ENIGMA 2000 NEWSLETTER

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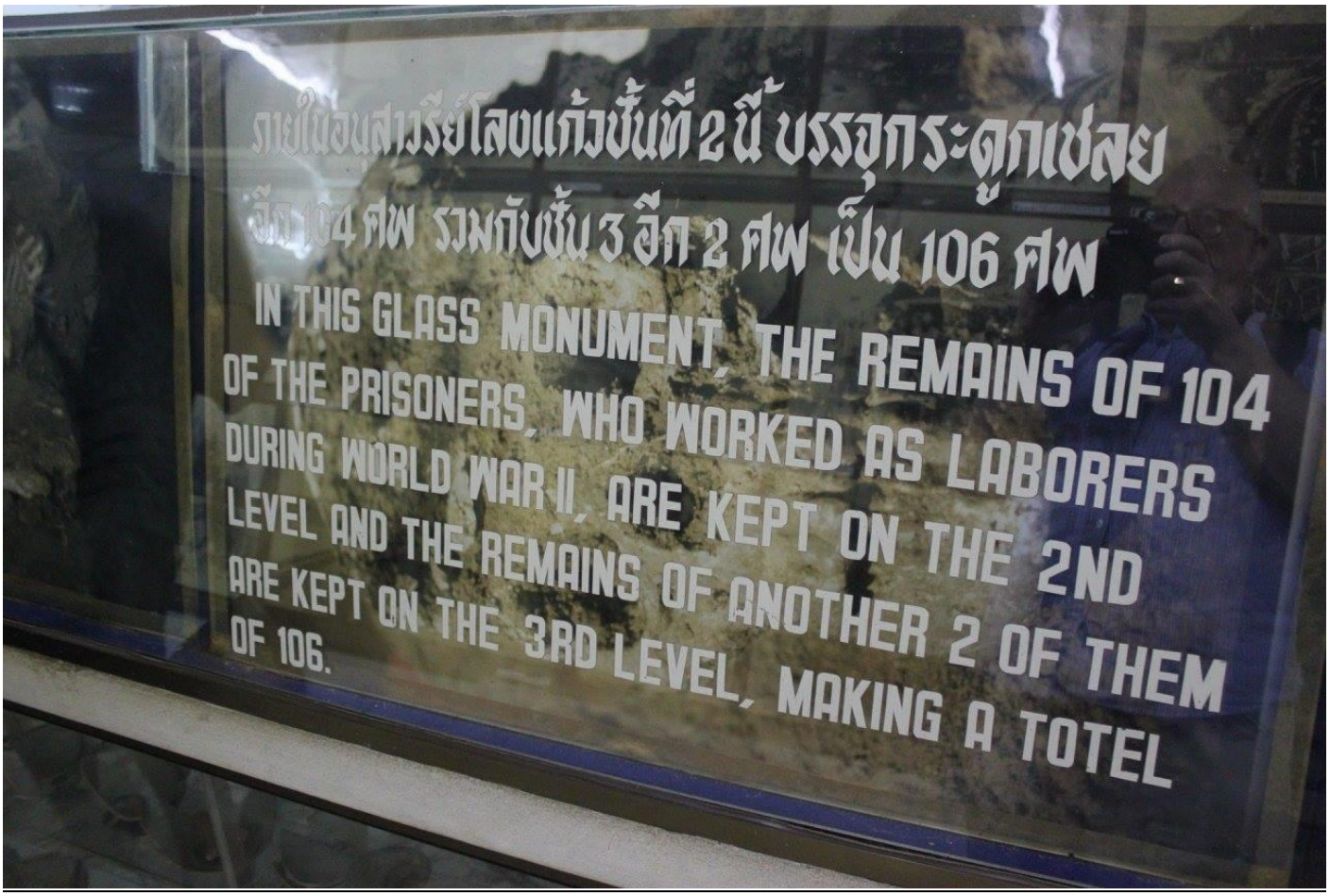

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This image taken at the Kanchananburi JEATH Museum
[Burma-Siam death railway – the Bridge over the River Kwae]

Human remains in this coffer are of those who lived, worked and died on the Bridge.
Photographed at this angle to preserve the utter respect the dead deserve.

There was a particular air about this place; in the words of Rudyard Kipling, '..... the silence 'ung that 'eavy you was 'arf afraid to speak!'

A very emotive and memorable exhibition featuring the events and belongings of those who lived, worked and died building the Burma - Siam Railway under the administrations of the Imperial Japanese army.

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En97

The Number Stations continue to do their stuff on the airwaves, several interesting developments over the last couple of months:- Unable to find any trace of the Monday + Wednesday 1900Z start E07 SSB schedule in September; rather strange because contact was re-established at the start of October with very strong signals although they have become much weaker in the second half of the month.

Some unusual activity outside of the usual schedules noted from the S06s station with the YL voice in the second week of September; logged either side of 1800 UTC and first heard on the 9th, calls 307, 329 and 263 were used, mainly "no message" format but a couple of "full message" transmissions were heard with group counts higher than the regular S06s routines. Signals were never very strong and last heard on Friday 16-September.

Return of the "Common and Precious" beacon:- not a number station, but an "oddity", a bit of private enterprise propagation research perhaps? A beacon sending slow CW with the message, "JO62SK common and precious ….. 5W dipole" on 10,237 kHz was noted in October of last year and was heard regularly, in daylight hours at least, until April of this year when it appeared to cease operation, not heard at all in the spring and summer months but a similar transmission found quite by chance on a lower frequency, noted close to an E11 transmission found by chance in October:-2-Oct-16, Sunday:- 1607 UTC, 6,397 kHz, very strong E11 SSB YL voice with, "Two three two oblique zero zero", ended with "out" 1608:15s UTC. After this had finished noted slow CW on 6,398 – point something – which when tuned in was sending, "JO62SK common and precious JO62SK 52W dipole", so similar to the one heard on 10,237 but just over ten times the power. Heard regularly since throughout October, and a check on 10,237 revealed that the "common and precious 5W.... " is back – or perhaps it was there all the time and lack of reception was all down to unfavourable propagation.

As for the E11 on 6,397, this showed up at 1605 UTC on 6,397 with, "232/00" on Sundays 9th and 16th of October but on the 23rd came up with a "full message" format, calling "235/37" - "235" not "232" and 5Fs sent first as doubles then repeated as single groups.

The German Weather Service appear to have ended their transmission with meteorological information which was heard just after 1200 UTC on 5,905 kHz with a good signal throughout most of this year, using the "amplitude modulation with lower side-band suppressed" mode much favoured by some number stations. A change of frequency to 6,180 kHz towards the other end of the 49 metre band had been noted in August and was logged on this frequency with an S9 signal at 1218Z on 19-September, but has not been heard in October. [PosW …thanks]

Propagation and general conditions have been very poor again; so poor my nightly monitoring of the usually strong signal of Radio Thailand, HSK9, transmitted from Udon Thani in the north of Thailand, has been exceedingly poor and on some nights totally NRH.
The Tuesday Thursday polytone schedule, XPA e, always a pot-luck signal in the UK, has not been heard since its transmission of 27th September, 2016. It looks as though this station has gone; a search have been made daily to ascertain if, like the Anschlag signal XPA b, minor changes occurred for 'operational' reasons. XPA e frequencies will monitored until January 2017 and, if still NRH, will be deemed closed.

It has been interesting to see the glut of polytone signals that Daniel in the Argentine intercepts seems to be most, albeit weaker. Excellent stuff indeed.

With the next issue of our Newsletter in 2017 it remains only to thank our contributors and editors and with our readers the Compliments of the Season.

Morse Stations

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

Morse - Number Stations

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

The M01 schedules are believed to be a training operation. Messages are often plainly fake & invariably contain a number of errors that appear to have been deliberately introduced, some of which can be quite problematic for even those more experienced Morse monitors.

Just as you start to believe that the operators of this schedule have used all the tricks they somehow manage to come up with a new twist. The latest challenge, seen over the last two months, involves the operator sending all or part of the message as a single continuous stream of numbers with no pauses, usually at an advanced speed. This on its own could be quite taxing, however, added to this are a number of errors.

M01 uses paired groups & the errors usually take the form of sending the occasional group once only, or by introducing one or two changed numbers in the repeated group However, the most challenging is added or omitted numbers, either in the initial or repeat group, creating a six or four figure group that can easily confuse the monitor trying to copy the message from the continuous stream - at least, for a group or two until it is possible to get back into the sequence.

September 2016:

5020	2000z	01 Sep	'463' 349 30 = =	00510...	...LG 51539 = =	Strong, fast. Msg sent as continuous stream	BR/CB/HFD	THU
	2000z	06 Sep	'463' 174 30 = =	99044...	...LG 01071 = =	Strong, fast. Numerous errors.	CB	TUE
	2000z	08 Sep	'463' 187 30 =	62292...	...LG 75241 = =	Strong, fast. Error in grp25	BR/CB	THU
	2000z	13 Sep	'463' 448 30 = =	14577...	...LG 48426 = =	Good, V.Fast. Msg sent as continuous stream	BR	TUE
	2000z	15 Sep	'463' 188 30 = =	66544...	...LG 11954 = =	Weak, fast. Copy difficult throughout	BR	THU
	2000z	20 Sep	'463' 771 30 = = = =	51967...	...LG 05578 = = = =	Strong, slow. Many errors. Some 4 fig grps	BR/CB	TUE
	2000z	22 Sep	'463' 174 30 = =	56672...	...LG 99176 = =	Strong, fast. Errors noted inc. 4 fig repeat	BR/CB	THU
	1959z	27 Sep	'463' 541 30 = =	25468...	...LG 31579 = =	Strong, fast. Msg sent as continuous stream	BR/CB	TUE
	2000z	29 Sep	'463' 245 30 = =	98365...	...LG 30241 = =	Fair, fast. Poor copy. Errors noted	BR/CB	THU
5475	1800z	01 Sep	'463' 295 30 / /	29530...	...LG 22527 / /	Fair. Poor copy - Unsure of grp accuracy	CB/HFD	THU
	1800z	06 Sep	'463' 254 30 = =	32346...	...LG 99671 = =	Weak, fast. Difficult copy. No noted errors	BR	TUE
	1800z	08 Sep	'463' 223 30 = =	19302...	...LG 17086 = =	Good, fast. Error in grp03	BR/CB	THU
	1800z	13 Sep	'463' 602 30 = =	194. 9...	...LG 0770 . = =	Good, V.Fast. Msg sent as continuous stream	BR	TUE
	1800z	15 Sep	'463' 217 30 = =	65489...	...LG 98955 = =	Good, fast. Only 29 grps sent.	BR	THU
	1800z	20 Sep	'463' 771 30 = = = =	95703...	...LG 40041= = = =	Good, slow. Some pauses. No errors	BR	TUE
	1800z	22 Sep	'463' 386 30 =	46645...	...LG 28814 = =	Strong, fast. Single = at start. No errors in msg	BR/CB	THU
	1800z	27 Sep	'463' 753 30 = =	95912...	...LG 23564 = =	Strong, fast. Most sent as continuous stream	BR/CB	TUE
	1800z	29 Sep	'463' 631 30 = =	02487...	...LG 25402 = =	Strong, fast. No noted errors.	BR/CB	THU

6260	1500z	03 Sep	'463' 193 30 = =	98541...	...LG 09711 = =	Ends 1508z	E.SMITH	SAT
	1500z	10 Sep	NRH				BR	SAT
	1500z	17 Sep	Very weak - No useful copy				CB	SAT
	1500z	24 Sep	'463' 155 30 = =	85250...	...LG 52412 = =	Good, fast. Excellent CW. Errors noted	BR	SAT
6510	0700z	04 Sep	'463' 216 30 = =	05516...	...LG 71688 = =	Fair/V.Weak, fast. One error on starting DK	BR/CB	SUN
	0700z	11 Sep	'463' 456 30 = =	99301...	...LG 11258 = =	Strong, fast. Numerous errors noted	BR/CB	SUN
	0700z	18 Sep	'463' 115 30 = =	02487...	...LG 25402 = =	Good, fast. Excellent CW. Errors noted	BR	SUN
	0659z	25 Sep	'463' 208 30 = =	88842...	...LG 59668 = =	Strong. Errors noted inc. 4fig grp	CB	SUN

October 2016:

5020	2000z	04 Oct	'463' 257 30 = =	98365...	...LG 30242 = =	Fair, fast. Several errors noted	BR	TUE
	2000z	04 Oct	'463' 278 30 = =	25752...	...LG 90822 = =	Strong, fast. Grps & repeat sent with no pause	BR/CB	THU
	2000z	11 Oct	'463' 507 30 = = = =	64001...	...LG 00213 = = = =	Good, fast. Msg sent as continuous stream	BR	TUE
	2000z	13 Oct	'463' 301 30 =	. . . 99...	...LG 12563 = =	Fair, fast. Good CW. CW QRM over grp01	BR	THU
	2000z	18 Oct	'463' 135 30 = =	34832...	...LG 75941 = =	Strong, fast. Several errors noted.	CB	TUE
	2000z	20 Oct	'463' 194 30 = =	03130...	...LG 79425 = =	Strong, fast. Repeat errors noted	CB	THU
	2000z	25 Oct	'463' . . 7 30 = =	72557...	...LG . . . . . = =	Fair - poor. Very poor copy.	BR/CB	TUE
	2000z	27 Oct	463. 812 30 = =	12019...	...LG . . . . . = =	Weak, Very poor copy.	BR	THU
5475	1800z	04 Oct	'463' 189 30 = =	66045...	...LG 21548 = =	Good, fast. Many errors. Severe XJT QRM	BR/CB	TUE
	1801z	06 Oct	'463' 239 30 = =	91857...	...LG 82725 = =	Strong, fast. Grps & repeat sent with no pause	BR/CB	THU
	1800z	11 Oct	'463' 409 30 = = = =	15123...	...LG 01214 1 = =	Good, fast. Msg sent as continuous stream	BR	TUE
	1800z	13 Oct	'463' 143 30 = =	87964...	...LG 30653 = =	Good, fast. Good steady CW. No errors	BR	THU
	1800z	18 Oct	'463' 021 30 = =	66530...	...LG 63640 = =	Strong, fast. Irregular in places. Errors noted	CB	TUE
	1800z	20 Oct	'463' 238 30 = =	99651...	...LG 33368 = =	Strong. Continuous stream in places	CB	THU
	1800z	25 Oct	'463' 187 30 = =	72529...	...LG 64106 = =	Fair, fast. Heavy static. Errors noted	BR/CB	TUE
	1800z	27 Oct	'463' 391 30 = =	25202...	...LG . . . . . = =	Fair, fast. Weak from grp19. Errors noted	BR	THU
6260	1500z	01 Oct	'463' 618 30 = =	52676...			HFD	SAT
	1500z	08 Oct	NRH				CB	SAT
	1500z	15 Oct	'463' 408 30 = =	68636...	...LG 50365 = =	Good, fast. One error noted. BC splatter	BR	SAT
	1500z	22 Oct	'463' 189 30 = =	78993...	...LG 66811 = =	Strong/Fair, fast. Several errors noted	BR/CB	SAT
	1500z	29 Oct	'463' 708 30 = =	77081...	...LG 68492 = =	Fair, fast. Errors noted. Unsure of LG	CB	SAT
6510	07**05**z	02 Oct	'463' 117 30 = =	40112...	...LG 36535 = =	Fair, fast. Late start with numerous errors	BR/CB	SUN
	0700z	09 Oct	'463' 707 30 = =	30194...	...LG 80831 = =	Strong, fast. Errors noted, inc. correction	BR/CB/HFD	SUN
	0700z	16 Oct	'463' 133 30 / /	61797...	...LG 22854 = =	Good, fast. Errors noted	BR	SUN
	0701z	23 Oct	'463' 344 30 = =	32028...	...LG 29575 = =	Strong, fast. Errors noted. Only 29 grps sent	BR/CB	SUN
	0700z	30 Oct	'463' 103 30 = =	49897...	...LG 62193 = =	Weak, fast. Errors noted. Strength variable	BR	SUN

M01 6260kHz 1500z 03 Sep16

463 (R4m) 193 193 30 30 = =

98541 71526 54541 84958 21656
64841 16498 11515 49851 61956
54511 54969 60235 00055 46256
62156 08989 58956 16567 04566
03123 01635 89854 15665 16664
06167 21650 21653 89712 09711
= = 000

193 193 30 30 000

Courtesy E.SMITH

M01 5475kHz 1800z 29 Sep16

463 (R4m) 631 631 30 30 = =

02487 04769 02456 01458 22897
64899 24677 02463 03214 04587
64785 02648 35147 25964 35416
25468 25484 36971 21597 35697
78458 97854 69154 25489 75895
64895 25648 35684 69475 25402
= = 000

631 631 30 30 000

Courtesy BR

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

Uascan logged this excellent example on 16 September;

4508 1705z 16 Sep 343 343 343 94420 94420..... 343 343 343 40301 000 Uascan FRI

343 343 343 94420 94420

343 343 343 42094 42094

343 343 343 40301 40301 343 343 343 40301 40301 343 343 343 40301 40301
343 343 343 40301 40301 343 343 343 40301 40301

343 343 343 40301 343 343 343 40301 000

M01b

3510//4605	1832z	01 Sep	'201' 715 33 = 51536....	HFD	THU
3520//4585	2009z	09 Sep	'582' 715 33 = 51536 13409.... 82028 000 Strong//Strong	HFD/tiNG	FRI
3535//4590	1810z	12 Sep	'420' 715 33 = 51536....	HFD	MON
	1810 - 1827z	19 Sep	'420' 715 33 = 51536 13409.... 82028 000 Good/Good	tiNG	MON

3625//4941	1902z	16 Sep	'153' 715 33 = 51536....	HFD	FRI
3625//4940	1902 - 1920z	30 Sep	'153' 715 33 = 51536 13409.... 82028 000 Strong	tiNG	FRI
3644//4454	1915z	19 Sep	'771' 715 33 = 51536....	HFD	MON
3715//4570	1942z	01 Sep	'477' 715 33 = 51536....	HFD	THU

M01b 5320//4585kHz 2009z 09 Sep16

153 (R4m) 715 715 33 33 = =

51536 13409 98940 26245 84210 56387 33787 86848 47478 47608
25201 22423 40241 54235 49852 91422 48421 94013 57124 35635
77582 58938 24255 99224 33010 16143 87241 57409 58695 22042
47719 89594 82028 = =

715 715 33 33 000

Courtesy tiNG

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 Transmissions Return - But still with technical problems... ...Report & Logs From AnonUS, our Man in America

As reported in the stop press of the last newsletter, M08a suddenly returned on September 6th following an absence of over two months. The first few transmissions were very loud and clear but soon the usual humming sounds returned and by the end of the period covered by this report the audio had degenerated to the point where only very faint intermittent Morse was audible mingling with the loud hum.

The theory that there may have been a new format ready to appear turned out to be unfounded with the previously used format returning. The usual weekend call-ups have also persisted.

September 2016:

7554	2000z	15 Sep	[26152 48882 53811]	Noisy transmitter is back with loud hum behind the Morse	AnonUS	THU
	2000z	17 Sep		Noisy carrier but no Morse by 2003z	AnonUS	SAT
	2000z	18 Sep		Noisy carrier but no Morse by 2003z	AnonUS	SUN
	2000z	19 Sep	[72321 83051 07072]		AnonUS	MON
	2000z	20 Sep	[44741 57162 61401]		AnonUS	TUE
	2000z	22 Sep	[71502 83832 16251]		AnonUS	THU
	2000z	23 Sep	[43172 56411 60832]	Very weak	AnonUS	FRI
	2000z	25 Sep		Noisy carrier but no Morse	AnonUS	SUN
	2000z	26 Sep	[- - - - -- 47301 51622]	Up late in progress	AnonUS	MON
	2000z	27 Sep	[71361 84702 07121]		AnonUS	TUE
	2000z	28 Sep		Noisy carrier but no Morse	AnonUS	WED
	2000z	29 Sep	[47321 51642 74172]		AnonUS	THU
	2000z	30 Sep		Noisy carrier but no Morse	AnonUS	FRI
8009	2300z	17 Sep		Came up in progress at 2301z	AnonUS	SAT
	2300z	28 Sep		Noisy carrier but no Morse	AnonUS	WED
8096	1400z	11 Sep	[18262 22501 35022]	Weekend schedule returns after almost 3 months absence!	AnonUS	SUN
	1400z	17 Sep	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SAT
	1400z	18 Sep		Noisy carrier from 1338z, came up in progress at 1418z	AnonUS	SUN
	1400z	19 Sep	[- - - -- - - - -- 27781]	Up at 1418z just before the 3rd call-up. Ended AR AR AR SK at 1432z	AnonUS	MON
	1400z	20 Sep	[- - - -- 58742 62161]	Up late in progress	AnonUS	TUE
	1400z	22 Sep	[87782 01222 14541]		AnonUS	THU
	1400z	24 Sep		Noisy carrier but no Morse	AnonUS	SAT
	1400z	25 Sep		Noisy carrier but no Morse	AnonUS	SUN
	1400z	26 Sep	[50382 63611 76141]		AnonUS	MON
	2000z	28 Sep	[04082 16312 30741]		AnonUS	WED
	1400z	29 Sep	[46302 50621 73051]		AnonUS	THU
	1400z	30 Sep	[46302 50621 73051]		AnonUS	FRI
8135	2300z	06 Sep	[15511 28832 32261]		AnonUS	TUE
	2300z	08 Sep	[43141 56461 60702]		AnonUS	THU
	2300z	15 Sep		Loud transmitter hum present from 2245z no Morse) (possible V02a voice in the background audible in LSB mode	AnonUS	THU
	2300z	16 Sep	[26721 30252 53571]		AnonUS	FRI
	2300z	20 Sep	[77532 81862 03281]		AnonUS	TUE
	2300z	22 Sep		Very noisy carrier but no Morse	AnonUS	THU
	2300z	23 Sep		Weak noisy carrier, finally came up in progress at 2310z	AnonUS	FRI
	2300z	25 Sep		Noisy carrier but no Morse	AnonUS	SUN

	2300z	27 Sep	[20772 33211 46532]		AnonUS	TUE
	2300z	29 Sep		Noisy carrier but no Morse	AnonUS	THU
	2300z	30 Sep		Morse present but drowned out by noisy carrier	AnonUS	FRI

October 2016:

7554	2000z	01 Oct		Noisy carrier but no Morse	AnonUS	SAT
	2000z	02 Oct	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SUN
	2000z	04 Oct		Noisy carrier but no Morse	AnonUS	TUE
	2000z	05 Oct	[- - - - - - - - -- 72601]	Up late in progress	AnonUS	WED
	2000z	07 Oct	[77051 80681 04611]		AnonUS	FRI
	2000z	08 Oct	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SAT
	2000z	09 Oct		Carrier but no Morse	AnonUS	SUN
	2000z	11 Oct	[05231`17562 21882]		AnonUS	TUE
	2000z	13 Oct	[14811 27232 31661]		AnonUS	THU
	2000z	12 Oct		Carrier but no Morse	AnonUS	WED
	2000z	14 Oct		Noisy carrier until 2020z but no Morse	AnonUS	FRI
	2000z	17 Oct	[63852 76271 80512]		AnonUS	MON
	2000z	18 Oct		Noisy carrier but no Morse	AnonUS	TUE
	2000z	19 Oct		Hum audible but low audio on Morse made it unreadable	AnonUS	WED
	2000z	20 Oct		Noisy carrier but no Morse	AnonUS	THU
	2000z	21 Oct		Noisy carrier but no Morse	AnonUS	FRI
	2000z	22 Oct		Noisy carrier but no Morse	AnonUS	SAT
	2000z	23 Oct		Noisy carrier but no Morse	AnonUS	SUN
	2000z	24 Oct	[86??? 004?? 127?1]	Low audio once again	AnonUS	MON
	2000z	25 Oct		Noisy carrier but no Morse	AnonUS	TUE
	2000z	26 Oct		Noisy carrier but no Morse	AnonUS	WED
	2000z	27 Oct		Noisy carrier but no Morse	AnonUS	THU
	2000z	28 Oct		Noisy carrier with weak Morse, call-ups possibly starting with 8, 0 and 1	AnonUS	FRI
8009	2300z	01 Oct		Noisy carrier but no Morse	AnonUS	SAT
	2300z	03 Oct		Noisy carrier but no Morse	AnonUS	MON
	2300z	05 Oct	[88632 - - - - - - - - - -]	Missed the other two call-ups	AnonUS	WED
	2300z	08 Oct		Carrier but no Morse	AnonUS	SAT
	2300z	19 Oct		Hum audible but low audio on Morse made it unreadable	AnonUS	WED
	2300z	22 Oct		Noisy carrier but no Morse	AnonUS	SAT
	2300z	24 Oct		Noisy carrier but no Morse	AnonUS	MON
8096	1400z	01 Oct	[**12345 67890**]	Repeated continuously	AnonUS	SAT
	1400z	02 Oct	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SUN
	1400z	03 Oct		Carrier but no Morse	AnonUS	MON
	1400z	06 Oct		Carrier but no Morse	AnonUS	THU
	1400z	07 Oct		Carrier but no Morse	AnonUS	FRI
	1400z	08 Oct	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SAT
	1400z	09 Oct		Carrier but no Morse	AnonUS	SUN
	1400z	11 Oct		Carrier but no Morse	AnonUS	TUE
	1400z	12 Oct	[15761 28101 31422]		AnonUS	WED
	1400z	13 Oct	[08862 10512 25522]		AnonUS	THU
	1400z	14 Oct	[82162 15481 28721]		AnonUS	FRI
	1400z	15 Oct		Carrier but no Morse	AnonUS	SAT
	1400z	17 Oct		Carrier but no Morse	AnonUS	MON
	1400z	18 Oct		Noisy carrier but no Morse	AnonUS	TUE
	1400z	19 Oct		Noisy carrier but no Morse	AnonUS	WED
	1400z	20 Oct		Noisy carrier but no Morse	AnonUS	THU
	1400z	21 Oct		Noisy carrier but no Morse	AnonUS	FRI
	1400z	22 Oct		Noisy carrier but no Morse	AnonUS	SAT
	1400z	23 Oct		Noisy carrier but no Morse	AnonUS	SUN
	1400z	24 Oct		Noisy carrier but no Morse	AnonUS	MON
	1400z	25 Oct		Noisy carrier but no Morse	AnonUS	TUE
	1400z	27 Oct		Noisy carrier but no Morse	AnonUS	THU
	1400z	28 Oct		Noisy carrier but no Morse	AnonUS	FRI
8135	2300z	02 Oct	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SUN
	2300z	04 Oct		Noisy carrier but no Morse	AnonUS	TUE
	2300z	06 Oct	[03121 26542 30871]		AnonUS	THU
	2300z	07 Oct		Carrier but no Morse	AnonUS	FRI
	2300z	09 Oct	[18262 22501 35022]	Usual weekend call-ups	AnonUS	SUN
	2300z	11 Oct	[37031 41352 53681]		AnonUS	TUE
	2300z	13 Oct		Noisy carrier only, SS/YL voice audible at around 2325z with repeated numbers, possibly HM01 call-ups	AnonUS	THU
	2300z	14 Oct	[4820**2** 5104**2** 6505**2**]	All three call-ups end with 2	AnonUS	FRI
	2300z	18 Oct		Noisy carrier but no Morse	AnonUS	TUE
	2300z	20 Oct		Morse present but low audio made it unreadable	AnonUS	THU
	2300z	21 Oct		Noisy carrier but no Morse	AnonUS	FRI
	2300z	23 Oct		Noisy carrier but no Morse	AnonUS	SUN
	2300z	25 Oct		Noisy carrier but no Morse	AnonUS	TUE
	2300z	27 Oct		Morse present but very low audio, one call-up starts with 8	AnonUS	THU
	2300z	28 Oct		Wide signal covering 8119 to 8140kHz with peaks every 50Hz	AnonUS	FRI

M12 IB ICW, some MCW / CW, short 0. Reuses many freqs year on year.

New ID's may be only for the month/sched shown, but not necessarily unknown . The reason for their reuse, some after long periods of time, is unknown.

Asiatic M12 Scheds

Asiatic Tues and Thur M12 Schedule Version 11.1, by Token
Chart based on observations up to 6 September, 2016.
Station transmits each Tuesday and Thursday morning, times as listed.
Transmissions are ICW, frequency listed is carrier frequency.

Time UTC	January 435	February 792	March 435	April 262	May 112	June 112	July 562	August 112	September 932	October 943	November 792	December 435
0100	14493	14793								15903	14793	14493
0120	13393	13903								14493	13903	13393
0140	11593	12203								13393	12203	11593?
0300			14493						13903			
0320			13393						13393			
0340			11593						12203?			
0500				12203	12193			12193				
0520				10693	11103			11103				
0540				9293	10293			10293				
0700						12193	11593					
0720						11103	10693					
0740						10293	9293					

Pacific area observed M12 schedule, Asiatic Russia or Kamchatka possible source based on HFDF and propagation modeling. Western US, Canada, Central America receive a good signal, parts of Asia also.
Propagation modeling and use of down stepping frequencies might suggest US / Canada / Central America as the target area.

Station transmitter sometimes comes on frequency being tuned up with broadcast audio in the background, as is seen occasionally on Asiatic V07 and Asiatic Wed / Sat M12. This can happen as early as 50 minutes before scheduled transmission time.

Token

European M12 Logs

With the end of October approaching & the impending change to Daylight Saving, several of the M12 schedules ceased around the 3rd week of the month, as observed by Edd Smith. This behaviour was noted last year too, and will result in some changes to the current M12 schedules & possibly the appearance of some new ones, too. The regular core IDs will continue, but there may be some adjustments to the time & day of some of the existing core schedules, too.

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

5792/6992/---	0430/0450/0510z	05 Sep	796 000			E.SMITH	MON
	0430/0450/0510z	12 Sep	796 000			E.SMITH/HFD	MON
	0430/0450/0510z	19 Sep	796 000			E.SMITH	MON
	0430/0450/0510z	26 Sep	796 000			E.SMITH	MON
6784/7684/---	0630/0650/0710z	01 Sep	761 000	Strong	QRM from STANAG 4285 on 5792kHz	E.SMITH/HFD	THU
	0630/0650/0710z	08 Sep	761 000	Good	QRM from STANAG 4285 on 5792kHz	E.SMITH	THU
	0630/0650/0710z	15 Sep	761 000			E.SMITH	THU
	0630/0650/0710z	22 Sep	761 000			E.SMITH	THU
	0630/0650/0710z	29 Sep	761 000			E.SMITH	THU
6793/5893/5493	2100/20/40z	07 Sep	785 1 (1881 127) 48120 29792....			BR	WED
	2100/20/40z	14 Sep	785 000			BR	WED
	2100/20/40z	21 Sep	785 1 (3547 115) 50188 51418....			BR/HFD	WED
	2100/20/40z	28 Sep	785 000			BR	WED
8047/6802/5788	2000/20/40z	01 Sep	463 1 (914 215) 65458 19256....			BR/HFD	THU
	1810/30/50z	05 Sep	463 1 (1584 120) 11446 40790....			BR	MON
	1900/20/40z	07 Sep	463 1 (4061 133) 59015 09580....			BR/HFD	WED
	2000/20/40z	08 Sep	463 1 (1628 88) 06992 65806....			BR	THU
	1810/30/50z	12 Sep	463 1 (4438 130) 32541 75915....			BR	MON
	1900/20/40z	14 Sep	463 1 (3191 142) 18533 91047....			BR	WED
	2000/20/40z	15 Sep	463 1 (6012 106)			BR	THU
	1810/30/50z	19 Sep	463 1 (2336 122) 38600 53637....			BR	MON
	1900/20/40z	21 Sep	463 1 (8956 141) 09971 15670....			BR	WED
	2000/20/40z	22 Sep	463 1 (4964 109) 43211 48759....			BR	THU
	1810/30/50z	26 Sep	463 1 (4149 126) 62893 30338....			BR	MON
	1900/20/40z	28 Sep	463 1 (8720 140) 89038 26705...			BR	WED
	2000/20/40z	29 Sep	463 1 (3871 102) 63791 75520...			BR	THU
8053/9178/10287	0800/20/40z	06 Sep	816 1 (1055 53) 63916 22245 ..... 57517 92344 000 000			E.SMITH	TUE
	0800/20/40z	20 Sep	816 1 (9871 62) 81732 84083 ..... 02554 69368 000 000			E.SMITH	TUE
	0800/20/40z	27 Sep	816 1 (3960 61) 68723 91441 ..... 11621 78403 000 000			E.SMITH	TUE
8176/9376/10476	0500/20/40z	03 Sep	134 000			E.SMITH	SAT
	0500/20/40z	10 Sep	134 1 (1881 127) 48120 29792 ..... 32710 05972 000 000			E.SMITH	SAT
	0500/20/40z	17 Sep	134 000			E.SMITH	SAT
	0500/20/40z	24 Sep	134 000			E.SMITH	SAT

9176/7931/6904	1900/20/40z	01 Sep	257 1 (1043 112) 28609 01393....	BR/HFD	THU
	1800/20/40z	05 Sep	257 1 (2874 146) 57736 30047....	BR	MON
	1800/20/40z	07 Sep	257 1 (4897 155) 88498 67182....	BR	WED
	1900/20/40z	08 Sep	257 1 (3437 124) 78727 81072....	BR	THU
	1800/20/40z	12 Sep	257 1 (5623 142) 77473 61058....	BR/HFD	MON
	1900/20/40z	15 Sep	257 1 (1339 130) 67065 78245....	BR	THU
	1800/20/40z	19 Sep	257 1 (2382 142) 23095 76942....	BR	MON
	1800/20/40z	21 Sep	257 1 (7762 148) 50962 74765....	BR	WED
	1900/20/40z	22 Sep	257 1 (4202 127) 68223 81467....	BR	THU
	1800/20/40z	26 Sep	257 1 (2565 146) 06554 66496....	BR	MON
	1800/20/40z	28 Sep	257 1 (1991 136) 27816 72425....	BR	WED
	1900/20/40z	29 Sep	257 1 (1795 116) 31487 63770....	BR	THU
10343/9264/8116	1200/20/40z	02 Sep	124 1 (5210 52) 33594 82965 ..... 36712 24769 000 000	E.SMITH	FRI
	1200/20/40z	09 Sep	124 1 (6388 54) 58472 02068....	BR	FRI
	1200/20/40z	16 Sep	124 1 (2212 52) 70305 56136 ..... 69968 23638 000 000	E.SMITH	FRI
	1200/20/40z	23 Sep	124 1 (6669 62) 58403 56933 ..... 20729 64709 000 000	E.SMITH	FRI
	1200/20/40z	30 Sep	124 1 (5994 64) 97117 61009..... 45580 44193 000 000	E.SMITH	FRI
11435/10598/9327	1800/20/40z	01 Sep	938 1	HFD	THU
	1800/20/40z	08 Sep	938 1 (7295 144) 05636 05213...	BR	THU
	1800/20/40z	15 Sep	938 1 (6269 148) 59704 89487....	BR	THU
	1800/20/40z	22 Sep	938 1 (9690 143) 76574 08795....	BR	THU
	1800/20/40z	29 Sep	938 1 (5575 147) 65714 59722...	BR	THU
11469/10469/9169	2110/30/50z	07 Sep	441 1 (1587 87) 54077 50266....	BR	WED
	2110/30/50z	10 Sep	441 000	BR	SAT
	2110/30/50z	14 Sep	441 1 (8826 95) 16977 55499....	BR	WED
	2110/30/50z	17 Sep	441 1 (8826 95) 16977 55449....	BR	SAT
	2110/30/50z	21 Sep	441 000	BR/HFD	WED
	2110/30/50z	24 Sep	441 000	E.SMITH	SAT
	2110/30/50z	28 Sep	441 1 (4408 101) 05838 54122....	BR	WED
12205/13559/14728	1100/20/40z	05 Sep	973 1 (3610 134) 80303 28087....	BR	MON
	1100/20/40	12 Sep	NRH	BR	MON
13873/13373/---	1310/30/50z	03 Sep	834 000 Weak	E.SMITH/HFD/tiNG	SAT
	1310/30/50z	08 Sep	834 000	BR	THU
	1310/30/50z	10 Sep	834 000	E.SMITH	SAT
	1310/30/50z	15 Sep	834 1 (4658 133) 57427 12742 ..... 65963 48308 000 000	E.SMITH	THU
	1310/30/50z	17 Sep	834 1 (4658 133) 57427 12742 ..... 65963 48308 000 000	E.SMITH	SAT
	1310/30/50z	22 Sep	834 000	E.SMITH	THU
	1310/30/50z	24 Sep	834 000	BR	SAT
	1310/30/50z	29 Sep	834 000	E.SMITH	THU
14575/16075/---	0710/30/50z	07 Sep	504 000	E.SMITH	WED
	0710/30/50z	14 Sep	504 000	E.SMITH	WED
	0710/30/50z	21 Sep	504 000	E.SMITH	WED
	0710/30/50z	28 Sep	504 000	E.SMITH	WED
16348/14848/13448	**1400/20/40z**	**14 Sep**	**384 1 (1836 59) 09562 34134 ..... 00569 95746 000 000**	E.SMITH	WED
	1400/20/40z	19 Sep	348 1 (1410 81) 53723 45260....	BR	MON
	1400/20/40z	21 Sep	384 1 (1410 81) 53723 45260 ..... 33364 45973 000 000	E.SMITH	WED
	1400/20/40z	26 Sep	384 1 000	BR	MON
	1400/20/40z	28 Sep	384 1 000	E.SMITH	WED
16117	**1520z**	**02 Sep**	**417 000**	HFD	FRI
17417/16117/---	**1500/20/40z**	**09 Sep**	**417 000**	BR	FRI
	1500/20/40z	16 Sep	417 000	BR	FRI
	1500/20/40z	23 Sep	417 000 Strong	BR/tiNG	FRI
	1500/20/40z	30 Sep	417 000 Good	BR/tiNG	FRI

October 2016:

4617/5317/---	0430/0450/0510z	03 Oct	638 000	E.SMITH	MON
	0430/0450/0510z	10 Oct	638 000	E.SMITH/HFD	MON
	0430/0450/0510z	17 Oct	638 000	E.SMITH	MON
	0430/0450/0510z	24 Oct	638 000	BR	MON
	0430/0450/0510z	31 Oct	NRH	E.SMITH	MON
5814/5214/4614....	2100/20/40z	05 Oct	826 1 (652 71) 95249 09699....	BR	WED
	2100/20/40z	12 Oct	826 000	BR	WED
	2100//20/40z	19 Oct	826 1 (2443 89) 90098 72387....	BR/HFD	WED
	2100/20/40z	26 Oct	826 000	BR	WED
6784/7684/---	0630/0650/0710z	06 Oct	761 000	E.SMITH	THU
	0630/0650/0710z	13 Oct	761 000	E.SMITH	THU
	0630/0650/0710z	20 Oct	761 000	E.SMITH	THU
	0630/0650/0710z	27 Oct	NRH	BR/E.SMITH	THU

6832/7932/---	0500/20/40z	01 Oct	892 000	E.SMITH/HFD	SAT
	0500/20/40z	08 Oct	892 000	E.SMITH	SAT
	0500/20/40z	15 Oct	892 000	E.SMITH	SAT
	0500/20/40z	22 Oct	892 1 (2443 89) 90098 72387 ..... 63120 43619 000 000	E.SMITH	SAT
	0500/20/40z	29 Oct	892 000	BR	SAT
8047/6802/5788	1810/30/50z	03 Oct	463 1 (5931 113) 56762 95947....	BR	MON
	1900/20/40z	05Oct	463 1 (1307 147) 49564 17120....	BR	WED
	2000/20/40z	06 Oct	463 1 (3578 95) 29415 70327....	BR	THU
	1810/30/50z	10 Oct	463 1 (5568 112) 41068 40860....	BR	MON
	1900/20/40z	12 Oct	463 1 (6208 147) 75190 50824....	BR	WED
	2000/20/40z	13 Oct	463 1 (7380 93) 33672 65669....	BR	THU
	1810/30/50z	17 Oct	463 1 (4601 121) 36842 41898....	BR	MON
	1900/20/40z	19 Oct	463 1 (9963 149) 49709 24492....	BR	WED
	2000/20/40z	20 Oct	463 1 (8609 111) 18712 45323....	BR	THU
(6802/5788)	1830/1850z	24 Oct	463 1 (2732 110) 17792 82932 12542 05883... (Remote tuner Sweden)	JPL	MON
	1900/20/40z	26 Oct	463 1 (1118 130) 05633 16569....	BR	WED
	2000/20/40z	27 Oct	463 1 (2641 94) 66034 .426	BR	THU
8053/9178/10287	**0800/20/40z**	**04 Oct**	**816 1 (3477 58) 15782 50439 ..... 71079 13510 000 000**	E.SMITH	TUE
	0800/20/40z	11 Oct	816 1 (1288 63) 34201 30605 ..... 41473 65830 000 000	E.SMITH	TUE
	0800/20/40z	18 Oct	816 1 (5339 62) 18275 62521 ..... 88040 04534 000 000	E.SMITH	TUE
	0800/20/40z	25 Oct	816 1 (3852 56) 39034 63871 ..... 40697 96209 000 000	E.SMITH	TUE
9176/7931/6904	1800/20/40z	03 Oct	257 1 (4386 142) 02468 53617....	BR	MON
	1800/20/40z	05 Oct	257 1 (2824 136) 16033 53273....	BR	WED
	1900/20/40z	06 Oct	257 1 (2033 126) 12923 56016....	BR	THU
	1800/20/40z	10 Oct	257 1 (2319 148) 77813 00994....	BR	MON
	1800/20/40z	12 Oct	257 1 (1564 145) 42485 07574....	BR	WED
	1900/20/40z	13 Oct	257 1 (2123 115) 19001 19052....	BR	THU
	1800/20/40z	17 Oct	257 1 (9618 148) 18329 64736....	BR	MON
	1800/20/40z	19 Oct	257 1 (9857 154) 55770 40708....	BR	WED
	1900/20/40z	20 Oct	257 1 (6155 120) 79563 31470....	BR	THU
	1800/20/40z	24 Oct	257 1 (3468 143) 01199 71313....	BR	MON
	1800/20/40z	26 Oct	257 1 (1423 131) 48503 20662....	BR	WED
	1900/20/40z	27 Oct	257 1 (4046 127) 18157 39530.... (9176kHz NRH)	BR	THU
10269/9269/ 7969	2110/30/50z	01 Oct	229 1 (4408 101) 05838 55122 ..... 84462 38921 000 000	E.SMITH/HFD	SAT
	2110/30/50z	08 Oct	229 000	E.SMITH	SAT
	2110/30/50z	05 Oct	229 000 (10269kHz NRH)	BR	WED
	2110/30/50z	12 Oct	229 000	BR	WED
	2110/30/50z	19 Oct	229 1 (5524 117) 71066 26080.... (10269kHz NRH)	BR	WED
	2110/30/50z	26 Oct	NRH	BR	WED
	2110/30/50z	29 Oct	NRH	BR	SAT
10343/9264/8116	1200/20/40z	07 Oct	124 1 (7925 65) 07985 99780 ..... 06907 06206 000 000	E.SMITH	FRI
	1200/20/40z	14 Oct	124 1 (9731 52) 54487 61712 ..... 06672 20848 000 000	E.SMITH	FRI
	1200/20/40z	21 Oct	124 1 (2451 66) 47317 53411..... 48560 35222 000 000	E.SMITH	FRI
	1200/20/40z	28 Oct	124 1 (6521 62) 18548 47154 ..... 57325 85062 000 000	AB/E.SMITH	FRI
11435/10598/9327	1800/20/40z	06 Oct	938 1 (5253 149) 18905 62872....	BR	THU
	1800/20/40z	13 Oct	938 1 (6502 246) 6 .451 2 . . . . (Weak signals)	BR	THU
	1800/20/40z	27 Oct	NRH	BR	THU
12205/13559/14728	1100/20/40z	03 Oct	973 1 (4220 147) 36766 96939....	BR	MON
	1100/20/40z	17 Oct	NRH	BR	MON
	1100/20/40z	24 Oct	NRH	BR	MON
12214/10814/9214	1310/30/50z	01 Oct	282 000	HFD	SAT
	1310/30/50z	06 Oct	282 1 (1141 175) 43400 39190 ..... 74296 52467 000 000	E.SMITH	THU
	1310/30/50z	13 Oct	282 000	BR	THU
	1310/30/50z	15 Oct	282 000	E.SMITH	SAT
	1310/30/50z	20 Oct	282 1 (401 141) 33897 80966....	BR	THU
	1310/30/50z	22 Oct	282 1 (401 141) 33897 80966....	BR	SAT
	1310/30/50z	27 Oct	282 000	E.SMITH	THU
	1310/30/50z	29 Oct	282 000	E.SMITH	SAT
16354/18254/---	0710/30/50z	05 Oct	324 000	E.SMITH	WED
	0710/30/50z	12 Oct	324 000	E.SMITH	WED
	0710/30/50z	19 Oct	NRH	E.SMITH	WED
	0710/30/50z	26 Oct	NRH	E.SMITH	WED
18639/17439/15839	**1400/20/40z**	**12 Oct**	**648 1 (9864 67) 09017 19100 ..... 74261 03596 000 000**	E.SMITH	WED
	1400/20/40z	26 Oct	NRH	E.SMITH	WED
20036/18636/---	1500/20/40z	07 Oct	064 000	BR	FRI
	1500/20/40z	28 Oct	NRH	BR	FRI

M12 10343/9264/8116kHz 1200/1220/1240z 02 Sep 2016

124 1 (R2m) 5210 52 5210 52

33594 82965 34971 32586 17934 97063 63718 86046 29641 98544
53241 76317 43533 12200 99165 58378 08602 33033 71696 94917
48729 81952 23476 70149 35206 12737 61465 76250 57576 63224
06882 23848 01654 56603 64396 43472 26190 72470 96961 02245
17177 72609 08283 70284 70180 04515 12078 62750 99566 52246
36712 24769 000 000

Courtesy E.SMITH

M12 10343/9264/8116kHz 1200/1220/1240z 28 Oct 2016

124 1 (R2m) 6521 62 6521 62

18548 47154 40644 39543 45418 43117 56946 18515 20307 41022
70786 73815 18591 61026 58381 47285 72964 32994 67667 05864
15621 59061 01215 87460 73077 22503 35740 14021 81896 63303
52760 55701 81931 80781 87762 67007 70298 46895 04619 57713
66268 87728 80654 76342 48797 98048 36219 30787 23076 97032
57152 89377 78101 19606 99362 76166 89312 22249 76436 81200
57325 85062 000 000

Courtesy AB

M14 IA MCW / ICW Short 0

September 2016:

5430	0759 - 0822z	24 Sep	171 (490 91) 52378 90126..... 62841 32465 = 490 91 00000 Good	tiNG	SAT
5463	1920z	14 Sep	537 (518 86) 32498....	HFD	WED
	19**29** - 1951z	28 Sep	537 (518 86) 32498 53900..... 57286 61220 = 518 86 00000 Strong	tiNG	WED
5477	1800 - 1804z	16 Sep	382 00000 Strong	HFD/tiNG	FRI
5560	0859 - 0922z	24 Sep	171 (490 91) 52378 90126..... 62841 32465 = 490 91 00000 Good [Note 1]	tiNG	SAT
5929	1700z	16 Sep	382 00000	HFD	FRI
5947	1820 - 1841z	13 Sep	346 (518 86) = 32498 53900 . . . 20943 57286 61220 = 518 86 00000 Strong	HFD/tiNG	TUE
9075	1305 (IP) - 1311z	20 Sep	(617 57) [In Progress] ..... 37676 68812 27235 = 612 57 00000	E.SMITH	TUE
	1300 - 1317z	27 Sep	089 (537 61) = 49893 22658 ..... 26288 73122 00000	E.SMITH	TUE
16347	0930 - 0934z	10 Sep	617 00000	E.SMITH	SAT

[Note 1] Call-up missing single "17" in transmission at 0859z!

October 2016:

5430	0800z	08 Oct	171 (613 82) = 76251	HFD/tiNG	SAT
5560	0900 - 0921z	08 Oct	171 (613 82) = 76251 82420 ..... 76351 82240 00000 Fair	HFD/tiNG	SAT
10755	1300 - 1317z	04 Oct	975 (843 60) = 22461 89373 ..... 18270 88167 00000	E.SMITH	TUE
	1300 - 1318z	11 Oct	975 (384 57) = 10453 02437 ..... 23537 91951 00000 [Note 1]	E.SMITH	TUE
	1300 - 1316z	18 Oct	975 (438 56) = 71902 71844 ..... 51419 34126 00000	E.SMITH	TUE
	1308 (IP) - 1317z	25 Oct	(841 59) = (In progress)..... 72763 22908 = 841 59 00000	E.SMITH	TUE

[Note 1] After Group 29 there was a short pause, the Call up restarted and then finished the message, changing Groups 28 and 29.

M14 10755kHz 1300z 04 October 2016

975 (R4m) 843 843 60 60 = =

22461 89373 16256 37458 28549 89871 53302 16866 03394 87801
34830 50591 35945 37659 57019 13064 41000 01683 47348 98099
44741 71308 40616 42747 22720 50834 65991 06310 13718 20469
31044 34233 57923 20976 13684 61540 32864 27075 97940 35503
85527 01811 14535 62248 84117 49059 72174 06967 37865 06366
39411 49225 35710 34236 77516 72877 98009 58015 18270 88167
= =

843 843 60 60 00000

Courtesy E.SMITH

M14 5560kHz 0900z 08 October 2016

171 (R4m) 613 613 82 82 = =

76251 82420 63321 84762 90001 63191 53772 48291 80345 76619
37281 44882 00655 27163 85524 04072 74541 73392 56012 31062
63880 93652 61710 87201 85491 63881 42608 90701 40027 55217
63381 93671 53122 70436 62117 70239 55411 61901 63888 92441
53790 84151 39959 00466 72261 84255 05003 77282 56201 60942
52771 43902 33735 72431 88465 72209 00512 31210 62091 50544
60011 74109 62420 52883 74507 54637 23110 63908 52260 74091
52081 43309 70551 10103 40622 82146 70336 42801 63035 62091
76351 82240 = =

613 613 82 82 00000

Courtesy tiNG

M23 O ICW

No reports

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

No reports

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

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

The station was expected to reappear by now, but so far has failed to do so. Guy (GD) has periodically been monitoring all of the three known frequencies to no avail, but we hope it will spring into life soon. It is a fascinating station with a very unusual format & we would like to be able to obtain some more logs to study in more detail.

Any reports or information on this station would be most welcome.

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

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

No reports

Morse Stations - Not Number Related

M51 XlX

3881//6825 Usual unscheduled & random continuous transmissions heard throughout September & October, often ceasing just before, or commencing shortly after the daily M51a transmissions.

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

3881//6825

1130 - 1212z	10 Oct	Lundi-Leçon	21-1/1 Codé	21-1/2 Clair,	21-1/3 Codé,	21-1/4 Clair (420 grps/hr)	BR	MON
1130 - 1204z	11 Oct	Mardi-Leçon	22-1/1 Codé	22-1/2 Clair,	22-1/3 Codé,	22-1/4 Clair (600 grps/hr)	BR	TUE
1130 - 1208z	12 Oct	Mercredi- Leçon	23-1/1 Codé,	23-1/2 Clair,	23-1/3 Codé,	23-1/4 Clair (720 grps/hr)	BR	WED
1130 - 1159z	13 Oct	Jeudi- Leçon	24-1/1 Codé,	24-1/2 Clair,	24-1/3 Codé,	24-1/4 Clair (840 grps/hr)	BR	THU
1130 - 1205z	09 Oct	Vendredi- Leçon	25-1/1 Codé,	25-1/2 Clair,	25-1/3 Codé,	25-1/4 Clair (960 grps/hr)	BR	FRI

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).

3187 3305 3378 3572 3651 3733 3767	4858	5550 5555 5566	6565 6594 6636 6639 6666 6688	6734 6775 6792 6796 6808 6825	8888

New Scheds for Sep / Oct 2016: **From logs submitted from JPL**

4858//4045	New Round Slip & freqs	4045kHz heard 30 Sept - // on 4858kHz found 01Oct	V NG3Y (X3) DE 2QLC (x2)
5810//NRH	New freq for this Round Slip	First heard 02 Oct	V NG3Y (X3) DE 2QLC (x2)

Jean-Paul (JPL) writes:- I Suspect that the new Round Slip NG3Y DE 2QLC is a change in call sign/frequency for 2SLC on 3330kHz & 5588kHz which has not been heard since 09 Sep. Message format suggests RIS9 is part of the 2SLC family.

3300//NRH	New Round Slip on this freq	First heard 02 Oct	V P7YT (x3) DE 9ZGA (x2)
3787//NRH	Known M89 freq	First heard on 10 Oct	V M8JF (x3) DE RIS9 (x2)

M89 has again been noted by JPL using both the day & night frequencies simultaneously for the RIS9 call sign.

4532//6793//8060	2234z	13 Oct	V M8JF (x3) DE RIS9 (x2)
3777//4532//6793	1745z	28 Sep	V M8JF (x3) DE RIS9 (x2)
	1111z	09 Oct	V M8JF (x3) DE RIS9 (x2)
	1122z	17 Oct	V M8JF (x3) DE RIS9 (x2)
3777//4532//6793//8060	1100z	30 Sep	V M8JF (x3) DE RIS9 (x2)
	1123z	18 Oct	V M8JF (x3) DE RIS9 (x2)
3777//4532//6793	1120z	22 Oct	V M8JF (x3) DE RIS9 (x2)
	1126z	23 Oct	V M8JF (x3) DE RIS9 (x2)

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

Freq in KHz	Call Slip
3300//NRH	V MW3D (x3) DE 2SLC (x2)
3300//NRH	**V P7YT (x3) DE 9ZGA (x2)**
3642//NRH	V DKG6 (x3) DE 3A7D (x2)
3642//7602	V DKG6 (x3) DE 3A7D (x2)
3777//NRH	V M8JF (x3) DE RIS9 (x2)
3777//4532	V M8JF (x3) DE RIS9 (x2)
3787//NRH	**V M8JF (x3) DE RIS9 (x2)**
4045//NRH	**V NG3Y (X3) DE 2QLC (x2)**
4045//4858	**V NG3Y (X3) DE 2QLC (x2)**
4131//NRH	V JKDJ (x3) DE SLBC (x2)
4532//NRH	V M8JF (x3) DE RIS9 (x2)
4532//6793	V M8JF (x3) DE RIS9 (x2)
4720//NRH	VVV WNF (x3) DE FXM (x2)
4860// NRH	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?
4860// 6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?

Freq in kHz	Call Slip
5177//NRH	V JKDJ (x3) DE SLBC (x2)
5588//NRH	V MW3D (x3) DE 2SLC (x2)
5801//NRH	V DKG6 (x3) DE 3A7D (x2)
5810//NRH	**V NG3Y (X3) DE 2QLC (x2)**
5801//10180	V DKG6 (x3) DE 3A7D (x2)
6793//NRH	V M8JF (x3) DE RIS9 (x2)
6793//8060	V M8JF (x3) DE RIS9 (x2)
6840//10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
7602//NRH	V DKG6 (x3) DE 3A7D (x2)
8060//NRH	V M8JF (x3) DE RIS9 (x2)
10180//NRH	V DKG6 (x3) DE 3A7D (x2)
10640//NRH	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K

Courtesy JPL

M89 4045kHz 1610 - 1700z 30 September 2016

V NG3Y (X3) DE 2QLC (x2) (IP - Cont'd) (Remote tuner Japan)

MSG **NR 121 CK 301 62 1001 0030 BT** (From R/S – 1630z)
DADT 76U7 AN7D 5..3 A765 N7TT 3NAT TU37 TT7D TT35
T443 4AA6 5ADU (Cont'd - 1631z)
BT AUDA AR (1643z)
MSG **NR 121 CK 301 62 1001 0030 BT**
DADT 76U7 AN7D 5763 A765 N7T. 3NAT TU37 TT7D TT35
T443 4.A6 5ADU N347 (Cont'd – 1645z)
BT AUDA AR (1656z)
VV A NG3Y V
DE NG3Y (x3) (Cont'd)
VV A NG3Y V (1657z)
DE NGEY (x3) V (Cont'd – R/S messed up – 1658z)
V NG3Y (X3) DE 2QLC (x2) (Return to normal R/S - 1700z)

M89 3572kHz 1524 - 1532z 02 October 2016

3U6A AU7D TAN3 4657 TNAD 675U AT4U
(IP – Cont'd – Machine sent – 1524z)
AR (1528z)
RPT 1P 100W BT BT N3DT AR (1529z)
R RPT 1P 99W BT BT 7AN6 AR (1530z)
RPT (1531z)
RPT 2P 60W BT BT 3TN4 AR (1531z)
RPT 2P 79W BT BT 45T3 AR (1532z)
FM E OK NIL SK GB (1532z)

Courtesy JPL

M89 5566kHz 1008 - 1020z 01 October 2016

VVV 8RIIIII (IP – Hand sent – 1008z)
V8LRU 8LRU DE CM3Z CM3Z K
VV GG0T GGOT DE CM3Z CM3Z K
VVV J.OV DE CM3Z CM3Z K
VVV 3.RY 1Z EEEEEE
VV J0RY J0RY DE CM3Z CM3Z K (1009z)
VV 5686 AR IEC BT 3914 AR K (Normally used during exercises)
IEC BT 4423 AR (1009z)
VV J6OW DE 0..WM K
VV ..U. DE .MP 0MPS. K
VVV DKM4 DE 0MPS K
VV F8PY DE 0MPS K (1011z)
VV CG3N CG3R DE 0MPS 0MPS K
VV IEC BT 9162 AR
IEC BT 67.2 AR
IEC BT 1469 AR
IEC BT 35..
IEC BT DT BT 3576 AR (1013z)
7G NR 77 77 GA
7G NR 001 CK 09 9 EEEEEE
7G NR 001 CK 9. 0 BT BT BT BT
5TUN UU.. A6DN N76U D547 (Cont'd – 1015z)
(Unable to monitor any longer – 1020z)

Courtesy JPL

DP Stations

3777//4832	1403 (IP) - 1414z	11 Sep	CQ (x3) DE DP4091 (x2) V (Cont'd) NIL SK GB (x2)	(Remote tuner Siberia)	JPL SUN
4832	1408 (IP) - 1215z	16 Sep	DP4091 (x3) DE CQ (x2) V (Cont'd) HR ALL TO	(Remote tuner Siberia)	JPL FRI
6636	1306 (IP) - 1324z	09 Sep	Traffic in 4 character code (This frequency normally used by DP91 at 1300z for CQ sked)	(Remote tuner Siberia)	JPL FRI
	0832 (IP) - 0840z	12 Sep	Traffic in 4 character code	(Remote tuner Siberia)	JPL MON
	1300 - 1303z	12 Sep	DP91 DE DP2191 CA K DP6191 DE	(Remote tuner Siberia)	JPL MON

6825	1006 - 1009z	07 Sep	N4FM5 (X3) DE DUT491 (X2) V (Cont'd) (This type of call sign sometimes sent by DP91)	(Remote tuner Siberia)	JPL	WED
	1006 (IP) - 1008z	17 Sep	DP91 (x3) DE CQ (x2) HR NIL SK GB (x3)	(Remote tuner Siberia)	JPL	SAT

M95 O XSV, XSV70, XSV85

Jean-Paul (JPL), logged this transmission on 22 September, with the comment that it is extremely rare for M95/M89 stations to send 4 letter coded messages.

M95 7788kHz 0031 - 0157z 22 Sep 2016

Call 3A3A (Remote tuner Hong Kong)

PGUW QXDS KTHJ FVER YNZO UGYP JHFX
LFRS CIOK VYDM PDLU CSYN VEPH
(IP - Cont'd – 0031z)

AR (0036z)

TLO4 TL04 DE DE 3A3A 3A3A K
KLO4 TLO4 TLO4 TL04 DE 3A3A 3A3A K

B8DB B8DB DE 3A3A 3A3A K
POQZ POQU DE 5QWX (0038z)

NR 452/CCK CK 305 59 0913 1650 BT
(Message format suggest QV5B family)

RLO4 DL.. DE 3A3A 3A3A K
LO4D LO4D DE 3A3A 3A3A K
RLO4 DLO4 DE 3A3A 3A3 K
BV8D BV8D DE 3A3A 3A3A K (0040z)
Q2PO QWPO DE ... K (0040z)
TF TLO4 TL04 DE 3TATT
LO4D LO4D DE 3A3A 3A3A QSK K (0042z)

7G NR 423/CCK CK 205 .0 0913 1555 ...

7G PSE CY 1555 RMKS 2181 TO 2186 55
NR 398 UNR ? B PO QUPO QUDE 5OJX 5MJX

L04 DE 3A3A 3A3A K (0045z)

NR 452/CCK CK 30 59 0913 1605 RMKS 2181 TO 2186 AR (0107z)

RLO4 DLO4 DE 3A3A 3ADA K
TO BV8D BV8D DE 3A3A 3A3A K
TLO4 DLO4D DE 1 TEAL
RLO4 DLO4 D DE 3A3A 3A3A K

T7G NR .13/CCK CK 20 59 0913 1555 RMKS 2181 TO 2186 AR (0109z)

POQ2 POQ2 DE 8YUV 8YUV K (0130z)

T 7G NR 001/CCK CK 45 09 0922 0932 RMKS 2181 TO 2187 K (0134z)

POQ2 POQ2 DE 8YUV 8YUV K (0150z)

NR 398/CCK CK ..0 09 0921 0938 RMKS
NR 398/CCK CK .5 09 0921 0938 RMKS 2189 TO 2398 R K (0156z)

Courtesy JPL

M95 Morse Logs

4243//9054 Message number differs from current XSV70 and XSV85 message numbers. All logged via Remote tuner Hong Kong unless stated.

1143 (IP) - 1219z	01 Sep	NR 0D3 CK 17 35 0NTA A5AA BT (Normally doesn't use cut numbers in msg header)		JPL	THU
		NR NT CK 13A 35 0NTA A53N BT		JPL	THU
		NR 02 CK 131 35 0901 1539 BT		JPL	THU
		NR 04 CK 22 35 0901 1650 BT		JPL	THU
1145 (IP) - 1210z	02 Sep	NR 085 CK 19 35 0902 1522 BT		JPL	FRI
		NR 04 CK 107 35 0902 1551 BT		JPL	FRI
		NR 007 CK 19 35 0902 1657 BT		JPL	FRI
1141 (IP) - 1205z	04 Sep	NR 089 CK 20 35 0904 1514 BT		JPL	SUN
		NR 08 CK 125 35 0904 1555 BT		JPL	SUN
0001 (IP) - 0010z	08 Sep	NR 15 CK 061 35 0908 0650 BT		JPL	THU
1146 (IP) - 1206z	11 Sep	NR 22 CK 142 35 0911 1506 BT		JPL	SUN
		NR 003 CK 18 35 0911 1700 BT		JPL	SUN
		NR 034 CK 14 35 0911 1723 BT		JPL	SUN
1153 (IP) - 1211z	13 Sep	NR 007 CK 17 35 0913 1525 BT		JPL	TUE
		NR 26 CK 103 35 0913 1526 BT		JPL	TUE
		NR 040 CK 15 35 0913 1638 BT		JPL	TUE
2341 (IP) - 2359z	13 Sep	NR 034 .3 49 0914 0612 BT (Very weak/fading)		JPL	TUE
		NR 2 CK 16 .050.1 . . BT		JPL	TUE
		NR 05. CK . . . . .0.. 607 BT		JPL	TUE
0001 (IP) - 0022z	14 Sep	NR 2 7 CK .. 07 CK 052 35 0914 0... BT		JPL	WED
1158 (IP) - 1204z	16 Sep	NR 013 CK 32 35 0916 1537 BT		JPL	FRI
		NR 013 CK 32 35 0916 1517 BT		JPL	FRI
1156 (IP) - 1159z	18 Sep	NR 061 CK 17 35 0920 1708 BT		JPL	SUN
1149 (IP) - 1206z	22 Sep	NR 025 CK 17 35 0922 1514 BT		JPL	THU
		NR 44 CK 103 35 0922 1515 BT		JPL	THU
		NR 067 CK 18 35 0922 1642 BT		JPL	THU
1140 (IP) - 1210z	27 Sep	NR 54 CK 153 35 0927 1456 BT		JPL	TUE
0942 (IP) - 1000z	01 Oct	NR 043 CK 29 35 1001 1531 BT	(Remote tuner Japan)	JPL	SAT
		NR 094 CK 26 35 1001 1657 BT	(Remote tuner Japan)	JPL	SAT

	0915 (IP) - 0931z	02 Oct	NR 04 . 185 35 1002 1620 BT	(Remote tuner Japan)	JPL	SUN
			NR 097 CK 26 35 1002 1646 BT	(Remote tuner Japan)	JPL	SUN
	1128 (IP) - 1143z	09 Oct	NR 09 19 35 1009 1525 BT		JPL	SUN
			NR 059 19 35 1009 1525 BT (Believe this is repeat of above message)		JPL	SUN
			NR 108.34 35 1009 1607 BT		JPL	SUN
	1149 (IP) - 1159z	17 Oct	NR 34 CK 118 35 1017 1557 BT		JPL	MON
			NR 043 CK 17 35 1017 1652 BT		JPL	MON
	1156 (IP) - 1212z	18 Oct	NR 36 CK 106 35 1018 1554 BT		JPL	TUE
	1140 (IP) - 1203z	23 Oct	NR 087 CK 23 35 1023 1534 BT		JPL	SUN
			NR 46 CK 122 35 1023 1616 BT		JPL	SUN
			NR 065 CK 17 35 1023 1645 BT (Unsure of message number)		JPL	SUN
	1140 - 1228z	25 Oct	NR 091 CK 25 35 1025 1535 BT		JPL	TUE
			NR 50 CK 162 35 1025 1601 BT		JPL	TUE
			NR 072 CK 24 35 1025 1654 BT		JPL	TUE
	1144 (IP) - 1233z	27 Oct	NR 095 CK 31 35 1027 15U8 BT		JPL	THU
			NR 54 CK 152 35 1027 1620 BT		JPL	THU
			NR 078 CK 28 35 1028 1638 BT		JPL	THU
			NR 079 CK 17 35 1027 1643 BT		JPL	THU
	1140 - 1232z	28 Oct	NR 083 CK 21 35 1027 1605 BT		JPL	FRI
			NR 084 CK 21 35 1028 1605 BT		JPL	FRI
			NR 085 CK 16 35 1028 1606 BT		JPL	FRI
			NR 097 CK 20 35 1028 1606 BT		JPL	FRI
			NR 56 CK 201 35 1028 1608 BT		JPL	FRI
	1201 (IP) - 1212z	28 Oct	NR 099 CK 19 35 1029 1605 BT		JPL	SAT
			NR 089 CK 20 35 1029 1644 BT		JPL	SAT
4283//NRH	Call sign XSV70					
	1001 (IP) - 1004z	07 Sep	Traffic - 3 character code	(Remote tuner Hong Kong)	JPL	WED
	0947 (IP) - 1008z	02 Oct	NR .. CK 55 1002 1900	(Remote tuner Japan)	JPL	SUN
			NR 053 CK 21 49 1002 1700	(Remote tuner Japan)	JPL	SUN
			NR 882 CK 128 35 1002 0708	(Remote tuner Japan)	JPL	SUN
	1335 (IP) - 1348z	02 Oct	NR 0.84 CK 185 35 1002 15.8	(Remote tuner Japan)		
4283//7553	Call sign XSV70					
	1002 (IP) - 1018z	04 Oct	NR 190 CK 645 1 1003 1800	(Remote tuner Hong Kong)	JPL	MON
			NR 886 CK 143 35 1003 0....	(Remote tuner Hong Kong)	JPL	MON
5555	1225 (IP) - 1240z	03 Sep	05 05 05 (Long Zeros) Traffic & Op. chat	(Remote tuner Hong Kong)	JPL	SAT
	1512 (IP) - 1525z	03 Sep	Traffic - hand sent		JPL	SAT
	1115 - 1127z	08 Sep	NR 3401 CK 300 **49** 0906 0700 RMKS 1834 TO 3965 BT (Remote tuner Hong Kong)		JPL	THU
			The number after the group count is normally 35 - First time I've noticed the use of 49 vice 35			
			(Voice also on this frequency – USB – Male – Chinese – Possibly V26 - 1118z)			
	1222 (IP) - 1232z	12 Sep	05 05 BT (Hand sent) 05 05 (Long zero) VVV 7G GA	(Remote tuner Hong Kong)	JPL	MON
	1123 (IP) - 1131z	22 Oct	NR 05/CCK CK 60 14 1022 1900 RMKS CQ BT	(Remote tuner Hong Kong)	JPL	SAT
			Message format indicates QV5B Family			
7553	Call sign XSV70					
	0954 (IP) - 0954z	27 Oct	445 N.D 436 467 (IP – Cont'd – Machine sent – 0954z) ZNN SK (0955z)		JPL	THU
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.					
	1132 - 1142z	01 Sep	NR 0724 CK 187 35 0901 1554 BT		JPL	THU
	0001 - 0015z	02 Sep	Technical problems - could not determine if switched to CW when digital mode		JPL	FRI
	1131 - 1145z	02 Sep	NR 0726 CK 240 35 0902 1534 BT		JPL	FRI
	1131 - 1240z	04 Sep	NR 0730 CK . 1 . 35 0904 .607 BT		JPL	SUN
	0009 - 0023z	07 Sep	NR 0735 CK 101 35 0907 0654 BT (Msg sent V.Slow - many mistakes - junior Op.?)		JPL	WED
	0010 - 0021z	08 Sep	NR 0737 CK 104 35 0908 0706 BT		JPL	THU
	1127 - 1144z	08 Sep	NR 0738 CK 162 35 0908 1606 BT		JPL	THU
	0001 - 0018z	10 Sep	NR 0741 CK 80 35 0910 0 . . 5 BT		JPL	SAT
			NR 0742 CK 40 35 09100 0722 BT		JPL	SAT
	1130 - 1217z	11 Sep	NR 0747 CK 402 35 0911 1621 BT		JPL	SUN
			NR 0748 CK 55 35 0911 1621 BT		JPL	SUN
	1131 - 1153z	13 Sep	NR 0763 CK 47 35 0913 1602 BT		JPL	TUE
			NR 0764 CK 282 35 0913 1605 BT		JPL	TUE
	0003 - 0025z	14 Sep	NR 0766 CK 124 35 0914 0656 BT		JPL	WED
			NR 0767 CK 61 35 0914 0712 BT		JPL	WED

	1136 - 1158z	16 Sep	NR 0779 CK 160 35 0916 1533 BT		JPL	FRI
			NR 0780 CK 47 35 0916 1534 BT		JPL	FRI
	0001 - 0024z	22 Sep	NR 0794 CK 96 35 0922 0707 BT		JPL	THU
	1130 - 1149z	22 Sep	NR 0795 CK 129 35 0922 1555 BT		JPL	THU
	0001 - 0009z	23 Sep	Weak/faded - Unable to copy		JPL	FRI
	1128 - 1140z	27 Sep	NR 0813 CK 173 35 0927 1600 BT		JPL	TUE
	0011 - 0020z	29 Sep	NR 0820 CK 102 35 0929 0659 BT		JPL	THU
	1130 - 1152z	30 Sep	NR 0823 CK 96 35 0930 1524 BT		JPL	FRI
			NR 60 CK 11. 35 0930 1510 BT		JPL	FRI
	0006 - 0019z	08 Oct	NR 0850 CK 48 35 1008 0706 BT		JPL	SAT
			NR 0851 CK 113 35 A00D 0707 BT		JPL	SAT
	1130 - 1148z	17 Oct	NR 0909 CK 45 35 1017 1615 BT		JPL	MON
			NR 0910 CK 85 35 1017 1622 BT		JPL	MON
	1130 - 1156z	18 Oct	NR 0917 CK 84 35 1018 1606 BT		JPL	TUE
			NR 0918 CK 48 35 1018 1606 BT		JPL	TUE
			NR 0919 CK 388 35 1018 1610 BT		JPL	TUE
	0010 (IP) - 0016z	19 Oct	Chinese digital 4+4 QPSK 75/3000 - LSB - 0010z. Silent - 0016z. No CW heard		JPL	WED
	0001 (IP) - 0045z	21 Oct	NR 0937 CK 152 35 1021 0657 BT		JPL	FRI
			NR 0938 CK 57 35 1021 0707 BT		JPL	FRI
	1130 - 1138z	23 Oct	NR 0947 CK 158 35 1023 1549 BT		JPL	SUN
	0011 - 0014z	24 Oct	3-character grp msgs. No header logged. Switched to voice		JPL	MON
	1129 - 1137z	25 Oct	NR 0951 CK 10. 35 1025 . 525 BT		JPL	TUE
	0009 (IP) - 0015z	26 Oct	TU3 773 35U 4T6 (IP) Hand sent AR AR (0014z) (Switched to voice – USB)		JPL	WED
	0002 (IP) - 0020z	27 Oct	NR 0954 CK 101 35 1027 0709 BT		JPL	THU
	1130 - 1144z	27 Oct	NR 0955 CK 349 35 1027 . . . . BT		JPL	THU
	1130z	28 Oct	Checked for 8073 sked at 1130z, but N/H		JPL	FRI

8888 Call Sign XSV85

	1732 - 1744z	08 Sep	05 05 05 05 & traffic in 4 character code	(Remote tuner Siberia)	JPL	THU

9054 Call sign XSV85 All logged via Remote tuner Hong Kong unless stated
(See also 4243//9054kHz listing)

	2342 (IP) - 2359z	07 Sep	NR 023 CK 17 35 0908 0624 BT	(// 4243 N/H)	JPL	WED
			NR 096 CK 19 35 0908 0647 BT	(// 4243 N/H)	JPL	WED
	2345 - 2355z	09 Sep	NR 029 CK 19 35 0910 0555 BT	(// 4243 N/H)	JPL	FRI
	2340 (IP) - 2359z	18 Sep	NR 37 CK 054 35 0919 0608 BT		JPL	SUN
			NR 056 CK 22 35 0919 0610 BT		JPL	SUN
			NR 020 CK .. . 35 0919 0622 BT		JPL	SUN
	2340 (IP) - 2354z	22 Sep	NR 026 CK 17 35 0923 0619 BT	(// 4243 N/H)	JPL	THU
			NR 068 CK 17 35 0923 0. . . BT	(// 4243 N/H)	JPL	THU
	2352 (IP) - 2359z	27 Sep	NR 55 CK 067 35 0928 06 . . BT		JPL	TUE
			NR 036 CK .. 35 0928 0 . . . BT		JPL	TUE
	0001 (IP) - 0003z	28 Sep	A HR PSE A HR UP SB .. K (Switched to voice - V26 sched)		JPL	WED
	2342 (IP) - 2354z	30 Sep	NR 042 CK 20 35 1001 0618 BT	(Remote tuner Japan)	JPL	FRI
			NR 01 CK 052 35 1001 0624 BT		JPL	FRI
			NR 092 CK 1535 1001 0634 BT		JPL	FRI
	2340 (IP) - 2359z	07 Oct	NR 056 CK 23 35 1008 0624 BT		JPL	FRI
			NR 014 CK 19 35 1008 0645 BT		JPL	FRI
			NR 15 CK 079 35 1008 0704 BT		JPL	FRI
	0001 (IP) - 0006z	08 Oct	NR 15 CK 079 35 1008 0704 BT		JPL	SAT
	2343 (IP) - 2359z	20 Oct	NR 053 CK 25 35 1021 0611 BT		JPL	THU
			NR 082 CK 28 35 1021 0632 BT		JPL	THU
			NR 41 CK 80 35 1021 0717 BT		JPL	THU
	0001(IP) - 0011z	24 Oct	NR 47 CK 052 35 1024 0710 BT	(// 4243 NRH)	JPL	MON
	2353 (IP) - 2359z	25 Oct	NR 092 CK 17 35 1026 0650 BT	(// 4243 N/H)	JPL	TUE
			NR 49 CK . . 1 35 1026 . .30 BT		JPL	TUE
	0001 (IP) - 0006z	26 Oct	34T T3U (IP – Cont'd – from old day log – 0001z) AR (0006z - Silent)		JPL	WED
	2341 - 2359z	26 Oct	NR 076 CK 20 35 1027 0603 BT	(// 4243 N/H)	JPL	WED
			NR 094 CK 28 35 1027 0631 BT		JPL	WED
			NR 53 CK 093 35 1027 0716 BT		JPL	WED
	0001 (IP) - 0006z	27 Oct	NR 53 CK 093 35 1027 0710 BT	(// 4243 N/H)	JPL	THU

The majority of logs in the following sections were provided by Christer (chpa), from Stockholm using a longwire, FunCube Dongle Pro+ and Gqrx on Mac OS. Thanks Christer!

Marker Beacons (MX MXI)

5156	1909z	16 Sep	MX CW Beacon "L"	Fair	chpa	FRI
6928	1825z	16 Sep	MX CW Beacon "V"	Fair	chpa	MON
13527.7	1019z	17 Sep	MXI CW Beacon "D"	Very weak	chpa	SAT

Oddities

5292kHz Marker

5292	0542z	01 Sep	'D' Marker	Very Strong	chpa	THU
	1901z	16 Sep		Fair	chpa	FRI
	1638z	19 Oct		Strong	chpa	THU

S28 'The Buzzer'

4625	0520z	01 Sep	S28	'The Buzzer' Marker	USB	Very Strong	chpa	THU
	1743z	01 Sep	S28	'The Buzzer' Marker	USB	Very Strong	chpa	THU
	0909z	14 Sep	S28	'The Buzzer' Marker	USB	Fair	chpa	WED
	1739z	26 Sep	S28	'The Buzzer' Marker	USB	Fair	chpa	MON
	1925z	26 Sep	S28	'The Buzzer' Marker	USB	Good Heard only on 4625kHz	HJH	MON
	1744z	13 Oct	S28	'The Buzzer' Marker	USB	Fair	chpa	THU
	1642z	19 Oct	S28	'The Buzzer' Marker	USB	Strong	chpa	TUE
6998	1426z	23 Sep	S28	'The Buzzer' Marker	USB	Fair	chpa	SAT
	1731z	24 Sep	S28	'The Buzzer' Marker	USB	Fair	chpa	SAT
	1735z	26 Sep	S28	'The Buzzer' Marker	USB	Strong	chpa	MON
	1718z	27 Sep	S28	'The Buzzer' Marker	USB	Fair only. (Usually Strong)	tiNG	TUE
	0754z	07 Oct	S28	'The Buzzer' Marker	USB	Incomplete message in Russian	chpa	FRI

9250 Gary (HJH), logged the Buzzer on 24 Oct sending on 9250kHz USB on 1557z with a fairly strong signal at his Cardiff QTH, although he was unable to hear anything on 4625khz or 6998khz. Mike L was able to report that he was able to hear all three frequencies in use at 1730z at his QTH, although they were all weak. Thanks to you both.

S30 'The Pip'

3756	1742z	26 Sep	S30	'Pip' marker (Night freq)	USB	Fair	chpa	MON
	1743z	13 Oct	S30	'Pip' marker	USB	Weak	chpa	THU
	1645z	19 Oct	S30	'Pip' marker	USB	Fair	chpa	TUE

S32 'Squeaky Wheel'

3828	1737z	13 Oct	S32	'Squeaky Wheel' marker	USB	Weak	chpa	THU
	1644z	19 Oct	S32	'Squeaky Wheel' marker	USB	Fair	chpa	TUE

Finally, we end this section with some Russian military flash Morse messages logged by Jay :-

14411	1231z	02 Oct	RDL	XXX XXX WEGI WEGI	05069	82902	REJNWEJN	7396 8102	JO	SUN
	1348z	02 Oct	RDL	XXX XXX WEGI WEGI	85141	89120	RASKAAeNIE	2490 1647	JO	SUN

Contributors: AB, AnonUS, BR, CB, chpa, E.SMITH, GD, HFD, HJH, JO, JkC, JPL, Mike L, tiNG, Token, Uascan *Thank you all for your logs.*

Voice Stations

E06 Sept/Oct log:

First /Third Thursday (repeats Friday) 0500z 14370kHz 0600z 16265kHz

01/09 & 15/09 '354' 879 102 43351 32471 02046 28403 69118 33861 50963 78723 30356 85621 37131 43962 18357 53623 61958 66306 89703 81518 72386 98885 83210 44196 71936 79690 63761 35716 04127 67408 05226 02653 62942 12504 37652 58789 10040 62007 64906 42089 03380 21415 67966 99897 66969 22169 36043 13300 56411 68129 92720 96581 99932 59501 09305 32714 19603 17628 22567 30825 62396 59208 95070 16569 95825 92663 13261 91353 47797 37202 31521 21343 95401 84501 19365 42193 32318 54971 13968 90436 69507 19909 29212 97473 48911 88699 85442 47096 74813 84400 81117 02483 92570 56131 48535 53601 69392 01730 60839 20971 56857 99088 82475 76690 879 102 00000

0600z 18425kHz 0700z 20230kHz

06/10 & 20/10 '186' 425 103 74424 56000 24727 63058 05438 82418 74414 03676 90470 22207 71393 03273 84500 85392 16458 94096 65271 18084 02140 23755 70488 82229 80238 36569 23404 77260 38815 02310 95209 45830 99596 46976 77685 30807 71733 65310 64547 75737 22833 19747 64911 85946 53226 55466 97333 92471 84386 86255 37851 86017 97448 30852 20462 13117 82763 04470 13489 51685 86429 95178 20255 08159 64721 79847 77515 03402 82382 59315 50083 39565 15693 17489

45074 65108 46258 34063 94231 80127 56469 05529 77745 49217 62546 54181 88016 14044 46129 29792 56797 22802
70333 33658 94153 18758 91219 19688 12673 55067 00608 52235 35372 28040 61182 425 103 00000

First/Third Thursday of month 2030z 5186kHz

15/09 '891' 237 60 06132……..43544 237 60 00000] 2042z used 5191kHz

06/10 '891' 569 63 14259……..54545 569 63 00000] 2048z S9 M8 THR (Morse Code started at 2030z ended as late TX started)

20/10 '891' 569 63 14259 22676 32782 32782 76723 89409 12215 74326 64070 90235 38085 59543 12319 74238 36664 12256 18841 73311
98089 12250 57878 87897 79879 99990 98878 89889 87879 56787 09000 76578 87878 89898 89890 98798 65656 54545
56566 56578 87876 99877 38085 59543 12319 74238 36664 12256 18841 73311 98089 12250
87878 89898 89890 98798 65656 54545 56566 56578 87876 99877 32333 43433 5 sudden sign off (Tks Ary)

Friday following First & Third Thursday 2130z 5197kHz

07/10 Sent as G06 (mistake?) Thanks to Ary

634 569 63 14259 22676 32782 32782 76723 89409 12215 74326 64070 90235 38085 59543 12319 74238 36664 12256 18841 73311 98089 12250
57878 87897 79879 99990 98878 89889 87879 56787 09000 76578 87878 89898 89890 98798 65656 54545 56566 56578 87876 99877
38085 59543 12319 74238 36664 12256 18841 73311 98089 12250 87878 89898 89890 98798 65656 54545 56566 56578 87876 99877
32333 43433 54545 569 63 00000

PoSW's E06 logs:

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

1-Sept-16:- 5,186 kHz, call "891", DK/GC "569 569 63 63", started about a minute before the half-hour, over S9. Seasonal change of frequency from 5,948 kHz inside the 49 metre band which suffered from a broadcast station on 5,950.

15-Sept-16:- 5,191 kHz, call "891", DK/GC "237 237 60 60", S9 signal.

6-Oct-16:- 5,186 kHz, started off in M14 MCW mode calling "891"; constant carrier, keyed audio tone. Stopped after 2033 UTC and after about 30s of plain carrier came up with the E06 voice calling "891". DK/GC "569 569 63 63", starting with, "14259 22676 ….", ended with, "..... 43433 54545".

20-Oct-16:- 5,186 kHz, started about 45 seconds before the half-hour, "891" and "569 569 63 63". Over S9 but went off complete with carrier on the very last of the sixty-three 5F groups, just managed to utter "five" - and then off. Perhaps no one had another five rouble coin to put in the pre-payment electricity meter. Kept the receiver on 5,186 for a while, nothing further heard although a strong carrier came up for a second or two around 2050Z.

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

16-Sept-16:- 5,197 kHz, call "634", DK/GC "569 569 63 63", S9 signal.

7-Oct-16:- 5,197 kHz, came up with the G06 German YL voice just to confuse everyone.
Call "634", DK/GC "569 569 63 63". Fairly sure this has happened once or twice in the past with either the Friday or Thursday schedule.

21-Oct-16:- 5,197 kHz, "634", DK/GC "569 569 63 63", call-up in progress when tuned in 30s before the half-hour, "634" and "569 569 63 63", over S9, pretty much a faultless transmission, no M14 MCW, G06 German voice or sudden collapse on the final 5F group, ended with the standard "DKDK GCGC 00000" routine 2144 UTC

E07

Monday + Wednesday Schedule, 1900 UTC Start:-

Something of a setback in the month of September, unable to find any trace of the Monday + Wednesday schedule, 1900 UTC start. This had changed from AM to SSB in June and used different frequencies from those of the past few years which removes the predictability of E07 schedules in any given month but nevertheless it was no problem to find the new frequencies in June, July and August because the signals were so strong. With SSB, of course, there is no tell-tale carrier up on frequency a few minutes before the start of transmission and a "no message" sending only gives two minutes or so search time.
Perhaps all transmissions were hiding away inside the broadcast bands; it takes real determination to trawl these parts of the short-wave spectrum these days, largely China Radio International in a variety of languages and American "Hell-fire and Damnation" preachers. Whatever the case, normal service was resumed in October:-

3-Oct-16, Monday:- 1900 UTC, 11,539 kHz, no problem in finding this, S9+ SSB signal found within about fifteen seconds of starting a search on the hour. "511 511 511 1", DK/GC "324 51" x 2, ended 1907:35s UTC, very strong signal throughout.
1920 UTC, 10,139 kHz, second sending, also S9+.
1940 UTC, 8,139 kHz, third sending, also S9+.

10-Oct-16, Monday:- 1900 UTC, 11,539 kHz, "511" and "324 51" again, S9+ signal.
1920 UTC, 10,139 kHz, and 1940 UTC, 8,139 kHz, repeats, both S9+.

12-Oct-16, Wednesday:- 1900 UTC, 11,539 kHz, "511" and "324 51", so no change there.
Repeated 1920 UTC, 10,139 kHz, and 1940 UTC, 8,139 kHz, all strong signals.

17-Oct-16, Monday:- 1900 UTC, 11,539 kHz, "511 511 511 000", "no message" and a much weaker signal than on previous occasions in October, only just readable.
1920 UTC, 10,139 kHz, second sending much stronger, over S9.

24-Oct-16, Monday:- 1900 UTC, 11,539 kHz, "511 511 511 000", very weak signal, only just readable.
1920 UTC, 10,139 kHz, second sending, only slightly stronger than the first transmission.
Propagation must have really gone downhill since the beginning of this month.

26-Oct-16, Wednesday, 1920 UTC, 10,139 kHz, missed 1900 UTC sending, "511 511 511 000", weak but clear signal, still suffering from crap propagation, seemingly.

Other schedules showed up on the expected frequencies:-
Sunday + Wednesday Schedule, 1700 UTC Start:-
4-Sept-16, Sunday:- 1700 UTC, 13,527 kHz, "526 526 526 1" for a "full message", weak signal, missed DK/GC, stronger by 1705Z, Single Letter Transmission cluster on close frequency, "S" the strongest producing a clear beat-note with the E07 carrier.
1720 UTC, 12,227 kHz, second sending, much stronger signal, over S9, DK/GC "304 78" x 2.
1740 UTC, 10,627 kHz, third sending, S8 to S9.

7-Sept-16, Wednesday:- 1700 UTC, 13,527 kHz, "526 526 526 000", over S9, SLT "S" also strong.
1720 UTC, 12,227 kHz, second sending, over S9.

11-Sept-16, Sunday:- 1700 UTC, 13,527 kHz, "526 526 526 000", over S9 with reasonable audio and SLT "S" for company.
1720 UTC, 12,227 kHz, second sending, also over S9.

18-Sept-16, Sunday:- 1700 UTC, 13,527 kHz, "526 526 526 000", over S9, SLT "S" strong and the rapidly swept carrier which lives here stronger than usual.

25-Sept-16, Sunday:- 1700 UTC, 13,527 kHz, "526 526 526 000", peaking S9 with deep QSB, SLT "S" and also "D", the swept carrier interference strong again.
1720 UTC, 12,227 kHz, over S9.

28-Sept-16, Wednesday:- 1700 UTC, 13,527 kHz, a "full message" for a change, "526 526 526 1", DK/GC "551 51" x 2, S9 signal.
1720 UTC, 12,227 kHz, second sending, S9+, very strong.
1740 UTC, 10,627 kHz, third sending, S9.

2-Oct-16, Sunday:- 1700 UTC, 13,376 kHz, very weak signal, unable to copy.
1720 UTC, 12,176 kHz, second sending much stronger, over S9, "317 317 317 1", DK/GC "551 51" x 2, same as on 28-September.
1740 UTC, 10,776 kHz, third sending, S8 with deep QSB.

9-Oct-16, Sunday:- 1700 UTC, 13,376 kHz, "317 317 317 1", DK/GC "298 95" x 2, in complete contrast with last Sunday a strong signal, over S9.
1720 UTC, 12,176 kHz, second sending, over S9.
1740 UTC, 10,776 kHz, third sending, over S9 again.

12-Oct-16, Wednesday:- 1700 UTC, 13,376 kHz, "317" and "298 95", as on Sunday.
1720 UTC, 12,176 kHz, and 1740 UTC, 10,776 kHz, repeat transmissions, all three over S9 with good audio.

16-Oct-16, Sunday:- 1700 UTC, 13,376 kHz, continues with "298 95", S9 with good audio.
1720 UTC, 12,176 kHz, S9, and 1740 UTC, 10,776 kHz, deep QSB.

26-Oct-16, Wednesday:- 1700 UTC, 13,376 kHz, very weak signal, unreadable, carrier went off just before 1702:30s UTC which means "no message".
1720 UTC, 12,176 kHz, second sending, also very weak and unreadable.

Thursday Schedule, 2010 UTC Start:-
1-Sept-16:- 2010 UTC, 9,387 kHz, severe interference from a strong broadcast station on 9,390, this together with low audio rendering E07 unreadable. Carrier went off just before 2012:30s UTC.
2030 UTC 7,526 kHz, "358 358 358 000", peaking S9 with rapid QSB, audio low.

8-Sept-16:- 2010 UTC, 9,387 kHz, flattened by the strong BC station on the HF side.
2030 UTC, 7,526 kHz, "358 358 358 000", audio low but readable.

15-Sept-16:- 2030 UTC, 7,526 kHz, "358 358 358 000".

29-Sept-16:- 2030 UTC, 7,526 kHz, "358 358 358 000", reasonable audio.

6-Oct-16:- 2010 UTC, 7,516 kHz, "584 584 584 000", audio low but readable.
2030 UTC, 5,836 kHz, second sending.

13-Oct-16:- 2010 UTC, 7,516 kHz, and 2030 UTC, 5,836 kHz, "584 584 584 000".

Others' logs:
Sunday/Wednesday

September 2016

1700z	**13527kHz**	**1720z**	**12227kHz**	**1740z**	**10627kHz**	
07/09	526 000					Weak
18/09	526 000					Strong
21/09	526 000					Very strong
25/09	526 000					Fair
28/09	526 1 551 51 05284 ... 45948 000					Very strong

October 2016

1700z	**13376kHz**	**1720z**	**12176kHz**	**1740z**	**10776kHz**	
05/10	317 1 298 95 02086 ... 52235 000 000					Very strong
09/10	317 1 298 95 02086 ... 52235 000 000					Very strong
12/10	317 1 298 95 01086 ... 52235 000 000					Very strong
16/10	317 1 298 95 02086 ... 52235 000 000					Strong
19/10	317 000					Weak
23/10	317 000					Strong
26/10	NRH					Poor Condx
30/10	317 000				S9+10 on KiwiSDR Nakhabino but very low audio	

Sunday/Saturday

September 2016

0600z	**9064kHz**	**0620z**	**10264kHz**	**0640z**	**11464kHz**	
03/09	024 1 944 98 40497 ... 03752 000 000					Weak

024 1 944 98
40497 13825 27578 95153 07524 55723 41110 00064 58961 45797
66598 29006 35526 68068 74046 86505 72954 26695 17360 00620
54857 75269 53146 41492 93719 64817 09686 80972 56538 85398
04145 92227 61688 50317 07252 03384 18531 46635 26532 71439
15414 64381 81809 47158 35979 68204 21496 40340 71066 62813
95562 02206 72632 03887 70043 83807 94547 30098 08899 07862
05768 60141 86979 78813 04240 12848 75729 46675 86287 72085
04592 24943 35064 71242 04576 47836 03525 15919 20999 10330
24045 46516 69624 41133 30821 99795 46027 05905 32426 71142
43196 68736 59558 39644 24744 42928 46633 03752
000 000 *Courtesy ES*

04/09	Message as 03/09 & 28/08					Unworkable, Weak
10/09	024 000					Weak/Fair
17/09	024 000	[0620z NRH]				Fair
18/09	024 000	[0620z Weak]				Fair
24/09	024 000	[0600z NRH]				Fair
25/09	024 000	[0620z Weak]				Fair

October 2016

0600z	**9064kHz**	**0620z**	**10264kHz**	**0640z**	**11464kHz**	
01/10	024 10672 121 28388 ... 31123 000 000					Weak, QSB3

024 024 024 1 672 121 672 121
28388 26540 87795 39211 65179 63271 09586 93353 47538 89372
66362 07259 02757 71836 81346 66636 38654 52491 02078 23062
88233 63582 90754 62664 39584 72987 09310 96463 88673 90702
49028 79745 24875 18047 00178 49949 75336 64281 11498 92605
83287 19167 09954 90422 70262 22136 49175 13598 32345 01985
15959 12477 64159 44137 11950 69390 69291 96084 43271 53736
18544 63550 09989 50106 32376 52075 61166 26258 32630 65883
07818 25822 46037 64324 18634 60747 15395 51918 74823 91156
37764 13658 32654 50245 12023 64807 82047 00654 48736 55227
09137 47130 35582 83595 36303 17469 69420 48556 64935 05918
14394 26252 08310 03953 37866 64787 76878 26189 26211 04701
31109 18287 82901 09476 38760 97462 29270 67464 94029 12925
31123
000 000 *Courtesy Ary*

02/10	024 10672 121 28388 ... 31123 000 000			[0640z HETQRM4]		Weak, QSB3
08/10	024 000					Strong
09/10	024 000					Strong
15/10	024 000					Weak
16/10	024 000					Weak
22/10	024 000					Strong

23/10	024 000	[0620z Fair]	Strong
29/10	024 000	[0620z NRH]	Weak, noisy
30/10	024 000		Weak, noisy

Monday/Wednesday

September 2016

1900z	**14584kHz**	**1920z**	**13384kHz**	**1940z**	**11584kHz**	
07/09	535 000					Fair
12/09	535 1 598 47 17593 ... 13675 000 000					Very strong

535 1 598 47
17593 23961 17637 15055 38656 45290 66375 14599 07476 84048
46788 88366 84763 15948 77663 55991 92370 21706 61677 65756
25881 66214 19507 41203 56117 13836 89515 04541 04485 59648
55719 45742 19175 39377 22256 53022 16296 54647 05317 14075
24263 44604 01808 00022 82523 38186 13675
000 000 *Courtesy tING*

19/09	535 1 587 34 67838 ... 81422 000 000		Very strong
21/09	535 1 557 34 67838 ... 81422 000 000		Very strong
26/09	535 000		Very strong
28/09	535 000		Weak

October 2016

1900z	**11539kHz**	**1920z**	**10139kHz**	**1940z**	**8139kHz**	
05/10	511 1 324 51 48299 ... 22577 000 000					Very strong
10/10	511 1 324 51 48299 ... 22577 000 000					Very strong
12/10	511 1 324 51 48299 ... 22577 000 000					Very strong
18/10	511 000					Very strong
19/10	511 000					Weak
24/10	511 000					Weak
26/10	511 000					Fair

Thursday

September 2016

2010z	**9387kHz**	**2030z**	**7526kHz**	**2050z**	**5884kHz**	
01/09	358 000		[2030z NRH]			Weak, QRM3
15/09	358 000					Weak
22/09	358 000		[2010z BCQRM5]			Weak
29/09	358 000		[2010z NRH]			Strong

October 2016

2010z	**7516kHz**	**2030z**	**5836kHz**	**2050z**	**4497kHz**	
06/10	584 000					Weak
13/10	584 000					Very weak
20/10	584 000		[2010z NRH]			Strong
27/10	584 000					Very weak, QSB3

E07 UNCLASSIFIED:

8045kHz 1230z 20/09 In progress:

687 1 5904 25 41069 32004 71754 88150 75854 40130 05113 81218 21747 Pause, 687 call up restarted,
Very weak, faded out.] 1231z QSA4 USB E.SMITH TUE

E07a

Wednesday Schedule, 2000 UTC Start:-

7-Sept-16:- 2000 UTC, 8,144 kHz, "197 197 197 000", S9+ signal.
2020 UTC, 6,944 kHz, second sending, also S9+.
A seasonal change to lower frequencies, 8,144 + 6,944 + 5,744 used in September of last year.

21-Sept-16:- 2000 UTC, 8,144 kHz, "197 197 197 1 39884" for a full message, DK/GC "5521 87" x 2, S9+ signal.
2020 UTC, 6,944 kHz, second sending, S9+ again.
2040 UTC, 5,744 kHz, third sending, another indicated S9+ to complete the trio.

28-Sept-16:- 2000 UTC, 8,144 kHz, "197 197 197 000", S9+ signal.
2020 UTC, 6,944 kHz, second sending, also S9+.

5-Oct-16:- 2000 UTC, 8,144 kHz, and 2020 UTC, 6,944 kHz, both very strong S9+ signals,
"197 197 197 000".

12-Oct-16:- 2000 UTC, 8,144 kHz, "197 197 197 1 61219 for a full message. DK/GC "4838
65" x 2, the usual S9+ SSB signal.
2020 UTC, 6,944 kHz, second sending, S9+.
2040 UTC, 5,744 kHz, third sending, also S9+.

26-Oct-16:- 2000 UTC, 8,144 kHz, "197 197 197 000"; something most unusual this evening, a very weak signal, only just readable, not the usual S9+. Don't think I have ever heard this Wednesday E07a as weak as this.
2020 UTC, 6,944 kHz, second sending, another weak signal, only slightly stronger than the first transmission.
The two Wednesday E07 schedules heard early this evening were much, much weaker signals than usual. Tuning around the 40 metre amateur band earlier noted a QSO between
several stations who were discussing an ongoing "geomagnetic storm" and the likely effects
on short-wave propagation which might be an explanation of all this.

Saturday Schedule, 0800 UTC Start:-
3-Sept-16:- 0800 UTC, 11,153 kHz, "114 114 114 000", not too strong, S5 at best.
0820 UTC, 12,153 kHz, second sending, stronger, S7.

17-Sept-16:- 0800 UTC, 11,153 kHz, a "full message" this morning, "114 114 114 1 38672",
DK/GC "2977 65" x 2, S7 signal.
0820 UTC, 12,152 kHz, second sending, a technical hitch occurred, vanished at approx 0825Z, came back with "114" call-up routine again and resumed 5Fs without repeating the DK/GC.
0840 UTC, 13,453 kHz, third sending, interference from the rapidly swept carrier which plies its trade on this part of the short-wave spectrum.

1-Oct-16:- 0800 UTC, 11,484 kHz, "413 413 413 000", weak signal.
0820 UTC, 12,184 kHz, much stronger, peaking S9.

8-Oct-16:- 0800 UTC, 11,484 kHz, and 0820 UTC, 12,184 kHz, both unusually strong over S9 signals, "413 413 413 000".

15-Oct-16:- 0800 UTC, 11,484 kHz, and 0820 UTC, 12,184 kHz, again both strong signals, S9 or over, "413 413 413 000".

Others' logs

Wednesday

September 2016

2000z	**8144kHz**	**2020z**	**6944kHz**	**2040z**	**5744kHz**	
07/09	197 000					Very strong
14/09	197 1 62218 5778 59 02843 ... 70743 000 000					Very strong
21/09	197 1 39884 5521 87 22289 ... 37625 000 000					Very strong
28/09	197 000					Very strong

October 2016

2000z	**8144kHz**	**2020z**	**6944kHz**	**2040z**	**5744kHz**	
05/10	197 000					Very strong
12/10	197 1 61219 4838 65 68870 ... 01551 000 000					Very strong
19/10	197 000					Very strong
26/10	197 000					Very weak, noisy

Thursday

September 2016

0430z	**6788kHz**	**0450z**	**7488kHz**	**0510z**	**8188kHz**	
01/09	741 000					Very strong
08/09	741 000		[0430z Unworkable]			Very weak
15/09	741 1 62218 5778 59 02843 ... 70743 000 000					Very strong
22/09	741 1 39884 5521 87 22289 ... 37625 000 000					Very strong
29/09	NRH					

October 2016

0430z	**6788kHz**	**0450z**	**7488kHz**	**0510z**	**8188kHz**	
06/10	741 000					Strong
13/10	741 1 61219 4838 65 68870 ... 01551 000 000					Strong/Fair, QSB
20/10	741 000					Very strong
27/10	741 000					Weak, noisy

Friday

September 2016

1510z	**10583kHz**	**1530z**	**9383kHz**	**1550z**	**8183kHz**	
02/09	531 000					Weak, QRN3
09/09	531 000					Strong
16/09	531 1 38672 2977 65 98649 ... 09106 000 000					Fair
23/09	531 000					Very strong
30/09	531 000		[1510z NRH]			Very weak

September 2016

1510z	**11424kHz**	**1530z**	**10124kHz**	**1550z**	**9124kHz**	
07/10	411 000					Fair
14/10	411 000					Very weak
21/10	411 000					Weak
28/10	411 000					Fair

Saturday

September 2016

0800z	**11153kHz**	**0820z**	**12153kHz**	**0840z**	**13453kHz**	
03/09	114 000		[0800z NRH]			Weak, QRN3/4
10/09	114 000					Fair
17/09	114 1 38672 2977 65 98649 ... 09106 000 000					Fair

114 1 38672 2977 65
98649 91538 19531 10685 72204 98649 69615 72005 70203 46291
29436 26632 35206 34904 67861 64854 77638 48195 05570 09010
17586 62399 14665 29662 19056 20431 23474 65204 77603 84869
93826 97156 62952 89492 55260 52701 19404 89783 01295 63494
76817 68574 57420 35239 34378 52829 47188 38299 97566 85740
96983 94101 02798 99016 96959 08506 13885 87483 19020 96646
19829 70562 57585 90484 09106
000 000 Courtesy JO

24/09	114 000					Strong

October 2016

0800z	**11484kHz**	**0820z**	**12184kHz**	**0840z**	**13384kHz**	
01/10	413 000					Fair
08/10	413 000					Fair
15/10	413 000					Weak
22/10	413 000					Fair
29/10	413 000					Very strong

E11 log Sept/October

5844kHz	1730z	17/09 [405/00] Out 1733z S9	Malc	SAT
	1730z	28/09 [405/00] Out 1733z S6	Malc	WED
	1730z	01/10 [405/00] Out 1733z S3 QRM	Malc, Thomas	SAT
	1730z	05/10 [405/00] Good	RNGB	WED
	1730z	19/10 [405/00] Out 1733z S6	Malc	WED
	1730z	22/10 [405/00]	RNGB	SAT
	1730z	26/10 [405/00] Out 1733z S3 QRM	Malc	WED
	1730z	29/10 [405/00] Out 1733z S8	Malc	SAT
6304kHz	0450z	05/09 [416/00] Out 0453z	Ed Smith	MON
	0450z	19/09 [416/00] Out 0453z	Ed Smith	MON
6397kHz	1605z	06/09 [232/00] Out 1608z S7	Malc, JkC	TUE
	1605z	13/09 [232/00] Out 1608z S5	Malc , RNGB	TUE
	1605z	27/09 [232/00] Out 1608z S7	Malc	TUE
	1605z	02/10 [232/00] Out 1608z QSA5 QRM1 QRN1 QSB1	Thomas	SUN
	1605z	04/10 [232/00] Out 1608z S9	Malc	TUE
	1605z	09/10 [232/00] Out 1608z S8	Malc	SUN
	1605z	11/10 [232/00] Out 1608z S9	Malc	TUE
	1605z	16/10 [232/00] Out 1608z S9	Malc	SUN
	1605z	30/10 [232/00] Out 1608z S6	Malc	SUN
7317kHz	0820z	08/09 [438/00] Out 0823z S2	Malc	THU
	0820z	12/09 [438/00] Out 0823z S4	Malc	MON
	0820z	15/09 [438/00] Out 0823z S3	Malc, RNGB	THU
	0820z	19/09 [438/00] Out 0823z S7	Malc	MON
	0820z	22/09 [438/00] Out 0823z	Ed Smith	THU
	0820z	03/10 [438/00] Out 0823z S4	Malc	MON
	0820z	10/10 [438/00] Out 0823z S4	Malc	MON
	0820z	13/10 [438/00] Out 0823z S5	Malc	THU
	0820z	24/10 [438/00] Out 0823z S7	Malc	MON
	0820z	27/10 [438/00] Out 0823z S5	Malc	THU
	0820z	31/10 [438/00] Out 0823z S4	Malc	MON
7377kHz	2000z	23/09 [576/00] Fair	RNGB, Gary H	FRI
	2000z	28/10 [576/00] Out 2003z S2	Malc	FRI
7850kHz	0315z	21/09 [253/00] Out 0318z	Ed Smith	WED
8102kHz	1045z	06/09 [576/00] Out 1048z S2	Malc	TUE
	1045z	20/09 [576/00] Out 1048z S6	Malc, RNGB	TUE
	1045z	27/09 [576/00] Out 1048z S4	Malc	TUE
	1045z	11/10 [576/00] Out 1048z S3	Malc	TUE
	1045z	18/10 [576/00] Out 1048z S4	Malc	TUE
8186kHz	2005z	03/09 [363/00] Out 2008z QSA1 QRM1 QRN1 QSB2	Thomas	SAT
	2005z	04/09 [363/00] Out 2008z S9	Malc	SUN
	2005z	17/09 [363/00] Out 2008z S9	Malc	SAT
	2005z	18/09 [363/00] Out 2008z S8	Malc	SUN
	2005z	01/10 [363/00] Weak	RNGB	SAT
	2005z	15/10 [363/00] Out 2008z S7	Malc	SAT
	2005z	16/10 [363/00] Out 2008z S9	Malc	SUN
	2005z	23/10 [363/00] Out 2003z S9	Malc	SUN
	2005z	29/10 [363/00] Out 2008z S2	Malc	SAT
	2005z	30/10 [363/00] Out 2008z S3	Malc	SUN

8803kHz	0930z	01/09 [270/00] Out 0933z S2	Malc	THU
	0930z	08/09 [270/000 Out 0933z S2	Malc	THU
	0930z	14/09 [270/00] Out 0933z S4	Malc	WED
	0930z	15/09 [270/00] Out 0933z S4	Malc, RNGB	THU
	0930z	28/09 [270/00] Out 0933z S6	Malc	WED
	0930z	29/09 [270/00] Out 0933z S3	Malc	THU
	0930z	12/10 [270/00] Out 0933z S4	Malc	WED
	0930z	13/10 [270/00] Out 0933z S9	Malc	THU
	0930z	19/10 [270/00] Out 0933z S3	Malc	WED
	0930z	26/10 [270/00] Out 0933z S3	Malc	WED
	0930z	27/10 [270/00] Out 0933z S2	Malc	THU
9371kHz	1730z	01/09 [416/00] Out 1733z QSA2 QRM1 QRN1 QSB1	Thomas, Malc	THU
	1730z	08/09 [416/00] Out 733z S5	Malc	THU
	1730z	29/09 [416/00] Out 1733z S5	Malc	THU
	1730z	13/10 [416/001 Out 1733z S2	Malc	THU
9399kHz	0900z	05/09 [534/00] Out 0902z S5	Malc	MON
	0900z	19/09 [534/00] Out 0903z S2	Malc	MON
	0900z	21/09 [534/00] Out 0903z S3	Malc , Ed Smith	WED
	0900z	26/09 [534/00] Out 0903z S6	Malc	MON
	0900z	28/09 [534/00] Out 0903z S4	Malc	WED
	0900z	10/10 [534/00] Out 0903z S4	Malc	MON
	0900z	12/10 [534/00] Out 0903z S4	Malc	WED
	0900z	17/10 [534/00] Out 0903z S3	Malc	MON
	0900z	19/10 [534/00] Out 0903z S3	Malc	WED
	0900z	24/10 [534/00] Out 0903z S7	Malc	MON
	0900z	26/10 [534/00] Out 0903z S6	Malc	WED
	0900z	31/10 [534/00] Out 0903z S2	Malc	MON
9443kHz	1205z	06/09 [469/00] Out 1208z S2	Malc	TUE
	1205z	13/09 [469/00] Out 1208z S5	Malc	TUE
	1205z	20/09 [469/00] Out 1208z S2	Malc, Ed Smith	TUE
	1205z	21/09 [469/00] Out 1208z S3	Malc	WED
	1205z	27/09 [469/00] Out 1208z S5	Malc	TUE
	1205z	12/10 [469/00] Out 1208z S5	Malc	WED
	1205z	18/10 [469/00] Out 1208z S2	Malc	TUE
	1205z	19/10 [469/00] Strong	RNGB	WED
	1205z	26/10 [469/00] Out 1208z S3	Malc	WED
10213khz	1705z	07/09 [392/00] Out 1708z QSA2 QRM1 QRN1 QSB2	Thomas	WED
	0745z	12/09 [262/00] Out 0748z S5	Malc	MON
	0745z	19/09 [262/00] Out 0748z S7	Malc	MON
	1705z	21/09 [392/00] Out 1708z S7	Malc	WED
	1705z	24/09 [392/00] Out 1708z S5	Malc	SAT
	0745z	26/09 [262/00] Out 0748z S5	Malc	MON
	1705z	28/09 [392/00] Out 1708z S6	Malc	WED
	1705z	01/10 [392/00] Out 1708z	Thomas	SAT
	0745z	03/10 [262/00] Out 0748z S4	Malc	MON
	1705z	15/10 [392/00] Out 1708z S6	Malc	SAT
	0745z	17/10 [262/00] Out 0748z S7	Malc	MON
	1705z	19/10 [392/00] Out 1708z S2	Malc	WED
	0745z	24/10 [262/00] Out 0748z S2	Malc	MON
	1705z	29/10 [392/00] Out 1708z S3	Malc	SAT
	0745z	31/10 [262/00] Out 0748z S9	Malc	MON
10221kHz	0710z	02/09 [633/00] Out 0713z QSA2 QRM1 QRN1 QSB2	Thomas	FRI
	0710z	06/09 [633/00] Out 0713z S3	Malc	TUE
	0710z	20/09 [633/00] Out 0713z S3	Malc, Ed Smith	TUE
10302kHz	1300z	03/09 [585/00] Out 1303z QSA5 QRM1 QRN2 QSB3	Thomas	SAT
	1300z	08/09 [585/00] Out 1303z S3	Malc	THU
	1300z	15/09 [585/00]	RNGB	THU
	1300z	17/09 [585/00] Out 1303z	Ed Smith	SAT
	1300z	29/09 [585/00] Out 1303z S2	Malc	THU
	1300z	01/10 [585/00] Out 1303z S4	Malc	SAT
	1300z	06/10 [585/00] Weak	RNGB	THU
	1300z	08/10 [585/00] Out 1303z S6	Malc	SAT
	1300z	13/10 [585/00] Out 1303z S9	Malc	THU
	1300z	15/10 [585/00] Out 1303z S5	Malc	SAT
	1300z	22/10 [585/00] Out 1303z S6	Malc	SAT

10330kHz	1530z	01/09 [262/001 Out 1533z S6	Malc	THU
	1530z	15/09 [262/00] Good	RNGB	THU
	1530z	29/09 [262/00] Out 1633z S2	Malc	THU
	1530z	27/10 [262/00] Out 1533z S9	Malc	THU
10448kHz	1625z	07/09 [972/00] Out 1628z QSA2 QRM1 QRN2 QSB2	Thomas	WED
	1625z	14/09 [972/00] Out 1628z S9	Malc	WED
	1625z	28/09 [972/00] Out 1628z S5	Malc	WED
	1625z	02/10 [972/00] Out 1628z QSA3 QRM1 QRN1 QSB1	Thomas	SUN
	1625z	05/10 [563/00] Out 1628z S7	Malc	WED
	1625z	09/10 [972/00] Out 1628z S4	Malc, RNGB	SUN
	1625z	12/10 [972/00] Out 1628z S9	Malc	WED
	1625z	16/10 [972/00] Out 1628z S7	Malc	SUN
	1625z	19/10 [972/00] Out 1628z S6	Malc	WED
	1625z	23/10 [972/00] Out 1628z S5	Malc	SUN
10450kHz	0805z	04/09 [311/00] Out 0808z S4	Malc	SUN
10620kHz	1925z	13/09 [551/00]	Gary H	TUE
	1925z	15/09 [551/00] Out 1928z S3	Malc	THU
	1925z	20/09 [551/00] Out 1928z S2	Malc	TUE
	1925z	27/09 [551/00] Out S2	Malc	TUE
	1925z	29/09 [551/00] Out 1928z S5	Malc	THU
10641kHz	1450z	06/09 [441/00] Out 1453z S7	Malc, JkC	TUE
	1450z	20/09 [441/00] Out 1453z S8	Malc	TUE
	1450z	27/09 [441/00] Out 1453z S8	Malc	TUE
	1450z	04/10 [441/00] Out 1453z S5	Malc	TUE
	1450z	11/10 [441/00]	Gary H	TUE
	1450z	18/10 [441/00] Out 1453z S5	Malc	TUE
10800kHz	0645z	01/09 [517/00] Out 0648z S5	Malc	THU
	0645z	13/09 [517/00] Out 0648z S8	Malc	TUE
	0645z	15/09 [517/00] Out 0648z S3	Malc	THU
	0645z	20/09 [517/00] Out 0648z S2	Malc, Ed Smith	TUE
	0645z	22/09 [517/00] Out 0648z	Ed Smith	THU
	0645z	27/09 [517/00] Out 0648z	Ed Smith	TUE
	0645z	11/10 [517/00] Out 0648z S8	Malc	TUE
	0645z	13/10 [517/00] Out 0648z S6	Malc	THU
	0645z	18/10 [517/00] Out 0648z S2	Malc	TUE
	0645z	20/10 [517/00] Out 0648z S2	Malc	THU
11450kHz	0805z	04/09 [311/00] Out 0808z QSA2 QRM1 QRN1 QSB4	Thomas	SUN
	0805z	14/09 [311/00] Out 0808z S7	Malc	WED
	0805z	18/09 [311/00] Out 0808z S7	Malc	SUN
	0805z	28/09 [311/00] Out 0808z S3	Malc	WED
	0805z	05/10 [311/00] Strong	RNGB	WED
	0805z	09/10 [311/00] Strong	RNGB	SUN
	0745z	12/10 [311/00] Out 0748z S4	Malc	WED
	0805z	16/10 [311/00] Out 0808z S7	Malc	SUN
	0805z	19/10 [311/00] Good	RNGB	WED
13046kHz	1345z	13/09 [911/00] Out 1348z S5	Malc	TUE
	1345z	17/09 [911/00] Out 1348z	Ed Smith	SAT
	1345z	20/09 [911/00] Out 1348z S2	Malc	TUE
	1345z	27/09 [911/00] Out 1348z	Ed Smith	TUE
	1345z	01/10 [911/00] Out 1348z S2	Malc	SAT
	1345z	04/10 [911/00] Out 1348z S3	Malc	TUE
	1345z	11/10 [911/00]	RNGB	TUE
	1345z	15/10 [911/00] Out 1348z S5	Malc	SAT
	1345z	18/10 [911/00] Out 1348z S4	Malc	TUE
	1345z	22/10 [911/00] Out 1348z S5	Malc	SAT
13470kHz	1745z	12/09 [242/001 Out 1748z S7	Malc	MON
	1745z	18/09 [242/00] Good	RNGB	SUN
	1745z	25/09 [242/00] Out 1748z S8	Malc	SUN
	1745z	03/10 [242/00] Out 1748z S3	Malc	MON
	1745z	09/10 [242/00] Out 1748z S5	Malc	SUN
	1745z	30/10 [242/00] Out 1748z S4	Malc	SUN

13873kHz	1650z	02/10 [921/00] Weak	RNGB	SUN
	1650z	07/10 [921/00] Out 1653z S2	Malc	SAT
	1650z	09/10 [921/00] Weak	RNGB	SUN
	1650z	14/10 [921/00] Out 1653z S3	Malc	FRI
	1650z	28/10 [921/00] Out 1653z S2	Malc	FRI
14575kHz	0745z	06/09 [335/00] Out 0748z S4	Malc	TUE
	0745z	08/09 [335/00] Out 0748z S2	Malc	THU
	0745z	20/09 [335/00] Out 0748z S3 QSB2	Malc	TUE
	0745z	22/09 [335/00] Out 0748z	Ed Smith	THU
	0745z	27/09 [335/00] Out 0748z QSA2 QRM4	Ed Smith	TUE
	0745z	11/10 [335/00] Out 0748z S2	Malc	TUE
	0745z	13/10 [335/00] Out 0748z S9	Malc	THU
	0745z	18/10 [335/00] Weak	RNGB	TUE
	0745z	20/10 [335/00] Out 0748z S2	Malc	THU
	0745z	27/10 [335/00] Out 0748z S5	Malc	THU
14769kHz	0710z	01/09 [491/00] Out 0713z S2	Malc	THU
	0710z	17/09 [491/00] Weak	RNGB, Ed Smith	SAT
	0710z	24/09 [491/00] Out 0713z S2	Malc	SAT
	0710z	20/10 [491/00] Out 0713z S7	Malc	THU
	0710z	27/10 [491/00] Out 0713z S2	Malc	THU
15632kHz	1300z	06/09 [133/00] Out 1303z S2	Malc	TUE
	1300z	21/09 [133/00] Out 1303z S3	Malc	WED
	1300z	27/09 [133/00] Out 1303z	Ed Smith	TUE
	1300z	04/10 [133/00] Weak	RNGB	TUE
	1300z	05/10 [133/00] Out 1303z S4	Malc	WED
	1300z	18/10 [133/00] Out 1303z S1	Malc	TUE
	1300z	19/10 [133/00] Out 1303z S2	Malc	WED
15825kHz	0730z	16/09 [352/00] Out 0733z S2 QSB1	Malc	FRI
	0730z	18/09 [352/00] Out 0733z S2	Malc	SUN
	0730z	02/10 [352/00] Out 0733z QSA2 QRM1 QRN1 QSB2	Thomas	SUN
	0730z	07/10 [352/00] Out 0733z S1	Malc	FRI
	0730z	09/10 [352/00] Very weak	RNGB	SUN
	0730z	28/10 [352/00] Out 0733z S2	Malc	FRI
15915kHz	0545z	14/09 [348/00] Weak	RNGB	WED
	0545z	21/09 [348/00] Out 0548z	Ed Smith	WED
20286kHz	1225z	05/09 [521/00] Out 1228z S2	Malc	MON
	1225z	09/09 [521/00] Good	RNGB	FRI
	1225z	12/09 [521/00] Out 1228z S9	Malc	MON
	1225z	03/10 [521/00] Out 1228z S9	Malc	MON
	1225z	10/10 [521/00] Out 1228z S8	Malc	MON
	1225z	31/10 [521/00] Out 1228z S4	Malc	MON

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5844kHz	1730z	24/09 [406/36 62649……..35642] Out 1739z	Malc	SAT
	1730z	12/10 [409/33 11891……..79407] Out 1719z	RNGB, Malc	WED
	1730z	15/10 [409/33 11891……etc] Repeat of Wednesday	Malc	SAT
7317kHz	0530z	22/09 [649/37 34200 72427 ..... 39084 11475] Out 0539z	Ed Smith	THU
	0820z	26/09 [436/32 52431……48615] Out 0828z S7	Malc	MON
	0820z	29/09 [436/32 52431……etc] Repeat of Monday	Malc	THU
	0820z	17/10 [439/36 93251…….03878] Out 0829z S4	Malc	MON
6304kHz	0450z	12/09 [413/31 92231 52738 05159 16120 81221 65037 61069……60142 68066] Out 0459z	Ed Smith	MON
6397kHz	1605z	20/09 [238/36 09273 88210 31638 78662 82297 04139 86690…..33927 04943] Out 1614z S7	RNGB, Malc	TUE
	1605z	18/10 [235/37 33583……..80378] Out 1615z S7	Malc	TUE
	1605z	23/10 [235/37 33583…..etc] repeat of Tuesday	Malc	SUN
7317kHz	0530z	06/10 [643/37 19277 32437 74917 59498 47117 48152 15545……11085 82436] Out 0540z	Ed Smith	THU
	0820z	20/10 [439/36 93251……03878]	Malc	THU
7377kHz	2000z	16/09 [573/40 54445 24349 98947 46926 91051 11402 12762 ……87154] Out 2010z S9	RNGB, Malc	FRI
	0533z	19/09 [649/37 34200 72427 08114 36906 07433 08594 21349……39084 11475] 3 mins late!	Ary	MON
	2000z	07/10 [575/36 05370……67588] Out 2009z S5	Malc	SAT

7850kHz	0315z	07/09 [255/38 12355 37432 89959 57444 92380 06623 66648 36739……66485 25817] out 0325z	Ed Smith	WED
8102kHz	1045z	13/09 [573/40 54445 24349 98947 46926 91051 11402 12762 02116……87154] Out 1055z S5	RNGB, Malc	TUE
	1045z	04/10 [575/36 05370 37783 04621 09023 01704 27639 14053…….26259 67588] Out 1055z	Ed Smith, Malc	TUE
8186kHz	2005z	24/09 [369/38 89536 00954 51174 27160 68543 66509 71712…46775 71320] Out 2015z S9	Ed Smith, Malc	SAT
	2005z	25/09 [369/38 89536……etc] Repeat of Saturday	Malc	SUN
	2005z	08/10 [369/38 45480 95342 44939 39724 95409 58518 16380…….94074 76153] Out 2015z S8	Ed Smith	SAT
	2005z	09/10 [369/38 45480…..etc] Repeat of Saturday	Malc	SUN
8803kHz	0930z	21/09 [278/39 16316…….27202] Out 0940z S7	Malc	WED
	0930z	05/10 [276/38 49041…….85346] Out 0940z S3	Malc	WED
	0930z	06/10 [276/38 49041 75935 04473 68562 72569 42195 64016……81502 85346]	RNGB	THU
9371kHz	1730z	15/09 [413/31 92231 52738 05159 16120 81221 65037 61069 80735……60142 68066] Good	RNGB	THU
9399khz	0900z	12/09 [534/38 84380 66300 00326 70273 91972 69524 83133……2564450519] Out 0910z S4	RNGB, Malc	MON
	0900z	14/09 [534/38 84380……etc] repeat of Monday	Malc	WED
	0900z	03/10 [532/35 07734 24942 49108 82708 38932 02371 70689..…63784 37401] Out 0909z S2	RNGB, Malc	MON
9443kHz	1205z	13/09 [460/32 45036 31270 14044 43396 70214 25617 70837 08168……94228]	RNGB	TUE
	1205z	14/09 [460/32 45036……..94228] Out 1213z S4	Malc	WED
	1205z	04/10 [469/36 66694 03972 32458 74852 18537 81031 33129……18597 90989] Out 1215z S9	Ed Smith, Malc	TUE
	1205z	05/10 [469/36 66694……etc) Repeat of Tuesday	Malc	WED
10213kHz	0745z	05/09 [269/39 57118…….64135] Out 0755z S8	Malc	MON
	1705z	14/09 [392/38 35632…….15546] Out 1719z S9	Malc	WED
	1705z	17/09 [392/38 35623 54806 43551 29738 36649 95492 67280 18280……01573 15546] Strong	RNGB	SAT
	1705z	05/10 [392/38 83890…….67575] Out 1715z S9	Malc	WED
	0745z	10/10 [261/38 01290…….....49700] Out 0755z S9	Malc	MON
10221khz	0710z	13/09 [637/37 13291 83022 66119 59470 60184 26130 13581……06105 01861] Out 0719z S4	RNGB, Malc	TUE
	0710z	16/09 [637/37 13291……etc} Repeat of Tuesday	Malc, Ed Smith	FRI
10302kHz	1300z	27/10 [585/34 93652……..87558] Out 1309z S5	Malc	THU
	1300z	29/10 [585/34 93652.....etc] Repeat of Thursday	Malc	SAT
10330kHz	1530z	08/09 [269/39 57118…….64135] Out 1540z S7	Malc	THU
10448kHz	1625z	21/09 [978/36 77028……..56440] Out 1634z S7	Malc	WED
10620kHz	1925z	06/09 [55?/37 86237……74839] Out 1934z S7	Malc	TUE
10641kHz	1450z	13/09 [442/36 60420 53126 15350 31505 95236 68158 61705……93137 17540] Out 1455z S5	RNGB, Malc	TUE
10800kHz	0645z	06/09 [514/40 92802 46949 01378 75456 47767 06443 57728……61713 78660] Out 0655z S5	Ed Smith, Malc	TUE
	0645z	08/09 [514/40 92802……etc] repeat of Tuesday	Malc	THU
	0645z	04/10 [517/31 81780 95255 10505 97509 89554 70267 83097……81899 98292]	RNGB, Ed Smith	TUE
11450kHz	0805z	21/09 [313/40 18055……..38285] Out 0815z S4	Malc	WED
	0805z	25/09 [313/40 18055 98549 85571 80897 80709 23326 82692 26120……97651 38285] Fair	Ary	SUN
	0805z	30/10 [314/31 76749.....40022] Out 0813z S3	Malc	SUN
13046kHz	1345z	06/09 [917/35 43997 56984 63057 00752 69786 65343…..15702 58466] Out 1354z S7	Ed Smith, Malc	TUE
13873kHz	1650z	16/09 [921/32 59236……..71419] Out 1658z	Malc	FRI
	1650z	18/09 [921/32 59236……etc] Repeat of Friday	Malc	SUN
	1650z	23/10 [924/35 93266…….64982] Out 1659z S5 QSB3	Malc	SUN
14575kHz	0745z	13/09 [333/33 15393 61944 66640 749.?? 61495 82300 49678……21312 64523] Out 0754z S5	RNGB, Malc	TUE
	0745z	15/09 [333/33 15393…..etc] Repeat of Tuesday	Malc	THU
14769kHz	0710z	13/10 [490/33 24595 08307 49207 34424 00355 80425 08758…….80414 17477]	RNGB	THU
15632khz	1300z	13/09 [133/40 68506 32116 11432 69628 00755 37697 73898……67319] Out 1310z S4	RNGB, Malc	TUE
	1300z	14/09 [130/40 68506……etc] Repeat of Tuesday	Malc	WED
	1300z	11/10 [135/31 20117 28555 33377 86383 60836 30837 73973……32505 75720] Good, some QSB	RNGB	TUE

15825kHz	0730z	23/09 [353/39 16360 06930 94552 82392 39800 09999 71464……61232 17900] Fair	Ary	FRI
	0730z	25/09 [353/39 16360….etc] Repeat of Friday	Ary	SUN
20286kHz	1225z	24/10 [525/36 48434……..30389] Out 1235z S3 QSB2	Malc	MON
	1225z	28/10 [525/36 48434……etc] repeat of Monday	Malc	FRI

E17z

Thursday

September 2016

0800z	**14260kHz**	**0810z**	**12930kHz**	
01/09	674 203 5 52491 63919 92699 14600 74248 203 5 00000			Weak STANAGQRM3
08/09	674 203 5 52491 63959 93699 14600 74248 203 5 00000			Weak
15/09	674 209 5 33699 … 83964 209 5 00000			Weak [0800z QSB to nil]
22/09	674 209 5 33699 39998 30667 35947 83964 209 5 00000			Fair
29/09	674 00000		[0800z NRH]	Weak

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06/10	674 983 5 17099 94961 35836 65906 77233 983 5 00000			Weak
13/10	674 983 5 17099 94961 35826 65906 77233 983 5 00000			Fair
20/10	674 938 5 07931 98755 84636 45752 64655 938 5 00000			Weak
27/10	674 938 5 07931 98755 84636 45753 64655 938 5 00000			Fair

G06

Second + Fourth Thursdays in the Month 1830 UTC Schedule:-
22-Sept-16:- 5,934 kHz, inside the 49 metre band but no strong broadcast stations close enough to interfere, call "579", DK/GC "317 317 60 60", starting with, "37839 35787.. ",
ending with, ".... 45454 34344", S9 signal.

13-Oct-16:- 5,934 kHz, started about 15 seconds before the half hour, call "579", DK/GC "391 391 60 60", starting with, "56327 21940 ..." and ending with, " ….. 94872 47426",
finishing just before 1844 UTC.

27-Oct-16:- 5,934 kHz, some deviant behaviour this evening, tuned in just before the half-hour to hear not the G06 YL voice but M14 MCW in progress, call "579" which went on until about 1835 UTC, then DK/GC "005 005 149 149" and into 5Fs. Over S9 at first but became weaker as the transmission progressed. Stopped suddenly in the middle of a 5F around 1847 UTC, carrier stayed up for a further five minutes or so before going off.

Friday 1930 UTC Schedule Following Second + Fourth Thursdays:-
9-Sept-16:- 5,442 kHz, call "947", DK/GC "391 391 60 60", starting "56327 21940... ",
ending with, "94872 47426", over S9 on a clear frequency. When this frequency was checked at about one hour earlier there was an extremely strong "XJT" roaring away but had gone off sometime before G06 started at just after 1929 UTC.

23-Sept-16:- 5,442 kHz, call "947", DK/GC "317 317 60 60", not the same message as last time but was the same as the 1830Z transmission on the previous day. Had a distinctly
slow delivery of the 5Fs, much as is usually the case when the Monday G06 sends a full message.

14-Oct-16:- 5,442 kHz, call "947", DK/GC "317 317 90 90". Had that slow delivery again.
The first sixty 5Fs appear to be the same as those sent on 23-Sept, plus another thirty added on, and just running one's eye over them look like the same as the ones first logged
when this schedule appeared on a Sunday instead of a Friday in the month of March of this year, specifically on Sunday the 27th of that month. Ended just after 1956 UTC.

First + Second Mondays in the Month, 1700 + 1800 UTC Schedule:-
5-Sept-16:- 1659 UTC, just after, 4,767 kHz, call "574", DK/GC "909 909 136 136", a long message, ended just before 1738 UTC.
1759 UTC, had started when tuned in just after one minute before the hour, 4,953 kHz, second sending with a strong signal, over an indicated S9.
The expected seasonal change of frequencies to those used in March and April of this year.

3-Oct-16:- 1700 UTC, 4,767 kHz, "574 574 574 00000", S9 signal, in progress when tuned in a few seconds before the hour, stopped just after 1702 UTC. Carrier stayed on and at around 1706 UTC started calling with, "111..... 00000" for a short while before going QRT.
1759 UTC, 4,953 kHz, second sending, over S9.

G06 Others' logs:

Monday

September 2016

0800z 6810kHz

05/09	329 ...	Weak, unworkable
19/09	329 00000	Weak

October 2016

03/10	329 00000	Weak

September 2016

1700z 4767kHz 1800z 4953kHz

12/09	574 909 137 71848 ... 66702 909 137 00000	Very strong

October 2016

03/10	574 00000	Very strong
10/10	574 00000	Very strong

Tuesday

September 2016

1659z 4767kHz 1800z 4953kHz

05/09	574 909 137 71848 ... 66702 018 137 00000 [1659z]	Fair
05/09	574 909 137 71848 ... 66702 909 137 00000 [1800z]	Fair

574 (R) 909 909 137 137
71848 70279 97387 54785 92602 87958 34225 82212 67241 43783
35131 77711 91733 97715 10034 60421 90985 24885 94883 11460
41922 43271 08412 72555 46470 93943 38370 87119 83134 38808
43900 78418 88465 78825 77362 80598 99895 92224 89415 13160
52440 73915 95589 68834 77775 69063 05095 86543 10959 77039
38869 39073 35124 60917 28889 03526 38959 53526 12898 83759
68103 34443 31939 36529 06405 66206 21324 00740 31318 63849
66109 87416 14331 75596 73075 55410 94342 71184 22683 22328
30460 46178 35849 05011 32876 63077 39181 34684 09188 99545
99680 99155 50258 76854 47699 26354 33582 80294 55891 44295
60059 64273 69337 58952 13519 87086 69252 95293 60207 46210
46688 42500 21714 27978 56633 04035 21158 02650 72893 61574
50311 19256 87918 17165 07793 27261 58624 12981 15895 91561
38292 66022 13424 48195 14549 41032 66702
018 018 137 137 00000 *Courtesy AB*

Wednesday

September 2016

1159z 5186kHz 1258z 5436kHz

14/09	574 909 137 71848 … 66702 909 137 00000	Nil sig report

1158z 5192kHz 1258z 5443kHz

05/10	574 00000	Strong

Thursday

September 2016

1829z 5934kHz

08/09	579 317 90 37839 ... 84784 317 90 00000	Strong

579 317 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 tING*

22/09	579 817 60 37839 ... 34343 317 60 00000	Very strong

October 2016

13/10 579 391 60 56237 ... 47426 391 60 00000 Fair

Friday

September 2016

1959z 5442kHz

09/09 947 391 60 56327 ... 47426 391 60 00000 Strong

947 391 60
56327 21940 73218 64184 47458 43252 32589 28474 71904 56483
34593 39453 04716 54718 94871 52894 24595 12421 48723 89248
45455 45454 45454 34545 35345 35454 35454 32454 23434 24334
56567 87876 34543 76765 34355 34543 34543 65656 24344 34343
34322 65656 34343 67656 87878 34343 67676 35435 13231 32323
63453 85958 74287 63513 53612 15879 74843 47309 94872 47426
391 60 00000 *Courtesy tING*

23/09 947 317 60 37839 ... 34344 317 60 00000 Very strong

1930z

28/10 947 149 52 12265 ... 95732 149 52 00000 Weak

S06

S06 log September 2016

Daily Mon- Fri 0400z 15721kHz
No reports

Thursdays (Repeats following day) 0830z 19035kHz 0930z 15645kHz
01/09 '842' 951 30 59380 92319 11046 03371 26173 09566 15931 32299 49472 00114 42751 55850 09702 89697 13225 22834 26955 34031 57158 13496 33593 25558 64971 95936 25069 91325 95803 60353 99913 36655 00000] 0939z

15/09 '842' 159 32 48742 54737 82415 62888 68347 99615 43336 61347 86078 96215 69851 30543 10366 85286 33754 44648 63132 06696 60624 37793 21148 49934 01115 54223 35603 95734 57795 76302 40844 03497 41010 97523 159 32 00000

22/09 '842' 706 33 73472 34032 35889 59050 62325 28327 10840 92873 35083 54797 64019 24922 36137 14421 85351 04987 90099 85517 12802 29706 89212 49599 30369 76272 80456 21612 88047 46009 02158 26760 54707 72490 43361 706 33 00000

27/09 '842' 591 34 90873 03820 40550 70425 06705 26557 62747 76626 76927 80660 17830 47799 01383 03639 89851 36834 82463 45410 62509 32685 92439 83963 36165 89289 36535 10969 49670 78423 362-9 0953- 92410 96161 80171 43306 591 34 00000

Fridays (1st & 3rd) 1900z 9496khz 2000z 6924kHz (frequencies may vary slightly)
16/09 '761' 00000

Saturdays (1st/3rd) 1900z 4756kHz 2000z 4059kHz (frequencies may vary slightly)
03/09 '614' 00000
17/09 '614' 00000

S06s September log:

Monday			
5th/12th	0830/0840z	9220/8270	'371' 920 5 38034 37823 38230 48235 38702
19th/26th			'371' 540 6 84916 96253 39313 34740 38752 93049
5th/12th	0900/0910z	14580/13165	'872' 906 5 37947 39747 31323 31829 47694
19th/26th			'872' 541 6 31317 37146 33214 84106 80533 46826
5th/12th	1200/1210z	9145/11460	'831' 831 209 5 49294 38064 31724 37324 39316
19th/26th			'831' 547 6 80533 46826 83007 91559 33577 85890
Tuesday			
6th/13th	0600/0610z	15855/16485	'438' NRH
20th/27th			'438' 290 5 49032 82871 88160 30332 84664 (Extremely weak)
6th/13th	0700/0715z	5760/6930	'374' 961 5 84496 13529 91969 44658 45517
20th/27th			'374' 985 6 46798 35467 33462 35088 51908 48749
6th/13th	0730/0740z	7425/11560	'427' 916 5 94591 86760 85007 55087 96538
20th/27th			'427' 913 5 34936 42366 44254 86014 39626
6th/13th	0800/0810z	11635/10420	'352' 806 7 97981 82006 50580 70963 83292 86087 97536
20th/27th			'352' 846 7 42647 86413 84916 96253 39313 33461 98237
6th/13th	1000/1010z	6410/7340	'893' 472 5 43167 30003 33493 94897 48995
20th/27th			'893' 421 5 84597 81254 90487 33962 99077
6th/13th	1100/1110z	6190/7230	'754' 281 6 47183 89128 59662 93898 87782 11355
20th/27th			'754' 809 6 36626 27996 31664 44527 46399 33972
6th/13th	1500/1510z	6464/7242	'537' 294 6 37391 37446 86535 89203 33244 91825
20th/27th			'537' 289 6 42935 99463 39465 36688 82974 35088

Wednesday

7th/14th	0530/0540z	9296/10365	‘464’ 938 7 11394 30307 31450 38153 39650 84498 48832
21st/28th			‘464’ 923 5 46116 34400 44228 47161 94304
7th/14th	0730/0740z	11530/12140	‘745’ 910 6 80328 32229 43306 47702 33713 48368
21st/28th			‘745’ 210 6 88238 86921 36954 18890 98870 47230
7th/14th	0820/0830z	8630/9255	‘471’ 829 5 31700 48366 36534 32840 48436
21st/28th			‘471’ 503 6 91309 84062 43661 49504 96005 83189
7th/14th	1000/1010z	13365/14505	‘729’ 508 6 11394 30307 31450 38153 39650 84498
21st/28th			‘729’ 461 5 83605 94039 47081 42841 30501

Thursday

1st/8th (E17z)	0800/0810z	14260/12930	‘674’ 203 5 52491 63919 92699 14600 74248
15th/22nd			‘674’ 209 5 33699 39998 30667 35947 83964
1st/8th	0900/0910z	5744/6524	‘624’ 935 7 55304 51511 50901 81797 94359 15302 30333
165h/22nd			‘624’ 839 5 35861 33432 89319 32494 37142
1st/8th	0930/0940z	9081/10514	‘314’ 875 6 56816 45708 86928 30194 28344 83370
15th/22nd			‘314’ 579 6 37830 31671 35401 34072 83030 32030
1st/8th	1200/1210z	12415/14212	‘425’ 960 7 93474 44147 33083 18833 92254 93097 36704
15th/22nd			‘425’ 806 7 85518 83929 48340 30054 40909 39394 42571

Friday

2nd/9th	0930/0940z	12140/13515	‘516’ 839 7 37823 38230 48235 38702 44520 46992 47281
16th/23rd			‘516’ 490 7 76342 15009 34140 78386 90494 82963 24162

Saturday

3rd	0800/0810	10350/8520	‘254’ 801 6 34895 79814 75017 50195 73904 57905

Sunday

4th/11th	0630/0640z	22185/20050	‘524’ No reports
18th/25th			‘524’ 817 6 34888 33671 37167 37671 43691 30643? (last group faded out)

Unscheduled:

S06s Voice and same Format, AM but with Suppressed USB rather than LSB.

Thurs 1st	0533z (I.P.)	9231kHz	……46291 80714 57922 69516 08704 77511 33064 49027 19155 86424 16103 14901 74750 82191 60241 06194 85016 67745 89562 30708 64037 14435 77508 32798 95570 82064 03644 52692 97528 05534 86499 74680 50132 89675 27671 79205 29488 22805 84455 122 41 00000] 0541z
	0554z (I.P.)	10933kHz	‘……..22805 84455 122 41 00000] 0558z

Identical messages, different Call - Up.

0813z (I.P.)	9082kHz	‘143’ 617 14 39475 49476 18613 79015 51602 10902 46620 93199 01125 30579 18482 07558 42575 88727 00000]
0823z (I.P.)	10603kHz	‘168’ 617 14 39475 49476.....42575 88727 00000] 0829z
1019z (I.P.)	10447kHz	‘…….00000] 101

Tues 6th

1531**z**	6902kHz	‘652’ 219 21 90969 84237 86680 07762 93912 93575 63917 09130 75404 36176 73224 60375 89472 52439 48235 20788 08046 70789 37597 54905 55887 219 21 00000
1625z	10411kHz	‘329’ 843 24 58088 17734 51795 92239 66943 01909 31708 23364 86395 66538 65073 57279 02348 51116 15869 50594 37759 96605 10783 82148 30170 27440 22940 14588 843 24 00000
1633z	9157kHz	‘329’843 24 58088 17734…….etc
1800z	10411kHz	‘307’ 329 24 58088 17734…....etc
1813z	9157kHz	‘307’ 329 24 58088 17734..…etc

Weds 7th

0948z (I.P.)	10332kHz	‘??? 59363 66850 24075 80023 82088 19320 16905 27594 296 15 00000] 0949z usb
1330z	10389kHz	‘450’ 297 13 26324 57256 65642 28310 82519 87955 05223 57975 47482 73311 30248 70915 17770 00000] 1337z

Thurs 8th

0810z	9082kHz	‘143’ 351 12 38730 81980 91333 13139 72909 09754 13863 06242 04990 86840 37260 38058 00000] lsb
0820z	10603kHz	‘168’ 351 12 38730 81980 91333 13139 72909 09754 13863 06242 04990 86840 37260 38058 00000] lsb

Tues 13th

0610z	10896khz	‘582’ 637 4 62358 02656 78452 12589 637 4 00000
0925z	10992kHz	‘724’ 313 3 30269 54120 95686 00000] 0930z lsb
0935z	9903kHz	‘357’ 313 3 30269 54120 95686 00000] 0940z lsb
1525z	6902kHz	‘652’ 601 8 45380 91175 40951 21973 77168 20312 96742 31075 601 8 00000
1620z	10441kHz	‘329’ 00000 (used lower sideband)
1630z	9157khz	‘329’ 00000 (used lower sideband)
1800z	10411kHz	‘307’ 00000 (started repeating 307 as if message was coming, then stopped and restarted with 307 x 3 00000
1810z	9157kHz	‘329’ 00000 a mistake with the call? Expected 307 Both lower sideband

Weds 14th

0939z 10332kHz '475' 00000
1225z 10291kHz '263' 00000

Thurs 15th

0530z 9231kHz '738' 00000 lsb mode
0540z 10933kHz '923' 00000 lsb mode
0810z 9082kHz '143' 00000 lsb
0820z 10603kHz '168' 00000 lsb
1300z 9231kHz '738' 00000 lsb
1310z 10933kHz '923' 00000 lsb
1515z 10447kHz '818' 00000 usb - no repeat found at 1525z

Friday 16th

0639z 6996kHz '142' 00000] 0643z usb
1010z 9199kHz '531' 00000 usb (No repeat found)

UNID S906g (S06s variant)

Tues 6th

0931z (I.P.) 10992kHz '357 18430 215 8 90180 19164 53950 38189 69998 46295 42791 45071 00000]
0938z (I.P.) 9903khz '357 18430 215 8 90180 19164 53950 38189 69998 46295 42791 45071 00000] 0943z LSB/AM
1409z 10992khz '724 724 724 18430 (R4m) 215 8 90180 19164 53950 38189 69998 46295 42791 45071 215 8 00000

Weds 7th

1224z (I.P.) 10291kHz '??? 91333 631 29 00000] 1224z - start time 1215z ?
1229z 10291kHz '263 31578 631 29 21599 59363 02348 65073 55049 04990 37260 82088 30170 93180 80023 66850 81980 16905 57279 13863 86840 38058 13139 09754 81452 38730 24075 19320 72909 27594 11466 66538 91333 00000] 1238z

Weds 14th

1330z 10389kHz '450' x3 78752 repeated for 3 minutes, No message
1340z 9046kHz '204' x3 78752 repeated for 3 minutes, No message

S06 log October 2016

Daily Mon- Fri 0400z 15721kHz
No reports

Thursdays (Repeats following day) 0830z 20312kHz 0930z 16237kHz

06/10 '842' 760 35 31065 71957 40313 30106 86823 72705 56067 80172 49802 31575 74108 07877 71032 27330 81293 87711 99022 57771 17873 52167 27366 21497 05039 23154 20558 90767 27995 21241 28985 30182 48090 19928 29003 40834 42346 760 35 00000

20/10 '842' 160 37 55424 16740 76322 56485 79585 86827 08224 98588 79551 16239 14799 87167 91511 73978 56388 75470 14387 93107 65548 37579 50108 15873 91477 84298 51802 78392 42195 67817 15829 14589 22917 67315 78598 84027 94057 72728 04117 160 37 00000

Fridays (1st & 3rd) 2000z 9496khz 2100z 6924kHz (frequencies may vary slightly)

21/10 '761' 00000

Saturdays (1st/3rd) 2000z 4756kHz 2100z 4059kHz (frequencies may vary slightly)

01/10 '614' 00000

Non scheduled:

10755kHz

10/10 0940z '975' 821 53 51872 93360 59285 35359 43131 19497 18086 62055 00498 28206 81758 37200 40901 57433 82974 13876 53341 45306 52573 22331 44308 75533 40333 42583 44259 29944 71384 55241 06834 96581 80458 81492 49822 06813 91150 48181 27030 99864 32398 38926 26258 38358 09343 17214 28774 22536 70786 32392 83056 78769 40405 44523 72788 821 53 00000] 0952z S5 Thanks Malc MON

S06s October log:

Monday

3rd/10th	0830/0840z	9220/8270	'371' 409 5 30042 38765 42363 90790 42803
17th/24th			'371' 496 5 37947 39747 31323 31829 47694
3rd/10th	0900/0910z	14580/13165	'872' 435 6 38003 44266 83420 46219 35814 30769
17th/24th			'872' 504 6 32391 38632 35044 41354 31663 41731
3rd/10th	1200/1210z	9145/11460	'831' 296 5 40328 35929 43234 33940 48075
17th/24th			'831' 509 6 46387 30197 31717 38137 34282 42358

Tuesday

4th/11th	0600/0610z	15855/16485	'438' 962 5 49314 47194 40583 33705 32293
18th/25th			'438' 912 5 63923 15287 03823 41735 04625
4th/11th	0700/0715z	5760/6930	'374' 958 6 01329 71105 89778 88848 20148 36011

18th/25th			‘374’ 802 5 49396 39625 32053 81782 47381
4th/11th	0730/0740z	7425/11560	‘427’ 931 5 72578 50903 91911 26248 57583
18th/25th			‘427’ 589 6 41645 35709 36414 49790 32628 39730
4th/11th	0800/0810z	11635/10420	‘352’ 860 7 10388 43493 13222 56835 18181 49602 38307
18th/25th			‘352’ 409 6 39613 39041 39005 35178 45024 35682
4th/11th	1000/1010z	6410/7340	‘893’ 412 5 24181 60127 11736 86781 51099
18th/25th			‘893’ 420 5 37947 39747 31323 31829 47694
4th/11th	1100/1110z	6190/7230	‘754’ 298 6 47225 62914 67608 65725 25328 40546
18th/25th			‘754’ 821 6 39249 33434 30345 88456 34983 36714
4th/11th	1500/1510z	6464/7242	‘537’ 291 6 44266 84320 33836 34717 37795 40228
18th/25th			‘537’ 421 6 34539 37126 43003 40894 83332 38861
Wednesday			
5th/12th	0530/0540z	9296/10365	‘464’ 890 5 49314 47194 40583 33705 32293
19th/26th			‘464’ 873 5 85858 17939 32860 84304 88497
5th/12th	0730/0740z	11530/12140	‘745’ 890 6 47225 04855 72189 55929 90284 38575
19th/26th			‘745’ 269 8 52401 63919 92699 14600 74248 48754 65125 41879
5th/12th	0820/0830z	8630/9255	‘471’ 893 5 10388 43493 13222 56835 18181
19th/26th			‘471’ 256 8 46062 68672 97478 39685 30485 96632 52537 53317
5th/12th	1000/1010z	13365/14505	‘729’ 801 5 49314 47194 40583 33705 32293
19th/26th			‘729’ 468 5 09394 76911 75155 58069 61732
Thursday			
6th/13th (E17z)	0800/0810z	14260/12930	‘674’ 983 5 17099 94961 35826 65906 77233
20th/27th			‘674’ 938 5 07931 98755 84636 45752 64655
6th/13th	0900/0910z	5744/6524	‘624’ 905 7 37325 54028 93793 32567 30061 48304
165h/22nd			‘624’ 938 5 58202 44206 29484 25473 03883
6th/13th	0930/0940z	9081/10514	‘314’ 960 5 38023 36140 46830 49785 33120
20th/27th			‘314’ 985 6 33445 69425 38167 05424 76458 59421
6th/13th	1200/1210z	12415/14212	‘425’ 983 6 29791 59737 38209 18844 51398 70283
20th/27th			‘425’ 830 6 62795 74228 56551 44999 47773 55580
Friday			
7th/14th	0930/0940z	12140/13515	‘516’ 832 7 46062 68672 07478 39585 30485 96632 52537
16th/23rd			‘516’ 903 7 46062 68672 97478 39685 30485 96632 52537
Saturday			
1st	0800/0810	10350/8520	‘254’ 930 6 49294 38064 31724 37324 39316 35660
Sunday			
2nd/9th	0630/0640z	22185/20050	‘524’ 960 7 31829 47694 45320 45089 32417 39436 35697
16th/23rd			‘524’ 870 6 35868 47892 37858 46347 32874 35017

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

PoSW’s logs:

The expected seasonal changes of frequency observed in September, S06 using the same frequencies as in the springtime months of March and April.

First + Third Fridays in the Month 1900 + 2000 UTC Schedule:-

16-Sept-16:- 1900 UTC, 9,491 kHz, “761 761 761 00000”, S7 to S8, inside the 31 metre band, no strong broadcast stations close enough to cause problems.
2000 UTC, 6,924 kHz, second sending, also peaking S8.
This schedule moved back to 1900 + 2000 UTC in September, was on at 2000 +2100 in the summer months.

7-Oct-16:- Moved forward by one hour in October, 2000 UTC, 9,496 kHz, 9 PM UK time,
“761 761 761 00000”, weak signal at first but came up to S6 to S7 during the course of the transmission.
2100 UTC, 6,924 kHz, second sending, stronger signal.

First + Third Saturdays in the Month 1900 + 2000 UTC Schedule:-

17-Sept-16:- 1900 UTC, 4,756 kHz, “614 614 614 00000”, S9 signal. This frequency was used in March and April. Tuning in the the expected frequency about five minutes before the hour there was strong two-way SSB chat about 1kHz higher in what sounded like Italian language or regional dialect of same; one side of the QSO had background noise that sounded as if it might be aeronautical in origin, was on continuously until about 50 seconds before S06 finished his routine just after four minutes past the hour.
2000 UTC, 4,059 kHz, second sending, S9 signal, strong “XJT” on LF side removed by using the receiver in USB mode. Was also there when this frequency was used in the springtime.

This schedule moved forwards by one hour in October, no doubt because daylight saving time has ended in whatever part of the world agent “614” resides and he doesn't want to change his Saturday routine. We Brits are still on “British Summer Time” until the last weekend in October, even if the daytime temperature barely gets into double figures on the Celsius scale and it is chucking it down with rain outside.

1-Oct-16:- 2000 UTC, 4,756 kHz, “614 614 614 00000”, S8 to S9 on a clear frequency.
2100 UTC, 4,059 kHz, second sending, still with the strong “XJT” on the LF side.

S06s YL Voice:-

Some unusual activity from S06s female voice, or "Young Olga" as I like to think of her;
usually on at predictable times and frequencies depending on the season of the year using that lower side-band suppressed with carrier mode of transmission, although the carrier seems to be reduced but not totally eliminated on many transmissions. However, a few S06s transmissions have been noted with the *upper* side-band suppressed requiring the receiver to be in LSB mode to resolve the audio. Also there has been some activity operating outside of the predicted schedules in the early evening UK time and on the couple of occasions when a full message was heard there was a 5F group in the call-up routine and there appeared to be no repeat transmission. Also the group counts were higher than the usual five, six or seven.
Starting with these:-

9-Sept-16, Friday:- 1813 UTC, 7.13 PM UK time, 9,157 kHz, S06s YL calling "329 329 329 27419", the usual S06s monitoring routine of selecting USB mode on the receiver and quickly tuning for carrier zero-beat produced …. silence! The lower side-band was being transmitted here. DK/GC "209 209 12 12", a double figure group count, not heard one of those before, "53830 33804 94344 49973 54312 14434 06008 98175 92649 32330 55049 89522". Ended around 1817:35s UTC, carrier stayed on for a further couple of minutes. No repeat found.

11-Sept-16, Sunday:- 1753 UTC, 10,291 kHz, another S06s with a 5F group in the call-up, "263 263 263 46215", call-up in progress when found, using the more common USB mode, DK/GC "375 375 9 9", "89522 55049 32330 50240 56915 21786 73001 11639 01046", ended after 1757 UTC, no second sending found.

13-Sept-16, Tuesday:- 1800 UTC, 10,411 kHz, calling "307" without a 5F as though the normal S06s "full message" call-up routine, was in LSB mode. Stopped for about seven or eight seconds around 1802 UTC then came back with "307 307 307 00000", i.e. the usual "no message" format. 1809 UTC, 9,157 kHz, not a second sending of the above, but "329 329 329 00000" lower side-band mode, stopped after 1813.

14-Sept-16, Wednesday:- 1751 UTC, 10,291 kHz, in progress when tuned in, "263 263 263 00000", USB mode, stopped after 1753, no further transmission found, had also had a fruitless quick tune around at 1740Z in anticipation of some possible S06s activity in case this was itself the second sending of a schedule.

16-Sept-16, Friday:- 1800 UTC, 10,414 kHz, not 10,411 as on the 13th, "307 307 307 00000", weak signal, upper side-band mode.
1809 UTC, 9,157 kHz, "329 329 329 00000", S7 USB.

Whatever was going on here appears to have ended, nothing observed at these times and frequencies on subsequent days.

On to some of the predicted S06s schedules, those which show up with reasonable signal strengths:-

Monday 0830 + 0840 UTC, Call "371":-
5-Sept-16:- 0830 UTC, 9,220 kHz, DK/GC "920 920 5 5", "38034 37823 38230 48235 38702", weak signal.
0840 UTC, 8,270 kHz, second sending, stronger signal.

19-Sept-16:- 0830 UTC, 9,220 kHz, may have started late, tuned in approx 0834Z, call-up in progress and DK/GC not reached until well after 0835, "540 540 6 6", weak signal, "84916 96253 39313 34740 38752 93049".
0840 UTC, only ten seconds late!, 8,270 kHz, second sending, stronger signal, S7 to S8.

26-Sept-16:- 0830 UTC, 9,220 kHz, weak signal, difficult copy.
0840 UTC, 8,270 kHz, second sending, DK/GC "540 540 6 6" and 5Fs as last time.

Monday 0900 + 0910 UTC Schedule, Call "872":-
26-Sept-16:- 0900 UTC, 14,580 kHz, DK/GC "541 541 6 6", "31317 37146 33214 84106 80533 46826", S7 with QSB.
0910 UTC, 13,165 kHz, second sending.

Monday 1200 + 1210 UTC Schedule, Call "831":-
12-Sept-16:- 1210 UTC, 11,460 kHz, second sending, missed 1200 UTC sending, DK/GC "209 209 5 5", "49294 38064 31724 37324 39316", transmitted in lower side-band mode instead of the more usual upper side-band.

19-Sept-16:- 1210 UTC, 11,460 kHz, 1200z sending on 9,145 was too weak to copy, DK/GC "547 547 6 6", "80533 46826 83007 91559 33577 84890", strength S7 in USB mode.

17-Oct-16:- 1200 UTC, 9,145 kHz, very weak signal, could just make out the "831" call.
1210 UTC, 11,460 kHz, second sending much stronger, DK/GC "509 509 6 6", "46387 30197 31717 38137 34282 42358".

Tuesday 0730 + 0740 UTC Schedule, Call "427":-
6-Sept-16:- 0730 UTC, 7,425 kHz, first sending of "427", too weak to copy.
0740 UTC, 11,560 kHz, second sending, much stronger, peaking S9, DK/GC "916 916 5 5",
"94591 86760 85007 55087 96538".

20-Sept-16:- 0730 UTC, 7,425 kHz, weak signal, unable to copy.
0740 UTC, 11,560 kHz, second sending much stronger again, DK/GC "913 913 5 5", "34936 42366 44254 86014 39626".

4-Oct-16:- 0730 UTC, 7,425 kHz, unusually strong signal, over S9, DK/GC "931 931 5 5",
"72578 50903 91911 26248 57583".
0740 UTC, 11,560 kHz, second sending, also strong peaking well over S9.

18-Oct-16:- 0740 UTC, 11,560 kHz, - missed 0730z transmission, - DK/GC "589 589 6 6",
"41645 35709 36414 49790 32628 39730".

Tuesday 0800 + 0810 UTC Schedule, Call "352":-
13-Sept-16:- 0800 UTC, 11,635 kHz, DK/GC "806 806 7 7", "97981 82806 50580 90963 83292 86087 97536", S7 with deep QSB, much weaker HM01 heard underneath.
0800 UTC, 10,420 kHz, second sending (?), very weak, unreadable.

20-Sept-16:- 0800 UTC, 11,635 kHz, DK/GC "846 846 7 7", "42647 86413 84916 96253 39313 33461 98237", over S9.
0810 UTC, 10,420 kHz, second sending, much stronger signal than last week, S7 to S8.

Wednesday 0820 + 0830 UTC Schedule, Call "471":-
21-Sept-16:- 0820 UTC, 8,630 kHz, DK/GC "503 503 6 6", "91309 84062 43661 49504 96005 83189", strong "XJT" on LF side, reasonable copy in USB mode.
0830 UTC, 9,255 kHz, second sending, S9 on a clear frequency.

28-Sept-16:- 0820 UTC, 8,630 kHz, "503 503 6 6" and 5Fs as last time
0830 UTC, 9,255 kHz, second sending, peaking over S9.

19-Oct-16:- 0820 UTC, 8,630 kHz, DK/GC "256 256 8 8", don't often get eight 5F groups with S06s, "46062 68672 97478 39685 30485 96632 52537 53317", S8, strong carrier approx 3 kHz higher.
0830 UTC, 9,255 kHz, second sending, S9.

Wednesday 1000 + 1010 UTC Schedule, Call "729":-
7-Sept-16:- 1000 UTC, 13,365 kHz, DK/GC "508 508 6 6", "11394 30307 31450 38153 39650 84498", S9+, one of the stronger transmissions from S06s.
1010 UTC, 14,505 kHz, second sending, also a good S9 or over.

14-Sept-16:- 1000 UTC, 13,365 kHz, "508 508 6 6" and 5Fs same as on the 7th, S8 to S9.
1010 UTC, 14,505 kHz, second sending, S9.

21-Sept-16:- 1000 UTC, 13,365 kHz:- DK/GC "461 461 5 5", "83605 94039 47081 42841 30501", over S9.
1010 UTC, 14,505 kHz, S9.

5-Oct-16:- 1010 UTC, 14,505 kHz, missed the 1000z, DK/GC "801 801 5 5", "49314 47194
40583 33705 32293", S8 to S9.

Friday 0930 + 0940 UTC Schedule, Call "516":-
2-Sept-16:- 0930 UTC, 12,140 kHz, DK/GC "839 839 7 7", "37823 38230 48235 38702 44520 46992 47281", S9+, very strong signal.
0940 UTC, 13,515 kHz, second sending, over S9.
A distinct pause between 5Fs 5 & 6.

9-Sept-16:- 0930 UTC, 12,140 kHz, "839 839 7 7" and 5Fs as last time, S9 signal.
0940 UTC, 13,515 kHz, second sending, S9+.

16-Sept-16:- 0930 UTC, 12,140 kHz, DK/GC "490 490 7 7", "76342 15009 34140 78386 90494 82963 24162".
0941 and 40s UTC approx, late start, 13,515 kHz, second sending.

30-Sept-16:- 0930 UTC, 12,140 kHz, "516 516 516 00000", - no message, S9+, very strong signal, missed second transmission.

7-Oct-16:- 0930 UTC, 12,140 kHz, DK/GC "832 832 7 7", "46062 68672 07478 39585 30485 96632 52537", S6 .
0940 UTC, 13,515 kHz, second sending, slightly stronger.

14-Oct-16:- 0930 UTC, 12,140 kHz, "832 832 7 7" and same 5Fs as last time, S9 signal.
0940 UTC, 13,515 kHz, second sending, much weaker, interference from the rapidly swept carrier which lives here.

21-Oct-16:- 0930 UTC, 12,140 kHz:- DK/GC "903 903 7 7", something a bit odd here, the 5F groups were almost the same as those transmitted on the 7th and 14th , a "9" instead of a "0" in group number three and a "6" instead of a "5" in number four - assuming I heard it correctly read as, "46062 68672 97478 39685 30485 96632 52537". S9+, very strong signal and a distinct "crackle" on the audio.
0940 UTC, 13,515 kHz, second sending, also S9+ with a crackle.

S11a log Sept/October

4016kHz	1955z	16/09 [371/00] Weak with QRM	RNGB	FRI
	1955z	21/09 [370/39 59522……..31927] Konyetz 2006z S9+10	Malc	WED
	1955z	23/09 [370/39 59522 31705 34315 55482 84821 66390 67128 84079……18765 31927] Good	RNGB	FRI
	1955z	28/09 [371/00] Konyetz 1958z S9	Malc	WED
	1955z	05/10 [371/00] Konyetz 1958z S7 QRM	Malc	WED
	1955z	07/10 [371/00] Konyetz 1958z S3	Malc	FRI
	1955z	12/10 [371/00] Konyetz 1958z S9+10 QRM	Malc	WED
	1955z	19/10 [377/32 68984 68402 59741 49550 00326 08075 14741…..27881 72361] Good	RNGB, Malc	WED
	1955z	28/10 [371/00] Konyetz 1958z S7	Malc	FRI
5358kHz	0455z	06/09 [321/00] КОНЕЦ 0458z	Ed Smith	TUE
	0455z	13/09 [321/00] КОНЕЦ 0458z	Ed Smith	TUE
	0455z	20/09 [326/36 59352 93810 93767 86806 44566 87821 37075.....39999 94435] КОНЕЦ 0506z	Ed Smith	TUE
	0455z	27/09 [321/00] КОНЕЦ 0458z	Ed Smith	TUE
	0455z	11/10 [322/36 72856 80389 05200 13745 54664 39652 73545…… 57652 60364] КОНЕЦ 0506z	Ed Smith	TUE
7317kHz	0915z	02/09 [484/00] Konyetz 0918z S3	Malc	FRI
	0915z	06/09 [484/00] Konyetz 0918z S2	Malc	TUE
	0915z	13/09 [484/00] Konyetz 0918z S3	Malc, Ed smith	TUE
	0915z	16/09 [484/00] КОНЕЦ 0918z	Ed Smith	FRI
	0915z	20/09 [484/00]	RNGB	TUE
	0915z	04/10 [484/00]	RNGB	TUE
	0915z	06/10 [484/00] Konyetz 0918z S2	Malc	FRI
	0915z	11/10 [484/00] Konyetz 0918z S3	Malc	TUE
	0915z	14/10 [484/00] Konyetz 0918z S4	Malc	FRI
	0915z	18/10 [484/00] Fair	RNGB	TUE
	0915z	25/10 [487/36 16434 21754 61103 89149 51825 88324 10918……63791 99843] Weak	Ary, RNGB	TUE
	0915z	28/10 [487/36 16434……etc] Repeat of Tuesday	Malc	FRI

9960kHz	1020z	02/09 [426/00] Konyetz 1023z QSA4 QRM1 QRN1 QSB1	Thomas, Malc	FRI
	1020z	06/09 [426/00] Konyetz 1023z S2	Malc, Ed Smith	TUE
	1020z	13/09 [426/00] Konyetz 1023z S4	Malc , Ed Smith	TUE
	1020z	20/09 [429/36 26357 43556 93811 33243 24303 83762 91519……91246 27193]	RNGB, Ed Smith	TUE
	1020z	04/10 [421/40 85751 86758 84759 39595 20884 82881 01009.…24810 94624] Konyetz 1032z S5	RNGB, Malc	TUE
	1020z	07/10 [421/40 85751….etc] Repeat of Tuesday	Malc	FRI
	1020z	11/10 [426/00] Konyetz 1023z S5	Malc	TUE
	1020z	18/10 [426/00]	RNGB	TUE
	1020z	28/10 [426/00] Konyetz 1023z S4	Malc	FRI
10800kHz	1540z	14/09 [563/00] Good	RNGB, Gary H	WED
	1540z	17/09 [563/00]	Malc	SAT
	1540z	21/09 [563/00] Konyetz 1543z S3	Malc	WED
	1540z	24/09 [563/00] Konyetz 1543z S4	Malc	SAT
	1540z	28/09 [563/00] Konyetz 1543z S3	Malc	WED
	1540z	01/10 [563/00]	Gary H	SAT
	1540z	05/10 [563/00] Konyetz 1543z S3	Malc	WED
	1540z	12/10 [563/00] Konyetz 1543z S9	Malc	WED
	1540z	15/10 [563/00] Konyetz 1543z S3	Malc	SAT
	1540z	19/10 [563/00] Konyetz 1543z S5	Malc	WED
	1540z	29/10 [56?/32 09761.....76528] Konyetz 1550z S9	Malc	SAT
16112kHz	1015z	01/09 [475/00] КОНЕЦ 1018z QSA2	Ed Smith	THU
	1015z	08/09 [470/38 69978…….42333]	Malc	THU
	1015z	12/09 [475/00] Konyetz 1018z S5	Malc	MON
	1015z	15/09 [475/00]	Ed Smith	THU
	1015z	26/09 [475/00] Konyetz 1018z S2	Malc	MON
	1015z	27/10 [475/00] Konyetz 1018z S2	Malc	THU
	1015z	31/10 [475/00] Konyetz 1018z S2	Malc	MON

V02a

V02a had not been heard in a while and it was assumed that it had gone away when the M08a transmissions ceased. On Thursday 15/9 on 7554kHz at 2000z there was no morse heard but it seemed that there may be a SS/YL voice in the background but too weak to confirm. Then on 6/10 in the same time slot the following was heard.

7554kHz2000z	06/10 [A56301 77131 82151] V02a still with us!	THU

So it seems that V02a did indeed survive whatever changes/problems had occurred over the previous few months. Good news indeed.

V07

Sunday

September 2016

0300z	**16037kHz**	**0320z**	**14637kHz**	**0340z**	**12137kHz**	
11/09	Test tones only					Very weak
18/09	661 1 ??? ?? ????? 47748 57303 88379 ... 75338 ??577 000 000					Very weak
25/09	661 000					Weak

October 2016

0100z	**18074kHz**	**0120z**	**15874kHz**	**0140z**	**14374kHz**	
09/10	NRH					
16/10	Weak test tones heard, Null Msg					
23/10	883 000					Weak
30/10	883 1 273 77 25434 90328 ...32384 72337 000 000					Weak

883 1 273 77
25434 90328 33488 03924 88407
58871 72585 02389 22533 43332
21434 10203 20812 03019 20879
05714 74215 01844 05581 30290
04151 11871 83807 28542 81333
00754 43512 23345 73149 03387
18831 51987 27353 11812 08533
15343 43020 83339 19525 71754
45259 21047 73340 82913 92452
22153 28534 34381 18030 41300
27831 74900 52933 11307 77394
47478 92377 50413 34980 10257
31843 25510 58958 30254 08247
39977 70820 48821 80883 84284
37574 91437 12830 31817 83100
32384 72337 000 000 *Courtesy DanA*

V15

Kim brings back spying by numbers

Richard Lloyd Parry, Asia Editor
July 21 2016, 12:01am, The Times

http://www.thetimes.co.uk/edition/world/kim-brings-back-spying-by-numbers-dhhphbzdh

Kim Jong Un's regime has resumed the practice of "spy radio" - broadcasting sequences of numbers in the middle of the nightLee Jin-man/AP

They were one of the enigmas of the Cold War — sequences of meaningless numbers intoned with great solemnity over shortwave radio frequencies, containing coded messages for spies and sleeper agents. Now North Korea, the land where the Cold War never ended, has revived the craft of "spy radio".

The South Korean government reports that after a 16-year hiatus Pyongyang has restarted the sinister late-night broadcasts. The reason behind it is a mystery. Does it indicate a new effort at infiltrating agents into North Korea's many enemies? Or is it just a mind game intended to sow suspicion and confusion?

The latest broadcast was made in the early hours of last Friday, and presented itself as an exercise for distance-learning students. At 00.45 in the morning, a female voice said in Korean: "Commencing now, I will give review work for the subject of mathematics under the curriculum of a remote education university for exploration agents of the 27th bureau."

She went on: "On page 459, number 35, on page 913, number 55, on page 135, number 86, on page 257, number 2." The broadcast continued in the same way for 12 minutes.

If it is not a homework assignment for conscientious North Korean maths students, the message may be a book cypher. The recipient agent, wherever he or she is, notes down the references, which pinpoint letters or words in a specified book and spell out a message.

Such broadcasts originated in Europe in the Second World War and have been used all over the world. In 2010 similar messages broadcast in Chinese were detected in Taiwan, the breakaway island that Beijing claims as its own.

According to South Korea's ministry of national unification, which is responsible for matters relating to North Korea, it was the first such broadcast from the North since 2000, when the leaders of the fraternal enemies held their first summit.

The warming of relations that accompanied the talks was one reason for the broadcasts ceasing — but with the rise of the internet it also became easier to send coded messages by email. The advantage of a radio broadcast, however, is that unlike a written message that can be found, it betrays no link to its recipient.

"Numbers broadcasts have been on hold for quite some time but have recently resumed, something we think is very regrettable," Jeong Joon Hee, of South Korea's unification ministry, said.

"We can't speak conclusively about North Korea's hidden intentions behind the broadcasting. But we urge North Korea to desist from such outdated practices and seek ways to improve the relationship between the Koreas."

http://www.thetimes.co.uk/edition/world/kim-brings-back-spying-by-numbers-dhhphbzdh [Thanks 'E']

From Moomin:

Date: September 16, 2016, KST 25:15 (PYT 24:45)

Location: ROK, Gyeonggi-do

Frequency : - (You must not write the comment about the frequency.)

Receiver: SDRPlay + 303WA-2

NOTE (Example):

Before, They transmit a song, "기쁨의 노래안고 함께 가리라 (We will go together with a song of joy)".

Then, They begin to announce. "지금부터 27호 탐사대원들을 위한 원격교육대학 정보기술기초 복습과제를 알려드리겠습니다. (We will notice the repetition homework of the basic Information Technology of Distance Learning University for No.27 exploration agent.)

and they also tell, "문제를 부르겠습니다. (We will give questions.)“

At that moment, Page can be told between 100 and 999. and

No. can be told from 1 to 100 inclusive.

When the transmission end, they tell, "n페지 n번'입니다'. '이상입니다.' (Page n, No. n are. That's all.)“ (Once they tell last number, they have to tell, "~페지 ~번'입니다.'")

2016. 09. 16
V15 North Korean Numbers Station Record
We will We will notice the repetition homework of the science of Distance Learning University for No.27 exploration agent.

지금부터 27호 탐사대원을 위한 원격교육대학 과학복습과제를 알려드리겠습니다.

We will give questions.

Page 774, No. 79
Page 326, No. 2
Page 258, No. 12
Page 741, No. 58
Page 419, No. 50
Page 687, No. 84
Page 900, No. 40
Page 187, No. 38
Page 905, No. 45
Page 813, No. 48
Page 432, No. 6
Page 672, No. 55
Page 894, No. 79
Page 932, No. 48
Page 422, No. 18
Page 299, No. 62
Page 97, No. 81
Page 212, No. 2
Page 392, No. 12
Page 863, No. 19
Page 923, No. 8
Page 561, No. 96
Page 533, No. 83
Page 429, No. 60
Page 201, No. 60
Page 299, No. 18
Page 853, No. 99 are.

We will give questions again.

Page 774, No. 79
Page 326, No. 2
Page 258, No. 12
Page 741, No. 58
Page 419, No. 50
Page 687, No. 84
Page 900, No. 40
Page 187, No. 38
Page 905, No. 45
Page 813, No. 48
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Page 863, No. 19
Page 923, No. 8
Page 561, No. 96
Page 533, No. 83
Page 429, No. 60
Page 201, No. 60
Page 299, No. 18
Page 853, No. 99 are.

That's all.

문제를 부르겠습니다.

774페지 79번
326페지 2번
258페지 12번
741페지 58번
419페지 50번
687페지 84번
900페지 40번
187페지 38번
905페지 45번
813페지 48번
432페지 6번
672페지 55번
894페지 79번
932페지 48번
422페지 18번
299페지 62번
97페지 81번
212페지 2번
392페지 12번
863페지 19번
923페지 8번
561페지 96번
533페지 83번
429페지 60번
201페지 60번
299페지 18번
853페지 99번 입니다.

다시 부르겠습니다.

774페지 79번
326페지 2번
258페지 12번
741페지 58번
419페지 50번
687페지 84번
900페지 40번
187페지 38번
905페지 45번
813페지 48번
432페지 6번
672페지 55번
894페지 79번
932페지 48번
422페지 18번
299페지 62번
97페지 81번
212페지 2번
392페지 12번
863페지 19번
923페지 8번
561페지 96번
533페지 83번
429페지 60번
201페지 60번
299페지 18번
853페지 99번 입니다.

이상입니다.

3250//3320//6400 kHz, 1615z 29/09 AM

Song "gippeum-ui nolaeango hamkke galila" followed by messages in Korean .

Repeat of 15-09

Hear the transmission:

https://www.youtube.com/watch?v=wMJeSaRZhdg

Thanks Moomin and others

V21

The Babbler continues to be present on 5637kHz and 6529kHz with weak signals. Expect transmissions to switch to approximately 1400z when the clocks fall backward in early November. There was operational traffic transmitted on 1/10 on 5637kHz, expect some analysis of this traffic in the next newsletter. The following were logged over the past two months.

6529kHz1300z 17/09 Present but extremely weak one count to 50 and possibly higher heard. SAT

5637kHz1300z 24/09 [48, 50, 16, 10, 23, 18, 42, 100, 19,] Most counts with 00. A few minutes after the transmission had apparently ended 00 was heard to be repeated multiple times. SAT

5637kHz1300z 01/10 Operational traffic, still to be analyzed. SAT

6529kHz1300z 01/10 In progress three counts to 60 were heard. SAT

6529kHz1300z 23/10 In progress [.....40, 40, 40, 40, 40, 40..still IP@ 1315z...40, 40, continues. SUN

V26

September 2016

4243kHz1206z 11/09/16[(From M95 sked - Voice - USB - Chinese - Female - //9054) (Remote tuner Hong Kong)] JPL SUN
4243kHz1211z 13/09/16[(From M95 sked - Voice - USB - Chinese - Female - //9054) (Remote tuner Hong Kong)] JPL TUE
4243kHz1201z 20/09/16[(From M95 sked - Voice - USB - Chinese - Female - //9054) (Remote tuner Hong Kong)] JPL TUE
4243kHz1206z 22/09/16[(From M95 sked - Voice - USB - Chinese - Female - //9054) (Remote tuner Hong Kong)] JPL THU

4532kHz1219z 01/09/16[(From M95 sked - Voice - USB - Chinese - Female - //9054) (Remote tuner Hong Kong)] JPL THU
4532kHz1217z 02/09/16[(From M95 sked - Voice - USB - Chinese - Female - //9054) (Remote tuner Hong Kong)] JPL FRI

8073kHz0023z 07/09/16[(From M95 sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)] JPL WED
8073kHz0022z 08/09/16[(From M95 sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)] JPL THU
8073kHz1217z 11/09/16[(From M95 sked - Voice - USB - Chinese - Female) (Remote tuner Hong Kong)] JPL SUN
8073kHz1230z 13/09/16[(From M95 sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)] JPL TUE
8073kHz0025z 14/09/16[(From M95 sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)] JPL WED
8073kHz0024z 18/09/16[(From M95 sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)] JPL SUN
8073kHz1155z 20/09/16[(IP - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)] JPL TUE
8073kHz0024z 22/09/16[(From M95 sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)] JPL THU

9054kHz1219z 01/09/16[(From M95 sked - Voice - USB - Chinese - Female - //4243) (Remote tuner Hong Kong)] JPL THU
9054kHz1217z 02/09/16[(From M95 sked - Voice - USB - Chinese - Female - //4243) (Remote tuner Hong Kong)] JPL FRI
9054kHz0018z 08/09/16[(From M95 sked - Voice - USB - Chinese - Female - //4243 N/H) (Remote tuner Hong Kong)] JPL THU
9054kHz1206z 11/09/16[(From M95 sked - Voice - USB - Chinese - Female - //4243) (Remote tuner Hong Kong)] JPL SUN
9054kHz1212z 12/09 (Voice - USB - Chinese - Female) QSA1 DanAR MON
9054kHz1211z 13/09/16[(From M95 sked - Voice - USB - Chinese - Female - //4243) (Remote tuner Hong Kong)] JPL TUE
9054kHz0001z 19/09/16[(From M95 sked - Voice - USB - Chinese - Female) (Remote tuner Hong Kong)] JPL MON
9054kHz1205z 20/09 (Voice - USB - Chinese - Female) QSA2 DanAR TUE
9054kHz1201z 20/09/16[(From M95 sked - Voice - USB - Chinese - Female - //4243) (Remote tuner Hong Kong)] JPL TUE
9054kHz1206z 22/09/16[(From M95 sked - Voice - USB - Chinese - Female - //4243) (Remote tuner Hong Kong)] JPL THU
9054kHz0003z 28/09/16[(From M95 sked - Voice - USB - Chinese - Female) (Remote tuner Hong Kong)] JPL WED

October 2016

4243kHz0958z 01/10/16[(From M95 sked - Voice - USB - Chinese - Female) (Remote tuner Japan)] JPL SAT
4243kHz0931z 02/10/16[(From M95 sked - Voice - USB - Chinese - Female - // 9054) (Remote tuner Japan)] JPL SUN
4243kHz1200z 17/10/16[(From M95 Sked - Voice - USB - Chinese - Female - // 9054) (Remote tuner Hong Kong)] JPL MON
4243kHz1203z 23/10/16[(From M95 sked - Voice - USB - Chinese - Female - Cont'd - // 9054) (Remote tuner Hong Kong)] JPL SUN
4243kHz1228z 25/10/16[(From M95 sked - Voice - USB - Chinese - Female - // 9054) (Remote tuner Hong Kong)] JPL TUE
4243kHz1232z 28/10/16[(From M95 sked - Voice - USB - Chinese - Female - // 9054) (Remote tuner Hong Kong)] JPL FRI
4243kHz1212z 29/10/16[(From M95 sked - Voice - USB - Chinese - Female - // 9054) (Remote tuner Hong Kong)] JPL SAT

8073kHz0020z 29/09/16[(From M95 sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)] JPL THU
8073kHz1155z 30/09/16[(IP - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)] JPL FRI
8073kHz0019z 08/10/16[(From M95 sked - Voice - USB - Chinese - Male - Cont'd) (Remote tuner Hong Kong)] JPL SAT
8073kHz0045z 21/10/16[(From M95 Sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)] JPL FRI
8073kHz0011z 24/10/16[(From M95 sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)] JPL MON
8073kHz0015z 26/10/16[(From M95 sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)] JPL WED
8073kHz0015z 26/10/16[(From M95 sked - Voice - USB - Chinese - Male) (Remote tuner Hong Kong)] JPL WED

9054kHz0931z 02/10/16[(From M95 sked - Voice - USB - Chinese - Female - // 4243) (Remote tuner Japan)] JPL SUN
9054kHz0016z 08/10/16[(IP - Voice - USB - Chinese - Female - Cont'd) (Remote tuner Hong Kong)] JPL SAT
9054kHz1200z 17/10/16[(From M95 Sked - Voice - USB - Chinese - Female - // 4243) (Remote tuner Hong Kong)] JPL MON
9054kHz1203z 23/10/16[(From M95 sked - Voice - USB - Chinese - Female - Cont'd - // 4243) (Remote tuner Hong Kong)] JPL SUN
9054kHz0020z 24/10/16[(From M95 sked - Voice - USB - Chinese - Female) (Remote tuner Hong Kong)] JPL MON
9054kHz1228z 25/10/16[(From M95 sked - Voice - USB - Chinese - Female - // 4243) (Remote tuner Hong Kong)] JPL TUE
9054kHz1232z 28/10/16[(From M95 sked - Voice - USB - Chinese - Female - // 4243) (Remote tuner Hong Kong)] JPL FRI
9054kHz1212z 29/10/16[(From M95 sked - Voice - USB - Chinese - Female - // 4243) (Remote tuner Hong Kong)] JPL SAT
9054kHz2338 z 31/10 Voice - USB - Chinese - Female (seems to be a test emission) QSA 2 DanAR MON
9054kHz0005z 01/11 Voice - USB - Chinese - Female (with msg) QSA1 DanAR MON

XPA c

Wednesday/Saturday

September 2016

0600z	**10359kHz**	**0620z**	**11559kHz**	**0640z**	**13559kHz**	
03/09	355 1 06610 00221 46447 31531 [0640z NRH]					Weak
07/09	355 000 05215 00001 00000 10140			[0600z Weak, QRN3]		Strong
10/09	355 000 09879 00001 00000 10140					Strong
14/09	355 1 06287 00151 59765 21560					Very strong
17/09	355 1 06287 00151 59765 21560			[0600/0620z Weak, QSB]		Very strong
21/09	355 000 03239 00001 00000 10140					Very strong
24/09	355 000 09155 00001 00000 10140					Fair
28/09	355 1 01216 00179 37735 24372			[0620zWeak&noisy. 0640z PulseQRM5]		Very strong

October 2016

0600z	**10868kHz**	**0620z**	**12168kHz**	**0640z**	**13368kHz**	
01/10	813 1 01216 00179 37735 24372					Weak, QRN3-5 QSB3
05/10	813 000 03322 00001 00000 10140					Fair, QSB3
08/10	813 000 01924 00001 00000 10140					Strong
12/10	813 1 02354 00231 78819 05464					Very strong
15/10	813 000 09551 00001 00000 10140					Very strong
19/10	813 000 04624 00001 00000 10140					Very strong
22/10	813 000 07652 00001 00000 10140					Very strong
26/10	813 000 04670 00001 00000 10140					Very strong
29/10	NRH`					Poor condx

XPA e

Tuesday/Thursday

September 2016

1900z	**10576kHz**	**1920z**	**10476kHz**	**1940z**	**9276kHz**	
01/09	542 000 01194 00001 00000 10140					Weak
06/09	542 000 02429 00001 00000 10140			[1920z NRH]		Weak, QRN3
08/09	542 000 02429 00001 00000 10140			[1900/1920z unworkable]		Weak, QRN3
13/09	542 1 08283 00269 75549 13044			[1900/1920z unworkable]		Very weak
15/09	542 1 08283 00269 75549 13044			[1900z QSB to nil, unworkable]		Fair, QSB3/5
20/09	542 000 06935 00001 00000 10140					Weak
22/09	542 000 07422 00001 00000 10140					Weak
27/09	542 000 01839 00001 00000 10140			[1920z Unworkable]		Very weak

October 2016

1900z	**9362kHz**	**1920z**	**8062kHz**	**1940z**	**7462kHz**
04/10	*NRH*				

This station has not been heard on this schedule since 27/09, a null message. Note the very weak signals and the recent poor propagation.
Other days chccked for change of day without success.

XPA2 m

Sunday/Tuesday

September 2016

1800z	**14538kHz**	**1820z**	**13538kHz**	**1840z**	**12138kHz**	
04/09	01572 00183 38963 00224					Very poor across schedule
06/09	09949 00001 00000 10140					Very strong
11/09	04438 00001 00000 10140			[1840z XJTQRM3]		Very strong
13/09	06182 00001 00000 10140			[1840z XJTQRM3]		Very strong
18/09	08612 00075 65897 51425					Very strong
20/09	08612 00075 65897 51425			[1840z lost in XJTQRM4/5]		Fair
25/09	08579 00001 00000 10140					Strong
27/09	07083 00001 00000 10140			[1800/1820z NRH]		Very weak

October 2016

1500z	**16338kHz**	**1520z**	**14538kHz**	**1540z**	**13538kHz**	
02/10	04477 00001 00000 10140			[1500z Fair]		Very strong
04/10	01292 00001 00000 10140			[Audible Argentine, NRH Eu]		Very weak
09/10	00430 00087 46311 41636					Very strong
11/10	00430 00087 46311 41636					Very strong
16/10	01585 00001 00000 10140					Very strong
18/10	03417 00001 00000 10140					Very strong
23/10	04320 00001 00000 10140					Very strong
25/10	02504 00001 00000 10140					Very strong
30/10	01385 00095 15339 43711					Strong

XPA2 p

Sunday/Friday

September 2016

1500z	**16147kHz**	**1520z**	**14947kHz**	**1540z**	**14447kHz**	
04/09	08864 00093 78099 75243					Very poor across schedule
09/09	07448 00001 00000 10140					Strong
11/09	01210 00001 00000 10140					Very strong
16/09	04434 00097 86688 21402					Very strong
18/09	04434 00097 86688 21402					Very strong
23/09	04434 00097 86688 21402					Fair
25/09	02386 00001 00000 10140					Strong
30/09	07234 00001 00000 10140					Very strong

October 2016

1500z	**16147kHz**	**1520z**	**14947kHz**	**1540z**	**14447kHz**	
02/10	04640 00001 00000 10140			[1520zVery strong]		Weak, unworkable
07/10	04218 00157 47738 24643					Fair
09/10	04218 00157 47738 24643					Very strong
14/10	NRH, poor condx					

16/10	04714 00001 00000 10140		Fair
21/10	06601 00001 00000 10140		Very strong
23/10	02863 00001 00000 10140		Very strong
28/10	02910 00209 14922 62043		Weak, QSB to nil
30/10	NRH		

XPA2 r

Friday/Saturday

September 2016

1900z	**16167kHz**	**1920z**	**14663kHz**	**1940z**	**13923kHz**	
02/09	Message, unworkable					Very poor across schedule
03/09	Message, unworkable					Very poor across schedule
09/09	07397 00001 00000 10140					Weak
10/09	09592 00001 00000 10140					Weak
16/09	00114 00085 10629 57155			[3m16s lg]		Fair
17/09	00114 00085 10629 57155					Weak
23/09	05367 00001 00000 10140					Weak (DanAr)
24/09	09035 00001 00000 10140					Very strong
30/09	NRH					

October 2016

1400z	**17462kHz**	**1420z**	**16114kHz**	**1440z**	**14828kHz**	
01/10	Null Msg					1400/1420z NRH 1440z weak, unworkable
07/10	05159 00063 67987 35164					Fair
08/10	05159 00063 67987 35164					Very strong
14/10	07315 00001 00000 10140			[1400/1420z NRH]		Weak, QSB3
15/10	08279 00001 00000 10140					Very strong
21/10	09811 00001 00000 10140					Very strong
22/10	04913 00001 00000 10140					Very strong
28/10	05963 00101 86235 53673					Very strong
29/10	05963 00101 86235 53673					Very strong

XPA2 t

Tuesday/Friday

September 2016

0700z	**17429kHz**	**0720z**	**18269kHz**	**0740z**	**20129kHz**	
02/09	Null message, unworkable			[0720/0740z NRH]		Weak,QSB3/4
09/09	05731 00089 41480 34217					Very strong
13/09	03976 00091 56635 61245			[0740z Weak, noisy]		Fair
15/09	09078 00001 00000 10140					Weak, noisy
20/09	07526 00001 00000 10140					Very weak, noisy
27/09	Msg, 3m43s lg			[0740z NRH]		Weak, unworkable
30/09	04030 00001 00000 10140			[0740z weak]		Strong

October 2016

0700z	**16284kHz**	**0720z**	**18184kHz**	**0740z**	**19584kHz**	
04/10	Msg starts 02884, rest unworkable					Very weak
07/10	NRH					
11/10	08313 00001 00000 10140					Strong/fair
14/10	NRH					
18/10	06043 00143 60705 00171			[0740z Weak, unworkable]		Fair
21/10	06043 00143 60705 00171					Very strong
25/10	03606 00001 00000 10140					Weak
28/10	05374 00001 00000 10140					Strong

XPA2 unclassified September 2016

13928kHz 1300z	19/09 [00709 00218 87719 52080 ... 45777]	Danix	MON
12158kHz 1310z	19/09 [00709 00218 87719 52080 ... 45777]	Danix	MON
10906kHz 1320z	19/09 [00709 00218 87719 52080 ... 45777]	Danix	MON

00709 00218 87719 52080 57174 22544 44123 27172 32136 73767
55093 63810 42005 85697 10269 57192 43071 89625 68432 69983
03668 54621 58441 02063 63836 95433 14030 54813 76260 64018
29150 71204 16735 47341 07766 46260 58318 75805 44125 64660
48502 19222 97540 79156 97492 68095 75104 90148 08045 14940
92364 16910 16950 59365 99702 14565 51500 25061 35522 92850
06015 15583 50883 08915 66115 88061 58831 46055 39367 30370
15331 01788 49246 33355 71917 69000 92704 77174 57204 82101
92194 42725 48068 76333 91305 84741 34339 88858 77982 73131
23454 83866 44416 13347 37955 12102 47657 13764 66590 61882
83766 30126 45487 82306 43231 02652 08394 76796 52937 66586
40368 66752 82188 83230 96092 84290 19656 46682 84973 69695
94353 37611 51165 60999 57411 95725 00950 94078 61518 56939
14972 45634 19578 05853 15320 96389 21680 82409 69834 07970
68424 39206 47323 52493 82432 25816 43631 53072 21452 87001
29718 51041 38725 38619 67307 49935 22810 25937 70520 85261
85952 76960 27340 06406 93981 21409 51958 89142 33056 63478
42994 87874 66363 12244 30626 19928 80839 74398 31173 02539
32369 93064 75627 99957 82919 58627 01042 49301 47956 47168
22251 06050 85002 49544 72440 77195 83092 42808 57581 56697
88006 52838 47504 35380 64025 38345 07509 61562 17388 19026
42668 97259 71945 76256 79945 35253 28881 62113 95756 89300
45777 Courtesy Danix

21/09 00959 00204 64076 22031 Weak, QSB3

XPA2 unclassified

16201kHz 1010z	24/09 [00369 00241 13857 ... 00217]	Danix	SAT
14512kHz 1020z	24/09 [00369 00241 13857 ... 00217]	Danix	SAT

00369 00241 13857 41164 37474 53598 47690 27499 21977 32723
52984 43937 06191 44793 76337 98129 81494 57885 08619 50796
07042 56584 95336 39695 80533 09906 02449 29939 86125 20886
15186 11165 54161 18743 96477 85750 52978 41848 97605 01346
96880 75452 81603 49331 00741 88862 52417 01748 59879 05990
15733 52059 04039 88982 57181 61521 03908 43797 58667 56737
38987 28368 88179 53588 81714 01741 57937 93571 42666 86698
68360 18490 52520 71759 21106 02402 76584 76103 10806 54383
77099 85992 22157 19441 27442 77253 47740 38663 10161 90864
58480 57005 95014 46662 49248 56995 09274 38379 03942 16900
19444 50495 58351 25327 57835 21988 95725 62945 09131 54024
74406 24249 13387 72046 54069 60736 14686 94087 73187 33050
15969 48965 82714 06831 02734 38376 37763 09690 34244 36285
23258 99998 11221 66382 71991 16131 83740 63747 58936 53916
04569 08872 62286 41761 09907 84953 19136 45130 66996 44924
25352 73119 89723 57450 24957 36897 79462 16905 39096 27701
73187 79276 08301 99422 02274 39217 49992 02185 33656 06262
46443 90232 45689 74772 55174 30890 55718 96371 49161 15324
48758 67318 90585 85489 58926 20375 75315 54593 78080 24088
01891 19147 25170 33376 31837 71513 73978 65914 07403 55787
32142 18959 87958 11147 17856 12174 87430 95043 89260 80989
93743 95457 27455 98027 68093 18965 13542 43155 30004 44986
50169 92042 63578 50721 40898 38911 70196 47715 85162 57014
59517 74445 15973 97966 07699 13533 57715 92765 12203 98411
47958 88746 11089 00217 *Courtesy Danix*

XPA2 unclassified

13928kHz1300z	24/09	NRH		PLdn	SAT
12158kHz1310z	24/09	Very weak, QSB to Nil, unworkable		PLdn	SAT
10906kHz1320z	24/09[00694 00438 78777 65331]		Weak, 7m47s lg	PLdn	SAT

16201kHz 1010z 25/09 [00871 00245 87719 88251 ... 26022]	Danix	SUN
14512kHz 1020z 25/09 [00871 00245 87719 88251 ... 26022]	Danix	SUN

00871 00245 87719 88251 69426 81989 55273 84037 20273 83496
95770 61379 32536 69615 19565 32972 99966 81286 71353 07220
77272 52806 19128 55895 93802 41323 96465 26375 25383 90488
20924 06953 69631 53410 44322 40472 32643 35460 07229 67558
58642 51597 62457 47642 17000 47762 55059 38694 84975 91883
00846 99945 01305 77275 60264 99882 51214 57774 00202 80967
12425 32497 39026 99047 63439 76497 91587 16138 57570 89952
06901 08453 98338 33062 15039 78323 11525 11843 45936 74868
74101 81001 30405 63042 99951 24342 60811 54299 60016 29959
89149 10916 74996 99340 25584 72808 08029 72639 68577 13483
17164 53597 22586 58706 45765 72572 98695 37574 73102 80924
81070 38506 41874 64859 97677 52276 20453 44442 13365 73665
33647 78569 28752 98680 66450 57321 73203 68623 21303 75503
88660 31229 65132 38950 12446 55327 11611 47235 02926 25935
80335 27169 03269 44472 10322 16949 07252 96528 62487 29310
76544 93412 65343 36162 09181 87229 39387 89033 75023 62168
93840 80590 45871 86444 10156 54365 38312 04245 01823 77353
33350 45264 82908 94762 89602 13708 93430 45902 75628 84319
53415 52732 34982 96307 35618 69171 15734 49005 72623 82527
93631 98763 71208 96047 07997 09930 98760 14468 35217 61094
88522 64723 36013 88107 24146 81774 51144 23440 17853 32270
43654 28716 00825 70691 65393 76280 90690 68632 93312 28096
00120 62638 38282 32048 84393 89099 14576 80973 83938 47877
89319 38887 91101 40672 13116 67636 02579 53635 85262 94960
39441 76272 85291 66611 70477 51720 18899 26022 *Courtesy Danix*

13928kHz1300z	25/09 Very weak, QSB to Nil, unworkable	PLdn	SAT
12158kHz1310z	25/09[00887 00218 53396 22566 Weak, 4m58s lg	PLdn	SAT
10906kHz1320z	25/09 Very weak, unworkable	PLdn	SAT
13928kHz1300z	29/09 NRH	PLdn	THU
12158kHz1310z	29/09[00911 00373 47318 02065] Fair, QSB3/4	PLdn	THU
10906kHz1320z	29/09 NRH	PLdn	THU

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The 1000z slot uses 18224 kHz.

16201kHz 1010z	01/10[00547 00385 52798 42910 18797 ... ?????] QSA1	DanAr	SAT
14512kHz 1020z	01/10[00547 00385 52798 42910 18797 ... ?????] QSA1	DanAr	SAT
16201kHz 1010z	02/10[00808 00333 32600 12382 17126 .... 76836 11500) QSA1	DanAr	SUN
14512kHz 1020z	02/10[00808 00333 32600 12382 17126 .... 76836 11500) QSA1	DanAr	SUN

HM01

HM01 has continued with all the usual schedules. Again, not much out of the ordinary to report, the callups ceased to increment between 9/10 and 15/10. On 19/10 at 1600z the transmission started with a SS/YL speaking for a few seconds before the callups started, then during the callups several different Windows XP sounds were heard!

Four messages with F1* extensions were transmitted over the past two months, as always file names beginning with 36 have the F1G extension and those beginning 50 have the F1C extension. Files transmitted were 50233050.F1C, 50816631.F1C, 36871410.F1G and 36537372.F1G

Logs

HM01 11435kHz 1600z 1/9 [88744 74582 71783 24021 32436 61004] THU

HM01 11435kHz 1600z 2/9 [88745 74583 71784 24022 32437 61005] FRI

HM01 11435kHz 1600z 3/9 [88746 74584 71785 24023 32438 61006] SAT

HM01 11435kHz 1600z 4/9 [88747 74585 71786 24024 35821 61007] New callup position 5, 35821 = 52153582.TXT. SUN

HM01 11435kHz 1600z 5/9 [88748 74586 71787 24025 35821 61008] MON

HM01 11435kHz 1600z 6/9 [88749 74587 71788 24026 35822 61009] TUE

HM01 11435kHz 1600z 7/9 [23471 74588 18631 24027 35823 26811] New callups positions 1, 3 and 6, 23471 = 52442347.TXT, 18631 = 26851863.TXT, 26811 = 76442681.TXT. WED

HM01 11435kHz 1600z 8/9 [23471 30501 18631 24028 35824 26811] New callup position 2, 30501 = 50233050.F1C. THU

HM01 11435kHz 1600z 9/9 [23472 30501 18632 24029 35825 26812] FRI

HM01 11435kHz 1600z 10/9 [23473 30502 18633 18221 35826 26813] New callup position 4, 18221 = 40881822.TXT. SAT

HM01 11435kHz 1600z 11/9 [23474 30503 18634 18221 35827 26814] SUN

HM01 11435kHz 1600z 12/9 [23475 30504 18635 18222 35828 26815] MON

HM01 11435kHz 1600z 13/9 [23476 30505 18636 18223 35829 26816] TUE

HM01 11435kHz 1600z 14/9 [23477 30506 18637 18224 41461 26817] New callup position 5, 41461 = 72134146.TXT. callups kept cutting out. WED

HM01 11435kHz 1600z 15/9 [53781 30507 66311 18225 41461 18721] New callups positions 1, 3 and 6, 53781 = 46065378.TXT, 66311 = 50816631.F1C, 18721 = 07651872.TXT THU

HM01 11435kHz 1600z 16/9 [53781 30508 66311 18226 41462 18721] FRI

HM01 11435kHz 1600z 17/9 [53782 30509 66312 18227 41463 18722] SAT

HM01 11435kHz 1600z 18/9 [53783 63301 66313 18228 41464 18723] New callup position 2, 63301 = 00046330.TXT. SUN

HM01 11435kHz 1600z 19/9 [53784 63301 66314 33411 41465 18724] New callup position 4, 33411 = 15123341.TXT. MON

HM01 11435kHz 1600z 20/9 [53785 63302 66315 33411 41466 18725] TUE

HM01 11435kHz 1600z 21/9 [53786 63303 66316 33412 41467 18726] WED

HM01 11435kHz 1600z 22/9 [53787 63304 66317 33413 41468 18727] THU

HM01 11435kHz 1600z 23/9 [53788 63305 66318 33414 41469 18728] FRI

HM01 11435kHz 1600z 24/9 [14101 63306 66319 33415 07641 18729] New callups positions 1 and 5, 14101 = 36871410.F1G, 07641 = 43150764.TXT SAT

HM01 11435kHz 1600z 25/9 [14101 63307 37381 33416 07641 80181] New callups positions 3 and 6, 37381 = 14823738.TXT, 80181 = 25758018.TXT SUN

HM01 11435kHz 1600z 26/9 [14102 63308 37381 33417 07642 80181] MON

HM01 11435kHz 1600z 27/9 [14103 28701 37382 33418 07643 80182] New callup position 2, 28701 = 45442870.TXT. TUE

HM01 11435kHz 1600z 28/9 [14104 28701 37383 12731 07644 80183] New callup position 4, 12731 = 76601273.TXT. WED

HM01 11435kHz 1600z 29/9 [14105 28702 37384 12731 07645 80184] THU

HM01 11435kHz 1600z 30/9 [14106 28703 37385 12732 07646 80185] FRI

HM01 11435kHz 1600z 1/10 [14107 28704 37386 12733 07647 80186] SAT

HM01 11435kHz 1600z 2/10 [36461 28705 37387 12734 07648 80187] New callup position 1, 36461 = 75433646.TXT. SUN

HM01 11435kHz 1600z 4/10 [36462 28707 37389 12736 33841 80189] New callup position 5, 33841 = 78513384.TXT. TUE

HM01 11435kHz 1600z 5/10 [36463 28708 28581 12737 33841 57001] New callups positions 3 and 6, 28581 = 48512858.TXT, 57001 = 85255700.TXT. WED

HM01 11435kHz 1600z 7/10 [36465 45461 28582 23551 33843 57002] New callups positions 2 and 4, 45461 = 45114546.TXT , 23551 = 36442355.TXT FRI

HM01 11435kHz 1600z 8/10 [36466 45462 28583 23551 33844 57003] SAT

HM01 11435kHz 1600z 9/10 [36467 45463 28584 23552 33845 57004] SUN

HM01 11435kHz 1600z 10/10 [36467 45463 28584 23552 33845 57004] Same callups as yesterday. MON

HM01 11435kHz 1600z 11/10 [36467 45463 28584 23552 33845 57004] Same callups as yesterday. TUE

HM01 11435kHz 1600z 12/10 [36467 45463 28584 23552 33845 57004] Same callups as yesterday. WED

HM01 11435kHz 1600z 13/10 [36467 45463 28584 23552 33845 57004] Same callups as yesterday. THU

HM01 11435kHz 1600z 14/10 [36467 45463 28584 23552 33845 57004] Same callups as yesterday. FRI

HM01 11435kHz 1600z 15/10 [36467 45463 28584 23552 33845 57004] Same callups as yesterday. SAT

HM01 11435kHz 1600z 17/10 [73727 07381 62242 01611 43073 35472] All new callups since Saturday, 73727 = 36537372.F1G, 07381 = 42050738.TXT, 62242 = 01216224.TXT, 01611 = 68580161.TXT, 43073 = 15424307.TXT, 35472 = 50663547.F1C. MON

HM01 11435kHz 1600z 18/10 [52001 07382 62243 01612 43074 35473] New callup position 1, 52001 = 02745200.TXT. TUE

HM01 11435kHz 1600z 19/10 [52001 07383 62244 01613 43075 35474] SS/YL talking and various windows XP sounds during the callups. WED

HM01 11435kHz 1600z 20/10 [52002 07384 62245 01614 43076 35475] THU

HM01 11435kHz 1600z 21/10 [52003 07385 62246 01615 43077 35476] FRI

HM01 11435kHz 1600z 22/10 [52004 07386 62247 01616 43078 35477] SAT

HM01 11435kHz 1600z 23/10 [52005 07387 62248 01617 32101 35478] New callup position 5, 32101 = 68523210.TXT. SUN

HM01 11435kHz 1600z 24/10 [52006 07388 62249 01618 32101 35479] MON

HM01 11435kHz 1600z 25/10 [52007 14411 70131 01619 32102 64111] New callups positions 2, 3 and 6, 14411 = 44161441.TXT, 70131 = 54877013.TXT, 64111 = 65516411.TXT. TUE

HM01 11435kHz 1600z 26/10 [52008 14411 70131 41841 32103 64111] New callup position 4, 41841 = 15814184.TXT. WED

HM01 11435kHz 1600z 27/10 [86551 14412 70132 41841 32104 64112] New callup position 1, 86551 = 50888655.TXT. THU

HM01 11435kHz 1600z 27/10 [86551 14413 70133 41842 32105 64113] FRI

Others' Logs

September 2016

10715kHz2200z	18/09 (53783 63301 66313 18228 41464 18723) QSA2	DanAR	SUN
2200z	25/09 (14101 63307 37381 33416 07641 80181) QSA2	DanAR	SUN
2200z	26/09 (14102 63308 37381 33417 07642 80181) QSA2	DanAR	MON
17480kHz2200z	22/09 (53787 63304 66317 33413 41468 18727) QSA2	DanAR	THU

October 2016

10715kHz2200z	02/10 (36461 28705 37387 12734 07648 80187) QSA1	DanAR	SUN
2200z	05/10 (36463 68708 28781 12737 33841 57001) QSA2	DanAR	WED
2200z	10/10 (36467 45463 28784 23552 33845 57004) QSA1	DanAR	MON
2200z	16/10 (35471 73726 07381 62241 01611 43072) QSA2 QRM2	DanAR	SUN
2200z	21/10 (35476 52003 07385 62246 01615 43077) QSA2	DanAR	FRI
2200z	28/10 (86551 14413 70133 41842 32105 64113) QSA2	DanAR	FRI
2200z	31/10 (86554 14416 70136 41845 27161 64116) QSA2	DanAR	MON
17480kHz2200z	13/10 (36467 45463 28584 23552 33845 57004) QSA1	DanAR	THU
2200z	15/10 (36467 45463 28584 23552 33845 57004) QSA2	DanAr	SAT
2200z	27/10 (86551 14412 70132 41841 32104 64112) QSA2	DanAR	THU
2200z	29/10 (86552 14414 70134 41843 32106 64114) QSA2	DanAR	SAT

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

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

Schedule:

Current Daily:***** 7351kHz 0440 - 0500z (Variable) From 14 April
0410 - 0430z (Variable) More recently has settled around an 0420z start time

*** (Ceased - Changed to 6261kHz on Wednesday 28 September - Not heard since)**

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

Morse msg Logs

September 2016

7351	0427 - 0439z	01 Sep	523 51 = 27657	63331.... 58634 = 000	Strong	Incorrect GC - 61 grps sent	AB/BR THU
	0430 - 0440z	02 Sep	552 52 = **80823**	**37181**.... 44031 = 000	Weak/Fair		AB/BR FRI
	0428z	03 Sep	264 32 = **80823**	**37181**.... 16712 = 000	Fair.	First 32 grps of msg from 02 Sep	AB SAT
	0426 - 0435z	04 Sep	287 46 = **35066**	**54693**.... 54532 = 000	Good/Strong		AB/BR SUN
	0422 - 0432z	05 Sep	427 46 = 88619	66245.... 96708 = 000	Good		AB/BR MON
	0429 - 0437z	06 Sep	814 48 = 10278	46124.... 70305 = 000	Weak > Strong		BR TUE
	0421 - 0429z	07 Sep	287 46 = **35066**	**54693**.... 54532 = 000	Strong	First 46 grps of msg from 04 Sep	AB/BR WED
	0421 - 0439z	08 Sep	803 42 = **35066**	**54693**.... 23564 = 000	Strong	First 42 grps of msg from 04 Sep	AB/BR THU
	0426 - 0436z	09 Sep	680 44 = 64264	27048.... 52225 = 000	Strong		AB/BR FRI
	0424z	10 Sep	127 34 = 82483	22357....46271 = 000	Strong		BR SAT
	0419 - 0428z	11 Sep	546 42 = 22204	08981....15291 = 000	Strong		BR SUN
	0421 - 0429z	12 Sep	829 43 = 82985	18686....66659 = 000	Good		BR MON
	0421 - 0431z	13 Sep	948 47 = 70513	55745....00506 = 000	Good	Med-fast increased to fast from grp17	BR TUE
	0426 - 0436z	14 Sep	294 53 = 64186	20610....07808 = 000	Good with QSB		BR WED
	0411 - 0420z	15 Sep	414 46 = 45619	05459....71254 = 000	Fair with QSB	Early start!	BR THU
	0418 - 0427z	16 Sep	207 46 = 63848	19967....71644 = 000	Good	Speed increased for last 3 grps of repeat!	BR FRI
	0420z	17 Sep	223 56 = 34105	46600....48356 = 000	Strong		BR SAT
	0421 - 0428	18 Sep	806 45 = 45435	13540....64042 = 000	Very strong today		AB/BR SUN
	0420 - 0431z	19 Sep	523 49 = 82247	76594....30462 = 000	Strong	Speed increased for repeat sending	AB/BR MON
	0416 - 0424z	20 Sep	281 43 = 43273	66870....53232 = 000	Weak		BR TUE
	0420 - 0429z	21 Sep	829 41 = **86010**	**24414....81578** = 000	Strong		AB/BR WED
	0421 - 0437z	22 Sep	807 41 = **86010**	**24414....81578** = 000	Strong	Operator mix-up [Note 1]	AB/BR THU
	0415 - 0425z	23 Sep	834 41 = **86010**	**24414....81578** = 000	Strong	Same msg as 21 & 22 Sept. - different IDs	AB/BR FRI
	0420 z	24 Sep	861 43 = 25692	69631.... 56732 = 000			AB SAT
	0423 - 0430z	25 Sep	513 42 = 52385	17874.... 12400 = 000	Good		AB/BR SUN
	0425 - 0433z	26 Sep	235 49 = 57335	637 .5.... 87104 = 000	Very weak.	Complete msg not copied	AB/BR MON
	0420z	27 Sep	125 41 = 37833	68734.... 79284 = 000	Weak	[Note 2]	AB/BR TUE

Changed to 6261kHz from Wednesday 28 September

6261 0420 - 0432z 28 Sep 192 54 = 08208 01014....20690 = 000 Good with QSB [Note 3] BR WED

No further transmissions heard on either 6261kHz or7351kHz.

Ary (AB) notes that HM02 was missing from 07 Oct 2015 to 12 March 2016. Searches have failed to find the station on any other frequency. so it would seem that HM02 ceases operations during this period.

[Note 1] After the FSK call-up sequence Op. started with a wrong message in FSK 50/129: 710 49 = 11262, Stopped & restarted with the correct message in CW. The repeat went wrong again. After several groups he stopped and restarted, continuing until the end. (*AB*)

[Note 2] After the first sending & pause, sent 125. No repeat sending of msg or any further code sent. Carrier off after 2 minutes.

[Note 3] The FSK call-up was followed by a short RTTY burst which was abruptly stopped. Then followed a long pause of several minutes before the FSK CW msg started – So another blunder by the Op (*BR*).

HM02 7351kHz 0426z 04 Sep 2016

FSK-19.8bd/129Hz/FSK-CW

287 46 = (FSK Morse)

35066 54693 96993 06341 04458 22454 01769 63867 64000 54364
58323 32302 71734 61882 96457 97081 25985 33156 78894 17413
90188 16733 02137 80383 15707 65744 49246 52130 99175 57157
23720 88840 73107 86385 08178 23177 71107 77273 62495 66229
90875 23564 93880 88955 28505 54532 =

287 46

287 46 = (Repeat of msg) =

287 46 000

Courtesy AB

HM02 7351kHz 0412z 04 Sep 2016

829 43 =

82985 18686 18991 31378 52089 42979 22805 04777 19094 63899
56317 29761 01293 15386 31213 00423 07662 55143 29403 61960
68253 59392 59702 60346 93390 30412 38132 09400 56258 57352
13575 72115 11979 54219 26683 10309 36940 29363 52300 91874
81613 82519 66659 =

829 43

829 43 = (Rpt of msg) =

829 43 000

Courtesy BR

M42 FSK [Charts in chart section]

M42c

Monday

Cuban schedule

0025/0125z 15672kHz 0035/0135z 13892kHz

05/09 No reports

12/09 Link ID 00117, Date 9th, Serial #41, Groups 210 (11177 00117 75129 09041 02109)
77237 25376 81364 03585 09980 24901 20063 90838 73100 50318 01791 03594 … 41208 00000

19/09 No reports

26/09 No reports

0024/0124z 14434kHz 0034/0134z 11439kHz

03/10 No reports

10/10 Link ID 00117, Date 7th, Serial #45, Groups 138 (11177 00117 68249 07045 01389)
90763 76150 65081 22691 04274 03280 37003 49274 25244 38608 92231 83422 … 45136 00000

17/10 Link ID 00117, Date 14th, Serial #46, Groups 214 (11177 00117 72815 14046 02149)
91345 85733 89553 86033 61870 51103 00454 24999 49816 39334 61561 72292 … 46212 00000

24/10 No reports

31/10 No reports

Message dates on this schedule were changed to the Friday before TX. Possibly a part of the ongoing process to consolidate it with the Friday 2230z link. As you may have noticed, they already use the same serial numbers the same week, but this wasn't the case prior to March 2016. Then in October, they also shifted the broadcast times one minute earlier.

First Tuesday (repeats Friday)

1840z	**13467kHz**	**1850z**	**11084kHz**	**1900z**	**9052kHz**

06/09 Null message

1840z	**11136kHz**	**1850z**	**9074kHz**	**1900z**	**7723kHz**

04/10 Null message

Despite sending its first message in months back in August, it doesn't appear that this link has returned to giving traffic regularly.

Friday

Cuban schedule

2230/2330z	**20618kHz**	**2240/2340z**	**18048kHz**

02/09 No reports

09/09 Link ID 00116, Date 9th, Serial #41, Groups 220 (11177 00116 45182 09041 02209)
76569 37452 54744 30786 88431 49206 89266 49504 87172 72261 06159 49091 … 41218 00000

16/09 Link ID 00116, Date 16th, Serial #42, Groups 195 (11177 00116 82539 16042 01959)
06083 78210 58550 73823 07776 91190 89880 37069 21779 76271 58845 65684 … 42193 00000

23/09 No reports

30/09 Link ID 00116, Date 30th, Serial #44, Groups 196 (11177 00116 _____ 30044 01969)
69143 67697 60907 66877 66537 69726 40754 01280 15207 16495 35110 07081 … 44194 00000

2229/2239z	**20966kHz**	**2229/2339z**	**18954kHz**

07/10 Link ID 00116, Date 7th, Serial #45, Groups 150 (11177 00116 49183 07045 01509)
76242 55052 97768 12032 87463 80497 97513 78095 21327 33238 61609 19150 … 45148 00000

14/10 Link ID 00116, Date 14th, Serial #46, Groups 204 (11177 00116 91420 14046 02069)
20245 84084 25427 57522 86600 91269 48282 78677 09454 22396 57439 44060 … 46204 00000

21/10 Link ID 00116, Date 21st, Serial #47, Groups 273 (11177 00116 79154 21047 02739)
00639 08387 31005 03180 17910 35948 46929 03033 79499 19420 65956 11437 … 47271 00000

28/10 Link ID 00116, Date 28th, Serial #48, Groups 245 (11177 00116 29465 28048 02459)
29050 41793 62125 39188 70527 91963 68466 72741 00644 37347 21795 68955 … 48243 00000

Just like on the Monday 0025z schedule, the broadcast times were shifted one minute earlier in October.

Saturday

1200z	**17441kHz**	**1210z**	**15845kHz**	**1220z**	**13506kHz**

03/09 Null message

10/09 Null message

17/09 Null message

24/09 Null message

1200z	**19526kHz**	**1210z**	**17463kHz**	**1220z**	**15824kHz**

01/10 Null message

08/10 Null message

15/10 Null message

22/10 Null message

29/10 Null message

No changes.

Saturday

1810z	**13384kHz**	**1820z**	**11441kHz**	**1830z**	**9184kHz**
03/09	Null message				
10/09	Null message				
17/09	Null message				
24/09	Null message				
1810z	**11462kHz**	**1820z**	**9226kHz**	**1830z**	**7829kHz**
01/10	Null message				
08/10	Null message				
15/10	Null message				
22/10	Null message				
29/10	Null message				

No changes.

M42d

Daily Monday – Friday

0200z	**16321kHz**	**0300z**	**14881kHz**
06/10	Link ID 41018, Date 5th, Serial #86, Groups 232 (1be9 a03a 8000 33d7 f5ec) 37c6 fe06 f765 2f80 21cc d450 11cf 7e40 79a7 etc.		

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

1530z	**16253kHz**	**1540z**	**14387kHz**	**1550z**	**12075kHz**
04/09	Link ID 20501, Null message				
11/09	Link ID 20501, Null message				
18/09	Link ID 20501, Null message				
25/09	Link ID 20501, Null message				
1530z	**14859kHz**	**1540z**	**12184kHz**	**1550z**	**10273kHz**
02/10	Link ID 20501, Null message				
09/10	Link ID 20501, Null message				
16/10	Link ID 20501, Null message				
23/10 & 24/10	Link ID 20501, Date 20th, Serial #58, Groups 132 (1be9 5015 f314 c891 90f7) 34a8 a324 cbdc a8e2 a03d 479c 7482 7b9c c011 99ad ca7f 4832 … 8bd8 8e00				
30/10	Link ID 20501, Null message				

Mainly nulls as always, but towards the end of October it delivered new traffic. Just like last August, the date and the group count were identical to the Thursday 1330z message sent earlier that week. So, do they give the same plaintexts on these two schedules or not? Prior to last August, their messages were independent of each other…

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

0400z	**9436kHz**	**0410z**	**7923kHz**	**0420z**	**6776kHz**
05/09	Link ID 45079, Null message				
19/09	Link ID 45079, Date 13th, Serial #16, Groups 434 (1be9 b017 12e4 8228 d8e3) a9bb 46f4 ddd7 0983 571a d41a f917 d97d dcd8 47fa 2318 73b0 … 1368 d600				
0400z	**9354kHz**	**0410z**	**7956kHz**	**0420z**	**6774kHz**
03/10	Link ID 45079, Date 30th, Serial #17, Groups 412 (1be9 b017 eb29 2c2a c0e1) 1abe 57d4 cc57 0aea 5a3b e21a 2517 d317 5cf5 47ce 631b 0439 … 6cc5 be00				
17/10	Link ID 45079, Date 14th, Serial #18, Groups 211 (1be9 b017 d254 8c2d e6e3) a739 4795 cc57 0983 d58a de33 2517 d976 9cd9 60ce 6318 387f … a8cc 8e40				

After sending messages rather sparsely for the last 6 months, this link has returned to giving new traffic every broadcast, at least for the time being.

Tuesday (repeats Wednesday)

1650z	**15848kHz**	**1700z**	**13385kHz**	**1710z**	**11089kHz**
06/09	Link ID 20501, Null message				
13/09	Link ID 20501, Null message				
20/09	Link ID 20501, Null message				
27/09	Link ID 20501, Null message				
1650z	**13426kHz**	**1700z**	**11116kHz**	**1710z**	**9175kHz**
04/10	Link ID 20501, Null message				
11/10	Link ID 20501, Null message				
18/10	Link ID 20501, Null message				
25/10	Link ID 20501, Null message				

Duplicate of Link ID 20501 which also sends on Sunday 1530z. However, I was quite surprised it didn't repeat its last Sunday's message on 25/10.

Tuesday (repeats Friday 0600/0610/0620z)

2300z	**11158kHz**	**2310z**	**9175kHz**	**2320z**	**7919kHz**
06/09	Link ID 40988, Null message				
13/09	Link ID 40988, Null message				
20/09	Link ID 40988, Null message				
27/09	Link ID 40988, Null message				
2300z	**10521kHz**	**2310z**	**8044kHz**	**2320z**	**6941kHz**
04/10	Link ID 40988, Date 29th, Serial #71, Groups 350 (1be9 a01c 3639 22b1 7de8) 678e edd8 afd7 4ed8 be03 38e1 c29a d7d9 d648 f541 e268 98c4 … 91a4 89e1				
11/10	Link ID 40988, Null message				
18/10	Link ID 40988, Null message				
25/10	Link ID 40988, Null message				

Messages continue to be sent only once in a few months here.

Wednesday (repeats Thursday)

Far Eastern schedule

0600z	**16346kHz**	**0610z**	**14847kHz**	**0620z**	**12223kHz**
31/08 & 01/09	Link ID 32816, Date 27th, Serial #81, Groups 232 (1be9 8030 4ab5 0eca fdf4) e6e7 faf0 7bc3 fb6e a589 f8cb 3a92 21d2 d7a5 7c15 84e3 df99 … b11b 07d1				
	Link ID 32817, Date 27th, Serial #82, Groups 218 (1be9 8031 b4a9 0ecd edf5) e1fc 0429 1a87 6471 bca1 3519 875e 01ee b2a1 8865 843a aa59 … e23a c000				
0600z	**15930kHz**	**0610z**	**13503kHz**	**0620z**	**11109kHz**
07/09 & 08/09	Link ID 32817, Date 3rd, Serial #83, Groups 297 (1be9 8031 72b4 1ecf 43f4) b618 27d5 1cb9 4518 14ed 38db c841 b1c6 5762 f149 eca7 4e0a … 6473 1900				
14/09 & 15/09	Link ID 32817, Date 10th, Serial #84, Groups 234 Link ID 32817, Date 10th, Serial #85, Groups 319				
21/09	Link ID 32816, Null message				
28/09 & 29/09	Link ID 32817, Date 24th, Serial #86, Groups 359 (1be9 8031 35b0 f0d7 87e6) 78cb 16e3 ee08 08ae 826e 46d3 9974 6274 a237 79d2 4a8a e603 … cdcc a7e9				
0600z	**19268kHz**	**0610z**	**17548kHz**	**0620z**	**15779kHz**
05/10	No reports				
12/10	No reports				
19/10	No reports				
26/10	No reports				

One or two messages every week as always, with an uncommon exception of a null on 21/09. The remote receivers I've been using for this schedule are out of range for the October frequencies, though. I haven't received any other logs of it either.

Wednesday (repeats Thursday)

0800z	**15938kHz**	**0810z**	**13554kHz**	**0820z**	**11461kHz**	
31/08 & 01/09	Link ID 45075, Date 26th, Serial #10, Groups 266 (1be9 b013 cf6d 0419 22ee) 8678 9457 099c ad72 6a5b dcf7 993a fd9f 45c8 a8af 99f3 c8c0 … baf4 66dc					[01/09 0810z aired using erroneous 250 Hz shift]
0800z	**16324kHz**	**0810z**	**14616kHz**	**0820z**	**12188kHz**	
07/09	Link ID 45075, Null message					
14/09	Link ID 45075, Null message					
21/09	Link ID 45075, Null message					
28/09	Link ID 45075, Null message					
0800z	**18546kHz**	**0810z**	**16231kHz**	**0820z**	**14629kHz**	
05/10 & 06/10	Link ID 45075, Date 4th, Serial #11, Groups 285 (1be9 b013 2a78 281b 36f0) 4b85 3979 e6ee 6d11 b969 a20f 4762 1016 f5f1 a682 e9e6 3308 … 94dd 4000					
12/10 & 13/10	Link ID 45075, Date 11th, Serial #12, Groups 256 (1be9 b013 8934 6e1e 16f4) 4ca7 6374 b3ec 6e5d 9538 87ba 459f cb0b 8779 79ca a596 cf21 … 38e5 8000					
19/10	Link ID 45075, Null message					[0820z TX erroneously sent -2 kHz off freq]
26/10 & 27/10	Link ID 45075, Date 26th, Serial #13, Groups 92 (1be9 b013 9ded 0420 65e3) 88ba 7494 cd63 5966 021e fadc 27a6 4e73 3ad6 d07a f054 22e9 … 4248 d35e					

This link, despite resembling its past self in September, has put out traffic almost every week the following month.

Second/Fourth Wednesday (repeats Thursday)

0800z	**18178kHz**	**0810z**	**15613kHz**	**0820z**	**13459kHz**
14/09 & 15/09 & 28/09 & 29/09	Link ID 16404, Date 13th, Serial #4, Groups 77 (1be9 4014 cf6c 820a 5ceb) 9dfa 4ea0 738c fd54 43e0 ba70 b86a af3c 6750 ea52 9591 cd66 … d7c9 5a00				
0800z	**20016kHz**	**0810z**	**18325kHz**	**0820z**	**16249kHz**
12/10 & 13/10 & 26/10 & 27/10	Link ID 16404, Date 11th, Serial #5, Groups 207 (1be9 4014 35f4 6e0c e2ea) 03cb 4d61 738c fd3f 3570 a689 b86a ab3a 2758 0952 9593 0a29 … 4c6a 8829				

No changes. However, its link ID has also been active elsewhere, as I will mention later in this column.

Second/Fourth Wednesday (repeats Thursday)

0915z	**16146kHz**	**0925z**	**13385kHz**	**0935z**	**11434kHz**
14/09	Link ID 20492, Null message				
28/09	Link ID 20492, Null message				
0915z	**19476kHz**	**0925z**	**17458kHz**	**0935z**	**15884kHz**
12/10	Link ID 20492, Null message				
26/10	Link ID 20492, Null message				

No changes.

First/Third Wednesday

1230z	**18517kHz**	**1240z**	**16309kHz**	**1250z**	**14464kHz**
07/09	Link ID 53277, Null message				
21/09	Link ID 53277, Null message				
1230z	**19363kHz**	**1240z**	**17476kHz**	**1250z**	**15873kHz**
05/10	Link ID 53277, Null message				
19/10	Link ID 53277, Null message				

No changes.

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

2100z	**NF**	**2110z**	**10161kHz**	**2120z**	**8184kHz**
21/09	Same message as 19/09 0400/0410/0420z				
2100z	**9948kHz**	**2110z**	**8115kHz**	**2120z**	**6826kHz**
05/10	Same message as 03/10 0400/0410/0420z				
19/10	Same message as 17/10 0400/0410/0420z				

Wednesday (repeats Thursday)

2200z	**12184kHz**	**2210z**	**10168kHz**	**2220z**	**9286kHz**
07/09	Link ID 49202, Null message				
14/09	Link ID 49202, Null message				
21/09	Link ID 49202, Null message				
28/09	Link ID 49202, Null message				
1000z	**22863kHz**	**1010z**	**20674kHz**	**1020z**	**18594kHz**
05/10	Link ID 49202, Null message				
12/10	Link ID 49202, Null message				
19/10	Link ID 49202, Null message				
26/10	Link ID 49202, Null message				

No changes.

Thursday (repeats Friday)

1330z	**14396kHz**	**1340z**	**12194kHz**	**1350z**	**10529kHz**
01/09	Link ID 49237, Null message				
08/09	Link ID 49237, Null message				
15/09	Link ID 49237, Null message				
22/09	Link ID 49237, Null message				
29/09	Link ID 49237, Null message				
1330z	**15841kHz**	**1340z**	**13376kHz**	**1350z**	**11108kHz**
06/10	Link ID 49237, Null message				
13/10	Link ID 49237, Null message				
20/10 & 21/10	Link ID 49237, Date 20th, Serial #24, Groups 132 (1be9 c055 da48 c83c 90ec) 059a d7b5 2d33 07b1 c778 f8af c883 b9bc a414 8495 ef7a f6b6 … 9ce0 8e00				
27/10	Link ID 49237, Null message				

Mainly nulls as always, but towards the end of October it delivered new traffic. Then once again the Sunday 1530z schedule later the same week sent a message with the same date and group count as on this link.

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

0600z	**15813kHz**	**0610z**	**13389kHz**	**0620z**	**11044kHz**

07/10 Same message as 04/10 2300/2310/2320z

Second/Fourth Saturday (repeats Sunday)

0800z	**13384kHz**	**0810z**	**11463kHz**	**0820z**	**9328kHz**

10/09 & 11/09 Link ID 45114, Date 9th, Serial #39, Groups 99 (1be9 b03a b24c 5a61 6cf6)
c850 06e3 c015 b8ba 51fb d335 9307 0224 3330 2c00 1776 c89d … 67e3 a580

24/09 & 25/09 Link ID 45114, Date 23rd, Serial #40, Groups 228 (1be9 b03a 7bec e664 f8ee)
e3de 15e3 c015 b838 5068 7735 9307 2cea f2b4 2c00 1776 e54f … a00f 6000

0800z	**14986kHz**	**0810z**	**12219kHz**	**0820z**	**10574kHz**

08/10 & 09/10 Link ID 45115, Date 7th, Serial #41, Groups 180 (1be9 b03b 1514 4666 c4f0)
1928 0be4 c015 b84c e9cb bf4e 9307 363f 7338 4500 1776 fec3 …0874 2000

22/10 & 23/10 Link ID 45114, Date 21st, Serial #42, Groups 126 (1be9 b03a 2a30 d269 8aea)
f252 c4f2 ab72 ccbd 7eaf 5088 5e4c 8d4a adb5 121e 4e19 7767 … 1673 a55a

No changes. Why were the first 12 groups completely different on the 22/10 message, though?

Second/Fourth Saturday (repeats Sunday)

0900z	**16341kHz**	**0910z**	**14706kHz**	**0920z**	**12217kHz**

10/09 & 11/09 & 24/09 & 25/09 Link ID 45057, Date 9th, Serial #87, Groups 118 (1be9 b001 55cc 5ad9 81f3)
94e3 85d3 1182 56aa e1ad 5cf2 b30d 0b8b 5428 7f15 bb6d 8887 … 7f9a c8af

0900z	**18919kHz**	**0910z**	**16268kHz**	**0920z**	**14486kHz**

08/10 & 09/10 & 22/10 & 23/10 Link ID 45057, Date 7th, Serial #88, Groups 73 (1be9 b001 660c 46dc 50f0)
8041 e539 b61d 5992 b68d 1aa8 0118 2e17 4f56 e108 13d7 432d … c588 c300

No changes.

Saturday (repeats Sunday)

1100z	**16174kHz**	**1110z**	**14855kHz**	**1120z**	**12214kHz**

03/09 & 04/09 Link ID 36882, Date 2nd, Serial #62, Groups 47 (1be9 9012 3304 149b 34e7)
b83d b1f6 e983 514f 6b83 4d1d 97a8 4d22 c105 7cd1 a393 a2c3 … ba52 c7d0

10/09 & 11/09 Link ID 36882, Date 9th, Serial #63, Groups 60 (1be9 9012 0da4 5a9d 42e6)
c3bc b016 e983 5140 e9f3 2f1d 97a8 51ab 8102 7cd1 a390 e905 … 7de7 6a00

17/09 & 18/09 Link ID 36882, Date 16th, Serial #64, Groups 204 (1be9 9012 4c44 a0a0 dee4)
dfdf b476 e983 5122 4d13 d91d 97a8 46b3 0119 7cd1 a391 fc23 … d269 8000

24/09 & 25/09 Link ID 36882, Date 23rd, Serial #65, Groups 125 (1be9 9012 be54 e6a2 88ed)
3c9c b8d6 e983 5014 49f0 371d 97a8 5afd 8126 7cd1 a393 1a83 … c805 9000

1100z	**17423kHz**	**1110z**	**15628kHz**	**1120z**	**13385kHz**

01/10 & 02/10 Link ID 36882, Date 30th, Serial #66, Groups 301 (1be9 9012 85cd 2ca5 48f0)
f6fd 84f6 e983 5053 2b80 7d1d 97a8 6a8e c133 7cd1 a391 a1c8 … 1788 9741

08/10 & 09/10 & 15/10 & 16/10 Link ID 36882, Date 7th, Serial #67, Groups 145 (1be9 9012 0b2c 46a7 9ee5)
b326 aed7 e983 512f 93b3 7f36 97a8 4825 8100 95d1 a390 767e … 429c c000

22/10 & 23/10 Link ID 36882, Date 21st, Serial #68, Groups 270 (1be9 9012 1784 d2aa 26eb) faba bdd7 e983 5000 6860 2336 97a8 5e18 4124 95d1 a391 9796 … b86a ae60

29/10 & 30/10 Link ID 36882, Date 28th, Serial #70, Groups 137 (1be9 9012 1d7d 18af 96e5) e6bf bbf7 e983 5133 2d10 0536 97a8 4945 0121 15d1 a391 a781 … 8608 903b

No null messages in the last two months. However, on 15/10 last week's message was re-sent, again. Then two weeks later, there was a discontinuity in the serial number. Why?

Saturday (repeats Sunday)

2100z	**15928kHz**	**2110z**	**13396kHz**	**2120z**	**11143kHz**

03/09 Link ID 32821, Null message

10/09 & 11/09 Link ID 32821, Date 8th, Serial #28, Groups 191 (1be9 8035 386c 5046 d0ef) b85b 9c95 92d6 5352 0569 5486 950d 6229 eaa7 181c 84e9 d713 … 336c 2580

17/09 & 18/09 Link ID 32821, Date 16th, Serial #29, Groups 121 (1be9 8035 0244 a048 84ea) 1d7a a195 9556 5488 e3d9 a486 f90d 5415 aab5 1822 c4e9 0208 … 5d8e 4000

24/09 Link ID 32821, Null message

1500z	**22963kHz**	**1510z**	**20461kHz**	**1520z**	**18356kHz**

01/10 Link ID 32821, Null message

08/10 Link ID 32821, Null message

15/10 Link ID 32821, Null message

22/10 Link ID 32821, Null message

29/10 Link ID 32821, Null message

Whatever event has involved this link for the last 2 months seems to have concluded mid-September.

Link ID 16404 Encounters

This link ID normally sends on second/fourth Wednesday at 0800z [0900z from November to March], delivering one new message every month. However, mid-October, I found unexpected broadcasts using it, with traffic that beared no continuity to that on the regular schedule. It appears that it sent daily, using a different time slot and frequencies each day.

1400z	**16246kHz**	**1410z**	**14383kHz**	**1420z**	**12158kHz**

11/10 Link ID 16404, Date 11th, Serial #3, Groups 139 (1be9 4014 7f0c 6e07 98e7) TUE
2b15 a149 18d5 1282 b359 822c e98c 8806 b579 73a6 da2a a5f8 … 3f50 1f7d

1500z	**13546kHz**	**1510z**	**11535kHz**	**1520z**	**9256kHz**

14/10 Link ID 16404, Date 14th, Serial #6, Groups 167 (1be9 4014 8a1c 8c0f b6f5) FRI
2ce4 a911 5ff8 d534 4b4f 79aa 63b0 50d9 efe3 05b1 3a66 b81c … a7e8 b400

I haven't heard from it after 14/10 despite searching.

Other transmissions

1030z	**Missed**	**1040z**	**16249kHz**	**1050z**	**13836kHz**

06/09 Link ID 20496, Date 5th, Serial #3, Groups 194 (1be9 5010 ce64 3207 d4e4) TUE
d0e0 d9c9 c9d8 b4cd 8030 fe96 8471 cb3d 08d6 ca39 fc26 7d40 … cad1 0504

I haven't found any information about this link ID.

1200z	**9433kHz**	**1210z**	**13389kHz**	**1220z**	**16264kHz**

13/09 Link ID 28676, Date 12th, Serial #41, Groups 196 (1be9 7004 2c60 7866 d6f7) TUE
4113 7478 0866 67fd a1d7 398c c83d 1dca 82d3 a1f8 e6c5 c481 … 0e16 9c1e

This link ID is not new. It has always been heard only at 1200/1210/1220z, and its serial number back in March 2014 was #28. Possibly one of those links that only show up unscheduled on certain time slots, like E06 ID's 634 & 759, or S06 ID's 387 & 726.

Logs sent by: Ary, DanAR, Danix

X06 report

Before we begin with the logs, here's a small mistake correction: G170 is the scale « 362154 » on a 3rd Wednesday of a month, G394 is « 214356 », also on a 3rd Wed. The entries of April 20th and June 15th this year (EN94/95) were G170. Sorry, but I was wrong in a line in January while looking for the right group. In this logs section the group number is right like in the following EN editions. Many thanks to Peter for analysis.

X06 Mazielka (1c) logs section

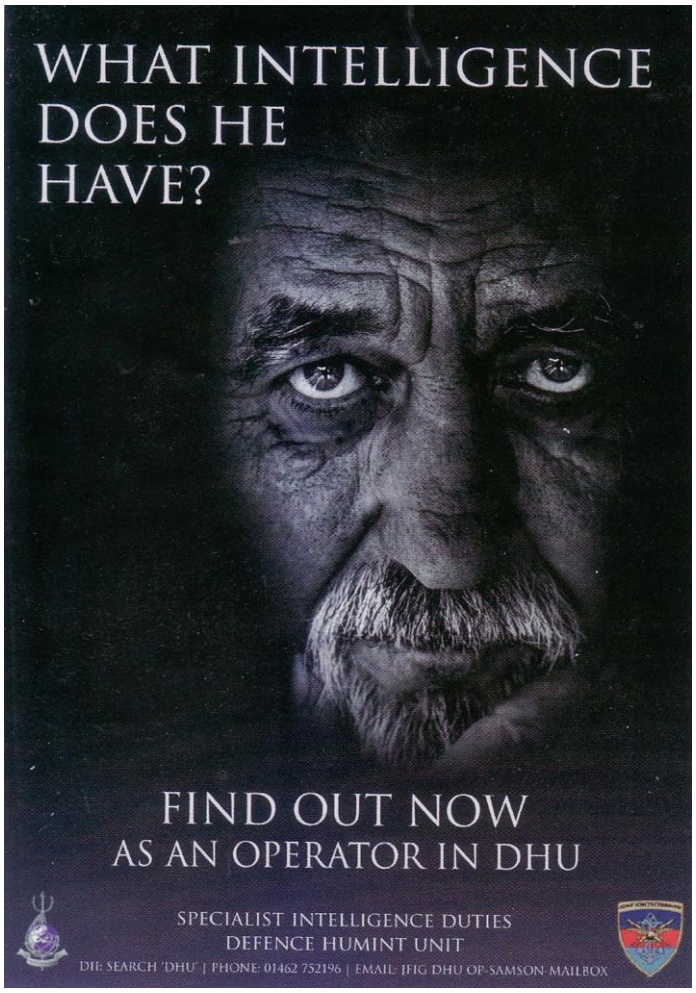
Date	Day	UTC	Freq	Scale	Monitor	Comments
20160902	Fri	1408	16147	1--6--	Schorschi	Fair X06b before XPA2
20160902	Fri	1416/1421	10583	1--6--	Schorschi	X06b with S9 before E07
20160905	Mon	0647-0657	10161	165324	Antonio/IT	G1 - first 2 mins: "156324" (error)
20160905	Mon	1540	4975	532614	Schorschi	New freq, LSB, S1, G4
20160906	Tue	1001	13411	165423	HFD	G12
20160912	Mon	1248	12177	364152	Schorschi	S9, G73
20160913	Tue	1012-1014	12100	612534	Benka	G89
20160916	Fri	0844-0845	16219	324615	RNGB	Alert 2 (G189) 1 Monitored i. p.
20160916	Fri	0845-0851	14570	324615	RNGB	2.2
20160916	Fri	1819/1821	16167	1--6--	LU5EMM	X06b before XPA2r
20160916	Fri	1820/1822	13923	1--6--	LU5EMM	X06b before XPA2r
20160916	Fri	1824/1828	14663	1--6--	LU5EMM	X06b before XPA2r
20160917	Sat	0540	10359	1--6--	Ary/NL	X06b before XPA
20160920	Tue	1714	13538	1--6--	LU5EMM	Weak X06b before XPA2M
20160920	Tue	1719	14538	1--6--	LU5EMM	Weak X06b before XPA2m
20160921	Wed	1125-1128	16115	215346	Schorschi	S9, G167
20160922	Thu	1811-1822	10315	1--6--	Schorschi	X06b with S9
20160926	Mon	1413/1415	16147	1--6--	LU5EMM	Weak X06b before XPA2p
20160930	Fri	1004	14863	615243	EdwardSmith	I. p., strong, G305
20161001	Sat	0526	10868	1--6--	Ary	X06b before XPA
20161003	Mon	1537-1541	10270	532614	Schorschi	I. p., S9, G4
20161004	Tue	1415/1416	16338	1--6--	LU5EMM	X06b before XPA2m
20161005	Wed	0826-0829	14631	362154	Danix/PL	G32
20161006	Thu	0930-0936	18197	645321	Schorschi	I. p., QSA3, G410 (new group)
20161009	Sun	1425/1427	16338	1--6--	LU5EMM	X06b before XPA2m
20161011	Tue	0849	17523	542136	Schorschi	S9, G88
20161012	Wed	1643	13376	1--6--	Ary	X06b before E07
20161019	Wed	0822-0829	14631	362154	Danix	G170
20161023	Sun	1414/1416	16147	1--6--	LU5EMM	X06b before XPA2p(1)
20161028	Fri	1420	16147	1--6--	Schorschi	X06b before XPA2p

1) X06b signal was better than XPA2p

Many thanks as usual to all contributors. Till next time best 73&55

Jochen Numbers- and X06 Teamkopf

Gizza Job



[Thanks 'E'].

PoSW's Items of Interest in the Media:-

Two stories with a connection to the world of spying noted in *The Times* newspaper of 5-October; the first, written by Ben Hoyle in Los Angeles carries the headline, "Yahoo accused of mass email snoop" and says, "Yahoo last year bowed to a secret demand from the US government to screen all of its customers' incoming emails for specific information provided by intelligence officials, it was claimed last night.The company used a custom built software program to scan hundreds of millions of Yahoo Mail accounts without informing their owners, Reuters reported.
The allegation will compound scrutiny of the company's security practices as it tries to complete a $4.8 billion deal to sell its core business to Verizon Communications.
It comes after an incident last month in which Yahoo stated that 'state sponsored' hackershad managed to access 500 million email accounts in 2014.
It is also likely to reanimate the debate over how to find a mutually trade off between the security that citizens in all countries crave and the privacy that many expect.
In contrast to Yahoo's decision, Apple refused to create a special program for US investigators to break into an encrypted iPhone used by the married couple who carried out the San Bernardino massacre in California last December.
The FBI eventually managed to unlock that phone with the help of a third party and dropped the demand, meaning that no precedent was set.
It is not known whether the classified directive in the Yahoo case came from the National
Security Agency (NSA) of the FBI or what information was being sought, other than it was a set of characters, which could refer to a message within an email or an attachment.
The massive on-line wire-tap is believed to be the first operation on such a scale to have come to light, security experts said. It was not clear what data Yahoo handed over to investigators, if any, or whether other email providers had complied with similar requests, Reuters said.
'Yahoo is a law abiding company and complies with the laws of the United States,' the company said in a brief statement. The technology giant declined to make any further comment, as did the NSA.
Microsoft and Google, two other big US email service providers, also chose not to comment.
Reuters said that, according to former Yahoo employees, the decision by Marissa Mayer,
the company's chief executive, to comply with the directive rather than fight it led to the departure in June 2015 of Alex Stamos, Yahoo's chief information security officer. He is now the chief security officer at Facebook.
Ms Mayer said in 2013 that when the government approached Yahoo for information on its users, as it was entitled to do under laws including the 2008 amendments to the Foreign Intelligence Surveillance Act, 'we push back a lot on requests'.
In 2007, before Ms Mayer took over, Yahoo had been the 'key plaintiff' in a privacy lawsuit against the Patriot Act, which gave law enforcement agencies new powers to prevent terrorism, and parts of Prism – the secret NSA surveillance programme exposed by
leaks from the agency's former contractor Edward Snowden that gave officials access to content held by Yahoo, Google, Facebook, and other Silicon Valley companies.
'A lot of people have wondered about that case and who it was. It was us,' Ms Mayer said at TechCrunch's Disrupt conference in San Francisco. 'The thing is, we lost and if you don't comply it's treason.' "

And from the same edition of *The Times* comes a another interesting piece with the somewhat bizarre headline, "Cardiff man 'hid data on cuff-link for use in terrorism'," written by John Simpson, Crime Correspondent which says, "A suspected member of Islamic State is accused of giving terror

training on encrypted technology and secreting a computer program on a removable hard drive hidden in a cuff-link in pursuit of its campaign of terrorism.
Samata Ullah, 33, was charged last night with six terror offences including membership of Islamic State – a proscribed organisation – and downloading books on missile guidance systems for terrorist purposes.
Mr Ullah, of Cardiff, was also charged with directing 'an organisation which is concerned in the commission of acts of terrorism' and in relation to giving instruction on the use of encrypted technology on a blog.
The charges include the allegation that Mr Ullah had a 'USB cuff-link that had an operating system loaded on to it for a purpose connected with the commission, preparation or instigation of terrorism, and the possession of 'a book about guided missiles and a PDF version of a book about advanced missile guidance' for the same purpose.
All the charges relate to offences allegedly committed on or before September 22. Mr Ullah is expected to appear in custody at Westminster magistrates' court today.
Mr Ullah lives in the Grangetown area of Cardiff with his family, who run the Cardiff Commercial Cleaning company. Neighbours have said that he regularly works out in a gym.
Announcing the charges, a spokesman for Scotland Yard said: 'The arrest which took place in the street in Cardiff by officers from the Counter Terrorism Command was pre-planned and as a result of a pro-active investigation by the Counter Terrorism Command supported by the Wales extremism and counter terrorism unit.' "

From *The Times* of 18-October comes another espionage-related story, written by Fiona Hamilton, Crime and Security Editor, with the headline, "Spy agencies broke the law collecting our private data", which says, "Spy agencies acted unlawfully for more than a decade when they collected massive amounts of personal information, a tribunal found yesterday.
The security services were facing calls for an audit to determine what material could be removed from their databases after the ruling by the Investigatory Powers Tribunal (IPT).
The IPT, which hears complaints against MI5, MI6 and GCHQ, concluded that some of the bulk data collection did not comply with the European Convention on Human Rights.
It said that the regime was now lawful after proper oversight was put in place last year.
The case was brought by Privacy International, the civil liberties group, which objected to the collection of personal information about tens of thousands of people. This can include personal communications data, web browsing history, financial data and bulk datasets – collections of lists such as those of airline passengers.
Privacy International claimed that most of the data was unlikely to be of any intelligence interest.
The IPT concluded that some of the data collection was unlawful as far back as March 1998 and that the bulk datasets collection regime, which commenced in 2006, was unlawful until last year. The judgement did not specify whether the material can be deleted."

Point to Ponder:- "Life is like a toilet roll, the closer it gets to the end the faster it goes" - seen in the comments section of the *Going Postal* website.

Thanks Peter.

Stephen de Mowbray, last of the great Cold War molehunters – obituary
7 October 2016

http://www.telegraph.co.uk/obituaries/2016/10/07/stephen-de-mowbray-last-of-the-great-cold-war-molehunters--obitu/

Stephen de Mowbray, the last of the great "molehunters", who has died aged 91, ran the MI6 side of a spying operation against senior MI5 officers suspected of being Soviet agents at the height of the Cold War.

De Mowbray, who became unfairly known within MI6 (the Secret Intelligence Service) as its "leading conspiracy theorist", worked with Peter Wright (an expert on bugging who later wrote Spycatcher) and the veteran MI5 officer Arthur Martin in the hunt for a mole at the very top of MI5.

The investigation was prompted by a succession of revelations from Soviet defectors, notably Igor Gouzenko, who defected to Canada in 1945, and Anatoli Golitsyn, a KGB officer who went over to the Americans in 1961, to the effect that there was a Soviet mole in the Security Service, MI5.

The 1950s and early 1960s saw the British establishment rocked by a succession of spy scandals, from the defections of Guy Burgess and Donald Maclean, the naming of Kim Philby as the so-called Third Man in the Cambridge Spy Ring, to the Profumo scandal.

Golitsyn not only revealed that John Vassall, a homosexual Admiralty clerk recruited in a KGB honey-trap, had been giving the Russians top-secret Royal Navy documents, but he also backed up claims by Gouzenko that there was a KGB mole, codenamed ELLI, inside MI5.

Wright and Martin were already obsessed with finding ELLI and had convinced themselves that their investigation was being sabotaged by someone at the top of MI5. Faced with the difficulties of investigating their own bosses, they appealed to MI6 and de Mowbray was assigned to help them.

He was soon convinced by their arguments that the way the search was being frustrated at every turn could only mean that the mole must be either the MI5 deputy director Graham Mitchell or Roger Hollis, head of MI5.

A joint MI5/MI6 committee of counter-intelligence experts, codenamed FLUENCY, reviewed the evidence of high-level hostile penetration and concluded that the case was convincing, but the actual identity of the culprit remained elusive.

"There were extraordinary things going on," de Mowbray told the BBC's Gordon Corera in 2010. "Martin was running people against the Soviets and those operations were going wonky." Wright was installing listening devices in Soviet offices around the world and picking up nothing. De Mowbray was "utterly horrified".

Dick White, the former head of MI5 who was now in charge of MI6, told de Mowbray, Wright and Martin to advise Hollis that they suspected Mitchell, and to request permission to place the deputy director under surveillance in order to rule him out of the investigation.

When Hollis refused to allow them to use "technical means" against Mitchell at his Chobham home, only later to agree to a tap on his office telephone after consultation with White, the molehunters saw it as further evidence that Hollis was involved.

As the investigation descended into paranoia, its operations became increasingly surreal, with British spies trailing their fellow spies around London and the rest of the country.

Since Mitchell knew all the members of MI5's "watcher" service, the decision was taken to employ amateurs, all MI6 volunteers who were unknown to him. A total of 40 MI6 staff, few of them trained in surveillance, were assigned to track Mitchell.

“We followed Mitchell all over the place,” de Mowbray recalled. “Down-town when he left from the office, trying to chase him up the steps in Waterloo when he went home.”

On one occasion de Mowbray heard that Mitchell, an ardent chess fan, was attending a tournament in Eastbourne in which Russians were taking part. De Mowbray commandeered an MI6 colleague with a fast sports car to whisk him down to the tournament, but without any results.

Another time, de Mowbray was following Mitchell through a rush-hour crowd in London when the MI5 officer stopped, turned and looked straight at him. Mitchell said nothing, but stared into de Mowbray’s face for several seconds before turning on his heels and walking away. He knew he was being watched.

In one of the most bizarre episodes in the history of British intelligence, three female employees of MI6 took shifts spying through a peephole drilled through Mitchell’s office wall. A secret camera recorded the changes in his body language, his eyes sinking into black hollows as he spiralled into depression as a result of his awareness that he was under suspicion.

Mitchell took early retirement, but even after his departure he was kept under surveillance, although de Mowbray and Wright remained convinced that Hollis was the real Soviet mole.

Fuelling the suspicions over Hollis was the fact that he had spent part of the 1930s in China, as a representative of British American Tobacco, associating with a number of communists, including the Soviet spies Richard Sorge and Agnes Smedley, before heading MI5’s anti-Soviet section during a period when the Cambridge Spy Ring were all active.

Eventually the CIA were told that Hollis had been cleared, so de Mowbray appealed first to Sir John Rennie, who took over as chief of MI6 in 1968. When Rennie declined to do anything, de Mowbray tried to speak to the prime minister Harold Wilson.

He did not get to speak to Wilson but had an interview with Sir John Hunt, the Cabinet Secretary, who initially thought he was mad. Hunt contacted Sir Dick White, now retired, and asked him if de Mowbray was “a screwball”.

White replied that de Mowbray was “patriotic, hardworking and obsessed”. White also refused to rule out that Hollis was the mole. Hunt asked his predecessor, Lord Trend, to carry out an inquiry. Trend spoke to de Mowbray, warning him that he was not going “to tear Whitehall apart about all this”.

Trend’s findings remain classified but its conclusion was ultimately that there was not enough evidence either to clear or condemn Hollis. De Mowbray eventually resigned, furious that no one seemed prepared to do anything about hostile penetration of MI5.
Harold Wilson, prime minister, in 1970: de Mowbray tried to tell him about his fears of a mole at the top of MI5
Harold Wilson, prime minister, in 1970: de Mowbray tried to tell him about his fears of a mole at the top of MI5 Credit: Keystone/Getty

“I could not reconcile myself to doing nothing,” de Mowbray recalled some 30 years later. “I had made so many commitments to myself and to others to pursue the problem to the end that I could not wash my hands and forget about it.”

Stephen de Mowbray was born on August 15 1925 at Lymington, where his father, Ralph Marsh de Mowbray, was an eminent surgeon. After Winchester de Mowbray joined the Fleet Air Arm in 1943, training as an observer on a torpedo squadron, but arriving too late to see any action. His service was enlivened, however, by the disinclination of his pilot, Laurence Olivier, to take naval discipline seriously.

Demobbed in 1946, de Mowbray went up to New College, Oxford, where he read PPE and was taught by Isaiah Berlin. For someone who saw himself as a “thinker” rather than a doer, it was an invaluable experience. Berlin was a significant influence on the young de Mowbray’s life.

Having decided during the war against following his father into medicine, de Mowbray felt that he could make a career for himself as a diplomat. But Berlin advised against it: “I think you had better be a spy.”

De Mowbray joined MI6 in 1950, working initially in the Economic Section run by George Young, one of the Service’s towering influences in the early period of the Cold War.

A keen sailor, de Mowbray married Tamsin Giles, daughter of the yacht designer Laurent Giles, and shortly afterwards was posted to the Middle East, serving in Baghdad.

On his return to head office, then in Broadway Buildings near St James’s Park Underground station, he worked in the MI6 counter-espionage section R5, where he found himself embroiled in the continuing investigations over Operation Nordpol, the German scheme that had successfully dismantled the Special Operations Executive’s wartime networks in Holland.

De Mowbray then moved to the Latin American section, and in November 1957 was posted as head of station in Montevideo, where his work was dominated by hunting down Soviet “illegals”, KGB agents operating under cover across Latin America.

His experience in such operations became invaluable when he was recalled to London to help deal with the fallout from Golitsyn’s defection, but his determination to prove that Hollis was a spy saw him taken off that case in 1964 and sent to Washington, initially as head of counter-intelligence and then subsequently as head of station.

It was on his return to London that he heard that the CIA had been told there was no case to answer against Hollis and de Mowbray embarked on his unsuccessful attempts to persuade two prime ministers, first Wilson and then James Callaghan, that Hollis was a Soviet mole.

“It was a very difficult situation for years on end,” he recalled. “People thought I was either mad or bad because I was trying to do something.”

De Mowbray’s quiet, forensic approach to counter-intelligence – which was widely admired – ferreted out a suspected mole inside MI6, Donald Prater, whom he interrogated in New Zealand, extracting an admission of a past adherence to the Communist Party.

De Mowbray retired in 1979, frustrated by official refusal to take the allegations against Hollis seriously, and went back to Washington to help Golitsyn write his memoirs, New Lies for Old, assisted by Arthur Martin, and in 1984 arranged for a friend to publish them. Later on he edited Golitsyn’s unpublished memoirs, Checkmate.

He also wrote a history of the Soviet Union, Key Facts in Soviet History (1990), and was ghost-writer for Golitsyn’s book The Perestroika Deception (1995), which rejected the 1980s reforms, arguing: “Scratch these new, instant Soviet 'democrats’, 'anti-Communists’, and 'nationalists’ who have sprouted out of nowhere, and underneath will be found secret Party members or KGB agents.”

When Professor Christopher Andrew published the authorised history of MI5 in 2009, in which he dismissed de Mowbray as one of a trio, with Martin and Wright, of conspiracy theorists with “paranoid tendencies”, de Mowbray felt compelled to speak out, having not breathed a word in public about it for 30 years.

He told Gordon Corera (author of The Art of Betrayal: The Secret History of MI6, 2012) that when he left MI6 no one seemed willing to countenance the idea of further Soviet penetration of the top of the Security Service. But he remained convinced that he was right.

"I vowed to myself that I would never let go of this case," he said. "There were suspicions with both of them [Mitchell and Hollis]. There are not suspicions now. But somebody was doing it."

Scholarly, self-effacing, kind and gracious, de Mowbray possessed a steely determination and a fierce commitment to the integrity of his service. In retirement he gardened and even talked about opening a snail farm. He played the piano and the cello well, and was devoted to the novels of Anthony Powell.

His first marriage was dissolved in the early 1970s and he married, secondly, Patricia White, a banker, whose work took them to New York and then Africa before they settled at Lymington. She survives him with three sons and a daughter from his first marriage and a son and a daughter from his second.

Stephen de Mowbray, born August 15 1925, died October 4 2016

http://www.telegraph.co.uk/obituaries/2016/10/07/stephen-de-mowbray-last-of-the-great-cold-war-molehunters--obitu/

National Archives

MI5 turned blind eye to 'genius' Soviet mole

David Sanderson
September 28 2016, 12:01am, The Times

http://www.thetimes.co.uk/article/mi5-turned-blind-eye-to-genius-sovietmole-szntf6cvx

Christopher Bailey was suspected of being a Soviet Union spy. He was also "something of a genius" in designing radio transmitters.

This led to the security services opting for a pragmatic approach. "It may be," an official wrote, "that we must stand up to the fact that other countries will get information from him . . . provided we benefit by his research, we may be able to keep ahead of the others."

For two decades from the mid-1930s Mr Bailey worked on secret projects for the government, while also being suspected of working for the Soviets. One MI5 officer in the 1950s concluded "this file convinces me that Bailey has been a Soviet agent and I should be surprised to find that he is not one still".

Concerns about the engineer began in 1934 when his car was spotted leaving a Friends of the Soviet Union meeting in London. His wife, Kathleen Nott, was known to read the Daily Worker.

Suspicions increased after the conviction of Percy Glading in 1938 for espionage. He had been running a Soviet spy ring centred in Woolwich Arsenal.

Glading's diary suggested that he made at least two payments to Mr Bailey, who at the time was employed by the Radio Transmission Equipment Company, which had an "important secret contract with the Air Ministry".

He was, MI5 files held at the National Archives suggested, "in a position to obtain information to secret Air Ministry experiments at Bawdsey Experimental Station". The activities of the "flabbily fat" 32-year-old were "likely to constitute a grave threat".

Mr Bailey was, however, allowed to continue working on sensitive projects.

Glading's diary implicating Mr Bailey had been destroyed in a registry fire meaning that definitive proof of his supposed treachery was even harder to obtain, while the Soviets by this time were also fighting Germany.

The "considerable risk" that his work would reach the Soviet authorities was balanced against the conclusion that he was "apparently something of a genius". The Air Ministry thought it "desirable" to "make the fullest possible use of his services".

While the suspect was interviewed by MI5 officers, files suggest that surveillance was reduced.

Mr Bailey moved to Sweden and in the early 1950s Swedish security authorities told their British counterparts that he had been "objectionably inquisitive about Swedish air force matters which did not concern him".

His file ended and he disappeared into the ether.

http://www.thetimes.co.uk/article/mi5-turned-blind-eye-to-genius-sovietmole-szntf6cvx

GCHQ thwarted Russian cyber-attack on general election

Tom Harper and Richard Kerbaj
September 25 2016, 12:01am, The Sunday Times

http://www.thetimes.co.uk/past-six-days/2016-09-25/news/gchq-spooks-thwart-russian-cyber-attack-on-general-election-62zdk9mnb

Russian hackers threatened to cause massive disruption to British government departments and TV broadcasters in the run-up to last year's general election, security sources have revealed.

The "imminent threat" by Fancy Bears, a cyber-warfare group thought to be linked to the Russian state, was thwarted by GCHQ, the government's eavesdropping agency.

The disclosure comes amid concerns that Russian hackers are attempting to disrupt the US presidential election. Last week DC Leaks, a Russian-linked website, hacked White House servers to obtain what appeared to be Michelle Obama's passport.

According to British security officials, Fancy Bears, which is also known as APT28 or Sofacy, threatened to attack every Whitehall server, including the Home Office, Foreign Office and Ministry of Defence as well as all the main UK broadcasters including the BBC, ITV, Channel 4 and Sky. David Anderson QC, the independent reviewer of terrorism legislation, described the incident as a "possible imminent threat" to the UK, and said GCHQ "deployed a capability to protect government networks from this cyber-attacker".

The eavesdropping agency uncovered the threat after analysing the group's successful attack against TV5Monde, the French broadcaster, last April.

Calling themselves "Cyber-Caliphate" and claiming to be acting on behalf of Isis, they knocked TV5Monde's scheduled programmes off air for 18 hours and replaced them with a black screen bearing images of the terrorist group's notorious flag.

GCHQ analysts were worried Isis had reached a new level in its hacking capability but traced the attack back to Moscow and uncovered the plot against Britain.

Analysts feared that the group could "embarrass" pillars of the British state and took defensive measures to protect government departments. Senior security officials are understood to have warned the TV networks so they could defend themselves.

"We found signs of this particular group and activity — they were looking at government department networks in the UK," said a counter-terrorism source. Another official familiar with the case added: "We had information, and it could have been activated, which is why it was an imminent threat. They certainly could have defaced a website for propaganda reasons and they could have possibly taken it down."

The revelation is the first known threat by the Russian-backed hackers to interfere in the British political process.

Brief details of the plot feature in an unnoticed section of a report by Anderson, published in July, which does not identify the name of the cyber-group.

The review, which outlines the "operational purpose" of bulk data collection for averting threats against Britain, also wrongly states that the attack "during the UK election period" took place in 2016, instead of 2015.

Anderson writes: "In 2016 a European media company suffered a major, destructive cyber-attack. Through the analysis of bulk interception data, GCHQ was able to link this attack to other compromises in the same sector and to explain what had happened. Further information then suggested a possible imminent threat to the UK from the same cyber- attackers during the UK election period.

"GCHQ deployed a capability to protect government networks from this cyber- attacker, and media organisations were briefed to enable them to protect their networks."

Cathryn McGahey QC, counsel to the Anderson review, this weekend said: "I am afraid that the reference to 2016 was a typographical error which was not picked up prior to publication."

•Police investigating claims Pippa Middleton's iCloud account was hacked arrested a 35-year-old man in Northamptonshire last night on suspicion of an offence under the Computer Misuse Act.

It is thought 3,000 images were taken from Middleton's phone including pictures of her sister, the Duchess of Cambridge, with children Prince George and Princess Charlotte.

http://www.thetimes.co.uk/past-six-days/2016-09-25/news/gchq-spooks-thwart-russian-cyber-attack-on-general-election-62zdk9mnb

Fancy Bear hackers attack British TV

A Kremlin-backed cyber-team attempted to sow mayhem by targeting election broadcasts and government departments
Josh Boswell, Richard Kerbaj and Tom Harper

September 25 2016, 12:01am, The Sunday Times
The BBC was one of the high-profile media targets

http://www.thetimes.co.uk/article/fancy-bear-hackers-attack-british-tv-7kwzgjqpj

In April last year there was barely disguised panic inside the Paris offices of TV5Monde, one of France's biggest television networks. All 11 of its channels had suddenly shut down, and its website flooded with jihadist propaganda.

Three hundred miles away, at Britain's listening post in Cheltenham, GCHQ analysts scrambled to search for the origins of the attack. British intelligence feared Isis had demonstrated a dramatic increase in its capabilities and was now capable of hacking western national broadcasters.

Intelligence gathered by GCHQ, however, quickly showed that the cyber-attack had been orchestrated by an elite group of Kremlin-sponsored hackers intent on sowing mayhem in Europe. What is more, the unit appeared to be preparing attacks on British targets, including every .gov.uk website and all major UK broadcasters.

With the general election weeks away, intelligence officials say it was the first indication of a suspected Russian-backed attack against the UK electoral process.

The group behind the attack has long courted controversy. First identified in 2007, Fancy Bears, also known as ATP28 and Pawn Storm, is thought to be behind a shutdown of the national grid in Ukraine, the leak of 20,000 emails from the US Democratic National Committee, and most recently, the leak of drug test records for top Olympic athletes including Mo Farah and Sir Bradley Wiggins.

Though the Russian government insists it has nothing to do with the group and does not condone cyber-crime, security experts remain unconvinced. "The ultimate sponsor is the Russian government," says Chris Porter, a manager at cyber-security firm FireEye.

"Most of the targeting they do is consistent with the requirements of the Russian ministry of defence."

Analysis of Fancy Bears' hacking shows it operates almost exclusively during Moscow business hours, and metadata from its cyber-bugs is written in Russian.

Porter revealed his company has been hired to eliminate bugs planted by Fancy Bears in a "military-related organisation" in the UK.

Internal reports from another security firm, seen by The Sunday Times, show Fancy Bears has also targeted the BBC, The Guardian, Al Jazeera, Reuters, CNN, Farnborough arms fair, defence contractor Northrop Grumman and the governments of Ukraine, Syria, Uzbekistan, Pakistan and the United Arab Emirates.

Separately a list published by security experts at the PwC consultancy shows 245 apparent Fancy Bears attacks on targets including Nato, the Chilean military, Apple, Google, the German ministry of defence and the Polish and Hungarian governments.

There is no suggestion any of these has been successful although one firm on the list, Yahoo, last week admitted that the personal information of 500m users had been stolen by what it called "state-sponsored" hackers in late 2014.

Ewan Lawson, senior research fellow at the Royal United Services Institute, said the UK's offensive response to cyber-attacks is more subtle.

"I'm not suggesting for one minute GCHQ is not getting inside Russia's networks, but we have a much more risk-averse culture and the idea of empowering anyone outside . . . is an anathema to people in Cheltenham," said Lawson. "I think for the moment the focus for UK security services will be gathering information."

Porter says a global agreement is needed to prevent an escalation of cyber-warfare.

However, there is currently disagreement between the White House and US military over how best to respond to Russia's cyber-attacks.

A recently retired US intelligence official said Barack Obama's administration views the hacks as "mischief-making and provocative but not outright hostile" and that responding aggressively would only exacerbate the situation.

The hesitancy is perhaps surprising. Last week, the alleged hacking of White House emails led to the online publication of Michelle Obama's passport. Cyber-security experts linked the attack back to Moscow.

In July, US security sources accused Russia of hacking the Democratic National Committee and releasing thousands of damaging emails just as the party was set to confirm Hillary Clinton as its presidential candidate in an apparent attempt to boost the election chances of her Republican rival, Donald Trump.

Susan Hennessey, a former lawyer at the National Security Agency, said that Russian activities demanded a muscular response.

"It's something that we've seen Russia do in other contexts but never in the United States," she said. "Not responding is itself a policy choice — a choice that comes with consequences."

Additional reporting: Toby Harnden

http://www.thetimes.co.uk/article/fancy-bear-hackers-attack-british-tv-7kwzgjqpj

Spectre's Enigma News Sep 2016

http://www.bbc.co.uk/news/world-us-canada-37369563

16/09/2016

China releases Canadian in spy case after two years

A Canadian man arrested with his wife in China two years ago on espionage charges has returned home.
Kevin Garratt was held in August 2014 and accused of stealing state secrets. His wife, Julia Garratt, was freed on bail in February the following year.

The couple had been living on the North Korea border before their arrest, where they said they were helping refugees.
His release follows Canadian Prime Minister Justin Trudeau's recent first official visit to China.

The Garratts' eldest son called the espionage allegations at the time "absurd".
A statement from the family said Mr Garratt was deported on Thursday following a ruling in the case.
"The Garratt family thanks everyone for their thoughts and prayers, and also thanks the many individuals who worked to secure Kevin's release," the statement said.

The Canadian prime minister said he was "delighted" by Mr Garratt's homecoming.
"We remain deeply impressed by the grace and resilience of the Garratt family," Mr Trudeau added.
Foreign Minister Stephane Dion told reporters on Friday that Canada did not make concessions to China to secure Mr Garratt's return.

In an August press conference, Chinese Premier Li Keqiang assured the Canadian PM that Mr Garratt would be treated humanely.
Mr Li will meet Mr Trudeau next week when he makes an official visit to Canada.
The Vancouver couple had lived since 1984 in Dandong, China, where they ran a popular coffee shop and carried out Christian aid work.

The Chinese government had denied accusations the couple's arrest was retaliation for the detention of a Chinese man in Canada who had been wanted in the US for allegedly stealing fighter jet documents.

https://www.theguardian.com/uk-news/2016/sep/21/mi6-recruit-digital-internet-social-media

21/09/2015

MI6 to recruit hundreds more staff in response to digital technology
Worldwide intelligence agencies increasingly rely upon internet and social media rather than running of agents

The UK's overseas intelligence agency is to recruit hundreds more staff over the next four years in response to the pace of change in digital technology.

MI6, which employs 2,500 people at present, deals with intelligence-gathering and operations abroad, while MI5 is responsible for security within the UK.

The government announced last year that the security services would be given 1,900 additional staff – and MI6 is the main beneficiary. BBC's Newsnight put the rise in staff for MI6 at 1,000 but it is believed to be fewer than that, though still substantial.

There is increasing reliance by worldwide intelligence agencies upon the internet, social media and changes such as facial recognition; rather than the running of agents as in the past.

One fear is that easier access to information, tracking and cross-checking can also be used against MI6 operatives.

The head of MI6, Alex Younger, speaking in Washington DC on Tuesday, said: "The information revolution fundamentally changes our operating environment. In five years' time there will be two sorts of intelligence services: those that understand this fact and have prospered, and those that don't and haven't. And I'm determined that MI6 will be in the former category.

"The third and most important part of British intelligence is the surveillance agency GCHQ, which in partnership with the US National Security Agency, is responsible for scooping up most of the intelligence through tracking phone calls, emails, chat lines and other communications."

Younger expressed concern about enemies also exploiting these new capabilities. He said: "Our opponents, who are unconstrained by conditions of lawfulness or proportionality, can use these capabilities to gain increasing visibility of our activities which means that we have to completely change the way that we do stuff."

Both the NSA and GCHQ relied heavily on cooperation from the major internet companies but that relation was badly damaged by the revelations of the NSA whistleblower Edward Snowden in 2013. The internet companies not only faced a backlash from customers concerned about their privacy but were displeased on discovering that, in spite of their cooperation, the agencies were accessing their information anyway through backdoor channels.

Younger said: "I think that the real issue for us has been the effect that this has had on the levels of trust between the intelligence communities internationally and the technology community where I think that the right and proper response to the common threats that face us is through community of effort and teamwork between those different groups. And to the extent that those revelations damaged and undermined the trust that needs to exist, I think it is highly problematic."

From 'E'

National Cyber Security Centre to lead digital war from new HQ in the heart of London
Exclusive: Security base in Victoria to defend UK
Joanna Bourke, Nicholas Cecil and Jonathan Prynn
Friday 30 September 2016

http://www.standard.co.uk/news/london/cyber-war-to-be-led-from-new-security-hq-in-the-heart-of-london-a3358406.html

War on cyber terror: how the National Cyber Security Centre's new base in the Nova development near Victoria will look

Britain's war against the soaring number of cyber attacks is to be led from a new HQ in the centre of London, the Standard reveals today.

The National Cyber Security Centre, close to Victoria station, will be tasked with bolstering security against the growing online threats from around the globe.

It will be the front line in the UK's battle to protect itself from cyber attacks emanating from countries including China and Russia as well as from terrorists and criminal gangs.

Some of Britain's best technological minds will break new ground in the bid to develop defences for the Government to block malware and phishing emails automatically.

The HQ will be located in property giant Land Securities' ultra-modern Nova development — including offices, shops, restaurants and bars — off Victoria Street and close to Buckingham Palace.

Specialist teams for the City, Whitehall, intelligence and security services, energy, telecoms, other parts of the critical national infrastructure and businesses will help them fight against and respond to general and more specific threats to their sectors.

War on cyber terror: NCSC chief executive Ciaran Martin moves from GCHQ,

The NHS, universities and local government will be offered more support to protect the huge amount of data they hold and to guard against intrusions.

The NCSC will have 700 staff, more than half based at the new HQ.

It will be an operational centre whose focus will be defensive work to combat increasingly sophisticated as well as more routine attacks on London and other parts of the UK. If needed, it will be able to call on offensive cyber capabilities developed by GCHQ and the Ministry of Defence.

NCSC chief executive Ciaran Martin, who moves from being GCHQ's director general of cyber security, said: "Our role is helping to make the UK the safest place to live and do business online. So we'll tackle the major threats from hostile states and criminal gangs.

"But we'll also work tirelessly to protect people automatically from those smaller scale and deeply damaging attacks."

NCSC chief executive Ciaran Martin (Getty)

The threat is growing, with 200 major cyber incidents a month — double the rate last year — say sources.

The NCSC will open on Monday as an organisation and staff will move into the new office later this year and at the start of 2017. It will be part of GCHQ, whose main centre is the spy listening hub in Cheltenham. But it will be more open and outward-facing — given that it will need to interact with businesses, Government, other organisations and the public to boost cyber defences.

Cabinet Office minister Ben Gummer said: “London leads the world in many ways already so it is only right that we establish the country’s first cyber security centre in the heart of the capital as Britain continues at the forefront of tackling this global issue.”

The NCSC, believed to be a world first with its links to the intelligence service, will have four key tasks:

- Respond to cyber security attacks to limit their damage, help with recovery and learn lessons to reduce the risks of recurrence. For very serious incidents, messages may have to be issued on how the public can protect themselves.
- Cut risks to the UK by working with public and private sector organisations to beef up their cyber security.
- Understand the cyber security environment, share knowledge and use that expertise to identify and address systemic vulnerabilities.
- Build Britain’s cyber security capability and provide leadership on critical issues by identifying threats and technology trends.

The Government has signed a lease for two floors at Nova. Agents Knight Frank and Cushman & Wakefield advised on the letting for the newly built offices where rents range from £72 to £87.50 per sq ft.

Land Securities has a 2.2 million sq ft development plan for Victoria and is investing £2 billion in an “exciting period of transformation”.

Employees will have a range of restaurants at the complex, including Aster by D&D London — the restaurant chain behind Bluebird and Quaglino’s — Jamie Oliver’s Barbecoa and Shake Shack.

http://www.standard.co.uk/news/london/cyber-war-to-be-led-from-new-security-hq-in-the-heart-of-london-a3358406.html

Thanks ‘E’

More from Spectre3000

http://www.newsbud.com/2016/10/05/why-did-the-russian-spies-get-a-new-boss/

Why Did the Russian Spies Get a New Boss?

Russia in preparation of a much more hostile relations with the U.S. & NATO in the coming period

The resounding victory of Putin-supported United Russia party in the September 18, 2016 parliamentary elections in which it won 343 out of 450 seats, helped greatly by the changes in the electoral system, will set the stage for the massive transformation of the Russian political system. United Russia, headed by the Russian prime minister Dmitry Medvedev, now has enough votes to single-handedly change the Russian constitution, written under the U.S. tutelage in the 1990s. There is no doubt that it will soon avail itself of this power, further centralizing the Russian state apparatus and making its activities more prominent in all areas of social and economic life of the country.

While constitutional changes will probably take some time, personnel changes at the pinnacle of political power in Russia are already taking place. Just a few days after the Central Electoral Commission announced the election results, Putin had a meeting with Sergey Naryshkin, the speaker of the Russian Parliament since the last election in December 2011, and Mikhail Fradkov, the former Russian prime minister who has led the Russian External Intelligence Agency, better known in the West through its Russian acronym SVR, since October 2007. At this meeting, Putin announced that he was offering Naryshkin the position of the new SVR chief, while Fradkov would assume the position of the chairman of the board of the Russian Railroads, one of the biggest state-controlled companies in Russia.[1]

This move was no surprise. The rumor of the possible replacement of Fradkov by Naryshkin was circulated as far back as 2010 when the Russian spy activities suffered what the U.S. intelligence community considered a serious blow. In June 2010, the FBI rounded up and arrested a group of alleged Russian spies, known in the intelligence world as "illegals," since they operated without any official cover.[2] These individuals came from various walks of life and worked hard to present themselves as ordinary U.S. residents. One of them, Anna Chapman, gained international media fame as the result of the arrest and later became a celebrity in Russia with her own TV show.[3] Chapman and others (including Cynthia Murphy who allegedly developed a source close to Hillary Clinton)[4] escaped punitive sanctions by being exchanged for the Russians convicted of spying for the U.S. The scandal died down and Fradkov kept his position.

However, since 2010, the Western intelligence intrigues directed against Russia as well as the Russian counter-intrigues have proliferated and become much more elaborate and complex. Just like during the Cold War, Russia once again came to be labeled by the U.S. military-intelligence complex as the "main adversary." After nine years at the SVR helm, and allegedly plagued by poor health,[5] it appears likely that Fradkov himself wanted to withdraw from the intelligence business and, by taking the prestigious position of the chairman of the Russian Railroads, ease his way into retirement.

I think that the reports claiming that he was fired by Putin for overly optimistic intelligence estimates and operational blunders are not accurate.[6] The recent string of Russian overt and covert interventions not only in Syria and Ukraine, but also throughout Eastern Europe and Eurasia, which have no doubt been made possible, at least in part, by the efforts and assistance of the SVR operatives, have been largely successful. Overall, neither Putin nor Fradkov have any significant reasons to be dissatisfied with Fradkov's SVR leadership.

As to Fradkov's successor Naryshkin, it first must be pointed out that he is no stranger to the intelligence work. Even though he has been very reluctant to admit any intelligence connections publicly, the most recent example being his first TV interview after the announcement of the appointment,[7] it is well-known that he completed a KGB academy in St. Petersburg in the 1970s where he was likely a colleague and friend of Putin.[8] His career path also mirrors Putin's in that he was placed outside of the USSR. While Putin's position was in Dresden, East Germany, Naryshkin was sent to the Soviet Embassy in Brussels (the seat of NATO and the EU) in the late 1980s.

Considering the importance of this location, it is clear that, just like Putin, Naryshkin belonged to the generation of the mid-level Soviet intelligence operatives who, instead of defending the system as they were supposed to, were forced to deal with the consequences of its demise due to the betrayal of their superiors. Still, just like many other former intelligence officers who later became involved in Russian politics, Naryshkin used his skills and connections to ride the wave of controversial privatizations of the state property successfully and became a very wealthy person in the process. His personal blog, filled with high quality photographs in luxurious settings, testifies that he is among the small minority of individuals who could be considered the main winners of the Russian "transition" to neoliberal market economy, which brought ruin, misery, and death to millions of ordinary Russians.[9]

The blog also presents Naryshkin as a successful academic with a PhD in economics, specializing in the area of foreign direct investment in Russia. He is the author of five books and almost fifty academic publications.

In addition to economics, Naryshkin has an academic interest in Russian history and chairs the Russian Historical Society. In fact, in the TV interview cited above, he spoke about the possibility of opening certain SVR archives to historians in order to chronicle the successes of the Russian intelligence agencies.

However, some analysts are doubtful that Naryshkin's academic star is as bright as he wants to make it. The research organization "Dissernet" which has investigated many academic theses written by Russian politicians claimed for instance that 40 percent of his dissertation has been plagiarized.[10] Naryshkin denied the claim but did not pursue any legal action against the "Dissernet."

As already pointed out, Naryshkin led the Russian Parliament [the State Duma] for five years. This period was perhaps the most challenging in the post-Soviet Duma's history. The annexation of Crimea (which the Russians call the re-unification) and the subsequent economic sanctions and political isolation, including the suspension of the Russian parliamentary delegation from the Council of Europe, have placed the Duma in the uncharted and troubled waters. Naryshkin himself is under the sanctions regime and is formally banned from entering the U.S. and the EU, which may make the meetings with his Western counterparts difficult.

At the same time, the Duma under Naryshkin retaliated against the Western policies by passing laws intended to defend Russia from foreign meddling in its internal affairs, which the critics interpreted as imposing restrictions on basic democratic freedoms. This trend will no doubt continue under Naryshkin's successor. However, the fact remains that it was Naryshkin who made the Duma more assertive on the Russian and international political scene. The Duma's growing media visibility and the increased involvement in the foreign policy making process contributed to Naryshkin's being perceived as a successful leader and administrator.

It is likely that, coming on top of Naryshkin's intelligence background and their long-time friendship, this perceived success in leading the Duma under difficult conditions, led Putin to offer him the top position in the SVR. The SVR is the chief Russian intelligence actor abroad, even though the FSB [the rough equivalent of the U.S. FBI] has also been granted legal authority to conduct operations beyond the Russian borders. In addition, the Russian military has its own foreign intelligence service - the GRU -, considered to be more conservative and "Eurasianist" than the KGB successors, the SVR and the FSB.

It is well-known that the rivalry between the GRU and KGB marked the entire Soviet era and there are indications that it continues into the present. It is worth pointing out that the GRU also underwent the leadership change this year after a sudden death of its chief Igor Sergun under what some have claimed to be "mysterious circumstances" in the Middle East.[11] The official narrative, however, asserts that Sergun died of a heart attack in Moscow on January 3, 2016.[12] He was succeeded by his deputy Igor Korobov which signaled no change in the overall policy direction.[13]

It is not clear whether Naryshkin will able to smooth over the decades-old jurisdictional and ideological disputes between the Russian civilian and military intelligence operatives. However, there is no doubt that in running the SVR, he will carry out Putin's directives to the letter. This might even mean throwing his support behind the merger of the SVR with other civilian intelligence agencies under the centralized ministry of state security, the rumors of which were recently reported by the liberal Russian daily newspaper "Kommersant."[14] This move would in fact be consistent with Russia's preparing for a much more hostile relations with the U.S. and NATO in the coming period.

http://www.esquire.com/news-politics/a49791/russian-dnc-emails-hacked/

Biggest Election Hack in U.S. History

PUTIN, WIKILEAKS, THE NSA AND THE DNC EMAIL FIASCO THAT GAVE TRUMP AND CLINTON ANOTHER REASON TO BE AT ODDS.

On an April afternoon earlier this year, Russian president Vladimir Putin headlined a gathering of some four hundred journalists, bloggers, and media executives in St. Petersburg. Dressed in a sleek navy suit, Putin looked relaxed, even comfortable, as he took questions. About an hour into the forum, a young blogger in a navy zip sweater took the microphone and asked Putin what he thought of the "so-called Panama Papers."

The blogger was referring to a cache of more than eleven million computer files that had been stolen from Mossack Fonseca, a Panamanian law firm. The leak was the largest in history, involving 2.6 terabytes of data, enough to fill more than five hundred DVDs. On April 3, four days before the St. Petersburg forum, a group of international news outlets published the first in a series of stories based on the leak, which had taken them more than a year to investigate. The series revealed corruption on a massive scale: Mossack Fonseca's legal maneuverings had been used to hide billions of dollars. A central theme of the group's reporting was the matryoshka doll of secret shell companies and proxies, worth a reported $2 billion, that belonged to Putin's inner circle and were presumed to shelter some of the Russian president's vast personal wealth.

When Putin heard the blogger's question, his face lit up with a familiar smirk. He nodded slowly and confidently before reciting a litany of humiliations that the United States had inflicted on Russia. Putin reminded his audience about the sidelining of Russia during the 1998 war in Kosovo and what he saw as American meddling in Ukraine more recently. Returning to the Panama Papers, Putin cited WikiLeaks to insist that "officials and state agencies in the United States are behind all this." The Americans' aim, he said, was to weaken Russia from within: "to spread distrust for the ruling authorities and the bodies of power within society."

Though a narrow interpretation of Putin's accusation was defensible—as WikiLeaks had pointed out, one of the members of the Panama Papers consortium had received financial support from USAID, a federal agency—his swaggering assurance about America's activities has a more plausible explanation: Putin's own government had been preparing a vast, covert, and unprecedented campaign of political sabotage against the United States and its allies for more than a year.

The Russian campaign burst into public view only this past June, when The Washington Post reported that "Russian government hackers" had penetrated the servers of the Democratic National Committee. The hackers, hiding behind ominous aliases like Guccifer 2.0 and DC Leaks, claimed their first victim in July, in the person of Debbie Wasserman Schultz, the DNC chair, whose private emails were published by WikiLeaks in the days leading up to the Democratic convention. By August, the hackers had learned to use the language of Americans frustrated with Washington to create doubt about the integrity of the electoral system: "As you see the U. S. presidential elections are becoming a farce," they wrote from Russia.

The attacks against political organizations and individuals absorbed much of the media's attention this year. But in many ways, the DNC hack was merely a prelude to what many security researchers see as a still more audacious feat: the hacking of America's most secretive intelligence agency, the NSA.

Russian spies did not, of course, wait until the summer of 2015 to start hacking the United States. This past fall, in fact, marked the twentieth anniversary of the world's first major campaign of state-on-state digital espionage. In 1996, five years after the end of the USSR, the Pentagon began to detect high-volume network breaches from Russia. The campaign was an intelligence-gathering operation: Whenever the intruders from Moscow found their way into a U. S. government computer, they binged, stealing copies of every file they could.

By 1998, when the FBI code-named the hacking campaign Moonlight Maze, the Russians were commandeering foreign computers and using them as staging hubs. At a time when a 56 kbps dial-up connection was more than sufficient to get the best of Pets.com and AltaVista, Russian operators extracted several gigabytes of data from a U. S. Navy computer in a single session. With the unwitting help of proxy machines—including a Navy supercomputer in Virginia Beach, a server at a London nonprofit, and a computer lab at a public library in Colorado—that accomplishment was repeated hundreds of times over. Eventually, the Russians stole the equivalent, as an Air Intelligence Agency estimate later had it, of "a stack of printed copier paper three times the height of the Washington Monument."

The Russians' tactics became more sophisticated over time; they even hacked satellites to cover their tracks. But while the American code names used to track the Russian effort changed—from Moonlight Maze to Storm Cloud to Makers Mark—the operation itself never really stopped. Over the next two decades, the FSB (successor to the KGB) and the GRU (Russia's premier military intelligence organization) went after political and military targets, while the NSA and the UK's GCHQ returned the favor.

This sort of espionage was business as usual, a continuation of long-standing practice. And during the cold war, both the USSR and the United States subtly, and sometimes covertly, interfered with foreign elections. What changed over the past year, however—what made the DNC hack feel new and terrifying—was Russia's seeming determination to combine the two. For the first time, Russia used a hacking operation, one that collected and released massive quantities of stolen information, to meddle in an American presidential election. The inspiration and template for this new attack was a poisonous cocktail of fact and fabrication that the Russians call kompromat, for "compromising material."

Kompromat had been deployed by the Soviet Union since at least the 1950s, but in 1999 the Kremlin gave the tactic a high-tech update. With parliamentary elections fast approaching, and with post-USSR corruption at a peak, the government of president Boris Yeltsin used anonymous websites to sling mud at opposition candidates. One notorious kompromat repository was run specifically to slander the mayor of Moscow, a rising star in the opposition with his eyes on the presidency. In 2009, a senior British diplomat working in Russia was forced to resign after the appearance online of a four-minute video that showed him having sex with two blond women in a brothel.

One of the first American targets of kompromat was Victoria Nuland, who served as the top U. S. diplomat for Europe during Obama's second term. In February 2014, at the peak of the crisis in Ukraine, Nuland was surreptitiously recorded while speaking on the phone with the U. S. ambassador to Kiev. Frustrated with Europe's lackluster response to the Ukrainian crisis, Nuland said, "Fuck the EU." Shortly after, an aide to the Russian deputy prime minister tweeted a link to a recording of the intercepted phone call. The State Department called the leak "a new low in Russian tradecraft."

The Nuland leak prompted a minor diplomatic hiccup between the European Union and the United States. But the kompromat campaign of the past year appears to be aimed at much bigger game: the American electoral system. According to Reuters, the FBI first contacted the DNC in the fall of 2015, obliquely warning the Democrats to examine their network. It wasn't until May, however, that the DNC asked for help from a cybersecurity company called CrowdStrike, which had experience identifying digital espionage operations by nation-states. CrowdStrike immediately discovered two sophisticated groups of spies that were stealing documents from the Democrats by the thousands.

CrowdStrike was soon able to reconstruct the hacks and identify the hackers. One of the groups, known to the firm as Cozy Bear, had been rummaging around the DNC since the previous summer. The other, known as Fancy Bear, had broken in not long before Putin's appearance at the St. Petersburg forum. Surprisingly, given that security researchers had long suspected that both groups were directed by the Russian government, each of the attackers seemed unaware of what the other was doing.

Meanwhile a mysterious website named DC Leaks was registered on April 19. In early June, a Twitter account associated with the site started linking to the private conversations of Philip Breedlove, who had been, until a few weeks earlier, NATO's Supreme Allied Commander in Europe. DC Leaks was well designed, but nobody seems to have noticed it until early July.

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On June 14, less than an hour after The Washington Post reported the breach at the DNC, CrowdStrike posted a report that detailed the methods used by the intruders. The firm also did something unusual: It named the Russian spy agencies it believed responsible for the hack. Fancy Bear, the firm said, worked in a way that suggested affiliation with the GRU. Cozy Bear was linked to the FSB.

The day after the Post story broke, a website appeared that claimed to belong to a hacker who identified himself as Guccifer 2.0. (Guccifer was the nickname of a Romanian hacker who, among other things, broke into the email account of George W. Bush's sister.) The operators, posing as Guccifer 2.0, dismissed CrowdStrike's attribution, insisting instead that the DNC had been "hacked by a lone hacker." As proof, Guccifer published eleven documents from the DNC, including an opposition-research file on Donald Trump and a list of major Democratic donors. In the weeks that followed, Guccifer offered interviews and batches of documents to several journalists, but he wrote that "the main part of the papers, thousands of files and mails, I gave to WikiLeaks."

Ultimately, more than two thousand confidential files from the DNC found their way to the public. Throughout the campaign, Guccifer maintained that he was the only person behind the hacking and leaking. "This is my personal project and I'm proud of it," he—or they—wrote in late June. But several sloppy mistakes soon revealed who was really behind the operation. The unraveling happened more quickly than anybody could have anticipated.

As soon as Guccifer's files hit the open Internet, an army of investigators—including old-school hackers, former spooks, security consultants, and journalists—descended on the hastily leaked data. Informal, self-organized groups of sleuths discussed their discoveries over encrypted messaging apps such as Signal. Many of the self-appointed analysts had never met in person, and sometimes they didn't know one another's real names, but they were united in their curiosity and outrage. The result was an unprecedented open-source counterintelligence operation: Never in history was intelligence analysis done so fast, so publicly, and by so many.

Matt Tait, a former GCHQ operator who tweets from the handle @pwnallthethings, was particularly prolific. Hours after the first Guccifer 2.0 dump, on the evening of June 15, Tait found something curious. One of the first leaked files had been modified on a computer using Russian-language settings by a user named "Feliks Dzerzhinsky." Dzerzhinsky was the founder of the Cheka, the Soviet secret police—a figure whose mythic renown was signaled by a fifteen-ton bronze statue that once stood in front of KGB headquarters. Tait tweeted an image of the document's metadata settings, which, he suggested, revealed a failure of operational security.

A second mistake had to do with the computer that had been used to control the hacking operation. Researchers found that the malicious software, or malware, used to break into the DNC was controlled by a machine that had been involved in a 2015 hack of the German parliament. German intelligence later traced the Bundestag breach to the Russian GRU, aka Fancy Bear.

There were other errors, too, including a Russian smile emoji—")))"—and emails to journalists that explicitly associated Guccifer 2.0 with DC Leaks, as the cybersecurity firm ThreatConnect pointed out. But the hackers' gravest mistake involved the emails they'd used to initiate their attack. As part of a so-called spear-phishing campaign, Fancy Bear had emailed thousands of targets around the world. The emails were designed to trick their victims into clicking a link that would install malware or send them to a fake but familiar-looking login site to harvest their passwords. The malicious links were hidden behind short URLs of the sort often used on Twitter.

To manage so many short URLs, Fancy Bear had created an automated system that used a popular link-shortening service called Bitly. The spear-phishing emails worked well—one in seven victims revealed their passwords—but the hackers forgot to set two of their Bitly accounts to "private." As a result, a cybersecurity company called SecureWorks was able to glean information about Fancy Bear's targets. Between October 2015 and May 2016, the hacking group used nine thousand links to attack about four thousand Gmail accounts, including targets in Ukraine, the Baltics, the United States, China, and Iran. Fancy Bear tried to gain access to defense ministries, embassies, and military attachés. The largest group of targets, some 40 percent, were current and former military personnel. Among the group's recent breaches were the German parliament, the Italian military, the Saudi foreign ministry, the email accounts of Philip Breedlove, Colin Powell, and John Podesta—Hillary Clinton's campaign chairman—and, of course, the DNC.

The rapid public reconstruction of the DNC break-in appears to have caught the hackers off guard. Researchers surmised that the Russian spies had not expected to be identified so quickly, a theory that would explain, among other things, the peculiar animus Guccifer seemed to have for CrowdStrike. According to this hypothesis, the tradecraft blunders that Tait and others had identified were the result of a hasty effort by the GRU to cover its tracks.

As if to regroup after the initial rush of activity, Guccifer and DC Leaks went quiet at the end of June. But the 2016 presidential campaign, already the most bizarre in living memory, had a further surprise in store, one that worked in favor of the Russians. At a time when only 32 percent of Americans say that they trust the media to report the news fairly and accurately, the hackers were about to learn that getting called out publicly didn't really matter: Their kompromat operations would still work just fine.

The hackers were about to learn that getting called out publicly didn't really matter.
On July 22, three days before the Democratic National Convention in Philadelphia, WikiLeaks published the largest trove of files to date, which included nearly twenty thousand hacked emails. Press coverage of the release quickly centered on emails that suggested a bias among some DNC staffers in favor of Hillary Clinton. The leaked emails lent credence to a suspicion held by some Democrats that the party establishment had never intended to give Bernie Sanders, Clinton's opponent in the primaries, a fair shake. Protesters in Philadelphia held up signs that read election fraud and dnc leaks shame. One day before the convention, the Russian kompromat campaign took its first trophy: Debbie Wasserman Schultz, the DNC chair, resigned from the organization.

The episode shocked the Democratic establishment, not least because of what it augured for the future. As Clinton's lead in the polls widened after the convention, commentators began to speculate that a damaging leak late in the campaign might be the only chance for Donald Trump to win the election. Fears of a Russia-sponsored October surprise grew as it became clearer that the subversion effort was improving. When files appeared, they were now scrubbed of the sort of distinguishing metadata that had allowed analysts to trace the leak back to Russian intelligence.

The operators behind Guccifer and DC Leaks also appear to have recognized that American journalists were desperate for scoops, no matter their source. The Russians began to act like a PR agency, providing access to reporters at Politico, The Intercept, and BuzzFeed. Journalists were eager to help. On August 27, when part of the DC Leaks website was down for some reason, Twitter suspended the @DCLeaks account. The Daily Caller, a conservative news website, posted a story about the events, drawing an outcry from Trump supporters. Lou Dobbs, the Fox Business anchor, sneered that "leftist fascism" was throttling the last best hope for a Trump victory. Twitter soon reinstated @DCLeaks.

The most effective outlet by far, however, was WikiLeaks. Russian intelligence likely began feeding hacked documents to Julian Assange's "whistleblower" site in June 2015, after breaching Saudi Arabia's foreign ministry. A group called WikiSaudiLeaks, probably a Guccifer-like front for Fancy Bear, claimed that "WikiLeaks have been given access to some part of these documents." The so-called Saudi Cables showed princes buying influence and monitoring dissidents. They became a major news story, proving that the old methods worked even better in the twenty-first century.

A leak released at the end of this past summer showed how frictionlessly the kompromat campaign was able to operate in the fact-free atmosphere of the 2016 American presidential campaign. In late September, DC Leaks published hundreds of emails from the account of a twenty-two-year-old freelancer for the Clinton campaign. Lachlan Markay, a reporter for The Washington Free Beacon, found an audio clip buried deep in the cache. In the recording, which was made at a fundraiser in Virginia, Hillary Clinton could be heard describing Sanders supporters as "children of the Great Recession" who "are living in their parents' basement." The comments were clumsy but, in context, hardly damning; Clinton was describing the appeal of Sanders's "political revolution" for young voters. ("We want people to be idealistic," she said.) Nevertheless, within a few days, Donald Trump was telling a roaring crowd in Pennsylvania, "Clinton thinks Bernie supporters are hopeless and ignorant basement dwellers."

In mid-August, when Guccifer and DC Leaks were making near-daily news, a third mysterious social-media account popped up out of nowhere. A group calling itself the Shadow Brokers announced that it had published "cyberweapons" that belonged to the NSA on file-sharing sites such as Github. The group said that it would soon hold an auction to sell off a second cache of tools. After a security researcher posted a link to a repository of the supposed NSA software, analysts flocked to the dump. Security researchers quickly discovered that the tools, a collection of malware designed to steal data from their targets, were the real thing. Crucially, The Intercept, a media outlet with access to the NSA files leaked by Edward Snowden, found a sixteen-character string ("ace02468bdf13579") in the Shadow Brokers' tools that was referenced in a top-secret, and previously unpublished, NSA manual. The connection proved the provenance of the Shadow Brokers' find.

Robbing the NSA, of course, is not easy. The agency's elite hacking unit, called Tailored Access Operations, has an internal network known as the "high side" that is physically segregated from the Internet (the "low side"). Data diodes, devices that allow data to flow one way only, like water from a faucet, make it nearly impossible to hack high-side computers from the low side. When TAO hackers want to attack an adversary, they move their tools from the high side to a server on the low side, navigate through a series of addresses that make their tracks difficult to trace, and install malware on their target. To steal the NSA's malware, the Shadow Brokers had to compromise a low-side machine that the TAO was using to hack its targets. The Shadow Brokers likely got lucky: Some analysts believe that an NSA operator mistakenly uploaded a whole set of tools to a staging computer the hackers were already watching. The alternative theory: an old-fashioned mole passed on the tools.

After going to all that trouble, why publish the results? A possible answer is suggested by a surprising discovery made by the U. S. intelligence community around the time Putin was addressing the journalists in St. Petersburg. American investigators had long known that the Russians were doing more than spear-phishing, but sometime around April they learned that the intruders were using commercial cloud services to "exfiltrate" data out of American corporations and political targets. Cozy Bear, the hacking group believed to be affiliated with the FSB, used some two hundred Microsoft OneDrive accounts to send data from its victims back to Moscow.

Using cloud services such as OneDrive was a clever but risky move—it was a little like taking the bus to make off with stolen goods from a burglary. Though the widespread use of the services by legitimate users offered a degree of cover for the hackers, data provided by Microsoft also helped America's elite digital spies identify the DNC intruders "with confidence" as Russian. It is even possible that the U. S. government has been able to identify the names and personal details of individual operators. The Russians knew they'd been caught. On July 30, an FSB press release announced that twenty government and defense organizations had been hit by high-powered spying tools.

Some intelligence analysts believe that the Shadow Brokers' publication of the NSA spy kit was a message from one group of professionals to another. "You see us?" the Russians seemed to be saying, perhaps in reference to ongoing U. S. efforts to investigate the DNC breach. "Fine, but we see you, too." Similarly, the announcement of an auction—all but certainly phony—was probably intended as a warning that the hackers were prepared to publish a key that would unlock an encrypted container holding a second batch of stolen tools. Like a severed ear in an envelope, the announcement told the Americans: Don't mess with us.

Like a severed ear in an envelope, the announcement told the Americans: Don't mess with us.
Meanwhile, the kompromat campaign proceeded apace. August and September each saw six data dumps, including files from the Democratic Congressional Campaign Committee, which had also been hacked. In October, as the presidential election drew near, Guccifer published a massive cache, more than twenty-one hundred files. Three days later, WikiLeaks began publishing thousands of emails stolen from John Podesta's account.

On the day WikiLeaks published the first batch of Podesta's emails, the U. S. government took the unprecedented step of announcing that it was "confident" Russia's "seniormost officials" had authorized the DNC hacks. So far U. S. investigators have not said publicly who was responsible for the Podesta hack, but the data harvested by SecureWorks makes it clear that Fancy Bear broke into the Clinton chairman's account as early as late March. The CIA briefed Trump about the origin of the kompromat, but he continued to cite the material, telling a Pennsylvania crowd, "I love WikiLeaks!"

On October 12, Putin appeared at another forum, this time with more than five hundred guests in Moscow. Sitting comfortably in front of a giant banner that said russia calling! he answered an audience question about the hacks. "Everyone is talking about who did it," Putin said. "Is it so important?" The former KGB officer, proving his full command of U. S. political intrigue, suggested that the Democrats had "supported one intraparty candidate at the expense of the other." Any talk of the hacks being in Russia's interest, he said, was "hysteria" intended to distract Americans from what the hackers discovered: "the manipulation of public opinion." When the audience applauded, a smirk returned to Putin's face. "I think I answered your question," he said.

http://www.latimes.com/nation/la-na-seeds-economic-espionage-20161031-story.html

The saga of the Chinese spies and the stolen corn seeds: Will it discourage economic espionage?

It was a chilly spring day when an Iowa farmer spotted something odd in his freshly planted cornfield: a short, bald Asian man on his knees, digging up seeds.

Not just any seeds — special inbred seeds, the product of years of secret research and millions of dollars in corporate investment, so confidential that not even the farmer knew exactly what he was growing.

The Iowa resident approached the trespasser, who grew flush and nervous, stammering something about being from a local university. When the farmer diverted his attention briefly to take a phone call, the stranger bolted to a waiting car and sped away.

That curious encounter eventually led to an exhaustive five-year federal investigation and prosecution into one of the most brazen examples of Chinese economic espionage against the U.S., a crime that annually costs American companies at least $150 billion.

The FBI pulled out all the stops to catch the spies. Agents obtained surveillance warrants from the nation's secret intelligence court, planted GPS-tracking devices on cars, trailed operatives from airplanes and bugged their phones.

Theft of trade secrets is not only promoted by Chinese government policies and state-backed companies, but it also reflects their societal attitude.
— Melanie Reid, professor at Lincoln Memorial Universityâ€™s Duncan School of Law

The probe culminated this month with a three-year prison sentence for Mo Hailong, 47, a Chinese citizen and U.S. legal resident who works for a Chinese conglomerate.

Federal officials say the prosecution of Mo, also known as Robert Mo, sent a message to China and others that economic espionage will not go unpunished.

But outside experts say the case also revealed the difficulty, and sometimes futility, of bringing justice to those responsible for feeding China's ravenous appetite for U.S. intellectual property.

Mo, who is being treated for a rare form of cancer, received a sentence that was even more lenient than the maximum five years laid out in his plea deal. Five others indicted in the plot remain free in China, out of the reach of U.S. law enforcement. And though the FBI suspected the Chinese government was involved in the thefts, it was never able to prove the link.

Worse, even though the scheme was exposed, Chinese companies almost certainly got their hands on some of the lucrative seeds. Five years before his arrest, court records show, Mo was being praised by his superiors for the quality of seeds he already had stolen.

"You have to have some kind of stick to get them to think twice," said Melanie Reid, professor at Lincoln Memorial University's Duncan School of Law. "Because these investigations can be quite complicated and many of the players are in other countries and protected from U.S. prosecution, it is unclear whether these types of cases are making a dent. Theft of trade secrets is not only promoted by Chinese government policies and state-backed companies, but it also reflects their societal attitude toward intellectual property. They simply don't see stealing U.S. trade secrets as a crime."

Some U.S. law enforcement officials echoed those observations, saying there is no clear evidence on the ground that such prosecutions have slowed China's quest for U.S. secrets.

But they say doing nothing isn't an option either, and they note that aggressive prosecutions against other forms of espionage by Chinese, such as cyber hacking, appear to have deterred such acts.

The Mo case highlighted the challenges of such prosecutions, which often span the globe and require the assistance of scientists, analysts, linguists and corporate executives who can be wary about cooperating for fear of disclosing their trade secrets.

Proving the Chinese government was involved in the theft was seen as critical to deterring future attempts, but not surprisingly, China refused to cooperate or turn over information and suspects for trial.

According to a review of court filings and interviews with U.S. law enforcement and FBI officials, some of whom spoke about the case for the first time, the investigation got a kick-start because the farmer jotted down the license plate number of the rental car.

He reported the incident to DuPont Pioneer, the global agriculture giant that owned the seeds. The Johnston, Iowa-based company used the rental car license number to identify Mo, and then passed along the information to FBI Special Agent Mark Betten of the bureau's Des Moines office.

Betten soon learned that a local sheriff's deputy had spotted Mo and two other men acting suspiciously near a second Iowa seed-testing field, this one used by Monsanto, an agricultural corporation headquartered near St. Louis.

Mo's appearance in two such testing fields operated by separate companies — more than 85 miles apart — sparked Betten's curiosity. The agent did some sleuthing and discovered that Mo had recently mailed to his home in Florida 15 heavy packages containing "corn samples."

Betten also learned that Mo was the U.S.-based director of international business for Beijing Dabeinong Technology Group, also known as DBN, a Chinese conglomerate that sells seeds through a subsidiary called Beijing Kings Nower Seed Science & Technology Co. Both are considered to have close ties to the Chinese government. Mo's sister was married to DBN's billionaire chairman.

The interest in Iowa seed was plain: China's demand for corn is expected to outstrip supply in the next decade. To close that gap, China would benefit from planting better corn seed — like the kind being produced by Pioneer and Monsanto.

Creating robust seeds requires the breeding of two pure "inbred" lines of seed to craft a "hybrid" that is later sold to the public. Developing a single inbred can cost as much as $30 million to $40 million in laboratory testing, field work and trial and error; companies evaluate scores of inbreds to develop a single hybrid.

Though he worried his supervisors would balk at an investigation involving something seemingly as mundane as corn seeds, Betten ramped up the probe. By 2012, agents were trailing Mo as he sped across Iowa, Indiana and Illinois. Following the spy was not easy because he sometimes engaged in counter-surveillance maneuvers, such as driving slowly, then fast, making U-turns and watching traffic for possible tails.

“You have to be careful trailing someone in farm country,” said Betten, a Nebraska native who speaks in a clipped Midwestern accent. “Cars kick up a lot of dust and can be seen from a long way off.”

Cyberattacks against companies don't hurt them much financially, Rand study finds »

Betten and other agents watched as Mo visited agriculture supply stores and purchased Pioneer and Monsanto seed, stashing it in a rented storage locker. The store clerks never should have sold the seeds to Mo and his colleagues because they had not signed required contracts with the companies.

A few weeks later, Mo and two Kings Nower employees wheeled five large boxes destined for Hong Kong into a FedEx store in suburban Chicago.

After the men left, agents swept in. They discovered 42 bags of hybrid seeds in the boxes; each bag was marked with its own code, presumably to help identify the contraband. The FBI replaced the seeds with others already commercially available in China and shipped them on their way.

Stepping up their surveillance, the agents listened to secretly recorded conversations of two Kings Nower employees — Lin Yong and Ye Jian, both Chinese citizens who live in China — discussing their crimes as they crisscrossed farm country in search of seeds.

“These are actually very serious offenses,” Lin told Ye, according to Justice Department transcripts of secretly recorded conversations.

“They could treat us as spies,” Ye said.

“That is what we’ve been doing,” Lin replied.

After six weeks of seed gathering, Ye and Kings Nower’s chief operating officer, Li Shaoming, tried to spirit their haul to China. As they were departing Chicago’s O’Hare International Airport on Sept. 30, 2012, customs officers searched the men and their luggage and found thousands of stolen seeds, much of it hidden in resealed boxes of microwave popcorn.

Meanwhile, customs agents stopped another of Mo’s associates trying to cross the border into Canada and found corn seed hidden in his luggage too.

The men were allowed to leave the country, but the seeds were seized.

To bring criminal charges, the FBI first had to genetically test the seeds to prove they were the product of U.S. trade secrets. It took the bureau nine months to iron out the agreements with Pioneer and Monsanto to conduct the tests at an independent lab. “Neither Pioneer nor Monsanto understandably wanted the other to have their secrets,” let alone a Chinese company, Betten said.

The tests revealed that many of the seeds were inbreds belonging to both companies. In December 2013, agents arrested Mo at his home in Boca Raton, Fla. By then, the other defendants were outside the U.S.

Calls to the Chinese embassy in Washington were not returned, nor were messages and emails left with DBN and Kings Nower.

Pioneer declined to comment on the case. Monsanto said in a statement that it fully cooperated with the FBI and is pleased “this matter has been concluded.”

Mo pleaded guilty to conspiring to steal trade secrets. Subdued and apologetic at his Oct. 5 sentencing, Mo removed his wire-rimmed glasses to wipe away tears, saying that he had “destroyed everything I had wanted” in life.

Looking down at Mo, U.S. District Judge Stephanie Rose said she felt bad for the man’s plight but hoped her sentence would send a message to China that it needed to halt its economic espionage. She cited the crime’s cost and reviewed the investigation’s extensive history, the secret warrants, wiretaps and the tens of thousands of pages of court filings she had reviewed.

To think, she said, this “all started with a man in a field.”

http://www.pravdareport.com/world/americas/31-10-2016/136031-china_spies-0/
Chinese spies steal from USA $100 billion a year

The Chinese intelligence has challenged the US national security system. China recruits senior military officials and conducts cyber attacks against the United States. What is worse, the Chinese intelligence has stolen Pentagon's plans for the future conflict with China, a recent report to US Congress said.

The annual report from the US-China Economic and Security Review Commission has sounded the alarm with regard to the activities of Chinese security forces. The report said that despite extensive ties between Beijing and Washington, the US-China relations have remained tense during the current year, the Washington Free Beacon said.

The relations between China and the United States have worsened primarily because of China's territorial claims in the South China Sea, permission from the United States to sell weapons to Taiwan, the deployment of the missile defense system in South Korea, Chinese cyber attacks and the US-led policy to "restore balance" in Asia.

As for most serious threats, the report highlights cybercrime and the "involvement of the human factor" to gain access to objects of national security. The activities of the Chinese intelligence have increased significantly over the past 15 years. The work is carried out through the Ministry of State Security, the People's Liberation Army of China and military departments of the Communist Party, the report said.

As for the "human factor", the report refers to the story of the recruitment of US Pacific Command Lieutenant Colonel Benjamin Pierce Bishop. The man was in an intimate relationship with a Chinese woman, who eventually recruited him. Thus, the information about US military secrets in the field of nuclear weapons, secrets of the Reaper MQ-9 UAV and the secret US report about the Strategy of the Ministry of Defense of China was compromised.

The report also mentions a few other recruited gentlemen: another senior official of the Pacific Command - James Fondren, who delivered "The National Defense Strategy of the USA" to China in 2010. Another man, Greg Bergerssen, delivered state secrets to China before he was arrested in 2008. US naval officer Edward Lin was caught for selling secrets of the US Navy to China. All this information may undermine the military superiority of the United States by promoting China's military modernization and providing China with understanding of the tactics of military operations and other operational approaches of the United States to potential developments in the region, the report said.

Noteworthy, China spies even on members of government delegations. For example, British officials, before going to the G20 summit in Hangzhou, were instructed to avoid contacts with "Chinese spies who offer sex", The Irish Times said. The officials were instructed not to take any gifts, especially electronic devices containing memory cards, SIM-cards or chargers as they could serve as a basis for video and audio surveillance. All the members of the British delegation were given temporary mobile phones and e-mail addresses. The officials were even recommended to change their clothes under blankets to avoid any chance of taking their nude pictures.

"Chinese intelligence has repeatedly infiltrated U.S. national security entities and extracted information with serious consequences for U.S. national security, including information on the plans and operations of U.S. military forces and the designs of U.S. weapons and weapons systems," the report said. "Among the information extracted were 5.6 million fingerprints, some of which could be used to identify undercover U.S. government agents or to create duplicates of biometric data to obtain access to classified areas," it continued.

China uses a variety of "actors" for its cyber espionage - from "government contractor" to independent "patriotic hackers" and "criminal entities." These groups often interact with each other.

The US Department of Justice paid attention to the arrest of US citizen Allen Ho, who was accused of stealing nuclear technology for China General Group. Ho enlisted as many as six American engineers for the purpose. In addition, the DoJ and the FBI accused Chinese nationals of the theft of know-how technology for the production of carbon fiber for submarines and compounds for bleaching materials.

The FBI evaluated losses from industrial espionage at 19 billion dollars a year. In one outstanding incidence, former Secretary of Commerce Carlos Gutierrez had his laptop hacked into and copied in Beijing, even though Gutierrez was one of the key figures in international trade negotiations. The information from his laptop was subsequently used to break into US government computers.

James Andrew Lewis of the Center for Strategic and International Studies in Washington said that the stolen intellectual property of the USA brings China the profit of up to 100 billion a year.

Interestingly, only a few Chinese spies have been arrested so far, John R. Schindler wrote for The Observer. The potential of the Chinese intelligence is high: 300,000 Chinese students studying in American universities.

Chart Section Index

November 2016

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Nov kHz, ID, ...	Dec kHz, ID, ...
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x	x	x	x	x			0400		S06	01A	15721 480	15721 480
x	x	x	x	x	x	x	0400		V13	0	search (15388?)	search (15388?)
x							0450		E11	03	5082 416/00	5082 416/00
	x			x			0455		S11A	03	4828 321/00	4828 321/00
x		x		x		x	0500		HM01	18	10860	10860
	x		x		x		0500		HM01	18	11462	11462
x	x	x	x	x	x	x	0500		V13	0	search (9522, 11430, 13750?)	search (9522, 11430, 13750?)
x			x				0530		E11	03	649/00, search	649/00, search
		x					0530/0540		S06S	01A	7425/ 9069 464	7425/ 9069 464
			x				0530/0550/0610		E07A	01B	5111/ 5811/ 6911 189	5111/ 5811/ 6911 189
x							0530/0550/0610		M12	01B	4617/ 5317/ 5817 638	4457/ 5157/ 417, search
x	x	x	x	x	x	x	0540 (var)		HM02	01C	7351	7351
		x		x			0545		E11	03		
x		x		x		x	0600		HM01	18	10345	10345
	x		x		x		0600		HM01	18	14375	14375
x	x	x	x	x	x	x	0600		V13	0	search (9522, 11430, 13750?)	search (9522, 11430, 13750?)
x				x			0600		E11	03	13046 181/00	13046 181/00
	x						0600/0610		S06S	01A	16145/14240 438	16145/14240 438
					x		0600/0620/0640		M12	01B	7637/ 9137/10237 612	5784/ 7584/ 9184 751
		x			x		0600/0620/0640		XPAc	01B		
			x	x			0600/0700	1/3	E06	01B	18285/20140 507	14575/17420 923
						x	0600/0700		M14	01A	5947/ 6767 382	5947/ 6767 382
						x	0630/0640		S06S	01A	13470/16515 524	13470/16515 524
	x		x				0645		E11	03	7840 517/00	7840 517/00
x		x		x		x	0700		HM01	18	9330	9330
	x		x		x		0700		HM01	18	13435	13435
						x	0700		M01	01B	5465 197	5465 197
	x						0700/0710(15)		S06S	01A	5250/ 6320 374	5250/ 6320 374

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Nov kHz, ID, ...	Dec kHz, ID, ...
x	x	x	x	x	x	x	0700		V13	0	search (15388?)	search (15388?)
					x	x	0700/0720/0740		E07	01B	10112/11112/12112 111	8123/ 9323/10423 134
		x			x		0700/0720/0740		XPAc	01B	11409/13509/14609	7756/ 9056/10656
	x			x			0700/0720/0740		XPAt	01B	14517/16017/17417	13393/14493/16293
	x			x			0710		E11	03	10800 633/00	10800 633/00
			x		x		0710		E11	03	12924 491/00	12924 491/00
x		x					0715		S11A	03	19099 382/00, check	19099 382/00, check
				x		x	0730		E11	03	16112 352/00	16112 352/00
	x						0730/0740		S06S	01A	7410/11532 427	7410/11532 427
			x				0730/0750/0810		M12	01B	5884/ 6884/ 888, search	5284/ 5784/ 277, search
x							0745		E11	03	10213 262/00	10213 262/00
	x		x				0745		E11	03	16112 335/00	16112 335/00
x							0800	1/3	G06	01A	5320 329	5320 329
x		x		x		x	0800		HM01	18	9065	9065
	x		x		x		0800		HM01	18	11365	11365
x	x	x	x	x	x	x	0800		V13	0	search (15388?)	search (15388?)
			x				0800/0810		E17Z	01A	11170, 9820 674	11170, 9820 674
	x						0800/0810		S06S	01A	11945/13195 352	11945/13195 352
					x		0800/0810	1	S06S	01A	8680/ 8260 254	8680/ 8260 254
x		x					0800/0820/0840		XPA2p	01B	16073/14973/14373	15861/14761/13561
					x		0800/0900		M14	01A	5430/ 5561 171	5430/ 5561 171
		x				x	0805		E11	03	10429 311/00	10429 311/00
x			x				0820		E11	03	6940 438/00, check	6940 438/00, check
		x					0820/0830		S06S	01A	8417/ 9262 471	8417/ 9262 471
x							0830/0840		S06S	01A	8057/ 8530 371	8057/ 8530 371
		x					0830/0840		S06S	01A	7335/11830 745	7335/11830 745
			x	x			0830/0930		S06	01A	19875/16067 842	17435/14375 842
x		x					0900		E11	03	9446 534/00	9446 534/00
x		x		x		x	0900		HM01	18	9240	9240
	x		x		x		0900		HM01	18	11462	11462
x							0900/0910		S06S	01A	14675/12830 872	14675/12830 872
			x				0900/0910		S06S	01A	12952/13565 167	12952/13565 167

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Nov kHz, ID, ...	Dec kHz, ID, ...
			x				0900/0910		S06S	01A	5765/ 6315 624	5765/ 6315 624
					x		0900/0920/0940		E07A	01B	11553/12153/13553 515	11121/12221/13421 124
	x			x			0915		S11A	03	7504 484/00	7504 484/00
		x	x				0930		E11	03	9950 270/00	9950 270/00
			x				0930/0940		S06S	01A	8812/ 9540 314	8812/ 9540 314
				x			0930/0940		S06S	01A	11780/12570 516 9445/10195 search	11780/12570 516 9445/10195 search
x		x		x		x	1000		HM01	18	5855, 9155	5855, 9155
	x		x		x		1000		HM01	18	12180	12180
	x						1000/1010		S06S	01A	/ 5660 893, search x6440	/ 5660 893, search x6440
		x					1000/1010		S06S	01A	12365/14280 729	12365/14280 729
			x			x	1010/1030/1050		M12	01B	15969/17479/18169 941	13569/14869/16269 582
x			x				1015		S11A	03	12530 475/00	12530 475/00
	x			x			1020		S11A	03	9610 426/00	9610 426/00
	x						1045		E11	03	12153 576/00	12153 576/00
	x						1100/1110		S06S	01A	5035/5975 754	5035/5975 754
x							1100/1120/1140		M12	01B	12205/13559/14728 973, check	12205/13559/14728 973, check
		x					1200	?	G06	01A	4912 574	4912 574
x	x	x	x	x	x	x	1200		V13	0	search (7502?)	search (7502?)
			x				1200/1210		S06S	01A	12155/10920 425	12155/10920 425
	x	x					1205		E11	03	7984 469/00	11100 > 7984 469/00
x				x			1225		E11	03	20167 521/00	20167 521/00
	x	x					1300		E11	03	18030 133/00	18030 133/00
			x		x		1300		E11	03	8680 585/00	8680 585/00
		x					1300	?	G06	01A	4039 574	4039 574
			x				1300	1/3	G06	01A	4460 329	4460 329
x	x	x	x	x	x	x	1300		V13	0	search (7502?)	search (7502?)
x							1300/1310		S06S	01A	8420/10635 831	8420/10635 831
					x		1300/1310/1320		M42C	01A	20374/18351/16249	20562/18194/16107
	x					x	1300/1320/1340		XPA2m	01B	18238/16238/14438	14538/13538/12138

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Nov kHz, ID, ...	Dec kHz, ID, ...
			x		x		1310/1330/1350		M12	01B	9162/ 8062/ 7462 104	7741/ 6841/ 5784 787
	x				x		1345		E11	03	14666 911/00	14666 911/00
x	x	x	x	x	x	x	1400		M08A	18	8096	8096
				x	x		1400/1420/1440		XPA2r	01B	17462/16114/14828	15967/13884/12217
	x		x				1450		E11	03	8196 441/00	8196 441/00
					x		1500		M01	14	5810 197	5810 197
	x						1500/1510		S06S	01A	6845/ 9170 537	6845/ 9170 537
			x				1500/1520/1540		M12	01B	13386/12189/11491 725	13386/12189/11491 725
			x				1530		E11	03	5409 262/00	5409 262/00
		x			x		1540		S11A	03	563/00, search	563/00, search
x	x	x	x	x	x	x	1600		HM01	18	11435	11435
	x					x	1605		E11	03	4505 232/00	4505 232/00
				x			1610/1630/1650		E07A	01B	8138/ 7538/ 6838 158	5887/5387/ 5087 830
		x				x	1625		E11	03	10448 972/00	10448 972/00
				x		x	1630		E11	03	921/00, search	921/00, search
x							1700	1/2	G06	01A	3696 574	3696 574
x	x	x	x	x	x	x	1700		HM01	18	11530	11530
				x			1700/1800	1/3	M14	01A	4562 574	4562 574
		x			x		1705		E11	03	9443 392/00	9443 392/00
		x			x		1730		E11	03	405/00, search	405/00, search
			x				1730		E11	03	5082 416/00	5082 416/00
x						x	1745		E11	03	242/00, search	242/00, search
x							1800	1/2	G06	01A	4562 574	4562 574
x	x	x	x	x	x	x	1800		HM01	18	11635	11635
	x		x				1800		M01	14	5320 197	5320 197
		x				x	1800/1820/1840		E07	01B	8153/ 6853/ 5453 184	7464/ 5864/ 4564 485
x		x					1800/1820/1840		M12	01B	9176/ 7931/ 6904 257	9176/ 7931/ 6904 257
			x				1800/1820/1840		M12	01B	11435/10598/ 9327 938	11435/10598/ 9327 938
x							1810/1830/1850		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
					x		1810/1820/1830		M42C	01A	9247/7762/ 5216	8131/ 6824/ 4471

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Nov kHz, ID, ...	Dec kHz, ID, ...
	x						1820	2/4	M14	01A	4636 186	4636 186
			x				1830	2/4	G06	01A	4519 271	4519 271
			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		XPAe	01B	8123/ 7523/ 6823	8164/ 7364/ 5864
				x			1900/2000	1/3	S06	01A	7812/ 5736 761, check	
x							1910		M01B	14	2435, 3519 853	2435, 3519 853
		x					1920	2/4	M14	01A	4761 748	4761 748
				x			1930	2/4	G06	01A	4792 436	4792 436
	x			x			1940/1950/2000	1	M42C	01A	8172/ 6791/ 4546	7684/ 5326/ 4029
		x		x			1955		S11A	03	5815 371/00	5815 371/00
				x			2000		E11	03	6304 576/00	6304 576/00
	x		x				2000		M01	14	4490 197	4490 197
x	x	x	x	x	x	x	2000		M08A/ V02A	18	7554	7554
x		x					2000/2020/2040		E07	01B	ex 7724/ 6924/ 5824 search	ex 7478/ 6778/ 5278 search
			x				2000/2020/2040		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
				x			2000/2100	1/3	S06	01A		7812/ 5736 761, check
					x		2000/2100	1/3	S06	01A	4031/ 3513 614	4031/ 3513 614
				x			2002		M01B	14	2653, 3197 866	2653, 3197 866
					x	x	2005		E11	03	11107 363/00	11107 363/00
x							2015		M01B	14	2427, 3205 375	2427, 3205 375
			x				2030	1/3	E06	01A	4836 321	4836 321
			x				2042		M01B	14	2485, 3160 382	2485, 3160 382
x		x		x		x	2100		HM01	18	11635	11635
	x		x		x		2100		HM01	18	16180	16180
		x					2100/2120/2140		E07A	01A	5877/ 5277/ 4577 825	5877/ 5277/ 4577 825
				x			2110		M01B	14	2405, 3180 610	2405, 3180 610
			x				2110/2130/2150		E07	01B	6777/ 5449/ 4483 774	6777/ 5449/ 4483 774
				x			2130	1/3	E06	01A	4760 472	4760 472
x		x		x		x	2200		HM01	18	10715	10715
	x		x		x		2200		HM01	18	17480	17480

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Nov kHz, ID, ...	Dec kHz, ID, ...
		x					2200/2220/2240		M12	01B	5429/ 4629/ 4029 460	5312/ 4512/ 350, search
	x		x		x		2300		M08A	18	8135	8135
						x	2300		M14	01A	5240 376	5240 376

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	Sep kHz, ID, ...	Oct kHz, ID, ...	Nov kHz, ID, ...	Dec kHz, ID, ...	Remarks
		x	x				0315		E11	03	7850 253/00	7850 253/00	5779 253/00	5779 253/00	since 01/14, last log 10/16
x							0450		E11	03	6304 416/00	6304 416/00	5082 416/00	5082 416/00	since 02/10, last log 10/16 2nd transmission Thu 1730z
	x			x			0455		S11A	03	5358 321/00	5358 321/00	4828 321/00	4828 321/00	since 09/14, last log 10/16
x			**x**				**0530**		**E11**	**03**	**7317** **649/00**	**7317** **649/00**	**649/00, search**	**649/00, search**	**since 05/16, last log 10/16**
		x		x			0545		E11	03	15915 348/00	15915 348/00			since 06/11, last log 10/16
x				x			0600		E11	03	181/00, search	181/00, search	13046 181/00	13046 181/00	since 07/15, **last log 08/16**
	x		x				0645		E11	03	10800 517/00	10800 517/00	7840 517/00	7840 517/00	since 07/09, last log 10/16
	x			x			0710		E11	03	10221 633/00	10221 633/00	10800 633/00	10800 633/00	since 02/11, last log 10/16
			x		x		0710		E11	03	14769 491/00	14769 491/00	12924 491/00	12924 491/00	since 07/15, last log 10/16
x		x					0715		S11A	03	14940 382/00	14940 382/00	19099 382/00, **check**	19099 382/00, **check**	since 05/14, last log 10/16
				x		x	0730		E11	03	15825 352/00	15825 352/00	16112 352/00	16112 352/00	since 04/15, last log 10/16
x							0745		E11	03	10213 262/00	10213 262/00	10213 262/00	10213 262/00	since 03/14, last log 10/16 2nd transmission Thu 1530z
	x		x				0745		E11	03	14575 335/00	14575 335/00	16112 335/00	16112 335/00	since 10/11, last log 10/16
		x				x	0805		E11	03	11450 311/00	11450 311/00	10429 311/00	10429 311/00	since 07/14, last log 10/16
x			x				0820		E11	03	**7317** 438/00	**7317** 438/00	6940 438/00, check	6940 438/00, check	since 10/09, last log 10/16
x		x					0900		E11	03	9399 534/00	9399 534/00	9446 534/00	9446 534/00	since 10/05, last log 10/16
	x			x			0915		S11A	03	7317 484/00	7317 484/00	7504 484/00	7504 484/00	since 01/10, last log 10/16
		x	x				0930		E11	03	8803 270/00	8803 270/00	9950 270/00	9950 270/00	since 02/14, last log 10/16
x			x				1015		S11A	03	16112 475/00	16112 475/00	12530 475/00	12530 475/00	since 04/10, last log 10/16
	x			x			1020		S11A	03	9960 426/00	9960 426/00	9610 426/00	9610 426/00	since 02/10, last log 10/16 2nd transmission Thu 1730z
	x						1045		E11	03	8102 576/00	8102 576/00	12153 576/00	12153 576/00	since 01/12, last log 10/16 2nd transmission Fri 2000z
	x	x					1205		E11	03	9443 469/00	9443 469/00	7984 469/00	11100 > 7984 469/00	since 03/10, last log 10/16
x				x			1225		E11	03	20286 521/00	20286 521/00	20167 521/00	20167 521/00	since 05/15, last log 10/16
	x	x					1300		E11	03	15632 133/00	15632 133/00	18030 133/00	18030 133/00	since 08/13, last log 10/16
			x		**x**		**1300**		**E11**	**03**	**10302** **585/00**	**10302** **585/00**	**8680** **585/00**	**8680** **585/00**	**since 02/16, last log 10/16**
	x				**x**		1345		E11	03	13046 911/00	13046 911/00	14666 911/00	14666 911/00	since 10/15, last log 10/16
	x		x				1450		E11	03	10641 441/00	10641 441/00	8196 441/00	8196 441/00	since 02/16, last log 10/16
			x				1530		E11	03	10330 262/00	10330 262/00	5409 262/00	5409 262/00	since 06/14, last log 09/16 2nd transmission Mon 0745z
		x			x		1540		S11A	03	10800 563/00	10800 563/00	563/00, search	563/00, search	since 03/16, last log 10/16
	x					x	1605		E11	03	6397 232/00	6397 232/00	4505 232/00	4505 232/00	since 11/15, last log 10/16
		x				x	1625		E11	03	10448 972/00	10448 972/00	10448 972/00	10448 972/00	since 02/15, last log 10/16
				x		**x**	**1630**		**E11**	**03**	**13873** **921/00**	**13873** **921/00**	**921/00, search**	**921/00, search**	**since 05/16, last log 10/16**
		x			x		1705		E11	03	10213 392/00	10213 392/00	9443 392/00	9443 392/00	since 02/14, last log 10/16
		x			**x**		**1730**		**E11**	**03**	**5844** **405/00**	**5844** **405/00**	**405/00, search**	**405/00, search**	**since 06/16, last log 10/16**
			x				1730		E11	03	9371 416/00	9371 416/00	5082 416/00	5082 416/00	since 03/10, last log 10/16 2nd transmission Mon 0450z
x						**x**	**1745**		**E11**	**03**	**13470** **242/00**	**13470** **242/00**	**242/00, search**	**242/00, search**	**since 05/16, last log 10/16**
	x		x				1925		E11	03	10620 551/00	10620 551/00			since 07/15, last log 10/16
		x		x			1955		S11A	03	4016 371/00	4016 371/00	5815 371/00	5815 371/00	since 02/14, last log 10/16
				x			2000		E11	03	7377 576/00	7377 576/00	6304 576/00	6304 576/00	since 03/12, last log 09/16 2nd transmission Tue 1045z
					x	x	2005		E11	03	8186 363/00	8186 363/00	11107 363/00	11107 363/00	since 03/14, last log 10/16 2nd transmission Thu 1530z

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Sep kHz, ID, ...	Oct kHz, ID, ...	Nov kHz, ID, ...	Dec kHz, ID, ...	Remarks
x							0800	1/3	G06	01A	6810 329	6810 329	5320 329	5320 329	since 07/10, last log 10/16 repeat at Thu 1300Z
		x					1200	?	G06	01A	5186 574	5186 574	4912 574	4912 574	since 10/14, last log 10/16 yearly changing frequencies + id repeat at 1300Z
		x					1300	?	G06	01A	5436 574	5436 574	4039 574	4039 574	since 10/14, last log 10/16 yearly changing frequencies + id repeat from 1200Z
			x				1300	**1/3**	G06	01A	4598 329	4598 329	4460 329	4460 329	since 09/11, **last log 08/16** repeat from Mon 0800Z
x							1700	1/2	G06	01A	4767 574	4767 574	3696 574	3696 574	since 04/10, last log 08/16 yearly changing frequencies + id repeat at 1800Z
x							1800	1/2	G06	01A	4953 574	4953 574	4562 574	4562 574	since 05/09, last log 10/16 yearly changing frequencies + id repeat from 1700Z
			x				1830	2/4	G06	01A	5934 579	5934 579	4519 271	4519 271	since 05/01, last log 10/16 repeat at Fri 1930Z
				x			1930	2/4	G06	01A	5442 947	5442 947	4792 436	4792 436	since 04/01, last log 09/16 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	
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

M42d Schedules (October 26, 2016) Most schedules repeat the next day using the same times and frequencies if a message was sent, unless noted. Yellow schedules indicate message-only repeats of other schedules, not always present.

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Mon - Fri	**02:00**	16321												41018
		03:00	14881												
New message every day, no repeats the following days. Parallels M42c at 0000/0100z, S06 at 0400z, and M14 at 0500z.															

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
1st, 3rd	Monday	**04:00**				?	11414	12064	11049	10748	9436	9354			45079
		04:10				8184	10169	10926	9126	9139	7923	7956			
		04:20				6773	8169	9049	8137	7424	6776	6774			
		05:00	6927	?	10249								?	?	
		05:10	5945	?	8137								?	?	
		05:20	4816	5126	5948								?	?	
Repeats messages the following Wednesday at 21:00 or 22:00 (look further down for frequencies) instead of the following day.															

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

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

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

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

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Wednesday	**08:00**				19138	17488	16330	15795	16319	18178	20018			16404 16405
		08:10				17545	15823	14367	13428	14378	15613	18325			
		08:20				15626	13459	12141	11060	11636	13459	16248			
		09:00	20735	20916	20386								?	?	
		09:10	18037	18730	18215								?	?	
		09:20	16250	16165	16061								?	?	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Wednesday	**09:15**				17537	14638	15629	14948	17434	16146	19476			20492
		09:25				14576	12156	13376	12176	14369	13385	17458			
		09:35				11639	10164	11544	10177	11163	11434	15884			
		10:15	19433	20639	20138								?	?	
		10:25	16048	17539	17428								?	?	
		10:35	14976	15644	14983								?	?	

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

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
1st, 3rd	Wednesday	**12:30**	16329	18235	18563	18476	17430	16286	16244	17455	18517	19363	18191	17478	53277
		12:40	14826	16144	16314	16168	15814	14517	14649	15923	16309	17476	15963	15838	
		12:50	12166	14519	14723	14643	13487	12179	12206	13388	14464	15873	13436	13387	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Follows 1st, 3rd Monday	Wednesday	**21:00**				10636	?	12218	?	13548	?	9948			45079
		21:10				8163	?	11164	?	11516	10161	8115			
		21:20				6854	?	9418	?	8145	8184	6826			
		22:00	6828	?	10164								?	?	
		22:10	5129	?	8076								?	?	
		22:20	4534	4989	6769								?	?	
Message-only repeat slot of 1st & 3rd Monday 04:00 or 05:00.															

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

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
		06:00	9068	12214	?	15991	16189	17483	16291	15946	15864	15813	13381	10236	
–	Friday	**06:10**	7853	10226	13419	13546	14408	15888	14519	13561	13483	13389	11018	8093	40988
		06:20	6964	9091	11133	11161	12191	13394	12186	11148	11126	11044	9139	6814	
Message-only repeat slot of Tuesday 23:00.															

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Saturday	**08:00**				?	?	?	13468	12223	13384	14986			45114 45115
		08:10				?	?	?	11634	10186	11463	12219			
		08:20				?	?	?	9486	8094	9328	10574			
		09:00	?	?	?								?	?	
		09:10	?	?	?								?	?	
		09:20	?	?	?								?	?	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Saturday	**09:00**				17481	17426	16314	16089	16186	16341	18919			45057
		09:10				15946	15818	14569	14384	14571	14706	16268			
		09:20				13543	13396	12191	12173	12195	12217	14486			
		10:00	20973	20894	18948								20868	20951	
		10:10	18736	18429	16223								18259	18643	
		10:20	16328	16153	14639								16113	16314	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Saturday	**11:00**	19436	19823	18344	17463	16354	14689	15964	16153	16174	17423	18048	17534	36882
		11:10	17524	17546	16273	15648	14536	12143	13549	14438	14855	15628	16214	15633	
		11:20	15638	15825	14434	13425	12218	10186	11524	12216	12214	13385	14358	13519	

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

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Saturday	**15:30**	?	22986	22874							20806	22984	20741	32821
		15:40	18689	20363	20634							18441	20719	?	
		15:50	16156	18669	18751							17463	18348	16343	
		21:30				20589	18663	18521	18246	17429	?				
		21:40				18371	16344	16256	16149	15861	13498				
		21:50				16108	14869	14641	14474	13486	11054				

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

M42c Schedules (October 7, 2016) Most schedules repeat the next day using the same times and frequencies if a message was sent, unless noted.

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Every	Mon - Fri	**00:00**	17471											
		01:00	14421											
New message every day. Parallels M42d at 0200/0300z, S06 at 0400z, and M14 at 0500z.														

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Every	Monday	**00:24** **01:24**	?	?	16023	?	?	16218	14878	16023	15672	14434	?	10884
		00:34 **01:34**	?	?	13555	?	?	?	12185	14373	13892	11439	9215	?
Doesn’t repeat the following days.														

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1st	Tuesday	**18:40**				12194	14363	14621	14829	15854	13467	11136		
		18:50				10581	12189	12206	12214	13543	11084	9074		
		19:00				8112	10346	10465	10932	11126	9052	7723		
		19:40	7629	8156	10467								8172	7684
		19:50	6783	6844	8094								6791	5326
		20:00	4034	4527	6779								4546	4029
Repeats messages the following Friday (same times and frequencies) instead of the following day.														

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Every	Friday	**22:29** **23:29**	?	?	20700	?	?	19224	18562	20823	20618	20966	?	?
		22:39 **23:39**	?	?	18726	19405	?	17491	16218	18397	18048	18954	?	?
Doesn’t repeat the following days.														

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

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Every	Saturday	**18:10**	7684	9153	12184	14517	15806	16322	16147	15931	13384	11462	9247	8131
		18:20	5387	7641	10292	12196	13512	14804	14389	13452	11441	9226	7762	6824
		18:30	4572	5251	8054	10413	11131	12207	12214	11093	9184	7829	5216	4471

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

Zulu > / Month v	0600/0700 Sched c Wednesday/Saturday USB 10baud			1730/1900 Sched e Tuesday / Thursday USB 10baud			XPA2 Sched m Various 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 now under investigation; last received scheduled transmission 27/09/2016
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 08/11/2016

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
Usually sttrong into UK, latest poorconditions affect sendings

08/11/2015

SPECIAL MATTERS

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

Operation Jallaa: Nil Return; Jallaa under review. Participants views welcomed on viability.

MESSAGES:

E: Thanks for info and updates; hope your situation changes. Please keep in touch.

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

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