x		x		2100		HM01	18	16180	16180
		x					2100/2120/2140		M12	01B	9241/ 7541/ 6841 258	9986/ 9086/ 7386 903
	x					x	2100/2120/2140		XPA2m	01B		14738/13438/12138
				x	x		2100/2120/2140		XPA2r	01B		16167/14663/13923
		x			x		2110/2130/2150		M12	01B	14869/13569/12179 851	16269/14669/13369 263
				x			2130	1/3	E06	01A	5731 315	5731 315
x		x		x		x	2200		HM01	18	10715	10715
	x		x		x		2200		HM01	18	17480	17480

M01 FREQUENCY LIST

Frequencies may vary by a few kHz

JAN FEB NOV DEC M01/1 197

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

MAR APRIL SEPT OCT M01/2 463

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

MAY JUNE JULY AUG M01/3 025

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

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Mar kHz, ID, ...	Apr kHz, ID, ...	May kHz, ID, ...	Jun kHz, ID, ...	Remarks
		x	x				0315		E11	03	7850 253/00	7850 253/00	8565 253/00	8565 253/00	since 01/14, last log 04/16
x							0450		E11	03	6304 416/00	6304 416/00	10800 416/00	10800 416/00	since 02/10, last log 04/16 2nd transmission Thu 1730z
	x			x			0455		S11A	03	5358 321/00	5358 321/00	5149 321/00	5149 321/00	since 09/14, last log 04/16
		x		x			0545		E11	03	15915 348/00	15915 348/00	13424 348/00	13424 348/00	since 06/11, last log 04/16
x				x			0600/0610		E11	03	181/00, search	181/00, search	13908 181/00	13908 181/00	since 07/15, last log 02/16
	x		x				0645		E11	03	10800 517/00	10800 517/00	13424 517/00	13424 517/00	since 07/09, last log 04/16
	x			x			0710		E11	03	10221 633/00	10221 633/00	14753 633/00	14753 633/00	since 02/11, last log 04/16
			x		x		0710		E11	03	14769 491/00	14769 491/00	15905 491/00	15905 491/00	since 07/15, last log 04/16
x		x					0715		S11A	03	14940 382/00	14940 382/00	18511 382/00, **check**	18511 382/00, **check**	since 05/14, last log 02/16
				x		x	0730		E11	03	15825 352/00	15825 352/00	17120 352/00	17120 352/00	since 04/15, last log 04/16
x							0745		E11	03	10213 262/00	10213 262/00	9610 262/00	9610 262/00	since 03/14, last log 04/16 2nd transmission Thu 1530z
	x		x				0745		E11	03	14575 335/00	14575 335/00	15632 335/00	15632 335/00	since 10/11, last log 04/16
		x				x	0805		E11	03	11450 311/00	11450 311/00	14975 311/00	14975 311/00	since 07/14, last log 04/16
x			x				0820		E11	03	**6923** 438/00	**6923** 438/00	9150 438/00, **check**	9150 438/00, **check**	since 10/09, last log 04/16
x				x			0830		E11	03	10690 649/00	10690 649/00	12924 649/00	12924 649/00	since 01/10, last log 04/16
x		x					0900		E11	03	9399 534/00	9399 534/00	13427 534/00	13427 534/00	since 10/05, last log 04/16
	x			x			0915		S11A	03	7317 484/00	7317 484/00	8530 484/00	8530 484/00	since 01/10, last log 04/16
		x	x				0930		E11	03	8803 270/00	8803 270/00	10213 270/00	10213 270/00	since 02/14, last log 04/16
x			x				1015		S11A	03	16112 475/00	16112 475/00	16530 475/00	16530 475/00	since 04/10, last log 04/16
	x			x			1020		S11A	03	9960 426/00	9960 426/00	11581 426/00	11581 426/00	since 02/10, last log 04/16 2nd transmission Thu 1730z
	x						1045		E11	03	8102 576/00	8102 576/00	13873 576/00	13873 576/00	since 01/12, last log 04/16 2nd transmission Fri 2000z
	x	x					1205		E11	03	9443 469/00	9443 469/00	x10302 469/00, search	x10302 469/00, search	since 03/10, last log 04/16
x				x			1225		E11	03	**20286** 521/00	**20286** 521/00	13537 521/00	13537 521/00	since 05/15, last log 04/16
	x	x					1300		E11	03	15632 133/00	15632 133/00	15803 133/00	15803 133/00	since 08/13, last log 04/16
x		x					1320		M03	03	5463 543/00	5463 543/00	7727 543/00	7727 543/00	since 08/13, last log 01/16 **d e l e t e d ?**
			x			x	1320		M03	03	9150 437/00	9150 437/00	7837 437/00	7837 437/00	since 02/11, last log 01/16 **d e l e t e d ?**
	x				**x**		1345		E11	03	13046 911/00	13046 911/00	911/00, search	911/00, search	since 10/15, last log 04/16
			x				1530		E11	03	10330 262/00	10330 262/00	10356 262/00	10356 262/00	since 06/14, last log 04/16 2nd transmission Mon 0745z
x						**x**	1540		E11	03	15915 228/00	15915 228/00	16335 228/00	16335 228/00	since 03/11, last log 03/16
	x					**x**	**1605**		**E11**	**03**	**6397** **232/00**	**6397** **232/00**	**232/00, search**	**232/00, search**	**since 11/15, last log 04/16**
		x				x	1625		E11	03	10448 972/00	10448 972/00	15795 972/00	15795 972/00	since 02/15, last log 04/16
		x			x		1705		E11	03	10213 392/00	10213 392/00	14865 392/00	14865 392/00	since 02/14, last log 04/16
			x				1725/1730		E11	03	9371 416/00	9371 416/00	8088 416/00	8088 416/00	since 03/10, last log 04/16 2nd transmission Mon 0450z
	x		x				1925		E11	03	10620 551/00	10620 551/00	11581 551/00	11581 551/00	since 07/15, last log 04/16
		x		x			1955		S11A	03	4016 371/00	4016 371/00	4870 371/00	4870 371/00	since 02/14, last log 04/16
				x			2000		E11	03	7377 576/00	7377 576/00	8530 576/00	8530 576/00	since 03/12, last log 04/16 2nd transmission Tue 1045z
					x	x	2005		E11	03	8186 363/00	8186 363/00	9130 363/00	9130 363/00	since 03/14, last log 04/16 2nd transmission Thu 1530z

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Mar kHz, ID, ...	Apr kHz, ID, ...	May kHz, ID, ...	Jun kHz, ID, ...	Remarks
x							0800	1/3	G06	01A	6810 329	6810 329	7320 329	7320 329	since 07/10, last log 04/16 repeat at Thu 1300Z
		x					1200	?	G06	01A	**5186** **574**	**5186** **574**	**x6933** **574, search**	**x6933** **574, search**	since 10/14, last log 04/16 yearly changing frequencies + id repeat at 1300Z
		x					1300	?	G06	01A	**5436** **574**	**5436** **574**	**x7411** **574, search**	**x7411** **574, search**	since 10/14, last log 04/16 yearly changing frequencies + id repeat from 1200Z
			x				1300		G06	01A	4598 329	4598 329	5890 329	5890 329	since 09/11, last log 01/16 repeat from Mon 0800Z
x							1700	1/2	G06	01A	**4767** **574**	**4767** **574**	x5246 574, search	x5246 574, search	since 04/10, last log 04/16 yearly changing frequencies + id repeat at 1800Z
x							1800	1/2	G06	01A	**4953** **574**	**4953** **574**	**x4892** **574, search**	**x4892** **574, search**	since 05/09, last log 04/16 yearly changing frequencies + id repeat from 1700Z
			x				1830	2/4	G06	01A	5934 579	5934 579	6887 842	6887 842	since 05/01, last log 04/16 repeat at Fri 1930Z
				x			1930	2/4	G06	01A	5442 947	5442 947	5943 218	5943 218	since 04/01, last log 04/16 repeat from Thu 1830Z

Current HM01 Schedules

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

Text in red requires confirmation.

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

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

Notes:

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

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

XPA2 p Six day variable schedule, separate document

Updated 19/04/2016

XPA2 p Russian Intelligence Multitone Systems [Radiogramma] Transmission Schedules

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

XPA2 p

Appears to be a robust schedule
Strong into UK

05/09/2015

SPECIAL MATTERS

Operation Jallaa: Nil Return

MESSAGES:

'E' Many thanks for your offering; Coat needed for 'Op Shed.'

RELEVANT WEBSITES

ENIGMA 2000 Website:	http://www.enigma2000.org.uk
Frequency Details can be downloaded from:	http://www.cvni.net/radio/
More Info on 'oddities' can be found on Brian of Sussex' excellent web pages:	http://www.brogers.dsl.pipex.com/page2.html
Time zone information:	http://www.timeanddate.com/library/abbreviations/timezones/
Encyclopedia of Espionage, Intelligence, and Security	http://www.espionageinfo.com/

EyeSpyMag! http://www.eyespymag.com